Facility Response Plan

Toledo Refining Company LLC

Toledo Refinery

Physical Address:
1819 Woodville Rd
Oregon, OH 43616

Mailing Address:
1819 Woodville Rd.
Oregon, OH 43616

TABLE OF CONTENTS

Section Heading	Description	Page
	Title Page	
Blue Section	EMERGENCY RESPONSE ACTION PLAN	ERAP 1-45
Table of Contents	Table of Contents	TOC-1
	Cross Reference for EPA	TOC-4
	Cross Reference for Coast Guard	TOC-9
	Cross Reference for DOT/PHMSA	TOC-19
Foreword		
	Acknowledgment and Plan Approval	i
	Certification of QI and Alt. QI	ii
	Certification of Response Preparedness	iii
	Revision Record	iv
	Revision Record Signature Page	v
	Distribution List	vi
1.0 Introduction and Plan Content	1.1 Plan Purpose/Objectives 1.2 Scope of Plan 1.3 Plan Distribution Procedures 1.4 Plan Review and Update Procedures 1.5 Regulatory Compliance 1.6 Discharge Classification a. Figure 1.1 (a) Area Map b. Figure 1.1 (b) Site Location Map c. Figure 1.2 Facility Diagrams d. Figure 1.3 Facility Information e. Figure 1.4 Qualified Individuals	1-1 1-1 1-2 1-3 1-5 1-6 1-8 1-9 1-10 1-11 1-14
2.0 Notification Procedures	2.1 Internal Notification 2.2 External Notification a. Figure 2.1 Internal Notification Sequence b. Figure 2.2 External Notification of Spill c. Figure 2.3 Discharge Form d. Figure 2.4 Internal Notification References e. Figure 2.5 External Notification References	2-1 2-2 2-5 2-6 2-7 2-8 2-9
3.0 Response Actions	3.1 Initial Response Actions a. Figure 3.1 – Specific incident response checklist b. Figure 3.2 – Product Specific Response – Crude c. Figure 3.3 – Product Specific Response –Gasoline 3.2 Documentation of Initial Response Actions 3.3 Oil Containment, Recovery and Disposal 3.4 Storage/Disposal 3.5 Sampling and Waste Analysis Procedures 3.6 Safety Awareness	3-1 3-3 3-8 3-9 3-11 3-11 3-12 3-12 3-12

4.0 Response Teams	4.1 Introduction	4-1
	4.2 Qualified Individual	4-1
	4.3 Emergency Response Team	4-3
	4.4 Emergency Command Team	4-3
	4.5 Response Team Training	4-3
	4.6 Response Team Exercises	4-5
	4.7 Site Safety and Health Plan(s) Development	4-9
	Figure 4.1 Emergency Response Team	4-10
	Figure 4.2 Emergency Command Team	4-11
5.0 Response Equipment Resources	5.1 Toledo Refining Company, LLC Facility Response Equipment	5-1
	5.2 Contract Resources	5-1
	5.3 Cooperative Mutual Aid Resources	5-2
	5.4 Experts and Consultants	5-2
	5.5 Volunteers	5-2
	5.6 Communications	5-4
	Figure 5.1 – External Response Resources	5-5
	Figure 5.2 – Facility Response Equipment	
6.0 Spill Impact Considerations	6.1 Critical Areas to Protect	6-1
	6.2 Environmental/Socio-Economic Sensitivities	6-1
	6.3 Wildlife Protection and Rehabilitation	6-3
	6.4 Staging Areas	6-5
	6.5 Spill Volume Estimates	6-5
	6.6 Trajectory Analysis	6-5
	6.7 Containment and recovery of Spilled Product	6-6
	6.8 Use of Chemical Dispersants and In-Situ Burning	6-15
	Figure 6.1 – Wildlife Listing	6-16
	Figure 6.2 – Sensitive Areas Maps and Data Planning Distance Calculations	6-17
	Figure 6.3 – Oil Slick Estimator	6-19
	Figure 6.4 – Contingency Protocol For Wildlife	6-20
	Figure 6.5 – Cleanup Methods	6-21
	Figure 6.6 - Cleanup Methods by Habitat	6-22
7.0 Worse Case Discharge Analysis and Scenarios	7.1 Introduction	7-1
	7.2 Small/Average Most Probable Discharge	7-5
	7.3 Medium/Maximum Most Probable Discharge	7-8
	7.4 Worst Case Discharge	7-10
	7.5 Response Planning Volume Calculations	7-14
	7.6 U.S.DOT/PHMSA Discharge Calculations	7-15
8.0 Hazard Evaluations	8.1 Hazard Identification	8-1
	8.2 Vulnerability Analysis	8-3
	8.3 Analysis of the Potential for a Spill	8-8
	8.4 Reportable Oil Spill History	8-10
	Figure 8.1 – Site Drainage Plan	8-16
	Figure 8.2 – Fire Protection System	8-17

Appendices	Appendix A - Principles of Health, Environmental and Safety	
	Appendix B - Response Plan Cover Sheet	
	Appendix C - Discharge Response Times	
	Appendix D - Disposal Plan	
	Appendix E - Discharge information Form	
	Appendix F - Spill Management Team Roles	
	Appendix G - Sample Exercise documentation forms	
	Appendix H - Group V oil Spill Response	
	Appendix I - Evacuation Plan	
	Appendix J - OSRO Contracts	
	Appendix K - Storage Tank Listing	
	Appendix L - Discharge detection systems and facility self inspections	
	Appendix M - National Response System	
	Appendix N - Glossary and Acronyms	

U.S. EPA - OPA 90
40 CFR Part 112.20(h) Final Rule - July 17, 2002
CROSS REFERENCE

§ 112.20 (h)	BRIEF DESCRIPTION	LOCATION in PLAN
(1)	***Emergency Response Action Plan***	-----
(1)(i)	The identity and telephone number of a qualified individual	ERAP - QI Info
(1)(ii)	The identity of individuals or organizations to be contacted in the event of a discharge	ERAP - Notifications
(1)(iii)	A description of information to pass to response personnel in the event of a reportable discharge	ERAP - Notifications
(1)(iv)	A description of the facility's response equipment and its location	ERAP - Facility Response Equip.
(1)(v)	A description of response personnel capabilities	ERAP - Local Response Team
(1)(vi)	Plans for evacuation of the Facility and a reference to community evacuation plans, as appropriate	ERAP - Evacuation Diagram
(1)(vii)	Plan Implementation - a description of immediate measures to secure the source of the discharge, and to provide adequate containment and drainage of spilled oil	ERAP - Initial Response Actions
(1)(viii)	A diagram of the facility	ERAP - Facility Diagram
(2)	***Facility information***	-----
	location and type of the facility	Fig 1.3
	the identity and tenure of the present owner and operator	Fig 1.3
	the identity of the qualified individual	Fig 1.3, 2.4
(3)	***Information about emergency response.***	-----
(3)(i)	The identity of private personnel and equipment	Fig 5.1
(3)(ii)	Evidence of contracts or other approved means for ensuring the availability of such personnel and equipment	App J
(3)(iii)	The identity and the telephone number of individuals or organizations to be contacted in the event of a discharge	Fig. 2.4, 2.5
(3)(iv)	A description of information to pass to response personnel	Fig 2.3
(3)(v)	A description of response personnel capabilities, including:	-----
	● duties of persons at the Facility during a response action	Fig 4.3, 4.4, App F
	● response times and qualifications...	§ 4.5, Fig 2.4
(3)(vi)	A description of the facility's response equipment including:	-----
	● location of the equipment	§ 5.2, App J, (Facility does maintain response equipment)
	● equipment testing	App G, (Facility does maintain response equipment)
(3)(vii)	Plans for evacuation of the Facility and a reference to community evacuation plans, as appropriate	App I
(3)(viii)	A diagram of evacuation routes	App I

U.S. EPA - OPA 90
40 CFR Part 112.20(h) Final Rule - July 17, 2002
CROSS REFERENCE

§ 112.20 (h)	BRIEF DESCRIPTION	LOCATION in PLAN
(3)(ix)	A description of the duties of the qualified individual that include	-----
(3)(ix)(A)	Activate internal alarms and hazard communications systems	§ 4.2
(3)(ix)(B)	Notify all response personnel, as needed	§ 4.2
(3)(ix)(C)	Identify the character, exact source, amount, and extent of release	§ 4.2
(3)(ix)(D)	Notify and provide necessary information to the appropriate Federal, State, and local authorities	§ 4.2
(3)(ix)(E)	Assess the interaction of the spilled substance with water and/or other substances stored at the Facility	§ 4.2
(3)(ix)(F)	Assess the possible hazards to human health and environment	§ 4.2
(3)(ix)(G)	Assess and implement prompt removal actions	§ 4.2
(3)(ix)(H)	Coordinate rescue and response actions	§ 4.2
(3)(ix)(I)	Use authority to immediately access company funding	§ 4.2
(3)(ix)(J)	Direct cleanup activities until properly relieved	§ 4.2
(4)	***Hazard evaluation***	-----
	Shall discuss the facility's known or reasonably identifiable history of discharges reportable under 40 CFR 110 for the entire life of the facility.	8.4
	identify areas within the facility where discharges could occur	§ 8
	what the potential effects would be on the affected environment	§ 8
(5)	***Response planning levels***	-----
(5)(i)	A worst case discharge, as calculated using the appropriate worksheet in appendix D	§ 1.2, § 7
(5)(ii)	A discharge of 2,100 gallons or less provided this amount is less than the WCD amount	§ 1.2, § 7
(5)(iii)	A discharge greater than 2,100 gallons and less than or equal to 36,000 gallons or 10 percent of the capacity of the largest tank, whichever is less	§ 1.2, § 7
(6)	***Discharge detection systems*** ... Describe the procedures and equipment used to detect discharges	App L
(7)	***Plan implementation***	------
(7)(i)	Response actions to be carried out by facility personnel or contracted personnel	§ 3.1, Fig 3.1, 3.2, 3.3
(7)(ii)	A description of the equipment to be used for each scenario	App J, § 7
(7)(iii)	Plans to dispose of contaminated cleanup materials	Section 3.4, App D
(7)(iv)	Measures to provide adequate containment and drainage of spilled oil	§ 3.1, Fig 3.1, 3.3
(8)	***Self-inspection, drills/exercises and response training***	-----
(8)(i)	A checklist and record of inspection for:	-----
	● tanks	App G
	● secondary containment	App G
	● response equipment	Fig 5.2, (Facility does

U.S. EPA - OPA 90
40 CFR Part 112.20(h) Final Rule - July 17, 2002
CROSS REFERENCE

§ 112.20 (h)	BRIEF DESCRIPTION	LOCATION in PLAN
(8)(ii)	A description of the drill/exercise program to be carried out under the response plan as described in § 112.21	§ 4.6
(8)(iii)	A description of the training program to be carried out under the response plan as described in § 112.21	§ 4.5
(8((iv)	Logs of:	-----
	● discharge prevention meetings	App G
	● training sessions	App G
	● drills/exercises	App G
(9)	***Diagrams***	-----
	● site plan	Fig 1.2
	● drainage plan	Section 8
(10)	***Security systems.*** The review plan shall include a description of facility security systems.	App L
(11)	***Response plan cover sheet***	App B

§ 112.21	BRIEF DESCRIPTION	LOCATION in PLAN
(a)	Develop and implement a facility response training program and a drill/exercise program.	-----
(b)	Develop a facility response training program to train personnel involved in response activities.	§ 4.5
(b)(1)	Proper instruction of facility personnel in the procedures to respond to discharges of oil and in applicable oil spill response laws, rules, and regulations`	§ 4.5
(b)(2)	Training shall be functional in nature according to job tasks for both supervisory and non-supervisory operational personnel	§ 4.5
(b)(3)	Trainers shall develop specific lesson plans on subject areas relevant to facility personnel involved in oil spill response and cleanup	§ 4.5
(c)	Develop a program of facility response drills/exercises, including evaluation procedures. Can follow PREP.	§ 4.6

U.S. EPA - OPA 90
40 CFR Part 112.20(h) Final Rule - July 17, 2002
CROSS REFERENCE

Appendix F to Part 112	BRIEF DESCRIPTION	LOCATION in PLAN
1.0	***Model Facility-Specific Response Plan***	-----
1.1	***Emergency Response Action Plan***	-----
	1. Qualified Individual Information	ERAP - QI Info
	2. Emergency Notification Phone List	ERAP - Notifications
	3. Spill Response Notification Form	ERAP - Notifications
	4. Response Equipment List and Location	ERAP - Facility Response Equipment
	5. Response Equipment Testing and Deployment	ERAP - Facility Response Equipment
	6. Facility Response Team	ERAP - Local Response Team
	7. Evacuation Plan	ERAP - Evacuation Diagram
	8. Plan Implementation - Immediate Actions	ERAP - Initial Response Actions
	9. Facility Diagram	ERAP - Facility Diagram
1.2	***Facility Information***	-----
1.2.1	Facility name and location	Fig 1.3
1.2.2	Latitude and Longitude	Fig 1.3
1.2.3	Wellhead Protection Area	Fig 1.3
1.2.4	Owner/operator	Fig 1.3
1.2.5	Qualified Individual	Fig 1.3, 2.4
1.2.6	Date of Oil Storage Start-up	Fig 1.3
1.2.7	Current Operation	Fig 1.3, § 8
1.2.8	Dates and Types of Substantial Expansion	Fig 1.3
1.3	***Emergency Response Information***	-----
1.3.1	Notification	§ 2.0 (all)
1.3.2	Response Equipment List and Location of Equipment	Fig 5.1, App J
1.3.3	Response Equipment Testing/Deployment Drills	5.2 and App G, (Facility does maintain response equipment)
1.3.4	Facility Response Personnel	§ 4.3, 4.4 Fig 2.4, 2.5
1.3.5	Evacuation Plans	App I
1.3.6	Qualified Individual's Duties	§ 4.2
1.4	***Hazard Evaluation***	-----
1.4.1	Hazard Identification	§ 8
1.4.2	Vulnerability Analysis	§ 8
1.4.3	Analysis of the Potential for an Oil Spill	§ 8

U.S. EPA - OPA 90
40 CFR Part 112.20(h) Final Rule - July 17, 2002
CROSS REFERENCE

Appendix F to Part 112	BRIEF DESCRIPTION	LOCATION in PLAN
1.4.4	Facility Reportable Oil Spill History	§ 8
1.5	***Discharge Scenarios***	-----
1.5.1	Small and Medium Discharges	§ 7
1.5.2	Worst Case Discharge	§ 7
1.6	***Discharge Detection Systems***	-----
1.6.1	Discharge Detection by Personnel	App L
1.6.2	Automated Discharge Detection	App L
1.7	***Plan Implementation***	-----
1.7.1	Response Resources for Small, Medium, and Worst Case Spills	Fig 5.1, App J, § 7
1.7.2	Disposal Plans	Section 3.4, App D
1.7.3	Containment and Drainage Planning	§ 3.1, Fig 3.1, § 8
1.8	***Self-Inspection, Drills/Exercises, and Response Training***	-----
1.8.1	Facility Self-Inspection	App G
1.8.1.1	Tank Inspection	App G
1.8.1.2	Response Equipment Inspection	Fig 5.2 (Facility does maintain response equipment)
1.8.1.3	Secondary Containment Inspection	
1.8.2	Facility Drills/Exercises	§ 4.6
1.8.2.1	Qualified Individual Notification Drill Log	App G
1.8.2.2	Spill Management Team Tabletop Exercise Log	App G
1.8.3	Response Training	§ 4.5
1.8.3.1	Personnel Response Training Log	App G
1.8.3.2	Discharge Prevention Meeting Log	AppG
1.9	***Diagrams***	-----
	(1) Site Plan Diagram	Fig 1.2
	(2) Site Drainage Plan Diagram	§ 8
	(3) Site Evacuation Plan Diagram	App I
1.10	***Security***	App L
2.0	***Response Plan Cover Sheet***	App B
3.0	***Acronyms***	App N

U.S. COAST GUARD - OPA 90
33 CFR 154 Final Rule – June 25, 2001
CROSS REFERENCE

§ 154.1030	DESCRIPTION OF GUIDELINE ITEM	SECTION
General response plan contents.		
(a)	The plan must be written in English.	Entire Plan
(b)	A response plan must be divided into sections	-----
(b)(1)	Introduction and plan contents.	§ 1.1
(b)(2)	Emergency response action plan:	-----
(b)(2)(i)	Notification procedures.	ERAP, § 2.1, 2.2
(b)(2)(ii)	Facility's spill mitigation procedures.	ERAP, § 2.0, 3.0, 4.0
(b)(2)(iii)	Facility's response activities.	ERAP, § 3.1, Fig 3.1, 3.2
(b)(2)(iv)	Fish and wildlife and sensitive environments.	ERAP, § 6.0
(b)(2)(v)	Disposal plan.	App D
(b)(3)	Training and Exercises:	-----
(b)(3)(i)	Training procedures.	§ 4.5
(b)(3)(ii)	Exercise procedures.	§ 4.6
(b)(4)	Plan review and update procedures.	§ 1.3, 1.4
(b)(5)	Appendices.	-----
(b)(5)(i)	Facility-specific information.	§ 1, Fig 1.1, 1.2, 1.3
(b)(5)(ii)	List of contacts.	§ 2.1, 2.2, Fig 2.4, 2.5
(b)(5)(iii)	Equipment lists and records.	§ 5.1, 5.2, App J
(b)(5)(iv)	Communications plan	§ 5.6
(b)(5)(v)	Site-specific safety and health plan.	§ 4.7
(b)(5)(vi)	List of acronyms and definitions.	App N
(b)(5)(vii)	A geographic-specific appendix ... mobile facility operates.	-----
(c)	... contained in § 154.1035, 154.1040, and 154.1041, as appropriate.	-----
(d)	...information required in § 154.1035, 154.1040, and 154.1041...	-----
(e)	... cross-reference ...	TOC
(f)	... be consistent with the NCP and ACP ...	Entire Plan, Acknowledgement Page

U.S. COAST GUARD - OPA 90
33 CFR 154 Final Rule – June 25, 2001
CROSS REFERENCE

§ 154.1035	DESCRIPTION OF GUIDELINE ITEM	SECTION(S)
Specific requirements for facilities that could reasonable be expected to cause significant and substantial harm to the environment.		
(a)	*Introduction and plan content.*	§ 1.0
(a)(1)	The facility's name, street address, city, county, state, ZIP code, facility telephone number, and tele-facsimile number, if so equipped...	Fig 1.3
(a)(2)	The facility's location ...	Fig 1.1, 1.2, 1.3
(a)(3)	... name, address, and procedures ... owner or operator ... 24-hour basis.	Fig 1.3
(a)(4)	A table of contents.	Foreword
(a)(5)	... cross index	TOC
(a)(6)	A record of change(s) to record information and plan updates.	Foreword
(b)	*Emergency Response Action Plan*...	-----
(b)(1)	Notification procedures.	ERAP, § 2.1, 2.2
(b)(1)(i)	... a prioritized list identifying the person(s) ... to be notified of a discharge or substantial threat of a discharge of oil ...	§ 2.1, 2.2, Fig 2.1, 2.2, 2.3, 2.4,2.5 '4.2, 4.3, Fig 4.1
(b)(1)(i)(A)	Facility response personnel, and Spill Management Team, oil spill removal organizations, and the qualified individual(s) ...	§ 2.1, 2.2,Fig 2.4,2.5 Section 4.2, 4.3, 4.4, 5.1, 5.2, 5.3
(b)(1)(i)(B)	Federal, State, or local agencies, as required.	§ 2.2, Fig 2.5
(b)(1)(ii)	... a form, ... which contains information to be provided in the initial and follow-up notifications to Federal, State, and local agencies ...	Fig 2.3, App E
(b)(2)	Facility's spill mitigation procedures.	§ 3.1, Fig 3.1, 3.2,3.3
(b)(2)(i)	..describe the volume(s) and oil groups..	§ 1.2, 6.5, § 7, § 8,
(b)(2)(i)(A)...(D)	...discharges from the MTR facility ... non-transportation related...	§ 1.2, § 7
(b)(2)(ii)	... must contain prioritized procedures for facility personnel to mitigate or prevent any discharge or substantial threat of a discharge of oil ...	§ 1.2, 2.1, 2.2, Fig 2.1, 2.2 § 3.0, Fig 3.1, 3.2, § 7
(b)(2)(ii)(A)...(G)	... Typical scenarios....	§ 1.2, 3.0, Fig 3.1, 3.2, § 7
(b)(2)(iii)	... a listing of equipment and the responsibilities of facility personnel to mitigate an average most probable discharge.	§ 3.0, Fig 3.1, § 5.1, 5.2, 5.3, 5.4, Fig 5.1, App J, § 7

U.S. COAST GUARD - OPA 90
33 CFR 154 Final Rule – June 25, 2001
CROSS REFERENCE

(b)(3)	Facility's response activities.	-----
(b)(3)(i)	... a description of the facility personnel's responsibilities ... pending the arrival of the qualified individual.	§ 3.1, Fig 3.1, 4.2, 4.3, 5.1
(b)(3)(ii)	... a description of the responsibilities and authority of the qualified individual and alternate as required in § 154.1026.	§ 4.2
(b)(3)(iii)	... describe the corporate organizational structure that will be used to manage the response actions, including ...	§ 4.3 fig. 4.1, 4.2
(b)(3)(iii)(A)..(H)	Command and control...Public Information...Safety... Liaison...Operations...Planning...Logistics...Finance.	§ 4.3, 4.4, Fig 4.1, 4.2, App F
(b)(3)(iv)	... identify the oil spill removal organization(s) and the Spill Management Team ...	§ 4.0, 5.0, App F
(b)(3)(iv)(A)	Be capable of providing the following response resources:	-----
(b)(3)(iv)(A)(1)	Equipment and supplies to meet..§154.1045, § 154.1047 or...	§ 5.1, 5.2, 5.3, 5.4, Fig 5.1, App J,
(b)(3)(iv)(A)(2)	Trained personnel necessary to continue operation...first 7 days of the response.	Fig 2.4, 2.5, § 4.3, 4.4, 5.0, Fig 5.1
(b)(3)(iv)(B)	...job descriptions for each Spill Management Team member...	App F
(b)(3)(v)	For mobile facilities ... the oil spill removal organization and the Spill Management Team in the applicable geographic-specific appendix...	N/A
(b)(4)	Fish and wildlife and sensitive environments.	-----
(b)(4)(i)	...identify areas of economic importance and environmental sensitivity..	§ 6.0, Fig 6.1, 6.2, § 8
(b)(4)(ii)	For a worst case discharge...this section must...	-----
(b)(4)(ii)(A)	List all fish and wildlife and sensitive environments identified in the ACP... ...	§ 6.3, Fig 6.1, 6.2, § 8
(b)(4)(ii)(B)	Describe all the response actions ... to protect these fish and wildlife and sensitive environments...	§ 3.1, 6.0, Fig 3.1, 3.2,3.3
(b)(4)(ii)(C)	Contain a map or chart showing the location of those fish and wildlife and sensitive environments ...	Fig 6.2

U.S. COAST GUARD - OPA 90
33 CFR 154 Final Rule – June 25, 2001
CROSS REFERENCE

§ 154.1035	DESCRIPTION OF GUIDELINE ITEM	SECTION(S)
(b)(4)(iii)	For a worst case discharge, ... identify appropriate equipment and required personnel to protect these areas...	§ 3.1, 4.2, 4.4, 5.0, 6.0, App J
(b)(4)(iii)(A)	Identify the appropriate equipment and required personnel to protect all fish and wildlife and sensitive environments ...	§ 2.0, 3.0, 4.0, 5.0, 6.0
(b)(4)(iii)(B)	Calculate the distances required by...by selecting one method described...	-----
(b)(4)(iii)(B)(1)	Distances calculated...	§ 7
(b)(4)(iii)(B)(2)	A spill trajectory or model may be substituted for distances...	-----
(b)(4)(iii)(B)(3)	The procedures contained in the Environmental Protection Agency's regulations...may be substituted for distances...	-----
(b)(4)(iii)(C)	Based on historical...COTP may require the additional fish and wildlife and sensitive environments	-----
(b)(5)	Disposal plan ...describe any actions to be taken or procedures to be used to ensure that all recovered oil and oil contaminated debris ...	App D
(c)	*Training and exercises.* To be divided into the following subsections:	-----
(c)(1)	Training procedures. ..must describe the training procedures ..	§ 4.5
(c)(2)	Exercise procedures. ... must describe the exercise program ...	§ 4.6
(d)	*Plan review and update procedures.* ... address the procedures ...	§ 1.3, 1.4
(e)	*Appendices.* ...must include appendices described...	-----
(e)(1)	Facility-specific information.. ... principal characteristics ...	-----
(e)(1)(i)	There must be a physical description of the facility...	Fig 1.2, 1.3, § 8
(e)(1)(ii)	...must identify the sizes, types, and number of vessels...	Fig 1.3, § 8
(e)(1)(iii)	...must identify the first valve(s) ...inside the secondary containment...	Fig 1.2, 1.3, Section 8

U.S. COAST GUARD - OPA 90
33 CFR 154 Final Rule – June 25, 2001
CROSS REFERENCE

§ 154.1035	DESCRIPTION OF GUIDELINE ITEM	SECTION(S)
(e)(1)(iv)	...must contain information on the oil(s) and hazardous material...	Fig 1.3 § 3.1, Fig 3.1, 3.2, MSDS at Facility
(e)(1)(iv)(A)	The generic or chemical name	Fig 1.3, § 3.1, Fig 3.1, 3.2, Section 8 MSDS at Facility
(e)(1)(iv)(B)	A description of the appearance and odor	Fig 1.3 § 3.1, Fig 3.1, 3.2, MSDS at Facility
(e)(1)(iv)(C)	The physical and chemical characteristics	Fig 1.3 § 3.1, Fig 3.1, 3.2, MSDS at Facility
(e)(1)(iv)(D)	The hazards involved in handling the oil(s) and hazardous...	Fig 1.3 § 3.1, Fig 3.1, 3.2, MSDS at Facility
(e)(1)(iv)(E)	A list of firefighting procedures and extinguishing agents effective with fires involving the oil(s) and hazardous materials	Fig 1.3 § 3.1, Fig 3.1, 3.2, MSDS at Facility
(e)(1)(v)	The appendix may contain any other information which the facility owner or operator determines to be pertinent...	-----
(e)(2)	List of contacts...	-----
(e)(2)(i)	The primary and alternate qualified individual(s) for the facility;	Fig 1.3, 2.4
(e)(2)(ii)	The contact(s) ... for activation of the response resources; and	Fig 1.3, 2.2, 2.5
(e)(2)(iii)	Appropriate Federal, State, and local officials.	Fig 2.5
(e)(3)	Equipment list and records. ... must include ...	-----
(e)(3)(i)	...list of equipment ... average most probable	§ 5.1, 5.2, App J
(e)(3)(ii)	...detailed listing of all the major equipment identified in the plan as belonging to an oil spill removal organization(s)...	§ 5.0, Fig 5.1, App J
(e)(3)(iii)	It is not necessary to list response equipment from oil spill removal organization(s) ... classified by the Coast Guard ... When it is necessary ... the list must include for each piece of equipment -	-----

U.S. COAST GUARD - OPA 90
33 CFR 154 Final Rule – June 25, 2001
CROSS REFERENCE

§ 154.1035	DESCRIPTION OF GUIDELINE ITEM	SECTION(S)
(e)(3)(iii)(A)	The type, make, model, and year of manufacture ... of the equipment;	N/A
(e)(3)(iii)(B)	For oil recovery devices, the effective daily recovery rate ...	N/A
(e)(3)(iii)(C)	For containment boom, ...height and type of end connectors;	N/A
(e)(3)(iii)(D)	The spill scenario in which the equipment will be used ...	N/A
(e)(3)(iii)(E)	The total daily capacity for storage and disposal of recovered oil;	N/A
(e)(3)(iii)(F)	For communication equipment, the type and amount of equipment ...	N/A
(e)(3)(iii)(G)	Location of the equipment; and	N/A
(e)(3)(iii)(H)	The date of the last inspection by the oil spill removal organization(s).	N/A
(e)(4)	*Communications plan* ...	§ 2.0, 4.0, 5.6
(e)(5)	*Site-specific safety and health plan* ...	§ 4.7
(e)(6)	*List of acronyms and definitions* ...	App N

U.S. COAST GUARD - OPA 90
33 CFR 154 Final Rule – June 25, 2001
CROSS REFERENCE

§ 154.1045	DESCRIPTION OF GUIDELINE ITEM	SECTION
Response plan development and evaluation criteria for facilities that handle, store, or transport Group I through Group IV petroleum oils.		
(a)	...facility that handles...Group I through Group IV petroleum oils..	-----
(a)(1)	..criteria in Table 1 ...identification of appropriate equipment..	-----
(a)(2)	...resources must be evaluated...including, but not limited to -	-----
(a)(2)(i)...(v)	Ice conditions; Debris; ... other appropriate....	-----
(a)(3(i)..(ii)	The COTP may reclassify a specific body of water or location ...	-----
(b)(1)...(3)	Response equipment must ---	App J, Section 7
(c)	...identify response resources...average most probable discharge...	§ 5.0, Fig 5.1, App J, Section 7
(c)(1)	1,000 feet of containment boom or two times the length of the largest vessel ... and the means of deploying and anchoring the boom ... within 1 hour of the detection of a spill;	§ 5.0, Fig 5.1, App J, Section 7
(c)(2)	...recovery devices and oil storage capacity ... within 2 hours ...	§ 5.0, Fig 5.1, App J, Section 7
(d)	... identify response resources ... maximum most probable discharge...	§ 5.0, Fig 5.1, App J, Section 7
(d)(1)	... include sufficient containment boom, oil recovery devices, and storage capacity for any recovery of up to the maximum most probable discharge planning volume...	App J, Section 7
(d)(2)	... resources must be appropriate for each group of oil ...	§ 5.0, App J, Section 7
(d)(3)	... must be positioned ... arrive ... scene of a discharge ...	-----
(d)(3)(i)	... within the specified times ...	Fig 5.1, App J
(d)(3)(ii)	In higher volume port areas ... within 6 hours ...	N/A
(d)(3)(iii)	In all other locations, ... within 12 hours ...	Fig 5.1, App J
(d)(4)	... COTP may impose additional operational restrictions ...	-----
(e)	... identify the response resources ... worst case discharge ...	§ 5.0, Fig 5.1, App J, Section 7
(e)(1)	The location must be suitable to meet the response times identified..	§ 5.0, App J, Section 7
(e)(2)	The response resources must be appropriate for ---	-----
(e)(2)(i)	The volume of the facility's worst case discharge;	App J, Section 7
(e)(2)(ii)	Group(s) of oil...handled, stored or transported by the facility; and	App J, Section 7

U.S. COAST GUARD - OPA 90
33 CFR 154 Final Rule – June 25, 2001
CROSS REFERENCE

§ 154.1045	DESCRIPTION OF GUIDELINE ITEM	SECTION
(e)(2)(iii)	The geographic area(s) in which the facility operates.	App J, § 7
(e)(3)	... sufficient boom, oil recovery devices, and storage capacity to recover the worst case discharge planning volumes.	§ 5.0, App J, § 7
(e)(4)	... quantity of response resources ... to respond ... to the worst case discharge to the maximum extent practicable.	§ 5.0, App J, §7
(e)(5)	... The following percentages of the response equipment ... must be capable of operating in waters of 6 feet or less depth.	-----
(e)(5)(i)	Offshore - 10 percent.	N/A
(e)(5)(ii)	Nearshore/inland/Great Lakes/rivers and canals - 20 percent.	§ 5.0, § 7
(e)(6)	... COTP may impose additional operational restrictions ...	-----
(f)	Response equipment ... must be capable of arriving on scene within the times specified in this paragraph ...	§ 5.0, App J, § 7
(g)	... response equipment identified for Level 1 plan credit must be capable of being mobilized and en route to the scene of a discharge within 2 hours of notification ...	§ 5.0, App J, § 7
(g)(1)	Either directly or through the qualified individual; and	§ 4.2, App J, § 7
(g)(2)	Within 30 minutes of a discovery ...	App J, Section 7
(h)	Response resources identified for Level 2 and Level 3 plan credit must be capable of arriving on scene within the time specified ...	App J, Section 7
(i)	... a facility that is located in any environment with year-round preapproval for use of dispersants, ... Group II or III persistent petroleum oils, may request a credit for up to 25 percent ...	N/A
(j)	... identify response resources with firefighting capability ...	Fig 1.2, 2.4, 2.5, Sect. 5.0
(k)	... identify equipment and required personnel ... to protect fish and wildlife and sensitive environments.	§ 5.0, App J
(k)(1)	... the identified response resources must include the quantities of boom sufficient to protect	§ 5.0, App J
(k)(2)	... resources and response methods ... must be consistent with the ... ACP in effect 6 months prior to initial plan submission or the annual plan review ...	§ 1.5, 3.1, 6.0, App J
(l)	The response plan for a facility that handles, stores, or transports Groups I through IV petroleum oils must identify an oil spill removal organization(s) with response resources that are available...	§ 5.0, Fig 5.1, App J

U.S. COAST GUARD - OPA 90
33 CFR 154 Final Rule – June 25, 2001
CROSS REFERENCE

§ 154.1045	DESCRIPTION OF GUIDELINE ITEM	SECTION
(l)(1)	Except as required in paragraph (l)(2) ... shoreline clean-up response resources required must be determined as described in Appendix C of this part.	§ 5.0, App J, Section 7
(l)(2)	... resources and response methods ... must be consistent with the ... ACP in effect 6 months prior to initial plan submission or the annual plan review ...	§ 1.5, 3.1, 6.0, App J
(m)	Appendix C ... quantity of response resources ... for the maximum most probable discharge volume, and for each worst case discharge response level.	App J, § 7
(m)(1)	Included in Appendix C of this part is a cap that recognizes the practical and technical limits of response capabilities ...	§ 7
(m)(2)	... Appendix C of this part lists the caps that will apply in ... February 18, 1998. ...facility whose estimated recovery capacity exceeds ... caps ... shall identify sources of additional equipment equal to twice the cap ... or the amount necessary to reach the calculated planning volume, whichever is lower.	§ 7
(n)(1)...(2)	The Coast Guard will initiate a review of cap increases and other requirements contained within this subpart ...	------

U.S. COAST GUARD - OPA 90
33 CFR 154 Final Rule – June 25, 2001
CROSS REFERENCE

§ 154.1047	BRIEF DESCRIPTION	SECTION
Response plan development and evaluation criteria for facilities that handle, store or transport Group V petroleum oils.		
(a)	…facility that handles…Group V petroleum oils	-----
(a)(1)	Procedures and strategies for responding to a worst case discharge…to the maximum extent practicable	Appendix H
(a)(2)	Sources of equipment and supplies necessary to locate, recover, and mitigate such a discharge	Appendix H
(b)	…ensure that any equipment identified…iscapable of operating in the conditions expected I the geographic area…	Appendix H
(b)(1)…(4)	Ice conditions-Debris-Temperature-Visibility	-----
(c)	…equipment must include…	-----
(c)(1)	Sonar sampling equipment, or other methods for locating the petroleum oil on the bottom or suspended in the water column	Appendix J
(c)(2)	Containment boom, sorbent boom, silt curtains, or other methods for containing the petroleum oil that may remain floating on the surface or to reduce spreading on the bottom	Appendix J
(c)(3)	Dredges, pumps, or other equipment necessary to recover petroleum oil from the bottom and shoreline	Appendix J
(c)(4)	Equipment necessary to assess the impact of such discharge; and	Appendix J
(c)(5)	Other equipment necessary to respond to a discharge involving the type of petroleum oil handled, stored or transported.	Appendix J
(d)	Response resources… (for) Group V…oil…must be capable of being at the spill site within 24 hours…	Appendix J
(e)	…must identify response resources with firefighting capability…must identify and ensure …the availability of adequate firefighting resources…just also identify an individual located at the facility to work with the fire department…	Fig 1.2, 2.5, Sect. 5.0

DOT/PHMSA 49 CFR Part 194
Interim Final Rule – February 23, 2005
CROSS REFERENCE

§ 194.105	BRIEF DESCRIPTION	LOCATION in PLAN
(a)	... determine the worst case discharge ... provide methodology, including calculations, used to arrive at the volume.	§ 1.2, Fig 1.3, § 7, § 8
(b)	The worst case discharge is the largest volume, in barrels, of the following:	-----
(b)(1)	... maximum release time in hours, plus the maximum shutdown response time in hours, multiplied by the maximum flow rate expressed in barrels per hour, plus the largest line drainage volume after shutdown of the line section(s) ...	Fig 1.3, § 7, § 8
(b)(2)	The largest foreseeable discharge for the line section(s) within a response zone, expressed in barrels, based on the maximum historic discharge, if one exists, adjusted for any subsequent corrective or preventative action taken.	Fig 1.3, § 7, § 8
(b)(3)	If the response zone contains one or more breakout tanks, the capacity of the single largest tank or battery of tanks within a single secondary containment system, adjusted for the capacity or size of the secondary containment system, expressed in barrels.	N/A

§ 194.107	BRIEF DESCRIPTION	LOCATION in PLAN
(a)	Each response plan must plan for resources for responding, to the maximum extent practicable, to a worst case discharge, and to a substantial threat of such a discharge.	§5.0, Fig 5.1, App J, Section 7
(b)	Each response plan must be consistent with the NCP and each applicable ACP. An operator must certify that it has reviewed the NCP and each applicable ACP and that the response plan is consistent with the existing NCP and each existing applicable ACP.	Ack & Plan Approval, § 1.5
(b)(1)	As a minimum to be consistent with the NCP a facility response plan must:	---
(b)(1)(i)	Demonstrate…clear understanding of the function of the Federal response structure, including procedures to notify the National response Center reflecting the relationship between the operator's response organization's role and the Federal on scene Coordinator's role in pollution response;	Fig. 2.3, 2.4 Sect. 4.3, App M
(b)(1)(ii)	Establish provisions to ensure the protection of safety at the response site; and	Sect. 3.1, 3.6, 4.8
(b)(1)(iii)	Identify the procedures to obtain any required Federal and State permissions for using alternative response strategies such as in-situ burning and dispersants as provided for in the applicable ACPs; and	Section 3.5, 6.8
(b)(2)	As a minimum, to be consistent with the applicable ACP the plan must	---
(b)(2)(i)	Address the removal of a worst case discharge and the mitigation or prevention of a substantial threat of a worst case discharge	Sect 6.0 Section 8
(b)(2)(ii)	Identify environmentally and economically sensitive areas;	Sect. 6.0, Fig 6.2
(b)(2)(iii)	Describe the responsibilities of the operator and of Federal, State, and local agencies in removing a discharge and in mitigating or preventing a substantial threat of a discharge; and	Section 1.1, 8, App F, J, M
(b)(2)(iv)	Establish the procedures for obtaining an expedited decision on use of dispersant or other chemicals	Sect 6.8, App M
(c)	Each response plan must include:	-----
(c)(1)	A core plan consisting of --	-----
(c)(1)(I)	An information summary as required in ' 194.113.	Fig 1.3
(c)(1)(ii)	Immediate notification procedures.	§ 2.0
(c)(1)(iii)	Spill detection and mitigation procedures.	§ 3.0, App L
(c)(1)(iv)	The name, address, and telephone number of the oil spill response organization, if appropriate.	Fig 2.5, Fig 5.1, App J
(c)(1)(v)	Response activities and response resources.	§ 3.0, 5.0, Fig 5.1, App J

DOT/PHMSA 49 CFR Part 194
Interim Final Rule – February 23, 2005
CROSS REFERENCE

§ 194.107	BRIEF DESCRIPTION	LOCATION in PLAN
(c)(1)(vi)	Names and telephone numbers of Federal, state, and local agencies which the operator expects to have pollution control responsibilities or support.	§ 2.2, Fig. 2.5
(c)(1)(vii)	Training procedures.	§ 4.5
(c)(1)(viii)	Equipment testing.	§ 5.1, App J
(c)(1)(ix)	Drill program…by following PREP guidelines (or) a program that is equivalent to PREP. The operator must describe the drill program in the response plan…	§ 4.6
(c)(1)(x)	Plan review and update procedures.	§ 1.4
(c)(2)	An appendix for each response zone. Each response zone appendix must include the information required in paragraph (d)(1) (I) to (ix) of this section that is specific to the response zone and the worst case discharge calculations.	Fig 1.3
§ 194.113	**BRIEF DESCRIPTION**	**LOCATION in PLAN**
(a)	The information summary for the core plan, required by ' 194.107, must include:	-----
(a)(1)	The name and address of the operator.	Fig 1.3
(a)(2)	For each response zone which contains one or more line sections that meet the criteria for determining significant and substantial harm as described in ' 194.103, a listing and description of the response zones, including county(s) and state(s).	Fig 1.3, § 7
(b)	The information summary for the response zone appendix, required in ' 194.107, must include:	-----
(b)(1)	The information summary for the core plan.	Fig 1.3
(b)(2)	The name and telephone number of the qualified individual available on a 24-hour basis.	Fig 1.3
(b)(3)	The description of the response zone, including county(s) and state(s), for those zones in which a worst case discharge could cause substantial harm to the environment.	Fig 1.3
(b)(4)	A list of line sections for each pipeline contained in the response zone, identified by milepost or survey station number, or other operator designation.	Fig 1.3
(b)(5)	The basis for the operator's determination of significant and substantial harm.	Fig 1.3
(b)(6)	The type of oil and volume of the worst case discharge.	Fig 1.3
§ 194.115	**BRIEF DESCRIPTION**	**LOCATION in PLAN**
(a)	Each operator shall identify and ensure, by contract or other approved means, the resources necessary to remove, to the maximum extent practicable, a worst case discharge and to mitigate or prevent a substantial threat of a worst case discharge.	§ 5.0, Fig 5.1, App J, § 7
(b)	An operator shall identify in the response plan the response resources which are available to respond within the time specified, after discovery of a worst case discharge, or to mitigate the substantial threat of such a discharge.	§ 5.0, Fig 5.1, App J, § 7

DOT/PHMSA 49 CFR Part 194
Interim Final Rule – February 23, 2005
CROSS REFERENCE

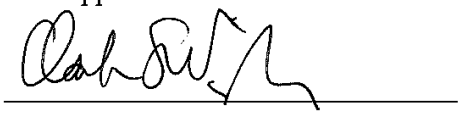
§ 194.117	BRIEF DESCRIPTION	LOCATION in PLAN
(a)	Each operator shall conduct training to ensure that:	-----
(a)(1)	All personnel know --	-----
(a)(1)(I)	Their responsibilities under the response plan	§ 4.5
(a)(1)(ii)	The name and address of, and the procedure for contacting, the operator on a 24-hour basis	Fig 1.3 § 2.0, Fig 2.4
(a)(1)(iii)	The name of, and procedures for contacting, the qualified individual on a 24-hour basis	§ 2.0, Fig 1.3, Fig. 2.4
(a)(2)	Reporting personnel know --	-----
(a)(2)(I)	The content of the information summary of the response plan.	Fig 1.3
(a)(2)(ii)	The toll-free telephone number of the National Response Center	Fig. 2.5
(a)(2)(iii)	The notification process	§ 2.0
(a)(3)	Personnel engaged in response activities know --	-----
(a)(3)(I)	The characteristics and hazards of the oil discharged	Fig 3.2, Toledo Refining Company, LLC Online MSDS System (CHIPS), yearly CBT training modules, and Section 8
(a)(3)(ii)	The conditions that are likely to worsen emergencies, including the consequences of facility malfunctions or failures, and the appropriate corrective actions.	§ 3.0, Section 8
(a)(3)(iii)	The steps necessary to control any accidental discharge of oil and to minimize the potential for fire, explosion, toxicity, or environmental damage	§ 3.0
(a)(3)(iv)	The proper firefighting procedures and use of equipment, fire suits, and breathing apparatus	§ 1.2, 2.0, 3.0
(b)	Each operator shall maintain a training record for each individual that has been trained as required by this section. Theses records must be maintained in the following manner as long as the individual is assigned duties under the response plan	-----
(b)(1)	Records for operator personnel must be maintained at the operator's headquarters	§ 4.5
(b)(2)	Records for personnel engaged in response, other than operator personnel, shall be maintained as determined by the operator.	§ 4.5
(b)(3)	Nothing in this section relieves an operator from the responsibility to ensure that all response personnel are trained to meet the OSHA standards for emergency response operations in 29 CFR 1910.120 ...	§ 4.5

FACILITY RESPONSE PLAN

ACKNOWLEDGMENT AND PLAN APPROVAL

The information and procedures in this Plan must be treated as guidelines only. The user should determine to what extent it is practical and advisable to follow them. This decision may involve considerations not discussed in this Plan.

The information and procedures contained herein are considered to be accurate as of this date and are consistent with the National Contingency Plan (NCP) and applicable Area Contingency Plans (ACP).

Plan Approved: 

Date: April 28, 2014

Clark Wrigley
Refinery Manager
Toledo Refining Company, LLC

FACILITY RESPONSE PLAN

CERTIFICATION OF QUALIFIED INDIVIDUAL AND ALTERNATE QUALIFIED INDIVIDUAL

Toledo Refining Company, LLC hereby certifies to the Coast Guard, Environmental Protection Agency and the Department of Transportation that the individuals identified as Qualified Individual and Alternate Qualified Individual in this plan have the full authority in accordance with the applicable federal regulations and this plan to:

1. Activated and engage in contacting the oil spill removal organizations;
2. Act as liaison with the pre-designated Federal On-Scene Coordinator (FOSC), and;
3. Obligate funds required to carry out response activities.

April 28, 2014
Date

Clark Wrigley, Refinery Manager

STATE OF OHIO

COUTY OF LUCAS

This Certification of Qualified Individual and Alternate Qualified Individual was acknowledged before me on April 28, 2014 by CLARK WRIGLEY, Refinery Manager of Toledo Refining Company, LLC on behalf of said corporation

My Commission expires JAMES M. SCIARINI
Attorney at Law
Notary Public, State of Ohio
My Commission Has No Expiration Date.

FACILITY RESPONSE PLAN

CERTIFICATION OF RESPONSE PREPAREDNESS

Toledo Refining Company, LLC hereby certifies to the Pipeline and Hazardous Materials Safety Administration of the Department of Transportation that it had identified, and ensured by contract, or other means approved by the Pipeline and Hazardous Materials Safety Administration, the availability of private personnel and equipment to response, to the maximum extent practicable, to a worst case discharge or a substantial threat of such a discharge.

May 12, 2014
Date

Clark Wrigley, Refinery Manager

STATE OF OHIO

COUTY OF LUCAS

This Certification of Response Preparedness was acknowledged before me on,

May 12, 2014 by CLARK WRIGLEY,

Refinery Manager of Toledo Refining Company, LLC on behalf of said corporation

My Commission expires

[illegible] M. SCIARINI
Attorney at Law
Notary Public, State of Ohio
My Commission Has No Expiration Date.

FACILITY RESPONSE PLAN

REVISION RECORD

Note: It is the responsibility of the holder of this plan to insure that all changes and updates are made. The holder shall:

- Remove and Discard obsolete pages
- Replace obsolete pages with the updated pages.
- Record each revision on this form

Change Date	***Affected Page Numbers (s)***	***Description of Changes (s)***	***Name***
April, 2014	All manuals	Initial Version*	Elmer Dunberger

* Initial Version for Toledo Refining Company LLC with a Facility Response for each facility (Marine Terminal/Hocking Valley Dock, Tank Farm No. 2, and Main Refinery) within the Toledo Refining Company, LLC.

FACILITY RESPONSE PLAN

REVISION RECORD SIGNATURE PAGE

The following acknowledge they have reviewed the revisions, as noted on the revision record page.

_____	_____
Health, Safety & Security Lead	Date
_____	_____
Environmental Lead	Date
_____	_____
Emergency Response/Security Lead	Date
_____	_____
OPA 90 Responsible Person	Date

FACILITY RESPONSE PLAN

Distribution List

NOTE: The Distribution of this Plan is controlled by the Copy Number located on the front cover and title page. Plan Distribution Procedures are provided in Section 1.3 and the Plan Review and Update Procedures are provided in Section 1.4 and should be followed when making any and all changes.

COPY NUMBER	***PLAN HOLDER***	***LOCATION***
1. Volume 1, 2 and 3	Toledo Refining Company, LLC HR Conference Room 1819 Woodville Rd Oregon, OH 43616	Oregon, OH
2. Volume 1, 2 and 3	Toledo Refining Company, LLC Security Dispactch – Gate 1 1819 Woodville Rd Oregon, OH 43616	Oregon, OH
3. Volume 2	Toledo Refining Company, LLC Operator's office – Tank Farm #2 2200 Pickle Rd Oregon, OH 43616	Oregon, OH
4. Volume 3	Toledo Refining Company, LLC Operator's office – Marine Terminal 1900-2100 Front Street Toledo, OH 43605.	Oregon, OH
5. Volume 1,2 and 3	Toledo Refining Company, LLC Environmental Department 1819 Woodville Rd Oregon, OH 43616	Oregon, OH
6. Volume 1, 2 and 3	Toledo Refining Company, LLC FSS Office 1819 Woodville Rd Oregon, OH 43616	Oregon, OH
7. Volume 1, 2 and 3	Toledo Refining Company, LLC Laboratory Conference Room 1819 Woodville Rd Oregon, OH 43616	Oregon, OH
8. Volume 1, 2 and 3	FRP Coordinator U. S. EPA – Region 5 77 W. Jackson Boulevard, SE-5J Chicago, Illinois 60604	Chicago, IL
9. Volume 1, 2 and 3	Pipeline Response Plans Officer Pipeline and Hazardous Material Safety Administration 1200 New Jersey Avenue, SE.,. Washington, D.C. 20590-0001	Washington, D.C.
10. Volume 1, 2 and 3	U.S. Coast Guard Marine Safety Office 420 Madison - Suite 700 Toledo, OH 43604	Toledo, OH

Emergency Response Action Plan (ERAP)

Qualified Individual Information

(Section 1.2)

Figure 1.4

Qualified Individual and Alternates						
NAME	**RESPONSE TIME**	**ROLE**	**TRAINING LEVEL**	**OFFICE**	**HOME**	**OTHER**
Elmer Dunberger – Supervisor of Security & Emergency Response	10 minutes	Qualified Individual	40 Hrs. HAZWOPR 8 Hrs. Annual	419-698-6669	(b) (6)	
Keith A Dempsey- Emergency Response and Security Shift Supervisor	10 minutes	Alt. Qualified Individual	Annual	419-698-6663		
Ed Donnelly- Emergency Response and Security Shift Supervisor	10 minutes	Alt. Qualified Individual	Annual	419-698-6663		
Phil Wojcinski- Emergency Response and Security Shift Supervisor	10 minutes	Alt. Qualified Individual	Annual	419-698-6663		
Ken Adams- Emergency Response and Security Shift Supervisor	10 minutes	Alt. Qualified Individual	Annual	419-698-6663		
Kevin Kennedy-Emergency Response and Security Shift Supervisor	10 minutes	Alt. Qualified Individual	Annual	419-698-6663		

Emergency Notification List

(Section 1.3.1)

EXTERNAL NOTIFICATION REFERENCES - FIGURE 2.5

EXTERNAL NOTIFICATIONS			
AGENCY	**LOCATION**	**OFFICE**	**ALTERNATE**
National Response Center (NRC)	Washington, D.C.	(800) 424-8802	(202) 267-2675
Ohio EPA Office of Emergency Response (SERC)	Columbus, OH	(800) 282-9378 (In state)	(614) 224-0946
Lucas County (LEPC)	Toledo, OH	(419) 936-3550 (24 Hrs.)	
Ohio State Fire Marshall	Reynoldsburg, OH	(888) 252-0803	(614) 752-8200
OSHA (For Reportable Injury or Death)	Washington, D.C.	(800) 321-6742	
U.S. Environmental Protection Agency (EPA) Region V	Chicago, IL	(312) 353-2318 (24 Hrs.)	(312) 353-2000
U.S. Coast Guard, MSO	Toledo, OH	(419) 418-6050	313-568-9560
U. S. Fish and Wildlife Service (USFWS) Region III	Twin Cities, MN	(978) 281-9328 ext. 6506	
National Marine Fisheries Service, N.E. Region	Gloucester, MA	(978) 281-9300	
Toledo Division of Environmental Services	Toledo, OH	(419) 936-3015	(419) 245-1000
State Highway Patrol	Hamilton, OH	(513) 863-4606	
Ohio State Police	Toledo, OH	(419) 865-5544	
National Weather Service (Recorded Forecasts)	Toledo, OH	(216) 265-2370	
Toledo Water Treatment Plant	Toledo, OH	(419) 936-3021	
TV - Channel 13	Toledo, OH	(419) 531-1313	
TV - Channel 24	Toledo, OH	(419) 535-0024	
TV - Channel 11	Toledo, OH	(419) 248-1111	
TV - Channel 36	Toledo, OH	(419) 244-3600	
Radio - WSPD/WLQR	Toledo, OH	(419) 244-8321	
Radio - K-100	Toledo, OH	(419) 385-6397	
Radio - WGTE FM 91	Toledo, OH	(419) 380-4600	
Radio - WRQN	Toledo, OH	(419) 240-1935	
BP Toledo Refinery (main gate)	Toledo, OH	(419) 698-6451	(419) 698-6400 (Switchboard)
Toledo Public Utilities Dept. (water intakes)	Toledo, OH	(419) 936-3021	(419) 936-3067

EXTERNAL NOTIFICATION REFERENCES - FIGURE 2.5

LOCAL EMERGENCY SERVICES (DIAL 911 for All Police, Fire, and Ambulance Emergencies)			
SERVICE	**LOCATION**	**OFFICE**	**ALTERNATE**
Local Emergency Planning Committee	Toledo, OH	(419) 936-3550 (24 Hrs.)	
Oregon Fire Department	Oregon, OH	(419) 691-5787 (24 Hrs.)	
Toledo Fire / Rescue	Toledo, OH	(419) 245-1180 (24 Hrs.)	
St. Charles Hospital	Toledo, OH	(419) 696-7200	(419) 696-7300 ER
Local Water Supply System	Oregon, OH	(419) 698-7039	(419) 698-7064
	Toledo, OH	(419) 936-3021	(419) 936-3067
Bay Park Community Hospital	Toledo, OH	(419) 690-7900	(419) 690-7911 ER
St. Vincent Mercy Medical Center	Toledo, OH	(419) 251-4200	(419) 251-4354 ER

USCG CLASSIFIED OIL SPILL REMOVAL ORGANIZATIONS (OSRO) *				
COMPANY	**RESPONSE TIME**	**LOCATION**	**OFFICE**	**ALTERNATE**
Heritage Environmental Services	1 to 2 hours	Toledo, OH	419-729-1321 (24 Hrs)	
NRC-National Response Corporation	1 to 2 hours	Great River, NY	(800) 899-4672 (24 Hrs)	(631) 224-9141

ADDITIONAL RESPONSE RESOURCES				
COMPANY	**RESPONSE TIME**	**LOCATION**	**OFFICE**	**ALTERNATE**
Nature's Nursery	1 hour	Whitehouse, OH	419 877-0060	
C&W Tank Cleaning Company	1 hour	Oregon, OH	(419) 691-1995 (24 Hrs.)	(419) 466-5493
EQ	2 to 3 hours	Ypsilanti, MI	(800) 839-3975 (24Hrs)	(419)-346-0795
International Bird Rescue Center	24 hours to 48 hours	Berkeley, CA	(707) 207-0380	
Tri-State Bird Rescue	24 hours to 48 hours	Newark, DE	(302) 737-7241	(800) 710-0695 PGR (800) 710-0696 PGR

*** Note: Toledo Refining Co is also a member of the Northwest Ohio and Michigan Mutual Assistance District (419) 245-1180**

Spill Response Notification Form

(Section 1.3.1)

Information on Discharge*
Facility: _____

(A) Reporting Party	(B) Suspected Responsible Party
Name:	Name:
Phone:	Phone:
Job Position:	
Company:	Company:
Address:	Organization Type: ☐ Private Citizen ☐ Private Enterprise ☐ Public Utility ☐ Local Government ☐ State Government ☐ Federal Government
City:	City:
State:	State:
Zip:	Zip:
Were materials discharged: ☐ Yes ☐ No	
Calling for Responsible Party: ☐ Yes ☐ No	
Date and Time of report call:	
Other Notifications : ☐ USCG ☐ EPA ☐ State ☐ Other:	

- It is not necessary to wait for all information before calling the National Response Center (NRC) 1-800 424-8802 or direct telephone: 202-267-2675

Incident Description			
Source and /or Cause of incident:			
Date of Incident:	Time of Incident:		
Incident Address/Location Nearest City/Distance from City/Township Range Borough:			
Storage Tank Container: Above Ground: ☐ Below ground: ☐ Other: ☐			
Container capacity (bbls):			
Facility Capacity			
Tank Capacity (bbls):	Latitude:	Longitude:	River Mile:

Information on Discharge*

Facility: _____

Materials	
Material Discharged:	
Quantity in water: (include units)	
Response Action	
Actions Taken to Correct or Mitigate Incident:	
Impact	
Number of Injuries:	Number of Fatalities:
Evacuations required: ☐ Yes ☐ No ☐ Unknown	If Yes: Number Evacuated:
Any Damage: ☐ Yes ☐ No ☐ Unknown	If Yes: Damage in Dollars:
Additional Information	

Response Equipment List and Location

(Section 1.3.2)

FIGURE 5.2

FACILITY RESPONSE EQUIPMENT *

ITEM	LOCATION	QTY	WRHS CODE	INSPECTOR	DATE	COMMENTS
American Boom & Barrier Containment Boom	Refinery Fire Dept.	Sections totaling 700’	N/A			
Sea Arc 18’, 1994 with 100 HP evinrude and accessories: rope, life jackets, tow bridals, anchors (Boat 492)	Refinery Fire Dept.	1 each	N/A			
Sea Arc 26’, 1991 with (2) 100 HP evinrude and accessories: rope, life jackets, tow bridals, anchors, (400’) containment boom (Boat 491)	Refinery FD/Harrison Marina	1 each	N/A			
Containment Boom	HVD	900’	26-086-061			
Absorbent Boom	Refinery #2 Storehouse Area 217	10 bags; 4 - 10’ sections each	26-086-066			
Absorbent Pads	Refinery #1 Storehouse Area 12161	8 packs	26-086-063			
Creek Boom Trailer	Refinery FD	500’ Creek Boom	N/A			
Spill Control Trailer *	Refinery Fire Dept.	Inventory Attached	N/A			
River Boom Trailer	Refinery FD	500’ River boom	N/A			
Snow Boom Trailer	Refinery FD	1000’ Creek Boom	N/A			
Skimmers	Refinery	2 each	N/A			
Communications Equipment - mounted in Unit 5 - mounted in boat - hand held	Refinery Fire Dept.	 1 VHF; 1 marine 1 VHF; 1 marine 6 VHF; 6 marine	N/A			
(Unit 11) 1989 White/GMC 1500 GPM pumper with 54’ articulating boom	Refinery Fire Dept.	1 each	N/A			
(Unit 10) 1981 Pierce 1500 GPM pumper with 55’ aerial ladder	Refinery Fire Dept.	1 each	N/A			
(Unit 1) 2002 E-ONE pumper 3,500 GPM	Refinery Fire Dept.	1 each	N/A			
(Unit 12) 1975 Ford Flat Bed (Used as foam hauler)	Refinery Fire Dept.	1 each	N/A			
(Unit 9) 1995 Ford F-350 Super Duty Mini Pumper	Refinery FD	1 each	N/A			
(Unit 6) 2007 Ford F-350	Refinery Fire Dept.	1 each	N/A			
(Unit 5) 1980 GMC, Hazardous Materials Truck	Refinery Fire Dept.	1 each	N/A			

FIGURE 5.2

FACILITY RESPONSE EQUIPMENT (Cont'd)

* SPILL CONTROL TRAILER EQUIPMENT
(Staged at the Toledo Refining Company, LLC Fire Dept.)

Side	Qty	Description	Inspector	Date
Back Left Door	1	Wooden Handle Pitchfork		
	2	Wooden Handle Spade Shovel		
Left Rear Side	2	Expandable Gaff Hooks		
	1	8lb. Sledge Hammer (Fiberglass)		
	1	20lb ABC Fire Extinguisher		
	10	24" Metal Stakes		
1A (Top)	6	3M Half Masks		
	6pr	3M Cartridges		
	3	Suspenders		
	2	Nomex Coveralls (46R, 50R)		
	1 cs	Tyvek-Poly Coated (3XL)		
1B (Middle)	3	Rainsuits (4XL)		
	3	Rainsuits (5XL)		
	2	Duct Tape		
	4	Bee Bopper		
	10	Leather Gloves (XL)		
	1	Nitrile Glove (M)		
	1	Nitrile Glove (L)		
	4	Googles		
1C (Bottom)	2	Boots Size 12		
	3	Boots Size 13		
	1	Hip Waders - Neoprene (13)		
	1	Hip Waders - Rubber (13)		
2A (Top)	1	Scrubs in a Bucket		
	2	Box of Wyp-All		
	4	Inflatable Kiddie Pools		
	1	Box of Garbage Bags		
	1	Drain Cover		
	1	Wooden Plug Kit		
2B (Middle)	1	Chain Saw		
	1	Gal Bar Oil		
	1	40:1 Fuel Can (Chainsaw)		
	1	Barrel Pump w/ slide fitting		
	1	25 ft Air Hose w/threads		
2C (Bottom)	4	Sandbags (filled)		
	1	Box of Sandbags		

	1	Sandbag Scoop		
	2	Bags of Sand		
3A/B/C	2	Wheelbarrows		
	2	Wood Handle Scoop Shovels		
	1	Wood Handle Flat Shovel		
	1	Fiberglass Handle Flat Shovel		
	1	Fiberglass Spade Shovel		
	1	Broom		
	15	Ground Posts		
4A (Top)	4	Spill Attack Kits		
	2	Box Cobra Coil Sausages		
	2	Box Peat Sorb Pads		
	1	Box Sorbant Industrial Rug (36"x50')		
4B (Middle)	8	8"x10' Absorbent Boom		
4C (Bottom)	8	8"x10' Absorbent Boom		
5/6/7 A (Top)	12	4"x10' PVC Pipe		
	3	2"x4"x8'		
5B (Middle)	1	Roll Snow Fence		
	6	Rolls of Chicken Wire (1"x36"x25')		
5C (Bottom)	3	Bags of Pom Pom's		
	1	Bag of Collapsable LED Cones		
6B (Middle)	2	Rolls of Plastic Sheeting (20'x100')		
	1	Rolls of Plastic Sheeting (12x100')		
6C (Bottom)	2	Bags of Oil Dry		
	4	Sandbags (filled)		
7B (Middle)	7	Safety Vests		
	16	24" Metal Stakes		
	12	24" Wood Stakes		
	1	Box of Flashlights		
		*(3) C Cell Flashlight		
		*(3) 6 volt Flashlight		
		*Spare Batteries		
	1	Tool Box		
		*Small Sledge		
		*Utility Knife		
		*Crescent Wrench		
		*Screw Drivers (various)		
		*Twine		
7C (Bottom)	3	200' Dockline Rope Bags		

	2	Wheel Chocks		
	1	Rope Box		
		*(1)Large 50' Braided Rope		
		*(1) 50' Hemp Rope		
		*(10) 50' sections of Cord		
		*(3) 100' Red Anchor Rope		
		*(1) 50' Dockline		
		*(2) 25' Red Anchor Rope		
Right Rear Side	2	Expandable Gaff Hooks		
	1	Windsock		
	1	10 lb Sledgehammer		
	1	Hand Saw		
	1	20lb ABC Fire Extinguisher		
	10	24" Metal Stakes		
Right Rear Door	2	Push Broom		
	2	Fiberglass Handle Flat Shovel		

* Note: The equipment listed in Figure 5.2 is inspected on a routine basis and is deployed as stated in Section 4.0.

Response Equipment Testing and Deployment

(Section 1.3.4)

4.3 EMERGENCY RESPONSE TEAM (ERT) – See Figure F.1

The first Toledo Refining Company, LLC person on scene, typically the on-duty Emergency Response Shift Supervisor or the on-duty Fire Marshal, will function as the On-Scene Commander until the arrival of the Emergency Response Chief or the Emergency Response and Security Shift Supervisor. Transfer of command may take place as more senior management respond to the incident.

The number of local Emergency Response Team Personnel required to handle an incident controlled by the On-Scene Commander and will depend on the size and complexity of the incident. The On-Scene Commander is always responsible for directing the response activities and will assume the duties of all the primary positions until the duties can be delegated to other qualified personnel.

Refer to Appendix F of this plan for job descriptions of the primary response team positions.

4.4 EMERGENCY COMMAND TEAM (ECT) – See Figure 4.2

The Emergency Command Team is a group of personnel trained to manage incidents. This team is activated as necessary, dependent upon the magnitude of the incident.

The size of, and positions on, the Emergency Command Team are incident-dependent. Dialogue with the activating facility will determine which positions will be activated.

A fully-staffed Emergency Command Team is designed to cover all aspects of a comprehensive and prolonged incident response (Level III incident). During a prolonged response, additional personnel may be cascaded to the incident location, and more than one level within the Team may be involved to sustain 24-hour operations.

4.5 RESPONSE TEAM TRAINING

The Spill Management Team is staffed by specially trained personnel from various Toledo Refining Company, LLC departments, and/or by consultants. Toledo Refining Company, LLC requires that all response personnel, including contractors and casual labor, have the appropriate training necessary to serve on a response team during an emergency. Team members will receive training in the following:

Response Plan Review

All Spill Management Team members should review their Facility Response Plan at least annually, or whenever their job position or responsibilities change under the Plan. A copy of this Plan will be available at all times to the team members at the facility.

HAZWOPER (29 CFR 1910.120)

Federal and state regulations require that response team members maintain up-

to-date HAZWOPER training necessary to function in their assigned positions. At a minimum, Toledo Refining Company, LLC employees will receive "First Responder Awareness Level" training. All "Non-Toledo Refining Company, LLC" personnel responding to an incident must satisfy the applicable HAZWOPER training requirements of 29 CFR 1910.120.

OSHA HAZWOPER TRAINING REQUIREMENTS		
Responder Classification	**Required Training Hours**	**Refresher**
29 CFR 1910.120(q) Emergency Response		
First Responder - Awareness Level	2-4 hrs demonstration of competency	same
First Responder - Operations Level	8 hrs	8 hrs
Hazardous Materials Technician	24 hrs plus competency	8 hrs
Hazardous Materials Specialist	24 hrs plus competency in specialized areas	8 hrs
On-Scene Commander	24 hrs plus competency	8 hrs
29 CFR 1910.120(e) Clean Up Sites		
General Site Workers	40 hrs / 3 days on the job training	8 hrs
Occasional Workers (Limited Tasks)	24 hrs / 1 day on the job training	8 hrs
General Site Workers (Low Hazard)	24 hrs / 1 day on the job training	8 hrs
Supervisors	8 hrs supervisor training	8 hrs
29 CFR 1910.120(p)(7)(8) RCRA TSD Sites		
New Employees	24 hrs	8 hrs
Current Employees*	24 hrs	8 hrs

* Previous work experience and/or training certified as equivalent by employer.

4.5 RESPONSE TEAM TRAINING (Cont'd)

Unified Command System

Response team members will receive UCS training, and may also receive supplemental training in other, related general topics.

4.5.1 Volunteers

Toledo Refining Company, LLC will not use non-employee volunteers for emergency incident response, and no Toledo Refining Company, LLC provisions exist to train them. Volunteers may be used by government response entities, as allowed by applicable policies/procedures.

4.5.2 Training Records

Training records for local team members will be maintained at the facility according to Federal, state, and local government requirements (three years for the U.S. Coast Guard and RSPA and five years for the U.S. Environmental Protection Agency). Training records will be maintained

indefinitely for emergency response personnel as long as they maintain an active role, with assigned duties, on the response team.

4.6 RESPONSE TEAM EXERCISES

Spill Management Team members, government agencies, contractors, and other resources must participate in response exercises required by Federal, state, or local regulations. The drill program and elements covered will be completed as detailed in the "National Preparedness for Response Exercise Program (PREP) Guidelines." Toledo Refining Company, LLC will conduct announced and unannounced drills to maintain compliance, and each plan-holder must conduct at least one exercise annually. The following table lists the triennial exercise cycle for facilities (see PREP Guidelines for full details).

Triennial Cycle		
Total Number	**Frequency**	**Exercise Type/Description**
12	Quarterly	QI Notification Exercise
6	Semi-Annual	Equipment Deployment Exercise *(Facility-owned equipment)*
3	Annual	Spill Management Team Tabletop Exercise
3	Annual	Equipment Deployment Exercise *(facilities with OSRO-owned equipment)*
3	Annual	Unannounced Exercise *(not a separate exercise)* Actual response can be considered as an unannounced exercise.
NOTE: All response plan components must be exercised at least once in the cycle. Exercise records will be maintained at the Facility as follows: EPA – 5 years; USCG and RSPA – 3 years.		

4.6 RESPONSE TEAM EXERCISES (Cont'd)

Quarterly QI Notification Exercise

- **Scope:** Exercise communication between facility personnel and the QI(s) and/or designated alternate(s). At least once each year, one of the notification exercises should be conducted during non-business hours.

- **Objective:** Contact must be made with a QI or designated alternate, as identified in the Plan.

- **General:** All personnel receiving notification shall respond to the notification and verify their receipt of the notification. Personnel who do not respond should be contacted to determine whether or not they received the notification.

Annual and Semi-Annual Equipment Deployment Exercise (for facilities with equipment)

- **Scope:** Deploy and operate facility response equipment identified in the response plan. The equipment to be deployed must include the following, at a minimum:

  - 1,000 feet of representative type of boom;
  - one of each type of skimming system; or
  - the equipment necessary to respond to the facility's Small/Average Most Probable Discharge (AMPD), whichever is less.

- **Objective:** Demonstrate personnel's ability to deploy and operate response equipment. Ensure that the response equipment is in proper working order.

- **General:** The facility may take credit for actual equipment deployment to a spill, or for training sessions, as long as the activities are properly documented.

***Annual Equipment Deployment Exercise* (OSRO-owned equipment)**

- **Review:** The facility should determine that the OSRO(s) has completed the equipment deployment exercise requirements and has maintained the necessary documentation. The OSRO may deploy equipment at any location, so long as it occurs within an operating environment similar to the facility's.

- **Scope:** OSRO must deploy and operate response equipment identified in the response plan. The equipment to be deployed must include the following, at a minimum:

  - 1,000 feet of representative type of boom, and
  - One of each type of skimming system.

- **Objective:** OSRO personnel must demonstrate their ability to deploy and operate OSRO response equipment, and must ensure that its response equipment is in proper working order.

Annual Response Team Tabletop Exercise

- **Scope:** Exercise the response team's organization, communication, and decision- making in managing a spill response. Each team identified within the plan must conduct an annual Response Team Tabletop Exercise.

- **Objective:** Exercise the response team in a review of the following:

  - Knowledge of the Plan.
  - Proper notifications.
  - Communications system.
  - Ability to access an OSRO.
  - Coordination of internal spill response personnel.
  - Transition from a local team to a regional team.
  - Ability to effectively coordinate response activity with the National Response System (NRS) infrastructure.
  - Ability to access information in the Area Contingency Plan.

- **General:** A minimum of one Response Team Tabletop Exercise in a triennial cycle will involve a Worst-Case Discharge scenario.

Government-Initiated Unannounced Exercise

- **Scope:** Upon request, the Facility is required to participate in only one unannounced exercise every 36 months from the date of the last government-initiated unannounced exercise.

Exercises are limited to approximately four hours in duration.

Exercises would involve response to a Small/Average Most Probable Discharge scenario.

Exercise would involve equipment deployment to respond to a spill scenario.

- **Objective:** Conduct proper notifications to respond to unannounced scenario of a Small/Average Most Probable Discharge.

  Demonstrate that the response is timely, conducted with an adequate amount of equipment for the scenario, and properly conducted.

- **General:** This exercise is only applicable to those facilities that are randomly chosen.

Area Exercises

- **Objective:** The purpose of the area exercise is to exercise the entire response community in a particular area. An area is defined as "that geographic area for which a separate and distinct Area Contingency Plan has been prepared, as described in OPA 90." The response community includes the federal, state, and local government and industry. The area exercises are designed to exercise the government and industry interface for spill response.

- **General:** The goal is to ensure that all areas of the country are exercised triennially. All of the area exercises will be developed by an exercise design team. The exercise design team is comprised of representatives from the federal, state, and local government and industry. A lead plan holder would lead each area exercise. The lead plan holder is the organization (government or industry) that holds the primary plan that is exercised in the area exercise. The lead plan holder would have the final word on designing the scope and scenario of the exercise.

Exercise Documentation

- All exercises should be documented and maintained at the facility; documentation should specify the:

  - Type of exercise;
  - Date and time of the exercise;
  - Description of the exercise;
  - Objectives met in the exercise;

- Components of the response plan exercised; and
- Lessons learned.

- Sample exercise forms are included in Appendix G. However, slight variations of the forms are acceptable and may be utilized at specific facilities.

- Exercise documentation should be kept on file for the required length of time depending on the regulating agency (three years for the U.S. Coast Guard and five years for the U.S. Environmental Protection Agency).

Exercise Planning and Design

- Designing and planning a spill response simulation exercise involves the determination of the appropriate spilled product discharge scenario and establishment of the framework for preparing, managing, and evaluating the exercise. It is the responsibility of the Emergency Response Manager to plan, carry out, and monitor drills and exercises.

Facility Response Team List

(Section 1.3.4)

FIGURE 2.4

INTERNAL NOTIFICATION REFERENCES

EMERGENCY RESPONSE TEAM						
NAME	**RESPONSE TIME**	**RESPONSIBILITY DURING RESPONSE ACTION**	**TRAINING LEVEL**	**OFFICE**	**HOME**	**OTHER**
Elmer Dunberger	10 Minutes (maximum)	Security Lead / Qualified Individual /Alternate QI	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6669	(b) (6)	
Ken Adams	15 minutes (*maximum*)	Emergency Response Shift Supervisor / QI / Alternate QI	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6663		
Keith Dempsey	15 minutes (maximum)	Emergency Response Shift Supervisor / QI / Alternate QI	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6663		
Ed Donnelly	10 minutes (*maximum*)	Emergency Response Shift Supervisor / QI / Alternate QI	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6663		
Kevin Kennedy	15 minutes (maximum)	Emergency Response Shift Supervisor / QI / Alternate QI	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6663		
Phil Wojcinski	10 minutes (*maximum*)	Emergency Response Shift Supervisor / QI / Alternate QI	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6663		
Cory Clark	15 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6628		
Chris Conley	20 minutes *(maximum)*	Emergency Response		419-697-2491		
Douglas Church	60 Minutes (maximum)	Emergency Response		419-698-6600		
Richard Cutcher	15 Minutes (maximum)	Emergency Response		419-698-6600		

EMERGENCY RESPONSE TEAM

NAME	RESPONSE TIME	RESPONSIBILITY DURING RESPONSE ACTION	TRAINING LEVEL	OFFICE	HOME	OTHER
Sandy Daniel	20 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6692	(b) (6)	
Justin Donley	15 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		
Jessie Duke	20 minutes (maximum)	Emergency Response		419-698-6600		
Fred Espinoza	15 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6608		
Craig Felbinger	20 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		
Daniel Flores	20 minutes (*maximum)*	Emergency Response		419-698-6600		
Dennis Flory	45 minutes *(maximum)*	Emergency Response		419-698-6600		
Dan Gresh	30 minutes	Emergency Response		419 698 6600		
Mike Jones	20 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6659		
Marty Koch	15 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6608		
John Kowalski	20 minutes (maximum)	Emergency Response		419-698-6600		
Mark Lambert	15 minutes *(maximum)*	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6974		

EMERGENCY RESPONSE TEAM

NAME	RESPONSE TIME	RESPONSIBILITY DURING RESPONSE ACTION	TRAINING LEVEL	OFFICE	HOME	OTHER
Terry Mack	15 minutes (maximum)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600	(b) (6)	
Mike Mahr	20 minutes (maximum)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6772		
Tim Marshall	30 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		
Jason McVey	45 minutes (maximum)	Emergency Response		419-698-6600		
Rusty Miller	15 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		
Tim Musolf	20 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		
Kevin Rank	10 minutes (*maximum*)	Emergency Response		419-698-6600		
Thomas Saunders	10 minutes (maximum)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6608		
Nick Schnell	20 minutes (*maximum*)	Emergency Response		419-698-6600		
Rick Schroeder	20 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		
Clark Timmons	15 minutes (maximum)	Emergency Response		419-698-6600		
Lloyd Wright	20 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		

EMERGENCY RESPONSE TEAM						
NAME	**RESPONSE TIME**	**RESPONSIBILITY DURING RESPONSE ACTION**	**TRAINING LEVEL**	**OFFICE**	**HOME**	**OTHER**
Dave Yap	15 minutes (*maximum*)	Emergency Response		419-698-6600	(b) (6) [redacted]	
Brian Yost	20 minutes (*maximum*)	Emergency Response		419-698-6600		

FIGURE 2.4

INTERNAL NOTIFICATION REFERENCES (Cont'd)

EMERGENCY COMMAND TEAM						
NAME	**RESPONSE TIME**	**RESPONSIBILITY DURING RESPONSE ACTION**	**TRAINING LEVEL**	**OFFICE**	**HOME**	**OTHER**
Clark Wrigley	15 minutes (*maximum*)	Incident Commander	Annually	419-698-6622	(b) (6)	
Neal Sahni	20 minutes (*maximum*)	Deputy Incident Commander	Annually	419-698-6766		
James Sciarini	20 minutes (*maximum*)	Administration Officer	Annually	419-698-6709		
Olivia Summons	15 minutes (*maximum*)	Information Officer	Annually	419-698-6910		
Joe Niedecken	15 minutes (*maximum*)	Refinery Operations Officer	Annually	419-698-6760		
Eric Fannin	15 minutes (*maximum*)	Safety Officer	Annually	419-698-6868		
Chris McCormick	35 minutes (*maximum*)	Planning Section Chief	Annually	419-697-6547		
Daniel Ingram	20 minutes (*maximum*)	Logistics Section Chief	Annually	419-698-6717		
Nancy Perham	35 minutes (*maximum*)	Finance Officer	Annually	419-697-6549		
Elaine Moore	15 minutes (*maximum*)	Liaison Officer	Annually	419-698-6847		
Vickie Witty Davis	35 minutes (*maximum*)	Oil Flow Officer	Annually	419-698-6794		

EMERGENCY COMMAND TEAM						
NAME	**RESPONSE TIME**	**RESPONSIBILITY DURING RESPONSE ACTION**	**TRAINING LEVEL**	**OFFICE**	**HOME**	**OTHER**
Christine Shultz	15 minutes (*maximum*)	Documentation Unit Leader	Annually	419-698-6810	(b) (6)	
Richard Beans	30 minutes (maximum)	Communications Unit Leader	Annually	419-698-6637		

Evacuation Plan

(Section 1.3.5)

EVACUATION PLAN

(b) (7)(F), (b) (3)

[redacted]

EVACUATION PLAN (Cont'd)

(b) (7)(F), (b) (3)

[redacted]

EVACUATION PLAN (Cont'd)

(b) (7)(F), (b) (3)

[redacted]

EVACUATION PLAN (Cont'd)

(b) (7)(F), (b) (3)

[redacted]

Immediate Action

(Section 1.7.1)

3.1 INITIAL RESPONSE ACTIONS (Cont'd)

FIRST TOLEDO REFINING COMPANY, LLC PERSON NOTIFIED/ON-SCENE

- _____ Follow the appropriate ***"Specific Incident Response Checklist"*** in Figure 3.1 and ***"Product Specific Response Considerations"*** in Figure 3.2.
- _____ Notify **Facility Shift Superintendent** of the incident.
- _____ Utilize local emergency services as necessary (police, fire, medical).
- _____ Notify the Pipeline Controllers, as appropriate.

On-Scene Commander (G-1 responding to scene)

- _____ **Evaluate the Severity**, Potential Impact, Safety Concerns, and Response Requirements based on the initial data provided by the first person on scene.
- _____ Assume the role of **Incident Commander**.
- _____ **Confirm safety** aspects at site, including need for personal protective equipment, sources of ignition, and potential need for evacuation.
- _____ Activate the **Emergency Response Team and Emergency Command Team**, as the situation demands.
- _____ Coordinate/perform **activation of additional spill response contractors,** as the situation demands (telephone reference is provided in Figure 2.5).
- _____ Coordinate/perform required notifications are completed.
- _____ Coordinate/perform **regulatory agency notification,** as the situation demands.
- _____ Proceed to spill site and **coordinate response and clean-up operations.**
- _____ Direct containment, dispersion, and/or clean-up operations in accordance with the Product Specific Response Considerations provided in Figures 3.2 and 3.3.

LOCAL RESPONSE TEAM

- _____ Assigned personnel will immediately respond to a discharge from the Facility, as the situation demands.
- _____ Perform response/clean-up operations as directed or coordinated by the Incident Commander.
- _____ Assist as directed at the spill site.

FIGURE 3.1

SPECIFIC INCIDENT RESPONSE CHECKLIST

Remember, Without Exception, Personnel Safety Is First Priority. Excessive Exposure To The Vapor And Liquid Stages Of The Spilled Product Should Be Avoided.

INITIAL RESPONSE

- _____ Take appropriate personal protective measures.
- _____ Call for medical assistance if an injury has occurred.
- _____ Check wind direction before investigating incidents where vapor cloud is a possibility.
- _____ Utilize LEL meter when you conduct an initial investigation to determine what has been released and the source.
- _____ Do not investigate on your own, take a buddy.
- _____ When you evacuate the Facility because of toxic or explosive vapors, make sure that you take the FRP, response checklists, cell phones, radios, etc. with you to the muster point.
- _____ At the evacuation muster point, take a head count to determine if anyone is missing.
- _____ If possible, block access to the hot zone and/or entire Facility (use vehicles, caution tape, traffic cones, etc.).
- _____ Restrict access to the spill site and adjacent area as the situation demands. Take any other steps necessary to minimize any threat to health and safety.
- _____ Verify the type of product and quantity released (Material Safety Data Sheets are retained separately at the Facility).
- _____ Advise personnel in the area of any potential threat and/or initiate evacuation procedures.
- _____ Use testing and sampling equipment to determine potential safety hazards, as the situation demands.
- _____ Identify/Isolate the source and minimize the loss of product, from a safe distance.
- _____ Take necessary fire response actions.
- _____ Eliminate possible sources of ignition in the near vicinity of the spill.
- _____ Notify Facility Management of the incident.

FIGURE 3.1

SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

LINE BREAK OR LEAK, SPECIFIC RESPONSE

- _____ Shut down pumping equipment.
- _____ Close upstream and downstream block valves.
- _____ Utilize Combustible Gas Indicator, O_2 meter, proper colormetric indicator and other air sampling measurements to assure that areas are safe to enter for continued response operations.
- _____ Mitigate spreading of the product, as the situation demands. Potential containment strategies include:
  - Earthen dike/berm
  - Ditching
  - Spreading sorbent material over the spill
- _____ Prevent the spill from entering the waterways, sewer, etc. to the greatest extent possible, from a safe distance.
- _____ If located within containment area, ensure that drainage valve(s) is "closed".
- _____ Drain the line section, as the situation demands.
- _____ Make all necessary repairs.
- _____ Return the line to service when repairs are complete.
- _____ Clean up spilled product to eliminate any possible environmental problems. Be alert for underground cables.
- _____ Inform local operators such as utilities, telephone company, railway.
- _____ If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in Section 6.0. Determine which of these may be threatened by the spill and direct the response operation to these locations. Initiate protection and recovery actions.
- _____ Complete follow-up and written reporting, as the situation demands.

FIGURE 3.1

SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

STORAGE TANK LEAK, SPECIFIC RESPONSE

- _____ Shut down all tank battery product movement operations and isolate the tank.
- _____ Initiate Confined Space Entry procedures, as applicable.
- _____ Ensure that the containment area drainage valve(s) is "closed".
- _____ If near tank bottom, consider filling tank with water and maintain water bottom to suspend the discharge.
- _____ Utilize Combustible Gas Indicator, O_2 meter, proper colormetric indicator and other air sampling measurements to assure that areas are safe to enter for continued response operations.
- _____ Block drainage of spilled material from traveling offsite.
- _____ Stop all traffic in hazardous area (inside and outside of property boundaries), as the situation demands.
- _____ Remove product from containment area (at a sump or in a low area) with an explosion proof pump, oil skimmer, and/or vacuum truck w/ skimmer attachments.
- _____ If applicable, process remaining product through the separator system.
- _____ Empty tank as soon as possible.
- _____ Make all necessary repairs. Return the line/tank to service when repairs are complete and tested.
- _____ Clean up product spill to eliminate any possible environmental problems. Be alert for underground cables.
- _____ Inform local operators such as utilities, telephone company, railway.
- _____ If necessary, call one (1) of the approved waste removal companies to remove the remaining sludge and residue from the containment area.
- _____ If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in Section 6.0 and ACP. Determine which of these may be threatened by the spill and direct the response to these locations. Initiate protection and recovery actions.
- _____ Complete follow-up and written reporting, as the situation demands.

FIGURE 3.1

SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

EXPLOSIONS AND/OR FIRE, SPECIFIC RESPONSE

- _____ Evacuate area.
- _____ Notify Fire Department.
- _____ Keep unnecessary people away.
- _____ Isolate hazard area and deny entry.
- _____ Stay upwind.
- _____ Keep out of low areas.
- _____ Attempt to control the fire until the fire department arrives. Do not risk injury.
- _____ Close all open valves.
- _____ Turn off all electrical power in the fire area or, if necessary, the entire Facility.
- _____ Employees are **NOT** to attempt to fight a large, fast spreading fire. Attempt to control small fires, to extinguish or prevent spreading, using whatever means are available (i.e. fire extinguisher, water, etc.).
- _____ If fire is located at a point where the incoming pipeline stream creates additional hazards, the Facility Personnel will hit the emergency shutdown button to close out the headgates, and notify the pipeline controllers of the problem.

All personnel are reminded that outsiders other than emergency services will not be allowed in the Facility during the time of an emergency, and that no statements will be issued to the media or other interested parties except by designated Facility Management. Be courteous with media representatives and direct them to the designated spokesman.

Fire hydrants, located in the vicinity of this Facility, operate at a pressure of 120-150 psi.

FIGURE 3.1

SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

VAPOR CLOUD (from a massive spill, line rupture, etc.), SPECIFIC RESPONSE

- _____ The person who discovers the vapor cloud will sound the alarm and notify the supervisor on duty and vacate the area.
- _____ **Remember: the only proper action in the presence of a vapor cloud is to get away from it. Do not shut off electrical equipment.**
- _____ All personnel will report to the evacuation muster point for roll call and further instructions.
- _____ After all personnel have been accounted for, the Facility Manager will initiate the following actions as deemed necessary:

    1. Shut down pipeline.
    2. Evacuation of adjacent property.
    3. Only the fire department will be permitted to enter the Facility.

- _____ Contact the appropriate agencies and potentially affected neighbors

FIGURE 3.2

PRODUCT SPECIFIC RESPONSE CONSIDERATIONS
For

CRUDE OIL SPILLS

Flash Point Range: Above 100°F

Remember, Without Exception, Personnel Safety Is First Priority. Excessive Exposure To The Vapor And Liquid Stages Of The Spilled Product Should Be Avoided.

Suggested physical response actions for these products are detailed below. It is important to note however, that each situation is unique and must be individually responded to. These procedures are considerations only. Actual circumstances may dictate that the procedures followed may differ somewhat from those listed below. ***The following are intended for guideline purposes only.***

These materials are not extremely flammable and the preferred response is containment and mechanical recovery.

___ Identify source and stop discharge if possible.

___ Obtain explosimeter and other air sampling measurements to assure that areas are safe to enter for continued response operations.

___ If spill occurs at the Refinery, every effort must be made to block any drainage to ditches to prevent product from escaping the containment area. Commence containment efforts for any product which has escaped.

___ Deploy spill response equipment and personnel in an attempt to contain and recover as much product as possible.

___ Advise people in the area of any potential threat and/or initiate evacuation. Inform local operators such as utilities, telephone company, railway, and tunnels as the situation demands.

___ Recover the product and affected soil. Be alert for underground cables and water bearing formations. Remember that product may penetrate deeper if impermeable natural layers are disturbed.

___ Determine the direction and expected duration of spill movement. Refer to the maps provided in Figure 6.1 for an overview of the area.

___ Request local authorities to establish traffic control in the area, as the situation demands.

___ If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in Section 6.0. Determine which of these may be threatened by the spill and direct the response operation to these locations. Initiate protection and recovery actions.

FIGURE 3.3

PRODUCT SPECIFIC RESPONSE CONSIDERATIONS
For

GASOLINE SPILLS

Flash Point Range: Below 100°F

Remember, Without Exception, Personnel Safety Is First Priority. Excessive Exposure To The Vapor And Liquid Stages Of The Spilled Product Should Be Avoided.

Suggested physical response actions for these products are detailed below. It is important to note however, that each situation is unique and must be individually responded to. These procedures are considerations only. Actual circumstances may dictate that procedures followed may differ somewhat from those listed below. ***The following are intended for guideline purposes only.***

These materials float on water and are extremely flammable. Containment of these materials may allow explosive concentrations to accumulate. The preferred response is to minimize impact to water and protect shorelines (storm sewers, creeks, rivers, etc.) from contamination, allow evaporation to occur, and contain/clean-up remaining product.

___ Identify source and stop discharge if possible.

___ Make appropriate notifications to regulatory agencies and internal Toledo Refining Company, LLC Management. (Refer to Figures 2.2 and 2.5 for notifications.)

___ Obtain explosimeter and other air sampling measurements to assure that areas are safe to enter for continued response operations.

___ Eliminate sources of vapor ignition.

___ Stay upwind and evacuate nonessential personnel.

___ Advise people in the area of any potential threat and/or initiate evacuation. Inform local operators such as utilities, telephone company, railway, and tunnels as the situation demands.

___ Minimize area of surface soil impacted by free product (e.g. damming). Contact with surface runoff or standing water should be prevented whenever possible.

___ Recover pooled hydrocarbon as soon as possible.

___ Free hydrocarbons may be floated with water to aid recovery if increased vapors and agitation can be avoided. The water will act as a barrier to reduce further infiltration of pure hydrocarbon into the soil. (NOTE: This water will later have to be removed and probably treated.)

___ If free hydrocarbon **IS NOT** present, do not add water to the impacted area.

FIGURE 3.3 (Cont'd)

PRODUCT SPECIFIC RESPONSE CONSIDERATIONS for GASOLINE SPILLS

___ Remove heavily impacted soil (saturated with hydrocarbons, or very strong hydrocarbon smell) as soon as possible after product/water removal.

___ Place in a bin/rolloff or a waste pile lined on the bottom and covered on the top with plastic sheeting to prevent contact with rainwater and contamination of other areas.

___ Drums may be used for very small spill cleanups.

___ If removal of heavily-impacted soil is delayed or contaminated soil is left in place pending final disposition, the following action should be taken if the possibility of rain exists to minimize contact with rainfall:

- ___ Cover area with plastic sheeting, overlap seams, weigh down with sandbags;
- ___ Use shallow ditches to divert rainwater around contaminated site; and
- ___ Promptly remove any rainwater that does accumulate on the site.

___ The following steps should be taken together with the Toledo Refining Company, LLC Environmental Department to minimize long term risk from the site:

- ___ Sample contaminated soil still in place;
- ___ Characterize and dispose of removed soil;
- ___ Estimate proper cleanup target;
- ___ Remove and dispose of more soil, if necessary;
- ___ Install groundwater monitoring wells or monitor existing wells, if necessary; and
- ___ Provide follow-up communication with regulatory agencies, if necessary.

___ Recover the product and affected soil. Be alert for underground cables and water bearing formations. Remember that product may penetrate deeper if impermeable natural layers are disturbed.

___ Due to the low flash point of these products: (1) Use non-sparking systems, (2) Have fire trucks or firefighting equipment nearby, (3) Warn all involved of the product's flammability, and (4) Allow product to evaporate to the greatest extent possible.

___ Determine the direction and expected duration of spill movement. Refer to the maps provided in Figure 6.1 for an overview of the area.

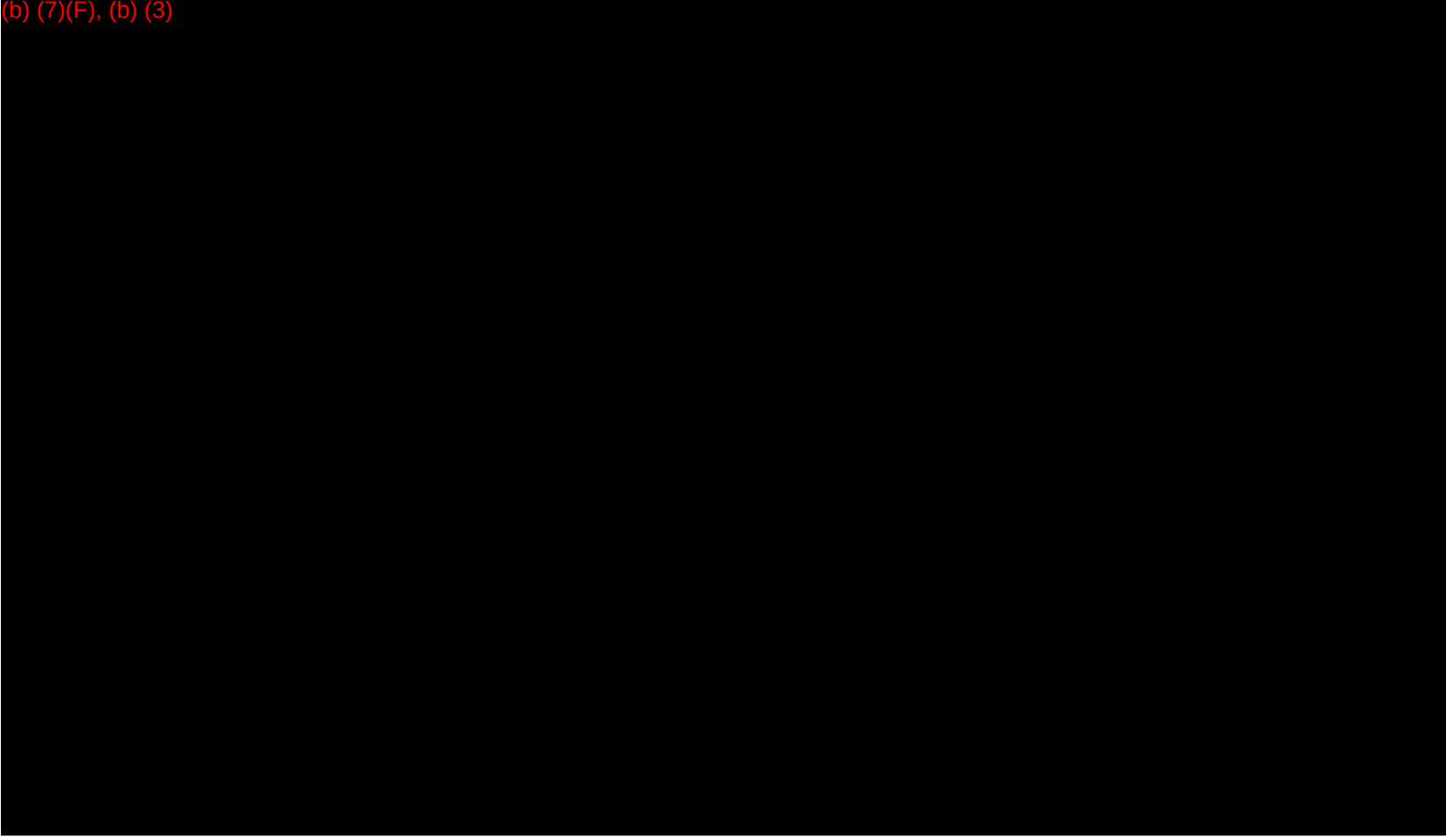
___ Request local authorities to establish traffic control in the area and to post a - "High Flammability" advisory, as the situation demands.

___ If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in Section 6.0. Determine which of these may be threatened by the spill and direct the response operation to these locations. Initiate protection and recovery actions.

Facility Diagram

(Section 1.9)

(b) (7)(F), (b) (3)



SITE LOCATION MAP
MAIN REFINERY

1.0 INTRODUCTION AND PLAN CONTENT

1.1 PLAN PURPOSE/OBJECTIVES

The purpose of this Facility Response Plan (hereinafter referred to as "Plan") is to assist the Toledo Refining Company, LLC personnel prepare for and respond quickly and safely to a discharge originating from the Facility. The Plan provides techniques and guidelines for achieving an efficient, coordinated, and effective response to a discharge incident which may occur at the Facility.

The specific objectives of the Plan are to:

- Establish an Emergency Response Team, assign individuals to fill the positions on the team, and define the roles and responsibilities of team members.
- Define notification, activation, and mobilization procedures to be followed when a discharge occurs.
- Define organizational lines of responsibility to be adhered to during a response operation.
- Document equipment, manpower, and other resources available to assist with the response.
- Ensure compliance with Toledo Refining Company, LLC's Principles of Health, Environment and Safety (Appendix A).
- Ensure compliance with the federal, state, and local oil pollution regulations.
- Ensure consistency with the National Contingency Plan and Area Contingency Plan(s) for the area of operation.

1.2 SCOPE OF PLAN

This Plan contains prioritized procedures for personnel to mitigate or prevent any discharge resulting from operations. A description of the operations conducted at the Facility has been detailed in Figure 1.3 with additional information provided in the "Hazard Evaluation" in Appendix Section 8. Facility spill mitigation procedures and response guidelines are provided in Section 3.0 for discharges that could result from any of the following scenarios:

- Tank overfill/failure
- Piping rupture/leak
- Explosion and/or fire
- Equipment failure (e.g. pumping system failure, relief valve failure, etc.)

1.2 SCOPE OF PLAN (Cont'd)

These scenarios could result in the following discharge volumes (as defined in EPA Final Rule 40 CFR Part 112, 33 CFR 154, and 49 CFR 194):

Discharge Scenario	Potential Oil Group	Planning Volumes		
		DOT/ PHMSA	EPA	Facility Maximum
Small/Average Most Probable	3/4	---	(b) (7)(F), (b) (3)	
Medium/Maximum Most Probable	3/4	---		
Worst Case	(b) (7)(F), (b) (3)			

These worst case discharge volumes are utilized in calculating the planning volume for response resources. The planning volume is used to determine the necessary on-water recovery capacity to respond within the three tiered response times. The identified oil spill recovery devices should be capable of arriving at the scene of a discharge within the time specified in Appendix C. Appendix C of this Plan demonstrates a series of calculations and planning volume determinations based on the applicable regulations. The inclusion of these calculations (Appendix C) is for demonstration of the response planning volumes and response capability necessary for on-water and on-shore recovery requirements as the result of the discharge scenarios outlined in the table above.

The Refinery Facility handles, stores and/or Transports Group 5 oils in excess of 10 percent of total facility storage capacity. Per 40 CFR 112 Appendix E Table 1, no separate calculations are required for Group 5 oils; however, response resource considerations are required as outlined in 40 CFR 112 Appendix E Section 7.6. Response considerations for containment and recovery of submerged oils are presented in Appendix H.

1.3 PLAN DISTRIBUTION PROCEDURES

The HSS Manager shall have the responsibility for distribution of the Plan. Distribution will be handled in the following manner:

- Distribution of the Plan is controlled by the number on the cover page. A distribution list is included in the Foreword to facilitate control.
- Company personnel who may be called upon to provide assistance during discharge response activities will have access to a copy of the plan for their use and training.
- It is the responsibility of any person holding a copy of the Plan to ensure that the copy is transferred to their replacement in the event of reassignment or change in responsibility.
- Various regulatory agencies will also be distributed a copy of the Plan. The list of agencies is detailed in the Distribution List located in the Foreword.

1.4 PLAN REVIEW AND UPDATE PROCEDURES

Annual Review/Update

The HSS Manager will coordinate with Facility Management to support the following plan review and update procedures.

- At least once each year review and make appropriate revisions as required by operational or organizational changes.
- At least once each year review and make appropriate revisions as required by changes in the names and telephone numbers detailed in Section 2.0.
- The HSS Manager will coordinate the word processing, publication, and distribution efforts of completing the revisions and maintaining the Plan.
- Plan review opportunities may occur during response team tabletop exercises or actual emergency responses.

Incorporation of Plan Revisions

The **plan holder**, immediately upon receipt of any revisions, shall

- Review and insert the revised pages into the Plan.
- Discard the obsolete pages.
- Record this action on the "Revision Record" page in the Foreword.

Agency Revision Requirements

- **EPA** - The Facility shall revise and resubmit revised portions of the Plan to the EPA Regional Administrator within 60 days of each facility change that may materially affect the response to a Worst Case Discharge.
- **DOT/PHMSA** - The Facility shall revise and resubmit changes to the Pipeline Response Plans Officer within 30 days. In addition, the entire plan shall be reviewed and resubmitted to PHMSA to obtain approval every five (5) years from the last plan approval date. If the plan is still current, PHMSA will accept a letter from the operator stating that the plan of file with the agency is still current and serves as the resubmitted plan for PHMSA to review for approval.
- **USCG** - Requires changes to be submitted in duplicated to the marine Safety Office in a timely manner (in duplicate). Plan review must occur within one (1) month of the anniversary date of the USCG approval letter. If no Changes are required, the Facilities shall submit a letter to the USCG stating “No Changes Required”.

1.4 PLAN REVIEW AND UPDATE PROCEDURES (Cont'd)

CONDITIONS REQUIRING CHANGES	EPA	DOT/PHMSA	USCG
Change in ownership of Facility and/or Pipeline.	✓	✓	✓
Relocation or replacement of portions of the Facility (including the pipeline) which in any way substantially affect the information included in this Plan, such as a change in the Worst Case Discharge volume.	✓	✓	✓
Emergency response procedures.		✓	✓
A change in the Qualified Individual.		✓	✓
A change in the NCP or an ACP that has significant impact on the equipment appropriate for response activities.		✓	✓
A change in the listings of economically important or environmentally sensitive areas identified in the applicable ACP in effect six (6) months prior to the plan review.	✓	✓	✓
Change in the Facility's configuration that materially alters the information included in the Plan (i.e. new construction).	✓	✓	✓
Change in the type of oil handled, stored, or transferred that materially alters the required response resources.	✓	✓	✓
A change in the name of the Oil Spill Removal Organization (OSRO).		✓	✓
Material change in capabilities of the Oil Spill Removal Organization(s) (OSROs) that provide equipment and personnel.	✓	✓	✓
Material change in the Facility's spill prevention and response procedures.	✓		
Any other changes that materially affect the implementation of the Plan.	✓	✓	✓
As a result of post incident or drill evaluations.		✓	✓

NOTE: Any agency may require revisions to this Plan at any time if deficiencies are found under their applicable regulations or during an actual response.

Submission of Revisions

Except as provided above, amendments to the following do not require approval by the Regional Administrator (RA):

- Personnel and telephone number lists included in the Plan.
- OSRO(s) change which does not result in a material change in support capabilities.

The RA shall be provided with a copy of such revisions. Facility shall submit the EPA issued Facility Identification Number with the changes.

1.5 REGULATORY COMPLIANCE

The development, maintenance, and utilization of this Plan implements company policy and addresses the following regulatory requirements and guidelines:

- Federal Spill Prevention, Control and Countermeasure Regulation: U. S. EPA Final Rule for Oil Pollution Prevention; Non-Transportation Related On-shore and Offshore Facilities (40 CFR Part 112 – as published on July 17, 2002).

A detailed cross-reference between the format of this Plan and that of the regulation is provided in Appendix D of the FRP.

- U.S. EPA Spill Prevention, Control, and Countermeasure (SPCC) regulations as published in 40 CFR Part 112.5.

- U.S. Department of Transportation (PHMSA) regulations as published in 49 CFR 194.

The applicable Area Contingency Plans for the Facility are:

- USCG Western Lake Erie Area Contingency Plan.

- U.S. Environmental Protection Agency - Region V, Chicago, IL.

The applicable National Contingency Plan for the Facility is:

- U.S. Environmental Protection Agency; National Oil and Hazardous Substances Pollution Contingency Plan; Final Rule.

General Applicability

This requirement applies to owners or operators of non-transportation related onshore and offshore facilities engages in drilling, producing, gathering, storing, processing, refining, transferring, distributing, using, or consuming oil and oil products, and that meet the each of the following criteria;

- Due to their location, could reasonably be expected to discharge oil in harmful quantities into or upon the navigable waters of the United States or Adjoining shorelines; **and**

- Has an aggregate aboveground storage capacity in excess of 1,320 gallons excluding containers less than 55 gallons; **or**

- Completely buried storage capacity in excess of 42,000 gallons, excluding any tanks, connected underground piping, underground ancillary equipment, and containment systems subject to the technical requirements of 40 CFR Part 280 or 281.

1.5 REGULATORY COMPLIANCE (Cont'd)

Submission of Spill Documentation

The Facility shall submit the documentation required by 40 CFR Part 112.4 to the EPA Regional Administrator within sixty (60) days whenever the Facility has a discharge event(s) that meets one of the following conditions:

- Discharges more than 1,000 gallons of oil (or oil products) into or upon the navigable waters of the United States or adjoining shorelines in a single spill event; or

- Discharges more than 42 gallons of oil (or oil products into the navigable waters of the United States in two (2) spill events within any 12 –month period.

A form detailing the documentation requirements to be included with this submission is provided in Appendix E.

1.6 DISCHARGE CLASSIFICATION

The severity of a discharge will have a bearing on the level of management involvement necessary and the extent of resource mobilization. The following definitions provide guidance in the early classification of discharges.

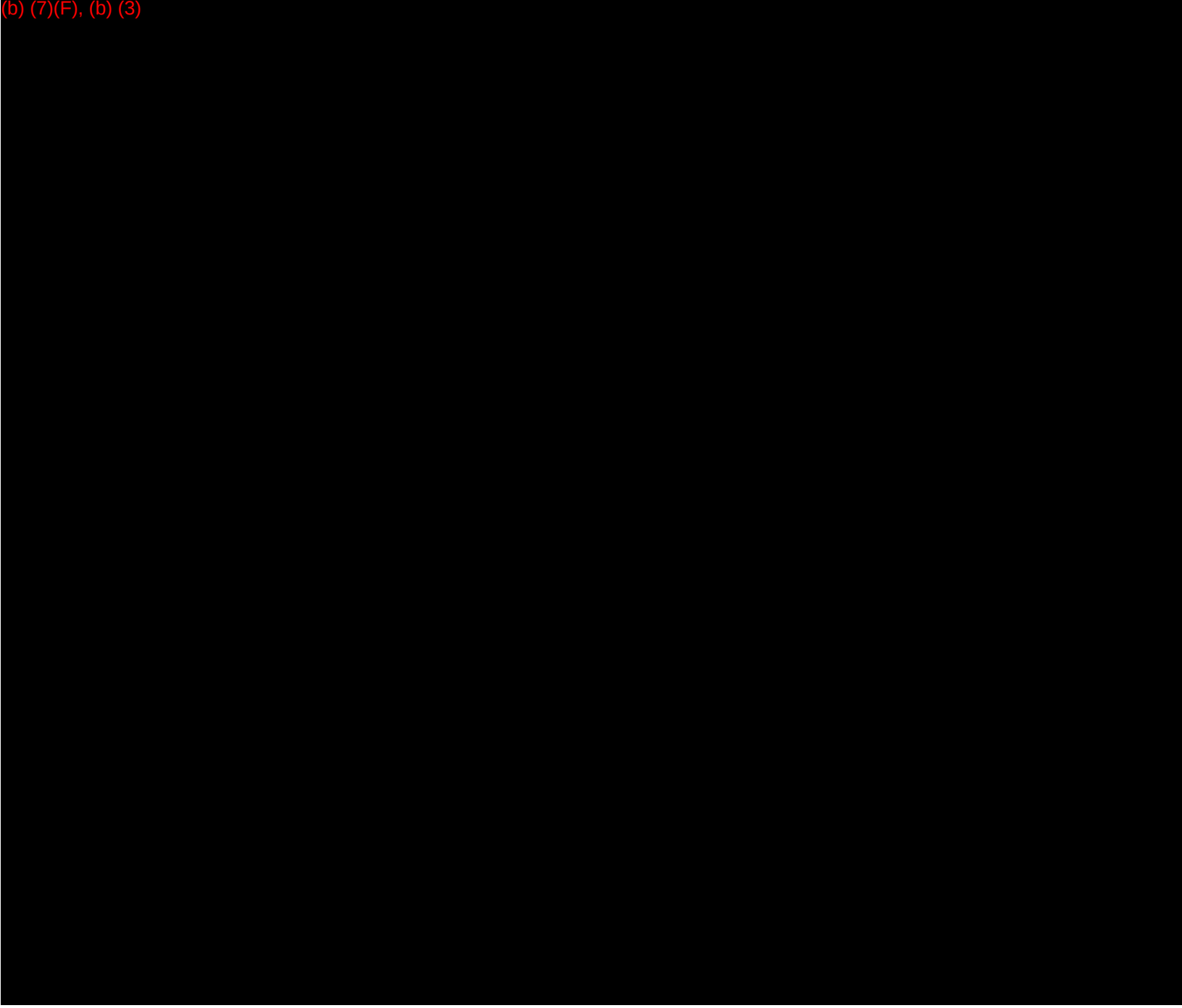
LEVEL I EVENT
Incident Command will normally be assumed by Facility Management. Spill Management Team support will be utilized on an as needed basis.
Exposure
The potential Public and Environmental exposure is moderate. The type and quantity of material released, while considering the overall nature of the incident (e.g. fire, proximity to private dwellings, etc.), will have moderate impact on the public and/or the environment.
Degree of Control
The incident can be controlled in a short period of time through implementation of the local resources available to the Facility (including contract resources).
Governmental Involvement
Government involvement will be moderate and generally restricted to State and Local levels.
Media Involvement
Media interest will be moderate and generally restricted to State and Local levels.

1.6 DISCHARGE CLASSIFICATION (Cont'd)

LEVEL II EVENT
Local Toledo Refining Company, LLC resources may have to be supplemented with Spill Management Team resources to manage the spill incident.
Exposure
The potential Public and Environmental exposure is moderately high. The type and quantity of material released, while considering the overall nature of the incident (e.g. fire, proximity to private dwellings, etc.), will have moderately high impact on the public and/or the environment.
Degree of Control
The incident can be brought under control in a moderate period of time through implementation of local resources available to the Facility (including contract resources) with possible implementation of regional resources.
Governmental Involvement
Government involvement will be moderately high and generally restricted to Regional levels.
Media Involvement
Media interest will be moderately high and generally restricted to Regional levels.

LEVEL III EVENT
Maximum Toledo Refining Company, LLC and external resources must be implemented to respond to the spill incident. Activation of the Toledo Refining Company, LLC Spill Management Team would be anticipated during a Level III incident.
Exposure
The potential Public and Environmental exposure is significant. The type and quantity of material released, while considering the overall nature of the incident (e.g. fire, proximity to private dwellings, etc.), will have significant impact on the public and/or the environment.
Degree of Control
Maximum Toledo Refining Company, LLC and third party resources must be implemented in order to gain control of the incident.
Governmental Involvement
Government involvement will be intense.
Media Involvement
Media interest will be high and may include national coverage.

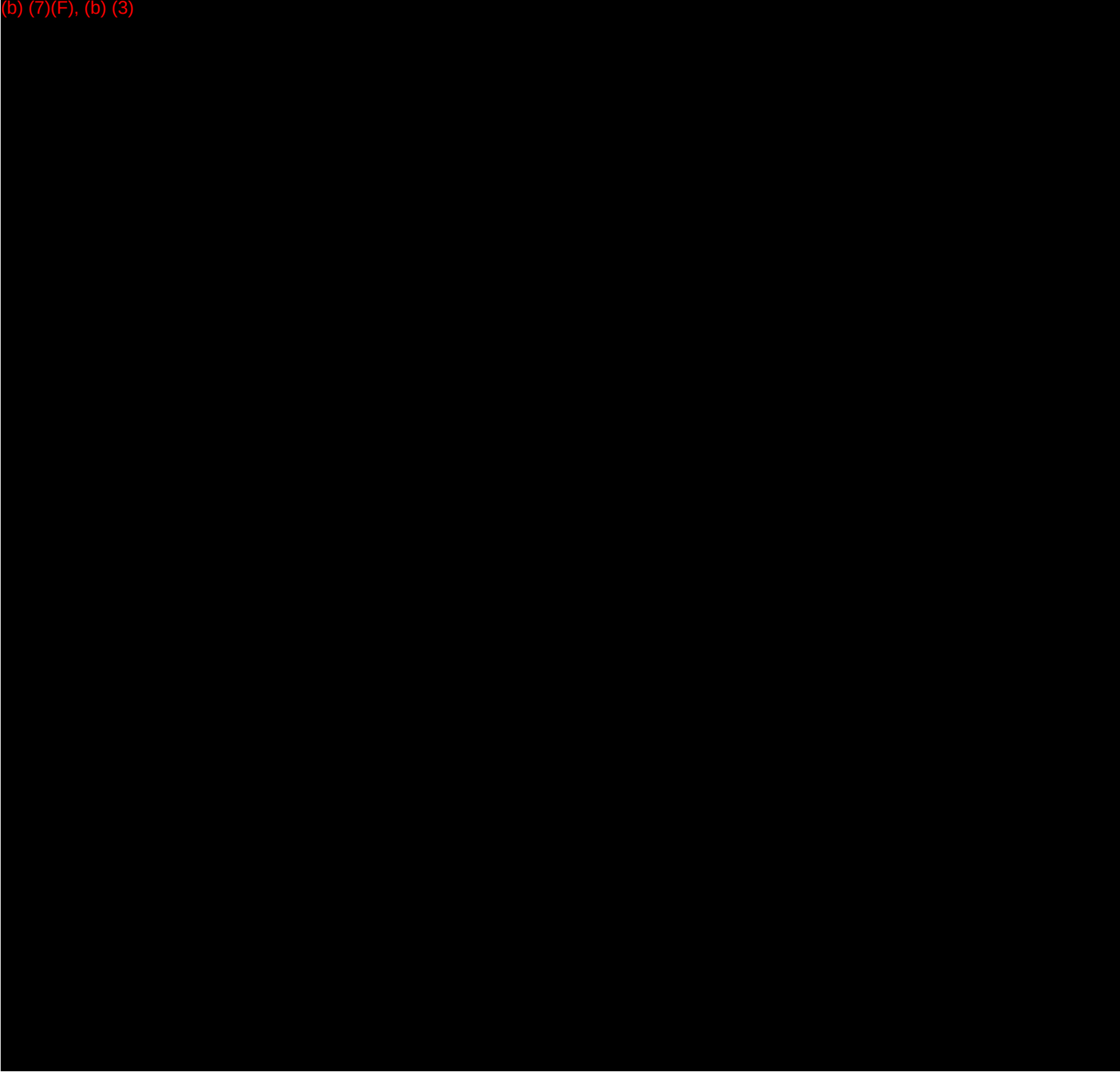
(b) (7)(F), (b) (3)



AREA MAP
MAIN REFINERY

FIGURE 1.1(a)

(b) (7)(F), (b) (3)



SITE LOCATION MAP
MAIN REFINERY

FIGURE 1.1 (b)

FACILITY DIAGRAM
MAIN REFINERY

FIGURE 1.2

FACILITY INFORMATION
MAIN REFINERY

FIGURE 1.3

GENERAL INFORMATION	
Facility Name:	Toledo Refining Company, LLC 1819 Woodville Oregon, OH 43616 (419) 698-6600 (Dispatcher) (419) 697-6423 FAX
EPA FRP ID#:	FRP 0500117
Owner Name:	Toledo Refining Company, LLC 1819 Woodville Road Oregon, OH 43616
Telephone/FAX:	Additional telephone references, including 24 hour numbers, for the Facility, Owner, and QI/AQI are provided in Figure 2.2.
Primary SIC Code:	2911
Primary NAICS Code:	324110
Date of Initial Oil Storage:	1895
FACILITY LOCATION	
County:	Lucas County, Ohio
Facility Latitude:	(b) (7)(F), (b) (3)
Facility Longitude:	
Area Map:	Provided in Figure 1.1
Facility Diagram:	Provided in Figure 1.2
Wellhead Protection Area:	No Impact

FIGURE 1.3 (CONT'D)

PHYSICAL DESCRIPTION - GENERAL

Description of Operation:

The Toledo Refining Company, LLC is located in Oregon, Ohio. The Toledo Refining Company, LLC is located at the area bounded by Navarre Avenue, Woodville Road, Pickle Road and Navarre Park. The main entrance is on Woodville Road.

- This Facility refines crude oil. Some oil storage is conducted at this Facility.
- Product is transferred to the Toledo Refining Company, LLC Marine Terminal and the Toledo Refining Company, LLC No. 2 Tank Farm.
- This Facility has five (5) rail racks. Chemicals and refined products are transferred across these rail racks.

Products Handled:

- Crude Oil
- Gasoline
- Kerosene / Jet-A
- No. 2 Fuel Oil
- Additives

Note: Material Safety Data Sheets (MSDS) are maintained separately at the Facility and in the electronic MSDS system (CHIP).

Pipeline Response Zone Information Summary:

General:

- ***Since all maintenance/operational functions are conducted by Toledo Refining Company, LLC personnel located in the Toledo area, a single Response Zone (DOT/PHMSA response planning requirement under OPA 90) has been developed. Subsequently, the requirement for a Core Plan and a separate Response Zone Plan/Appendix for each Response Zone have been combined into this one Facility Response Plan.***
- There are two (2) other company owned pipelines, which transfer refined products from the Refinery to the Marine Terminal. These pipelines are approximately 2.5 miles in length and are 6" and 8"diameter.
- Pipelines are used to transport refined products.

This FRP is written in English and understood by personnel responsible for carrying out the plan.

FIGURE 1.3 (CONT'D)

PHYSICAL DESCRIPTION - GENERAL (Cont'd)

Pipeline Response Zone Information Summary (Cont'd):

Determination of Significant and Substantial Harm (DOT/PHMSA):

This Response Zone does not meet the criteria for "*Significant and Substantial Harm"* because the line sections are less than 10 miles (16 kilometers) in length.

Pipeline Specifications:

The basic specifications of the pipelines and the single Response Zone are as follows:

- **Product Types:** Refined Products
- **Pipe Detail:** 6"and 8" diameter

Response Resources*:*

- **Line Length:** approximately 2.5 miles (from Refinery to Marine Terminal)
- **DOT/PHMSA Worst Case Discharge:** (b) (7)(F), (b) (3) [redacted]
- **Contracted resources:** Agreement numbers and classifications are detailed in Figure 5.1 and Appendix J.
- **Geographic Area:** See Figures 1.1, 1.2 and 6.2
- **Areas Traversed:** Oregon, Toledo, Lucas County, Ohio

DATES AND TYPES OF SUBSTANTIAL EXPANSIONS

- In 2009, pollution control equipment was installed at the FCC and a new SRU was constructed. No additional oil storage capacity was added, process vessels, piping and towers only.
- In 2007, Plant 6 was modified for Naphtha Simplification. No additional oil storage capacity was added, process vessels, piping and tower modifications only.
- In 2005, a new Unit was installed at Plant 9 (LSG unit). No additional oil storage capacity was added, process vessels, piping and towers only.
- Other historical expansions records are available in the refinery engineering files.

OTHER FACILITY DATA

Additional facility data (including storage information) is provided in Appendix K and discharge detection and inspection information is provided in Appendix L.

QUALIFIED INDIVIDUALS

FIGURE 1.4

Qualified Individual and Alternates						
NAME	**RESPONSE TIME**	**ROLE**	**TRAINING LEVEL**	**OFFICE**	**HOME**	**OTHER**
Elmer Dunberger – Supervisor of Security & Emergency Response	10 minutes	Qualified Individual	40 Hrs. HAZWOPR 8 Hrs. Annual	419-698-6669	(b) (6)	
Keith A Dempsey- Emergency Response and Security Shift Supervisor	10 minutes	Alt. Qualified Individual	Annual	419-698-6663		
Ed Donnelly- Emergency Response and Security Shift Supervisor	10 minutes	Alt. Qualified Individual	Annual	419-698-6663		
Phil Wojcinski- Emergency Response and Security Shift Supervisor	10 minutes	Alt. Qualified Individual	Annual	419-698-6663		
Ken Adams- Emergency Response and Security Shift Supervisor	10 minutes	Alt. Qualified Individual	Annual	419-698-6663		
Kevin Kennedy-Emergency Response and Security Shift Supervisor	10 minutes	Alt. Qualified Individual	Annual	419-698-6663		

2.0 NOTIFICATION PROCEDURES

This section is a guide for notification procedures that should be implemented immediately after discovering a discharge incident and securing the source (if at all possible). Internal and external notifications are described separately for clarification purposes only. All notifications are of extreme importance and must be completed in a timely manner.

2.1 INTERNAL NOTIFICATION

The following internal notifications should be made for each emergency incident to the extent that the incident demands. An internal notification sequence is provided in Figure 2.1. In no event shall notification be delayed because the immediate supervisor is inaccessible. **Authorization is given to bypass management levels if necessary to provide immediate notification to upper management.** The Facility Spill Management Team will consist of members of the Emergency Response Team and the Emergency Command Team Teams, as well as contract personnel as the situation demands. The typical internal notification responsibilities for each person potentially involved in the initial response are as follows:

First Toledo Refining Company, LLC Person Notified/On-Scene

- ☐ Immediately notify **Facility Shift Superintendent.**

Facility Shift Superintendent

- ☐ Notify security dispatch. Coordinate with Environmental Department to notify all regulatory/governmental agencies and other emergency response organizations as defined in Section 2.2 as the situation demands.

Security Dispatch

- ☐ Notify **Qualified Individual (QI)** for first assessment
- ☐ **Coordinate** activation of additional response as directed by QI (including activation / mobilization of the Toledo Refining Company, LLC Emergency Command Team and Emergency Response team). Figure 2.4 provides contact information for the appropriate teams.

2.2 EXTERNAL NOTIFICATION

The following external notifications should be made in accordance with federal, state, and local regulations for all reportable discharges The Facility Superintendent shall ensure that the following required verbal notifications are made as the situation demands.

The Environmental Department shall ensure that an “Information on Discharge” form is completed for all required reportable FRP related discharges and written notifications are made as designated below.

Figure 2.5 provides a listing of potential external organization contact information.

Required Notifications

☐ **National Response Center (NRC)**
Verbal
Immediately for all spills that impact or threaten navigable water.

Written
In accordance with the applicable SPCC regulations, within 60 days to the U.S. Environmental Protection Agency for a spill in excess of 1,000 gallons (24 Bbls.) in a single event or two spill events within a twelve month period into or upon navigable waters of the United States or adjoining shorelines.

U.S. Environmental Protection Agency - Region V
77 West Jackson Blvd., 5th Floor
Chicago, IL 60604

☐ **Ohio EPA Office of Emergency Response (SERC)**
Verbal
Immediately for all spills that impact state air, land or waters.

Written
As requested by the agency. (Within 30 days)

Division of Emergency and Remedial Response
P. O. Box 1049
Columbus, OH 43216-1049

☐ **Local Emergency Planning Committee (LEPC)**
Verbal
For all spills which escape the boundary of the Facility.

Lucas County (LEPC)

Written
As the agency may request, depending on circumstances.

2.2 EXTERNAL NOTIFICATION (Cont'd)

Required Notifications (Cont'd)

☐ **Ohio State Fire Marshall**
Verbal
If the spill is in any way underground storage tank related, the Ohio State Fire Marshall must be notified if a (UST) containing flammable or combustible liquids have any release or suspected release to the local Fire Official and the State Fire Marshall within 24 hours.

Written
As requested by the agency.

Ohio State Fire Marshall
8895 East Main
Reynoldsberg, OH 43068

Other notification required will be made by the Emergency Command team, depending on the incident situation.

Other Notifications

☐ **Occupational Safety and Health Administration (OSHA)**
Immediately for incidents involving three (3) or more hospitalizations or one (1) or more deaths.

☐ **U.S. Environmental Protection Agency (EPA)**

- *Immediately for all spills that impact or threaten navigable water or adjoining shoreline. Notification to the EPA is typically accomplished by the call to the NRC.*

- *As per RCRA regulations, a written report on the incident must be submitted to the Regional Administrator within 15 days from the date of the incident.*

- *The report must include:*

1. *Name, address, and telephone number of the owner or operator;*
2. *Name, address, and telephone number of the Facility;*
3. *Date, time, and type of incident (e.g., fire, explosion);*
4. *Name and quantity of material(s) involved;*
5. *The extent of injuries, if any;*
6. *An assessment of actual or potential hazards to human health or the environment, where this is applicable; and*
7. *Estimated quantity and disposition of recovered material that resulted from the incident.*

2.2 EXTERNAL NOTIFICATION (Cont'd)

Other Notifications (Cont'd)

☐ **U.S. Coast Guard - MSO (USCG)**
Immediately for all spills that impact or threaten navigable water or adjoining shoreline. Notification to the USCG is typically accomplished by the call to the NRC.

☐ **U.S. Fish and Wildlife Service (USFWS)**
Immediately for Wildlife Protection/Rehabilitation

☐ **Local Emergency Services**
Immediately for all Police, Fire, and Medical Emergencies

Dial 911

Police Department (Note for HVD/MT events Security Dispatch calls Toledo Fire non-emergency number)

Fire Department (Note for HVD/MT events Security Dispatch calls Toledo Fire non-emergency number)

Ambulance Service

☐ **Wildlife Rehabilitation Resources**

International Bird Rescue Center (Berkeley, CA)

Tri-State Bird Rescue Center

☐ **Neighbors**
Directly or with assistance from local police and fire agencies, inform all adjacent businesses and private citizens that might be immediately impacted.

SPILL REPORTING GUIDELINES

- Never include information which has **not been verified.**
- **Never speculate** as to the cause of an incident or make any acknowledgment of liability.
- **DOCUMENT:**
  - ☐ Agency notified
  - ☐ Time agency notified
  - ☐ Person notified
  - ☐ Content of message given
- **DO NOT DELAY** reporting due to incomplete information.

FIGURE 2.1

INTERNAL NOTIFICATION SEQUENCE

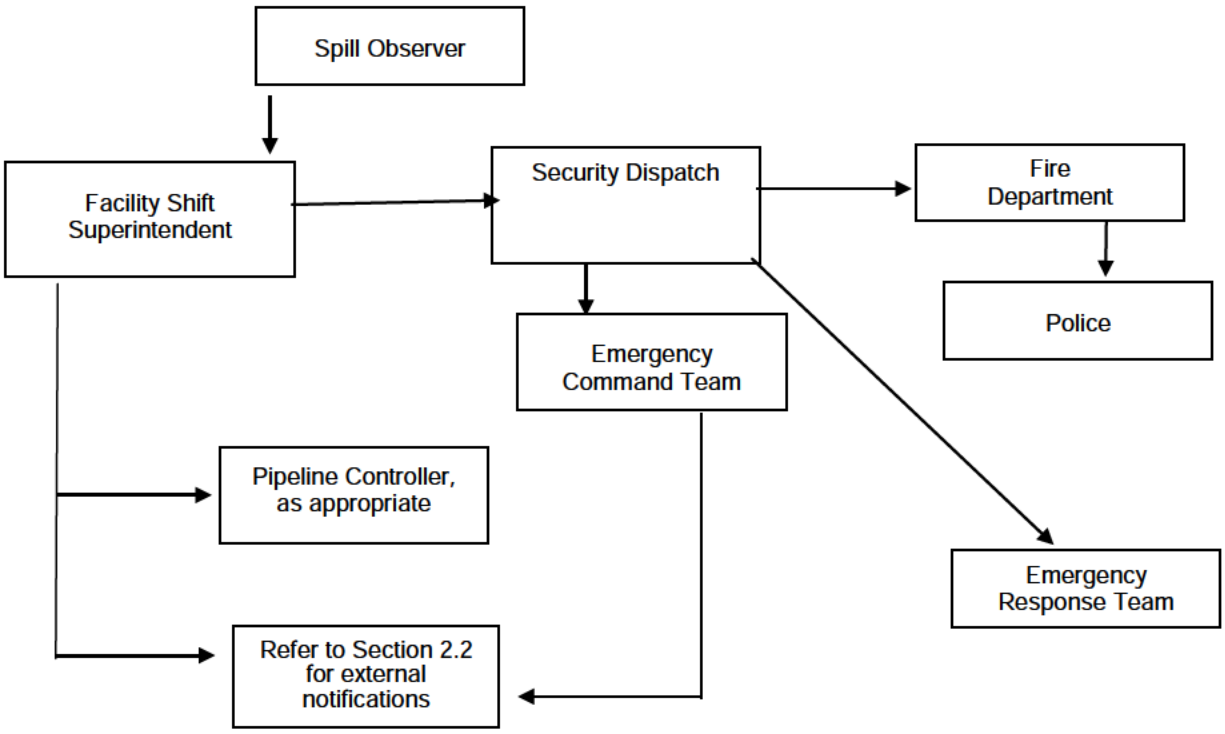
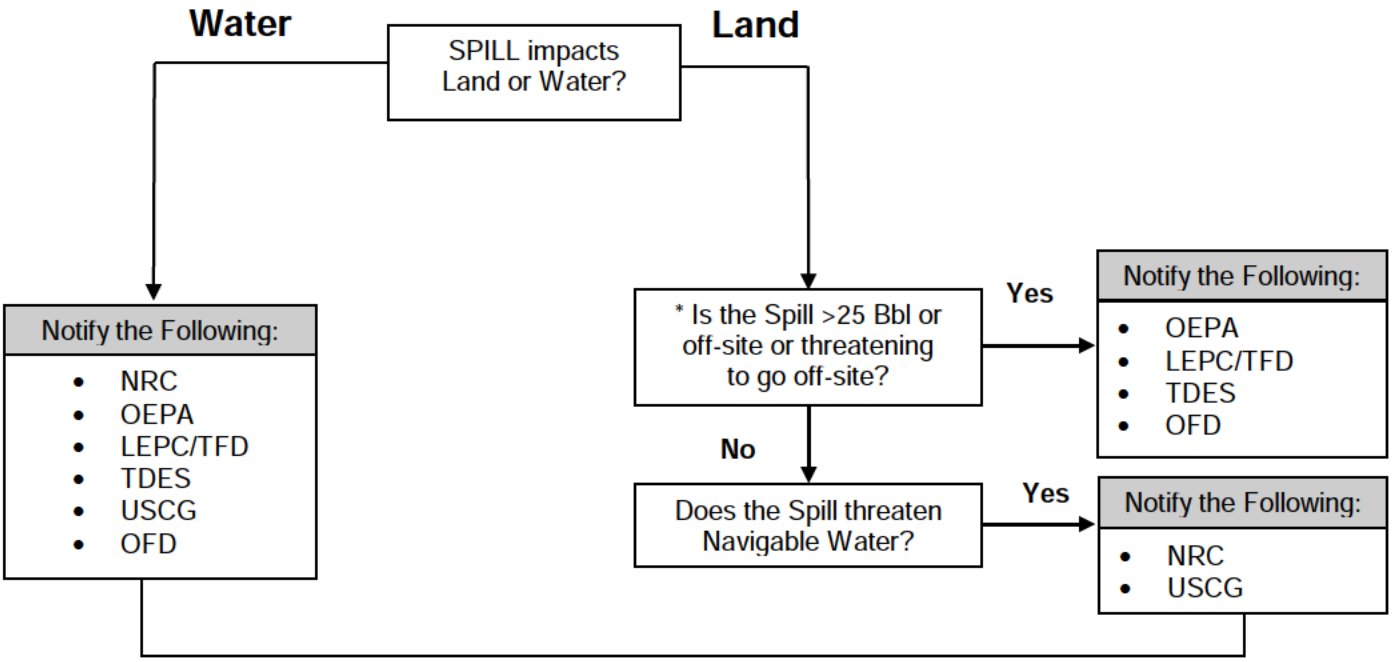


FIGURE 2.2

EXTERNAL NOTIFICATION OF SPILL



Acronyms:
• NRC = National Response Center • OEPA = Ohio Environmental Protection Agency • TFD = Toledo Fire Department • LEPC = Local Emergency Planning Committee • USCG = U.S. Coast Guard • OFD = Oregon Fire Department • TDES = Toledo Division of Environmental Services

* Ohio EPA requires that all spills that cause 25 gallons or more to be released offsite be reported

FIGURE 2.3

Information on Discharge form

Information on Discharge*
Facility: _____

(A) Reporting Party	(B) Suspected Responsible Party
Name:	Name:
Phone:	Phone:
Job Position:	
Company:	Company:
Address:	Organization Type: ☐ Private Citizen ☐ Private Enterprise ☐ Public Utility ☐ Local Government ☐ State Government ☐ Federal Government
City:	City:
State:	State:
Zip:	Zip:
Were materials discharged: ☐ Yes ☐ No	
Calling for Responsible Party: ☐ Yes ☐ No	
Date and Time of report call:	
Other Notifications : ☐ USCG ☐ EPA ☐ State ☐ Other:	

- It is not necessary to wait for all information before calling the National Response Center (NRC) 1-800 424-8802 or direct telephone: 202-267-2675

Incident Description			
Source and /or Cause of incident:			
Date of Incident:	Time of Incident:		
Incident Address/Location Nearest City/Distance from City/Township Range Borough:			
Storage Tank Container: Above Ground: ☐ Below ground: ☐ Other: ☐			
Container capacity (bbls):			
Facility Capacity			
Tank Capacity (bbls):	Latitude:	Longitude:	River Mile:

Information on Discharge*

Facility: _____

Materials	
Material Discharged:	
Quantity in water: (include units)	
Response Action	
Actions Taken to Correct or Mitigate Incident:	
Impact	
Number of Injuries:	Number of Fatalities:
Evacuations required: ☐ Yes ☐ No ☐ Unknown	If Yes: Number Evacuated:
Any Damage: ☐ Yes ☐ No ☐ Unknown	If Yes: Damage in Dollars:
Additional Information	

FIGURE 2.4

Internal Notification Contact Information

EMERGENCY RESPONSE TEAM

NAME	RESPONSE TIME	RESPONSIBILITY DURING RESPONSE ACTION	TRAINING LEVEL	OFFICE	HOME	OTHER
Elmer Dunberger	10 Minutes (maximum)	Security Lead / Qualified Individual /Alternate QI	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6669	(b) (6)	
Ken Adams	15 minutes (*maximum*)	Emergency Response Shift Supervisor / QI / Alternate QI	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6663		
Keith Dempsey	15 minutes (maximum)	Emergency Response Shift Supervisor / QI / Alternate QI	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6663		
Ed Donnelly	10 minutes (*maximum*)	Emergency Response Shift Supervisor / QI / Alternate QI	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6663		
Kevin Kennedy	15 minutes (maximum)	Emergency Response Shift Supervisor / QI / Alternate QI	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6663		
Phil Wojcinski	10 minutes (*maximum*)	Emergency Response Shift Supervisor / QI / Alternate QI	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6663		
Cory Clark	15 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6628		
Chris Conley	20 minutes *(maximum)*	Emergency Response		419-697-2491		
Douglas Church	60 Minutes (maximum)	Emergency Response		419-698-6600		
Richard Cutcher	15 Minutes (maximum)	Emergency Response		419-698-6600		
Sandy Daniel	20 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6692		

EMERGENCY RESPONSE TEAM

NAME	RESPONSE TIME	RESPONSIBILITY DURING RESPONSE ACTION	TRAINING LEVEL	OFFICE	HOME	OTHER
Justin Donley	15 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600	(b) (6)	
Jessie Duke	20 minutes (maximum)	Emergency Response		419-698-6600		
Fred Espinoza	15 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6608		
Craig Felbinger	20 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		
Daniel Flores	20 minutes (*maximum)*	Emergency Response		419-698-6600		
Dennis Flory	45 minutes *(maximum)*	Emergency Response		419-698-6600		
Dan Gresh	30 minutes	Emergency Response		419 698 6600		
Mike Jones	20 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6659		
Marty Koch	15 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6608		
John Kowalski	20 minutes (maximum)	Emergency Response		419-698-6600		
Mark Lambert	15 minutes *(maximum)*	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6974		
Terry Mack	15 minutes (maximum)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		

EMERGENCY RESPONSE TEAM

NAME	RESPONSE TIME	RESPONSIBILITY DURING RESPONSE ACTION	TRAINING LEVEL	OFFICE	HOME	OTHER
Mike Mahr	20 minutes (maximum)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6772	(b) (6)	
Tim Marshall	30 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		
Jason McVey	45 minutes (maximum)	Emergency Response		419-698-6600		
Rusty Miller	15 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		
Tim Musolf	20 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		
Kevin Rank	10 minutes (*maximum*)	Emergency Response		419-698-6600		
Thomas Saunders	10 minutes (maximum)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6608		
Nick Schnell	20 minutes (*maximum*)	Emergency Response		419-698-6600		
Rick Schroeder	20 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		
Clark Timmons	15 minutes (maximum)	Emergency Response		419-698-6600		
Lloyd Wright	20 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		
Dave Yap	15 minutes (*maximum*)	Emergency Response		419-698-6600		

EMERGENCY RESPONSE TEAM						
NAME	**RESPONSE TIME**	**RESPONSIBILITY DURING RESPONSE ACTION**	**TRAINING LEVEL**	**OFFICE**	**HOME**	**OTHER**
Brian Yost	20 minutes (*maximum*)	Emergency Response		419-698-6600	(b) (6)	

EMERGENCY COMMAND TEAM						
NAME	**RESPONSE TIME**	**RESPONSIBILITY DURING RESPONSE ACTION**	**TRAINING LEVEL**	**OFFICE**	**HOME**	**OTHER**
Clark Wrigley	15 minutes (*maximum*)	Incident Commander	Annually	419-698-6622	(b) (6)	
Neal Sahni	20 minutes (*maximum*)	Deputy Incident Commander	Annually	419-698-6766		
James Sciarini	20 minutes (*maximum*)	Administration Officer	Annually	419-698-6709		
Olivia Summons	15 minutes (*maximum*)	Information Officer	Annually	419-698-6910		
Joe Niedecken	15 minutes (*maximum*)	Refinery Operations Officer	Annually	419-698-6760		
Eric Fannin	15 minutes (*maximum*)	Safety Officer	Annually	419-698-6868		
Chris McCormick	35 minutes (*maximum*)	Planning Section Chief	Annually	419-697-6547		
Daniel Ingram	20 minutes (*maximum*)	Logistics Section Chief	Annually	419-698-6717		
Nancy Perham	35 minutes (*maximum*)	Finance Officer	Annually	419-697-6549		
Elaine Moore	15 minutes (*maximum*)	Liaison Officer	Annually	419-698-6847		
Vickie Witty Davis	35 minutes (*maximum*)	Oil Flow Officer	Annually	419-698-6794		
Christine Shultz	15 minutes (*maximum*)	Documentation Unit Leader	Annually	419-698-6810		

EMERGENCY COMMAND TEAM						
NAME	**RESPONSE TIME**	**RESPONSIBILITY DURING RESPONSE ACTION**	**TRAINING LEVEL**	**OFFICE**	**HOME**	**OTHER**
Richard Beans	30 minutes (maximum)	Communications Unit Leader	Annually	419-698-6637	(b) (6)	

FIGURE 2.5

External Notification Contact Information

EXTERNAL NOTIFICATIONS			
AGENCY	**LOCATION**	**OFFICE**	**ALTERNATE**
National Response Center (NRC)	Washington, D.C.	(800) 424-8802	(202) 267-2675
Ohio EPA Office of Emergency Response (SERC)	Columbus, OH	(800) 282-9378 (In state)	(614) 224-0946
Lucas County (LEPC)	Toledo, OH	(419) 936-3550 (24 Hrs.)	
Ohio State Fire Marshall	Reynoldsburg, OH	(888) 252-0803	(614) 752-8200
OSHA (For Reportable Injury or Death)	Washington, D.C.	(800) 321-6742	
U.S. Environmental Protection Agency (EPA) Region V	Chicago, IL	(312) 353-2318 (24 Hrs.)	(312) 353-2000
U.S. Coast Guard, MSO	Toledo, OH	(419) 418-6050	313-568-9560
U. S. Fish and Wildlife Service (USFWS) Region III	Twin Cities, MN	(978) 281-9328 ext. 6506	
National Marine Fisheries Service, N.E. Region	Gloucester, MA	(978) 281-9300	
Toledo Division of Environmental Services	Toledo, OH	(419) 936-3015	(419) 245-1000
State Highway Patrol	Hamilton, OH	(513) 863-4606	
Ohio State Police	Toledo, OH	(419) 865-5544	
National Weather Service (Recorded Forecasts)	Toledo, OH	(216) 265-2370	
Toledo Water Treatment Plant	Toledo, OH	(419) 936-3021	
TV - Channel 13	Toledo, OH	(419) 531-1313	
TV - Channel 24	Toledo, OH	(419) 535-0024	
TV - Channel 11	Toledo, OH	(419) 248-1111	
TV - Channel 36	Toledo, OH	(419) 244-3600	
Radio - WSPD/WLQR	Toledo, OH	(419) 244-8321	
Radio - K-100	Toledo, OH	(419) 385-6397	
Radio - WGTE FM 91	Toledo, OH	(419) 380-4600	
Radio - WRQN	Toledo, OH	(419) 240-1935	
BP Toledo Refinery (main gate)	Toledo, OH	(419) 698-6451	(419) 698-6400 (Switchboard)
Toledo Public Utilities Dept. (water intakes)	Toledo, OH	(419) 936-3021	(419) 936-3067

LOCAL EMERGENCY SERVICES (DIAL 911 for All Police, Fire, and Ambulance Emergencies)			
SERVICE	**LOCATION**	**OFFICE**	**ALTERNATE**
Local Emergency Planning Committee	Toledo, OH	(419) 936-3550 (24 Hrs.)	
Oregon Fire Department	Oregon, OH	(419) 691-5787 (24 Hrs.)	
Toledo Fire / Rescue	Toledo, OH	(419) 245-1180 (24 Hrs.)	
St. Charles Hospital	Toledo, OH	(419) 696-7200	(419) 696-7300 ER
Local Water Supply System	Oregon, OH	(419) 698-7039	(419) 698-7064
	Toledo, OH	(419) 936-3021	(419) 936-3067
Bay Park Community Hospital	Toledo, OH	(419) 690-7900	(419) 690-7911 ER
St. Vincent Mercy Medical Center	Toledo, OH	(419) 251-4200	(419) 251-4354 ER

USCG CLASSIFIED OIL SPILL REMOVAL ORGANIZATIONS (OSRO) *				
COMPANY	**RESPONSE TIME**	**LOCATION**	**OFFICE**	**ALTERNATE**
Heritage Environmental Services	1 to 2 hours	Toledo, OH	419-729-1321 (24 Hrs)	
NRC-National Response Corporation	1 to 2 hours	Great River, NY	(800) 899-4672 (24 Hrs)	(631) 224-9141

ADDITIONAL RESPONSE RESOURCES				
COMPANY	**RESPONSE TIME**	**LOCATION**	**OFFICE**	**ALTERNATE**
Nature's Nursery	1 hour	Whitehouse, OH	419 877-0060	
C&W Tank Cleaning Company	1 hour	Oregon, OH	(419) 691-1995 (24 Hrs.)	(419) 466-5493
EQ	2 to 3 hours	Ypsilanti, MI	(800) 839-3975 (24Hrs)	(419)-346-0795
International Bird Rescue Center	24 hours to 48 hours	Berkeley, CA	(707) 207-0380	
Tri-State Bird Rescue	24 hours to 48 hours	Newark, DE	(302) 737-7241	(800) 710-0695 PGR (800) 710-0696 PGR

*** Note: Toledo Refining Co is also a member of the Northwest Ohio and Michigan Mutual Assistance District (419) 245-1180**

3.0 RESPONSE ACTIONS

3.1 INITIAL RESPONSE ACTIONS

Initial response actions are those taken by local personnel immediately upon becoming aware of a discharge or emergency incident, before the Emergency Response Team (described in Section 4.0) is formed and functioning. Timely implementation of these initial steps is of the utmost importance because they can greatly affect the overall response operation.

It is important to note that **these actions are intended only as guidelines**. The appropriate response to a particular incident may vary depending on the nature and severity of the incident and on other factors that are not readily addressed. Note that, **without exception, personnel and public safety is first priority**.

The first Toledo Refining Company LLC person on scene will function as the person-in-charge until relieved by an authorized G-1 or Fire Marshal who will assume the position of On-scene Commander. Transfer of command will take place as more senior management respond to the incident.

The person functioning as **On-Scene Commander** during the initial response period **has the authority to take the steps necessary to control the situation and must not be constrained by these general guidelines**.

INITIAL RESPONSE ACTIONS - SUMMARY

- Personnel and Public Safety is first priority
- Eliminate sources of ignition
- If possible, Isolate the source of the discharge, minimize further flow
- Make internal notifications
- Activate the Local Response Team as necessary
- Activate response contractors and other external resources as necessary
- Monitor and control the containment and clean-up effort

3.1 INITIAL RESPONSE ACTIONS (Cont'd)

FIRST TOLEDO REFINING COMPANY LLC PERSON NOTIFIED/ON-SCENE

- _____ Follow the appropriate ***"Specific Incident Response Checklist"*** in Figure 3.1 and ***"Product Specific Response Considerations"*** in Figure 3.2.
- _____ Notify **Facility Shift Superintendent** of the incident.
- _____ Utilize local emergency services as necessary (police, fire, medical).
- _____ Notify the Pipeline Controllers, as appropriate.

On-Scene Commander (G-1 responding to scene)

- _____ **Evaluate the Severity**, Potential Impact, Safety Concerns, and Response Requirements based on the initial data provided by the first person on scene.
- _____ Assume the role of **Incident Commander**.
- _____ **Confirm safety** aspects at site, including need for personal protective equipment, sources of ignition, and potential need for evacuation.
- _____ Activate the **Emergency Response Team and Emergency Command Team**, as the situation demands.
- _____ Coordinate/perform **activation of additional spill response contractors,** as the situation demands (telephone reference is provided in Figure 2.5).
- _____ Coordinate/perform required notifications are completed.
- _____ Coordinate/perform **regulatory agency notification,** as the situation demands.
- _____ Proceed to spill site and **coordinate response and clean-up operations.**
- _____ Direct containment, dispersion, and/or clean-up operations in accordance with the Product Specific Response Considerations provided in Figures 3.2 and 3.3.

LOCAL RESPONSE TEAM

- _____ Assigned personnel will immediately respond to a discharge from the Facility, as the situation demands.
- _____ Perform response/clean-up operations as directed or coordinated by the Incident Commander.
- _____ Assist as directed at the spill site.

FIGURE 3.1

SPECIFIC INCIDENT RESPONSE CHECKLIST

Remember, Without Exception, Personnel Safety Is First Priority. Excessive Exposure To The Vapor And Liquid Stages Of The Spilled Product Should Be Avoided.

INITIAL RESPONSE

- _____ Take appropriate personal protective measures.
- _____ Call for medical assistance if an injury has occurred.
- _____ Check wind direction before investigating incidents where vapor cloud is a possibility.
- _____ Utilize LEL meter when you conduct an initial investigation to determine what has been released and the source.
- _____ Do not investigate on your own, take a buddy.
- _____ When you evacuate the Facility because of toxic or explosive vapors, make sure that you take the FRP, response checklists, cell phones, radios, etc. with you to the muster point.
- _____ At the evacuation muster point, take a head count to determine if anyone is missing.
- _____ If possible, block access to the hot zone and/or entire Facility (use vehicles, caution tape, traffic cones, etc.).
- _____ Restrict access to the spill site and adjacent area as the situation demands. Take any other steps necessary to minimize any threat to health and safety.
- _____ Verify the type of product and quantity released (Material Safety Data Sheets are retained separately at the Facility).
- _____ Advise personnel in the area of any potential threat and/or initiate evacuation procedures.
- _____ Use testing and sampling equipment to determine potential safety hazards, as the situation demands.
- _____ Identify/Isolate the source and minimize the loss of product, from a safe distance.
- _____ Take necessary fire response actions.
- _____ Eliminate possible sources of ignition in the near vicinity of the spill.
- _____ Notify Facility Management of the incident.

FIGURE 3.1

SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

LINE BREAK OR LEAK, SPECIFIC RESPONSE

- _____ Shut down pumping equipment.
- _____ Close upstream and downstream block valves.
- _____ Utilize Combustible Gas Indicator, O_2 meter, proper colormetric indicator and other air sampling measurements to assure that areas are safe to enter for continued response operations.
- _____ Mitigate spreading of the product, as the situation demands. Potential containment strategies include:
    - Earthen dike/berm
    - Ditching
    - Spreading sorbent material over the spill
- _____ Prevent the spill from entering the waterways, sewer, etc. to the greatest extent possible, from a safe distance.
- _____ If located within containment area, ensure that drainage valve(s) is "closed".
- _____ Drain the line section, as the situation demands.
- _____ Make all necessary repairs.
- _____ Return the line to service when repairs are complete.
- _____ Clean up spilled product to eliminate any possible environmental problems. Be alert for underground cables.
- _____ Inform local operators such as utilities, telephone company, railway.
- _____ If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in Section 6.0. Determine which of these may be threatened by the spill and direct the response operation to these locations. Initiate protection and recovery actions.
- _____ Complete follow-up and written reporting, as the situation demands.

FIGURE 3.1

SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

STORAGE TANK LEAK, SPECIFIC RESPONSE

- _____ Shut down all tank battery product movement operations and isolate the tank.
- _____ Initiate Confined Space Entry procedures, as applicable.
- _____ Ensure that the containment area drainage valve(s) is "closed".
- _____ If near tank bottom, consider filling tank with water and maintain water bottom to suspend the discharge.
- _____ Utilize Combustible Gas Indicator, O_2 meter, proper colormetric indicator and other air sampling measurements to assure that areas are safe to enter for continued response operations.
- _____ Block drainage of spilled material from traveling offsite.
- _____ Stop all traffic in hazardous area (inside and outside of property boundaries), as the situation demands.
- _____ Remove product from containment area (at a sump or in a low area) with an explosion proof pump, oil skimmer, and/or vacuum truck w/ skimmer attachments.
- _____ If applicable, process remaining product through the separator system.
- _____ Empty tank as soon as possible.
- _____ Make all necessary repairs. Return the line/tank to service when repairs are complete and tested.
- _____ Clean up product spill to eliminate any possible environmental problems. Be alert for underground cables.
- _____ Inform local operators such as utilities, telephone company, railway.
- _____ If necessary, call one (1) of the approved waste removal companies to remove the remaining sludge and residue from the containment area.
- _____ If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in Section 6.0 and ACP. Determine which of these may be threatened by the spill and direct the response to these locations. Initiate protection and recovery actions.
- _____ Complete follow-up and written reporting, as the situation demands.

FIGURE 3.1

SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

EXPLOSIONS AND/OR FIRE, SPECIFIC RESPONSE

- _____ Evacuate area.
- _____ Notify Fire Department.
- _____ Keep unnecessary people away.
- _____ Isolate hazard area and deny entry.
- _____ Stay upwind.
- _____ Keep out of low areas.
- _____ Attempt to control the fire until the fire department arrives. Do not risk injury.
- _____ Close all open valves.
- _____ Turn off all electrical power in the fire area or, if necessary, the entire Facility.
- _____ Employees are **NOT** to attempt to fight a large, fast spreading fire. Attempt to control small fires, to extinguish or prevent spreading, using whatever means are available (i.e. fire extinguisher, water, etc.).
- _____ If fire is located at a point where the incoming pipeline stream creates additional hazards, the Facility Personnel will hit the emergency shutdown button to close out the headgates, and notify the pipeline controllers of the problem.

All personnel are reminded that outsiders other than emergency services will not be allowed in the Facility during the time of an emergency, and that no statements will be issued to the media or other interested parties except by designated Facility Management. Be courteous with media representatives and direct them to the designated spokesman.

Fire hydrants, located in the vicinity of this Facility, operate at a pressure of 120-150 psi.

FIGURE 3.1

SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

VAPOR CLOUD (from a massive spill, line rupture, etc.), SPECIFIC RESPONSE

- _____ The person who discovers the vapor cloud will sound the alarm and notify the supervisor on duty and vacate the area.
- _____ **Remember: the only proper action in the presence of a vapor cloud is to get away from it. Do not shut off electrical equipment.**
- _____ All personnel will report to the evacuation muster point for roll call and further instructions.
- _____ After all personnel have been accounted for, the Facility Manager will initiate the following actions as deemed necessary:

    1. Shut down pipeline.
    2. Evacuation of adjacent property.
    3. Only the fire department will be permitted to enter the Facility.

- _____ Contact the appropriate agencies and potentially affected neighbors

FIGURE 3.2

PRODUCT SPECIFIC RESPONSE CONSIDERATIONS
for
CRUDE OIL SPILLS

Flash Point Range: Above 100°F

Remember, Without Exception, Personnel Safety Is First Priority. Excessive Exposure To The Vapor And Liquid Stages Of The Spilled Product Should Be Avoided.

Suggested physical response actions for these products are detailed below. It is important to note however, that each situation is unique and must be individually responded to. These procedures are considerations only. Actual circumstances may dictate that the procedures followed may differ somewhat from those listed below. ***The following are intended for guideline purposes only.***

These materials are not extremely flammable and the preferred response is containment and mechanical recovery.

___ Identify source and stop discharge if possible.

___ Obtain explosimeter and other air sampling measurements to assure that areas are safe to enter for continued response operations.

___ If spill occurs at the Refinery, every effort must be made to block any drainage to ditches to prevent product from escaping the containment area. Commence containment efforts for any product which has escaped.

___ Deploy spill response equipment and personnel in an attempt to contain and recover as much product as possible.

___ Advise people in the area of any potential threat and/or initiate evacuation. Inform local operators such as utilities, telephone company, railway, and tunnels as the situation demands.

___ Recover the product and affected soil. Be alert for underground cables and water bearing formations. Remember that product may penetrate deeper if impermeable natural layers are disturbed.

___ Determine the direction and expected duration of spill movement. Refer to the maps provided in Figure 6.1 for an overview of the area.

___ Request local authorities to establish traffic control in the area, as the situation demands.

___ If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in Section 6.0. Determine which of these may be threatened by the spill and direct the response operation to these locations. Initiate protection and recovery actions.

FIGURE 3.3

PRODUCT SPECIFIC RESPONSE CONSIDERATIONS for GASOLINE SPILLS

Flash Point Range: Below 100°F

Remember, Without Exception, Personnel Safety Is First Priority. Excessive Exposure To The Vapor And Liquid Stages Of The Spilled Product Should Be Avoided.

Suggested physical response actions for these products are detailed below. It is important to note however, that each situation is unique and must be individually responded to. These procedures are considerations only. Actual circumstances may dictate that procedures followed may differ somewhat from those listed below. ***The following are intended for guideline purposes only.***

These materials float on water and are extremely flammable. Containment of these materials may allow explosive concentrations to accumulate. The preferred response is to minimize impact to water and protect shorelines (storm sewers, creeks, rivers, etc.) from contamination, allow evaporation to occur, and contain/clean-up remaining product.

___ Identify source and stop discharge if possible.

___ Make appropriate notifications to regulatory agencies and internal Toledo Refining Company LLC Management. (Refer to Figures 2.2 and 2.5 for notifications.)

___ Obtain explosimeter and other air sampling measurements to assure that areas are safe to enter for continued response operations.

___ Eliminate sources of vapor ignition.

___ Stay upwind and evacuate nonessential personnel.

___ Advise people in the area of any potential threat and/or initiate evacuation. Inform local operators such as utilities, telephone company, railway, and tunnels as the situation demands.

___ Minimize area of surface soil impacted by free product (e.g. damming). Contact with surface runoff or standing water should be prevented whenever possible.

___ Recover pooled hydrocarbon as soon as possible.

___ Free hydrocarbons may be floated with water to aid recovery if increased vapors and agitation can be avoided. The water will act as a barrier to reduce further infiltration of pure hydrocarbon into the soil. (NOTE: This water will later have to be removed and probably treated.)

___ If free hydrocarbon **IS NOT** present, do not add water to the impacted area.

FIGURE 3.3 (Cont'd)

PRODUCT SPECIFIC RESPONSE CONSIDERATIONS for GASOLINE SPILLS

___ Remove heavily impacted soil (saturated with hydrocarbons, or very strong hydrocarbon smell) as soon as possible after product/water removal.

___ Place in a bin/rolloff or a waste pile lined on the bottom and covered on the top with plastic sheeting to prevent contact with rainwater and contamination of other areas.

___ Drums may be used for very small spill cleanups.

___ If removal of heavily-impacted soil is delayed or contaminated soil is left in place pending final disposition, the following action should be taken if the possibility of rain exists to minimize contact with rainfall:

- ___ Cover area with plastic sheeting, overlap seams, weigh down with sandbags;
- ___ Use shallow ditches to divert rainwater around contaminated site; and
- ___ Promptly remove any rainwater that does accumulate on the site.

___ The following steps should be taken together with the Toledo Refining Company LLC Environmental Department to minimize long term risk from the site:

- ___ Sample contaminated soil still in place;
- ___ Characterize and dispose of removed soil;
- ___ Estimate proper cleanup target;
- ___ Remove and dispose of more soil, if necessary;
- ___ Install groundwater monitoring wells or monitor existing wells, if necessary; and
- ___ Provide follow-up communication with regulatory agencies, if necessary.

___ Recover the product and affected soil. Be alert for underground cables and water bearing formations. Remember that product may penetrate deeper if impermeable natural layers are disturbed.

___ Due to the low flash point of these products: (1) Use non-sparking systems, (2) Have fire trucks or firefighting equipment nearby, (3) Warn all involved of the product's flammability, and (4) Allow product to evaporate to the greatest extent possible.

___ Determine the direction and expected duration of spill movement. Refer to the maps provided in Figure 6.1 for an overview of the area.

___ Request local authorities to establish traffic control in the area and to post a - "High Flammability" advisory, as the situation demands.

___ If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in Section 6.0. Determine which of these may be threatened by the spill and direct the response operation to these locations. Initiate protection and recovery actions.

3.2 DOCUMENTATION OF INITIAL RESPONSE ACTIONS

It is difficult, particularly during the first few minutes of an initial response operation to think about the importance of documentation. A log should be maintained which documents the history of the events and communications that occur during the response. When recording this information, it is important to remember that the log may become instrumental in legal proceedings, therefore:

- Record only facts, do not speculate.
- Do not criticize the efforts and/or methods of other people/operations.
- Do not speculate on the cause of the spill.
- Do not skip lines between entries or make erasures. If an error is made, draw a line through it, add the correct entry above or below it, and initial the change.
- Record the recommendations, instructions, and actions taken by government/ regulatory officials.
- Document conversations (telephone or in person) with government/regulatory officials.
- **Request that government/regulatory officials document and sign their recommendations or orders (especially if company personnel do not agree with the suggestions, instructions, or actions).**

3.3 OIL CONTAINMENT, RECOVERY AND DISPOSAL

After initial response has been taken to stop further spillage and notifications made to the required agencies, Toledo Refining Company LLC will begin spill containment, recovery, and disposal operations.

The Incident Commander will assess the size and hazards of the spill. The type of product, the location of the spill, and the predicted movement of the spill will be considered.

Based on this assessment, additional clean-up personnel and equipment will be dispatched to the site and deployed to control and contain the spill. Boom may be deployed in waterways to contain the spill and to protect socio-economic and environmentally sensitive areas. Booms may also be used in waterways to deflect or guide the spill to locations where it can more effectively be cleaned up using skimmers, vacuum trucks, or sorbent material. Clean-up equipment and material will be used in the manner most effective for rapid and complete clean-up of all spilled product.

Response and cleanup will continue until all recoverable product is removed, the environment is returned to its pre-spill state, and the unified command of Toledo Refining Company LLC's Incident Commander and the On-Scene Coordinators determine that further response and cleanup is no longer necessary.

3.4 STORAGE/DISPOSAL

Strict rules designed to ensure safe and secure handling of waste materials govern Toledo Refining Company LLC's waste disposal activities. To ensure proper disposal of recovered oil and associated debris, the following guidelines should be considered:

- In the event of a product spill, the Facility has limited capacity to store recovered product and water. Separated product is pumped to trucks to be carried to the Facility for processing.
- Oily debris will be segregated on site and containerized for temporary storage prior to disposal in accordance with RCRA/CERCLA regulations.
- Transportation of waste material will be performed in accordance with all applicable federal and state guidelines.
- Waste associated with the spill will be disposed of at Toledo Refining Company LLC pre-approved sites which have the necessary permits to accept the type of waste to be discharged.

Toledo Refining Company LLC's Disposal Specialist will coordinate activities and secure the necessary permits to ensure proper disposal or recycling of recovered product and debris. Refer to Appendix D for more disposal information.

3.5 SAMPLING AND WASTE ANALYSIS PROCEDURES

Toledo Refining Company LLC's sampling and waste analysis practices are governed by the regulations for the applicable state and the United States Environmental Protection Agency (EPA). These regulations outline methods and procedures for determining the chemical and physical characteristics of wastes generated by the Facility, including waste associated with spills, so that they may be properly stored, treated, or disposed of.

3.6 SAFETY AWARENESS

It is the corporate policy of Toledo Refining Company LLC to provide a safe workplace for all workers. All employees and contractors are responsible for maintaining the safety and health of all workers at the Facility and the response operations.

Prior to engaging in **any** spill response activity:

- All employees/contractors must have received orientation from Toledo Refining Company LLC's Safety Plan.
- All contractor response personnel must be in compliance with OSHA training requirements.
- All other personnel will have completed appropriate training for their position as outlined in Section 4.0.
- No employee/contractor shall engage in activities which place them at risk without the appropriate protective equipment and training.

All company and contract personnel are expected to comply with the Site Safety and Health Plan for each spill incident.

4.0 RESPONSE TEAMS

4.1 INTRODUCTION

This section describes organizational features and duties of the Toledo Refining Company, LLC Spill Management team. Toledo Refinery has a two tier response spill management team (SMT). There are two components that are based upon the Unified Command System (UCS) and are modular, the Emergency Response Team (ERT) and the Emergency Command Team (ECT)

- Level I Incident typically only creates impact in the local area and can be handled by the ERT.
- Level II Incident has regional impact and the ERT usually requires some additional assistance from members of the ECT.
- Level III Incident has impact nationally and usually requires the complete Spill Management Team to respond.

The key to an effective emergency response is a rapid, coordinated, tiered response by the affected unit/facility. Activation of the components of the Spill Management Team is determined by the magnitude of the incident.

The Emergency Response Team will provide first response to an incident at a facility. Additional Emergency Command Team support will respond, as requested and to the degree necessary, to incidents that exceed local capability. If additional response resources are needed, the On-Scene Commander can activate the full Spill Management Team (SMT).

The Toledo Refining Company, LLC response teams use the Unified Command System (UCS) to manage emergency response activities. Because UCS is a management tool that is readily adaptable to incidents of varying magnitude, it should be used for all emergency incidents. Staffing levels will be adjusted to meet specific response team needs, based on incident size, severity, and type of emergency.

An explanation of UCS and the roles and responsibilities for primary members of a response team is provided in Appendix F.

4.2 QUALIFIED INDIVIDUAL

Qualified Individuals (QI) have been identified. Arrangements have been made to ensure that a QI is available on a 24-hour basis. Additional qualified personnel are able to arrive at the facility in a reasonable time for an extended incident.

The Qualified Individual (QI) is responsible for coordinating with the Federal On-Scene Coordinator (FOSC), State On-Scene Coordinator (SOSC) and Local On-Scene Coordinator throughout the response.

A QI is required to:

- Be available on a 24-hour basis;
- Speak fluent English;
- Be located in the United States;
- Be familiar with the implementation of the response plan;
- Be trained in the responsibilities of the QI under the response plan;

4.2 QUALIFIED INDIVIDUAL (Cont'd)

- Be provided a document by the owner/operator designating them as a qualified individual and specifying their full authority to-

  (1) Activate and engage in contracting with oil spill removal organization(s) and other response related resources identified in the plan;
  (2) Act as a liaison with the predesignated Federal On-Scene Coordinator (OSC); and
  (3) Obligate funds required to carry out response activities.

- Activation of internal alarms and hazard communication systems to notify all facility personnel.

- Activation of response contractors and cooperatives in a timely manner.

- Notification of all response team personnel, as needed.

- Identification of the character, source, amount, and extent of the release, as well as other needed response items.

- Provision of necessary information to the appropriate Federal, state, and local authorities with designated response roles, including the National Response Center (NRC), State Emergency Response Commission (SERC), and local response agencies, as specified in the Facility Response Plan. Ensure Notification has been completed by Emergency Command Team.

- Assessment of the interaction of the spilled substance with water and/or other substances stored at the facility and notification of response personnel at the scene of that assessment.

- Assessment of the possible hazards to human health and the environment due to the release. This assessment must consider both the direct and indirect effects of the release (i.e., the effects of any toxic, irritating, or asphyxiating gases that may be generated or the effects of any hazardous surface water runoffs from water or chemical agents used to control fire and/or heat-induced explosion).

- Assessment and implementation of prompt removal actions to contain and remove the substance released, as appropriate.

- Coordination of rescue and response actions, as previously arranged with all response personnel.

- Ensurement that all provisions of the FRP have been properly addressed/ implemented.

- The accessing of company funding to initiate cleanup activities.

- Direction of cleanup activities until properly relieved of this responsibility.

4.3 EMERGENCY RESPONSE TEAM (ERT) – See Figure F.1

The first Toledo Refining Company, LLC person on scene, typically the on-duty Emergency Response Shift Supervisor or the on-duty Fire Marshal, will function as the On-Scene Commander until the arrival of the Emergency Response Chief or the Emergency Response and Security Shift Supervisor. Transfer of command may take place as more senior management respond to the incident.

The number of local Emergency Response Team Personnel required to handle an incident controlled by the On-Scene Commander and will depend on the size and complexity of the incident. The On-Scene Commander is always responsible for directing the response activities and will assume the duties of all the primary positions until the duties can be delegated to other qualified personnel.

Refer to Appendix F of this plan for job descriptions of the primary response team positions.

4.4 EMERGENCY COMMAND TEAM (ECT) – See Figure 4.2

The Emergency Command Team is a group of personnel trained to manage incidents. This team is activated as necessary, dependent upon the magnitude of the incident.

The size of, and positions on, the Emergency Command Team are incident-dependent. Dialogue with the activating facility will determine which positions will be activated.

A fully-staffed Emergency Command Team is designed to cover all aspects of a comprehensive and prolonged incident response (Level III incident). During a prolonged response, additional personnel may be cascaded to the incident location, and more than one level within the Team may be involved to sustain 24-hour operations.

4.5 RESPONSE TEAM TRAINING

The Spill Management Team is staffed by specially trained personnel from various Toledo Refining Company, LLC departments, and/or by consultants. Toledo Refining Company, LLC requires that all response personnel, including contractors and casual labor, have the appropriate training necessary to serve on a response team during an emergency. Team members will receive training in the following:

Response Plan Review

All Spill Management Team members should review their Facility Response Plan at least annually, or whenever their job position or responsibilities change under the Plan. A copy of this Plan will be available at all times to the team members at the facility.

HAZWOPER (29 CFR 1910.120)

Federal and state regulations require that response team members maintain up-to-date HAZWOPER training necessary to function in their assigned positions. At a minimum, Toledo Refining Company, LLC employees will receive “First Responder Awareness Level” training. All “Non-Toledo Refining Company, LLC” personnel responding to an incident must satisfy the applicable HAZWOPER training requirements of 29 CFR 1910.120.

OSHA HAZWOPER TRAINING REQUIREMENTS		
Responder Classification	**Required Training Hours**	**Refresher**
29 CFR 1910.120(q) Emergency Response		
First Responder - Awareness Level	2-4 hrs demonstration of competency	same
First Responder - Operations Level	8 hrs	8 hrs
Hazardous Materials Technician	24 hrs plus competency	8 hrs
Hazardous Materials Specialist	24 hrs plus competency in specialized areas	8 hrs
On-Scene Commander	24 hrs plus competency	8 hrs
29 CFR 1910.120(e) Clean Up Sites		
General Site Workers	40 hrs / 3 days on the job training	8 hrs
Occasional Workers (Limited Tasks)	24 hrs / 1 day on the job training	8 hrs
General Site Workers (Low Hazard)	24 hrs / 1 day on the job training	8 hrs
Supervisors	8 hrs supervisor training	8 hrs
29 CFR 1910.120(p)(7)(8) RCRA TSD Sites		
New Employees	24 hrs	8 hrs
Current Employees*	24 hrs	8 hrs

* Previous work experience and/or training certified as equivalent by employer.

4.5 RESPONSE TEAM TRAINING (Cont'd)

Unified Command System

Response team members will receive UCS training, and may also receive supplemental training in other, related general topics.

4.5.1 Volunteers

Toledo Refining Company, LLC will not use non-employee volunteers for emergency incident response, and no Toledo Refining Company, LLC provisions exist to train them. Volunteers may be used by government response entities, as allowed by applicable policies/procedures.

4.5.2 Training Records

Training records for local team members will be maintained at the facility according to Federal, state, and local government requirements (three years for the U.S. Coast Guard and PHMSA and five years for the U.S. Environmental Protection Agency). Training records will be maintained indefinitely for emergency response personnel as long as they maintain an active role, with assigned duties, on the response team.

4.6 RESPONSE TEAM EXERCISES

Spill Management Team members, government agencies, contractors, and other resources must participate in response exercises required by Federal, state, or local regulations. The drill program and elements covered will be completed as detailed in the "National Preparedness for Response Exercise Program (PREP) Guidelines." Toledo Refining Company, LLC will conduct announced and unannounced drills to maintain compliance, and each plan-holder must conduct at least one exercise annually. The following table lists the triennial exercise cycle for facilities (see PREP Guidelines for full details).

Triennial Cycle		
Total Number	**Frequency**	**Exercise Type/Description**
12	Quarterly	QI Notification Exercise
6	Semi-Annual	Equipment Deployment Exercise *(Facility-owned equipment)*
3	Annual	Spill Management Team Tabletop Exercise
3	Annual	Equipment Deployment Exercise *(facilities with OSRO-owned equipment)*
3	Annual	Unannounced Exercise *(not a separate exercise)* Actual response can be considered as an unannounced exercise.
NOTE: All response plan components must be exercised at least once in the cycle. Exercise records will be maintained at the Facility as follows: EPA – 5 years; USCG and PHMSA – 3 years.		

Quarterly QI Notification Exercise

- **Scope:** Exercise communication between facility personnel and the QI(s) and/or designated alternate(s). At least once each year, one of the notification exercises should be conducted during non-business hours.

- **Objective:** Contact must be made with a QI or designated alternate, as identified in the Plan.

- **General:** All personnel receiving notification shall respond to the notification and verify their receipt of the notification. Personnel who do not respond should be contacted to determine whether or not they received the notification.

Annual and Semi-Annual Equipment Deployment Exercise (for facilities with equipment)

- **Scope:** Deploy and operate facility response equipment identified in the response plan. The equipment to be deployed must include the following, at a minimum:

  - 1,000 feet of representative type of boom;
  - one of each type of skimming system; or
  - the equipment necessary to respond to the facility's Small/Average Most Probable Discharge (AMPD), whichever is less.

- **Objective:** Demonstrate personnel's ability to deploy and operate response equipment. Ensure that the response equipment is in proper working order.

- **General:** The facility may take credit for actual equipment deployment to a spill, or for training sessions, as long as the activities are properly documented.

***Annual Equipment Deployment Exercise* (OSRO-owned equipment)**

- **Review:** The facility should determine that the OSRO(s) has completed the equipment deployment exercise requirements and has maintained the necessary documentation. The OSRO may deploy equipment at any location, so long as it occurs within an operating environment similar to the facility's.

- **Scope:** OSRO must deploy and operate response equipment identified in the response plan. The equipment to be deployed must include the following, at a minimum:

  - 1,000 feet of representative type of boom, and
  - One of each type of skimming system.

- **Objective:** OSRO personnel must demonstrate their ability to deploy and operate OSRO response equipment, and must ensure that its response equipment is in proper working order.

Annual Response Team Tabletop Exercise

- **Scope:** Exercise the response team's organization, communication, and decision- making in managing a spill response. Each team identified within the plan must conduct an annual Response Team Tabletop Exercise.

- **Objective:** Exercise the response team in a review of the following:

  - Knowledge of the Plan.
  - Proper notifications.
  - Communications system.
  - Ability to access an OSRO.
  - Coordination of internal spill response personnel.
  - Transition from a local team to a regional team.
  - Ability to effectively coordinate response activity with the National Response System (NRS) infrastructure.
  - Ability to access information in the Area Contingency Plan.

- **General:** A minimum of one Response Team Tabletop Exercise in a triennial cycle will involve a Worst-Case Discharge scenario.

Government-Initiated Unannounced Exercise

- **Scope:** Upon request, the Facility is required to participate in only one unannounced exercise every 36 months from the date of the last government-initiated unannounced exercise.

Exercises are limited to approximately four hours in duration.

Exercises would involve response to a Small/Average Most Probable Discharge scenario.

Exercise would involve equipment deployment to respond to a spill scenario.

- **Objective:** Conduct proper notifications to respond to unannounced scenario of a Small/Average Most Probable Discharge.

  Demonstrate that the response is timely, conducted with an adequate amount of equipment for the scenario, and properly conducted.

- **General:** This exercise is only applicable to those facilities that are randomly chosen.

Area Exercises

- **Objective:** The purpose of the area exercise is to exercise the entire response community in a particular area. An area is defined as "that geographic area for which a separate and distinct Area Contingency Plan has been prepared, as described in OPA 90." The response community includes the federal, state, and local government and industry. The area exercises are designed to exercise the government and industry interface for spill response.

- **General:** The goal is to ensure that all areas of the country are exercised triennially. All of the area exercises will be developed by an exercise design team. The exercise design team is comprised of representatives from the federal, state, and local government and industry. A lead plan holder would lead each area exercise. The lead plan holder is the organization (government or industry) that holds the primary plan that is exercised in the area exercise. The lead plan holder would have the final word on designing the scope and scenario of the exercise.

Exercise Documentation

- All exercises should be documented and maintained at the facility; documentation should specify the:

  - Type of exercise;
  - Date and time of the exercise;
  - Description of the exercise;
  - Objectives met in the exercise;
  - Components of the response plan exercised; and
  - Lessons learned.

- Sample exercise forms are included in Appendix G. However, slight variations of the forms are acceptable and may be utilized at specific facilities.

- Exercise documentation should be kept on file for the required length of time depending on the regulating agency (three years for the U.S. Coast Guard and five years for the U.S. Environmental Protection Agency).

Exercise Planning and Design

- Designing and planning a spill response simulation exercise involves the determination of the appropriate spilled product discharge scenario and establishment of the framework for preparing, managing, and evaluating the exercise. It is the responsibility of the Emergency Response Manager to plan, carry out, and monitor drills and exercises.

4.7 SITE SAFETY AND HEALTH PLAN(S) DEVELOPMENT

The Incident Commander or Safety Representative is responsible for preparing a Site Safety and Health Plan that establishes site-specific policies, practices, and procedures to protect workers and the public from contacting potential chemical and/or physical hazards. A Site Safety and Health Plan will:

- Describe who is responsible for monitoring site safety.
- Characterize the risks associated with each operation that will be conducted in the area covered by the plan.
- Describe known chemical and physical hazards, and the measures that have been instituted to eliminate the hazards or reduce them to acceptable levels.
- Define the level of HAZWOPER training required for workers commensurate with their job responsibilities.
- Describe site control measures, and will include a site map.
- Describe decontamination procedures for personnel and equipment.

FIGURE 4.1

Emergency Response Team Structure

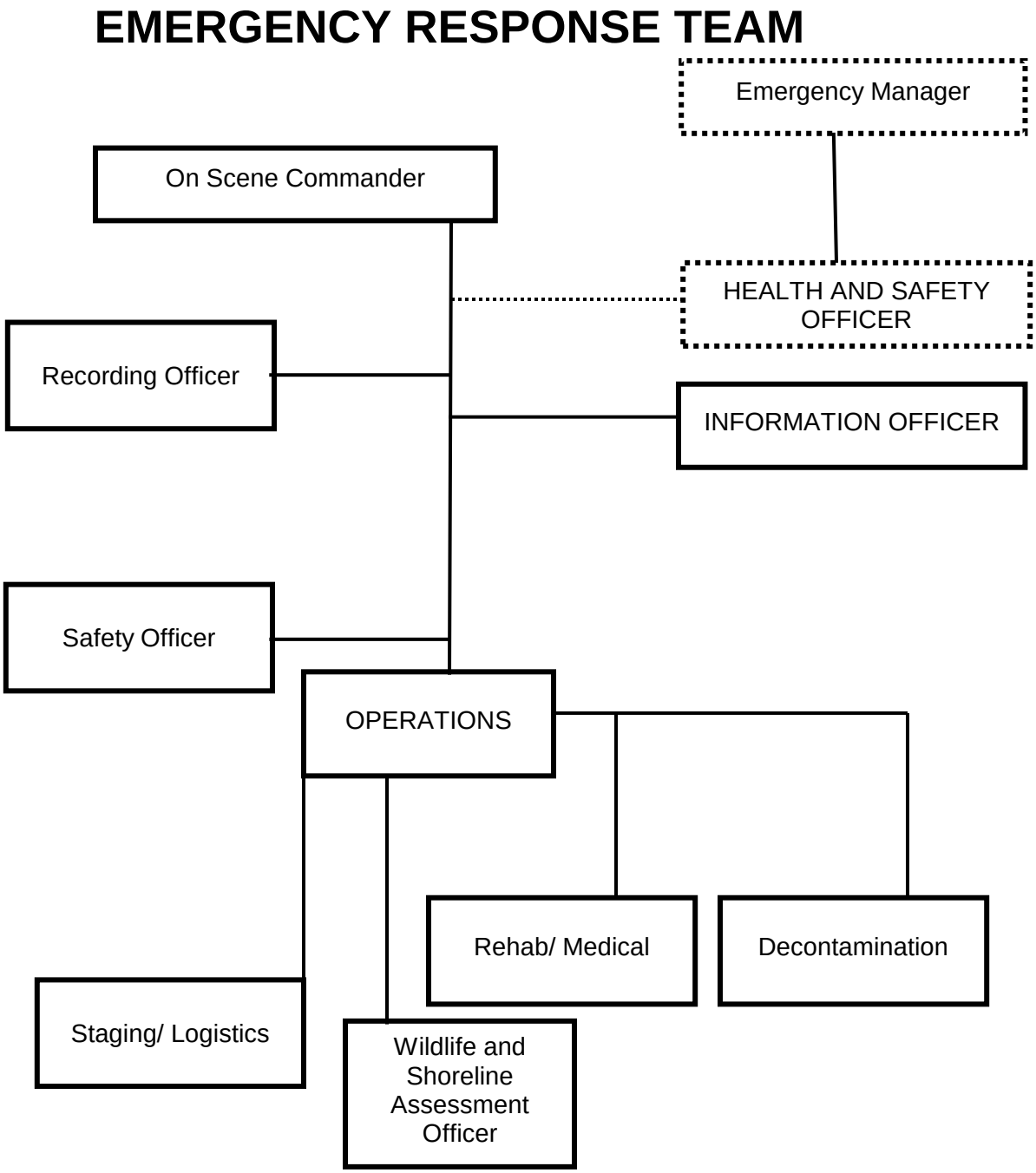
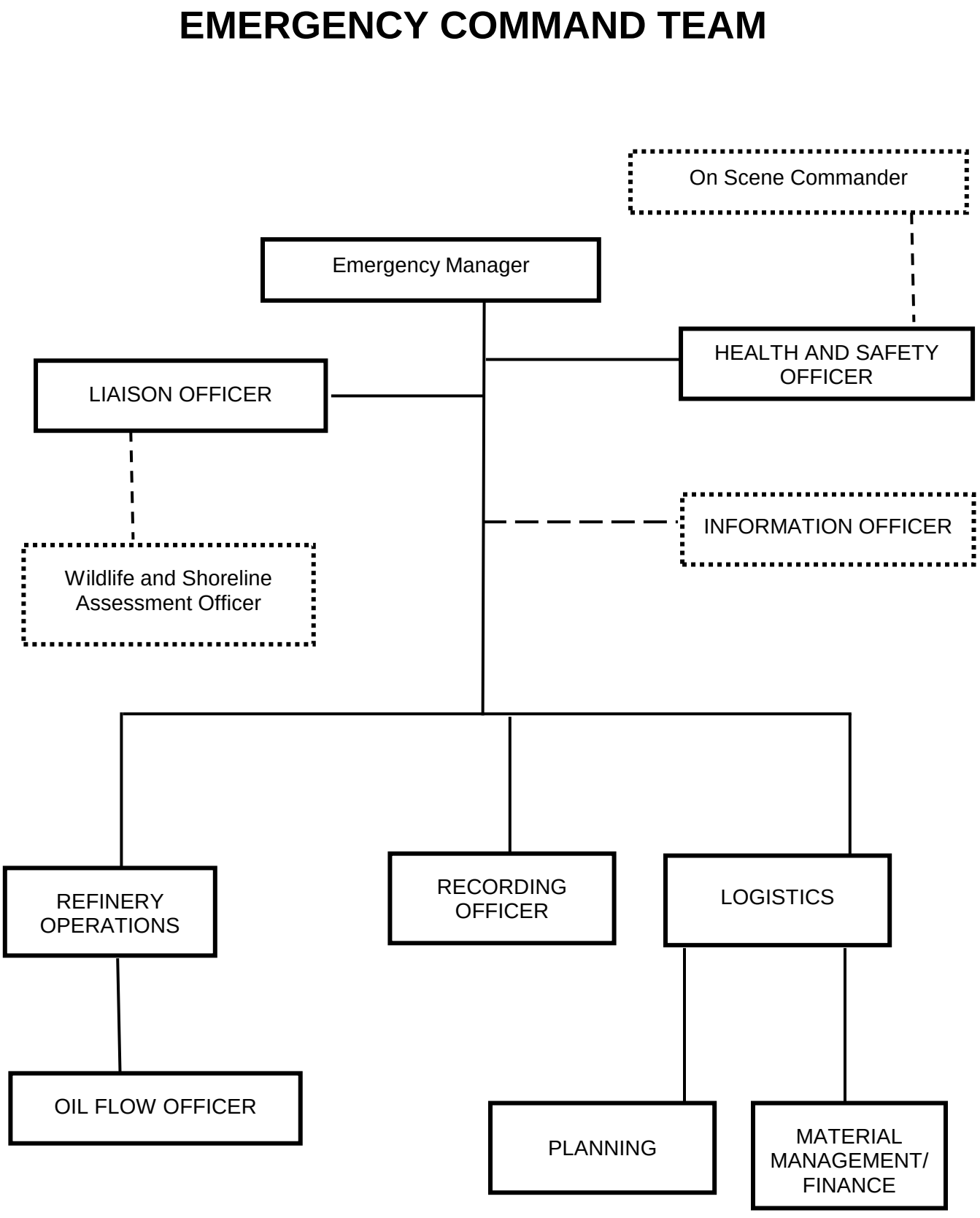


FIGURE 4.2

Emergency Command Team Structure



5.0 RESPONSE EQUIPMENT/RESOURCES

The following sections outline the various response equipment/resources available from the Toledo Refining Company LLC facility, Oil Spill Removal Organizations, and other outside resources.

5.1 FACILITY RESPONSE EQUIPMENT

The Facility is equipped with spill response equipment. This equipment is listed in Figure 5.2. The equipment listed in Figure 5.2 is inspected on a routine basis and is deployed as stated in Section 4.0. The Facility equipment is kept and maintained on site. This equipment is capable of initially containing the identified average most probable discharge of 50 barrels. The Facility also has contracts in place with Oil Spill Removal Organizations and other clean-up contractors for response to a discharge.

Toledo Refining Company LLC maintains firefighting resources to response to a fire at the Refinery and # 2 Tank Farm Facilities. The Oregon City Fire Department is available to provide additional resources as necessary. For the Marine Terminal and Hocking Valley Dock, the City of Toledo Fire Department is the primary responder, with secondary resources provided by Toledo Refining Company LLC. Fire response equipment is listed in Figure 5.2.

The Qualified Individual has the authority to activate Toledo Refining Company LLC resources or that of private contractors and other experts and consultants as the situation demands.

5.2 CONTRACT RESOURCES

In the event of a discharge which is beyond the initial response capabilities of the Emergency Response Team, contract manpower and equipment resources can be obtained through Oil Spill Removal Organization(s) (OSRO). These OSRO's can provide manpower and containment/clean-up equipment for the response operation on land, water, or adjacent shorelines. The resources will be secured from a Toledo Refining Company LLC approved contractor. Notification/implementation of these resources will typically be handled by the Refinery Management (QI). Figure 5.1 provides a quick reference to the Oil Spill Removal Organizations and details their response capability and estimated response times. Additional OSRO data, including equipment inventories and/or USCG certification data, is provided in Appendix J. **Telephone reference is provided in Figure 2.5.** *(Note: Toledo Refining Company LLC has a program in place to insure that each OSRO has a comprehensive maintenance program and applicable training / drills programs in place. Each OSRO is responsible for maintaining and inspecting their own equipment. The Facility is provided updated equipment deployment documentation on an annual basis and records are maintained for a five (5) year period.*

5.3 COOPERATIVE/MUTUAL AID RESOURCES

Toledo Refining Company LLC is a member of the Northwest Ohio – Michigan Mutual Assistance District (NOMMAD).

5.4 EXPERTS AND CONSULTANTS

Toledo Refining Company LLC maintains a relationship with various environmental and technical consultants that can provide support in the event of an emergency incident. These consultants can provide expertise and support in the areas of emergency response management, environmental services, site assessment, permitting, waste treatment, recycling, dewatering, hazardous waste disposal, and remediation. Implementation of these services should be coordinated through the Emergency Command Team.

5.5 VOLUNTEERS

Volunteers will not be utilized by Toledo Refining Company LLC for responding to spills originating from the Facility. All volunteers will be referred to the State or Federal On-Scene Coordinator (EPA).

5.6 COMMUNICATIONS

Effective and efficient communications systems are essential for emergency response at every level. The communications system will be utilized to gather information and current status reports as well as to provide coordination and direction to widely separated work groups involved in search, containment/ diversion, repair, traffic control, public control or evacuation, and restoration.

Lines of communication between the On-Scene Commander (OSC), Emergency Response Team, and the Emergency Command Team (ECT) members are demonstrated in the organization charts shown in Section 4.0. Communication of the overall spill response operation between the Facility and the responsible government agencies in the Federal Regional Response Team (RRT) will occur between the OSC and the Federal On-Scene Coordinator. Appendix J provides additional detail on the Federal Response Organization.

5.6.1 Central Communications System

Prearranged communication channels are of the utmost importance in dealing with Facility emergencies. The notification procedures and telephone contacts documented in Section 2.0 will be reviewed in accordance with the earlier documented updating procedures. The predetermined communications channels include the following:

- A list of emergency telephone numbers for internal management and emergency response personnel (Figure 2.4).
- A list of emergency telephone numbers for various external resources such as the fire and police department, medical, and regulatory agencies (Figure 2.5).
- A list of emergency telephone numbers for contract response resources (Figure 2.5).

5.6 COMMUNICATIONS (Cont'd)

5.6.2 Communications Equipment

Field communications during a spill response to a small or medium discharge will be handled via the existing Facility communications network. This network will utilize existing radios, telephones, beepers, FAX machines, and computers and will be maintained by Facility personnel. In the event of a Worst Case Discharge, field communications will be enhanced with other Toledo Refining Company LLC and contract resources as the situation demands.

5.6.3 Communication Types

Radios - Handheld and vehicle mounted radio sets are the most effective means of communication for the field response operation. The units are battery operated, multi-channeled, and have a typical range that will cover the area of the response operation. Additional radio sets and battery packs/charges will be necessary in the event of a prolonged response operation.

Telephone (Conventional) - Conventional land line telephones are the most effective means of communication for regulatory and advisory notifications during a spill response operation. Additional telephone lines can be installed in the event of a prolonged response operation.

Telephone (Cellular) - Cellular telephones allow for added mobility and response effectiveness. Cellular phones are commonly maintained by certain Facility personnel. Additional cellular phones can be secured in the event of a prolonged response operation.

Pagers - Pagers are used for rapid notification to field personnel when radio and telephone resources are limited. Most response team members carry a pager.

FAX Machines - FAX machines allow for a rapid transfer of information/documentation such as status reports/updates, written notifications, and purchase orders.

Computers - Computers are commonly used in networks which allow access to various other locations and company personnel. Computers also speed the consolidation of information and preparation of written reports.

FIGURE 5.1

EXTERNAL RESPONSE RESOURCES *

Toledo Captain of the Port (COTP) Zone							
USCG Classified Oil Spill Removal Organization (OSRO)							
OSRO Name	Contract Number	Environment Type	Facility Classification Level**				Shoreline Cleanup
			M	W1	W2	W3	
National Response Corporation		Great Lakes	X	X	X	X	Yes
		Inland/Nearshore	X	X	X	X	
		Rivers/Canals	X	X	X	X	
Heritage Environmental Services	4600000202	Great Lakes			X	X	
		Inland/Nearshore	X		X	X	
		Rivers/Canals	X	X	X	X	

Additional Response Resources		
Contractor Name	Contract Number	Response/Mobilization Time
EQ Industrial Service	4600000261	1 - 2 hours

*** Note**: Toledo Refining Company LLC is also a member of the NOMMAD

** Facility Classification Explanation can be found in Appendix C detailing Resource Quantities, Facility Response Times and Vessel Response times.

Toledo Refining Company LLC certifies that the Average Most Probable Discharge (AMPD) is covered by the facility or one or more of the Oil Spill Removal Organizations as indicated by the table above.

. FIGURE 5.2
FACILITY RESPONSE EQUIPMENT *

ITEM	LOCATION	QTY	WRHS CODE	INSPECTOR	DATE	COMMENTS
American Boom & Barrier Containment Boom	Refinery Fire Dept.	Sections totaling 700’	N/A			
Sea Arc 18’, 1994 with 100 HP evinrude and accessories: rope, life jackets, tow bridals, anchors (Boat 492)	Refinery Fire Dept.	1 each	N/A			
Sea Arc 26’, 1991 with (2) 100 HP evinrude and accessories: rope, life jackets, tow bridals, anchors, (400’) containment boom (Boat 491)	Refinery FD/Harrison Marina	1 each	N/A			
Containment Boom	HVD	900’	26-086-061			
Absorbent Boom	Refinery #2 Storehouse Area 217	10 bags; 4 - 10’ sections each	26-086-066			
Absorbent Pads	Refinery #1 Storehouse Area 12161	8 packs	26-086-063			
Creek Boom Trailer	Refinery FD	500’ Creek Boom	N/A			
Spill Control Trailer *	Refinery Fire Dept.	Inventory Attached	N/A			
River Boom Trailer	Refinery FD	500’ River boom	N/A			
Snow Boom Trailer	Refinery FD	1000’ Creek Boom	N/A			
Skimmers	Refinery	2 each	N/A			
Communications Equipment - mounted in Unit 5 - mounted in boat - hand held	Refinery Fire Dept.	 1 VHF; 1 marine 1 VHF; 1 marine 6 VHF; 6 marine	N/A			
(Unit 11) 1989 White/GMC 1500 GPM pumper with 54’ articulating boom	Refinery Fire Dept.	1 each	N/A			
(Unit 10) 1981 Pierce 1500 GPM pumper with 55’ aerial ladder	Refinery Fire Dept.	1 each	N/A			
(Unit 1) 2002 E-ONE pumper 3,500 GPM	Refinery Fire Dept.	1 each	N/A			
(Unit 12) 1975 Ford Flat Bed (Used as foam hauler)	Refinery Fire Dept.	1 each	N/A			
(Unit 9) 1995 Ford F-350 Super Duty Mini Pumper	Refinery FD	1 each	N/A			
(Unit 6) 2007 Ford F-350	Refinery Fire Dept.	1 each	N/A			
(Unit 5) 1980 GMC, Hazardous Materials Truck	Refinery Fire Dept.	1 each	N/A			

FIGURE 5.2
FACILITY RESPONSE EQUIPMENT (Cont'd)
* SPILL CONTROL TRAILER EQUIPMENT
(Staged at the Toledo Refining Company LLC Fire Dept.)

Side	Qty	Description	Inspector	Date
Back Left Door	1	Wooden Handle Pitchfork		
	2	Wooden Handle Spade Shovel		
Left Rear Side	2	Expandable Gaff Hooks		
	1	8lb. Sledge Hammer (Fiberglass)		
	1	20lb ABC Fire Extinguisher		
	10	24" Metal Stakes		
1A (Top)	6	3M Half Masks		
	6pr	3M Cartridges		
	3	Suspenders		
	2	Nomex Coveralls (46R, 50R)		
	1 cs	Tyvek-Poly Coated (3XL)		
1B (Middle)	3	Rainsuits (4XL)		
	3	Rainsuits (5XL)		
	2	Duct Tape		
	4	Bee Bopper		
	10	Leather Gloves (XL)		
	1	Nitrile Glove (M)		
	1	Nitrile Glove (L)		
	4	Googles		
1C (Bottom)	2	Boots Size 12		
	3	Boots Size 13		
	1	Hip Waders - Neoprene (13)		
	1	Hip Waders - Rubber (13)		
2A (Top)	1	Scrubs in a Bucket		
	2	Box of Wyp-All		
	4	Inflatable Kiddie Pools		
	1	Box of Garbage Bags		
	1	Drain Cover		
	1	Wooden Plug Kit		
2B (Middle)	1	Chain Saw		
	1	Gal Bar Oil		
	1	40:1 Fuel Can (Chainsaw)		
	1	Barrel Pump w/ slide fitting		
	1	25 ft Air Hose w/threads		

2C (Bottom)	4	Sandbags (filled)		
	1	Box of Sandbags		
	1	Sandbag Scoop		
	2	Bags of Sand		
3A/B/C	2	Wheelbarrows		
	2	Wood Handle Scoop Shovels		
	1	Wood Handle Flat Shovel		
	1	Fiberglass Handle Flat Shovel		
	1	Fiberglass Spade Shovel		
	1	Broom		
	15	Ground Posts		
4A (Top)	4	Spill Attack Kits		
	2	Box Cobra Coil Sausages		
	2	Box Peat Sorb Pads		
	1	Box Sorbant Industrial Rug (36"x50')		
4B (Middle)	8	8"x10' Absorbent Boom		
4C (Bottom)	8	8"x10' Absorbent Boom		
5/6/7 A (Top)	12	4"x10' PVC Pipe		
	3	2"x4"x8'		
5B (Middle)	1	Roll Snow Fence		
	6	Rolls of Chicken Wire (1"x36"x25')		
5C (Bottom)	3	Bags of Pom Pom's		
	1	Bag of Collapsable LED Cones		
6B (Middle)	2	Rolls of Plastic Sheeting (20'x100')		
	1	Rolls of Plastic Sheeting (12x100')		
6C (Bottom)	2	Bags of Oil Dry		
	4	Sandbags (filled)		
7B (Middle)	7	Safety Vests		
	16	24" Metal Stakes		
	12	24" Wood Stakes		
	1	Box of Flashlights		
		*(3) C Cell Flashlight		
		*(3) 6 volt Flashlight		
		*Spare Batteries		
	1	Tool Box		
		*Small Sledge		
		*Utility Knife		
		*Crescent Wrench		
		*Screw Drivers (various)		
		*Twine		

7C (Bottom)	3	200' Dockline Rope Bags		
	2	Wheel Chocks		
	1	Rope Box		
		*(1)Large 50' Braided Rope		
		*(1) 50' Hemp Rope		
		*(10) 50' sections of Cord		
		*(3) 100' Red Anchor Rope		
		*(1) 50' Dockline		
		*(2) 25' Red Anchor Rope		
Right Rear Side	2	Expandable Gaff Hooks		
	1	Windsock		
	1	10 lb Sledgehammer		
	1	Hand Saw		
	1	20lb ABC Fire Extinguisher		
	10	24" Metal Stakes		
Right Rear Door	2	Push Broom		
	2	Fiberglass Handle Flat Shovel		

* Note: The equipment listed in Figure 5.2 is inspected on a routine basis and is deployed as stated in Section 4.0.

6.0 SPILL IMPACT CONSIDERATIONS

6.1 CRITICAL AREAS TO PROTECT

The critical areas to protect are classified as high, moderate, and low sensitivity to oil. The Federal, State, and local authorities will further clarify these categories at the time of the response. The categories are defined as follows:

HIGH SENSITIVITY
● Areas which are high in productivity, abundant in many species, extremely sensitive, difficult to rehabilitate, or inhabited by threatened/endangered species. ● Areas which consist of forested areas, brush/grassy areas, wooded lake areas, freshwater marshes, wildlife sanctuaries/refuges, and vegetated river/stream banks.

MODERATE SENSITIVITY
● Areas of moderate productivity, somewhat resistant to the effects of oiling. ● Areas which consist of degraded marsh habitat, clay/silt banks with vegetated margins, and gravel/cobble beaches.

LOW SENSITIVITY
● Areas of low productivity, man-made structures, and/or high energy. ● Areas which consist of gravel, sand, or clay material, barren/ rocky riverbanks and lake edges, man-made structures, and concrete/compacted earthen drainage ditches.

6.2 ENVIRONMENTAL/SOCIO-ECONOMIC SENSITIVITIES

Environmental/Socio-economic Sensitivities are of extreme importance when planning a response effort. The health and safety of the public and the environment, as well as the protection of the various socio-economic sensitivities, must be promptly addressed in order to mitigate the extent of damage and minimize the cost of the clean-up effort.

All environmental/socio-economic sensitivities are worthy of protection, but must be prioritized during a response effort. When making decisions on which areas to designate as collection areas and which to protect, the following sources may be consulted:

- U.S. Fish and Wildlife Service and related state agencies
- Applicable Area Contingency Plans
- Other industry and private experts

6.2 ENVIRONMENTAL/SOCIO-ECONOMIC SENSITIVITIES (Cont'd)

The environmental and socio-economic sensitivities in the vicinity of the Facility can be divided into a number of categories. The following environmental/socio-economic sensitivity summary describes these categories which may be impacted by a discharge and should be addressed in the response:

Environmental:

- Environmentally sensitive areas are prevalent throughout any marine and/or terrestrial environment and may be affected by any potential discharge incident.

- Environmentally sensitive areas subjected to stress and sudden change may be severely damaged. All means of exclusion/diversion should be utilized during a response effort to minimize the impact on these areas.

Historical Areas:

- Properties listed in the National Register of Historic Places and Natural Landmarks are included in this category.

- These areas may need to be boomed off or otherwise protected to minimize impact.

Major Recreational Areas:

- A discharge affecting these areas may pose a public safety/health risk during a response effort.

- Shoreline access for personnel and equipment deployment (boats, boom, etc.) is typically available in these areas.

Marinas:

- These areas have a high degree of public exposure (personal and property) and should be boomed for protection.

- Boats and other water deployed equipment can often be deployed and/or obtained in these areas.

Residential Areas:

- These are areas with high public impact and may warrant evacuation in extreme cases.

- Cleanup must be performed with extreme caution due to extensive public exposure.

- Suburban Animal Hospital will be contacted to handle contaminated domestic animals.

6.2 ENVIRONMENTAL/SOCIO-ECONOMIC SENSITIVITIES (Cont'd)

Commercial Farming/Ranching Areas:

- Commercial Farming/Ranching Areas have the potential of human and livestock impact, as well as socio-economic impact in the potential loss of crops or loss of property use.

Water Intake Points:

- Commercial, industrial, municipal, and private water intakes are subject to impact.
- These areas may need to be boomed off or otherwise protected to minimize impact.

Wildlife Management Areas and Refuges:

- These areas have a high degree of exposure to threatened/endangered species and many other types of wildlife. Figure 6.1 contains a listing of the threatened/endangered species.
- Protection booming and clean-up efforts are high priority in these areas.

Figure 6.2 contains listings and tiles showing the locations of areas of Environmental/Socio-Economic Sensitivities. The information was obtained from the U.S. EPA Inland Sensitivity Atlases for Northwest Ohio and South East Michigan.

6.3 WILDLIFE PROTECTION AND REHABILITATION

Toledo Refining Company, LLC will work with Federal, State, and local agency personnel to provide labor and transportation to retrieve, clean, and rehabilitate birds and wildlife affected by an oil spill, as necessary. Figure 6.4 contains a contingency protocol for oiled wildlife which has been prepared for Toledo Refining Company, LLC by Tri-State Bird Rescue & Research Inc. Oversight of Toledo Refining Company, LLC's wildlife preservation activities and coordination with Federal, State, and local agencies during an oil spill is the responsibility of the Shoreline Assessment and Wildlife Officer under the direction of the On-scene Commander.

Special consideration should be given to the protection and rehabilitation of endangered species and other wildlife and their habitat in the event of an oil spill and subsequent response. Jurisdictional authorities should be notified and worked with closely on all response/clean-up actions related to wildlife protection and rehabilitation. Laws with significant penalties are in place to ensure appropriate protection of these species.

6.3.1 Endangered/Threatened Species

The U.S. Fish and Wildlife Service (USFWS) and related state agencies classify the status of various wildlife species in the potentially effected states. A summary of critical birds, reptiles, mammals, and rare plant species status for the state of Ohio are presented in Figure 6.1. The lists were printed directly from the Ohio Department of Natural Resources website. Potential locations of the species being identified in Figure 6.1 are shown in Figure 6.2.

6.3 WILDLIFE PROTECTION AND REHABILITATION (Cont'd)

6.3.2 Wildlife Rescue

Toledo Refining Company, LLC will work with Federal, State, and local agency personnel to provide labor and transportation to retrieve, clean, and rehabilitate wildlife affected by an oil spill, as the situation demands.

The following are items which should be considered for wildlife rescue and rehabilitation during a spill response:

- Bird relocation can be accomplished using a variety of deterrents, encouraging birds to avoid areas of spilled oil. Bird relocation can be accomplished by utilizing deterrent methods including:
  - Use of visual stimuli, such as inflatable bodies, owls, stationary figures, or helium balloons, etc.
  - Use of auditory stimuli, such as propane cannons, recorded sounds, or shell crackers.
  - Use of herding with aircraft, boats, vehicles, or people (as appropriate).
  - Use of capture and relocation.

6.3.3 Search and Rescue - Points to Consider

- **Toledo Refining Company, LLC's involvement should be limited to offering assistance as needed or requested by the agencies.**
- Prior to initiating any organized search and rescue plan, **authorization must be obtained from the appropriate federal/state agency.**
- **Initial search and rescue efforts, if needed, should be left up to the appropriate agencies.** They have the personnel, equipment, and training to immediately begin capturing contaminated wildlife.
- With or without authorization it must be anticipated that volunteer citizens will aid distressed/contaminated wildlife of their own. It is important to communicate that it may be illegal to handle wildlife without express authority from appropriate agencies. Provisions should be made to support an appropriate rehabilitator, however, **no support should be given to any unauthorized volunteer rescue efforts.**
- The regulatory agencies and response personnel should be provided the name and location of a qualified rehabilitator in the event contaminated wildlife is captured.

6.3 WILDLIFE PROTECTION AND REHABILITATION (Cont'd)

- Resources and contacts that can assist with wildlife rescue and rehabilitation are provided in Section 2.0. This list includes:
  - Outside rehabilitation organizations
  - Local regulatory agencies
  - Other resources

6.4 STAGING AREAS

When establishing personnel and equipment staging areas for a response to a Facility discharge, the following criteria should be evaluated:

- Access to waterborne equipment launching facilities and/or land equipment.
- Access to open space for staging/deployment of heavy equipment and personnel.
- Access to public services utilities (electricity, potable water, public phone, restroom and washroom facilities, etc.)
- Access to the environmental and socio-economically sensitive areas which are projected for impact.

6.5 SPILL VOLUME ESTIMATES

Quality spill volume estimates are required in order to evaluate the equipment and manpower requirements necessary to handle the response. The primary and most accurate method of estimating the spill volume is from tank gauging and/or pump rate estimates (depending on the type of incident which caused the spill). In the event that tank or pump estimates are not available, the secondary method of visual estimation can be performed by analyzing the color and size of the slick and converting that data with the information provided in Figure 6.3.

6.6 TRAJECTORY ANALYSIS

Oil spilled on water will react primarily to the effects of wind and current. The oil will tend to spread to a thin layer under the influence of gravity (primary) and chemical (secondary) forces. The following describes the behavior of oil on water:

- Oil will move in the direction and at the rate of the current under negligible wind conditions.
- Oil will move in the direction and at approximately 3.4 % of the velocity of the wind under negligible current conditions.
- The combined effects of wind and current on the oil should be carefully analyzed. A method of vector analysis can be performed to determine the net direction of movement (wind forces can work in addition to, against, or in many other combinations with the current).

6.6 TRAJECTORY ANALYSIS (cont'd)

- The primary method of surveillance for the Facility will be visual. Visual surveillance is not effective however in rain, fog, darkness, or heavy cloud cover. It is difficult to observe a slick on the water from a boat, dock or land due to the angle of observation. Aerial surveillance is the preferred method of visual surveillance because of the elevated view and the ability to cover a large area in a short period.

6.7 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT

General descriptions of various specific response techniques that may be applied during a response effort are discussed below. Company responders are free to use all or any combination of these methods as incident conditions require, provided they meet the appropriate safety standards and other requirements relative to the situation encountered. Data was obtained from reports, manuals and pamphlets prepared by the American Petroleum Institute, Environmental Protection Agency and the United States Coast Guard. The most effective cleanup of a product spill will result from an integrated combination of clean-up methods. Each operation should complement and assist related operations and not merely transfer spillage problems to areas where they could be more difficult to handle.

The spill should be assessed as soon as possible to determine the source, extent and location of travel. Terrain and other physical conditions down gradient of the spill site will determine the methods of control at a point in advance of the moving product. Often, the bulk of a spill can be contained at a single location or a few key locations in the immediate vicinity of the source point. When possible the executions of this type of initial containment strategy helps confine a spill to a relatively limited area. A listing of methods with precautions/recommendations is available in Figure 2.5. Figure 2.6 provides recommendations that match the methods with the type of the habitat impacted.

6.7.1 Spill on Land (Soil Surfaces)

- **Confinement Methods**

  Product can be trapped in ditches and gullies by earth dams. Where excavating machinery is available, dams can be bulldozed to contain lakes of product. Dams, small and large, should be effectively employed to protect priority areas such as inlets to drains, sewers, ducts and watercourses. These can be constructed of earth, sandbags, absorbents, planks or any other effective method. If time does not permit a large dam, many small ones can be made, each one holding a portion of the spill as it advances. The terrain will dictate the placement of the dams. If the spill is minor, natural dams or earth absorption will usually stop the product before it advances a significant distance. Cleanup is the main concern in such situations.

  In situations where vapors from a spill present a clear and present danger to property or life (possible ignition because of passing automobiles, nearby houses, or work vehicles approaching the area), spraying the surface of the spill with dispersant will greatly reduce the release of additional vapors from the product. This method is especially adapted to gasoline spills on soil surfaces.

6.7 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

6.7.1 Spill on Land (Soil Surfaces) (Cont'd)

- **Removal Methods**

  The recovery and removal of free product from soil surfaces is a difficult job. The best approaches at present seem to be:

  - Removal with suction equipment to tank truck if concentrated in volumes large enough to be picked up. Channels can be formed to drain pools of product into storage pits. The suction equipment can then be used.

  - Small pockets may have to be dipped up by hand.

  - If practicable after removal of the bulk of the spill, controlled burning presents the possibility of a fast, simple, and inexpensive method of destruction of the remainder of the product. If all other options have been executed and the site is still unsafe for further activity because explosive vapors persist, the vapors may need to be intentionally ignited to prevent an accumulation sufficient to become an explosive mixture, provided the other requirements of these guidelines for controlled burning are met.

Intentional ignition to remove released product should be utilized only if all of the following conditions are met:

- Other steps and procedures have been executed and a determination has been made that this is the safest remaining method of control.

- Intentional burning will not unduly damage the pipeline, adjacent property, or the environment.

- Controlled burning is permitted by government authorities. Local government authorities to be contacted may include city council, county board of commissioners, city or county fire chiefs, the county forestry commission or fire tower, and the local environmental protection agency. In seeking permission from these authorities, be prepared to convince them that adequate safety precautions have been and will be taken during the operation.

- Controlled burning is conducted with the consent of local landowners.

- Safety must always be a prime consideration when considering controlled burning of product. Sparks and heat radiation from large fires can start secondary fires and strong winds make fire control difficult. There must be no danger of the fire spreading beyond control limits. All persons must be at a safe distance from the edge of the inflammable area. Remember that all burning must be controlled burning.

6.7 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

6.7.2 Spill on Lake or Pond (calm or slow-moving water)

- **Confinement Methods**

  A lake or pond offers the best conditions for removal of product from water. Although the removal is no easy task, the lake or pond presents the favorable conditions of low or no current and low or no waves.

  The movement of product on a lake or pond is influenced mainly by wind. The product will tend to concentrate on one shore, bank or inlet. Booms should be set up immediately to hold the product in the confined area in the event of a change in wind direction.

  If the spill does not concentrate itself on or near a shore (no wind effect), then a sweeping action using boats and floating booms will be necessary. The essential requirement for this operation is that it be done very slowly. The booms should be moved at not more than 40 feet per minute. Once the slick is moved to a more convenient location (near shore), the normal operations of removal should begin.

  If the slick is small and thin (rainbow effect) and not near the shoreline, an absorbent boom instead of a regular boom should be used to sweep the area very slowly and absorb the slick. The product may not have to be moved to the shoreline.

- **Removal Methods**

  If the confined slick is thick enough, regular suction equipment may be used first; however, in most instances, a floating skimmer should be removed. If judged appropriate or useful, a surface collecting agent should be applied once the slick is isolated to facilitate the removal. The surface collecting agent will concentrate the product into a smaller area and make the floating skimmer work more efficiently. If the floating skimmer starts picking up excess water (slick becomes thin), do not stop using it if it is not removing any appreciable amount of product.

  Additions of more surface collecting agent from time to time may improve the skimming efficiency of the skimmer. It will continue to concentrate the slick into a smaller area, thus making the film thickness greater. Drawing the boom closer to the bank as product is removed will also keep film of product thicker. However, when the slick becomes too thin, the skimmer should be stopped and an absorbent applied (with a boat if necessary) to remove the final amounts.

  The floating skimmer (if speed is a must) or hand skimmers (if water is shallow enough) or both can be used to pick up the product-soaked absorbent. Before pumping the product-soaked absorbent with a floating skimmer, insure that the absorbent in question can be pumped and will not harm the pump. Several types are nonabrasive to pump internals. If the floating skimmer is used first, the product-soaked absorbent/water mixture should be pumped into a tank truck.

6.7 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

A better method of retrieving the product-soaked absorbent is to draw it in as close to the shore as possible with the booms used to confine the product initially. The absorbent can then be hand skimmed from the water surface and placed in drums, on plastic sheets or in lined roll-off boxes. It should then be disposed of by acceptable means.

The final rainbow on the surface can be removed with additions of more absorbent.

6.7.3 Spill on Small to Medium Size Streams (relatively fast-flowing creeks)

- **Confinement Methods**

The techniques used for product containment on fast-flowing shallow streams are quite different from the ones used on lakes, ponds, or other still bodies of water. The containment and removal processes require a calm stretch of water to allow the product to separate onto the surface of the water. If a calm stretch of water does not exist naturally, a deep slow-moving area should be created by damming. The dam can be constructed by using sandbags, planks or earth. If a dam is required, it should be situated at an accessible point where the stream has high enough banks. The dam should be constructed soundly and reinforced to support the product and water pressure.

- Underflow dam - The underflow dam is one method that can be used, especially on small creeks. The water is released at the bottom, of the dam using a pipe or pipes which are laid during construction of the dam. The flow rate through the pipe must be sufficient to keep the dam from overflowing. One method is to lay the pipe at an angle through the dam (while dam is being constructed) so that the height of the downstream end of the pipe will determine the height the water will rise behind the dam.

- Overflow dam – Another method of containment is the overflow type dam. The dam is constructed so that water flows over the dam, but a deep pool is created which slows the surface velocity of the water. Therefore, the condition of a calm stretch of water is met. The overflow dam may be used where larger flow rates (medium size creeks) of water are involved. With this type dam, a separate barrier (floating or stationary boom) must be placed across the pool created by the dam. The separate barrier arrests the surface layer of product.

  At the same time, the water is flowing under the barrier and over the top of the dam. The barrier should be placed at an angle of 45 % across the pool to decrease the effective water velocity beneath it. Also, it helps to concentrate the product at the bank and not all along the barrier. A second barrier should be placed approximately 10 to 15 feet downstream of the first one as a secondary back-up.

  The stationary boom type barrier should be made of wood planks or other suitable material. The stationary boom should be soundly constructed and sealed against the bank. The ends of the planks can be buried in the banks of the stream and timber stakes driven into the stream bed for support as needed. The necessary length of the boom will be approximately 1-1/2 times the width of the waterway. The plank boom

6.7 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

6.7.3 Spill on Small to Medium Size Streams (relatively fast-flowing creeks) (Cont'd)

should extend six to eight inches deep into the water and about two inches or higher above the water level. If the increase in velocity under the stationary boom is causing release of trapped product, it should be moved upward slightly. At no time should barrier be immersed more than 20% of the depth of the pool at the barrier location; that is, if the pool created by damming is three feet deep, do not exceed an immersion depth of seven inches with the barrier at the position the barrier is installed.

Another method used with the underflow dam is having the pipe or pipes sized to carry only a portion of the flow needed. The pipe would be placed at the bottom of the dam and level with the creek bed. The remaining flow of the creek could be siphoned or preferably pumped around the dam from a point away from the dam and from the deepest portion of the pool. The pumping or siphoning can be controlled to maintain the desired water level at the dam. The key is the removal of water through or around the dam at the lowest point in the basin. This prevents the oil from escaping with the released water.

A floating boom can be used in place of the stationary type if the created pool's size (bank to bank) and depth will permit. Since changing the depth and/or length of a standard floating boom in a small stream is difficult, the use of the separation of product and water. The advantages of using a floating boom are the speed of deployment and the fact that there is not need for additional support as with the stationary boom.

Multiple Impoundments – Since emergency built dams (either underflow or overflow) are seldom perfect, a series of dams is usually required. The first one or two will trap the bulk and the ones that are downstream will trap the last traces of product. Precautions should be taken to ensure that the foundations of emergency dams are not washed away by the released water. If earth is used to construct an overflow dam, a layer of earth-filled bags should be placed on top of the dam so erosion will not take place.

6.7.4 Spill on Small River and Streams

- **Removal Methods**

Once the containment dams are constructed, the problem or removal of the product from the water surface should be the prime consideration. The removal must be continuous or else build-up of product behind the dams or booms might lead to product escaping the traps.

The type of removal procedures used depends largely on the amount of product being trapped in a given span of time, if the amount of product moving down the stream is of sufficient quantity, the first dam or fixed boom would quite possibly trap enough for the floating skimmer to work efficiently. The skimmer will pump the product and possibly some water to a tank truck or other holding tank. Separated water may be released from the bottom of the tank truck if it becomes necessary. The absorbents (straw, ground corncobs, or other stocked absorbent) could then be used at downstream dams or booms. It is inadvisable to place an absorbent in the stream prior to or at the first dam in anticipation of the arriving

6.7 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

6.7.4 Spill on Small River and Streams(Cont'd)

product. Let the product accumulate at the first dam and use the floating skimmer to recover the product.

Disposal of gross amount of product-soaked absorbent would not then be a problem. Follow directions on use of each absorbent. Some are designed to be placed on water before product arrives (straw and other new types); others are intended only to be placed on the product after it accumulates on the water (ground corncobs and others). Plastic sheets should be used to place the product-soaked absorbent on as it is hand skimmed from the water. Alternatively, the material may be placed in drums or lined roll-off boxes.

If the amount of product in the stream is minor, a straw-bale may be constructed to filter out the product. The slowing of the water would not be necessary, but several dams might be necessary to ensure complete removal. The downstream dams would also offer protection when the upstream bales are removed, releasing traces of product. Straw-bale dams can also be used downstream from underflow and overflow dams for added protection.

Thus, the containment and removal of spilled product on small to medium fast-flowing streams might require a combination of underflow or overflow dams, fixed booms, skimmers, absorbents, and straw-bale dams to ensure a complete cleanup.

6.7.5 Spill on Large Streams and Rivers

- **Confinement Methods**

  The containment techniques differ considerably on large streams and rivers versus small streams. First, the smooth calm area of water necessary for product-water separation must be found along the stream or river rather than making one as with small streams. Floating booms (rather than fixed booms or dams) must be used to trap the surfaced product.

  Local conditions of current and wind must be considered when selecting the site for the boom. A point with a low water velocity near the bank, sufficient depth to operate the product removal equipment, and good access are required. The fact that wind may tend to concentrate the product against one bank must be considered. A smooth, undisturbed area of water is required immediately upstream of the boom to ensure that the product has opportunity to separate out onto the surface. The boom should be positioned where the current is at a minimum. It is more effective to boom at a wide, slow position than on a narrow, fast stretch of water.

  If the boom are positioned straight across a river or stream, at right angles to the flow, surface water tends to dive beneath the barrier (boom) when current velocities exceed about ½ knot (0.8 ft./sec.). However, if the current of the entire river is ½ knot or less, then a boom can be positioned straight across the river or large stream, but angled slightly in relation of the banks. By placing the boom at an angle to the banks, product on the surface is diverted along the boom to the side of the river.

6.7 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

6.7.5 Spill on Large Streams and Rivers (Cont'd)

The current velocity is usually much slower near the river bank than in the center and the product will move along the boom toward the bank for removal. A water-tight seal between the bank and the boom is essential. A secondary boom should be set up immediately downstream of the first one to capture the amounts that escape the upstream boom. A boom can be employed parallel to the river flow at the bank to form the seal with the booms used to trap the product.

Where the current velocity of the chosen site exceeds ½ knot, the boom should be positioned in two smooth curves from a point of maximum velocity (usually the center of the river) to both banks. However, this double-boom required product to be removed from both sides of the river. To determine the appropriate angle of boom placement and support (mooring) needed to hold the booms in position, the current velocity should be measured by timing a floating object which is 80% submerged over a distance of 100 feet. A time of 60 seconds over this distance indicates a water current of approximately 1 knot. For currents from 1 to 2.5 knots (1.7 to 4.2 ft./sec.), the more the boom will have to be angled acute to the bank. The length of the boom will have to be such to reach the center of the river. For currents between ½ and 1 knot (0.8 and 1.7 ft./sec.), the angle of employment can be enlarged.

The major load on the boom is taken by the terminal moorings, particularly the one in the center of the river. However, intermediate moorings are also required both to maintain the smooth curve of the boom to prevent breaking of the boom and to assist with preventing skirt deflection. The intermediate moorings are preferably positioned every 25 feet and must be adjusted to avoid the formation of indentations in the boom profile. These trap product in pockets, prevent its deflection to the bank, and also encourage diving currents. The moorings' ropes should be five times the water depth.

In certain situations, it might be advantageous to position booms to deflect the approaching spilled product to a slower moving area. Naturally, additional booms would have to be positioned around this slower moving area prior to deflecting the product to the area. This approach has been used along river which has lagoons, etc., with a very low current action. The recovery would take place in the lagoons and not along the river bank.

- **Removal Methods**

The product collected upstream of the floating booms in a large stream or river should be removed from the water surface as it accumulates. Regular suction equipment, a floating skimmer, and/or absorbents (including absorbent booms) should be used to remove the product as appropriate to the quantity being trapped in a given span of time. If the amount moving down the stream is of sufficient quantity, the primary floating boom would possibly trap enough for the floating skimmer to work efficiently. The skimmer will pump the product and some water to a tank truck or other holing tank.

6.7 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

6.7.5 Spill on Large Streams and Rivers (Cont'd)

The absorbents (type that can be placed on water before product arrival straw is an example) would then be used upstream of the secondary boom to absorb the underflow from the primary boom. An absorbent boom (Sea-Serpent) or other stocked absorbent boom can also be placed between the primary and secondary booms to help the other absorbents control the underflow from the primary boom. If the underflow from the primary boom is significant, then the type absorbent which can be placed on the water only after product is collected may be used. An example of this type of absorbent is ground corncobs. It is best to hand skim the saturated absorbents and place on plastic sheets. However, if the absorbent used can be pumped after product absorption and speed of removal is a necessity, the floating skimmer can be used to remove the product-soaked absorbent.

The disadvantage of pumping the product-soaked absorbent to a truck is the volume that will accumulate (skimmer will pump excess water) and the disposal problems associated with the large water/product-soaked absorbent mixture.

If the volume of product moving toward the boomed area is expected to be small, an absorbent (straw) should be placed in the river upstream of the primary and secondary booms. If regular booms are not necessary, a screen filter could be stretched across the river to contain the straw, or an absorbent boom could be constructed by tightly fastening hay bales together, forming a chain. Boats (either rented or furnished by contractors) would be necessary to retrieve the product-soaked absorbents.

6.7.6 Spill on Stream which Flows into Lake of Pond

There are certain locations along the pipeline where streams (small and large ones) flow into lakes or ponds at relatively short distances from the pipeline. It is conceivable that a spill that reached the streams in question could reach or almost reach the lakes before containment and recovery operations could be set up. If time permits for containment operations to be set up on the stream in question, it then would be handled as described above depending upon the stream size involved.

However, if product in the stream is near the lake site or if product is flowing into the lake with a significant amount yet to arrive, a different containment should be employed.

6.7 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

6.7.6 Spill on Stream which Flows into Lake of Pond (Cont'd)

- Confinement Methods

  Product on a stream flowing into a lake should be boomed as close to the entrance as possible. The boom should be positioned on the lake at an angle to the residential stream current so as to direct the surface water to a slower moving area. The area where the product is being deflected should be enclosed by booms to contain it. An additional boom for sweeping the product to the bank will be required. This area of containment should not have a current velocity of more than 1/2 knot (0.8 ft./sec.), preferably less.

- Removal Methods

  The removal of product from the lake or pond's surface would be handled as described earlier.

  For sizable releases, collected product will usually be pumped into tank trucks and transported to a storage facility. Tank trucks are available at several locations throughout.

6.7.7 Spill in a Mud or tidal Flat Area

- Confinement Methods

  Shoreline boom lined with absorbent boom should be placed at the surf line to prevent oil from washing up onto the flat area. If oiling has already occurred, the boom is used to prevent further oiling, and keep oil that has impacted the flat from spreading.

- Removal Methods

  Natural Recovery, Flooding, and Sorbents are the three preferred methods. Any invasive type of recovery method poses a risk of driving the oil into the substrate of the flat and endangering the biological organisms that live there. Invasive methods should only be used in order to protect more sensitive areas.

6.7.8 Spill in a Marsh or Wetland

- Confinement Method

  Shallow water booms should be placed around the perimeter of the area to prevent impact or contain oil to prevent spreading. Booming may be difficult due to a large number of trees and/or debris.

- Removal Methods

  Natural Recovery, Flooding, Sorbents, and Low-Pressure Cold-Water Flushing are the preferred methods. As with mud and tidal flats, invasive methods may do more harm than good. In-situ burning is also an option so long as there is enough water to protect the roots of the vegetation.

6.7.8 Spills of Group V Oils

Due to the unique characteristics of Group V oils when released into a waterway, a contracted OSRO has provided methods of containment and removal for this oil group. Please see Appendix H

6.7.9 Spills in Urban Areas

Oil spills in urban areas can greatly impact recreational use, human health, wildlife habitat(s) and potential beach or park closures. Manmade structures along waterways require unique protection strategies. Manmade structures could include vertical shore protection structures such as seawalls, piers, and bulkheads, as well as riprap revetments and groins, breakwaters and jetties. Vertical structures can be constructed of concrete, wood and corrugated metal. They usually extend below the water surface, although seawalls can have beaches or riprap in front of them. These structures are very common along developed shores, particularly in harbors, marinas, and residential areas. The range in degree of exposure to waves and currents varies widely from very low in dead-end canals, to very high on offshore breakwaters. Boat wakes can generate wave energy in otherwise sheltered areas.

Maintaining shipping or other kinds of vessel traffic through navigation channels or waterways during a spill response is a difficult consideration because there is usually economic and political pressure to re-establish normal operations as soon as possible. This consideration extends to vehicular traffic through urban areas. Deploying booms and skimmers or constructing recovery sites can conflict with such traffic for several days. Also, passage of deep-draft vessels through the waterway can suddenly change water level and flow or create wakes causing booms to fail. For these reasons, recovery efforts must be coordinated through the Unified Command to ensure the cooperation of all parties involved.

6.8 Use of Chemical Dispersants and In-Situ Burning

Toledo Refining Company, LLC will consider alternate means of oil recovery such as chemical dispersants and in-situ burning under the guidance and direction of the Region 5 and Ohio EPA, USCG, contracted OSROs, and Toledo Refining Company, LLC OSC.

Procedures for permissions and expedited decisions on the use of these alternate methods of oil recovery can be found in the Region 5 Oil and Hazardous Substances Integrated Contingency Plan, sections:

- 2.10.2 OSC Notification Responsibilities
- 3.3.2 Use of Chemical Agents
- 3.3.2.1 Application steps for Use of Chemical Spill Control Agent
- 3.3.3.2 Chemical Use Checklist
- 3.3.3 Use of In Situ Burning in U. S. EPA Region 5
- Appendix VII: Chemical Use Checklist
- Appendix VII: In Situ Burning of Oil as A Response Tool In Region 5

The complete Region 5 Oil and Hazardous Substances Integrated Contingency Plan may be found online at: http://Great-lakes.net/partners/epa/acp-rc

Figure 6.1

Endangered, Threatened, Species of Concern, Special Interest, Extirpated, or Extinct listing from Division of Wildlife

Ohio Department of Natural Resources
DIVISION OF WILDLIFE

Publication 5356
(R1012)

WILDLIFE THAT ARE CONSIDERED TO BE ENDANGERED, THREATENED, SPECIES OF CONCERN, SPECIAL INTEREST, EXTIRPATED, OR EXTINCT IN OHIO

October 2012

The Division of Wildlife's mission is to conserve and improve the fish and wildlife resources and their habitats, and promote their use and appreciation by the public so that these resources continue to enhance the quality of life for all Ohioans. The Division has legal authority over Ohio's fish and wildlife, which includes about 56 species of mammals, 200 species of breeding birds, 84 species and subspecies of amphibians and reptiles, 170 species of fish, 100 species of mollusks, and 20 species of crustaceans. In addition, there are thousands of species of insects and other invertebrates which fall under the Division's jurisdiction. Furthermore, Ohio law grants authority to the chief of the Division to adopt rules restricting the taking or possession of native wildlife threatened with statewide extirpation and to develop and periodically update a list of endangered species (Ohio Revised Code 1531.25).

The status of native wildlife species is very important to the Division. While the listing process identifies individual wildlife species needing protection, it also serves as a powerful tool in the Division's planning process. It provides direction for the allocation of personnel time and funds in Division programs and projects.

The first list of Ohio's endangered wildlife was adopted in 1974 and included 71 species. An extensive examination of the list is conducted every five years. The Division seeks input from our staff along with other noted professional and amateur wildlife experts across Ohio. In 2001, as part of our comprehensive management plan, the Division initiated a reevaluation of the endangered species list. During this process, the need for an additional state-list category was recognized and has been designated as "Special Interest." The name of the previous special interest category has been changed to "Species of Concern," but retains its original definition.

Therefore, in addition to endangered the Division uses five other categories: threatened, species of concern, special interest, extirpated, and extinct, to further define the status of selected wildlife. These categories and the species contained within them are dynamic and will be revised as our knowledge of the status of Ohio's wildlife evolves.

Definitions of these categories, a summary of the numbers of species and subspecies in each category, and the list of species and subspecies in each category follow:

ENDANGERED - A native species or subspecies threatened with extirpation from the state. The danger may result from one or more causes, such as habitat loss, pollution, predation, interspecific competition, or disease.

THREATENED - A species or subspecies whose survival in Ohio is not in immediate jeopardy, but to which a threat exists. Continued or increased stress will result in its becoming endangered.

SPECIES OF CONCERN - A species or subspecies which might become threatened in Ohio under continued or increased stress. Also, a species or subspecies for which there is some concern but for which information is insufficient to permit an adequate status evaluation. This category may contain species designated as a furbearer or game species but whose statewide population is dependent on the quality and/or quantity of habitat and is not adversely impacted by regulated harvest.

SPECIAL INTEREST - A species that occurs periodically and is capable of breeding in Ohio. It is at the edge of a larger, contiguous range with viable population(s) within the core of its range. These species have no federal endangered or threatened status, are at low breeding densities in the state, and have not been recently released to enhance Ohio's wildlife diversity. With the exception of efforts to conserve occupied areas, minimal management efforts will be directed for these species because it is unlikely to result in significant increases in their populations within the state.

EXTIRPATED - A species or subspecies that occurred in Ohio at the time of European settlement and that has since disappeared from the state.

EXTINCT - A species or subspecies that occurred in Ohio at the time of European settlement and that has since disappeared from its entire range.

Number of Species in Major Taxa Classified as Endangered, Threatened, Species of Concern, Special Interest, Extirpated, or Extinct in Ohio, October 2012.

Taxon	Endangered	Threatened	Species of Concern	Special Interest	Extirpated	Extinct
Mammals	4	2	19	1	10	0
Birds	14	5	14	33	5	2
Reptiles	4	4	11	0	0	0
Amphibians	5	1	2	0	0	0
Fishes	20	13	9	0	8	2
Mollusks	24	4	8	0	11	6
Crayfishes	0	2	3	0	0	0
Isopods	2	1	0	0	0	0
Pseudoscorpions	1	0	0	0	0	0
Dragonflies	13	3	1	0	0	0
Damselflies	3	3	0	0	0	0
Caddisflies	3	6	3	0	0	0
Mayflies	2	0	1	0	0	0
Midges	1	3	1	0	0	0
Crickets	0	0	1	0	0	0
Butterflies	8	1	2	1	1	0
Moths	14	4	22	11	0	0
Beetles	2	2	6	0	0	1
Total	120	54	103	46	35	11

OHIO's ENDANGERED SPECIES

(updated September 2013)

NOTE: *E & *T denote federal (U.S. Fish and Wildlife Service) listed endangered and threatened species respectively.

MAMMALS

Indiana myotis *E	*Myotis sodalis*
Allegheny woodrat	*Neotoma magister*
Black bear	*Ursus americanus*
Snowshoe hare	*Lepus americanus*

BIRDS

American bittern	*Botaurus lentiginosus*
Northern harrier	*Circus cyaneus*
King rail	*Rallus elegans*
Sandhill crane	*Grus canadensis*
Piping plover *E	*Charadrius melodus*
Common tern	*Sterna hirundo*
Black tern	*Chlidonias niger*
Bewick's wren	*Thryomanes bewickii*
Loggerhead shrike	*Lanius ludovicianus*
Kirtland's warbler *E	*Dendroica kirtlandii*
Lark sparrow	*Chondestes grammacus*
Snowy egret	*Egretta thula*
Cattle egret	*Bubulcus ibis*
Upland sandpiper	*Bartramia longicauda*

REPTILES

Copperbelly watersnake *T	*Nerodia erythrogaster neglecta*
Plains gartersnake	*Thamnophis radix*
Timber rattlesnake	*Crotalus horridus*
Eastern massasauga	*Sistrurus catenatus*

AMPHIBIANS

Eastern hellbender	*Cryptobranchus alleganiensis alleganiensis*
Blue-spotted salamander	*Ambystoma laterale*
Green salamander	*Aneides aeneus*
Cave salamander	*Eurycea lucifuga*
Eastern spadefoot	*Scaphiopus holbrookii*

FISHES

Ohio lamprey	*Ichthyomyzon bdellium*
Northern brook lamprey	*Ichthyomyzon fossor*
Mountain brook lamprey	*Ichthyomyzon greeleyi*
Lake sturgeon	*Acipenser fulvescens*
Shovelnose sturgeon	*Scaphirhynchus platorynchus*
Spotted gar	*Lepisosteus oculatus*
Shortnose gar	*Lepisosteus platostomus*
Cisco (or Lake herring)	*Coregonus artedi*
Goldeye	*Hiodon alosoides*
Shoal chub	*Macrhybopsis hyostoma*
Pugnose minnow	*Opsopoeodus emiliae*
Popeye shiner	*Notropis ariommus*
Longnose sucker	*Catostomus catostomus*
Northern madtom	*Noturus stigmosus*
Scioto madtom *E	*Noturus trautmani*
Pirate perch	*Aphredoderus sayanus*
Western banded killifish	*Fundulus diaphanus menona*
Spotted darter	*Etheostoma maculatum*
Iowa darter	*Etheostoma exile*
Gilt darter	*Percina evides*

MOLLUSKS

Snuffbox	*Epioblasma triquetra*
Ebonyshell	*Fusconaia ebenas*
Fanshell *E	*Cyprogenia stegaria*
Butterfly	*Ellipsaria lineolata*
Elephant-ear	*Elliptio crassidens crassidens*
Purple catspaw *E	*Epioblasma obliquata obliquata*
White catspaw *E	*Epioblasma obliquata perobliqua*
Northern rifffleshell *E	*Epioblasma torulosa rangiana*
Long-solid	*Fusconaia maculata maculata*
Pink mucket *E	*Lampsilis orbiculata*
Sharp-ridged pocketbook	*Lampsilis ovata*
Yellow sandshell	*Lampsilis teres*
Eastern pondmussel	*Ligumia nasuta*
Washboard	*Megalonaias nervosa*
Sheepnose	*Plethobasus cyphyus*

MOLLUSKS (CONT.)

Clubshell *E	*Pleurobema clava*
Ohio pigtoe	*Pleurobema cordatum*
Pyramid pigtoe	*Pleurobema rubrum*
Rabbitsfoot *T	*Quadrula cylindrica cylindrica*
Monkeyface	*Quadrula metanevra*
Wartyback	*Quadrula nodulata*
Purple lilliput	*Toxolasma lividus*
Rayed bean	*Villosa fabalis*
Little spectaclecase	*Villosa lienosa*

DRAGONFLIES

Hine's emerald *E	*Somatochlora hineana*
Mottled darner	*Aeshna clepsydra*
Plains clubtail	*Gomphus externus*
American emerald	*Cordulia shurtleffi*
Uhler's sundragon	*Helocordulia uhleri*
Frosted whiteface	*Leucorrhinia frigida*
Elfin skimmer	*Nannothemis bella*
Canada darner	*Aeshna canadensis*
Racket-tailed emerald	*Dorocordulia libera*
Brush-tipped emerald	*Somatochlora walshii*
Blue corporal	*Ladona deplanata*
Chalk-fronted corporal	*Ladona julia*
Yellow-sided skimmer	*Libellula flavida*

DAMSELFLIES

Lilypad forktail	*Ischnura kellicotti*
Seepage dancer	*Argia bipunctulata*
River jewelwing	*Calopteryx aequabilis*

CADDISFLIES

	Chimarra socia
	Oecetis eddlestoni
	Brachycentrus numerosus

MAYFLIES

	Rhithrogena pellucida
	Litobrancha recurvata

MIDGES

	Rheopelopia acra

BUTTERFLIES

Persius dusky wing	*Erynnis persius*
Frosted elfin	*Callophrys irus*
Karner blue *E	*Lycaeides melissa samuelis*
Purplish copper	*Lycaena helloides*
Swamp metalmark	*Calephelis muticum*
Regal fritillary	*Speyeria idalia*
Mitchell's satyr *E	*Neonympha mitchellii*
Grizzled skipper	*Pyrgus centaureae wyandot*

MOTHS

Unexpected cycnia	*Cycnia inopinatus*
Graceful underwing	*Catocala gracilis*
	Spartiniphaga inops
	Hypocoena enervata
	Papaipema silphii
	Papaipema beeriana
	Lithophane semiusta
	Trichoclea artesta
	Tricholita notata
	Melanchra assimilis
Pointed sallow	*Epiglaea apiata*
	Ufeus plicatus
	Ufeus satyricus
Hebard's noctuid moth	*Erythroecia hebardi*

BEETLES

Ohio cave beetle	*Pseudanophthalmus ohioensis*
American burying beetle *E	*Nicrophorus americanus*

ISOPODS

Fern cave isopod	*Caecidotea filicispeluncae*
Unnamed cave isopod	*Caecidotea sp. nov.*

PSEUDOSCORPIONS

Buckskin cave pseudoscorpion	*Apochthonius hobbsi*

OHIO's THREATENED SPECIES

(updated October 2012)

NOTE: *E & *T denote federal (U.S. Fish and Wildlife Service) listed endangered and threatened species respectively.

MAMMALS

Bobcat	*Lynx rufus*
Eastern harvest mouse	*Reithrodontomys humulis*

BIRDS

Black-crowned night-heron	*Nycticorax nycticorax*
Barn owl	*Tyto alba*
Least bittern	*Ixobrychus exilis*
Peregrine falcon	*Falco peregrinus*
Trumpeter swan	*Cygnus buccinator*

REPTILES

Kirtland's snake	*Clonophis kirtlandii*
Spotted turtle	*Clemmys guttata*
Blanding's turtle	*Emydoidea blandingii*
Lake Erie watersnake	*Nerodia sipedon insularum*

AMPHIBIANS

Mud salamander	*Pseudotriton montanus*

FISHES

Brook trout	*Salvelinus fontinalis*
Bigeye shiner	*Notropis boops*
Tonguetied minnow	*Exoglossum laurae*
Greater redhorse	*Moxostoma valenciennesi*
Channel darter	*Percina copelandi*
American eel	*Anguilla rostrata*
Paddlefish *M	*Polyodon spathula*
Bigmouth shiner	*Notropis dorsalis*
Lake chubsucker	*Erimyzon sucetta*
River darter	*Percina shumardi*
Tippecanoe darter	*Etheostoma tippecanoe*
Blue sucker	*Cycleptus elongatus*
Mountain madtom	*Noturus eleutherus*

MOLLUSKS

Black sandshell	*Ligumia recta*
Threehorn wartyback	*Obliquaria reflexa*
Fawnsfoot	*Truncilla donaciformis*
Pondhorn	*Uniomerus tetralasmus*

CRAYFISHES

Sloan's crayfish	*Orconectes sloanii*
Cavespring crayfish	*Cambarus tenebrosus*

DRAGONFLIES

Riffle snaketail	*Ophiogomphus carolus*
Harlequin darner	*Gomphaeschna furcillata*
Green-faced clubtail	*Gomphus viridifrons*

DAMSELFLIES

Boreal bluet	*Enallagma boreale*
Northern bluet	*Enallagma cyathigerum*
Marsh bluet	*Enallagma ebrium*

CADDISFLIES

	Psilotreta indecisa
	Hydroptila albicornis
	Hydroptila artesa
	Hydroptila koryaki
	Hydroptila talledaga
	Hydroptila valhalla

MIDGES

	Bethbilbeckia floridensis
	Apsectrotanypus johnsoni
	Radotanypus florens

BUTTERFLIES

Silver-bordered fritillary	*Boloria selene*

MOTHS

Wayward nymph	*Catocala antinympha*
	Spartiniphaga paruatela
	Fagitana littera
The pink-streak	*Faronta rubripennis*

BEETLES

	Cicindela hirticollis
Cobblestone tiger beetle	*Cicindela marginipennis*

ISOPODS

Frost cave isopod	*Caecidotea rotunda*

OHIO's SPECIES of CONCERN

(updated October 2012)

NOTE: *E & *T denote federal (U.S. Fish and Wildlife Service) listed endangered and threatened species respectively.

MAMMALS

Pygmy shrew	*Sorex hoyi*
Star-nosed mole	*Condylura cristata*
Eastern small-footed bat	*Myotis leibii*
Rafinesque's big-eared bat	*Corynorhinus rafinesquii*
Little brown bat	*Myotis lucifugus*
Big brown bat	*Eptesicus fuscus*
Tri-colored bat	*Perimyotis subflavus*
Northern long-eared bat	*Myotis septentrionalis*
Woodland jumping mouse	*Napaeozapus insignis*
Badger	*Taxidea taxus*
Ermine	*Mustela erminea*
Smoky shrew	*Sorex fumerus*
Deer mouse	*Peromyscus maniculatus*
Prairie vole	*Microtus ochrogaster*
Woodland vole	*Microtus pinetorum*
Southern bog lemming	*Synamptomys cooperi*
Silver-haired bat	*Lasionycteris noctivagans*
Red bat	*Lasiurus borealis*
Hoary bat	*Lasiurus cinereus*

BIRDS

Sharp-shinned hawk	*Accipiter striatus*
Sedge wren	*Cistothorus platensis*
Marsh wren	*Cistothorus palustris*
Henslow's sparrow	*Ammodramus henslowii*
Cerulean warbler	*Dendroica cerulea*
Prothonotary warbler	*Protonotaria citrea*
Black vulture	*Coragyps atratus*
Bobolink	*Dolichonyx oryzivorus*
Northern bobwhite	*Colinus virginianus*
Common moorhen	*Gallinula chloropus*
Great egret	*Ardea alba*
Sora rail	*Porzana carolina*
Virginia rail	*Rallus limicola*
Yellow-bellied sapsucker	*Sphyrapicus varius*

MOLLUSKS

Purple wartyback	*Cyclonaias tuberculata*
Wavy-rayed lampmussel	*Lampsilis fasciola*
Round pig-toe	*Pleurobema sintoxia*
Salamander mussel	*Simpsonaias ambigua*
Deertoe	*Truncilla truncata*
Elktoe	*Alasmidonta marginata*
Kidneyshell	*Ptychobranchus fasciolaris*
Creek heelsplitter	*Lasmigona compressa*

REPTILES

Eastern box turtle	*Terrapene carolina carolina*
Ouachita map turtle	*Graptemys ouachitensis*
Black kingsnake	*Lampropeltis getula nigra*
Eastern gartersnake (melanistic)	*Thamnophis sirtalis sirtalis*
Northern rough green-snake	*Opheodrys aestivus*
Eastern foxsnake	*Pantherophis gloydi*
Queensnake	*Regina septemvittata*
Little brown skink	*Scincella lateralis*
Smooth earthsnake	*Virginia valeriae*
Smooth greensnake	*Opheodrys vernalis*
Short-headed gartersnake	*Thamnophis brachystoma*

AMPHIBIANS

Four-toed salamander	*Hemidactylium scutatum*
Eastern cricket frog	*Acris crepitans crepitans*

FISHES	
Lake trout	*Salvelinus namaycush*
Lake whitefish	*Coregonus clupeaformis*
Burbot	*Lota lota*
Muskellunge	*Esox masquinongy*
River redhorse	*Moxostoma carinatum*
Eastern sand darter	*Ammocrypta pellucida*
Least darter	*Etheostoma microperca*
Blue catfish	*Ictalurus furcatus*
Longnose dace	*Rhinichthys cataractae*
CRAYFISHES	
Great Lakes crayfish	*Orconectes propinquus*
Northern crayfish	*Orconectes virilis*
Allegheny crayfish	*Orconectes obscurus*
DRAGONFLIES	
Tiger spiketail	*Cordulegaster erronea*
MAYFLIES	
	Maccaffertium ithica
MIDGES	
	Cantopelopia gesta
CADDISFLIES	
	Hydroptila chattanooga
	Asynarchus montanus
	Nemotaulius hostilis
BUTTERFLIES	
Two-spotted skipper	*Euphyes bimacula*
Dusted skipper	*Atrytonopsis hianna*
MOTHS	
Milnei's looper moth	*Euchlaena milnei*
Buck moth	*Hemileuca maia*
One-eyed sphinx	*Smerinthus cerisyi*
Precious underwing	*Catocala pretiosa*
	Macrochilo bivittata
	Phalaenostola hanhami
	Paectes abrostolella
	Capis curvata
	Tarachidia binocula
	Apamea mixta
	Agroperina lutosa
Columbine borer	*Papaipema leucostigma*
Bracken borer moth	*Papaipema pterisii*
Osmunda borer moth	*Papaipema speciosissima*
	Chytonix sensilis
	Amolita roseola
Goat sallow	*Homoglaea hircina*
	Brachylomia algens
Purple arches	*Polia purpurissata*
Scurfy quaker	*Homorthodes furfurata*
	Trichosilia manifesta
	Agonopterix pteleae
BEETLES	
Six-banded longhorn beetle	*Dryobius sexnotatus*
	Cicindela splendida
	Cicindela ancocisconensis
	Cicindela cursitans
	Cicindela cuprascens
	Cicindela macra
CRICKETS	
Laricis tree cricket	*Oecanthus laricis*

OHIO's SPECIES of INTEREST

(updated October 2012)

NOTE: *E & *T denote federal (U.S. Fish and Wildlife Service) listed endangered and threatened species respectively.

MAMMALS

Evening bat	*Nycticeius humeralis*

BIRDS

Canada warbler	*Wilsonia canadensis*
Magnolia warbler	*Dendroica magnolia*
Northern waterthrush	*Seiurus noveboracensis*
Winter wren	*Troglodytes troglodytes*
Black-throated blue warbler	*Dendroica caerulescens*
Brown creeper	*Certhia americana*
Chuck-will's-widow	*Caprimulgus carolinensis*
Bell's vireo	*Vireo bellii*
Long-eared owl	*Asio otus*
Mourning warbler	*Oporornis philadelphia*
Northern saw-whet owl	*Aegolius acadicus*
Pine siskin	*Carduelis pinus*
Purple finch	*Carpodacus purpureus*
Red-breasted nuthatch	*Sitta canadensis*
Short-eared owl	*Asio flammeus*
Western meadowlark	*Sturnella neglecta*
Golden-crowned kinglet	*Regulus satrapa*
Blackburnian warbler	*Dendroica fusca*
Wilson's snipe	*Gallinago delicata*
Gadwall	*Anas strepera*
Green-winged teal	*Anas crecca*
Northern pintail	*Anas acuta*
Northern shoveler	*Anas clypeata*
Redhead	*Aythya americana*
Ruddy duck	*Oxyura jamaicensis*
American black duck	*Anas rubripes*
Wilson's phalarope	*Phalaropus tricolor*
Yellow-headed blackbird	*Xanthocephalus xanthocephalus*
Common raven	*Corvus corax*
Dark-eyed junco	*Junco hyemalis*
Yellow-crowned night-heron	*Nyctanassa violacea*
Hermit thrush	*Catharus guttatus*
Least flycatcher	*Empidonax minimus*

BUTTERFLIES

Olympia marble	*Euchloe olympia*

MOTHS

Slender clearwing	*Hemaris gracilis*
	Sphinx lucitiosa
	Tathorhynchus exsiccatus
	Catocala marmorata
	Catocala maestosa
Subflava sedge borer moth	*Archanara subflava*
	Caradrina meralis
	Calophasia lunula
	Leucania insueta
	Protorthodes incincta
Variegated orange moth	*Epelis truncataria*

OHIO's EXTIRPATED SPECIES

(updated October 2012)

NOTE: *E & *T denote federal (U.S. Fish and Wildlife Service) listed endangered and threatened species respectively.

MAMMALS

Rice rat	*Oryzomys palustris*
Porcupine	*Erethizon dorsatum*
Timber wolf	*Canis lupus*
Marten	*Martes americanus*
Fisher	*Martes pennanti*
Mountain lion	*Puma concolor*
Lynx	*Lynx canadensis*
Wapiti (Elk)	*Cervus elaphus*
Bison	*Bison bison*
Southern red-backed vole	*Clethrionomys gapperi*

BIRDS

Swallow-tailed kite	*Elanoides forficatus*
Greater prairie-chicken	*Tympanuchus cupido*
Ivory-billed woodpecker	*Campephilus principalis*
Bachman's sparrow	*Aimophila aestivalis*
Golden-winged warbler	*Vermivora chrysoptera*

FISHES

Alligator gar	*Lepisosteus spatula*
Pugnose shiner	*Notropis anogenus*
Longhead darter	*Percina macrocephala*
Diamond darter	*Crystallaria circotti*
Spoonhead sculpin	*Cottus ricei*
Blackchin shiner	*Notropis heterodon*
Blacknose shiner	*Notropis heterolepis*
Mississippi silvery minnow	*Hybognathus nuchalis*

MOLLUSKS

Orange-footed pearly mussel *E	*Plethobasus cooperianus*
Rough pigtoe *E	*Pleurobema plenum*
Fat pocketbook *E	*Potamilus capax*
Winged mapleleaf *E	*Quadrula fragosa*
Mucket	*Actinonaias l. ligamentina*
Spectaclecase	*Cumberlandia monodonta*
Cracking pearly mussel *E	*Hemistena lata*
White wartyback	*Plethobasus cicatricosus*
Hickorynut	*Obovaria olivaria*
Ring pink	*Obovaria retusa*
Scale shell	*Leptodea leptodon*

BUTTERFLIES

Mustard white	*Pieris napi*

OHIO's EXTINCT SPECIES

(updated October 2012)

NOTE: *E & *T denote federal (U.S. Fish and Wildlife Service) listed endangered and threatened species respectively.

BIRDS

Passenger pigeon	*Ectopistes migratorius*
Carolina parakeet	*Conuropsis carolinensis*

FISHES

Harelip sucker	*Lagochila lacera*
Blue pike	*Sander vitreus glaucus*

MOLLUSKS

Leafshell	*Epioblasma flexuosa*
Forkshell	*Epioblasma lewisi*
Round snuffbox	*Epioblasma personata*
Cincinnati riffleshell	*Epioblasma phillipsi*
Scioto pigtoe	*Pleurobema bournianum*
Tubercled blossom	*Epioblasma torulosa torulosa*

BEETLES

Kramer's cave beetle	*Pseudanophthalmus krameri*

FIGURE 6.2

ENVIRONMENTAL SENSITIVITY MAPS AND PLANNING DISTANCE CALCULATIONS

Environmental Sensitivity Maps

The following Environmental Sensitivity Maps have been prepared utilizing U.S. Geological Survey 7.5 Minute Quadrangle Maps as the base. The maps include a key to the reference symbols located on each map.

Remember these maps are to be utilized as guidelines only. During a real response effort Federal, State, and Local agencies should be contacted to provide further assistance in the proper identification and protection of the various environmental and socio-economic sensitive areas.

Planning Distance Calculations

In order to calculate a planning distance from which to base the vulnerability analysis, we assumed that the area from the Refinery location along Otter Creek to the mouth of the Maumee River would be impacted, and possibly the area between Toledo Refining Company, LLC's dock and the mouth of the Maumee River. Given this assumption, we calculated a 27 hour planning distance, from the mouth of the Maumee River, based upon the formula for oil transport on a standing body of water as provided in Appendix F, Part 112 of Title 40, Section 3.0. The transport formula is based upon the theoretical condition that the oil will spread from the shoreline (mouth of the Maumee River) into a semi-circle (not accounting for wave or wind action). The formula solves for the area of a circle, divides this area by 2 to account for the semi-circular shape, and then calculates the radius of this circle in feet. After calculating the radius of this circle, the radius is extended by assuming that, under a 20 knot wind under storm conditions, the oil slick will move at 3 percent of the wind's speed. These calculations follow:

Given:

Constant conversion factor = 0.1643 (Appendix F, Part 112 of Title 40, Section 3.0).

Following through the equations we calculate:

Surface area covered by the worst case spill = A(1) = $2.75 \times 10^8 ft^2$
Area of circle divided by 2 to account for a semi-circular shape = A(2) = $(\pi r^2)/2$

Solving for the radius, r, using the relationship [A(1) = A(2)] we get:
$[2.75 \times 10^8 = (\pi r^2)/2]$

Therefore, r = 13,241 ft = 2.5 miles.

Assuming the following conditions: a 20 knot wind under storm conditions, that the slick travels at 3 percent of the wind's speed, and a response time of 27 hours, we calculate:

[1 knot = 1.15 miles/hour]
20 knots x 1.15 miles/hour/knot = 23 miles/hour
23 miles/hour x 0.03 = 0.69 miles/hour
27 hours x 0.69 miles/hour = 18.6 miles

FIGURE 6.2

ENVIRONMENTAL SENSITIVITY MAPS AND PLANNING DISTANCE CALCULATIONS (Cont'd)

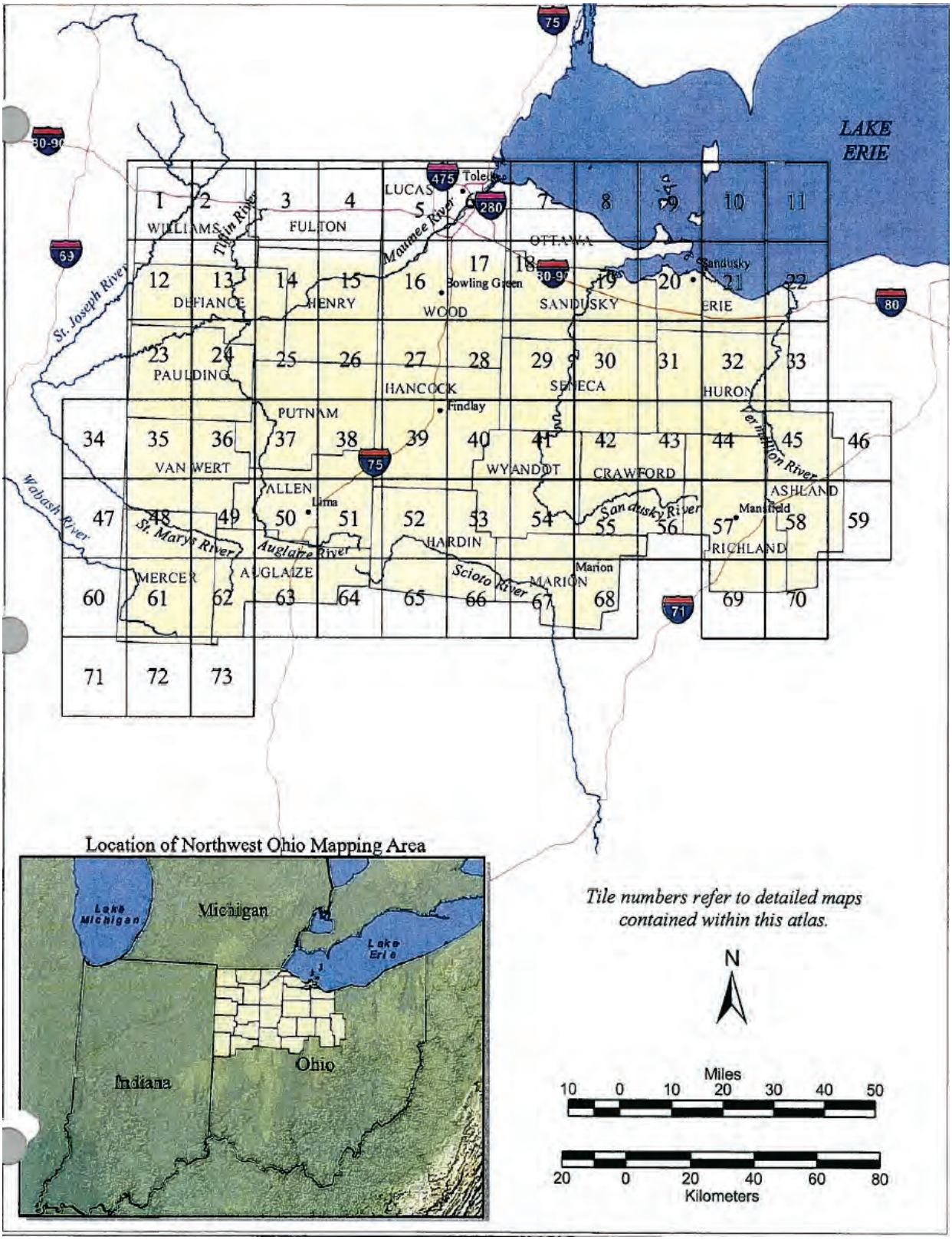
The total distance (d) that the oil will travel from the mouth of the Maumee River is calculated as follows:

[Planning Distance = d = 18.6 miles + 2.5 miles = 21.1miles].

Based upon these calculations, our planning distance included:

1. Otter Creek, which crosses Toledo Refining Company, LLC's property.
2. a distance of 21 miles from the mouth of the Maumee River along the south shoreline of Lake Erie to Sand Beach, Ohio (Lacarne, Ohio 7.5 minute USGS quadrangle),
3. a distance of 21 miles from the mouth of the Maumee River along the north shoreline of Lake Erie to Stony Point, Michigan (Stony Point, Michigan 7.5 minute USGS quadrangle), and
4. the area of the Maumee River from Toledo Refining Company, LLC's dock (Hocking Valley) to the mouth of the Maumee River,

In reviewing potentially impacted resources, our analysis considered all shoreline areas (including a distance of approximately ¼ mile inland) within the 27 hour planning area. Maps depicting potentially impacted resources within the 27 hour planning area have been developed and are presented in this figure.


LAKE ERIE
LUCAS
WILLIAMS
FULTON
OTTAWA
DEFIANCE
HENRY
WOOD
SANDUSKY
ERIE
PAULDING
HANCOCK
SENECA
HURON
PUTNAM
VAN WERT
ALLEN
WYANDOT
CRAWFORD
ASHLAND
HARDIN
RICHLAND
MERCER
AUGLAIZE
MARION
Toledo
Bowling Green
Findlay
Lima
Mansfield
Marion
Maumee River
Tiffin River
St. Joseph River
Wabash River
St. Marys River
Auglaize River
Scioto River
Sandusky River
Vermilion River
Location of Northwest Ohio Mapping Area
Lake Michigan
Michigan
Lake Erie
Indiana
Ohio
Tile numbers refer to detailed maps contained within this atlas.
N
Miles
10 0 10 20 30 40 50
20 0 20 40 60 80
Kilometers

MAP LEGEND

SENSITIVE SPECIES

Aquatic/Riparian Zone

- Vascular Plants
- Birds
- Amphibians and Reptiles
- Mammals
- Invertebrates
- Fish
- Natural Communities
- Icons Indicating Threatened or Endangered Status

Terrestrial Zone

- Vascular Plants
- Birds
- Amphibians and Reptiles
- Mammals
- Invertebrates
- Natural Communities
- Multiple Species Groupings

NATURAL RESOURCE AREAS

- F — Federal Managed Areas
- S — State Managed Areas
- R — Regional Managed Areas
- P — Private Managed Areas
- O — Other Environmentally Sensitive Aquatic Areas
- O — Other Environmentally Sensitive Terrestrial Areas

- F — Federal Designated Areas
- S — State Designated Areas
- R — Regional Designated Areas
- P — Private Designated Areas

- T — Tribal Land

OTHER SENSITIVE RESOURCES

- Marina
- Navigational Lock and Dam
- Water Intake (nonpotable)
- Water Intake (potable)

SHORELINE SENSITIVITY

- Low Sensitivity
- Low-Medium Sensitivity
- Medium-High Sensitivity
- High Sensitivity

POTENTIAL SPILL SOURCES

- Fixed Oil Storage Facility
- Marine Transfer Facility and/or Facility with more than 1 million gallons
- Pipeline

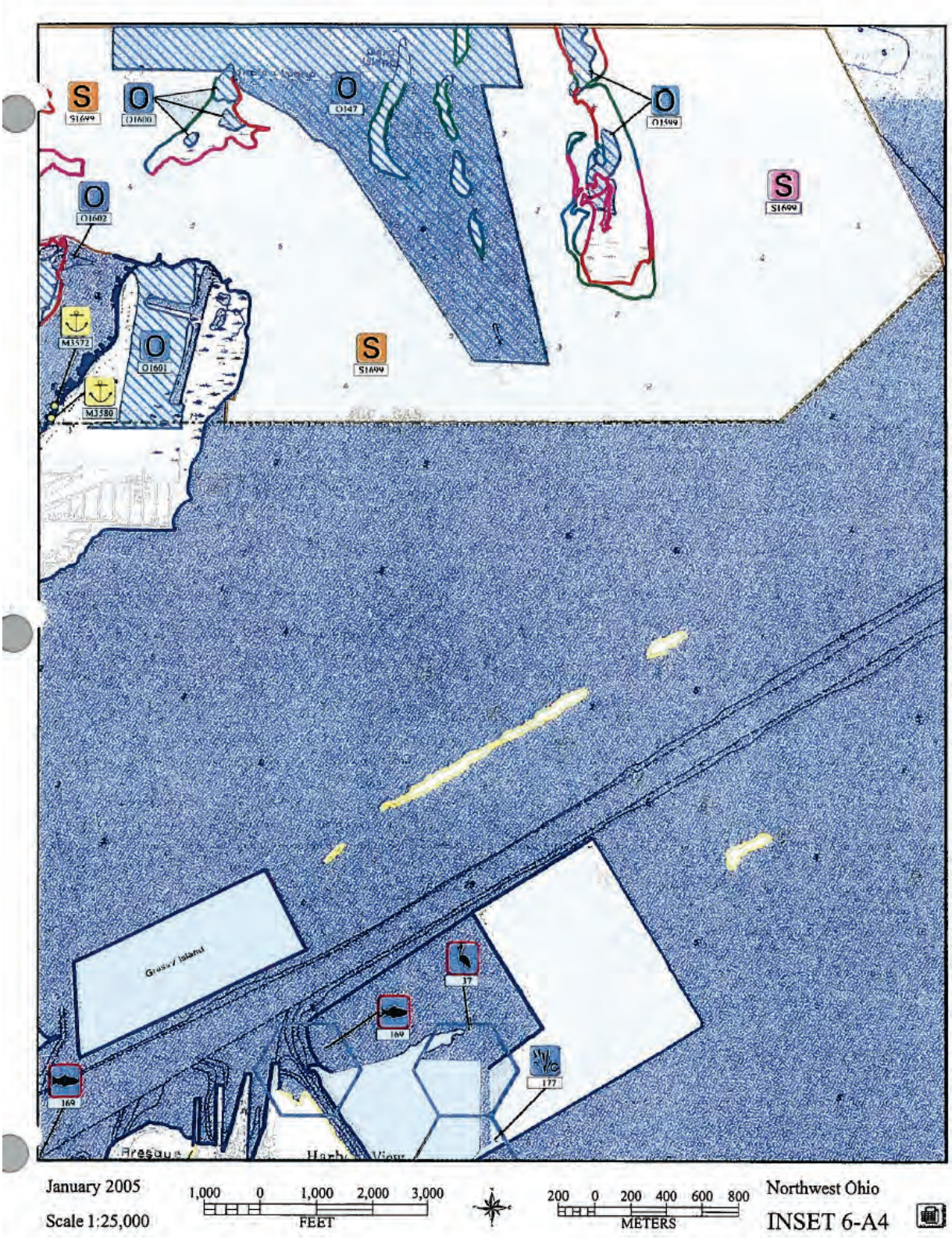
RESPONSE CONSIDERATIONS

- Ⓐ Boat Access
- Ⓓ Non-navigational Dam

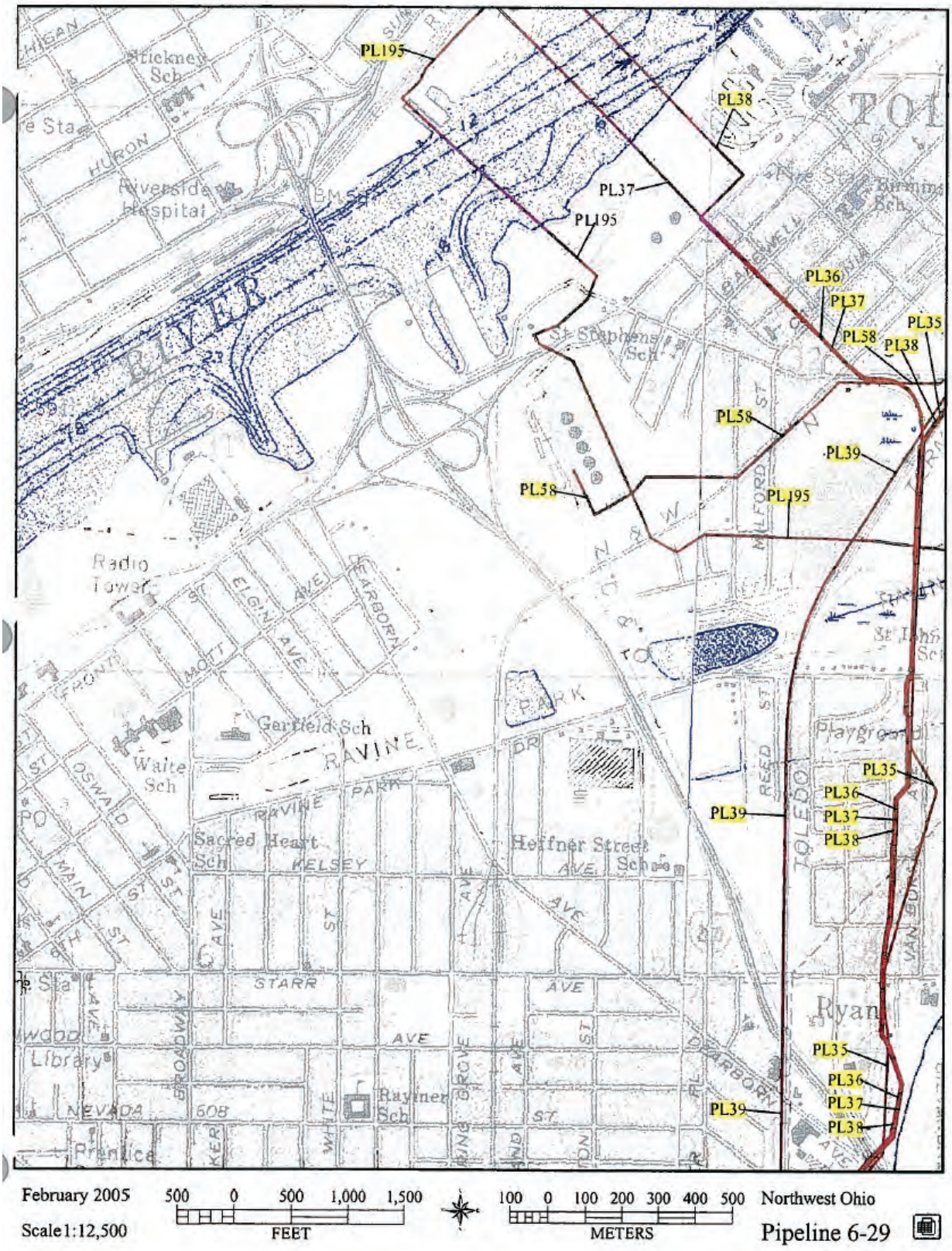
BOUNDARY DESIGNATIONS

- County Boundary
- Pipeline Inset Boundary

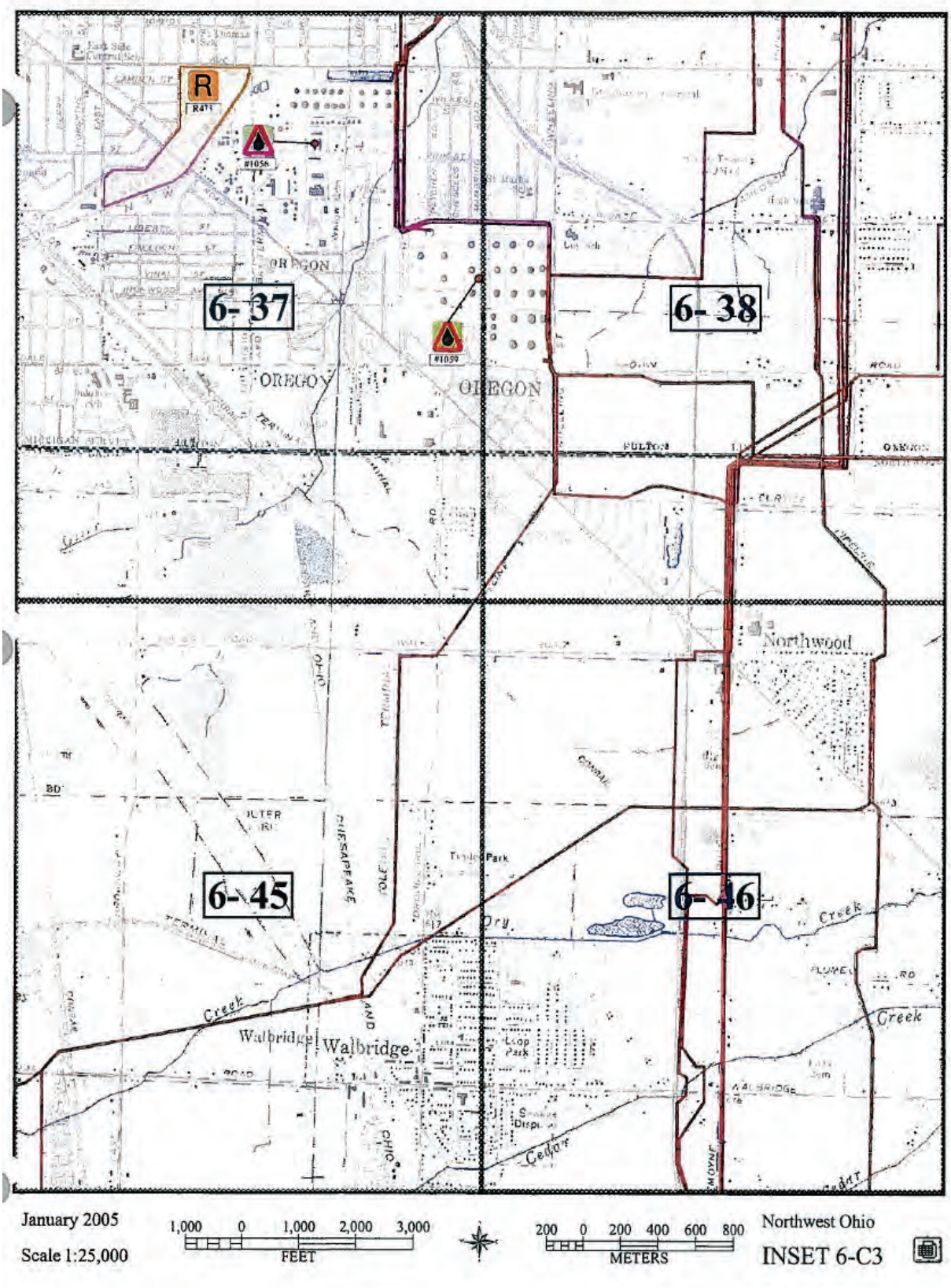
(b) (7)(F), (b) (3)

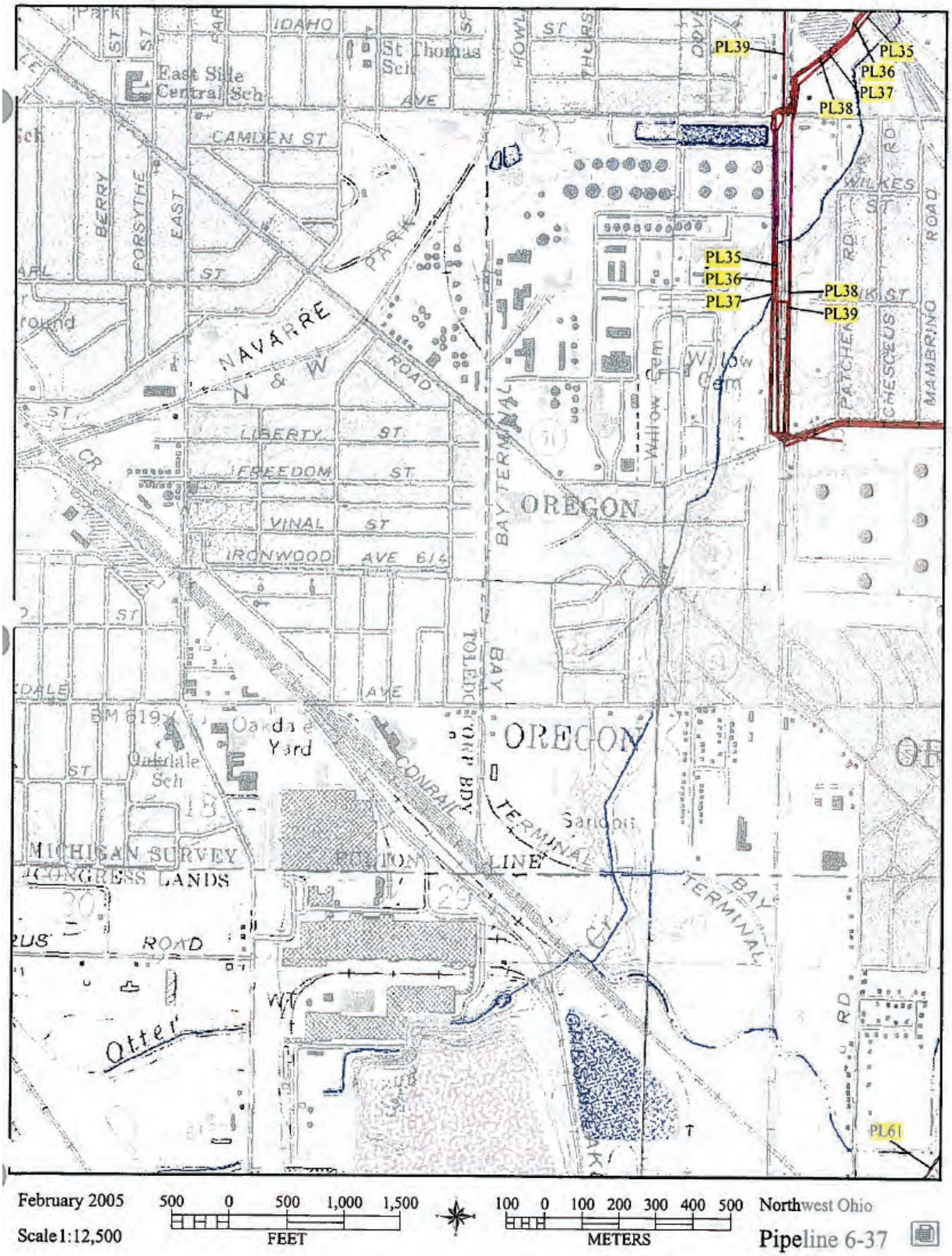

S
S1699
O
O1600
O
O147
O
O1599
S
S1699
O
O1602
O
O1601
S
S1699
M3572
M3580
Grassy Island
17
169
177
169
Presque
Harbor View
January 2005
Scale 1:25,000
1,000 0 1,000 2,000 3,000
FEET
200 0 200 400 600 800
METERS
Northwest Ohio
INSET 6-A4

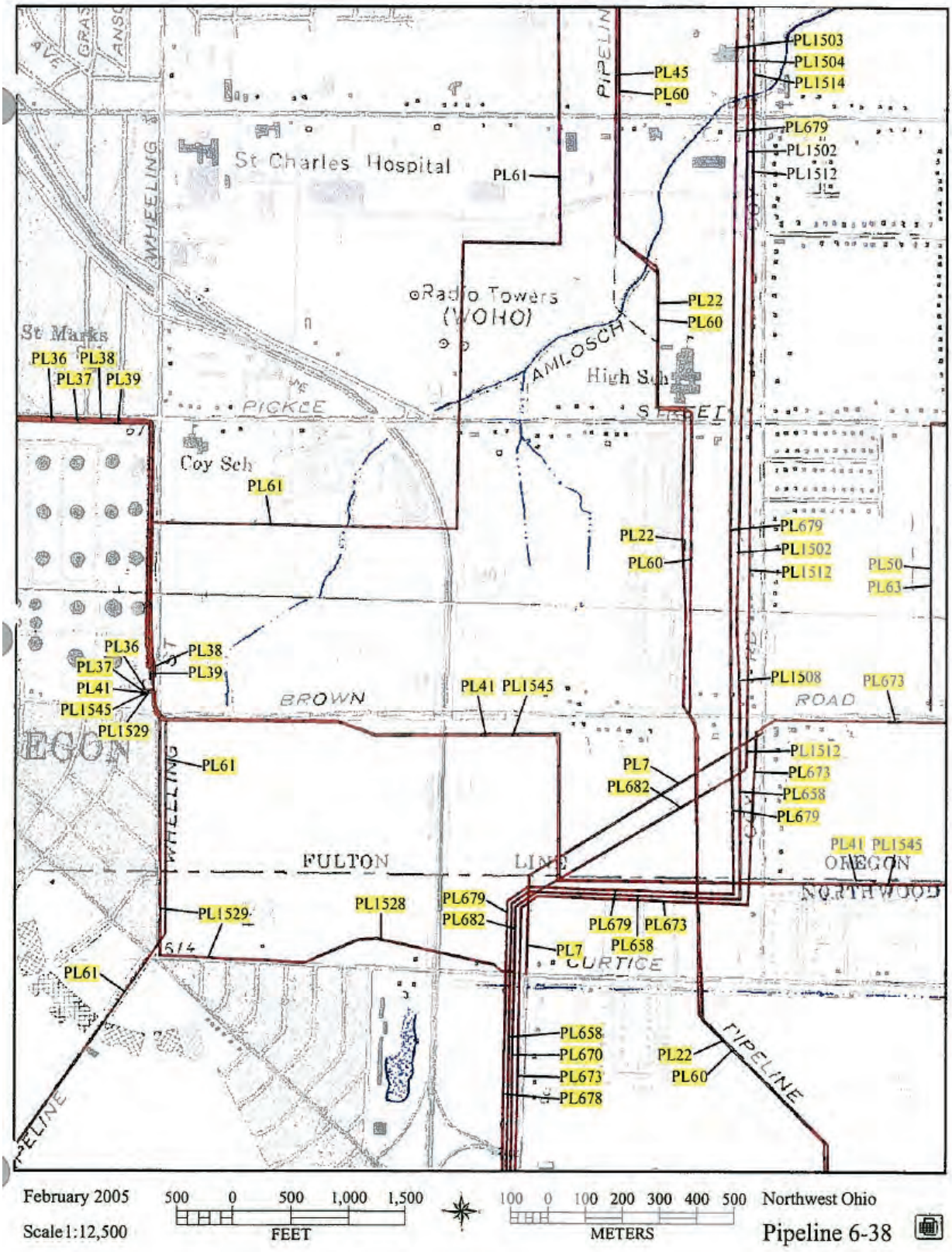
(b) (7)(F), (b) (3)


PL195
PL38
PL37
PL195
PL36
PL37
PL35
PL58
PL38
PL58
PL39
PL58
PL195
PL35
PL36
PL39
PL37
PL38
PL35
PL36
PL37
PL39
PL38
Stickney Sch
Riverside Hospital
St Stephens Sch
Radio Tower
Garfield Sch
Waite Sch
Sacred Heart Sch
Heffner Street Sch
Playground
Ryan
Rayiner Sch
Library
Prentice
RAVINE
PARK
STARR
NEVADA
February 2005
Scale 1:12,500
500 0 500 1,000 1,500
FEET
100 0 100 200 300 400 500
METERS
Northwest Ohio
Pipeline 6-29

(b) (7)(F), (b) (3)


R
#1056
#1059
OREGON
6-37
6-38
6-45
6-46
Northwood
Walbridge
Walbridge
Creek
Creek
Creek
January 2005
Scale 1:25,000
1,000 0 1,000 2,000 3,000
FEET
200 0 200 400 600 800
METERS
Northwest Ohio
INSET 6-C3


PL39
PL35
PL36
PL37
PL38
PL35
PL36
PL37
PL38
PL39
PL61
East Side Central Sch
St Thomas Sch
CAMDEN ST
IDAHO
AVE
NAVARRE
ROAD
LIBERTY ST
FREEDOM ST
VINAL ST
IRONWOOD AVE
OREGON
BAY TERMINAL
TOLEDO
Oakdale Yard
Oakdale Sch
CONRAIL
MICHIGAN SURVEY
CONGRESS LANDS
LINE
ROAD
Otter
Willow Cem
WILKES ROAD
PATCHEN
CHESCELUS
MAMBRINO
February 2005
Scale 1:12,500
500 0 500 1,000 1,500
FEET
100 0 100 200 300 400 500
METERS
Northwest Ohio
Pipeline 6-37


PL1503
PL1504
PL1514
PL45
PL60
PL679
PL1502
PL1512
St Charles Hospital
PL61
Radio Towers
(WOHO)
PL22
PL60
St Marks
PL36
PL38
PL37
PL39
AMLOSCH
High Sch
PICKLE
STREET
Coy Sch
PL61
PL22
PL60
PL679
PL1502
PL1512
PL50
PL63
PL36
PL38
PL37
PL39
PL41
PL1545
PL1529
BROWN
PL41 PL1545
PL1508
PL673
ROAD
PL61
PL7
PL682
PL1512
PL673
PL658
PL679
WHEELING
FULTON
LINE
PL41 PL1545
OREGON
NORTHWOOD
PL1529
PL1528
PL679
PL682
PL679
PL673
PL658
PL7
CURTICE
PL61
PL658
PL670
PL673
PL678
PL22
PL60
PIPELINE
February 2005
Scale 1:12,500
500 0 500 1,000 1,500
FEET
100 0 100 200 300 400 500
METERS
Northwest Ohio
Pipeline 6-38

Sensitive Species[a]

Listing	Contact Name	Emergency Phone	Contact Phone
Federal (Ohio) Elements	U.S. Fish and Wildlife Service	800-800-5923 to page 612-660-9062 (Stan Smith, Regional Spill Response Coordinator)	309-793-5800, ext. 515 or 524
State (Ohio) plants, communities	Ohio DNR: Division of Natural Areas and Preserves	614-265-6472	614-265-6453
State (Ohio) animals, fish, invertebrates	Ohio DNR: Division of Wildlife	614-265-6300	614-265-6329 Terrestrial, 614-265-6344 Aquatics
State	Indiana DNR Division of Fish and Wildlife Michigan Natural Features Inventory	None None	317-232-4080 517-373-9418

Managed Areas

Icon Number	Name	Category	Managing Agency	Waterbody	Emergency Phone	Contact Phone	Comments
R465	**Pearson Metropark**	Regional Park	Toledo Metropolitan Park District	Wolf Ditch	419-243-5111	419-691-3997	Remnant of Old Black Swamp. Half of park developed for recreation.
R470	**Cullen Park**	City Park	City of Toledo	Maumee Bay	419-243-5111	419-936-2874	
R471	**Detwiler Park**	City Park	City of Toledo	Detwiler Ditch, Maumee Bay	419-243-5111	419-936-2874	
R473	**Navarre Park**	City Park	City of Toledo	Maumee River	419-243-5111	419-936-2874	
R474	**Joe E. Brown Park**	City Park	City of Toledo	Ottawa River	419-243-5111	419-936-2874	
R475	**Sterling Park**	City Park	City of Toledo	Swan Creek	419-243-5111	419-936-2874	
R476	**Walbridge Park**	City Park	City of Toledo	Maumee River	419-243-5111	419-936-2874	
R478	**Highland Park**	City Park	City of Toledo	Swan Creek	419-243-5111	419-936-2874	
R483	**Swan Creek Metropark**	Regional Park	Toledo Metropolitan Park District	Swan Creek	419-243-5111	419-382-4664	Several very nice small oxbow lakes adjacent to Swan Creek. Very diverse plant and animal community.
R552	**Audubon Islands**	State Nature Preserve	Toledo Metropolitan Park District	Maumee River	419-243-5111	419-535-3050	Designated State Nature Preserve. Nesting and wildlife habitat with meadows and tallgrass prairie, mature floodplain woodland.
R553	**Bay View Park**	City Park	City of Toledo	Maumee River, Maumee Bay	419-243-5111	419-936-2874	Numerous marinas located in inlet. Along ship channel and next to water treatment plant.
R554	**Ravine Park**	City Park	City of Toledo	Duck Creek, Maumee Bay	419-243-5111	419-936-2874	

[a] 2003 Ohio Natural Heritage Data provided by the Ohio Department of Natural Resources, Division of Natural Areas and Preserves and Division of Wildlife
[a] 2003 Indiana Natural Heritage Data provided by the Indiana Department of Natural Resources, Division of Fish and Wildlife
[a] 2003 Michigan Natural Heritage Data provided by the Michigan Department of Natural Resources and the Michigan Natural Features Inventory

Contingency Protocol for Oiled Wildlife – The Toledo Refining Company LLC
November, 2005
PHMSA 00124221

Northwest Ohio Atlas – Tile 6 (Continued)

Managed Areas - Continued

Icon Number	Name	Category	Managing Agency	Waterbody	Emergency Phone	Contact Phone	Comments
R555	**Ottawa Park**	City Park	City of Toledo	Ottawa River	**419-243-5111**	419-936-2874	The Ottawa River bisects the property from southwest to the northeast.
R556	**Jermain Park**	City Park	City of Toledo	Ottawa River	**419-243-5111**	419-936-2874	The Ottawa River bisects the property from southwest to northeast.
R557	**Willys Park**	City Park	City of Toledo	Willys Creek, Ottawa River	**419-243-5111**	419-936-2874	
R5226	**Orleans Park**	City Park	Perrysburg City Parks and Recreation	Maumee River	**419-243-3441**	419-872-7966	Plenty of parking, fishing, grills, picnic tables and a nature walk along the river. 32 acres.
R5227	**Bicentennial Park**	City Park	Perrysburg City Parks and Recreation	rivercrest	**419-243-3441**	419-872-7966	Twinbrook Drive to Mark Lane. 19 acres with play equipment, soccer fields and a walking trail.
R5228	**Municipal Park**	City Park	Perrysburg City Parks and Recreation	Grassy Creek	**419-243-3441**	419-872-7966	18 acres. The park is currently undergoing renovation to include a walking trail between the ball fields.
R5229	**Three Meadows Park**	City Park	Perrysburg City Parks and Recreation	Grassy Creek	**419-243-3441**	419-872-7966	20 acres with 2 ponds for swimming, boating and fishing.
R5230	**Woodlands Park**	City Park	Perrysburg City Parks and Recreation	Grassy Creek	**419-243-3441**	419-872-7966	43 acres with community built play-grounds, a nature preserve and many beautiful gardens.
R5232	**W.W. Knight Nature Preserve**	County Park	Wood County Park District	Maumee River, Grassy Creek	**419-243-3441**	419-353-1897; 800-321-1897	Features distinct natural areas including woodlands, a native prairie, a pond, a constructed wetland and grassy meadows.
R5233	**Cedar Creek Preserve**	County Park	Wood County Park District	Cedar Creek	**419-243-3441**	419-353-1897; 800-321-1897	17 acre example of the former Black Swamp that once covered a large portion of northwest OH.
S529	**Wildlife Habitat Restoration Area**	Restoration Area	OH DNR Division of Wildlife	Henry Creek	**614-224-0946**	419-424-5000	Primarily upland habitats supporting warm and cool season grasses.
S1699	**Erie State Game Area**	State Game Area	Michigan Department of Natural Resources	North Maumee Bay, Lake Erie	**800-292-4706**	517-373-1263	

Other Environmentally Sensitive Areas

Icon Number	Additional Resource Area Name	Contact Agency	Waterbody	Emergency Phone	Contact Phone	Comments
O147	**Erie Marsh Reserve**	The Nature Conservancy	North Maumee Bay, Lake Erie	517-373-7660	312-759-8017	Total of 2168 acres. Migratory and nesting shorebirds, waterfowl, and avian species. Raptors during migration. Swamp mallow grows here.
O1594	**Otter Creek Wetland**	Great Lakes Wetland Consortium	Otter Creek, Maumee River, Maumee Bay	419-345-4917	734-971-9135	railroad; wetland is contiguous and contains some upland; point represents portion of wetland not recognized by OWI; industrial development exists
O1599	**Woodtick Peninsula Wetland**	Great Lakes Wetland Consortium	North Maumee Bay	734-240-7400	734-971-9135	wetland is contiguous and contains small ponds; part of large wetland complex including Herdendorf wetlands; industrial development exists
O1600	**Indian Island Wetland**	Great Lakes Wetland Consortium	North Maumee Bay	734-240-7400	734-971-9135	wetland is contiguous
O1601	**Carland Beach Wetland**	Great Lakes Wetland Consortium	North Maumee Bay	734-240-7400	734-971-9135	Remnant of much larger wetland; residential development exists.
O1602	**Ottawa River Mouth Wetland**	Great Lakes Wetland Consortium	North Maumee Bay	734-240-7400	734-971-9135	residential development exists
O1603	**Halfway Creek Wetland**	Great Lakes Wetland Consortium	North Maumee Bay	734-240-7400	734-971-9135	wetland is contiguous; residential development exists

Marinas

Icon Number	Name	Street Address	Waterbody	Slips	Fuel Available	Emergency Phone	Contact Phone
M2600	**American Marine**	2929 E. Sterns Road, Erie	Hoopers Run Creek, Lake Erie	80	No	734-243-7070	734-848-8501
M2603	**Andrews Boat Dock**	2937 E. Sterns Road, Erie	Maumee Bay, Lake Erie Access	146	No	734-243-7497, 734-243-7070	800-649-3777 734-848-3337
M2609	**Bay View Yacht Club**	Bay View Park, Toledo	Maumee Bay, Lake Erie	168	Yes	419-243-5111	419-729-0371
M2611	**Bi-State Marina**	2969 E Sterns, Erie	Hoopers Run Creek, Lake Erie		No	734-243-7070	734-848-4749
M2615	**Brenner Marine**	1 Main Street, Toledo	Maumee River	40	No	419-243-5111	419-691-4663
M2618	**Bush Marine**	5235 N Summit Street, Toledo	Ottawa River	250	No	419-243-5111	419-726-0794
M2639	**Erie Bay Harbor Marina**	7120 Summit Street, Erie	Halfway Creek, Lake Erie	250	Yes	888-423-0372	734-848-4550
M2658	**Jocketts Marina Dockage**	6213 Edgewater Drive, Toledo	Ottawa River, Maumee Bay	90	No	419-243-5111	419-726-9443
M2686	**New Harrison Marina**	3840 N Summit Street, Toledo	Maumee River, Maumee Bay	300	Yes	419-382-8225	419-729-1676
M2691	**Ottawa River Yacht Club**	5844 Edgewater Drive, Toledo	Ottawa River, Maumee Bay	182	Yes	419-243-5111	419-726-4101
M2696	**River Run Marina**	5813 Edgewater Drive, Toledo	Ottawa River, Maumee Bay			419-243-5111	419-727-1171
M2697	**River View Yacht Club**	5844 Edgewater Drive, Toledo	Ottawa River, Maumee Bay	220	Yes	419-243-5111	419-729-9421

Contingency Protocol for Oiled Wildlife –The Toledo Refining Company LLC November, 2005

PHMSA 000124223

Northwest Ohio Atlas – Tile 6 (Continued)

Marinas - Continued

Icon Number	Name	Street Address	Waterbody	Slips	Fuel Available	Emergency Phone	Contact Phone
M2711	State Line Marina	7370 Perch Street, Erie	Hoopers Run Creek, N. Maumee Bay, Lake Erie Access	143	Yes	734-243-7497, 734-243-7070	734-848-8137
M2716	Toledo Yacht Club	Bay View Park, Toledo	Maumee Bay, Lake Erie	108	No	419-243-5111	419-726-3485
M2736	Cullen Park Ramp	Summit Street, Toledo	Maumee Bay		No	419-936-3076	419-936-2871 419-936-3085
M2740	Pier 75 Marina	299 Edwin Drive, Toledo	Maumee River		Yes	419-243-5111	419-242-7575
M2741	Harbor View Yacht Club	2180 Autokee, Oregon	Maumee Bay	130	No	419-243-5111	419-698-8128
M2742	Maumee River Yacht Club	2735 Broadway, Toledo	Maumee River	125	No	419-243-5111	419-382-3625
M2743	Toledo Sailing Club	2700 Broadway, Walbridge Park, Toledo	Maumee River	60	No	419-243-5111	419-382-5841
M3563	Burlens Dock	6316 Willow Place, Erie	Ottawa River, Maumee Bay Access	35	Yes	313-243-7070	N/A
M3568	Jo Jo's Marina	7371 Bass, Erie	Maumee Bay, Lake Erie			313-243-7070	734-848-2158
M3569	John Fisher's Marina	2961 Sterns Road, Erie	Maumee Bay, Lake Erie			313-243-7070	734-848-8331
M3572	Lost Peninsula Marina	6300 Edgewater Drive, Erie	Maumee Bay, Lake Erie Access	700	Yes	734-723-7466, 734-723-7410	734-723-7466
M3580	River Cafe & Marina	6215 Edgewater Drive, Erie	Ottawa River, Lake Erie Access	6	No	313-243-7070	734-723-7405
M3582	Rodger Dodgers Lands End Marina	2941 E. Sterns Road, Erie	Hoopers Run Creek, Lake Erie Access	32	Yes	313-243-7070	734-828-4249
M3584	Shelter Cove Marina	2929 E. Sterns Road, Erie	Hoopers Run Creek, Lake Erie Access	80	No	734-243-7497	734-848-8501
M5132	Rossford Marina	100 Hannum Ave, Rossford	Maumee River	250	No	419-666-7390	419-661-4299
M5136	Perrysburg Boat Club	111 Water Street, Perrysburg	Maumee River	60	No	419-354-9137	419-874-6538

Surface Water Intakes

Icon Number	Name	Street Address	Waterbody	Water Use	Reserve Capacity	Intake Information	Comments	Emergency Phone	Contact Phone
[redacted]									

(b) (3), (b) (7)(F)

PHMSA 000124224

Northwest Ohio Atlas – Tile 6 (Continued)

Oil Storage Facilities

Icon Number	Name	Operator	Street Address	Waterbody	Facility Response Plan	Marine Transfer Facility	Products Handled	Emergency Phone	Contact Phone
#1050	**Westway Terminal Company, Inc.**	Westway Terminal Company, Inc.	431 John Carey Dr., Toledo	Maumee River, Duck Creek	Yes	Yes	Vegetable Oils	**419-698-8031**	419-698-8031
#1051	**Oregon Facility**	Asphalt Materials, Inc.	940 N Wynn Rd, Oregon	Wynn Rd. Drainage Swale, Lake Erie	Yes	N/A	Asphalt-cutback,emul,multi, #1 & 2 Oils, Tall Oil	**419-693-0626/317-875-4670**	419-693-0626
#1052	**Toledo Facility**	Delta Fuels of Ohio	1820 Front Street, Toledo	Maumee River, Maumee Bay	Yes	Yes	Gasoline, Diesel, Ethanol	**419-620-8222 (p)/419-620-8282 (p)**	419-693-0983
#1053	**Toledo Edison Acme Station**	Centerior Energy Corporation	1401 Front Street, Toledo	Maumee River	Yes	N/A		**419-249-5700**	419-691-3581
#1054	**Toledo Emulsion Plant**	Bituminous Products, Inc.	352 George Hardy Dr, Toledo	Maumee River	Yes	N/A		**419-243-5111**	419-693-3933
#1055	**Toledo Refinery**	BP Exploration and Oil Company	4001 Cedar Point Rd, Oregon	Otter Creek, Driftmeyer Ditch	Yes	Yes	Gasoline, Aviation Fuel, Diesel, Asphalt, Kerosene	**419-698-6200**	419-698-6200
#1056	**Toledo Refinery**	Sun Company, Inc.	1819 Woodville Road, Oregon	Otter Creek, Amslosch Ditch	Yes	N/A	Gasoline	**419-698-6610**	419-698-6610
#1057	**Citgo Toledo Terminal**	Citgo Petroleum Corporation	1840 Otter Creek Road, Oregon	Otter Creek, Driftmeyer Ditch, Maumee Bay	Yes	Yes	Gasoline, LS & HS Diesel, Kerosene, Racing Fuel	**419-698-8055/419-440-6778 (p)**	419-698-8055
#1058	**Toledo Terminal**	Clark Refining and Marketing	2844 N. Summit, Toledo	Maumee River, Maumee Bay	Yes	Yes	Gasoline, Fuel Oil, Ethanol	**419-726-9741**	419-726-9741
#1059	**Toledo #2 Tank Farm**	Sun Refining/Marketing	1601 Woodville Rd, Toledo	Maumee River	Yes	N/A	Refined Oil	**419-698-6610**	419-698-6610
#1060	**Toledo Terminal**	BP Exploration and Oil Company	2450 Hill Avenue, Toledo	Williams Ditch, Swan Creek	Yes	No	Gasoline, Diesel, Jet-A, Aviation Gas, Kerosene	**800-842-6561**	419-537-9540
#1063	**Walbridge Facility**	Consolidated Rail Corp.	28531 E Broadway, Walbridge	Cedar Creek	Yes	No		**419-354-9001**	419-661-4885
#1066	**BP Oil Company**	BP Oil and Exploration Company	4128 Monroe, Toledo	Peterson Ditch	No	No	Gasoline	**800-842-6561**	419-537-9540
#4966	**Walbridge Facility CSXT**	CSZ Transportation Corp.	28531 E Broadway, Walbridge	Cedar Creek	No	No	Diesel Fuel	**419-661-4691**	419-661-4858 419-661-4691

Northwest Ohio Atlas – Tile 6 (Continued)

Pipelines

Icon Number	Company Name	Route Name	Number of Pipes in Route	Diameters	Products	Emergency Phone	Contact Phone	Active
PL1	**Buckeye Pipeline Company**	DS316BD001	1	16"	Product	800-331-4115	800-523-9420	Yes
PL7	**Buckeye Pipeline Company**	Sun Junction Idle	2	8"	Product	800-331-4115	800-523-9420	No
PL13	**Buckeye Pipeline Company**	DE150TO007	1	8.63"	Product	800-331-4115	800-523-9420	Yes
PL14	**Buckeye Pipeline Company**	DE150TO008	1	8.63"	Product	800-331-4115	800-523-9420	Yes
PL15	**Buckeye Pipeline Company**	DE150TO010	1	8.63"	Product	800-331-4115	800-523-9420	Yes
PL16	**Buckeye Pipeline Company**	DE150TO011	1	8.63"	Product	800-331-4115	800-523-9420	Yes
PL20	**Buckeye Pipeline Company**	DE150TO012	1	8.63"	Product	800-331-4115	800-523-9420	Yes
PL21	**Buckeye Pipeline Company**	DE150TO013	1	8.63"	Product	800-331-4115	800-523-9420	Yes
PL22	**Buckeye Pipeline Company**	DE150TO014	1	8.63"	Product	800-331-4115	800-523-9420	Yes
PL23	**Sunoco Inc.**	16" Crude	1	16"	Crude	800-786-7440 419-691-4554	313-292-8850 800-279-4602	Yes
PL31	**BP Oil Pipeline Company**	West Toledo 6"	1	6"	Product	800-842-6561	419-435-3789	Yes
PL32	**BP Oil Pipeline Company**	TR 6"	1	6"	Product	800-842-6561	419-435-3789	Yes
PL33	**Citgo Petroleum Corporation**	Inland Pipe	1	10"	Product	419-698-8055	419-698-8055	Yes
PL34	**Citgo Petroleum Corporation**	Dock Pipe	1	10"	Product	419-698-8055	419-698-8055	Yes
PL35	**Sunoco Inc.**	5 Crude Toledo Pump Station to York St.	1	16"	Crude	800-786-7440 419-691-4554	313-292-8850 800-279-4602	Yes
PL36	**Sunoco Inc.**	Toledo to Sarnia	2	8"	Product	800-786-7440 419-691-4554	313-292-8850 800-279-4602	Yes
PL37	**Sunoco Inc.**	Toledo Inkster 8"	2	8"	Product	800-786-7440 419-691-4554	313-292-8850 800-279-4602	Yes
PL38	**Sunoco Inc.**	37 Toledo Pump Station to Cedar Point Junction	1	12"	Product	800-786-7440 419-691-4554	313-292-8850 800-279-4602	Yes
PL39	**Sunoco Inc.**	Toledo Inkster 6"	2	6"	Product	800-786-7440 419-691-4554	313-292-8850 800-279-4602	Yes
PL41	**Sunoco Inc.**	13013 South Line	2	8"	Product	800-786-7440 419-691-4554	313-292-8850	Yes
PL43	**Clark Oil Company**	Toledo 6"	1	6"	Product	219-931-2739	419-726-9741	Yes
PL44	**Marathon Ashland Pipe Line LLC**	Tank Farm to Buckeye	1	8"	Product	800-537-6644	419-421-2121	Yes
PL45	**Buckeye Pipeline Company**	DE150TO015	1	8.63"	Product	800-331-4115	800-523-9420	Yes
PL46	**Buckeye Pipeline Company**	DE150TO016	1	8.63"	Product	800-331-4115	800-523-9420	Yes

PHMSA 000124226

Northwest Ohio Atlas – Tile 6 (Continued)

Pipelines - Continued

Icon Number	Company Name	Route Name	Number of Pipes in Route	Diameters	Products	Emergency Phone	Contact Phone	Active
PL47	Buckeye Pipeline Company	DE150TO017	1	8.63"	Product	800-331-4115	800-523-9420	Yes
PL48	Buckeye Pipeline Company	DE150TO018	1	8.63"	Product	800-331-4115	800-523-9420	Yes
PL49	Buckeye Pipeline Company	DE150TO009	1	8.63"	Product	800-331-4115	800-523-9420	Yes
PL50	Buckeye Pipeline Company	Sun Junction to Cedar Point	1	10"	Product	800-331-4115	800-523-9420	No
PL58	Buckeye Pipeline Company	CT999TO001	1	8"	Product	800-331-4115	800-523-9420	Yes
PL60	Marathon Ashland Pipe Line LLC	196	1	6"	Product	800-537-6644	419-422-2121	Yes
PL61	Sunoco Inc.	MV22 Main Line	2	22"	Crude	800-753-5531	600-371-4469	Yes
PL63	Buckeye Pipeline Company	Sun Junction to Cedar Point	2	10"	Product	800-331-4115	800-523-9420	No
PL64	BP Oil Pipeline Company	TR 10"	1	10"	Product	800-842-6561	419-435-3789	Yes
PL66	Sunoco Inc.	Toledo Pump Station to B.P. Oil Refiner	1	8"	Product	800-786-7440 419-691-4554	313-292-8850 /800-279-4602	Yes
PL195	Wolverine Pipe Line Company	Freedom Jct. to Toledo 16"	1	16"	Crude	888-337-5004 219-844-9510	616-323-2491	Yes
PL217	Sunoco Inc.	Toledo Inkster 6"	2	6"	Product	800-786-7440 419-691-4554	313-292-8850 800-279-4602	Yes
PL649	Buckeye Pipeline Company	CG301DC002	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL653	Buckeye Pipeline Company	CG302DS003	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL654	Buckeye Pipeline Company	CG302DS004	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL655	Buckeye Pipeline Company	CG302DS005	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL656	Buckeye Pipeline Company	CG302DS006	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL657	Buckeye Pipeline Company	CG302DS007	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL658	Buckeye Pipeline Company	CG302DS008	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL666	Buckeye Pipeline Company	CG414DL002	4	10.75"	Product	800-331-4115	800-523-9420	Yes
PL668	Buckeye Pipeline Company	CG414DL003	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL669	Buckeye Pipeline Company	CG414DL004	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL670	Buckeye Pipeline Company	CG414DL005	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL673	Buckeye Pipeline Company	CG416DS001	1	16"	Product	800-331-4115	800-523-9420	Yes
PL677	Buckeye Pipeline Company	DC301DL001	1	12.75"	Product	800-331-4115	800-523-9420	Yes

PHMSA 000124227

Northwest Ohio Atlas – Tile 6 (Continued)

Pipelines - Continued

Icon Number	Company Name	Route Name	Number of Pipes in Route	Diameters	Products	Emergency Phone	Contact Phone	Active
PL678	Buckeye Pipeline Company	DC301DL002	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL679	Buckeye Pipeline Company	DL301DS001	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL682	Buckeye Pipeline Company	DL414DS001	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL743	Buckeye Pipeline Company	DS304WS002	3	12.75"	Product	800-331-4115	800-523-9420	Yes
PL778	Buckeye Pipeline Company	CG416DS002	4	16"	Product	800-331-4115	800-523-9420	Yes
PL798	Sunoco Inc.	Toledo – Brown Jct. Transfer Line	1	8"	Product	800-786-7440 419-691-4554	313-292-8850 800-279-4602	
PL1500	Buckeye Pipeline Company	DS211WW001	3	12.75"	Product	800-331-4115	800-523-9420	Yes
PL1501	Buckeye Pipeline Company	SM999DS001	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL1502	Buckeye Pipeline Company	CG302DS010	4	10.75"	Product	800-331-4115	800-523-9420	Yes
PL1503	Buckeye Pipeline Company	DL301DS002	4	10.75", 12.75"	Product	800-331-4115	800-523-9420	Yes
PL1504	Buckeye Pipeline Company	CG302DS011	4	10.75"	Product	800-331-4115	800-523-9420	Yes
PL1505	Buckeye Pipeline Company	DL301DS003	4	10.75", 12.75"	Product	800-331-4115	800-523-9420	Yes
PL1506	Buckeye Pipeline Company	PC999DS001	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL1507	Buckeye Pipeline Company	CG302DS012	4	10.75"	Product	800-331-4115	800-523-9420	Yes
PL1508	Buckeye Pipeline Company	CG302DS009	4	10.75"	Product	800-331-4115	800-523-9420	Yes
PL1509	Buckeye Pipeline Company	DL301DS004	4	10.75", 12.75"	Product	800-331-4115	800-523-9420	Yes
PL1510	Buckeye Pipeline Company	DS303WW001	3	12.75"	Product	800-331-4115	800-523-9420	Yes
PL1511	Buckeye Pipeline Company	CG302DS013	4	10.75"	Product	800-331-4115	800-523-9420	Yes
PL1512	Buckeye Pipeline Company	DL414DS002	4	10.75", 12.75"	Product	800-331-4115	800-523-9420	Yes
PL1513	Buckeye Pipeline Company	DS303WW002	3	12.75"	Product	800-331-4115	800-523-9420	Yes
PL1514	Buckeye Pipeline Company	DL414DS003	4	10.75", 12.75"	Product	800-331-4115	800-523-9420	Yes
PL1515	Buckeye Pipeline Company	DL414DS004	4	10.75", 12.75"	Product	800-331-4115	800-523-9420	Yes
PL1516	Buckeye Pipeline Company	DS304WS001	3	12.75"	Product	800-331-4115	800-523-9420	Yes
PL1518	Buckeye Pipeline Company	DS999AS001	1	8.63"	Product	800-331-4115	800-523-9420	Yes
PL1519	Buckeye Pipeline Company	DS999TA001	1	16"	Product	800-331-4115	800-523-9420	Yes
PL1520	Buckeye Pipeline Company	DS999TZ001	1	16"	Product	800-331-4115	800-523-9420	Yes
PL1521	Buckeye Pipeline Company	DS999TT001	1	16"	Product	800-331-4115	800-523-9420	Yes
PL1522	Buckeye Pipeline Company	DS999TR001	1	10"	Product	800-331-4115	800-523-9420	Yes

PHMSA 000124228

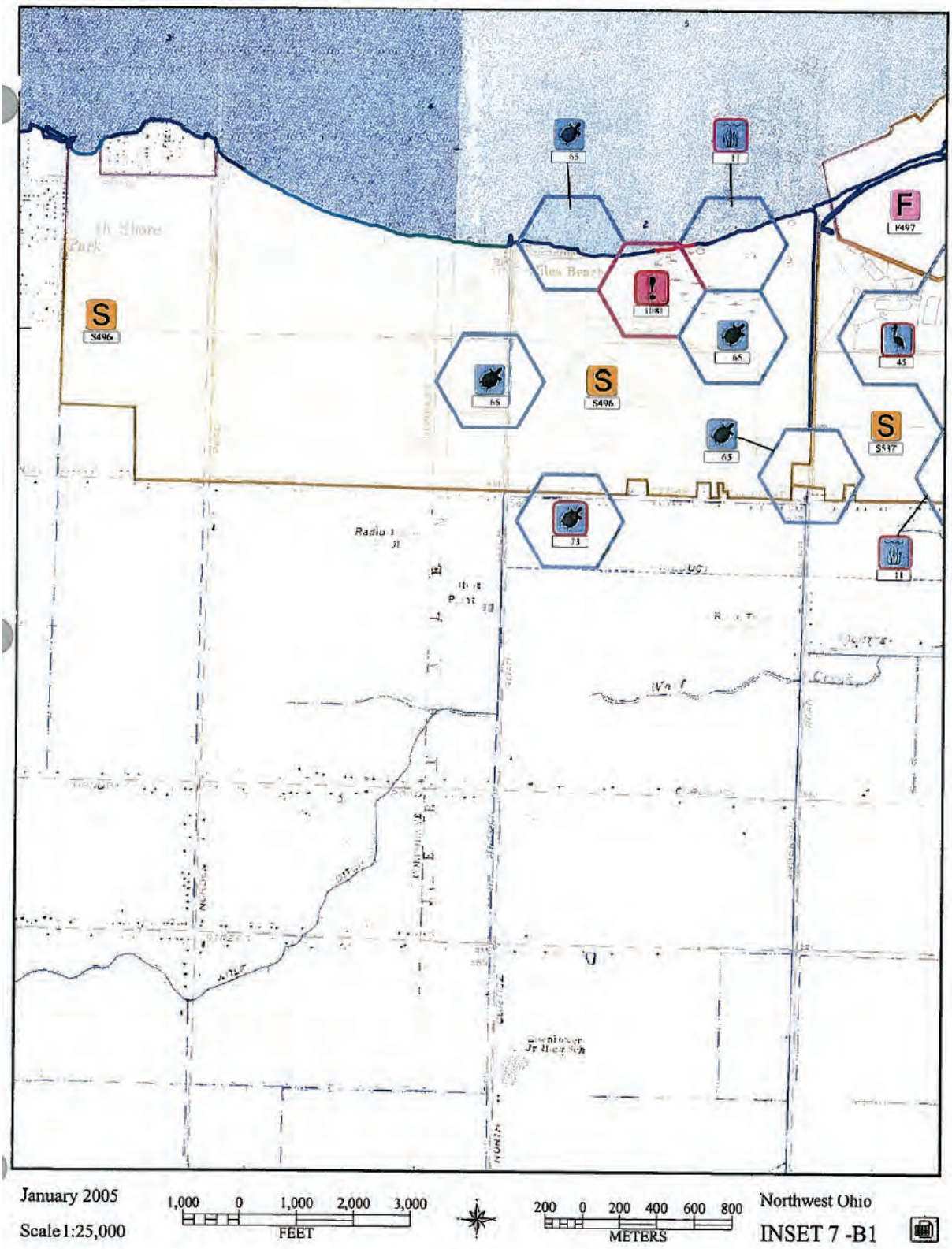
Northwest Ohio Atlas – Tile 6 (Continued)

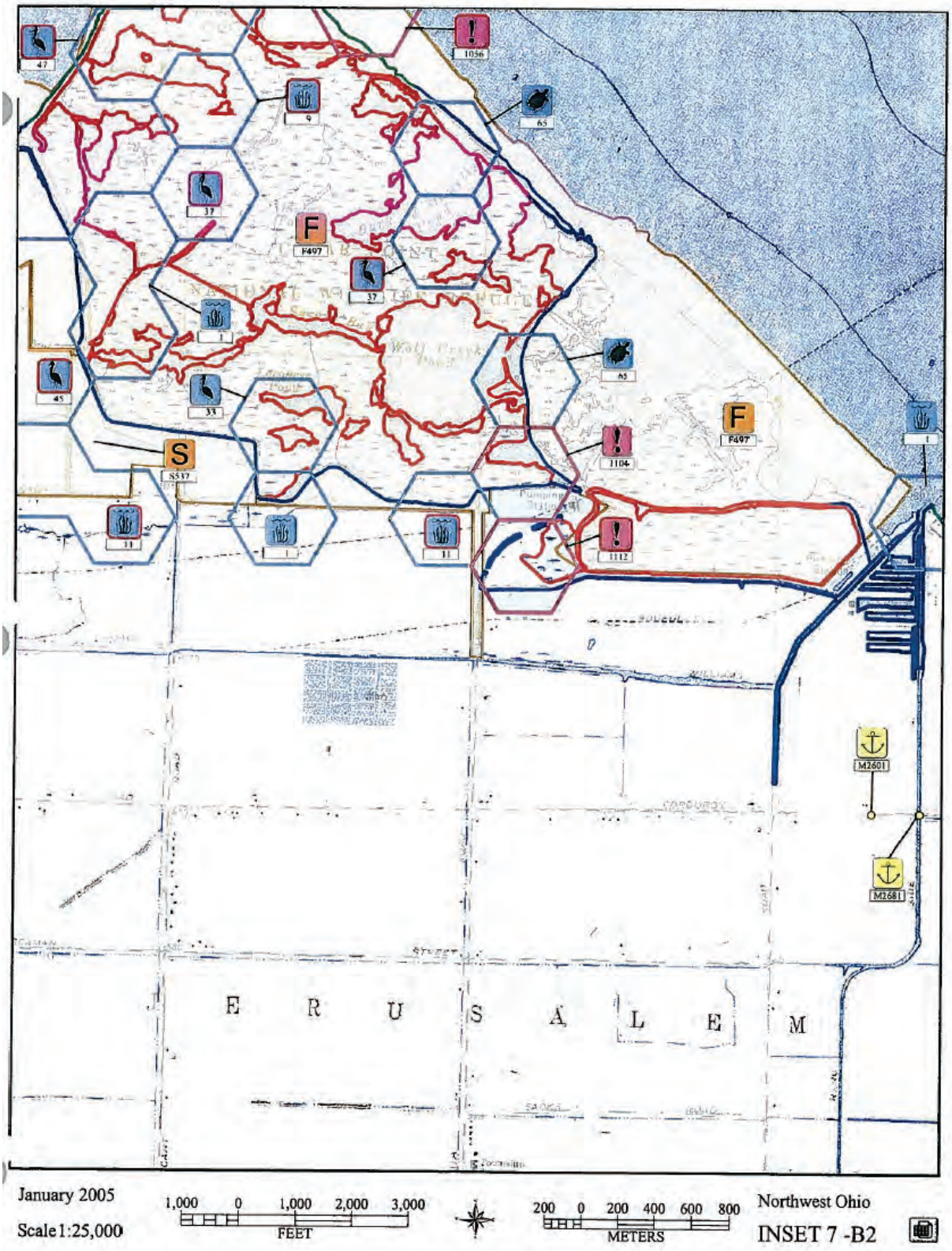
Pipelines - Continued

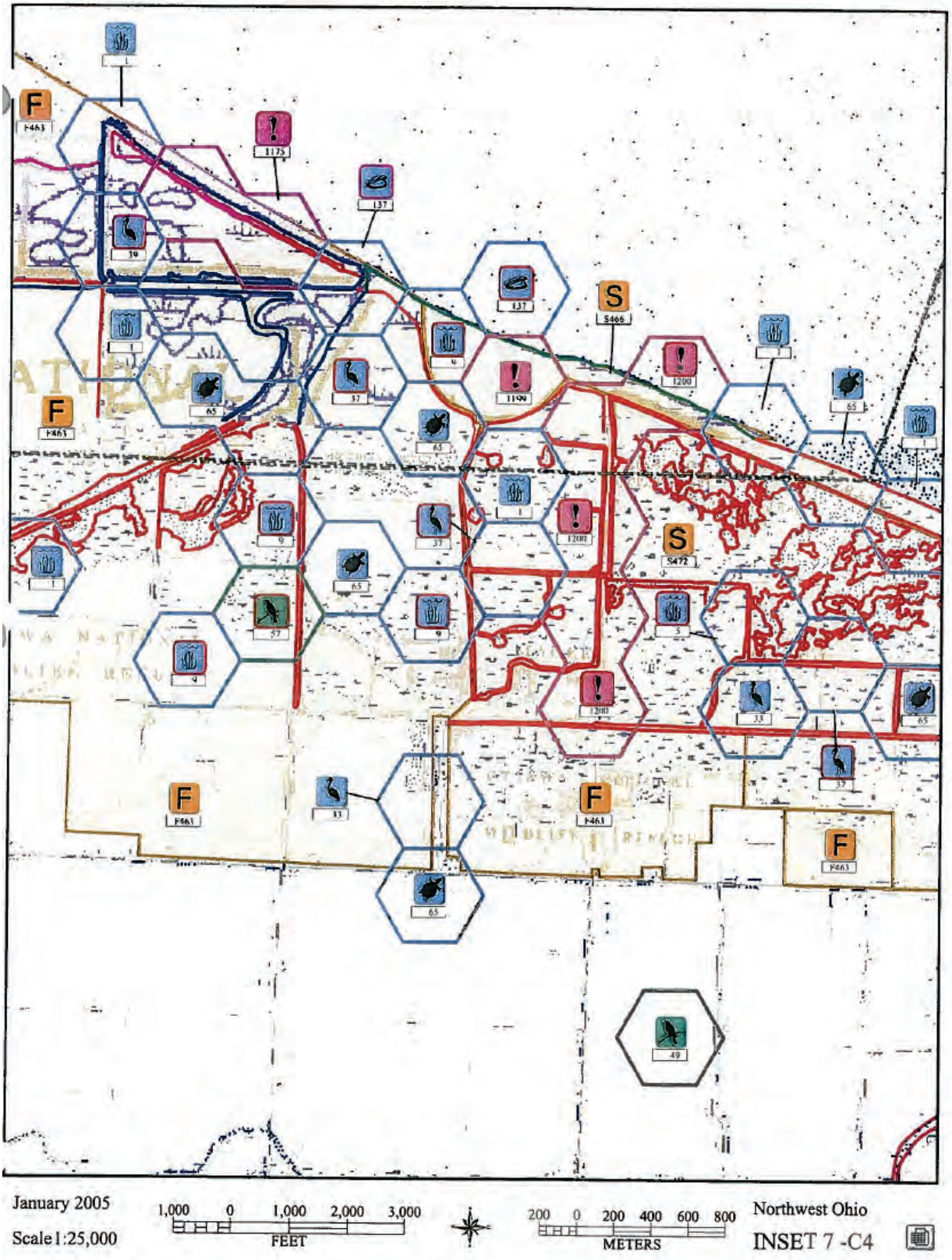
Icon Number	Company Name	Route Name	Number of Pipes in Route	Diameters	Products	Emergency Phone	Contact Phone	Active
PL1523	Buckeye Pipeline Company	DS999ST001	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL1524	Buckeye Pipeline Company	DS999PC001	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL1525	Buckeye Pipeline Company	DS999IC001	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL1526	Buckeye Pipeline Company	DS999CE001	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL1527	Buckeye Pipeline Company	DS999BK001	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL1528	Buckeye Pipeline Company	DL999SU001	1	8.63"	Product	800-331-4115	800-523-9420	Yes
PL1529	Buckeye Pipeline Company	DL999SU002	1	8.63"	Product	800-331-4115	800-523-9420	Yes
PL1532	Buckeye Pipeline Company	CT999TO002	1	8"	Product	800-331-4115	800-523-9420	Yes
PL1533	Buckeye Pipeline Company	CT999TO003	1	8"	Product	800-331-4115	800-523-9420	Yes
PL1534	Buckeye Pipeline Company	CT999TO004	1	8"	Product	800-331-4115	800-523-9420	Yes

PHMSA 000124229

(b) (7)(F), (b) (3)


S
S496
S
S496
S
S497
F
H497
!
Radio
January 2005
Scale 1:25,000
1,000 0 1,000 2,000 3,000
FEET
200 0 200 400 600 800
METERS
Northwest Ohio
INSET 7 -B1


F
F497
S
S517
F
F497
M2601
M2681
E R U S A L E M
January 2005
Scale 1:25,000
1,000 0 1,000 2,000 3,000
FEET
200 0 200 400 600 800
METERS
Northwest Ohio
INSET 7 -B2


F
F463
S
S466
S472
1175
1200
1199
1208
January 2005
Scale 1:25,000
1,000 0 1,000 2,000 3,000
FEET
200 0 200 400 600 800
METERS
Northwest Ohio
INSET 7 -C4

Sensitive Species[a]

Listing	Contact Name	Emergency Phone	Contact Phone
Federal (Ohio) Elements	U.S. Fish and Wildlife Service	800-800-5923 to page 612-660-9062 (Stan Smith, Regional Spill Response Coordinator)	309-793-5800, ext. 515 or 524
State (Ohio) plants, communities	Ohio DNR: Division of Natural Areas and Preserves	614-265-6472	614-265-6453
State (Ohio) animals, fish, invertebrates	Ohio DNR: Division of Wildlife	614-265-6300	614-265-6329 Terrestrial, 614-265-6344 Aquatics
State	Indiana DNR Division of Fish and Wildlife Michigan Natural Features Inventory	None None	317-232-4080 517-373-9418

Managed Areas

Icon Number	Name	Category	Managing Agency	Waterbody	Emergency Phone	Contact Phone	Comments
F463	**Ottawa National Wildlife Refuge**	National Wildlife Refuge	U. S. Fish and Wildlife Service	Lake Erie, Toussaint River	**800-759-8352**	419-898-0014	Contains 500+ acres of habitat managed for bald eagles, waterfowl, and other migratory birds. The refuge is protected by a dike.
F497	**Cedar Point National Wildlife Refuge**	National Wildlife Refuge	U.S. Fish and Wildlife Service	Lake Erie	**800-759-8352**	419-898-0014	2,500 acres of wetland habitat for bald eagles, waterfowl and other migratory birds. The refuge is protected by a dike except for the eagle nest area and Potters Marsh.
S466	**Crane Creek State Park**	State Park	OH DNR Division of Parks and Recreation	Crane Creek, Lake Erie	**614-224-0946**	419-836-7758	
S467	**Metzger Marsh State Wildlife Area**	State Wildlife Area	OH DNR Division of Wildlife	Lake Erie	**614-224-0946**	419-424-5000	
S469	**Toussaint State Wildlife Area**	State Wildlife Area	OH DNR Division of Wildlife	Toussaint Creek	**614-224-0946**	419-424-5000	
S472	**Magee Marsh State Wildlife Area**	Wildlife Area	OH DNR Division of Wildlife	Lake Erie	**614-224-0946**	419-898-0960	2,600 acre marshland located at crossing point of Mississippi and Atlantic Flyways, Two major migratory paths. Abundant waterfowl.
S496	**Maumee Bay State Park**	State Park	OH DNR Division of Parks and Recreation	Lake Erie (Maumee Bay)	**614-224-0946**	419-836-7758	Year-round facilities, including recreational and natural.
S537	**Mallard Club Marsh Wildlife Area**	Wildlife Area	OH DNR Division of Wildlife	Wolf Creek Pond, Lake Erie	**614-224-0946**	419-424-5000	

[a] 2003 Ohio Natural Heritage Data provided by the Ohio Department of Natural Resources, Division of Natural Areas and Preserves and Division of Wildlife
[a] 2003 Indiana Natural Heritage Data provided by the Indiana Department of Natural Resources, Division of Fish and Wildlife
[a] 2003 Michigan Natural Heritage Data provided by the Michigan Department of Natural Resources and the Michigan Natural Features Inventory

Contingency Protocol for Oiled Wildlife –The Toledo Refining Company LLC
November, 2005
PHMSA 000124234

Northwest Ohio Atlas – Tile 7 (Continued)

Marinas

Icon Number	Name	Street Address	Waterbody	Slips	Fuel Available	Emergency Phone	Contact Phone
M2601	**Anchor Pointe Boat-A-Minimum**	10905 Corduroy Road, Curtice	Lake Erie	587	No	**419-734-4404**	419-836-2455
M2680	**Meinke Marina East**	12805 Bono Road, Curtice	Wards Canal, Lake Erie			**419-734-4404**	419-898-1416
M2681	**Meinke Marina West**	10955 Corduroy Road, Curtice	Reno Side Cut Ditch, Lake Erie			**419-734-4404**	419-836-7774

Surface Water Intakes

Icon Number	Name	Street Address	Waterbody	Water Use	Reserve	Intake	Comments	Emergency	Contact

[redacted] (b) (3), (b) (7)(F)

Pipelines

Icon Number	Company Name	Route Name	Number of Pipes in Route	Diameters	Products	Emergency Phone	Contact Phone	Active
PL1	**Buckeye Pipeline Company**	DS316BD001	1	16"	Product	**800-331-4115**	800-523-9420	Yes

PHMSA 000124235

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

Sensitive Species[a]

Listing	Contact Name	Emergency Phone	Contact Phone
Federal (Ohio) Elements	U.S. Fish and Wildlife Service	800-800-5923 to page 612-660-9062 (Stan Smith, Regional Spill Response Coordinator)	309-793-5800, ext. 515 or 524
State (Ohio) plants, communities	Ohio DNR: Division of Natural Areas and Preserves	614-265-6472	614-265-6453
State (Ohio) animals, fish, invertebrates	Ohio DNR: Division of Wildlife	614-265-6300	614-265-6329 Terrestrial, 614-265-6344 Aquatics
State	Indiana DNR Division of Fish and Wildlife Michigan Natural Features Inventory	None None	317-232-4080 517-373-9418

Managed Areas

Icon Number	Name	Category	Managing Agency	Waterbody	Emergency Phone	Contact Phone	Comments
F500	West Sister Island National Wildlife Refuge	National Wildlife Refuge	U.S. Fish and Wildlife Service	Lake Erie	800-759-8352	419-898-0014	80 acres of woodlands and brush managed as a National Wilderness Area for colonial nesting birds. Great blue heron, great egret, and cormorant nests.
F572	Rusha Creek Marsh (Private)	Private Wetland	U.S. Fish and Wildlife Service	Rusha Creek, Toussaint River	800-759-8352	614-469-6923	Coastal Wetlands.
F5253	Ottawa National Wildlife Refuge, Navarre unit	National Wildlife Refuge	U. S. Fish and Wildlife Service	Lake Erie, Toussaint River	800-759-8352	419-898-0014	Coastal Wetland.
F5254	Ottawa National Wildlife Refuge, Darby unit	National Wildlife Refuge	U. S. Fish and Wildlife Service	Lake Erie, Toussaint River	800-759-8352	419-898-0014	Coastal Wetland.
S466	Crane Creek State Park	State Park	Ohio DNR	Crane Creek, Lake Erie	614-224-0946	419-836-7758	
S469	Toussaint State Wildlife Area	State Wildlife Area	OH DNR Division of Wildlife	Toussaint Creek	614-224-0946	419-424-5000	
S472	Magee Marsh State Wildlife Area	Wildlife Area	OH DNR Division of Wildlife	Lake Erie	614-224-0946	419-898-0960	2,600 acre marshland located at crossing point of Mississippi and Atlantic Flyways, Two major migratory paths. Abundant waterfowl.

[a] 2003 Ohio Natural Heritage Data provided by the Ohio Department of Natural Resources, Division of Natural Areas and Preserves and Division of Wildlife
[a] 2003 Indiana Natural Heritage Data provided by the Indiana Department of Natural Resources, Division of Fish and Wildlife
[a] 2003 Michigan Natural Heritage Data provided by the Michigan Department of Natural Resources and the Michigan Natural Features Inventory

Contingency Protocol for Oiled Wildlife –The Toledo Refining Company LLC
November, 2005
PHMSA 000124239

Northwest Ohio Atlas – Tile 8 (Continued)

Marinas

Icon Number	Name	Street Address	Waterbody	Slips	Fuel Available	Emergency Phone	Contact Phone
M2610	**Beef Creek Marina**	4385 Rider Road, Oak Harbor	Toussaint Creek, Lake Erie			419-734-4404	419-898-1829
M2617	**Brown's Marina**	4305 N Rider Road, Oak Harbor	Lake Erie			419-734-4404	419-898-1820
M2638	**East Side Marina**	10221 Locust Point Road, Oak Harbor	Lake Erie	388	No	419-734-4404	419-285-2204
M2640	**Fenwick Marina**	10261 W State Route 2, Oak Harbor	Turtle Creek Bay, Lake Erie			419-734-4404	419-898-7009
M2642	**Floro's Marina**	6627 Thompson Road, Oak Harbor	Toussaint River, Lake Erie			419-734-4404	419-898-1572
M2655	**Inland Marina**	10644 W State Route 2, Oak Harbor	Turtle Creek Bay, Lake Erie			419-734-4404	419-898-5071
M2722	**Turtle Creek Access**	State Route 2 at Turtle Creek, Oak Harbor	Turtle Creek			419-734-4404	419-898-0960
M2723	**Turtle Point Marina**	10275 W Locust Point, Oak Harbor	Lake Erie	80	Yes	419-734-4404	419-898-2003
M2732	**Wild Wings Marina & RV Park**	6395 N Russell Road, Oak Harbor	Lake Erie			419-734-4404	419-898-1416

Surface Water Intakes

Icon Number	Name	Street Address	Waterbody	Water Use	Reserve Capacity	Intake Information	Comments	Emergency Phone	Contact Phone

[redacted] (b) (3), (b) (7)(F)

PHMSA 000124240

Appendix B. Sensitive Species and Natural Communities

Icon	Species Group Name	State Threatened	State Endangered	Federal Threatened	Federal Endangered
1	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
5	Aquatic/Riparian Zone Vascular Plants	-	X	-	-
9	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
17	Upland Zone Vascular Plants	-	-	-	-
21	Upland Zone Vascular Plants	-	X	-	-
25	Upland Zone Vascular Plants	X	-	-	-
29	Upland Zone Vascular Plants	X	X	-	-
33	Aquatic/Riparian Zone Birds	-	-	-	-
37	Aquatic/Riparian Zone Birds	-	X	-	-
39	Aquatic/Riparian Zone Birds	-	X	X	-
41	Aquatic/Riparian Zone Birds	X	-	-	-
49	Terrestrial Zone Birds	-	-	-	-
53	Terrestrial Zone Birds	-	X	-	-
57	Terrestrial Zone Birds	X	-	-	-
65	Aquatic/Riparian Zone Amphibians and Reptiles	-	-	-	-
69	Aquatic/Riparian Zone Amphibians and Reptiles	-	X	-	-
71	Aquatic/Riparian Zone Amphibians and Reptiles	-	X	X	-
73	Aquatic/Riparian Zone Amphibians and Reptiles	X	-	-	-
102	Aquatic/Riparian Zone Mammals	-	X	-	X
113	Terrestrial Zone Mammals	-	-	-	-
129	Aquatic/Riparian Zone Invertebrates	-	-	-	-
133	Aquatic/Riparian Zone Invertebrates	-	X	-	-
134	Aquatic/Riparian Zone Invertebrates	-	X	-	X
137	Aquatic/Riparian Zone Invertebrates	X	-	-	-
142	Aquatic/Riparian Zone Invertebrates	X	X	-	X
161	Fish	-	-	-	-
165	Fish	-	X	-	-
169	Fish	X	-	-	-
177	Aquatic Natural Communities	-	-	-	-
193	Terrestrial Zone Natural Communities	-	-	-	-
1006	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Invertebrates	X	-	-	-
1013	Aquatic/Riparian Zone Vascular Plants	-	X	-	-
	Fish	-	X	-	-
1020	Aquatic/Riparian Zone Amphibians and Reptiles	-	X	X	-
	Aquatic/Riparian Zone Vascular Plants	-	X	-	-
	Upland Zone Vascular Plants	-	X	-	-
1021	Aquatic/Riparian Zone Vascular Plants	-	X	-	-
	Fish	-	X	-	-
1029	Aquatic/Riparian Zone Invertebrates	-	X	-	-
	Fish	-	-	-	-
1030	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Invertebrates	-	-	-	-

Sensitive Species and Natural Communities, continued

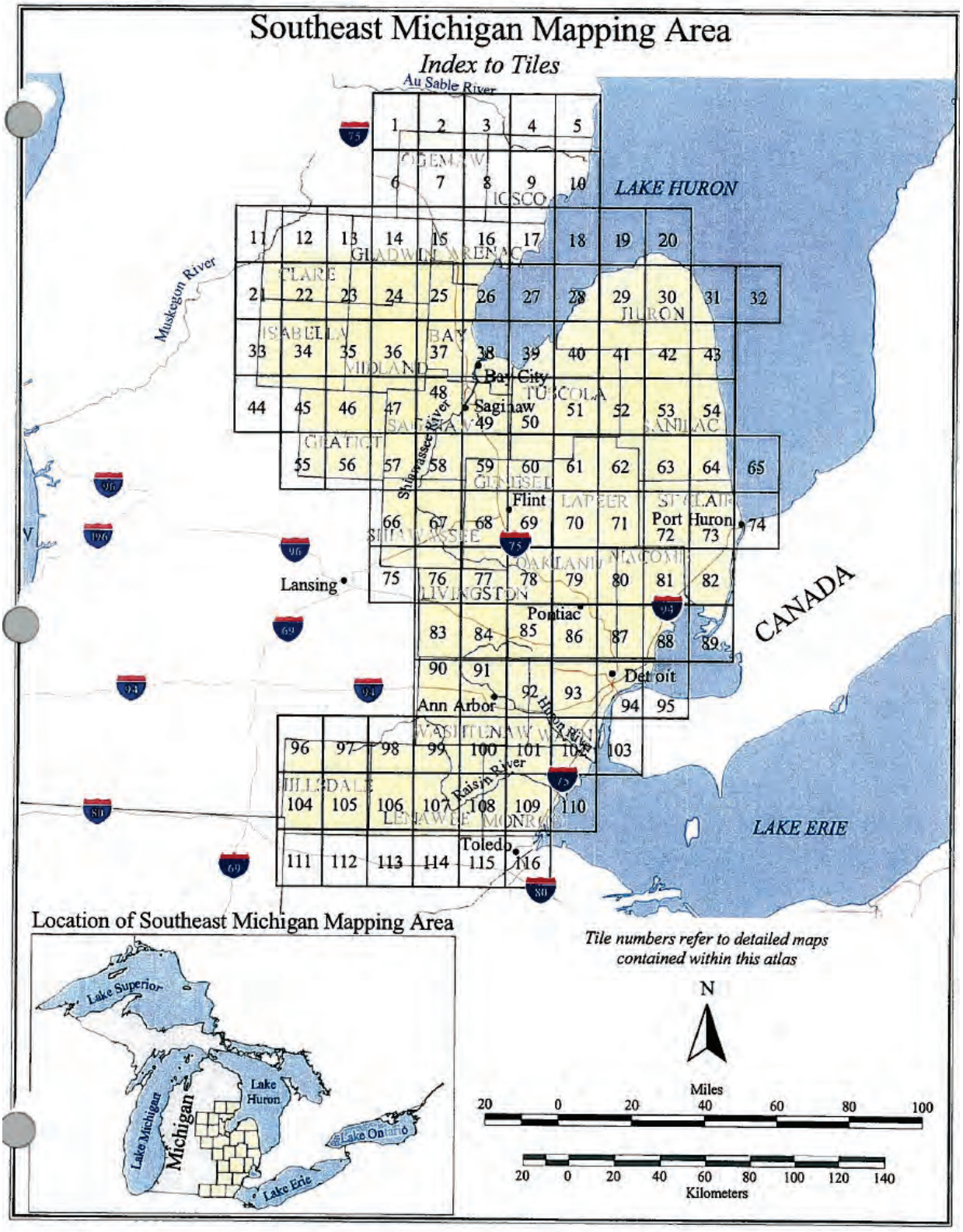
Icon	Species Group Name	State Threatened	State Endangered	Federal Threatened	Federal Endangered
1031	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Amphibians and Reptiles	X	X	X	-
	Aquatic/Riparian Zone Invertebrates	-	X	-	-
	Aquatic/Riparian Zone Vascular Plants	X	X	-	-
	Fish	X	-	-	-
	Terrestrial Zone Invertebrates	-	X	-	-
	Upland Zone Vascular Plants	X	-	-	-
1049	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1050	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1055	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	X	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1059	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1064	Aquatic/Riparian Zone Vascular Plants	-	X	-	-
	Upland Zone Vascular Plants	X	X	-	-
1069	Aquatic/Riparian Zone Invertebrates	X	-	-	-
	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
1076	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1080	Aquatic/Riparian Zone Invertebrates	X	-	-	-
	Fish	-	-	-	-
1081	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Invertebrates	-	X	-	X
1085	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1086	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	X	X	-	-
1089	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1092	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Amphibians and Reptiles	X	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	X	-	-
	Upland Zone Vascular Plants	X	-	-	-
1094	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Amphibians and Reptiles	-	-	-	-
1101	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1129	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Amphibians and Reptiles	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	-	X	-	-
1137	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1140	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	X	-	-	-

Sensitive Species and Natural Communities, continued

Icon	Species Group Name	State Threatened	State Endangered	Federal Threatened	Federal Endangered
1184	Aquatic/Riparian Zone Invertebrates	-	X	-	-
	Upland Zone Vascular Plants	-	X	-	-
1200	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1222	Aquatic/Riparian Zone Amphibians and Reptiles	X	-	-	-
	Aquatic/Riparian Zone Birds	X	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	X	-	-
1224	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1227	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
1246	Aquatic/Riparian Zone Amphibians and Reptiles	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1259	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	-	X	-	-
1301	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	-	X	-	-
	Upland Zone Vascular Plants	-	-	-	-
1302	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1303	Aquatic Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1306	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Fish	-	-	-	-
1309	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1311	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1318	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
1324	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Amphibians and Reptiles	X	-	-	-
	Aquatic/Riparian Zone Birds	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1332	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1334	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	X	-	-
	Upland Zone Vascular Plants	-	-	-	-
1341	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1342	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1345	Aquatic/Riparian Zone Amphibians and Reptiles	-	X	-	-
	Upland Zone Vascular Plants	-	-	-	-

Sensitive Species and Natural Communities, continued

Icon	Species Group Name	State Threatened	State Endangered	Federal Threatened	Federal Endangered
1350	Aquatic/Riparian Zone Amphibians and Reptiles	-	X	-	-
	Terrestrial Zone Invertebrates	-	X	-	-
1360	Aquatic/Riparian Zone Vascular Plants	X	X	-	-
	Upland Zone Vascular Plants	-	-	-	-
1380	Aquatic/Riparian Zone Birds	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
1384	Aquatic Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1398	Terrestrial Zone Birds	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1403	Aquatic/Riparian Zone Vascular Plants	-	X	-	-
	Upland Zone Vascular Plants	-	-	-	-
1406	Terrestrial Zone Birds	X	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
1408	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Invertebrates	-	X	-	-
1413	Terrestrial Zone Birds	X	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1427	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1428	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Invertebrates	-	-	-	-
1446	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Amphibians and Reptiles	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
1451	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1455	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1458	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
1462	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Birds	-	X	X	-
1464	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Invertebrates	-	X	-	-
1465	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
1470	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
1473	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1480	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1482	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Invertebrates	-	X	-	-


Southeast Michigan Mapping Area
Index to Tiles
Au Sable River
LAKE HURON
Muskegon River
Saginaw River
Shiawassee River
Flint
Bay City
Saginaw
Port Huron
Lansing
Pontiac
Detroit
Ann Arbor
Toledo
Raisin River
CANADA
LAKE ERIE
Location of Southeast Michigan Mapping Area
Lake Superior
Lake Michigan
Michigan
Lake Huron
Lake Ontario
Lake Erie
Tile numbers refer to detailed maps contained within this atlas
N
Miles
20 0 20 40 60 80 100
20 0 20 40 60 80 100 120 140
Kilometers

MAP LEGEND

SENSITIVE SPECIES

Aquatic/Riparian Zone	Terrestrial Zone
Vascular Plants	Vascular Plants
Birds	Birds
Amphibians and Reptiles	Amphibians and Reptiles
Mammals	Mammals
Invertebrates	Invertebrates
Fish	Natural Communities
Natural Communities	Multiple Species Groupings

Icons Indicating Threatened or Endangered Status

NATURAL RESOURCE AREAS

Federal Managed Areas	Federal Designated Areas
State Managed Areas	State Designated Areas
Regional Managed Areas	Regional Designated Areas
Private Managed Areas	Private Designated Areas

Other Environmentally Sensitive Aquatic Areas

Other Environmentally Sensitive Terrestrial Areas

Tribal Land

OTHER SENSITIVE RESOURCES

- Marina
- Navigational Lock and Dam
- Water Intake (nonpotable)
- Water Intake (potable)

POTENTIAL SPILL SOURCES

- Fixed Oil Storage Facility
- Marine Transfer Facility and/or Facility with more than 1 million gallons
- Pipeline

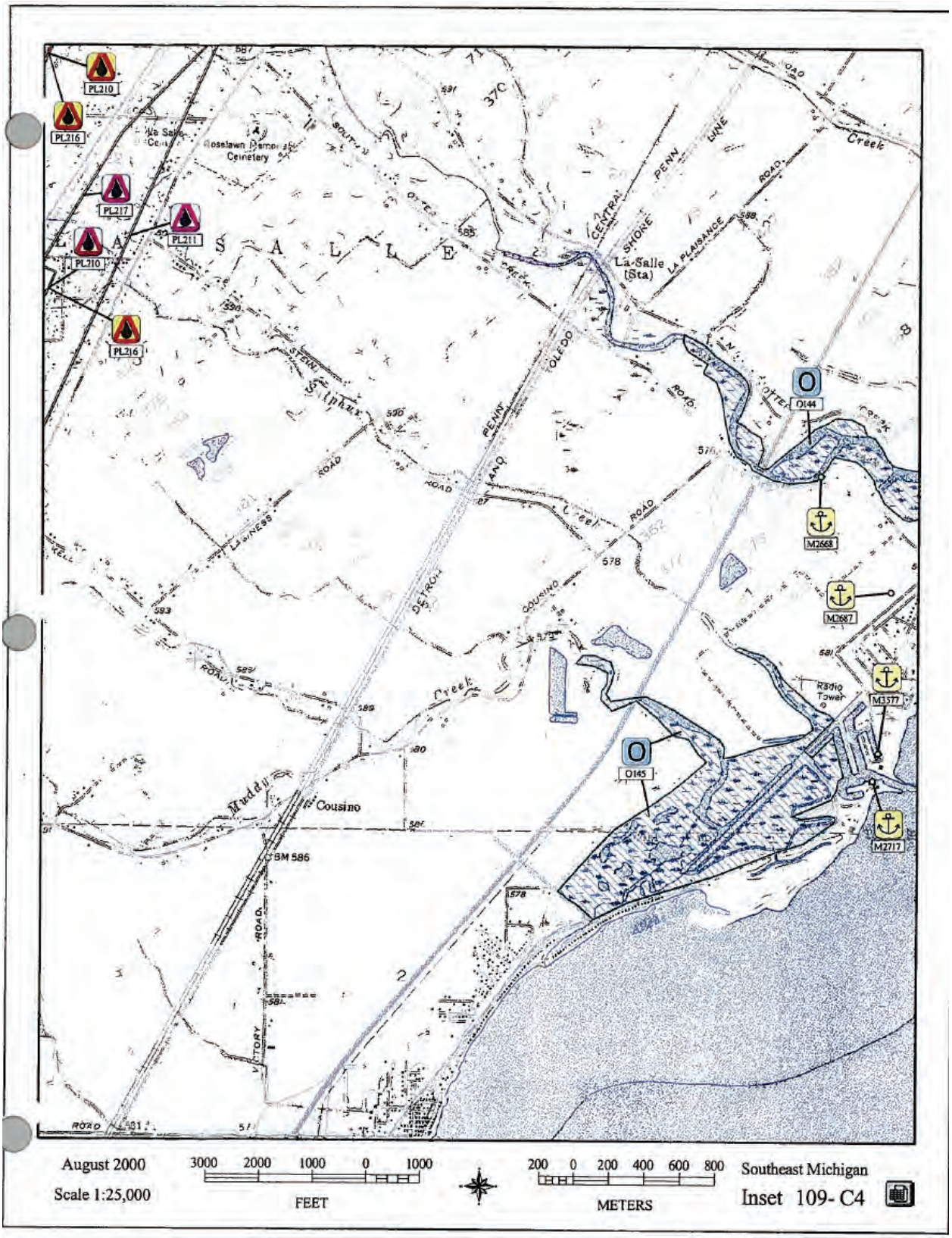
RESPONSE CONSIDERATIONS

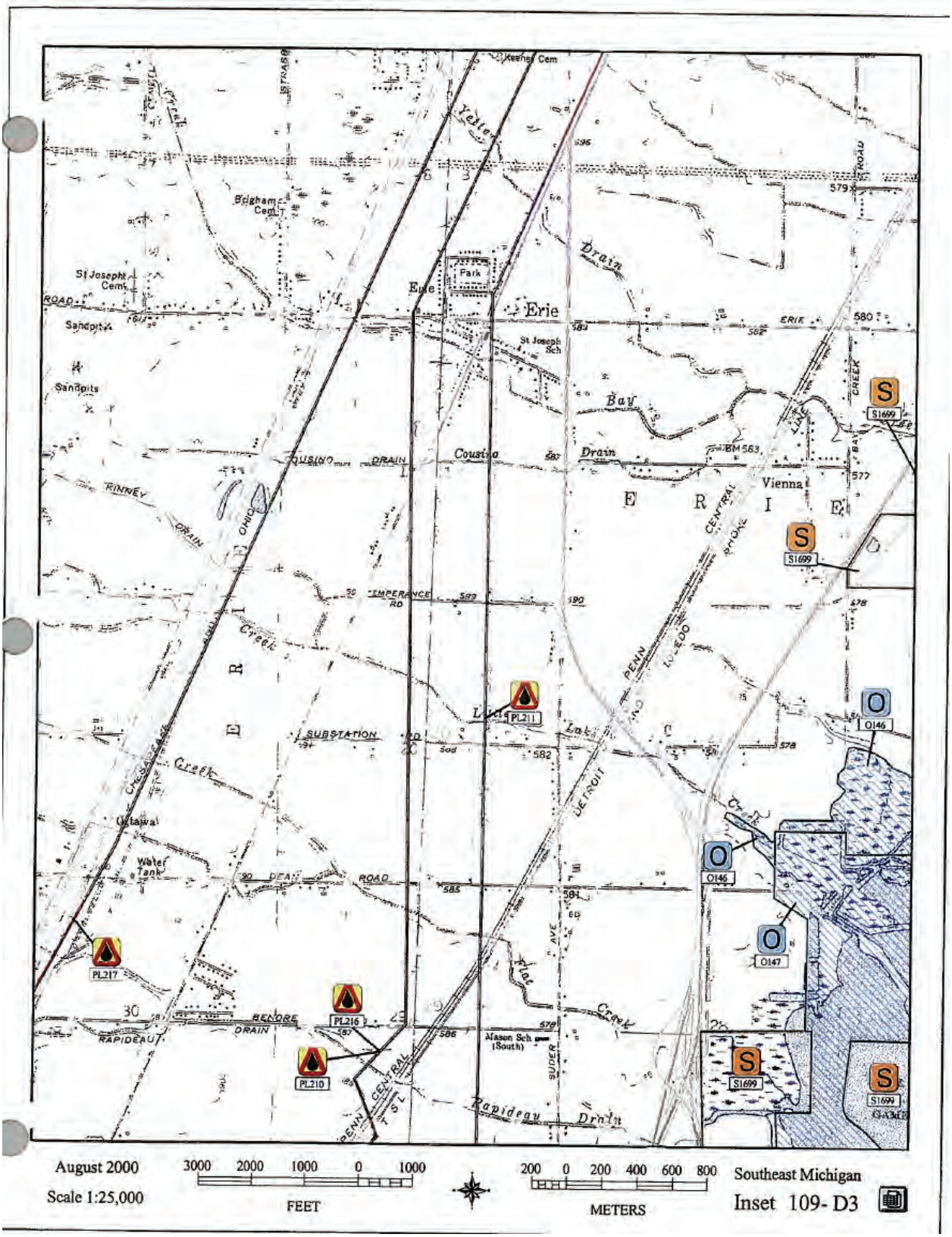
- Ⓐ Boat Access
- Ⓓ Non- navigational Dam

BOUNDARY DESIGNATIONS

- County Boundary
- EPA/Coast Guard Jurisdictional Boundary
- Pipeline Inset Boundary

(b) (7)(F), (b) (3)


PL210
PL216
PL217
PL211
PL210
PL216
LA SALLE
La Salle (Sta)
Roselawn Memorial Cemetery
CENTRAL SHORE LINE
PENN
LA PLAISANCE ROAD
TOLEDO
DETROIT
COUSINO
Creek
ROAD
O144
O145
M2668
M2687
M3577
M2717
Radio Tower
Cousino
BM 586
VICTORY
August 2000
Scale 1:25,000
3000 2000 1000 0 1000
FEET
200 0 200 400 600 800
METERS
Southeast Michigan
Inset 109- C4


Erie
Vienna
Bay
Creek
Drain
Park
Sandpits
Cemetery
Rapideau Drain
PL211
PL216
PL217
PL210
S1699
O146
O147
August 2000
Scale 1:25,000
3000 2000 1000 0 1000
FEET
200 0 200 400 600 800
METERS
Southeast Michigan
Inset 109- D3

(b) (7)(F), (b) (3)

Southeast Michigan Atlas – Tile 109

Sensitive Species Contact Data[a]

Listing	Contact Name	Emergency Phone	Contact Phone
Federal (Michigan)	U.S. Fish and Wildlife Service	none	517-351-2555
State (Michigan)	Michigan Natural Features Inventory	none	517-373-9418

Managed Areas

Icon Number	Name	Category	Managing Agency	Waterbody	Emergency Phone	Contact Phone	Comments
P1399	Monroe County Fairgrounds	Fairgrounds	Monroe County Fair Association	River Raisin, Lake Erie	313-243-7070	734-241-5775	
R1400	White Park	County Park	Monroe County	Indian Creek	313-243-7070	734-243-7011	
R1401	Parmelee Park	County Park	Monroe County	Springbrook Creek	313-243-7070	734-243-7011	
R1487	County Park	County Park	Monroe County	River Raisin	313-243-7070	734-243-7011	
S1699	Erie State Game Area	State Game Area	Michigan Department of Natural Resources	North Maumee Bay, Lake Erie	800-292-4706	517-373-1263	

Other Environmentally Sensitive Areas

Icon Number	Additional Resource Area Name	Contact Agency	Waterbody	Emergency Phone	Contact Phone	Comments
O144	Otter Creek Estuary (Private)	U.S. Fish and Wildlife Service	Otter Creek, Lake Erie	800-759-8352	614-469-6923	Site includes migratory waterfowl. Coastal Wetland.
O145	Muddy Creek Estuary (Private)	U.S. Fish and Wildlife Service	Muddy Creek, Allens Cove	800-759-8352	614-469-6923	Coastal Wetlands.
O146	Erie Marsh (Private)	U.S. Fish and Wildlife Service	North Maumee Bay	800-759-8352	614-469-6923	Coastal Wetlands connected to those of Erie State Game Area.
O147	Erie Marsh Reserve	The Nature Conservancy	North Maumee Bay, Lake Erie	517-373-7660	517-332-1741	Total of 2168 acres. Migratory and nesting shorebirds, waterfowl, and avian species. Raptors during migration. Swamp mallow grows here.

Marinas

Icon Number	Name	Address	Waterbody	River Mile	Slips	Fuel Available	Emergency Phone	Contact Phone
M2668	Lighthouse Marina	5800 S. Otter Creek Road, La Salle	Otter Creek, Lake Erie	N/A	170	Y	313-884-9324	734-242-0111
M2670	Luna Pier Harbour Club	10420 S. Harold Street, Luna Pier	Lapoint Drain, Lake Erie Access	N/A	393	Y	734-848-8777, 734-848-4310	734-848-8777
M2687	North Cape Yacht Club	11850 Toledo Beach Road, La Salle	Lake Erie	N/A			734-243-7070	734-242-5081
M2717	Toledo Beach Marina	11840 Toledo Beach Road, La Salle	Lake Erie	N/A	600	Y	419-262-8195	734-243-3800
M3577	North Cape Yacht Club	11850 Toledo Beach Road, La Salle	Lake Erie	N/A	150	N	734-241-2121	734-242-5081

[a] 2000 Michigan Natural Heritage Data provided by the Michigan Department of Natural Resources and the Michigan Natural Features Inventory

Southeast Michigan Atlas – Tile 109 (Continued)

Surface Water Intakes

Icon Number	Name	Address	Waterbody	River Mile	Water Use	Reserve Capacity	Intake Information	Comments	Emergency Phone	Contact Phone
[redacted]										

(b) (3), (b) (7)(F)

Oil Storage Facilities

Icon Number	Name	Operator	Address	Waterbody	River Mile	Facility Response Plan	Marine Transfer Facility	Products Handled	Emergency Phone	Contact Phone
#3214	C. Barron & Sons, Inc.	C. Barron & Sons, Inc.	612 S. Roessler Street, Monroe	Raisin River	N/A	N	N	Gasoline, No. 2 H/S Fuel, No.1 L/S Fuel, Kerosene	734-241-8633	734-241-8633
#3216	Hachman Farm Supply, Inc.	Hachman Farm Supply, Inc.	627 W. Temperance Road, Temperance	Unknown	N/A	N	N	Gasoline, Kerosene, No. 2 Fuel Oil, Diesel	313-243-7070	734-847-3235
#3217	James L. Barron Oil Company	James L. Barron Oil Company	2466 Lewis Avenue, Ida	Pitts Drain	N/A				313-243-7070	313-269-9595
#3219	Monroe Oil Company	Monroe Oil Company	1125 W. Front Street, Monroe	River Raisin, Lake Erie Access	N/A				313-243-7070	734-241-8822
#3220	Store 284	Pilot Corporation	1200 Meadow Road, Monroe	River Raisin, Lake Erie Access	N/A				313-243-7070	313-457-3500

Pipelines

Icon Number	Company Name	Route Name	Number of Pipes in Route	Diameters	Products Carried in Line	Emergency Phone	Contact Phone
PL173	Buckeye Pipe Line Company	304	1	12"	PRD	800-331-4115	800-523-9420
PL174	Buckeye Pipe Line Company	303	1	12"	PRD	800-331-4115	800-523-9420
PL181	Buckeye Pipe Line Company	211	1	12"	PRD	800-331-4115	800-523-9420
PL195	Wolverine Pipe Line Company	Freedom Jct. to Toledo 16"	1	16"	CRD, PRD	888-337-5004/219-844-9510	616-323-2491
PL207	Buckeye Pipe Line Company	Sylvania Station to Samaria Station	1	8"	PRD	800-331-4115	800-523-9420
PL208	Buckeye Pipe Line Company	Cygnet to Ann Arbor Road	3	6"	PRD	800-331-4115	800-523-9420
PL209	Buckeye Pipe Line Company	Hasel Junction to Samaria Junction	2	8"	PRD	800-331-4115	800-523-9420
PL210	Sun Pipe Line Company	Toledo Inkster 8"	2	8"	PRD	800-786-7440/419-691-4554	313-292-8850/800-279-4602
PL211	Sun Pipe Line Company	Toledo Dearborn 6"	1	6"	PRD	800-786-7440/419-691-4554	313-292-8850/800-279-4602
PL212	Buckeye Pipe Line Company	Cygnet Station to Ann Arbor Road	3	6"	PRD	800-331-4115	800-523-9420
PL213	Mid-Valley Pipe Line Company	MV22	1	22"	CRD	800-265-7887	606-371-4469

Southeast Michigan Atlas – Tile 109 (Continued)

Pipelines (Continued)

Icon Number	Company Name	Route Name	Number of Pipes in Route	Diameters	Products Carried in Line	Emergency Phone	Contact Phone
PL215	Sun Pipe Line Company	16"	1	16"	CRD	800-786-7440/419-691-4554	313-292-8850/800-279-4602
PL216	Sun Pipe Line Company	Toledo to Sarnia	2	8"	PRD, LPG	800-786-7440/419-691-4554	313-292-8850/800-279-4602
PL217	Sun Pipe Line Company	Toledo Inkster 6"	2	6"	PRD, LPG	800-786-7440/419-691-4554	313-292-8850/800-279-4602
PL214	Marathon Ashland Pipe Line L.L.C.	Mosherville to Samaria 8"	1	8"	PRD	800-537-6644	419-421-2121
PL205	Marathon Ashland Pipe Line L.L.C.	Samaria to Detroit 16" Crude	1	16"	CRD	800-537-6644	419-421-2121

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

Southeast Michigan Atlas – Tile 110

Sensitive Species Contact Data[a]

Listing	Contact Name	Emergency Phone	Contact Phone
Federal (Michigan)	U.S. Fish and Wildlife Service	none	517-351-2555
State (Michigan)	Michigan Natural Features Inventory	none	517-373-9418

Managed Areas

Icon Number	Name	Category	Managing Agency	Waterbody	Emergency Phone	Contact Phone	Comments
R1398	Township Park	Township Park	Frenchtown Township	Stony Creek, Lake Erie	313-243-7070	313-289-1009	
S1691	Sterling State Park	State Park	Michigan Department of Natural Resources	Lake Erie, Brest Bay, River Raisin	800-292-4706	517-373-9990	

Other Environmentally Sensitive Areas

Icon Number	Additional Resource Area Name	Contact Agency	Waterbody	Emergency Phone	Contact Phone	Comments
O142	Swan Creek Estuary (Private)	U.S. Fish and Wildlife Service	Swan Creek, Lake Erie	800-759-8352	614-469-6923	Site includes American Lotus beds. Coastal Wetland.
O143	Plum Creek Estuary (Private)	U.S. Fish and Wildlife Service	Plum Creek, Lake Erie	800-759-8352	614-469-6923	Site includes Shorebirds and migratory waterfowl a American Lotus beds in Coastal Wetland.
O144	Otter Creek Estuary (Private)	U.S. Fish and Wildlife Service	Otter Creek, Lake Erie	800-759-8352	614-469-6923	Site includes migratory waterfowl. Coastal Wetland.

Marinas

Icon Number	Name	Address	Waterbody	River Mile	Slips	Fuel Available	Emergency Phone	Contact Phone
M2616	Brest Bay Marina	4088 Brest Road, Newport	Stony Creek	N/A	420	Y	734-243-7070	734-289-1234
M2626	Charlies Boat & Bait	13468 La Plaisance Road, Monroe	Woodchuck Creek	N/A	50	Y	734-243-4404	734-241-1545
M2634	Detroit Beach Boat Club	3028 Harbor View Drive, Monroe	Sandy Creek, Brest Bay	N/A	90	Y	734-243-7070	734-289-3222
M2647	Harbor Marine	13950 Bridge Drive, Monroe	La Plaisance Creek, La Plaisance Bay	N/A	24	Y	734-243-7070	734-241-2833
M2684	Monroe Marina	6647 N La Plaisance Creek Road, Monroe	La Plaisance Creek, La Plaisance Bay	N/A	46	N	734-243-7070	734-241-4624
M2692	Otter Creek Marina, Inc.	6305 Lakeview Avenue, La Salle	Otter Creek, Lake Erie	N/A	72	Y	734-241-0313	734-241-0313
M2695	Rivertront Marina	1560 E. Elm Avenue, Monroe	River Raisin, Lake Erie	N/A	84	Y	734-243-7070	734-242-0737
M2703	Roes Riverside Bait & Tackle	1509 E. Front Street, Monroe	River Raisin	N/A			734-243-7070	734-457-0188
M2713	Swan Boat Club	6332 Brancheau Road, Newport	Swan Creek, Lake St. Clair	N/A	129	Y	734-243-7070	734-586-2002
M2720	Trout's Yacht Basin	7970 Harbor Road, Monroe	La Plaisance Creek, La Plaisance Bay	N/A	100	Y	734-243-7070	734-242-5545
M3566	Erie Party Shoppe & Docks	6838 La Plaisance Road, Monroe	La Plaisance Creek, Lake Erie Access	N/A			313-243-7070	734-457-0006

[a] 2000 Michigan Natural Heritage Data provided by the Michigan Department of Natural Resources and the Michigan Natural Features Inventory

Southeast Michigan Atlas – Tile 110 (Continued)

Marinas (Continued)

Icon Number	Name	Address	Waterbody	River Mile	Slips	Fuel Available	Emergency Phone	Contact Phone
M3567	Flying Eagle Marina	13975 Lake Drive, Monroe	Lake Erie	N/A			313-243-7070	734-241-8776
M3570	La Plaisance Creek Marina	13931 Bridge Drive, Monroe	La Plaisance Creek, Lake Erie Access	N/A	61	N	734-457-9714	734-241-4460
M3574	Miller Boat Livery	6838 La Plaisance Road, Monroe	La Plaisance Creek, Lake Erie Access	N/A			313-243-7070	734-242-7734
M3575	Monroe Boat Club	7932 Harbor, Monroe	La Plaisance Creek, Lake Erie Access	N/A	125	N	313-243-7070	734-243-8935
M3578	O.P.M. Club	8000 Harbor Road, Monroe	La Plaisance Creek, Lake Erie Access	N/A	28	N	734-241-4637	

Surface Water Intakes

[redacted]

(b) (3), (b) (7)(F)

Icon Number	Name	Operator	Address	Waterbody	River Mile	Facility Response Plan	Marine Transfer Facility	Products Handled	Emergency Phone	Contact Phone
#3215	Fermi 2 Power Plant	Detroit Edison Company	6400 N. Dixie Highway, Newport	Lake Erie	N/A	Y	N	Refined Oil	734-586-5235	734-586-4970
#3218	Maybee Gas & Oil Company	Maybee Gas & Oil Company	3500 N. Monroe Street, Monroe	Roadside Ditch	N/A				313-243-7070	734-241-4808
#3221	Liquid Asphalt Production Plant	Thompson-McCully Oil Company	3125 E. Front Street, Monroe	River Raisin, Lake Erie Access	N/A	Y	Y	Liquid Asphalt	734-243-7070	734-241-1910

PHMSA 000124257

Southeast Michigan Atlas – Tile 110 (Continued)

Pipelines

Icon Number	Company Name	Route Name	Number of Pipes in Route	Diameters	Products Carried in Line	Emergency Phone	Contact Phone
PL210	Sun Pipe Line Company	Toledo Inkster 8"	2	8"	PRD	800-786-7440/419-691-4554	313-292-8850/800-279-4602
PL211	Sun Pipe Line Company	Toledo Dearborn 6"	1	6"	PRD	800-786-7440/419-691-4554	313-292-8850/800-279-4602
PL216	Sun Pipe Line Company	Toledo to Sarnia	2	8"	PRD, LPG	800-786-7440/419-691-4554	313-292-8850/800-279-4602
PL217	Sun Pipe Line Company	Toledo Inkster 6"	2	6"	PRD, LPG	800-786-7440/419-691-4554	313-292-8850/800-279-4602

Appendix B. Sensitive Species and Natural Communities

Icon	Species Group Name	State Threatened	State Endangered	Federal Threatened	Federal Endangered
1	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
5	Aquatic/Riparian Zone Vascular Plants	-	X	-	-
7	Aquatic/Riparian Zone Vascular Plants	-	X	X	-
9	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
11	Aquatic/Riparian Zone Vascular Plants	X	-	X	-
13	Aquatic/Riparian Zone Vascular Plants	X	X	-	-
15	Aquatic/Riparian Zone Vascular Plants	X	X	X	-
17	Upland Zone Vascular Plants	-	-	-	-
21	Upland Zone Vascular Plants	-	X	-	-
25	Upland Zone Vascular Plants	X	-	-	-
29	Upland Zone Vascular Plants	X	X	-	-
33	Aquatic/Riparian Zone Birds	-	-	-	-
37	Aquatic/Riparian Zone Birds	-	X	-	-
41	Aquatic/Riparian Zone Birds	X	-	-	-
49	Terrestrial Zone Birds	-	-	-	-
53	Terrestrial Zone Birds	-	X	-	-
54	Terrestrial Zone Birds	-	X	-	X
57	Terrestrial Zone Birds	X	-	-	-
65	Aquatic/Riparian Zone Amphibians and Reptiles	-	-	-	-
69	Aquatic/Riparian Zone Amphibians and Reptiles	-	X	-	-
73	Aquatic/Riparian Zone Amphibians and Reptiles	X	-	-	-
81	Terrestrial Zone Amphibians and Reptiles	-	-	-	-
102	Aquatic/Riparian Zone Mammals	-	X	-	X
105	Aquatic/Riparian Zone Mammals	X	-	-	-
117	Terrestrial Zone Mammals	-	X	-	-
129	Aquatic/Riparian Zone Invertebrates	-	-	-	-
133	Aquatic/Riparian Zone Invertebrates	-	X	-	-
134	Aquatic/Riparian Zone Invertebrates	-	X	-	X
137	Aquatic/Riparian Zone Invertebrates	X	-	-	-
142	Aquatic/Riparian Zone Invertebrates	X	X	-	X
145	Terrestrial Zone Invertebrates	-	-	-	-
150	Terrestrial Zone Invertebrates	-	X	-	X
153	Terrestrial Zone Invertebrates	X	-	-	-
161	Fish	-	-	-	-
165	Fish	-	X	-	-
169	Fish	X	-	-	-
177	Aquatic Natural Communities	-	-	-	-
193	Terrestrial Zone Natural Communities	-	-	-	-
1004	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Amphibians and Reptiles	-	-	-	-
1096	Aquatic Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1116	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1118	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Birds	X	-	-	-
1250	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1262	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
1267	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
1271	Aquatic Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-

Sensitive Species and Natural Communities, continued

Icon	Species Group Name	State Threatened	State Endangered	Federal Threatened	Federal Endangered
1277	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
1279	Aquatic Natural Communities	-	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
1290	Aquatic/Riparian Zone Invertebrates	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1291	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Amphibians and Reptiles	-	-	-	-
1302	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Terrestrial Zone Invertebrates	-	-	-	-
1309	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1315	Aquatic Natural Communities	-	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1320	Aquatic Natural Communities	-	-	-	-
	Terrestrial Zone Invertebrates	-	-	-	-
1332	Aquatic Natural Communities	-	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1344	Aquatic/Riparian Zone Birds	-	-	-	-
	Terrestrial Zone Birds	-	-	-	-
1355	Aquatic Natural Communities	-	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
1363	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
1365	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
1367	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
1369	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
1378	Terrestrial Zone Invertebrates	-	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
1419	Aquatic/Riparian Zone Amphibians and Reptiles	-	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1422	Terrestrial Zone Invertebrates	-	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1429	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1439	Terrestrial Zone Invertebrates	X	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1443	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1444	Terrestrial Zone Invertebrates	X	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1448	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1470	Aquatic/Riparian Zone Amphibians and Reptiles	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1478	Aquatic/Riparian Zone Birds	-	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-

Sensitive Species and Natural Communities, continued

Icon	Species Group Name	State Threatened	State Endangered	Federal Threatened	Federal Endangered
1511	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1512	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1522	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1537	Aquatic Natural Communities	-	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1545	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1546	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1547	Aquatic/Riparian Zone Amphibians and Reptiles	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1565	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1567	Aquatic/Riparian Zone Invertebrates	-	-	-	-
	Fish	-	-	-	-
1568	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1570	Aquatic/Riparian Zone Invertebrates	X	X	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
1573	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1574	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1575	Aquatic Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1589	Aquatic/Riparian Zone Birds	X	-	X	-
	Aquatic/Riparian Zone Invertebrates	X	-	-	-
	Fish	-	X	-	-
	Upland Zone Vascular Plants	X	-	-	-
1592	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	X	-	-
1595	Aquatic Natural Communities	-	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
1597	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1612	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Terrestrial Zone Invertebrates	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1619	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1644	Aquatic/Riparian Zone Amphibians and Reptiles	-	-	-	-
	Aquatic/Riparian Zone Invertebrates	-	-	-	-
	Terrestrial Zone Invertebrates	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1646	Aquatic/Riparian Zone Amphibians and Reptiles	X	-	-	-
	Terrestrial Zone Invertebrates	-	-	-	-

Sensitive Species and Natural Communities, continued

Icon	Species Group Name	State Threatened	State Endangered	Federal Threatened	Federal Endangered
1648	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Amphibians and Reptiles	X	-	-	-
1692	Aquatic/Riparian Zone Invertebrates	-	-	-	-
	Terrestrial Zone Invertebrates	-	-	-	-
1711	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1724	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1739	Aquatic/Riparian Zone Amphibians and Reptiles	-	-	-	-
	Aquatic/Riparian Zone Invertebrates	-	X	-	X
1751	Aquatic/Riparian Zone Amphibians and Reptiles	-	X	-	-
	Aquatic/Riparian Zone Invertebrates	-	X	-	X
1753	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1758	Aquatic/Riparian Zone Amphibians and Reptiles	-	X	-	-
	Aquatic/Riparian Zone Invertebrates	-	X	-	X
1771	Aquatic Natural Communities	-	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-

FIGURE 6.3

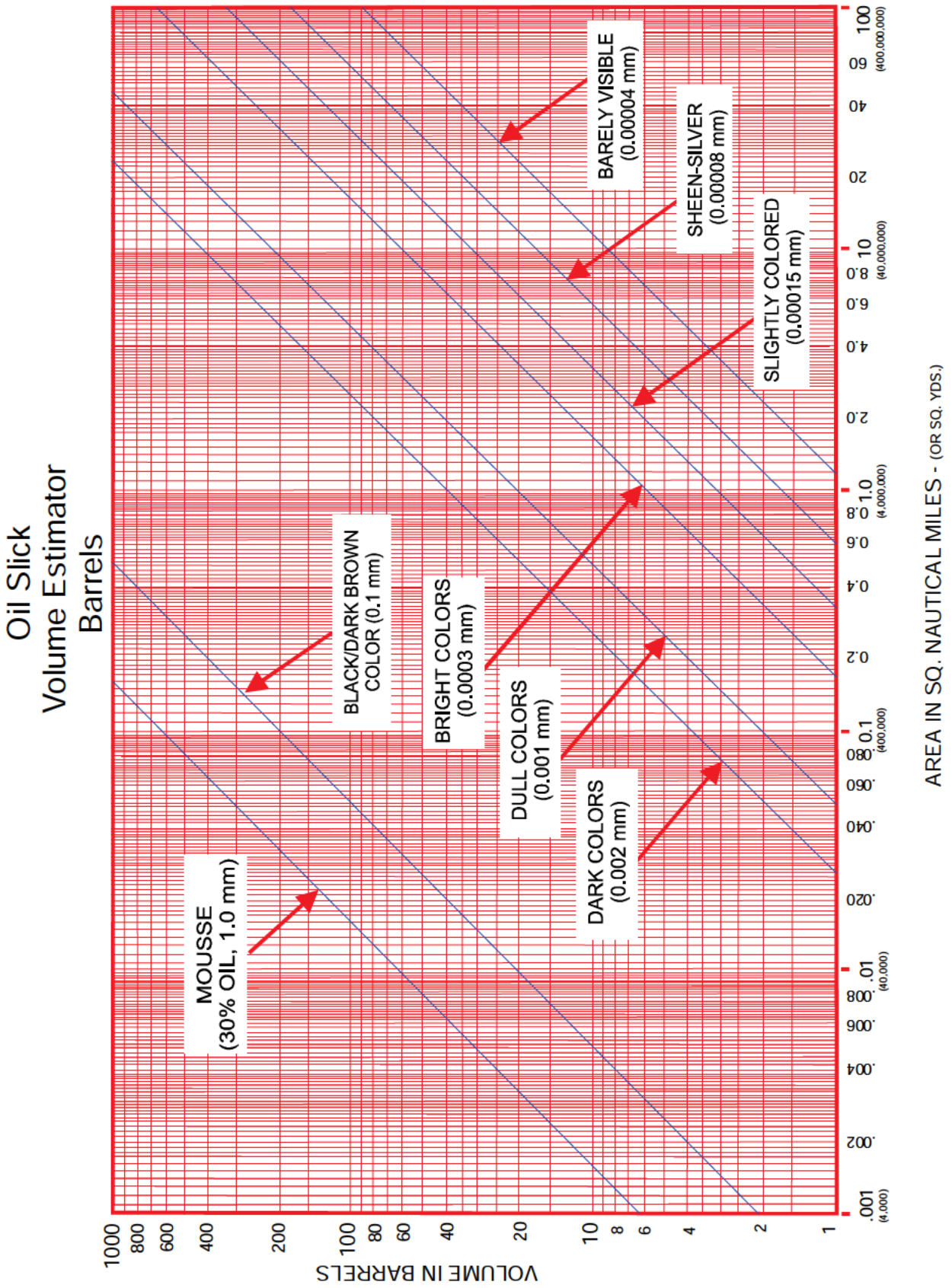

Oil Slick
Volume Estimator
Barrels
VOLUME IN BARRELS
1000
800
600
400
200
100
80
60
40
20
10
8
6
4
2
1
AREA IN SQ. NAUTICAL MILES - (OR SQ. YDS.)
.001 (4,000)
.002
.004
.006
.008 .01 (40,000)
.020
.040
.060
.080 0.1 (400,000)
0.2
0.4
0.6
0.8 1.0 (4,000,000)
2.0
4.0
6.0
8.0 10 (40,000,000)
20
40
60
100 (400,000,000)
MOUSSE
(30% OIL, 1.0 mm)
BLACK/DARK BROWN
COLOR (0.1 mm)
BRIGHT COLORS
(0.0003 mm)
DULL COLORS
(0.001 mm)
DARK COLORS
(0.002 mm)
BARELY VISIBLE
(0.00004 mm)
SHEEN-SILVER
(0.00008 mm)
SLIGHTLY COLORED
(0.00015 mm)

FIGURE 6.4

Contingency Protocol for Wildlife

Prepared for The Toledo Refining Company LLC.
Oregon, Ohio

Project Manager
Eileen Gilbert, B.S.

Project Team
Erica Miller, DVM
Heidi Stout, VMD
Kristine Evans
Katie Battaglia

Tri-State Bird Rescue & Research, Inc.
110 Possum Hollow Road
Newark, DE 19711

CONTINGENCY PROTOCOL FOR OILED WILDLIFE
For The Toledo Refining Company LLC. 2005

Initial Wildlife Response Protocol
Draft - Table of Contents

INTRODUCTION....3
GOALS OF THE WILDLIFE CONTINGENCY....3
OVERVIEW OF WILDLIFE RESPONSE
Strategies for Responding to an Oil Spill....4
Special Concerns in Oiled Wildlife Response....5-6
I. Federal Contacts....7
II. Ohio State Contacts....7
Checklist – Timely Response To Wildlife....8-9
WILDLIFE PERSONNEL RESPONSIBILITIES
Trustee Authorization and Oversight....10-11
Responsibilities on Initiation of the Wildlife Component of an Oil Spill Response....12
MIGRATORY BIRD PERMITS....12
PERSONNEL
Identifying Qualified Wildlife Responders....12
VOLUNTEER RESOURCES....13-14
OVERVIEW OF FACILITY AND EQUIPMENT NEEDS
Facility Needs and Setup....15
Site Safety....15
FACILITY REQUIREMENTS
Hot / Cold Water Capacity....16-17
Electric / Lighting....17
HVAC Systems....17-18
Communications....18
OCCUPATIONAL SAFETY AND HEALTH
Health & Safety Overview....18
Personnel Training9....18-19
Site Safety....19
Product Risks....19
Human Risk from Wildlife....20
Zoonoses....20-21
SITE SAFETY PLAN....22-24

INTRODUCTION

The Contingency Protocol for Oiled Wildlife for The Toledo Refining Company LLC (CPOW)

was developed to provide detailed information and guidance to assist refinery personnel, the wildlife resource trustees and local responders, during a major oil spill in which wildlife has been or could be affected.

The CPOW covers generic response protocols for addressing the immediate needs of wildlife threatened by or impacted by oil. It also provides the guidelines for disposing of the carcasses of wildlife that perish due to oil exposure or the complications of oil exposure, and wildlife that are euthanized.

RESPONSIBILITIES

The local wildlife agency, a Qualified Wildlife Responder and / or The Toledo Refining Company LLC. personnel should supervise implementation of this protocol. The priority for wildlife rehabilitation will be established based on current legislative restrictions and requirements and the prioritization of species at risk.

The level of response will be based on the potential for oiled animals.

GOALS OF THE WILDLIFE CONTINGENCY PLAN

A. To provide an operational template that assists The Toledo Refining Company LLC., the wildlife agencies, and supporting organizations in defining incident objectives pertaining to natural resources.

B. To provide an information base that enables the wildlife agencies and The Toledo Refining Company LLC. to: protect wildlife at risk of contamination by oil and oversee the wildlife response effort in a timely and effective manner.

OVERVIEW OF WILDLIFE RESPONSE

Wildlife response after oil spills is a complex challenge requiring a teamwork approach among wildlife management agencies, the responsible party, a contracted Qualified Wildlife Responder (outlined on page 13) and carefully trained volunteers. All wildlife actions must be coordinated with the wildlife agency or personnel beginning with the step of notification. The steps involved in notification and the general process of the wildlife component of an oil spill response (outlined on pages 7 - 9) are presented as a checklist.

Strategies for Responding to an Oil Spill

A. Keep Oil Away from Wildlife (Prevent/Reduce Impacts on Key Habitats)

The primary response strategy for wildlife protection emphasizes controlling the release and spread of spilled oil or hazardous substances at the source, in order to prevent or reduce contamination of wildlife and/or their habitats.

In general, spill control primary response strategies may include mechanical cleanup, protective booming, *in situ* burning and dispersant use. In addition, the primary response strategy includes the removal of contaminated debris, particularly contaminated food

sources (such as wildlife carcasses and oiled vegetation) both in water and on land.

In the event of an incident, The Toledo Refining Company LLC. should consult with local resource agencies regarding threats to wildlife to identify any specific actions that are appropriate for that incident. The Toledo Refining Company LLC. should also incur responsibility for implementation of the determined wildlife protection strategies.

B. Keep Un-oiled Wildlife Away from Oil (Field Assessment/Deterrents)

The secondary response strategy emphasizes keeping potentially affected wildlife away from impacted areas through the use of deterrent techniques.

Qualified and experienced observers must coordinate an immediate assessment of habitat and species at risk, followed by rapid implementation of wildlife deterrent efforts. Each hour and dollar spent preventing contamination before a wildlife impact can potentially save hundreds of hours and dollars during a response effort.

C. Respond to Oiled Wildlife

The tertiary response strategy, which is a last-resort strategy, addresses retrieval and treatment of oiled wildlife.

The key steps to effective retrieval of contaminated animals, both dead and alive, are:

- rapid selection and activation of a Qualified Wildlife Responder;
- rapid response by qualified field personnel;
- careful collection and documentation of contaminated animals and carcasses;
- timely and appropriate transportation of live animals to a wildlife response facility.

Special Concerns in Oiled Wildlife Response

Expertise in veterinary medicine, husbandry and biology is not a requirement for licensing to hold and treat wildlife; however, wildlife does benefit from professional care for traumatic injuries or diseases. More specifically, experienced professionals must be engaged to address the significant human safety and wildlife health issues inherent in dealing with wildlife contaminated in oil spills.

A. Human Health and Safety

Risks to staff and volunteers include:

- exposure to harmful components in the contaminant;
- traumatic injuries to humans caused by wild animals;
- exposure to zoonotic diseases -rabies, chlamydia, salmonella, cryptosporidia, endoparasites, etc.;
- job related injuries occurring on-site.

Prolonged hands-on contact with and/or general exposure to contaminated animals

requires more stringent protective measures than those specified for field clean-up workers. Large numbers of volunteers must be trained, scheduled and continually supervised with regard to both human and animal health and safety matters.

B. Wildlife Health Issues

For the rehabilitation effort to be successful, each oil-contaminated animal requires immediate and specialized care. When hundreds or even thousands of wild animals become oiled during a spill, the rescue effort becomes a strategically complicated, medically complex, crisis-oriented task.

To minimize mortality and maximize the rehabilitative effort, a rehabilitation facility must be identified, equipped and managed so as to function in a safe and effective manner.

C. Disease Outbreaks and Wildlife Health

Every effort must be made to prevent the transmission of disease from rehabilitated animals to free-roaming populations of wildlife. An epizootic disease is a disease that can affect large populations of animals over a short period of time. Epizootic diseases can be the result of bacterial, viral, fungal, parasitic or toxic agents and can cause widespread morbidity and mortality in wildlife populations. Wild animals contaminated by oil are exposed to stress factors in the wild and in captivity that can lower their resistance to diseases. Animals undergoing rehabilitation are confined in close quarters where spread of disease can be extremely rapid. In addition to causing sudden and high mortality within a rehabilitation facility, epizootic diseases can be introduced to geographic regions when an improperly "rehabilitated" animal is released and serves as a carrier to wild populations.

There is a risk that the release of diseased, rehabilitated animals can cause significant die-offs resulting in more damage to wildlife populations than the spill itself. This issue is addressed, in part, when trustees limit the responsibility of wildlife care to Qualified Wildlife Responders.

Natural Resource Trustee / Agency: Notification and Initiation of Response

When an oil spill impacts wildlife, or has a significant potential for impact, the Responsible Party and / or State or Federal On-Scene Coordinator (OSC) shall immediately contact the U.S. Fish and Wildlife Service (USFWS) and the Ohio Division of Fish and Wildlife. Primary and alternate contact points for each of the agencies are listed below; only one contact per agency is necessary because the person initially contacted will notify other personnel in his/her agency.

Date/Time	Person Contacted	By Whom	
			I. Federal Contacts:
_____	_____	_____	**National Response Center** *(24 hour phone number for reporting any hazardous material spill)* 1-800-424-8802
_____	_____	_____	**United States Coast Guard** Federal On-Scene Coordinator (FOSC) USCG MSO Toledo *(24 hour phone number for reporting any hazardous material spill)* 1-419-418-6050
_____	_____	_____	**United States Department of the Interior** Office of Environmental Policy Office: (215) 597-5378 Cell: (b) (6)
_____	_____	_____	**United States Fish and Wildlife Service** Primary Contact, Stan Smith Office: (612) 713-5335
			II. Ohio State Contacts:
_____	_____	_____	**Ohio Division of Fish and Wildlife (OhioF&W)** Primary contact, Carolyn Caldwell Office: (614)265-6329 24-hour: (614)799-9538
			III. QUALIFIED WILDLIFE RESPONDER: *(The QWR will select and activate the most appropriate of the pre-identified response facilities for the specific incident.)*
_____	_____	_____	**Tri-State Bird Rescue & Research, Inc.** 110 Possum Hollow Road Newark, DE 19711 Office: (302) 737-7241 Fax: (302) 737-9562 24 hour emergency pagers: (800) 710-0695 (800) 710-0696

CHECKLIST - TIMELY RESPONSE TO WILDLIFE: (Applicable to both pre- and post-spill activities)

In the event of a release that has contaminated or threatens to contaminate wildlife, the following people or agencies should be notified. Notifications may either be made by The Toledo Refining Company LLC. personnel or by the Qualified Wildlife Responder (QWR) on behalf of Sunoco. Once contracted, notifications should be completed by the QWR; this agreement should be confirmed at the time of their notification.

Assigned By Whom	Date / Time	Completed By Whom	Date / Time	
_____	_____	_____	_____	**I. NOTIFY WILDLIFE AGENCIES (RP)**
				II. IDENTIFY WILDLIFE AT RISK (Planning)
_____	_____	_____	_____	A. Species of Concern
_____	_____	_____	_____	B. Geographic Distribution
_____	_____	_____	_____	C. Seasonal Distribution
_____	_____	_____	_____	**II. IDENTIFY IMMEDIATE SPILL CONTROL OPTIONS AND THEIR CONSEQUENCES TO WILDLIFE RESOURCES (Operations)**
_____	_____	_____	_____	A. Mechanical (skimming, booms, dikes, berms)
_____	_____	_____	_____	B. Chemical (dispersants, herding agents, solidifiers)
_____	_____	_____	_____	C. Other (*in situ* burning)
				IV. IDENTIFY WILDLIFE PROTECTION OPTIONS (Planning / Operations)
_____	_____	_____	_____	A. Field/Air Assessments for Wildlife at Risk
_____	_____	_____	_____	B. Dispersing Non-oiled Animals
_____	_____	_____	_____	C. Pre-emptive Capture and Relocation of Non-oiled Animals
_____	_____	_____	_____	D. Retrieving Oiled Animals
_____	_____	_____	_____	**V. IDENTIFY AND CONTACT QUALIFIED WILDLIFE RESPONDER (RP)**

Assigned By Whom	Date / Time	Completed By Whom	Date / Time

©TSBR 1993, updated 2002

VI. DETERMINE RESPONSE TO OILED WILDLIFE (Operations - Wildlife Branch)

A. Search and Retrieval (dead and live oiled animals)
B. Field Care (stabilization)
C. Facility Setup
D. Training of Volunteers / Personnel
E. Medical and Rehabilitative Care
F. Records and Chain of Evidence
G. Pre-release Health Checks and Evaluations
H. Identification and Assessment of Release Sites
I. Release

Wildlife Personnel Responsibilities

Trustee Authorization and Oversight

Trustees are authorized to act on behalf of the public's best interest in the protection of natural resources. Full authority regarding protection and oversight of the rescue and rehabilitation of wildlife and fish remains with the trustees, although care for contaminated wildlife can be contracted by the Responsible Party, the Federal On-Scene Coordinator (FOSC), or other federal and state agencies as authorized.

Migratory birds are the species most often affected in oil spills. In these cases, the United States Fish & Wildlife Service serves as the lead agency for trustee response, coordinating with other trustees and providing oversight for the Qualified Wildlife Responder (QWR).

Effective wildlife response to oil spills requires a team approach as specialists in government and the private sector lend their skills to the response efforts. Oversight of this team effort, however, rests with the trustees. Clear definition and thorough understanding of trustee authorization and responsibilities, with regard to wildlife efforts in particular, will allow for the most timely and effective preparation and response to oil spill incidents.

A. Trustee Authorization

Authority and guidance for wildlife response following oil spills are contained in two federal plans:

- The National Multi-agency Oil and Hazardous Materials Contingency Plan (NCP 1968) assigns certain emergency response tasks to agencies with particular missions and expertise.

-The Fish and Wildlife and Sensitive Environment Plan fulfills the OPA 90 mandate for "immediate and effective protection, rescue and rehabilitation of, and the minimization of risk of damage to, fish and wildlife resources and their habitat that are harmed or that may be jeopardized by a discharge".

Department of the Interior

The US Fish & Wildlife Service, under the jurisdiction of the Department of the Interior (DOI), has trustee responsibility for birds which are listed under the Migratory Bird Treaty Act (16 USC 703-711) of 1972 (revised 1978) and for most threatened and endangered species under the Endangered Species Act (16-USC-1531-1544) of 1973.

The DOI also has trustee responsibility for sea otters, dugong, walrus and manatee under the Marine Mammal Protection Act (16 USC 1361-1407) of 1972.
The DOI is also a trustee for lands it manages, including the National Wildlife Refuges (administered by the DOI's U.S. Fish and Wildlife Service) and the National Seashores and Parks (administered by the DOI's National Park Service).

Department of Commerce / Department of the Interior

The Department of Commerce and the Department of the Interior share trustee responsibility for anadromous fish under the Anadromous Fish Conservation Act (16-USC-757a-757f). These two agencies also share trusteeship of threatened and

endangered sea turtles.

National Marine Fisheries Service

Trustee responsibility for other marine mammals (whales and seals) and sea turtles resides with National Marine Fisheries Service (NMFS), an agency of the Department of Commerce.

State Agencies

State agencies have trustee responsibilities for other game and non-game species not listed above. (States also may possess co-trustee responsibility for above-mentioned species.)

B. Oversight

Adapted from material produced by the Minnesota Wildlife Assistance Cooperative, Sartell, Minnesota.

1. General Permit Requirements

Federal Regulation 50 CFR 21.11 (1972; revised 1989) prohibits the possession of any bird listed under the Migratory Bird Treaty Act for any purpose, unless special permits have been issued for activities that show benefit to the migratory bird resource.

Most native species fall under the "protected" designation, including: all birds (except the Rock dove [pigeon], European starling and English house sparrow); all mammals with a hunting or trapping season; some reptiles, amphibians, fish and insects; and all endangered or threatened species. It is illegal to possess any protected species without the proper permits.

Required general permits and oil spill response permits from federal and state agencies should be obtained prior to collection, transportation, rehabilitation, or release of protected species. In special circumstances, permits can be obtained by the QWR at the time of a spill.

a. Federal Permits

Federal permits are necessary if birds that fall under the Migratory Bird Treaty Act, or endangered or threatened species are handled. Because sea turtles are protected under the Endangered Species Act, persons not authorized under the Act need special permits from the USFWS to handle them. Permits are obtained from the permit section of the USFWS Headquarters.

b. State Permits

State permits are required to possess and rehabilitate any wild animal in the State of Ohio.

2. Oversight of Retrieval and Rehabilitation Care

Care for contaminated wildlife can be contracted for by the RP, the FOSC or other federal and state agencies, as authorized. Migratory birds are the species most often affected in oil spills.

Responsibilities on Initiation of the Wildlife Component of an Oil Spill Response

Following the initiation of an oil spill response, the following actions will be taken:

1) The USFWS, NMFS, and Ohio Division of Fish & Wildlife may consult available reference material to determine significance of the resources in the impacted area(s).
2) The USFWS, NMFS, and Ohio Division of Fish & Wildlife may decide jointly on further involvement of each agency based upon the severity of the spill and species impacted under each agency's respective responsibilities.
3) The USFWS, NMFS, and Ohio Division of Fish & Wildlife may dispatch the most appropriate individual to inspect the spill site. This could be unilateral or cooperative effort, involving one or more of the agencies, and determined at the time of the spill, depending on the particular resources at risk.

TITLE 50, CODE OF FEDERAL REGULATIONS, PART 21
MIGRATORY BIRD PERMITS

21.11 (1972; revised 1989) General permit requirements

No person shall take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase or barter, any migratory bird, or the parts, nests, or eggs of such bird except as may be permitted under the terms of a valid permit issued pursuant to the provisions of this Part and Part 13, or as permitted by regulations in this Part or Part 20 (the hunting regulations).

[39 CFR 1178, Jan. 4, 1974, as amended at 46 CFR 42680, Aug. 24, 1981; 54 CFR 38151, Sept. 14, 1989.]

PERSONNEL

Identifying Qualified Wildlife Responders

An effective wildlife response / rehabilitation effort for oil contaminated animals requires supervision by personnel with demonstrated field experience in oil spill response. A Qualified Wildlife Responder (QWR) should be identified by the trustees and utilized for an oil spill response.

Wildlife response requires immediate coordination of efforts of all personnel. That can best be accomplished by identifying a Qualified Wildlife Responder in advance of oil spill incidents. Identification and selection of a QWR will allow for immediate response in the event of a spill. Immediate response by experienced oiled wildlife responders will insure delivery of the highest quality of treatment to the contaminated animals.

Possession of general wildlife rehabilitation permits does not indicate capabilities for oil spill response.

VOLUNTEER RESOURCES

A wildlife response effort involves many workers on multiple shifts; it benefits the response effort to have as many volunteers as possible trained in advance of spills as part of the contingency program. This type of preparation will limit the time and energy necessary during the initiation of a spill response and establishment of the wildlife response.

A. Volunteers

Because of the large number of volunteers that typically are needed in a wildlife response,

it is imperative that all of these volunteers be trained and supervised under a Qualified Wildlife Responder. In major spills, there may be two or three shifts per day, with each shift utilizing over 50 volunteer workers. Volunteers must be thoroughly trained, precisely scheduled for suitable tasks, and must be supervised at all times.

Volunteers working within the facility should be at least 18 years old. Jobs for younger volunteers can be identified as minimal risk, out-of-facility tasks. There is a place for everyone in oiled wildlife response, but the safety of humans and the welfare of the animals must be the highest priorities, not the emotional needs of the people who want to help. Not every concerned person/group can be a lead organization in a spill response.

It is recommended that volunteer training occur before a spill incident, as part of a contingency planning program. In the event of a spill, a previously trained volunteer base can then be put on alert and prepared to participate as soon as they are needed. Management by experienced personnel will minimize problems and strengthen teamwork.

B. Colleagues

While most wildlife rehabilitators and veterinarians cannot make the commitment of time needed to develop the resources to respond to major oil spills, many rehabilitators, veterinarians, and staff and volunteers from nature organizations will be willing to serve in a limited capacity during spill response efforts. The QWR, as the lead wildlife response organization, should be willing to identify each person's or organization's strengths and incorporate them into the wildlife response. Teamwork is the solution to a successful oil spill response.

C. Liability and Volunteer Criteria

All volunteers must be at least 18 years of age, in good health and have a current tetanus toxoid inoculation. Pregnant women and immuno-compromised individuals should not work directly with any wildlife - oiled or non-oiled. The Qualified Wildlife Responder/Trainer should be prepared to accept liability for training and oversight of volunteers and should require that a General Release of
Liability Form be signed before volunteers are allowed to work on the response effort. Volunteers must be able to donate a minimum of three shifts, (5 - 6 hours long), within the first two weeks of the spill response.

D. Training

1) During an oil spill involving wildlife there is an immediate need for large numbers of trained volunteers to work with the QWR.

2) With regard to human health and safety, in accordance with the National Contingency Plan, 40 CFR 300, all persons involved in a response action must comply with the OSHA safety standards. These standards vary according to the potential exposure risk to the individual relative to their assigned duty.

3) Establishing Goals for Training: raining for personnel can:

- enhance the speed and quality of a response involving wildlife following an oil spill;

- clarify the duties and the responsibilities of the spiller, clean-up contractor, state and national agencies, volunteers and the general public;
- significantly improve the treatment and the release rates for affected animals;
- considerably reduce cost of wildlife response by focusing efforts in a cost-effective manner;
- help to insure the safety of all those working in a wildlife response.

4) Training Agenda

Volunteer training on the effects of oil on wildlife should meet the guidelines set in Best Practices.

OVERVIEW OF FACILITY AND EQUIPMENT NEEDS

A. Facility Needs and Setup

Facility needs usually focus on the majority of species affected by a petroleum discharge, which historically, are avian. Facility requirements can vary significantly, depending on overall size of response, species and age of wildlife contaminated, the type of contamination, the season/weather, the location of the spill, and the rehabilitation effort. The facility needed will vary according to the needs of the specific spill situation, and should be determined by a representative of a wildlife response group with major spill response experience (Qualified Wildlife Responder).

Because facility requirements can vary so significantly, a permanent facility is not always advisable, and may actually be an impediment in providing the appropriate facility design for the situation. A suitable facility must have a large open space on the ground floor that can easily be configured and reconfigured to accommodate the changing needs of this unique form of wildlife rehabilitation. All rehabilitation efforts should be accommodated under one roof. Experience has taught that multiple buildings or a tent situation are ineffective and unsuitable. A warehouse, township garage, armory, motor pool or convention hall that is accessible to a trained labor force, is within a reasonable distance from hotel accommodations, and has adequate parking and exterior grounds could meet this requirement. If a facility is situated in a secure site, *e.g.* military instillation or refinery, entry needs for a fluctuating volunteer work force will have to be addressed. The facility may be located away from the spill site, provided that on-scene stabilization is administered prior to transportation. An oil spill stabilization site can be located at the time of a spill.

It is recommended that a list be assembled of potential sites within the identified high risk areas, and the these sites be physically reviewed by a Qualified Wildlife Responder. Once actual facilities have been identified, all costs, availability, and contract information should be reviewed every six months. A list of specific facility requirements and site evaluation forms follows.

B. Site Safety

Immediately following the retrofitting of a facility, a site safety plan must be initiated, preferably as a part of the contingency plan and/or as a part of the site selection process. The safety plan must include checklists for measures to avoid physical, chemical and biological hazards, and should contain emergency procedures and contact numbers. Site safety issues are addressed in this document. In addition, there is a form to be utilized in developing a

site-safety plan.

Facility and equipment requirements can vary significantly, depending on the factors discussed in the introduction. The actual quantities of materials needed will vary according to the needs of the specific spill situation, and should be determined by a Qualified Wildlife Responder.

FACILITY REQUIREMENTS

This list represents minimum facility needs for rehabilitating 100-150 oiled animals.
Space requirements:

- Front desk / Admissions	250 sq. ft.
- Logistics Office	250 sq. ft.
- Kitchen / Food storage	200 sq. ft.
- Husbandry/ Area (large central room)	1200 sq. ft.
- Supplies / Storage	250 sq. ft.
- Wildlife Cleaning Area I	750 sq. ft.
- Medical Treatment / Exam	200 sq. ft.
- Pathology / Lab / Cold Storage	100 sq. ft.
- Isolation Ward	200 sq. ft.
- Volunteer / Worker Rest Room	150 sq. ft.
- Bathrooms, Decon, Changing	200 sq. ft.
- Outside Pool Areas @ one 10' x 15' x 2' pool per 15 birds, + access and maintenance space	3300 sq. ft.
- Non-hazardous and hazardous (medical and oil) waste	
Indoor	50 sq. ft.
Outside	400 sq. ft.
- Outside area for oily waste water	300 sq. ft.
- Loading Dock / Parking for 50 (opposite side of building from outside cages)	5000 sq. ft.
Total interior sq. ft.	**3800 sq. ft.**
Total exterior sq. ft.	**9000 sq. ft.**
Total sq. ft.	**12,800 sq. ft.**

Note: If an existing wildlife rehabilitation center were to be used, it would require the above space in addition to the space allocated for any existing caseload. Animals impacted by an oil spill must be cared for separately from the in-house population.

HOT / COLD WATER CAPACITY

When selecting a wildlife response facility it is important that the water supply will not be contaminated by the oil spill. For preplanning purposes, potential facility locations should be selected in areas of low spill probability. All oily waste water must be collected and disposed of in accordance with federal and municipal regulations. The large quantities of rinse water, pool and general use water generated during a spill response are permitted access to most municipal systems. It is therefore inadvisable to select a location that relies on a septic system to handle

waste, for this large volume of water can exceed the designed capacity of most septic systems. Ideally, there should be external access to cold water supplies (*e.g., hose faucets on exterior of building)* for filling outdoor pools.

Due to the nature of wildlife rehabilitation, large amounts of water are used in many locations throughout the facility. It is therefore advisable that the facility should have floors that can tolerate being wet, with drains at least in the areas designated for cleaning activities.

- Cold Water Volume (pools and general use)	23360 gallons per day
- Hot Water Volume (animal cleaning only)	450 gph @ 40 degrees C.
	6750 gallons per day @ 15 hrs.
- Water Pressure (animal cleaning only)	50 - 60 psi.
- Water Hardness (animal cleaning only)	0.042 - 0.060 ppm

True sea birds (diving and pelagic species) cannot be successfully rehabilitated unless the water is maintained at the proper water hardness.

N.B. A potential facility suitable in terms of size, availability and location should not be discarded due to hot water and hardness capacities. Provided there is an adequate cold water supply, mobile hot water and treatment systems can be retrofitted into existing equipment without much difficulty.

ELECTRIC / LIGHTING

The electrical needs of a wildlife response facility are very similar to conventional factory operations in so far as the need for general and task lighting, with separately circuited outlets throughout the space capable of providing 20 amp protection. Because of potential risk of electric shock in wet areas, the addition of a ground fault interrupter (GFI) circuit breaker in those areas is desirable.

In addition to lighting and heat, ventilation and air conditioning (HVAC) systems, electric power will be used for hot water heaters, freezers, refrigerators, heat lamps, pet dryers, office and medical equipment, pool pumps and filters, power tools, etc.

- 200 amp 120/240 volt 3-wire single phase service with minimum of ten (10) 20 amp circuits in addition to the lighting and HAVC needs, with the ability to expand.

HVAC Systems

The three main concerns regarding air quality are:

1) Eliminating thermal stress to debilitated animals by providing a stable, draft free inside air temperature between 21- 26 degrees C;
2) Minimizing human and animal exposure to petroleum volatiles; and,
3) Minimizing animal exposure to pathogenic organisms (bacterial and fungal).

- Air within a wildlife response facility should be exchanged 6 times per hour within office space, 10 times per hour within large open areas involving animal care, and 20 times an hour within critical care and surgical areas and still maintain ambient temperatures.

- Typical HVAC systems used in industrial space are often forced air or closed re-

circulating systems which by themselves will not meet the above requirements. These systems will need to be augmented with portable filtration High-Efficiency Particulate Air (HEPA) filters and air exchange units. The design of the systems should be determined by the wildlife response group once the facility has been selected and the particulars of the animal caseload is known.

- Air quality in systems that employ return air filters can be enhanced through the replacement of the existing filters with an electrostatic type. This will not, however, preclude the need for HEPA type filtration and regular air exchanges as outlined above.

COMMUNICATIONS

Minimum of three (3) telephone lines (public, private, fax/modem) with the ability to add as needed.

OCCUPATIONAL SAFETY AND HEALTH

Health and Safety Overview

Contact with oil and oiled wildlife must be minimized through the use of personal protective equipment (PPE), ventilation and human hygiene. Field safety issues must also be considered. The following recommendations are general guidelines for an oiled wildlife response safety plan. These guidelines were designed to meet *The Occupational Safety and Health Act* of 1970 *Safety Standards (USA).* The 1970 *Safety Standards* do not apply to volunteers - only to employees. (Anku, 1994) In addition, the standards vary according to the potential exposure risk to the individual relative to their assigned duty. (Jennings, 1996) Regional requirements should be reviewed in order to ensure compliance specific to the response location.

A. Personnel Training

All individuals, employees or volunteers, must receive minimum instruction in Health and Safety concerns, including:

- "Right to Know" issues (potential hazards of the spilled product),
- basic first aid and/or emergency notification instruction in case of exposure to the product,
- the use of PPE as advised for the spilled product, and
- potential hazards encountered when working with wildlife in general, and methods to prevent or minimize these hazards.

Health and safety concerns for field personnel and transporters are included in **section 9**.

All team leaders in the wildlife response facility should meet national, state and local requirements for safety training in order to anticipate and avoid safety problems, instruct other staff and volunteers of these potential hazards, and respond to any emergencies. All other staff and volunteers should receive a minimum of four hours equivalent of Health and Safety instruction to prepare them to recognize, avoid and/or respond to any potential

health or safety hazard in the area in which they work.

Access to and from any wildlife staging area or rehabilitation facility must be restricted to only those individuals who have received the above training.

Because of the potential for exposure to toxins and disease, any individual who is immuno-compromised (presently sick with an infectious disease, on chemotherapy, has a liver disease or any immuno-compromising disease, etc.), is pregnant, or is under the age of 18 years, should not be allowed to work with wildlife (either petroleum-contaminated or non-contaminated).

B. Site Safety

A site safety plan must be initiated as soon as the staging and/or wildlife rehabilitation area is established. The safety plan must include:

1. checklists for measures to avoid physical, chemical and biological hazards
2. locations of emergency equipment (first aid kits, eye wash stations, fire extinguishers, etc.,)
3. floor plan of the facility indicating emergency exits
4. emergency procedures and contact numbers

General site safety guidelines apply to wildlife rehabilitation operations. The form in this section can be used as a guideline for developing individual site-safety plans.

C. Product Risks

Petroleum products, in, on and around wildlife may present a hazard to human health and safety. Various components in petroleum products can damage skin and conjunctivae of eyes on contact, lungs if inhaled, and the gastrointestinal tract if inadvertently ingested. Chronic and/or prolonged exposure may cause damage to the central nervous system and/or the reproductive system, and some cancers including skin cancer and leukemia.

Protective measures must be taken to avoid and/or minimize exposure. Individual risk factors such as pregnancy or history of liver disease should be taken into consideration when allowing personnel access to contaminated areas. Personal hygiene must be stressed during the decontamination process.

D. Human Risk from Wildlife

Specific human health and safety concerns in handling wildlife will vary with the species of animals involved, but some general guidelines should be followed. All individuals who will be handling oiled wildlife must be trained in proper capture and restraint techniques:

1. The head (beak or teeth) and feet (talons or claws) of most animals can cause serious injuries if the handler has received improper or incomplete training or is inconsiderate of the animal's needs because of haste or carelessness, etc.

2. Protective eyewear should be worn when working with birds with long, pointed beaks, and towels or gloves should be used to restrain the feet of all birds

(note: towels allow the handler to control the entire body of the bird without damaging feathers).

3. Animals should be held at waist-height, away from human faces.

4. At least two people should be present for any prolonged handling (examinations, washing, etc.)

5. Aggressive mammals should be controlled with nets or snare poles, and should be sedated for any prolonged handling.

Anyone handling wildlife should have a current tetanus shot (booster every 10 years). Anyone handling mammals should have a current rabies vaccination (titer checked every two years, and boosters given as needed).

E. Zoonoses

Unique to the wildlife aspect of an oil spill response is the potential hazard of zoonotic diseases, *i.e.*, diseases which can be transmitted from animals to humans. Of specific concern are the following diseases:

Birds:

Aspergillosis--a fungal disease causing respiratory problem in humans.
Chlamydiosis--a bacterial disease causing flu-like symptoms in people. Potentially fatal.
Salmonellosis--a bacterial disease causing diarrhea in humans.
Avian Tuberculosis--a bacterial disease causing skin lesions and occasionally respiratory problems in humans.
Histoplasmosis--a fungal disease causing pneumonia in humans.

Mammals:

Rabies--a viral disease causing central system (CNS) nervous disorder in humans. *Fatal if untreated.*
Giardia--a protozoal disease causing diarrhea in humans.
Baylisascaris--a parasite causing central nervous disorder and death in humans.
Campylobacteriosis--a bacterial disease causing diarrhea in humans.
Cryptosporidiosis--a protozoal disease causing diarrhea in humans.
Toxoplasmosis--a protozoal disease which may cause CNS disorder in humans.
Leptospirosis--a bacterial disease which may cause hepatitis, nephritis and meningitis in humans.

Vector-transmitted diseases:

These zoonotic diseases may not necessarily affect wildlife, which act as diseases for the reservoirs, but they do affect humans. These diseases are transmitted from the carrier animals to humans via parasites such as ticks, fleas and mosquitoes.

Rocky Mountain spotted fever--a rickettsial (bacteria-like) disease transmitted by ticks, which may cause rashes, headaches, nephritis, anemia and meningitis in humans.

Bubonic plague--a bacterial disease transmitted by fleas, which may cause swollen lymph nodes, septicemia, hemorrhages and death in humans.

Wearing gloves while cleaning animal cages and food bowls, washing hands with a disinfectant soap, wearing gloves and surgical mask while performing necropsies (postmortem examinations), and providing for adequate room ventilation will help to avoid contracting these diseases.

SITE SAFETY PLAN

Site Description

Site:_____

Location:_____

Building / Structure (s):_____

Outdoor area:_____

_____

Surrounding area: ____ industrial ____ residential ____ rural _____ other

Potential Weather Hazards: ____ heat stress ____ hyperthermia ____ fog ___ storms
____ frostbite ____ hypothermia ____ice ___ other

Site Organization

Safety Officer_____

Organization_____

Headquarters_____

Address_____

Team Leaders: Spill Manager_____

Logistics_____

Field Retrieval_____

Medical_____

Cleaning_____

Husbandry_____

Site Control

___ Restricted areas designated with signs
___ Restrictions (PPE) posted at entry
___ Sign-in / Sign-out
___ Predator control for outdoor facility

Product / Hazard Evaluation

Product identification_____

Contains: A) **Benzene** (crude, gasoline, military JP4, commercial JET B, aviation gasoline, gas oils, and feed stocks).
B) **PolyAromatic Hydrocarbons** (PAHs) (kerosene, diesels, military JP5, commercial JET A).
C) **Hydrogen sulfide** (sulfur hydroxide) (sour crudes).

Action: A) May cause dermatitis, nausea & eye irritation. Hematologic toxin and carcinogen. Wear full PPE. Wash hands & change before exiting site.

B) May cause dermatitis, nausea & eye irritation. Wear full PPE. Wash hands and change before exiting site.
C) Irritating to eyes & mucous membranes; pulmonary edema; asphyxiation; headaches, diarrhea, fatigue; CNS depressant. Irrigate eyes & provide respiratory support if exposed.

General Site Safety & Health Procedures Checklist

___ Fire extinguishers: ___ Medical Area ___ Washing Area

___ Whistles at fire extinguishers: ___ Medical Area ___ Washing Area

___ Fire exits marked and routes posted

___ First Aid Kits: ___ Medical Area ___ Washing Area

___ Electrical Cords grounded

___ MSDS posted

___ Eye wash station or flush bottles available

Checklist For Field Retrieval

___ Heat Stress: ___ Fluids available in rest area

___ Cold Stress: ___ Heated / Sheltered rest area ___ Warm fluids available in rest area ___ Blankets

___ Personal Flotation Devices (for water retrieval)

___ Insect Repellent

___ Snake Bite Kits

Personal Protective Equipment (PPE)

___ Required gear posted at entry
___ Tyveks ___ Gloves
___Aprons ___ Glasses

Decontamination Procedures

___ Rags/Towels for wiping off equipment & PPE clothing
___ Bin for disposal of contaminated clothing, towels
___ Bin for disposal of contaminate papers & boxes
____Wash stations for staff/volunteers leaving site
___ Storage area for PPE to be reused

Emergency Procedures

___ Identify local emergency numbers and post by telephone

Police: _____

Fire: _____

Ambulance/EMT/Hospital: _____

24 hour toxicology/poison hot line: _____

____ Identify safety personnel to whom injuries/accidents/hazards shall be reported

©Tri-State Bird Rescue & Research, Inc. 1994 eam, revised 2002

Figure 6.5

Cleanup Methods

Figure 6.5

Clean Up Methods			
Method	***Cautions***	***Don't use on…***	***Recommended for…***
Barriers/Berms		Safety concerns limit use on gasoline spills	Deflecting spills away from sensitive resources
Booming	Safety Concerns limit containment of gasoline spills Fast currents, shallow water, steep banks limits effectiveness.		Deflecting spills away from sensitive resources Driving slickes toward collection points in low current areas
Chemical Shoreline Pretreatment	Insufficient information on impact and effectiveness (particularly on manmade structures)		
Debris Removal	Degree of oiling warrants debris removal and disposal.		
Dispersants	Inhibit evaporation of gasoline	Shallow water depths (May result in high aquatic toxicity)	
Emulsion-Treating Agents		Gasoline (does not form emulsions) Shallow freshwater (insufficient toxicity data to evaluate impact)	
Flooding		Heavy oils (Leave large amounts of residuals) Gasoline spills (may transport the gasoline to more sensitive habitats)	Fresh/fluid oils

PHMSA 00012428

Figure 6.5

Method	***Cautions***	***Don't use on…***	***Recommended for…***
Herding Agents		Not effective on heavy oils (oil must be fluid)	Calm Conditions
High Pressure – Cold Water Flushing	High pressure jets may fluidize sand/soil and wash oiled sediments into sensitive areas.	Gasoline spills (may transport the gasoline to more sensitive habitats) Heavy oils (Leave large amounts of residuals)	Fresh/fluid medium crude oils
High Pressure – Hot Water Flushing	Will kill any attached organisms High pressure jets may fluidize sand/soil and wash oiled sediments into sensitive areas.		Heavy oil (heat liquefaction)
In-Situ Burning	Generates air pollution, thermal impact on biota and residue. Public Safety concerns Less environmental in winter (Snow and ice, plants dormant, fewer animals)	Lighter oils – may penetrate sand/soil leaving insufficient concentration to burn	Heavy oil accumulations
Low Pressure – Cold Water Flushing	Optimize pressure to minimize amount of material washed down-slope.	Heavy oils (Leave large amounts of residuals) Gasoline spills (may transport the gasoline to more sensitive habitats)	Fresh fluid oils

Figure 6.5

Method	***Cautions***	***Don't use on…***	***Recommended for…***
Low Pressure – Hot Water Flushing	Negative impact on any organisms present. Optimize pressure to minimize amount of material washed down-slope.		Heavy crudes (heat makes oil more fluid)
Manual Oil Removal/Cleaning		Small Persistent pockets of oil exposed on surface	Heavy oils in patches or crevices
Mechanical Oil Removal	Tends to remove large amounts of clean soil/sand/gravel with contaminated material May require very intrusive recovery techniques		High use areas where rapid removal is necessary.
Natural Microbe Seedling	May require chemical shoreline pretreatment. Insufficient information on available products, effectiveness or impact		
Natural Recovery	Sheltered bedrock may need cleanup because of slow natural removal rates For smaller spills only, larger spills may persist.	Heavy oils (will persist on all but most exposed shores)	Lighter oils/More exposed settings

PHMSA 000124290

Figure 6.5

Method	***Cautions***	***Don't use on…***	***Recommended for…***
Nutrient Enrichment	Nutrient overloading in poorly flushed areas	Gasoline Spills (Gas evaporates too rapidly) Weathered thick oil residues	Lighter oils that leave thin residues.
Physical Herding	Potential to drive oil into the water column or sediment May be only water to remove oil trapped in vegetation or debris		
Sediment Reworking			Lightly oiled and stained sediments
Shoreline Cleaning Agents	Individual products vary in their toxicity and recoverability		Sticky Oils
Skimming	Land Based Operations need site specific restrictions to minimize physical destruction		
Solidifiers	Early use may prevent pooled oil from penetrating deeper.	Heavy oils (too viscous)	Heavy accumulations of pooled oil Control chronic Sheening (including gasoline)
Sorbents	Overuse generates excess waste	Heavy oils (will be slow) Not applicable to gasoline spills (evaporate too rapidly) Large rivers or open water (oil spread and drift to rapidly)	Along riprap structures to recover residual sheening
Steam Cleaning and Sand Blasting	Will kill any organism present		Persistent oil removal for aesthetic reasons
Vacuum	Early use of vacuum will prevent deeper penetration	Not applicable to gasoline spills because of safety concerns	Thick/heavy oils Pooled oil in crevices

Figure 6.5

Method	***Cautions***	***Don't use on…***	***Recommended for…***
Vegetation Removal	Helps prevent secondary oiling of wildlife		
Visco-Elastic Agents		Heavy oils (too viscous) Gasoline spills (inhibition of evaporation)	

Toledo Refining Company, LLC

Fig 6.5 -5

Facility Response Plan
March 2011

Figure 6.6

Clean up methods by Habitat Recommendations

Figure 6.6 – Clean Up Methods by Habitat Recommendations

Spill on Land (Habitat Response)					
Habitat Type	***Least Adverse Habitat Impact***	***Some Adverse Habitat Impact***	***Probable Adverse Habitat Impact***	***Most Adverse Habitat Impact***	***Insufficient Information***
Bedrock	Natural Recovery	Flooding/Low Pressure – Cold Water Flushing	Nutrient Enrichment	Steam Cleaning and Sand Blasting	Natural Microbe Seeding
	Debris Removal	High Pressure – Cold Water Flushing	High-Pressure, Hot – Water Flushing		
	Sorbents	Manual Oil Removal/Cleaning	Steam Cleaning and Sand Blasting		
		Vacuum			
		In-situ Burning			
		Shoreline Cleaning Agents			
		Solidifiers			
		Low Pressure – Hot Water Flushing			
Manmade Structures	Manual Oil Removal/Cleaning/ Debris Removal	Flooding	Nutrient Enrichment		Chemical Shoreline Pretreatment
	High Pressure – Cold Water Flushing	Low Pressure – Cold Water Flushing	Steam Cleaning and Sand Blasting		
	Sorbents	Low Pressure – Hot Water Flushing			
	Vacuum	High-Pressure, Hot –Water Flushing			
	Natural Recovery	Shoreline Cleaning Agents			
		Solidifiers			
		In-situ Burning			

Figure 6.6 – Clean Up Methods by Habitat Recommendations

Habitat Type	***Least Adverse Habitat Impact***	***Some Adverse Habitat Impact***	***Probable Adverse Habitat Impact***	***Most Adverse Habitat Impact***	***Insufficient Information***
Sand	Debris Removal		Low Pressure – Hot Water Flushing	High Pressure – Hot Water Flushing	Chemical Shoreline Pretreatment
	Natural Recovery	Mechanical Oil Removal		High Pressure – Cold Water Flushing	Natural Microbe Seeding
	Flooding	Low Pressure – Cold Water Flushing			
	Sorbents	Vacuum			
		Sediment Reworking			
		Nutrient Enrichment			
		Shoreline Cleaning Agents			
		Solidifiers			
		In-situ Burning			
Mixed Sand/Gravel	Debris Removal	Vacuum	High Pressure – Cold Water Flushing	High Pressure – Hot Water Flushing	Chemical Shoreline Pretreatment
	Natural Recovery	Manual Oil Removal/Cleaning	Low Pressure – Hot Water Flushing	Steam Cleaning	Natural Microbe Seeding
	Flooding	Sediment Reworking			
	Sorbents	Mechanical Oil Removal			
	Low Pressure – Cold Water Flushing	Shoreline Cleaning Agents			
		Nutrient Enrichment			
		In-situ Burning			
		Solidifiers			

Figure 6.6 – Clean Up Methods by Habitat Recommendations

Habitat Type	***Least Adverse Habitat Impact***	***Some Adverse Habitat Impact***	***Probable Adverse Habitat Impact***	***Most Adverse Habitat Impact***	***Insufficient Information***
Gravel	Debris Removal	Vacuum	Low Pressure – Hot Water Flushing	High Pressure – Hot Water Flushing	Chemical Shoreline Pretreatment
	Natural Recovery	High Pressure – Cold Water Flushing	Mechanical Oil Removal	Steam Cleaning	Natural Microbe Seeding
	Flooding	Nutrient Enrichment			
	Sorbents	Manual Oil Removal/Cleaning			
	Low Pressure – Cold Water Flushing	Sediment Reworking			
		Shoreline Cleaning Agents			
		In-situ Burning			
		Solidifiers			
Vegetated Shoreline	Natural Recovery	Sorbents	High Pressure – Cold Water Flushing	Low Pressure – Hot Water Flushing	Chemical Shoreline Pretreatment
	Flooding	Manual Oil Removal/Cleaning	Mechanical Oil Removal	High Pressure – Hot Water Flushing	Natural Microbe Seeding
	Low Pressure – Cold Water Flushing	Debris Removal		Sediment Reworking	Shoreline Cleaning Agents
		Vacuum		Solidifiers	
		Vegetation Removal			
		Nutrient Enrichment			
		In-Situ Burning			

Figure 6.6 – Clean Up Methods by Habitat Recommendations

Habitat Type	***Least Adverse Habitat Impact***	***Some Adverse Habitat Impact***	***Probable Adverse Habitat Impact***	***Most Adverse Habitat Impact***	***Insufficient Information***
Mud	Natural Recovery	Debris Removal	In-Situ Burning	Solidifiers	Chemical Shoreline Pretreatment
	Flooding	Vacuum	Low Pressure – Cold Water Flushing	Mechanical Oil Removal	Natural Microbe Seeding
	Sorbents		Manual Oil Removal/Cleaning	Sediment Reworking	
			Low Pressure – Hot Water Flushing	Shoreline Cleaning Agents	
				High Pressure – Cold Water Flushing	
				High Pressure – Hot Water Flushing	
Wetlands	Natural Recovery	In-Situ Burning	Vegetation Removal	High Pressure – Cold Water Flushing	Chemical Shoreline Pretreatment
	Sorbents	Vacuum	Manual Oil Removal/Cleaning	High Pressure – Hot Water Flushing	Natural Microbe Seeding
	Flooding	Debris Removal		Low Pressure – Hot Water Flushing	Nutrient Enrichment
	Low Pressure – Cold Water Flushing			Mechanical Oil Removal	Shoreline Cleaning Agents
				Sediment Reworking	
				Solidifiers	

Figure 6.6 – Clean Up Methods by Habitat Recommendations

Spill on Water (Habitat Response)					
Habitat Type	***Least Adverse Habitat Impact***	***Some Adverse Habitat Impact***	***Probable Adverse Habitat Impact***	***Most Adverse Habitat Impact***	***Insufficient Information***
Small Lake and Pond	Booming	Natural Recovery	Manual Oil Removal/Cleaning	Dispersants	Emulsion Treating Agents
	Skimming/Vacuum	In-situ Burning	Mechanical Oil Removal		Natural Microbe Seeding
	Sorbents	Herding Agents			
		Debris Removal			Nutrient Enrichment
		Vegetation Removal			
		Physical Herding			
		Visco-Elastic Agents/ Solidifiers			
Small River and Streams	Booming	Physical herding	Manual Oil Removal/Cleaning	Dispersants	Emulsion Treating Agents
	Skimming/Vacuum	Natural Recovery	Mechanical Oil Removal	Herding Agents	Natural Microbe Seeding
	Sorbents	Debris Removal			
	Barriers/Berms	Visco-Elastic Agents/ Solidifiers			
	Natural Recovery	Vegetation Removal			Nutrient Enrichment
		In-situ Burning			

Figure 6.6 – Clean Up Methods by Habitat Recommendations

Habitat Type	***Least Adverse Habitat Impact***	***Some Adverse Habitat Impact***	***Probable Adverse Habitat Impact***	***Most Adverse Habitat Impact***	***Insufficient Information***
Large River	Booming	Natural Recovery	Dispersants	Herding Agents	Nutrient Enrichment
	Skimming/Vacuum	Physical Herding		High Pressure – Cold Water Flushing	Natural Microbe Seeding
		Sorbents			
		In-situ Burning			
		Emulsion Treating Agents			
		Vegetation Removal			
		Debris Removal			
		Visco-Elastic Agent /Solidifiers			
		Manual Oil Removal/Cleaning			
		Mechanical Oil Removal			
Open Water	Booming	Physical Herding			Nutrient Enrichment
	Skimming/Vacuum	Sorbents			Natural Microbe Seeding
	In-situ Burning	Vegetation Removal			
	Natural Recovery	Emulsion Treating Agents			
	Low Pressure – Cold Water Flushing	Visco-Elastic Agent /Solidifiers			
		Dispersants			
		Herding Agents			
		Manual Oil Removal/Cleaning			
		Mechanical Oil Removal			

Figure 6.6 – Clean Up Methods by Habitat Recommendations

Habitat Type	***Least Adverse Habitat Impact***	***Some Adverse Habitat Impact***	***Probable Adverse Habitat Impact***	***Most Adverse Habitat Impact***	***Insufficient Information***
Sand	Debris Removal		Low Pressure – Hot Water Flushing	High Pressure – Hot Water Flushing	Chemical Shoreline Pretreatment
	Natural Recovery	Mechanical Oil Removal		High Pressure – Cold Water Flushing	Natural Microbe Seeding
	Flooding	Low Pressure – Cold Water Flushing			
	Sorbents	Vacuum			
		Sediment Reworking			
		Nutrient Enrichment			
		Shoreline Cleaning Agents			
		Solidifiers			
		In-situ Burning			
Mixed Sand/Gravel	Debris Removal	Vacuum	High Pressure – Cold Water Flushing	High Pressure – Hot Water Flushing	Chemical Shoreline Pretreatment
	Natural Recovery	Manual Oil Removal/Cleaning	Low Pressure – Hot Water Flushing	Steam Cleaning	Natural Microbe Seeding
	Flooding	Sediment Reworking			
	Sorbents	Mechanical Oil Removal			
	Low Pressure – Cold Water Flushing	Shoreline Cleaning Agents			
		Nutrient Enrichment			
		In-situ Burning			
		Solidifiers			

Section 7.1 - INTRODUCTION

The Facility is classified as a "Non-Transportation Related Onshore Facility" which operates in a NON-Higher Volume Port Area.

Pipeline (and associated breakout tank) facilities must perform discharge calculations for the U.S. DOT/PHMSA. The EPA and DOT/PHMSA discharge volume calculations are described as follows:

EPA Discharge Volume Calculation
● **Worst Case Discharge** *100% of the largest single tank* ● **Medium Discharge** *Discharge greater than 2,100 gallons (50 Bbls) and less than or equal to 36,000 gallons (857 Bbls) or 10% of the capacity of the largest tank, whichever is less and not to exceed the WCD* ● **Small Discharge** *Discharge of less than or equal to 2,100 gallons (50 Bbls), not to exceed the WCD*

USCG Discharge Volume Calculation
● **Worst Case Discharge** *DOT-PHMSA discharge volume calculation was used as the WCD because the pipeline crosses Otter and Duck Creeks* ● **Maximum Most Probable Discharge (MMPD)** *1,200 BBls or 10% of the WCD, whichever is less, for the facility* *2,500 BBls or 10% of the WCD, whichever is less, for a vessel* ● **Average Most Probable Discharge (AMPD)** *50 BBLS or 1% of the WCD, whichever is less*

Section 7.1 – INTRODUCTION (cont'd)

DOT-PHMSA Discharge Volume Calculation

- **Worst Case Discharge**
  The largest volume (Bbls) of the following:

  - *Pipeline's maximum release time (hrs), plus the maximum shutdown response time (hrs), multiplied by the maximum flow rate (Bbls/hr.), plus the largest line drainage volume after shutdown of the line section.*

  -- OR --

  - *Largest foreseeable discharge for the line section is based on the maximum historic discharge, if one exists, adjusted for any subsequent corrective action or preventive action taken.*

  -- OR --

  - *Capacity of the single largest breakout tank or battery of tanks within a single secondary containment system, adjusted for the capacity or size of the secondary containment system.*

The following planning volume calculations must be performed to determine the required response resources for a Worst Case Discharge:

Planning Volume for On-Shore Recovery (OSR)

OSR = WCD * % Oil On Shore * Emulsification Factor

Planning Volume for On-Water Recovery (OWR)

OWR = WCD * % Recovered Floating Oil * Emulsification Factor

Recovery Capacity (RC)

RC = OWR * On-Water Recovery Resource Mobilization Factors

The recovery capacity determined by these equations is compared to the appropriate response capability caps from the EPA tables, the actual contracted response amount is the lesser of the two values. If the calculated capacity exceeds the capability caps, sufficient response resources should be available for twice the amount of the caps or up to the total planning volume, whichever is less.

The facility handles, stores and /or transports Group 5 oils in excess of ten percent of total facility storage capacity. Response resources as identified in 40 CFR 112, Appendix E, Section 7.6.1 are available by contract or other approved means.

Section 7.1 – INTRODUCTION (cont'd)

Scenario Types

The occurrence of a Small, Medium, or Worst Case Discharge could be the result of any number of scenarios at the Facility including:

- Tank overfill and/or failure.
- Piping rupture.
- Piping leak, under pressure and not under pressure.
- Explosion or fire.
- Equipment failure (e.g. pumping system failure, relief valve failure, or other general equipment relevant to operational activities associated with internal or external facility transfers).

The response actions to each of these scenarios are outlined in Section 3.1 and Figures 3.1, 3.2, and 3.3. The response resources are identified in a quick reference format in Figure 5.1 with additional detail on equipment and manpower provided in Appendix J. Facility response personnel list/telephone numbers and other internal/external resources telephone numbers are detailed in Figures 2.4 and 2.5.

Discharge Scenario	Potential Oil Group	Planning Volumes		
		DOT/ PHMSA	EPA	USCG
				Facility
Small/Average Most Probable	3/4	---	50 Bbls	50 Bbls
Medium/Maximum Most Probable	3/4	---	857 Bbls	1,200 Bbls
Worst Case	(b) (7)(F), (b) (3) [redacted]			

EPA TABLES

FOR WORST CASE DISCHARGE RESPONSE RESOURCES DETERMINATION

AND REMOVAL CAPACITY PLANNING

Spill Location	(1) Rivers & Canals			(2) Nearshore/Inland/Great Lakes		
Sustainability of on-water oil recovery	3 Days			4 Days		
		D	E		D	E
Oil Group	% Natural Dissipation	% Recovered Floating Oil	% Oil On Shore	% Natural Dissipation	% Recovered Floating Oil	% Oil On Shore
I. Non-persistent oils	80	10	10	80	20	10
II. Light crudes	40	15	45	50	50	30
III. Medium crudes and fuels	20	15	65	30	50	50
IV. Heavy crudes and fuels	5	20	75	10	50	70

EMULSION FACTORS

F	
NON-PERSISTENT OIL	
Group I	1.0
PERSISTENT OIL	
Group II	1.8
Group III	2.0
Group IV	1.4
Group V	1.0

RESPONSE CAPABILITY CAPS (bbls/day)
(Maximum Required Recovery levels)

AREA	TIER 1	TIER 2	TIER 3
Rivers and Canals	(b) (7)(F), (b) (3)		
Great Lakes			
Inland/Nearshore			

ON-WATER OIL RECOVERY RESOURCE MOBILIZATION FACTORS

AREA	TIER 1	TIER 2	TIER 3
River	.30	.40	.60
Inland/Near shore Great Lakes	.15	.25	.40

NOTE: These mobilization factors are for total resources mobilized, not incremental response resources.

RESPONSE TIME (hours)

AREA	TIER 1	TIER 2	TIER 3
Higher volume port area	(b) (7)(F), (b) (3)		
All Other			

Section 7.2 - RESPONSE CAPABILITY SCENARIOS

Small Discharge = 50 Bbls

A small discharge at this Facility is considered to be a discharge that does not exceed 50 barrels (2,100 gallons).

Description

This size discharge would most likely occur due to minor equipment failures or human error. Examples may include, but not limited to,

- Pump seal leak
- Valve leak
- Container rupture
- Storage spill

The most likely location for a discharge of this size would be leaking Facility piping and would be crude oil, gasoline, #2 fuel oil, or kerosene.

This size discharge would likely be noticed quickly and appropriate clean up measures taken since product transfers are monitored by Facility personnel. These types of small spills are typically contained on the grounds of the Facility (earthen material or concrete). Adverse weather conditions would not hinder response efforts during a small discharge.

Prevention

Several steps can be taken to limit the number of occurrences and the amount of discharges. In particular, employees receive training periodically on the proper procedures for pipeline transfers. In addition, preventive maintenance of equipment is performed at regularly scheduled intervals to ensure that any weaknesses are discovered. Also, old or worn parts are replaced as needed. Annual product transfer and pipeline testing is the most important of these measures.

Additional Comments

While the Facility's OSRO or spill contractor would be notified and the best method for containment determined, such discharges that are contained at the Facility could be diverted to the product tanks that are not at maximum capacity. Spills that enter Otter Creek can be handled by response contract vacuum truck, absorbent pad and boom, or other equipment.

The closest body of navigable water is Otter Creek (see Figure 6.2). The storage tanks have adequate secondary containment so it is unlikely that a spill would reach Otter Creek or travel very far if it did. Finally, this type of spill is not one that is expected to result in a chain reaction of failures of other equipment.

Section 7.2 - RESPONSE CAPABILITY SCENARIOS (Cont'd)

Small Discharge = 50 Bbls (Cont'd)

Response Requirement

The Facility shall identify sufficient resources, by contract or other approved means, to respond to a small discharge. The response resources shall, as appropriate, include:

- 1,000' of containment boom and a means of deploying it within one (1) hour of the discovery of a spill.
- Oil recovery devices with an effective daily recovery capacity equal to the amount of oil discharged in a *Small Discharge* or greater which is available at the Facility within two (2) hours of the detection of an oil discharge.
- Oil storage capacity for recovered oily material equivalent to twice the effective daily recovery rate.

Facility Response Resources/Capability

The Facility will respond to a ***Small Discharge*** with the manpower detailed in Figures 2.4 and 4.1 as well as local contract resources as detailed in Figure 2.5, 5.1, and Appendix J.

- A 50 Bbl discharge at the Facility typically will not escape the containment of the Facility.
- If a fifty (50) barrel discharge escaped the Facility it could flow to Otter Creek. However, due to the design of the containment area and the sewer systems, spilled product would be directed to the Facility sewer system.

Offsite Impact

- A portion of Otter Creek traverses through the Facility property. Therefore, the potential impact to wildlife and sensitive habitats does exist. The worst probable chain reaction to a spill of this type would be storm related. Severe weather could possibly carry the product toward Maumee Bay/Lake Erie.
- Oil containment and recovery devices can be secured from contract resources (with a minimum effective daily recovery capacity of 50 Bbls) and can be implemented at the Facility, as the situation demands.
- A minimum of 100 Bbls of oil storage capacity for recovered oily material can be secured from contractor resources or made available within the Facility's storage facilities, as the situation demands.
- Additional recovery and storage equipment may be secured from other Toledo Refining Company, LLC and contract resources, as the situation demands.

Section 7.2 - RESPONSE CAPABILITY SCENARIOS (Cont'd)

Small Discharge = 50 Bbls (Cont'd)
Notes: ● Equipment and manpower resources are detailed in Sections 4.0, 5.0, Figure 5.1, Figure 5.2 and Appendix J. ● Telephone references are provided in Figures 2.4 and 2.5. ● Response resources and actions for Group 5 oil spills are outlined in Appendix H.

Section 7.3 – RESPONSE CAPABILITY SCENARIOS

Medium Discharge = 857 Bbls

A medium discharge at this Facility is considered to be a discharge that does not exceed 857 barrels (36,000 gallons).

Description

This size discharge would most likely occur due to a major equipment failure or during product transfer. Examples may include, but not limited to,

- Line or flange rupture
- Valve rupture
- Tank failure
- Tank overfill or failure
- Pipeline manifold rupture.

Because of dikes and other containment located throughout the Facility, it is very unlikely that the discharge would leave the Facility property or reach a navigable waterway before spill containment could begin. However, a portion of Otter Creek traverses through the Facility property, so potential impact does exist. Adverse weather conditions would increase the chances of a discharge entering Otter Creek, and eventually Maumee Bay/Lake Erie; however, the following response actions would minimize the impacts on sensitive areas.

Prevention

Several steps can be taken to limit the number of occurrences and the amount of discharges. In particular, employees receive training periodically on the proper procedures for transfers to and from tanks (e.g. proper tank gauging procedures). This training includes what to do in the event of an unusual occurrence such as equipment rupture (i.e. how to transfer spilled material to the miscellaneous tank or product tanks).

In addition, preventive maintenance of equipment is performed at regularly scheduled intervals to ensure that any weaknesses are discovered, such as tank inspections and hydrostatic testings. Old or worn parts are replaced as needed. Storage tank ages can be referenced in Appendix K.

Immediate Action

In the event of a medium size discharge, the OSRO or spill contractor would be notified. While waiting for the OSRO to arrive, qualified Facility personnel would complete internal and external notifications and begin initial deployment of facility owned equipment. Diked area containment of large spills can be handled with the use of contractor vacuum trucks. Medium discharges resulting from tank failure would more than likely be contained by the dike.

Otter Creek traverses through the Facility property (see Figure 6.2), so the potential exists for a spill to reach navigable water. Therefore, the potential impact to environmentally sensitive areas does exist. Finally, the most likely chain reaction of failure would be fires resulting from accidental spark or downed power lines.

Section 7.3 – RESPONSE CAPABILITY SCENARIOS

Medium Discharge = 857 Bbls (Cont'd)

Response Requirement

The Facility shall identify sufficient response resources, by contract or other approved means, to respond to a Medium Discharge. The response resources shall, as appropriate, include:

- Oil recovery devices with an effective daily recovery capacity equal to 50% of the *Medium Discharge* volume must be capable of arriving on scene within 12 hours.
- Sufficient quantity of containment boom must arrive within 12 hours for oil collection and containment and for protection of fish and wildlife and sensitive environments, as appropriate.
- Temporary storage capacity equal to twice the daily recovery capacity must be available.

Facility Response Resources/Capability

The Facility will initially respond to a ***Medium Discharge*** with a similar response to the Small Discharge. Additional response resources will be activated from an Oil Spill Removal Organization(s) (OSRO) as detailed in Figures 2.5, 5.1, and Appendix C and will arrive within 12 hours.

- All resources shall be capable of arriving at the Facility within the applicable response level requirements (Level 1 = 12 hours; Level 2 = 36 hours; Level 3 = 60 hours)
- Oil recovery devices with an effective daily recovery capacity of 428 Bbls (50% of the Medium Discharge volume) secured from the OSRO(s) will be on scene within 12 hours.
- 857 Bbls of oil storage capacity for recovered oily material will be secured from the OSRO(s) and/or made available within the Facility's storage facilities.
- Containment boom for oil collection and containment and for protection of fish and wildlife and sensitive areas will be secured from the OSRO(s) in the event that the spill impacts Otter Creek.
- Diked area containment of large spills can be handled with the use of contractor equipment.

Notes:

- Equipment and manpower resources are detailed in Sections 4.0, 5.0, Figure 5.1, Figure 5.2 and Appendix J.
- Telephone references are provided in Figures 2.4 and 2.5.
- Response resources and actions for Group 5 oil spills are outlined in Appendix H. References are provided in Figure 2.2 and 2.5.

Section 7.4 - RESPONSE CAPABILITY SCENARIOS

Worst Case Discharge = (b) (7)(F), (b) (3)

A worst-case discharge at this Facility is considered to be a discharge that does not exceed (b) (7)(F), (b) (3) .

Description

This size discharge would most likely occur due to a natural disaster or catastrophic event. Examples may include, but not be limited to,

- Tank fire
- Earthquake-induced spills
- Catastrophic tank shell failure
- Tornado-induced spills
- Pipeline manifold rupture.

Diking and containment areas are located throughout the Facility. For a discharge this size to reach a navigable waterway, or leave the Facility property, diking would have to be damaged or destroyed (breached).

Prevention

For a worst case discharge caused by a natural disaster, preparedness is more appropriate than prevention. The Facility employees receive training periodically on the proper procedures to deal with a natural disaster. Employees are also trained in steps to follow if the Facility must be evacuated (due to a tank fire or other emergency). In addition, preventive maintenance of tanks is performed at regularly scheduled intervals to ensure that any weaknesses are discovered. Storage tank ages can be located in Appendix K.

Worst Case Discharge And Adverse Weather

Calculation of the planning volume for a worst-case discharge are provided in this section. It should be noted that it is not practical to consider all the variables associated with different weather scenarios so the planning distance could alter slightly. Severe rain events and associated flooding would also increase the chances of an oil spill from leaving the property.

Probable chain reactions of failures would be induced by the weather conditions. They would include, but not be limited to, fires, health hazards, and discharges of more than one product.

Worst Case Spill Pathway Scenario

In the event of tank rupture, the product may splash over the dike wall and flow toward Otter Creek.

For a spill that is confined to the land along the pathway, Facility personnel would have at least two (2) options by which to contain the spill:

- Dams
- Trenches

Section 7.4 - RESPONSE CAPABILITY SCENARIOS (Cont'd)

Worst Case Discharge = (b) (7)(F), (b) (3)

Protection Of Groundwater

The chances of groundwater impact due to a spill are minimal because the pathway between the Facility and the waterway is improved and/or impervious to a large extent. However, if a spill moved downward through the soil horizons and reached the groundwater table, then it would be necessary to contain and recover the product.

If the groundwater is near the surface, a possible solution might be a trench or an existing ditch. The back side of the trench or ditch could be lined with a polyethylene sheeting material which can serve to collect product for transfer to the oil/water separator. The groundwater would then be allowed to continue in its movement. If, however, the contaminated area is large and slow moving, an open trench may not be the answer. A deflecting barrier could be used as a structure which is more permanent than a trench or ditch and that moves the skimmed floating product to an upright recovery culvert with slits cut in the sides to allow the product to move inside and filter out the rocks.

Deep groundwater recovery could be accomplished by using a cone of depression type of pumping method. By placing a well suction beneath the floating product and producing a funnel type of effect, the product could be brought to a general area. This cone of depression forms a greater area of product. The second pump shaft could then be placed in this region.

Ditch Containment

A spill may also be contained in storm water ditches. Some practical containment methods are:

- A board skimming device
- Earth dam and weir
- Wire fence filter boom
- Culvert weir
- Under flow dam

These methods are simple to construct and effective for containment.

Spills That Reach the Waterway

A portion of Otter Creek traverses through the Facility property (see Figure 6.2). The priority during larger spills is to prevent oil from reaching the waterway. Oil spill response organizations (OSROs) that are under contract with the Facility will be the initial responders. Some of these OSROs can initiate initial boom deployment and anchoring at the waterway within one hour. A Damage Assessment by the state and federal trustees would more than likely follow the response.

Section 7.4 - RESPONSE CAPABILITY SCENARIOS (Cont'd)

Worst Case Discharge = (b) (7)(F), (b) (3)

Response Requirement

The Facility shall identify sufficient response resources, by contract or other approved means, to respond to a worst case discharge to the maximum extent practicable. The response resources shall, as appropriate, include:

- Sonar, sampling equipment, or other methods for locating the oil on the bottom or suspended in the water column.
- Containment boom, sorbent boom, silt curtains, or other methods for containing the oil that may remain floating on the surface or to reduce spreading on the bottom.
- Dredges, pumps, or other equipment necessary to recover oil from the bottom and shoreline.
- Equipment necessary to assess the impact of such discharges.
- Other appropriate equipment necessary to respond to a discharge involving the type of oil handled, stored, or transported.

Facility Response Resources/Capability

The Facility will respond to a Worst Case Discharge (WCD) initially with a similar response as identified for a Small or Medium Discharge. Facility Management will initiate "immediate response actions" located in Section 3.0 immediately upon discovering a spill. Additional OSRO(s) will be activated as the situation demands. The response resources will be capable of arriving within the required response levels and will include:

- Oil recovery devices with an effective daily recovery capacity equal to the lesser of 50% of the WCD or the response caps will be secured from the OSRO(s) and other Toledo Refining Company, LLC resources. Any amount in excess of the required caps will be contracted for and responded to as part of the same response effort.
- Temporary storage capacity equal to twice the daily recovery capacity will be secured from OSRO(s), other Toledo Refining Company, LLC resources, or made available within the Facility's storage facilities.
- At least 20% of the on-water response equipment secured from the OSRO(s) and other Toledo Refining Company, LLC resources will be capable of operating in water of 6 feet or less depth.
- Containment boom for oil collection and containment and for protection of fish and wildlife and sensitive environments and socio-economic sensitivities will be secured from the OSRO(s) and other Toledo Refining Company, LLC resources.

RESPONSE CAPABILITY SCENARIOS (Cont'd)

Worst Case Discharge = (b) (7)(F), (b) (3)

Facility Response Resources/Capability (Cont'd)

- Resources capable of responding to a shoreline clean-up operation involving the calculated volume of oil and emulsified oil that might impact the shoreline will be secured from the OSRO(s) and other Toledo Refining Company, LLC resources.
- Overall response operations will be conducted under the Incident Command System with adequate Facility and Contract Response personnel to continue operations for a minimum of seven (7) days.

Notes:

- Equipment and manpower resources are detailed in Sections 4.0, 5.0, Figure 5.1, Figure 5.2 and Appendix J.
- Telephone references are provided in Figures 2.4 and 2.5.
- Response resources and actions for Group 5 oil spills are outlined in Appendix H.

Section 7.5 - Toledo Refining Company, LLC Response Planning Volume Calculations

Location Data	
Location Type	(b) (7)(F), (b) (3)
Port Type	
WCD Product Type	
Product Group	
Capacity of the Largest Single Tank (Bbls)	

Discharge Volumes/Calculations	
Average Most Probable or Small Discharge (bbls)	(b) (7)(F), (b) (3)
Maximum Most Probable or Medium Discharge (bbls)	
Worst Case Discharge – Based on EPA criteria (bbls)	

Selected Calculation Factions (Based on EPA Tables)	
Removal Capacity Planning Volume – Percent Natural Dissipation	20%
Removal Capacity Planning Volume – Percent Recovered Floating Oil	15%
Removal Capacity Planning Volume – Percent Oil Onshore	65%
Emulsification Factor	2
Tier 1 – On Water Oil Recovery Resource Mobilization Factor	30%
Tier 2 – On Water Oil Recovery Resource Mobilization Factor	40%
Tier 3 – On Water Oil Recovery Resource Mobilization Factor	60%

Response Planning Volume Calculations	
On-Water Recovery Volume (bbls)	(b) (7)(F), (b) (3)
On-Shore Recovery Volume (bbls)	
Total Recovery Volume (bbls)	
Shoreline Cleanup Volume (bbls)	

	Tier 1	Tier 2	Tier3
On-Water Recovery Capacity (bbls/day)	(b) (7)(F), (b) (3)		
Shallow Water Response Capacity (bbls/day)			
Storage Capacity (bbls/day)			
On-Water Response Caps (bbls/day)			
Additional Response Req'd (bbls/day)			
Response Time (Hrs)			

Section 7-6 Toledo Refinery U.S. DOT/PHMSA Worst Case Discharge Calculations

(b) (7)(F), (b) (3)

[redacted]

Section 8.1 Hazard Identification

Loading / Unloading of Transportation Vehicles

This Facility conducts pipeline, truck and rail transfer operations.

Day-to-Day Operations

The day-to-day operations at the Facility that may present a risk of discharging oil or releasing a hazardous substance are:

- Loading/unloading storage tanks via pipeline transfer
- Loading/unloading operations across five (5) rail racks

Work such as piping replacement/repair is rare, and would only be done on portions of the system that are isolated from the active system.

There are no drainage troughs at this Facility. There are no weirs or pre-deployed boom at this Facility.

There are no sump pumps located at this Facility.

Secondary Containment Volumes

Secondary containment is provided for the bulk storage tanks and/or transfer points at the Facility. The Facility has a strong spill response plan in place to address any spill.

Tanks:

Secondary Containment volumes for all bulk storage tanks are detailed on the "Hazard Identification Tanks" form located in Appendix K.

The tanks at the Refinery are surrounded by dikes constructed of compacted soil or concrete which provide secondary containment.

Drainage:

The refinery is tiled to direct all liquids to the refinery's oil-bearing system which drains to the wastewater treatment facility. The on-site wastewater treatment facility is currently owned and operated by Treated Water Outsourcing (TWO) on behalf of Toledo Refining Company, LLC. The refinery sewer system and wastewater treatment facility provide additional containment for a potential spill at both the refinery and No. 2 Tank Farm. The wastewater treatment facility is located north of the refinery, along Navarre Avenue.

Section 8.1 - Hazard Identification (Cont'd)

Secondary Containment Volumes (Cont'd)

Water is transported via the oil-bearing sewers to the wastewater treatment facility by gravity. The API oil-water separator is at the headworks of the wastewater treatment facility. Here, a primary oil-water separation is effected. The recovered oil is returned to the Refinery for reprocessing. The water is then routed to a Dissolved Nitrogen Flotation (DNF) unit for additional oil and solids removal. This oil is also reprocessed through the Refinery. The clarified DNF effluent flows to a series of three (3) equalization/storm water storage tanks. Each of the three (3) tanks has a capacity of (b) (7)(F), (b) (3) gallons. In the equalization mode, the tanks provide over 10 hours of retention time to dampen any spikes of dissolved constituents. In the storage mode, the tanks provide storage for excessive storm water flow, and could also be used as storage for oil released into the Refinery sewer as the result of a spill.

The wastewater treatment facility is designed to handle the volume of water from a 25-year, 24-hour storm (7.5 million gallons) or the flow of water from a 25-year one-hour storm (b) (7)(F), (b) (3) Should the flow exceed the design capacity, an emergency overflow exists to discharge the effluent to Otter Creek. The three (3) equalization/storage tanks are located in a diked area which would provide containment during of an equalization/storage tank overfill.

The secondary treatment section of the wastewater treatment facility consists of a conventional activated sludge system to biodegrade the dissolved organic contaminants. In the aeration tanks, large amounts of air are introduced to a mixture of equalized effluent and activated sludge. The treated effluent flows to the clarifiers where any sludge that is carried over settles out and is returned to the aeration tanks. The clarifier effluent flows to the sandfilter make-up sump. Most of the clarifier effluent is polished by the sandfilters and used as make-up water to the Refinery cooling towers. The remainder is sent to the City of Toledo Public Owned Treatment Works (POTW).

Normal Daily Throughput

The Normal Daily Throughput for the Facility:

Normal Daily Throughput	Average Daily Storage	Total Storage
(b) (7)(F), (b) (3)		

The Facility has sufficient tank volume to handle any potential increase in Facility receipts / transfers.

Section 8.2 - Vulnerability Analysis

Introduction

The vulnerability analysis addresses the potential effects (i.e., to human health, property, or the environment) of an oil spill originating from the Facility. Section 6.0 of this Plan provides general guidance to the responder for "Spill Impact Considerations", addressing response options for many of the specific sensitivities detailed below.

The area potentially affected by a spill originating from the Facility has a number of characteristics which require consideration in the event of a discharge.

- The natural topography that existed at the Refinery site has been altered to make the site more suitable for development. Generally, elevations are higher at the southern portions of the site than the northern portions, although the overall topography is broken by structures such as tanks, dikes, and processing units. There are three (3) low-lying areas: the wastewater treatment facility area, the western border along Navarre Park, and the portion of Otter Creek flowing along Willow Cemetery. After flowing along part of the eastern side of Willow Cemetery, Otter Creek enters a culvert and flows through part of the Refinery, and is then returned to an open channel downstream of the Refinery.

Water Intakes

(b) (7)(F), (b) (3)

[redacted]

Section 8.2 - Vulnerability Analysis (Cont'd)

(b) (3), (b) (7)(F)

Residential Areas and Businesses

The Refinery is bordered by the commercial area along Woodville Road on the southwest, Navarre Park on the west, a residential area along Navarre Road on the north and a residential area and Willow Cemetery on the east. Impacts to these areas could involve closure and/or evacuation.

Any evacuation efforts for these areas will be coordinated with the local emergency assistance agencies (police department, fire department, etc.). Additional detail on the residential areas within the area of the Facility are included on the maps in Figure 6.2.

Wetlands, and other Sensitive Environments

Several wetlands were identified in Figure 6.2 Many of these sensitive areas are associated with state parks and wildlife refuges. Wetlands and wildlife refuges serve as high ecologically productive areas and therefore, if they become oiled, can result in high ecological loss Wetlands and other sensitive areas which were identified as potentially vulnerable to a spill are presented below:

- Cullen Park
- Navarre Park
- Ravine Park
- Woodtick Peninsula Wetland
- Carland Beach Wetland
- Detwiler Park
- Bay View Park
- Erie March Reserve
- Muddy Creek Estuary
- Otter Creek Estuary
- Sterling State Park
- Cedar Point National Wildlife Refuge
- Indian Island Wetland
- Ottawa National Wildlife Refuge
- Mallard Club Marsh Wildlife Area
- Magee Marsh State Wildlife Area
- Erie Marsh
- Erie State Game Area
- Maumee Bay State Park
- Metzger Marsh Wildlife Area
- Ottawa River Mouth Wetland
- Crane Creek State Park

Section 8.2 - Vulnerability Analysis (Cont'd)

During a response situation the USFWS and applicable state agencies should be contacted for information regarding wetlands and other sensitive environments. Upon contact the agencies will be able to:

- Identify and establish priorities for fish and wildlife, wetlands, and other sensitive environments requiring protection from any direct or indirect effects from a discharge.

- Identify potential environmental effects on fish and wildlife, wetlands, and other sensitive environments resulting from removal actions or countermeasures.

Fish and Wildlife

Fisheries and wildlife biologists in Ohio and Michigan were contacted and questioned about the species of fish and wildlife that would be affected by a spill in the Maumee Bay area of Lake Erie. As there are a wide range of species present in the Maumee River and the Western portion of Lake Erie, the species potentially impacted would be quite diverse. Potential impacts that could result from an oil spill would include acute impacts (e.g., mortality) and chronic impacts (e.g., reduced reproductive success, growth). The following categories of fish and wildlife (and other biota) could potentially be impacted:

1. Migratory Waterfowl
2. Shorebirds
3. Raptors
4. Fish
5. Mammals
6. Reptiles and Amphibians
7. Invertebrates

Habitat areas for these species are identified in Figure 6.2.

Lakes and Streams

With the exception of Lake Erie, no lakes were identified as being potentially impacted due to a Toledo Refining Company, LLC release. However, several rivers and streams were identified as being potentially impacted by a discharge from the Facility, in particular, Otter Creek. Almost all of the rivers and streams would not receive any oiling except during a worst case discharge.

Otter Creek, which runs through the Facility property, could be immediately impacted in the event of a spill from this Facility. It is also possible that Duck Creek could be impacted. Both Otter and Duck Creeks have wetlands that are adjacent to the creeks and would likely receive oiling if oil was present in either of the creeks. Other creeks that might receive oiling (depending upon flow/wind/storm conditions) are identified below.

The lakes, streams, and rivers that may be potentially impacted by a discharge originating at the Facility are identified on the maps in Figure 6.2.

Section 8.2 - Vulnerability Analysis (Cont'd)

Endangered Flora and Fauna

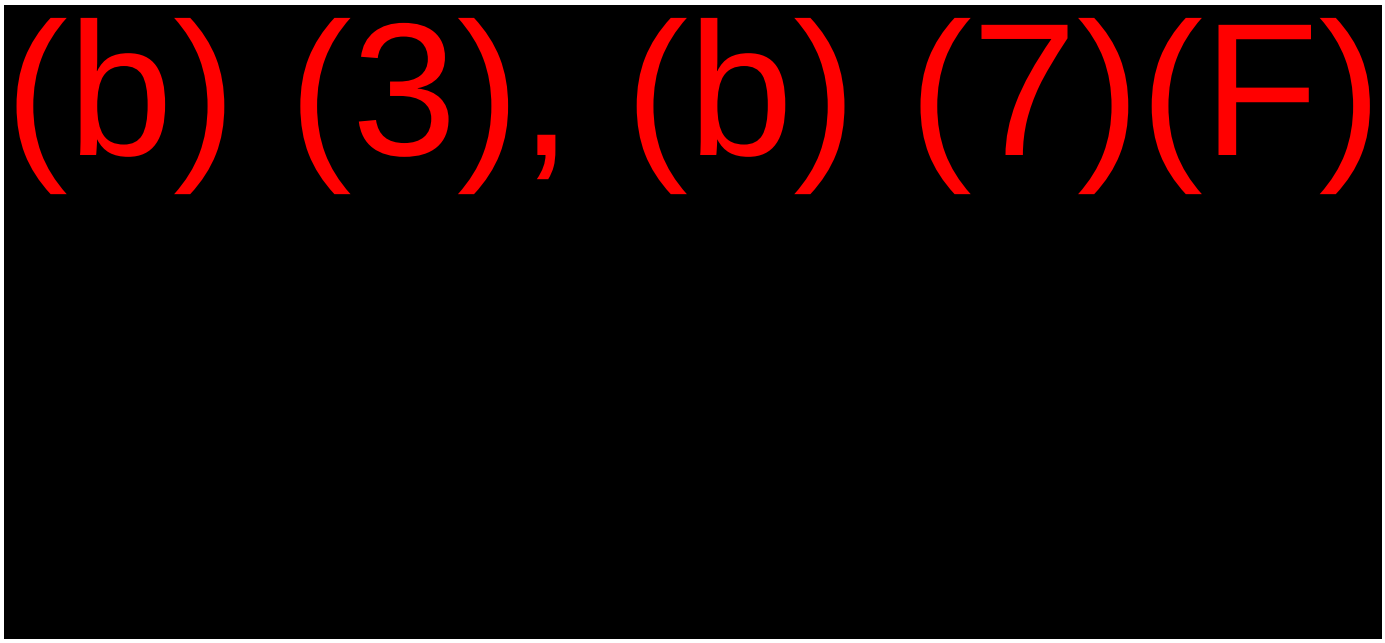
Many State natural resource departments contain a natural heritage division that maintains a list of the threatened and endangered resources within the State. Most resource agencies are unwilling to provide specific details on the exact locations of threatened and endangered species. However, in the event of an oil spill, the resource agencies can be contacted to obtain information on endangered resources during the course of an emergency (i.e., spill).

The endangered flora and fauna that may be potentially impacted by a discharge originating at the Facility are detailed in Figure 6.2.

Recreational Areas

Recreational areas are subject to closure from releases of oil. These closures are mainly due to the presence of vapors/fumes or direct oiling of property such as a boat launch

The recreational areas that may be potentially impacted by a discharge originating at the Facility are more fully identified on the maps in Figure 6.2.



Section 8.2 - Vulnerability Analysis (Cont'd)

(b) (3), (b) (7)(F)

(b) (7)(F), (b) (3)

Other Areas of Economic Importance

The lakes and rivers are bordered by various dock facilities, other commercial facilities, and recreational/public use areas. These areas are identified on the maps in Figure 6.1.

Any evacuation efforts necessary for these areas will be coordinated with the local emergency assistance agencies (police department, fire department, etc.), State Police, U.S. Coast Guard, and other agencies as the situation demands. Telephone references are provided in Figure 2.5.

Section 8.3 - Analysis of the Potential for a Spill

The potential for a significant spill at the Facility is minimal due to the spill prevention measures that are in place and the operating procedures followed by facility personnel. The potential for a spill of sufficient magnitude to escape the Facility is very remote due to the spill mitigation measures inherent in the facility design.

Spill prevention measures include a number of discharge detection methods and various inspection procedures described further in Appendix I.

Tank age, as well as other tank information, can be found in the Hazard Identification Tanks table located in Appendix K.

Facility operating procedures are defined in the Procedures Manual. All personnel responsible for Facility operations are qualified. New personnel receive on-the-job training working with experienced operating personnel as well as training in the areas of safety, spill prevention, emergency response, and applicable pollution prevention laws, rules and regulations. They become qualified prior to assuming unsupervised operating responsibilities.

Spill mitigation measures include facility designs intended to direct releases to containment areas where they can be promptly controlled and cleaned up.

The horizontal range of a potential spill from this Facility is as follows: in the event that a spill does escape the Facility's boundaries, the spill could travel towards Otter Creek, and eventually Lake Erie.

The Facility area is not typically subject to excessive damage from inclement weather such as hurricanes and floods. Although it is possible for tornadoes and floods to occur, there have been no spills at the Facility which were caused by natural disasters of this kind.

Other factors such as earthquake zones and Karst topography should be considered when evaluating the potential for a spill. The Facility is susceptible to minor earthquakes, according to the U.S. Geological Survey, however, a discharge has never resulted from an earthquake. The Facility is situated on an underlying layer of carbonate bedrock which has the potential to develop Karst. Though landslides are prevalent in a few areas of Ohio, the Facility is not in such an area where landslides are known to occur.

Section 8.4 - Reportable Oil Spill History

The Facility maintains a separate Oil Spill History file in the Facility office. The Facility's file contains the below listed information to the extent that such information is reasonably identifiable. Spill history prior to 2002 is available in the Environmental Department records.

- Date of discharge.
- Location of discharge.
- Discharge cause(s).
- Material(s) discharged.
- Amount discharged.
- Amount of discharge that reached navigable waters.
- Amount recovered.
- Effectiveness and capacity of secondary containment.
- Clean-up actions taken.
- Steps taken to reduce possibility of recurrence.
- Total storage capacity of the tank(s) or impoundment(s) from which the material discharged.
- Enforcement actions.
- Effectiveness of monitoring equipment.
- Description of how spill was detected.

Date of discharge	*Location of discharge*	*Discharge cause(s)*	*Material(s) discharged*	*Amount discharged*	*Amount of discharge that reached navigable waters.*	*Amount recovered*	*Effectiveness and capacity of secondary containment.*	*Clean-up actions taken.*	*Steps taken to reduce possibility of recurrence.*	*Enforcement actions.*	*Effectiveness of monitoring equipment.*	*Description of how spill was detected.*
12/31/2013	T&S RR	Leak	Diesel	210 gals	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
11/22/2013	GR	Leak	Naptha	2000 gals	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
8/7/2013	TF1	Leak	Gasoline	309 gals	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
7/29/2013	TF1	Leak	Diesel	61 gals	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
6/19/2013	T&S RR	Leak	Harf/CSO	68 gals	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
4/30/2013	TF1	Leak	Diesel	76 gals	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
4/15/2013	P/5	Leak	Crude Oil	17.8 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
2/1/2013	P/2	Leak	HCO (oil)	26 gals	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
8/7/2012	TF1	Leak	LCO	28 gals	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
2/22/2012	TF1	Leak	Harf/CSO	8.8 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
1/20/2012	T&S RR	Leak	Harf/CSO	1 bbl	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
1/11/2012	T&S RR	Leak	Harf/CSO	0.9 bbl	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
12/30/2011	T&S RR	Leak	Harf/CSO	5.9 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
10/7/2011	TF1	Leak	Jet Fuel	50 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
9/26/2011	P/5	Leak	Virgin crude	41 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
8/19/2011	P/4	Leak	Hydrocarbon	203 gals	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
5/16/2011	T&S RR	Leak	Harf/CSO	8.2 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
4/29/2011	P/4	Leak	LCO	10 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
4/1/2011	TF1	Leak	Gasoline	31 gals	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report

2/3/2011	TF1	Leak	Gasoline	27 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
12/17/10	T&S	Leak	Transmix	30 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
10/30/10	T&S	Leak	Gasoline	150 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
07/15/10	P/5	Leak	Gas Oil	2.5 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
05/27/10	P/5-1	Leak	LCO	38.5 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
05/16/10	P/5	Leak	Gas Oil	10 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
05/11/10	T&S	Leak	Harf/CSO	25 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
04/06/20	p/2-1	Leak	Diesel	41.1 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
01/04/10	TF1	Leak	Diesel	28 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
10/27/09	TF1	Leak	Harf/CSO	33 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
10/16/09	T&S	Leak	Harf/CSO	25 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
9/28/2009	P/4	Leak	Gasoline	30 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
08/02/09	TF1	Leak	Gas Oil	38 (.90 BBL)	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
02/27/09	P/9	Spill/Leak	Hydrocarbon	403 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
02/26/09	P/9	Spill/Leak	Hydrocarbon	6.5 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
01/29/09	T&S	Spill/Leak	Harf/CSO	155 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
10/02/08	TF#1	Spill/Leak	Other - LCO	31.8 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
08/30/08	P/6-2	Spill/Leak	Other - Jet	28 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
07/24/08	P/3	Spill/Leak	Other - Dark Oil	3.9 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
03/18/08	T&S	Spill/Leak	Other - LCO / Gas Oil	250 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
03/11/08	P/9-2	Spill/Leak	Other - Lube Oil	40 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report

02/01/08	Waste Water Separator	Spill/Leak	Other - Hydrocarbon	1108 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
01/09/08	P/3	Spill/Leak	Other - Diesel	30 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
09/12/07	T&S	Spill/leak	Cat Gas	2 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
08/14/07	P/5-1	spill/leak	Virgin crude	2 bls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
07/23/07	T&S	spill/leak	HGO	1 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
07/16/07	T&S	spill/leak	Jet Fuel	1 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
07/08/07	P/6-2	spill/leak	Jet Fuel	3 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
06/26/07	Plant 5-1	spill/leak	Crude Oil	4 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
06/24/07	Plant 5-1	spill/leak	Crude Oil	<1 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
06/04/07	T&S	spill/leak	Hydrocarbon	206 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
05/21/07	T & S	spill/leak	LCO	7.5 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
04/13/07	T&S	spill/leak	Heavy Gas Oil	1 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
03/29/07	T&S	spill/leak	Diesel	1 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
02/28/07	T&S	spill/leak	Gas Oil/FCC Feed	45 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
02/05/07	T&S	spill/leak	Polycase	800 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
02/05/07	Plant 6	spill/leak	Reformate	1 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
08/24/06	T&S	Leaks/Spills	Jet / Kero	30 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
08/20/06	Plant 5-1	Leaks/Spills	Flash Crude	42 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
08/11/06	Plant 9-2	Leaks/Spills	Wet Gas	8 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
08/08/06	Plant Wide - Ops	Leaks/Spills	Hydrocarbon	9 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
05/22/06	Plant 5-1	Leaks/Spills	Heavy Oil	30 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report

04/08/06	Plant 6-3	Leaks/Spills	Light Naphtha	100 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
04/01/06	Plant 4	Leaks/Spills	LCO	9 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
01/06/06	S. of Bundle Wash	Leaks/Spills	Polycase wash water	2 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
12/15/05	Plant 5	UG Leak	Slop Oil	4 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
11/23/05	Plant 5	Leaks/Spills	Slop Oil	8 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
11/19/05	Plant 3	Leaks/Spills	Gas Oil	100 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
09/20/05	Plant 8	Leaks/Spills	Poly gasoline	67 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
07/14/05	Plant 5	Leaks/Spills	LCO	1 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
07/11/05	Plant 3	Leaks/Spills	Harf/CSO	4.4 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
04/10/05	Plant 9	Leaks/Spills	Naphtha	50 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
03/24/05	Plant 2	Leaks/Spills	Harf/CSO	3 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
03/18/05	#1TF	UG Leak	Reformate	180 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
01/26/05	Plant 9/3	Leaks/Spills	Shell T32 Lube Oil	400 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
01/03/05	Plant 9	Leaks/Spills	Sodium Hypochlorite	390 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
09/15/04	Plant 4	Leaks/Spills	Harf/CSO	3 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
07/28/04	T&S	Leaks/Spills	LSD	5 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
07/22/04	T&S	Leaks/Spills	KEROSENE/Jet Fuel	2 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
06/13/04	T&S	Leaks/Spills	KEROSENE/Jet Fuel	6.6 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
05/22/04	T&S	Leaks/Spills	LSD	100 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
05/11/04	Plant 9	Leaks/Spills	hydrocarbon	42 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
02/22/04	Sanitary Sewer	UG Leak	Hydrocarbon	sheen	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report

01/28/04	Plant 6	Leaks/Spills	Heavy Aromatics	95 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
10/01/03		Spill	Lube Oil	< 30 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
09/10/03	TF1	UG Leak	Gasoline	200 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
07/29/03		UG Leak	#3 Stream	60 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
04/21/03	TF1	UG Leak	Jet	5 barrels	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
03/31/03	RR	Leak	Xylene	225 gallons	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
03/11/03	TF1	UG Leak	Reformate	38 barrels	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
03/11/03	TF1	UG Leak	Jet	141 barrels	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
02/21/03	TF1	UG Leak	LSD	150 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
02/10/03		Leak	LCO	24 barrels	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
02/02/03		Leak	Gasoline	125 gallons	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
12/15/02	TF-1	Line leak	Harf/CSO	4 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
12/08/02		Exchanger tube leak	Naptha	75 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
11/15/02	TF-1	Line leak	Xylene	50 gals	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
10/31/02	TF-1	Line leak	LSD	2 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
10/11/02	P/5	Faulty level gauge	Slop Oil	50 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
10/11/02	TF-1	Line leak	Petroleum	2 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
09/23/02	TF-1	Line leak	Gas Oil	50 gals	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
07/19/02	P/5	Roof hung up on wall	Slop Oil	295 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
06/29/02	P/5	Line leak	Crude Oil	1 bbl	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report

06/02/02	P/9	Inlet valve open when HCC s/d due to compressor s/d	Diesel	4 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
05/30/02	P/8	Valve leak	Sulfuric Acid	45 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
05/14/02	TF-1	Tank damaged by equipment	Diesel	60 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
04/19/02	TF-1	Line leak	Jet Fuel	1 bbl	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
03/12/02	P/4	Line leak	Gasoline	1 bbl	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
01/31/02	TF-1	Sewer overflow due to high volume of tank dike drainage	Diesel	2 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
01/10/02	TF-1	Line leak	LSD	150 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
01/03/02	TF-1	Line leak	Reformate	100 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
01/02/02	TF-1	Line leak	Gasoline	1.5 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
08/10/01	Trailer	Material was released when a pressure relief valve opened.	Gasoline	50 gallons	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report

SITE DRAINAGE PLAN
Figure 8.1

Fire Protection System
Figure 8.2

APPENDIX A

GENERAL INFORMATION

PAGE
Toledo Refining Company's Principles of Health, Safety and Environment A-2

Toledo Refining Company's Principles of Health, Safety and Environment

Protection of the Biosphere

We will reduce our overall emissions to the environment (air, water and land) with special emphasis on toxic substances. We will pay special attention to the protection of the surrounding environment at present facilities and when planning for new facilities or operations.

Sustainable Use of Natural Resources

We will minimize the use of water in our facility and strive to improve the quality of our water discharge streams. We will employ practical land management and conservation techniques to conserve the soils and forests at our facility. We will make efficient use of non-renewable natural resources through careful planning and employment of conservation techniques.

Reduction and Disposal of Wastes

We will continue to reduce and where possible eliminate waste through the use of source reduction, recycle/reuse and treatment techniques. The handling and disposal of all waste will be conducted in a safe and responsible fashion in accordance with regulatory standards.

Energy Conservation

We will conserve energy through careful selection of raw materials and energy sources and through cost effective improvements in our operations, including technological improvements in new energy-consuming processes. Environmental protection and sustainability will be considered in selecting new energy sources.

Risk Reduction

Our goal is to prevent HSE incidents such as environmental spills and releases, fires, explosions, injuries and illnesses and other accidents. We will utilize sound maintenance and work practices, safety-conscious design, employee training and incident investigations to minimize risks to our employees and the community in which we operate. We will be prepared to respond promptly and professionally should an incident occur.

Safe Products and Services

Through research, planning and analysis we will strive to minimize the environmental impact and health and safety hazards of our company products and services. We will counsel our employees and customers in the safe use and handling of our products and services and, where feasible, attempt to correct unsafe use. We will strive to eliminate the use of purchased products which pose known environmental hazards such as PCBs and CFCs.

Environmental Restoration

We will promptly correct any conditions in our operations which result in a significant health, safety or environmental impact. We will take responsibility for any harm caused by our operations to our employees, customers, the general public or the environment; to the extent feasible, we will also restore the environment.

Toledo Refining Company's Principles of Health, Safety and Environment (Cont'd)

Informing the Public

We will inform appropriate officials, employees, contractors, customers and the public about significant health, safety or environmental hazards related to our facility in a timely manner. We will regularly participate in dialogue with our neighboring community and its residents. No action will be taken against employees for reporting dangerous incidents or conditions to management or appropriate authorities.

Management Commitment

We will ensure that senior management is fully informed about pertinent HSE issues and take responsibility for carrying out HSE policy. We will consider demonstrated environmental commitment and HSE experience as factors in our selection of senior managers.

Audits and Reports

We support the concept of public accountability for HSE performance and intend to report on our progress in consistent, measurable terms.

RESPONSE PLAN COVER SHEET

Facility Name:	Toledo Refining Company, LLC		
EPA FRP ID#:	FRP0500117		
Facility Address:	1819 Woodville Rd Oregon, OH 43616.	1819 Woodville Rd Oregon, OH 43616.	
Phone Number: (24 hr)	(419) 698-6600	Fax Number:	(419) 697-6423
County:	Lucas County, OH	Primary SIC Code:	2911
Facility Start Date:	1895	Dun & Bradstreet:	005046511
Facility Latitude:	(b) (7)(F), (b) (3)	Facility Longitude:	(b) (7)(F), (b) (3)
NAICS Code	324110	Distance to Navigable Water:	<1/4 mile
Name of Protected Waterway or Environmentally Sensitive Area:		Otter Creek	

Owner Address:	Toledo Refining Company, LLC 1819 Woodville Rd Oregon, OH 43616	Owner Phone Number (24 hr):	419-698-6600

Total Number of ASTs:	50	Largest AST Capacity: (gallons)	(b) (7)(F), (b) (3)
Total Number of USTs:	3	Total UST Storage: (gallons)	
Total Storage of Drums & Transformers that Contain Oil:			
Maximum Oil Storage Capacity (gallons):	(b) (7)(F), (b) (3)	Worst Case Discharge Amount (gallons):	
Number of Surface Impoundments:	0	Total Storage of Surface impoundments:	0

Certification of the Applicability of the Substantial Harm Criteria

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons? Yes X No ___

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area? Yes ___ No X

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C–III to this appendix or a comparable formula[1]) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Plans: Fish and Wildlife and Sensitive Environments" (see Appendix E to this part, section 13, for availability) and the applicable Area Contingency Plan.
Yes X No ___

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III to this appendix or a comparable formula[1]) such that a discharge from the facility would shut down a public drinking water intake[2]? Yes X No ___

[1] If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

[2] For the purposes of 40 CFR part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).

5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil discharge in an amount greater than or equal to 10,000 gallons within the last 5 years? Yes X No ___

Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Signature

Clark Wrigley
Name (Please type or print)

Refinery Manager
Title

April 28, 2014
Date

APPENDIX C

RESPONSE RESOURCES

USCG CLASSIFIED OIL SPILL REMOVAL ORGANIZATIONS (OSROs)

Minimum Equipment Requirements for OSRO Classifications C-2

REVISED USCG OSRO CLASSIFICATIONS

The USCG has classified OSROs according to their response capabilities, within each Captain of the Port (COTP) zone, for vessels and for facilities in four types of environments. Response capabilities are rated A, B, C, D, or E as described below.

MINIMUM EQUIPMENT REQUIREMENTS FOR OSRO CLASSIFICATIONS			
Classification	**Resource Quantity Guidelines [2,3]**	**Maximum Facility Response Times**	**Maximum Vessel Response Times**
Rivers/Canals [1]			
A	Boom: 2,000 ft EDRC: 50 bbls TSC: 100 bbls	Boom Deployment: 1 hour EDRC/TSC: 2 hours	Boom Deployment: 1 hour EDRC/TSC: 2 hours
B	Containment Boom/Protective Boom: 4,000 ft / 4,000 ft EDRC: 1,250 bbls TSC: 2,500 bbls	High Volume Ports: 6 hours Other Ports: 12 hours	High Volume Ports: 12 hours Other Ports: 24 hours
C [4]	Containment Boom/Protective Boom: 4,000 ft / 10,000 ft EDRC: 1,875 bbls TSC: 3,000 bbls	High Volume Ports: 6 hours Other Ports: 12 hours	High Volume Ports: 12 hours Other Ports: 24 hours
D [4]	Containment Boom/Protective Boom: 4,000 ft / 16,000 ft EDRC: 3,750 bbls TSC: 6,000 bbls	High Volume Ports: 30 hours Other Ports: 36 hours	High Volume Ports: 36 hours Other Ports: 48 hours
E [4]	Containment Boom/Protective Boom: 4,000 ft / 22,000 ft EDRC: 7,500 bbls TSC: 12,000 bbls	High Volume Ports: 54 hours Other Ports: 60 hours	High Volume Ports: 60 hours Other Ports: 72 hours
Great Lakes			
A	Boom: 2,000 ft EDRC: 50 bbls TSC: 100 bbls	Boom Deployment: 1 hour EDRC/TSC: 2 hours	Boom Deployment: 1 hour EDRC/TSC: 2 hours
B	Containment Boom/Protective Boom: 6,000 ft / 6,000 ft EDRC: 1,250 bbls TSC: 2,500 bbls	All Ports: 6 hours	All Ports: 12 hours
C [4]	Containment Boom/Protective Boom: 12,000 ft / 12,000 ft EDRC: 6,350 bbls TSC: 10,000 bbls	All Ports: 12 hours	All Ports: 18 hours
D [4]	Containment Boom/Protective Boom: 18,000 ft / 18,000 ft EDRC: 12,300 bbls TSC: 20,000 bbls	All Ports: 36 hours	All Ports: 42 hours
E [4]	Containment Boom/Protective Boom: 24,000 ft / 24,000 ft EDRC: 25,000 bbls TSC: 40,000 bbls	All Ports: 60 hours	All Ports: 66 hours

REVISED USCG OSRO CLASSIFICATIONS (Cont'd)

Inland			
A	Boom: 2,000 ft / 6,000 ft EDRC: 50 bbls TSC: 100 bbls	Boom Deployment: 1 hour EDRC/TSC: 2 hours	Boom Deployment: 1 hour EDRC/TSC: 2 hours
B	Containment Boom/Protective Boom: 6,000 ft / 6,000 ft EDRC: 1,250 bbls TSC: 2,500 bbls	High Volume Ports: 6 hours Other Ports: 12 hours	High Volume Ports: 12 hours Other Ports: 24 hours
C [4]	Containment Boom/Protective Boom: 12,000 ft / 12,000 ft EDRC: 12,500 bbls TSC: 20,000 bbls	High Volume Ports: 6 hours Other Ports: 12 hours	High Volume Ports: 12 hours Other Ports: 24 hours
D [4]	Containment Boom/Protective Boom: 18,000 ft / 18,000 ft EDRC: 25,000 bbls TSC: 40,000 bbls	High Volume Ports: 30 hours Other Ports: 36 hours	High Volume Ports: 36 hours Other Ports: 48 hours
E [4]	Containment Boom/Protective Boom: 24,000 ft / 24,000 ft EDRC: 50,000 bbls TSC: 80,000 bbls	High Volume Ports: 54 hours Other Ports: 60 hours	High Volume Ports: 60 hours Other Ports: 72 hours
Oceans			
A	Boom: 2,000 ft EDRC: 50 bbls TSC: 100 bbls	Boom Deployment: 1 hour EDRC/TSC: 2 hours	Boom Deployment: 1 hour EDRC/TSC: 2 hours
B	Containment Boom/Protective Boom/Initial Response Boom [5]: 6,000 ft / 4,000 ft / 4,000 ft EDRC: 1,250 bbls TSC: 2,500 bbls	High Volume Ports: 6 hours Other Locations: 12 hours (for open ocean, plus travel time from shore)	High Volume Ports: 12 hours Other Locations: 24 hours (for open ocean, plus travel time from shore)
C	Containment Boom/Protective Boom/Initial Response Boom [5]: 12,000 ft / 7,000 ft / 5,000 ft EDRC: 12,500 bbls TSC: 20,000 bbls	High Volume Ports: 6 hours Other Locations: 12 hours (for open ocean, plus travel time from shore)	High Volume Ports: 12 hours Other Locations: 24 hours (for open ocean, plus travel time from shore)
D	Containment Boom/Protective Boom/Initial Response Boom [5]: 18,000 ft / 12,000 ft / 6,000 ft EDRC: 25,000 bbls TSC: 40,000 bbls	High Volume Ports: 30 hours Other Locations: 36 hours (for open ocean, plus travel time from shore)	High Volume Ports: 36 hours Other Locations: 48 hours (for open ocean, plus travel time from shore)
E	Containment Boom/Protective Boom/Initial Response Boom [5]: 24,000 ft / 16,000 ft / 8,000 ft EDRC: 50,000 bbls TSC: 80,000 bbls	High Volume Ports: 54 hours Other Locations: 60 hours (for open ocean, plus travel time from shore)	High Volume Ports: 60 hours Other Locations: 72 hours (for open ocean, plus travel time from shore)

[1] Rivers/canals include bodies of water, including the Intracoastal Waterway and other bodies artificially created for navigation, confined within an inland area and having a project depth of 12 feet (3.66 meters).

[2] EDRC stands for "effective daily recovery capacity" or the calculated recovery capacity of oil recovery devices determined by using a formula that takes into account limiting factors such as daylight, weather, sea state, and emulsified oil in the recovered material.

[3] TSC stands for "temporary storage capacity" meaning sufficient storage capacity equal to twice the EDRC of an OSRO. Temporary storage may include inflatable bladders, rubber barges, certified barge capacity, or other temporary storage that can be utilized on scene at a spill response and which is designed and intended for the storage of flammable or combustible liquids. It does not include vessels or barges of opportunity for which no pre-arrangements have been made. Fixed shore-based storage capacity, ensured available by contract or other means, will be acceptable.

[4] 20% of resources must be capable of operating in waters of 6 feet (1.82 meters) or less.

[5] Initial response boom amounts specify the amount of boom that must be available for immediate transport to the site of the spill as far as 50 miles offshore. The other boom can be moved to a shoreline point for transport as needed at a later time.

APPENDIX D

WASTE ANALYSIS / DISPOSAL PLAN

Page

Overview D-2

Handling Excavation Soils (Document No. 26) D-3

Internal Waste Material Handling and Disposal (Document No. 33) D-6

WASTE MANAGEMENT

OVERVIEW

This Section provides Toledo Refining Company policies and guidelines for waste classification, handling, transfer, storage and disposal techniques.

A major oil spill response would generate significant quantities of waste material ranging from oily debris and sorbent materials to sanitation water and used batteries. All these wastes need to be classified and separated (i.e., oily, liquid, etc.), transported from the site and treated and/or disposed of at approved disposal sites. Each of these activities demands that certain health and safety precautions be taken, which are strictly controlled by federal and state laws and regulations.

It is the responsibility of Toledo Refining Company's Waste Disposal Specialist to manage waste disposal needs during an oil spill cleanup in accordance with Toledo Refinery Environmental Procedures, Handling Excavation Soils (Document No. 26) and Internal Waste Material Handling and Disposal (Document No. 33. These documents are presented on the following pages.

Handling Excavation Soils
Document No. 26

Toledo Refining Company

1.0 Purpose/Scope

(Note: Agreements have been made with prior owners that historical undergound events may be covered by their costs and not PBF. It should be noted that the environmental department is tracking and billing previous owners for those such events. Please contact the environmental department should any of these events occur.)

1.1 Purpose: The purpose of this procedure is to provide guidance for the proper handling, sampling and disposal of potentially hydrocarbon contaminated soil which results from an excavation.

1.2 Scope / Applicability: This procedure applies to all refinery personnel that may direct excavation activities associated with potentially hydrocarbon-contaminated soil.

2.0 Definitions

2.1 Petroleum Contaminated Soil (PCS): Soil that has any amount of petroleum constituents in it, from any man made source such as line leaks, spills, or tank-bottom leaks.

2.2 RCRA: Resource Conservation and Recovery Act: The federal regulation that dictates management standards for solid and hazardous wastes. (40 CFR 260-280)

3.0 General Requirements

3.1 According to Ohio EPA letter (Environmental library file number 451), PCS is considered a waste if:

3.1.1 A governmental agency with proper regulatory authority requires that it be disposed of offsite, or

3.1.2 Toledo Refining Company decides to move it offsite, or

3.1.3 Toledo Refining Company considers the soil to be a waste.

3.2 PCS may be used as backfill for excavations, if conditions in Section 4.6 of this procedure are met.

3.3 If soil that is petroleum contaminated has been determined to be a waste and is intended for offsite disposal, the waste must be managed according to RCRA standards, and potentially managed as a hazardous waste. In this event contact the Environmental Department for guidance before starting the job, or as soon as it is decided that the soil is waste.

3.4 The person in charge of the soil excavation job must comply with all the requirements of CA training, including having approved contracts, scope, budget, work order, JSA, etc. for the work to be done.

4.0 Procedure/Process

4.1 Soil piles that are generated, as a response of a spill or line leak, must be treated as hydrocarbon contaminated until documented otherwise. If during other types of excavations, it becomes evident that the soil is contaminated, immediately cease excavation activities until a tarp or roll off box is secured for the contaminated soil only. Reminder: Any non-contaminated soil that comes into contact with hydrocarbon contaminated soil must then be considered contaminated.

4.2 For all excavations, place a sign on the soil pile, noting the origin of soil, and the date. The sign needs to be substantial / weather proof and permanently or firmly affixed to the pile. Signs may be handmade or made on a computer and placed in a plastic sheath. A blank line should be on the sign that can be completed when the determination is made as to if the soil may be reused or if the soil must be disposed of in an offsite facility.

4.3 If there is no evidence of contamination, as listed below. No further action required. Soil is presumed to be hydrocarbon contaminated if any of these conditions exist:

4.3.1 Surface water in an excavation in contact with the soil has a visible sheen,

4.3.2 The soil exhibits a visible and characteristic oil stain,

4.3.3 The soil has a characteristic hydrocarbon odor.

4.4 Guidelines for management of PCS and suspected PCS, to be followed by the individual responsible for the job (this may be RMF Foreman, Contract Administrator, Supervisor or Environmental Engineer):

4.4.1 When conducting a job, task, work order, etc., if PCS is encountered, notify the job supervisor and the Environmental Department immediately.

Note: There is no requirement to remove all PCS in every situation when it is encountered. Notifying the environmental department will allow records to be kept of known subsurface contamination.

4.4.2 Notify the Environmental Department contact for the area you are working in if any petroleum contaminated soil is to be left in place and backfilled.

4.4.3 The Environmental Department will keep a record of any known subsurface contamination that was left in place.

4.4.4 Segregate petroleum contaminated from uncontaminated soil.

4.4.5 Place PCS non-benzene, toluene, crude, xylene bearing contaminated soil on a plastic tarp or sheet. Cover soil pile with another plastic tarp or sheet to prevent rainwater from leaching through the contaminated soil and spread petroleum contamination. For PCS containing or suspected of containing benzene, toluene, crude or xylene see 4.4.6

Note: Tarp must remain in place until soil is properly reused or disposed.

4.4.6 Benzene, toluene, crude or xylene product requirements:

4.4.6.1 If the contaminated soil is known to have benzene, toluene, crude or xylene in it, do not place it on plastic, but instead place it into a roll off box and cover when not in active use. Besides benzene product itself, the following materials may be presumed to contain an appreciable amount of benzene: toluene, gasoline, reformates raffinate, wastewater slop oil, and crude oil.

4.4.6.2 Call the environmental department to get a rolloff box with a vapor-tight lid or cover delivered to the job site.

4.4.6.3 Call the environmental department to have the vapor tight lid on the rolloff box tested once it is loaded to ensure that <500 ppm VOC is detected at the lid-seal portion of the rolloff box with an approved monitoring instrument (Method 21). The environmental department can also ensure that the proper sampling is performed.

4.5 Sampling of contaminated soil is to be done by the individual responsible for the job (this may be the Contract Administrator, Supervisor, or Environmental Engineer):

4.5.1 Obtain clean sampling utensil(s) from the Toledo Refining Company laboratory or the environmental department.

Note**: Utensils must not have been in hydrocarbon contact, unless they have been thoroughly decontaminated.**

4.5.2 Obtain either a clean wide mouth glass jar or a NASCO Whirl-Pak bag from the Toledo Refining Company laboratory to use for sample collection.

4.5.3 Collect multiple samples from different corners/spots in the excavated soil, from several depths (at least 4" to 6" under dirt surface) and combine them into a composite sample.

4.5.4 Fill the sample bottle or bag with a representative sample from the composite sample that was made in Section 4.5.3 above.

Note: Sample must be representative or "worst case", so sample at areas where highest potential for contamination is possible.

4.5.5 Label the container which holds the composite sample with the following sample information:

4.5.5.1 Date, time sample was collected, person that collected the sample, sample name/origin.

4.5.5.2 Contact the Environmental Department to request analytical testing for the sample: These may include TPH (Total Petroleum Hydrocarbon), BTEX (benzene, toluene, ethylbenzene, and xylene), TCLP and flashpoint.

Note: If the sample is going to be used for a hazardous waste determination, contact the environmental department prior to taking the sample for special sampling requirements and to obtain sample preservation instructions.

4.5.6 A completed chain-of-custody (COC) form must accompany samples. The COC indicates the person who had custody or control of the sample starting at the time the sample was taken, and lists every transfer of custody at every point in transit to the off-site commercial laboratory. The Environmental Department will provide chain-of-custody forms, obtained from the commercial laboratory.

4.5.7 All soil samples will be sent to the Environmental Department for coordination of analytical work at an offsite laboratory.

4.5.8 The Environmental Department will:
4.5.8.1 Obtain contract with a qualified lab,
4.5.8.2 Have the lab pick up the samples from the refinery,
4.5.8.3 Receive all sample results from the offsite laboratory.
4.5.8.4 Forward analytical results to the appropriate person in charge.

Note: If a sample is to be shipped to an offsite lab, the refinery laboratory will assist with proper packaging and labeling to comply with DOT regulations.

4.6 Disposition of Petroleum Contaminated Soil (PCS)

4.6.1 Options for onsite re-use of soil contact the environmental department for guidelines.

4.6.2 No PCS shall be used as backfill on property that Toledo Refining Company does not own.

5.0 Monitoring and Reporting

5.1 The Environmental Department will receive the laboratory results from the offsite laboratory.

5.2 The laboratory report will be forwarded to the person who is responsible for the excavation if necessary.

6.0 Recordkeeping

6.1 The Environmental Department will keep the laboratory results on file for a period of 10 years.

Revision Log

Revision Date	Document Authorizer	Document Reviewer	Document Author	Revision Details
June 11, 2003	P Hanley	P Hanley	TNeuhart/SShelt	Added Checklist and modified section 3 and 4
June 15, 2006	P Hanley	P Hanley	S Shelt	Editorial changes, removed C&W
Sept 21, 2006	P Hanley	P Hanley	S Shelt	Editorial changes
March 27, 2007	P. Hanley	P. Hanley	S. Shelt	Revised for MACT changes
March 27, 2009	E. Moore	S. Shelt	S. Shelt	No changes required.
May 18, 2009				Administrative Update – Revised Revision date, updated revision log from 3/27/2009 review of procedure
June 27, 2011		S.Shelt		Adminstrative changes for TRC change-over only.
June 19, 2014	E. Moore	S. Shelt	S.Shelt	Adminstrative and minor changes olny.(Including the beginning note)

Internal Waste Material Handling and Disposal
Document No. 33

Toledo Refining Company

Material Handling and Disposal

Document Number: 33

1.0 Purpose/Scope

The purpose of this procedure is to describe the handling process for waste materials transported, relocated, and/or disposed internal to the refinery and in preparation for shipping material outside the facility.

2.0 Definitions

2.1 *Waste* – any material that has been abandoned, reached the end of its useful life, marked for disposal, and/or destined to be recycled off-site

2.2 *Flowable Waste* – A material meeting the definition of a waste that can be pumped or gravity fed

2.3 *Solid Waste* - A material meeting the definition of a waste that cannot be pumped or gravity fed

2.4 *DOT container* – A container approved by DOT for shipping materials over a public road. Liquid materials are to be in leak tight containers only. Note: solid materials are defined by passing "paint filter" test for landfills. If the material can not pass the "paint filter" test it is to be considered a liquid material and would require a leak tight container.

3.0 General Requirements

This procedure was created to ensure that Toledo Refining Company complies with the appropriate RCRA and DOT regulations. By documenting the transportation, relocation, and/or disposal of waste materials, Toledo Refining Company can more easily demonstrate compliance with federal, state, or local environmental regulations.

4.0 Procedure/Process

4.1 A Toledo Refining Company Representative requests Contractor to transport and/or remove a waste material within the boundaries of the refinery.

4.1.1 Flowable Wastes

- ♦ If waste material is flowable and is a petroleum product, the material can be off-loaded at one of several intra-refinery disposal sites, based on the amount of oil and water in the waste, per the flow chart entitled "Internal

Waste Material Handling and Disposal for Flowable Materials", which can be found in Appendix A. As a guideline; typical hydrocarbon and benzene containing material should go directly to wastewater treatment tanks. If material has a high concentration of water and no benzene the barrel dump can be utilized. The bundle pit should be used for only washing out trucks and during bundle washing. If the material may contain heavy solids then arrangements should be made to put into vac boxes or material may go directly into wastewater tanks depending on the solid content. Wastewater treatment operators should be notified ahead of time to confirm they are able to take any material to be put into their system.

- ♦ If waste material is flowable (not a petroleum product) and is polycase solid/liquid, the material shall be off-loaded in the designated polycase vacuum roll off for disposal or another tank suited for storing until disposal.

- ♦ If waste material is flowable (not a petroleum product or polycase liquid), the Toledo Refining Company Facility Shift Supervisor must be consulted for disposal instructions. *Note: This type material may include but is not limited to high COD, caustics or acid solutions and may require a drain rate before discharging to wastewater.*

4.1.2 Non-Flowable Wastes (Solids and Semi-Solids)

4.1.2.1 If waste material is non-flowable and the waste is suspect hazardous, Contractor is to contact Toledo Refining Company Environmental for verification as to whether sampling prior to staging and/or disposal is required.

- ♦ If sampling is required, the Contractor or environmental depart will use appropriate SW-846 sampling techniques and acquire the appropriate number of samples. A Toledo Refining Company representative may oversee this process. Refer to Environmental Document No. 213 for guidance on sampling techniques.

  After sampling, the waste is placed in an approved DOT container, labeled as a hazardous waste with the suspected or known waste code(s), and staged in the 90-day hazardous waste storage area until hazardous or non-hazardous determination is made from the laboratory sample results.

- ♦ If sampling is not required and the waste is a hazardous waste the waste is then placed in an approved DOT container, labeled as a hazardous waste with the known waste code(s), and staged on the 90-day hazardous waste storage pad until arrangements are made for appropriate off-site disposal.

4.1.2.2 If waste material is non-flowable and the waste is not suspect hazardous, the waste is solidified for load-bearing strength or free

liquids, if needed, and/or placed in an approved DOT container, labeled non-hazardous, and placed in the non-hazardous waste storage area until arrangements are made for appropriate off-site disposal.

4.1.3 If unsure of the appropriate final disposal site of any waste material, verify with Toledo Refining Company Environmental Department or Facility Shift Supervisor prior to movement or disposal.

4.2 Movement Documentation

4.2.1 All pertinent movement data is to be logged onto the "Toledo Refining Company Internal Waste Tracking Log" by the Contractor. After completion of daily "Toledo Refining Company Internal Waste Tracking Log," Contractor should return completed logs to Toledo Refining Company Environmental at the end of each calendar week.

4.2.2 Additions to the container inventory spreadsheet that is maintained by Contractor must be done after staging is complete.

5.0 Monitoring and Reporting

5.1 Individual tracking information from the "Toledo Refining Company Internal Waste Tracking Log" will be compiled daily by the contractor. Copies of this will be kept in the Environmental Department.

5.2 The "Roll-Off Box Status Report" should be compiled weekly and stored on the "X" drive of the Environmental Department.

6.0 Recordkeeping

Toledo Refining Company Environmental will maintain a copy of the completed "Toledo Refining Company Internal Waste Tracking Log" for a period of five (5) years. Toledo Refining Company will retain the completed "Toledo Refining Company Roll-Off Status Report" for a minimum period of 13 weeks.

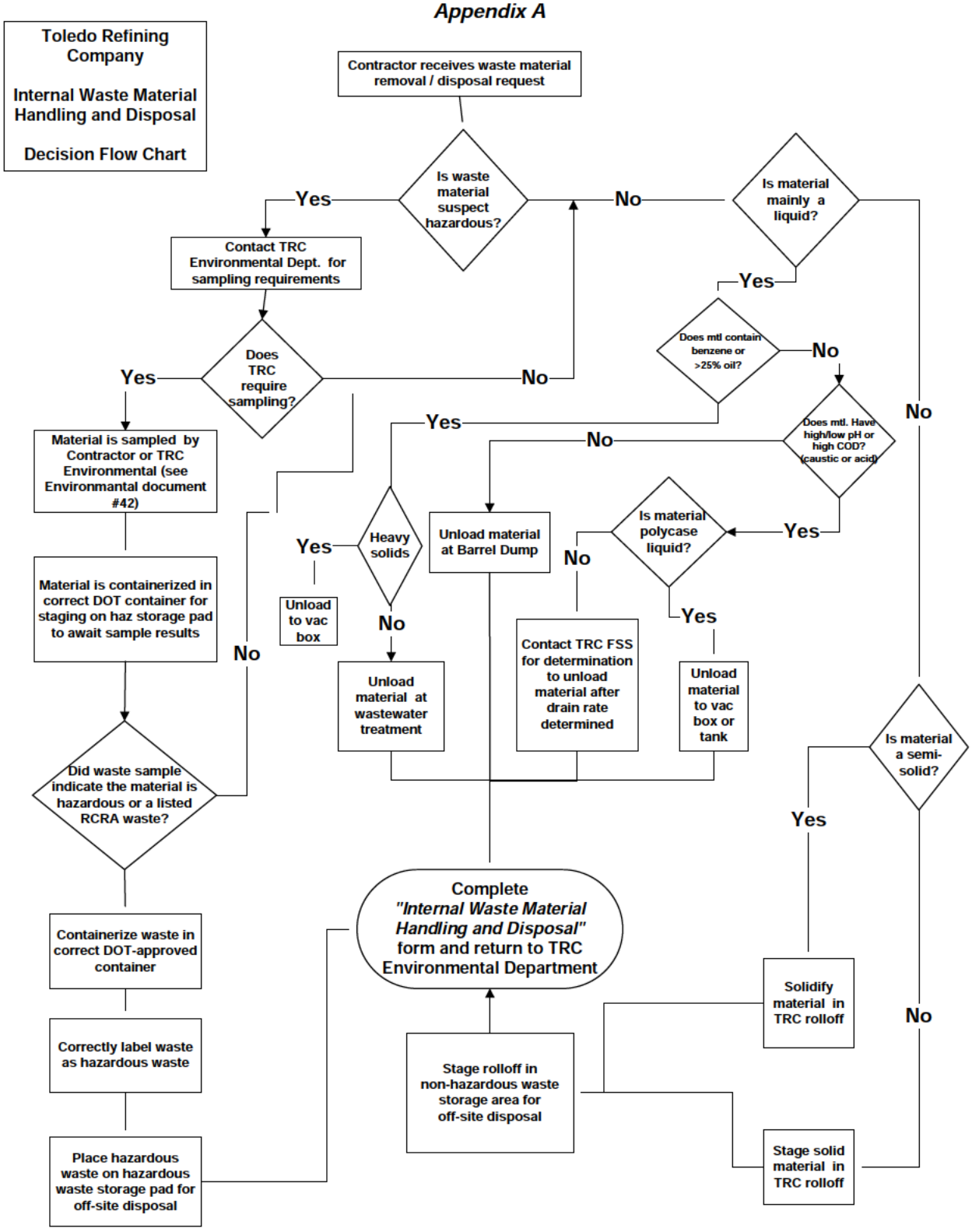
7.0 Records

Revision Log

Revision Date	Document Authorizer	Document Reviewer	Document Author	Revision Details
November 15, 2004	PHanley	PHanley	TNeuhart/SShelt	Fixed flowchart
November 19, 2004	PHanley	PHanley	TNeuhart/SShelt	To section 4.1 and Section 6
April 26, 2005	PHanley	PHanley	TNeuhart/SShelt	To Section 5.0 and 6.0
October 16, 2006	PHanley	Shelt	Shelt	Updated OEMS Info.

October 31, 2006	PHanley	Shelt	Shelt	Updated to include DOT container definition.
October 23, 2008	EMoore	SShelt	SShelt	Changed polycase material handling and Sampling plan document number due to new procedures.
November 1, 2010	E. Moore	S. Shelt	S.Shelt	Removed the 820 tank indication.
August 29, 2012	E. Moore	J. Romp	J. Romp	Updated Off-load points under 4.1.1: Removed TK-510. Changed U.S. Filter Slop Oil Tank to WWTU Slop Oil Tank. M. Rossnagel
November 30, 2012	E. Moore	E. Moore	S. Shelt	Minor wording and flow chart updates
March 22, 2013	E.Moore	E. Moore	S. Shelt	Revised Appendix A and section 4.1 to include wastewater treatment, benzene material, high COD and high/low pH items.

Appendix A


Toledo Refining Company
Internal Waste Material Handling and Disposal
Decision Flow Chart
Contractor receives waste material removal / disposal request
Is waste material suspect hazardous?
Yes
No
Is material mainly a liquid?
Contact TRC Environmental Dept. for sampling requirements
Does TRC require sampling?
Yes
No
Yes
Does mtl contain benzene or >25% oil?
No
Yes
Does mtl. Have high/low pH or high COD? (caustic or acid)
No
Yes
No
Material is sampled by Contractor or TRC Environmental (see Environmantal document #42)
Heavy solids
Yes
No
Unload material at Barrel Dump
Is material polycase liquid?
Yes
No
Yes
Material is containerized in correct DOT container for staging on haz storage pad to await sample results
Unload to vac box
Unload material at wastewater treatment
Contact TRC FSS for determination to unload material after drain rate determined
Unload material to vac box or tank
No
Did waste sample indicate the material is hazardous or a listed RCRA waste?
Is material a semi-solid?
Yes
No
Containerize waste in correct DOT-approved container
Complete "Internal Waste Material Handling and Disposal" form and return to TRC Environmental Department
Solidify material in TRC rolloff
Correctly label waste as hazardous waste
Stage rolloff in non-hazardous waste storage area for off-site disposal
Stage solid material in TRC rolloff
Place hazardous waste on hazardous waste storage pad for off-site disposal

Information on Discharge*
Facility: _____

(A) Reporting Party	(B) Suspected Responsible Party
Name:	Name:
Phone:	Phone:
Job Position:	
Company:	Company:
Address:	Organization Type: ☐ Private Citizen ☐ Private Enterprise ☐ Public Utility ☐ Local Government ☐ State Government ☐ Federal Government
City:	City:
State:	State:
Zip:	Zip:
Were materials discharged: ☐ Yes ☐ No	
Calling for Responsible Party: ☐ Yes ☐ No	
Date and Time of report call:	
Other Notifications : ☐ USCG ☐ EPA ☐ State ☐ Other:	

- It is not necessary to wait for all information before calling the National Response Center (NRC) 1-800 424-8802 or direct telephone: 202-267-2675

Incident Description			
Source and /or Cause of incident:			
Date of Incident:	Time of Incident:		
Incident Address/Location Nearest City/Distance from City/Township Range Borough:			
Storage Tank Container: Above Ground: ☐ Below ground: ☐ Other: ☐			
Container capacity (bbls):			
Facility Capacity			
Tank Capacity (bbls):	Latitude:	Longitude:	River Mile:

Information on Discharge*

Facility: _____

Materials	
Material Discharged:	
Quantity in water: (include units)	
Response Action	
Actions Taken to Correct or Mitigate Incident:	
Impact	
Number of Injuries:	Number of Fatalities:
Evacuations required: ☐ Yes ☐ No ☐ Unknown	If Yes: Number Evacuated:
Any Damage: ☐ Yes ☐ No ☐ Unknown	If Yes: Damage in Dollars:
Additional Information	

Toledo Refining Company

Toledo Refinery	***Document Authorizer:*** ***Health, Safety & Security Manager***
Issuing Dept: ***Health & Safety***	***Document Reviewer:*** ***Emergency Response & Security Supervisor***
Revision Date: ***February 18, 2011***	***Document Author:*** ***Emergency Response & Security Administrative Coordinator***
Next Review Date: ***February 18, 2016***	***Document Administrator:*** ***Emergency Response & Security Administrative Coordinator***

INITIAL RESPONSE

ASSIGNMENT

Primary: On-Duty Emergency Response Shift Supervisor

Secondary: On-Duty Senior Fire Marshal/Fire Marshal

The initial Response person is responding quickly to emergencies in (and in close proximity to) the Toledo Refining Company, LLC facilities, including the main refinery, Marine Terminal / Hocking Valley Dock and #2 Tank Farm. This person shall determine the initial actions to be taken to mitigate the emergency.

- Make initial "size up" of the emergency to determine the seriousness and what response is needed from internal personnel and Mutual Aid.
- Make initial set-up of equipment as needed to mitigate the emergency.
- Function as On-Scene Commander until the arrival of the Security Lead or designated relief.
- Utilize 'Incident Command Check Sheet'
    1. Reference note: Check sheet to be reviewed on the same schedule as this procedure.
- At the conclusion of the emergency:
    1. Report "All Clear" to the Dispatcher.
    2. See that all emergency response equipment is returned to the Firehouse and returned to a state of readiness.
    3. Return Fire Water System to state of readiness (firewater pumps, hydrants, monitors, etc.).

THE CONTROLLED VERSION OF THIS DOCUMENT CAN BE FOUND ON THE FACILITY INTRANET.

EMERGENCY RESPONSE TEAM PERSONNEL

ASSIGNMENT

Primary: Toledo Refining Company, LLC Emergency Response Team Personnel

Secondary: Mutual Aid Personnel

- Emergency Response Team personnel are responsible for carrying out the directives of the On-Scene Commander.
- Report to Refinery Fire Station and don appropriate Personal Protective Equipment for the emergency.
- Proceed to the location identified by the On-Scene Commander.
- Follow directives of On-Scene Commander to mitigate the emergency.
- At the conclusion of the emergency, assist in restoring all emergency response equipment to a ready state.

ON-SCENE COMMANDER

ASSIGNMENT

Primary: Security Lead

Secondary: Emergency Response Shift Supervisor

The On-Scene Commander is responsible for the “field” portion of the Emergency Response.

- Develop tactics for mitigation of the incident.
- Command field Emergency Response.
- Coordinate response with Command Personnel from other responding agencies.
- Maintain close communications and coordination with operations and tactical personnel.
- Maintain close communications with the “Emergency Command Center” and Emergency Manager, with updates on operations, emergency mitigation efforts, environmental impact, possible community impact, etc.
- Utilize cell phone to keep radio traffic to a minimum.
- Assess need for mutual aid/outside assistance

ON SCENE COMMAND POST SCRIBE

ASSIGNMENT

Primary: Process Safety Engineer

Secondary: Environmental Engineer

ROLES / RESPONSIBILITIES

- Immediately respond to Gate 1 for transport to On Scene Command Post (CP).
- Upon arrival at CP, begin transcription of CP communications (radio traffic, face to face discussions, etc.)
- Completion of all necessary Oil Spill Response Forms required
- Can be used by Incident Commander as necessary to facilitate the mitigation of the incident
- Provide situational report to ECC as needed per Incident Commander

EMERGENCY MANAGER

ASSIGNMENT

Primary: Refinery Manager

Secondary: Operations Manager

Tertiary: Area Manager(s)

The Emergency Manager is responsible for incident activities including the development and implementation of strategic decisions and for approving the ordering and releasing of resources.

- Report to Emergency Command Center. (Primary- HR Conference Room, Back-up- Lab Conference Room).
- Obtain incident briefing from On-Scene Commander.
- Activate Emergency Command Center.
- Assess incident situation.
- Activate elements of the Incident Command System as required by incident.
- Coordinate Emergency Command Center staff activity.
- Insure that all regulatory notifications and internal notifications are made by Facility Shift Superintendent or the Environmental Department.
- Depending on Incident, serve as or designate Media Spokesperson.
- Focus on “outside the gate” issues: insurance, neighbors, elected officials, other business groups.
- Get group to brainstorm on-going and/or longer-range issues from incident to work toward resolution of these issues when the immediate situation is handled.
- Ensure that the investigation of the incident is staffed and started.

OIL FLOW OFFICER

ASSIGNMENT

Primary: Planning & Economics Manager

Secondary: Senior Planning & Economics Advisor

- Report to Emergency Command Center (Primary- HR Conference Room, Back-up- Lab Conference Room).
- Obtain briefing from Emergency Manager.
- Assess oil flow impacts of the incident.
- Notify internal and external Supply Chain contacts as appropriate for the incident
- Prepare action plan to address oil flow/business impacts (communicate with the Emergency Manager in the Emergency Command Center).
- Implement Action Plan.
- Monitor incident and adjust action plan as the situation dictates.
- Prepare Economic Impact Assessment for follow-up report.

LIAISON OFFICER

ASSIGNMENT

Primary: Environmental Team Leader

Secondary: Environmental Engineer

The Liaison Officer is responsible for fulfilling requests from the Emergency Manager by providing coordination and appropriate management of all refinery resources.

- Report to Emergency Command Center. (Primary- HR Conference Room, Back-up- Lab Conference Room).
- Obtain briefing from Emergency Manager.
- Provide Primary interface with outside Environmental agencies.
- Assess need for community monitoring, working with Safety officer.
- Notify/update corporate officials as appropriate.
- If the event is an environmental incident only, prepare a one page summary (facts only, in bullet format) covering description, injuries, community impact, business impact, and current status. Send within 24 hours to Refinery Manager and HSE Manager for further distribution.
- Monitor incident operations to identify current or potential organizational problems.

HEALTH and SAFETY OFFICER

ASSIGNMENT

Primary: Health, Safety and Security Team Leader

Secondary: Process Safety Lead

The Safety Officer is responsible for monitoring the HS&S impact of the incident and determining what type of compliance action needs to be taken.

- Report to Emergency Command Center. (Primary- HR Conference Room, Back-up- Lab Conference Room).
- Obtain briefing from Emergency Manager.
- Assess the incident for health and safety impact on response personnel.
- Recommend a course of action to the Emergency Manager.
- Provide liaison between the Emergency Manager and OSHA/Department of Health personnel.
- If the event is an HS&S incident only, prepare a one page summary (facts only, in bullet format) covering description, injuries, community impact, business impact, and current status. Send within 24 hours to Refinery Manager and HSE Manager for further distribution.
- Dispatch appropriate representation to support the field's needs (i.e. Industrial Hygiene, Safety Engineer, security personnel, etc.).
- Liaison between On-Scene Commander and ECC

INFORMATION OFFICER

ASSIGNMENT

Primary: Public Relations

Secondary: Outside Public Relations Firm

The Information Officer is responsible for the formulation and release of information about the incident to the news media and other appropriate agencies and organizations.

- Report to Emergency Command Center. (Primary- HR Conference Room, Back-up- Lab Conference Room).
- Obtain briefing from Emergency Manager.
- Establish Incident Information Center.
- Prepare initial information summary as soon as possible after arrival.
- Obtain approval for release of information from Emergency Manager/Legal.
- Release information to News Media and post information in Emergency Command Center.
- Arrange press conferences with appropriate personnel.
- Respond to special requests for information.
- Stay in touch with News Media.
- Activate insurance claims process.

OPERATIONS FIELD LIAISON

ASSIGNMENT

Primary: Shift Supervisor

Secondary: Shift Supervisor

The Operations Field Liaison is responsible for providing a communications line to Emergency Personnel as to what is happening from an Operations standpoint, and to pass information to Operations Personnel as to Emergency Response activities.

- Report to Emergency (report to the On-Scene Commander).
- Maintain close communications and coordination with Operations and Emergency Response Personnel.

PLANNING OFFICER

ASSIGNMENT

Primary: Technical Manager

Secondary: Technical Support Lead Engineer

The Planning Officer is responsible for the collection, evaluation, dissemination and use of information about the development of the incident and status of resources.

- Report to Emergency Command Center. (Primary- HR Conference Room, Back-up- Lab Conference Room).
- Obtain briefing from Emergency Manager.
- Establish information requirements and reporting schedules for all Incident Command System organizational elements for use in preparing the Incident Action Plan.
- Prepare Incident Action Plan based on strategic and tactical options.
- Identify need for specialized resources. Assemble information of alternative strategies and tactics based on interface with On-Scene Command, Incident Potential, and other incident Command System information.
- Compile and display incident status summary information.
- Prepare recommendations for release of resources for review with the Emergency Manager.

LOGISTICS OFFICER

ASSIGNMENT

Primary: Maintenance Manager

Secondary: Projects and Reliability Manager

The Logistics Officer is responsible for providing facilities, services, and material in support of the incident response.

- Report to Emergency Command Center. (Primary- HR Conference Room, Back-up- Lab Conference Room).
- Obtain briefing from Emergency Manager.
- Identify service and support requirements for planned or expected operations.
- Coordinate and process requests for additional resources.
- Advise Emergency Manager on current service and support capabilities.
- Estimate future service and support requests.

RECORDING OFFICER

ASSIGNMENT

Primary: Human Resources Manager

Secondary: Human Resources Advisor (Services)

The Recording/Finance Officer is responsible for maintaining accurate and complete incident file records. The Recording/Finance Officer is also responsible for all financial and cost analysis aspects of the incident. This position should be heavily involved in the development and implementation of the Incident Action Plan.

- Report to Emergency Command Center. (Primary- HR Conference Room, Back-up- Lab Conference Room).
- Obtain briefing from Emergency Manager.
- Track status of all requests made to Emergency Command Center.
- Maintain Activity Log in chronological order.
- Provide Emergency Manager with status reports.
- Distribute information as needed.
- Compile notes and deliver to Emergency Manager after the incident.
- Establish finance unit in Main Office Building.
- Develop an operation plan for the finance function for the incident.
- Provide input on financial on cost matters.
- Insure that all financial obligation documents initiated at the incident are properly prepared and completed.

MATERIALS MANAGEMENT OFFICER

ASSIGNMENT

Primary: Purchasing Lead

Secondary: Purchasing Specialist

The Materials Management officer is responsible for providing facilities, services, and material in support of the incident response.

- Report to Emergency Command Center. (HR onsite incidents, Laboratory back-up location or designated off-site center).
- Obtain briefing from Emergency Manager.
- Assist Logistics Officer to obtain the required service and support for planned or expected operations.
- Assist with work orders, purchase orders, material tracking and contract services for additional resources.
- Assist Financial Officer with tracking costs of materials consumed.
- Ensure that Oil Spill Response Organization (OSRO) contracts are up-to-date.
- Ensure that agreements are in place and up-to-date for assistance such as vacuum trucks, baker tanks, etc…. in the event of a large incident.
    - Establish finance unit in Main Office Building.
    - Develop an operation plan for the finance function for the incident.
    - Provide input on financial on cost matters.
    - Insure that all financial obligation documents initiated at the incident are properly prepared and completed.

Revision Log

Revision Date	Document Authorizer	Document Reviewer	Document Author	Revision Details
10/25/02	P. Hanley	E. Dunberger	J. Utendorf	Intial Version
8/23/04				Added OEMS information
10/9/05	H. Szymanski	E. Dunberger	J. Utendorf	1. Changed review date to reflect annual review 2. Added role of Materials Management Officer
7/10/06	H. Szymanski	E. Dunberger	J. Utendorf	Changed 'Facility Manager' to 'Operations Manager'
3/28/07	H. Szymanski	E. Dunberger	J. Utendorf	Added Underlined text to 'Initial Response' page, made minor formatting corrections.
3/31/08	R. Vogel	E. Dunberger	J. Utendorf	Emergency Manager Primary, Secondary and Tertiary changed. Safety Officer secondary changed. Materials Management Officer secondary changed. Recording/Finance Officer secondary changed. Logistics Officer secondary changed. Safety and Liaison Officers reporting criteria updated. Corrected minor typos.
10/16/09	R. Vogel	E. Dunberger	K. Dempsey	Updated per revised FRP and staff restructuring.
3/17/11	R. Vogel	E. Dunberger	K. Dempsey	Updated document to reflect change of facility ownership. Added role of On Scene Command Post Scribe

APPENDIX G

MISCELLANEOUS FORMS

Page

Qualified Individual (QI) Notification Exercise - Internal Exercise Documentation G-2

Team Tabletop Exercise - Internal Exercise Documentation G-3

Equipment Deployment Exercise - Internal Exercise Documentation G-4

Discharge Prevention Meeting Log (Sample) G-5

Tank Inspection Checklist G-6

Secondary Containment Inspection Checklist G-7

Forms and Exercise Documentation File Maintenance Procedures

- Forms and exercise documentation records should be maintained in a separate file in the Facility's office filing system.
- These files must be available for presentation upon request by regulatory agency personnel.
- Facility also utilizes Coast Guard Incident Action Plan forms such as ICS201, ICS208, etc. Forms available on the Coast Guard Internet site.

Qualified Individuals (QIs) Notification Exercise
Procedure No. 77

Toledo Refinery – Health, Safety & Security Department

Qualified Individuals Notification Test			
Dispatcher Name:		**Time Text Message was Sent on the Phone System?**	
Emergency Response Shift Supervisor:		**Date of Test:**	

Qualified Individuals Notified	Time QI Called the Dispatcher	Comments
1. Elmer Dunberger		
2. Keith Dempsey		
3. Edward Donnelly		
4. Philip Wojcinski		
5.		

Note: It is not a requirement that 100% of the QI's return the call. Only the QI on call or a delegate is required to be available. This checklist documents that Toledo Refining Company, LLC has tested the system.

Records: Health, Safety & Security Department maintains original for 5 years.
HSE Manager receives copy.
Security Lead receives copy.

Reference Document for this record is Health, Safety & Security Procedure 76.

Spill Management Team Tabletop Exercise
Internal Exercise Documentation
Procedure No. 82

Table Top Exercise

1. Date Performed:			2a. Exercise or Actual Response:	
3. Location:			2b. If Exercise, Announced or Unannounced:	
4. Times:	Start Time:		5. Response plan scenario used simulated ☐ Average most probable discharge (gallons) ☐ Maximum most probable discharge _____ ☐ Worst case discharge	Size of Discharge
	Completion Time:			
6. Preplanned Objective No. 1:				
7. Preplanned Objective No. 2:				
8. Preplanned Objective No. 3:				
9. Preplanned Objective No.4:				
10. Preplanned Objective No.5:				
11. Lessons Learned/Corrective Action Items assigned (if necessary):				

Retain this form and other documentation related to this exercise on file for a period of 5 years.

_____

Certifying Signature - Incident Commander

Equipment Deployment Exercise (Semiannual)
Internal Exercise Documentation Form
Procedure No. 80

Equipment Deployment

1. Date Performed:			2a. Exercise or Actual Response:		
3. Deployment Location:			2b. If Exercise, Announced or Unannounced:		
4. Times:	Start Time:		5. Equipment Deployed was; (check all that apply)	☐ Facility Owned	☐ OSRO Owned
	Time OSRO called:		6. List Type and amount of all equipment deployed and number of support personnel employed:		
	Time On-scene:				
	Time boom deployed:				
	Time recovery equipment on-scene				
	Time Completed				

7. Describe goals of the deployment (Attach sketch of equipment deployments and booming strategies):
8. For deployment of facility owned equipment, was the amount of equipment deployed at least the amount necessary to respond to your facility's average most probable spill and deployed in the intended operating environment.
9. Did personnel responsible for its deployment in the event of an actual spill deploy the equipment?
☐ YES or ☐ NO.
10. Was all deployed equipment operational? If not, why not?
☐ YES or ☐ NO.
IF NO:
11. Identify which of the 15 core components were exercised during this particular exercise:
12. Lessons Learned/Corrective Action Items assigned (if necessary):

_____

Certifying Signature - Incident Commander

SAMPLE

DISCHARGE PREVENTION MEETING LOG

Date:	
Attendees:	

Subject/Issue	Required Action	Implementation

Tank Inspection Checklist

Monthly Aboveground Storage Tank Inspection Report

☐ External Floater (EFR) ☐ Internal Floater (IFR) ☐ Cone ☐ Other

Location:	Tank Status:	Tank Number:
Inspected By:	(INITIAL)	Date of Inspection:
Assess the condition of the following items:		**Remarks for "UNSAT" comments**
Ladders, Stairways, Platforms, and Walkways:		
- Corrosion ☐ N/A ☐ SAT ☐ UNSAT		
- Broken or missing parts ☐ N/A ☐ SAT ☐ UNSAT		
- Cracked, spalled or deteriorated concrete ☐ N/A ☐ SAT ☐ UNSAT		
- Area lighting ☐ N/A ☐ SAT ☐ UNSAT		
Foundations:		
- Build up or erosion of soil around tank bottom ☐ N/A ☐ SAT ☐ UNSAT		
- Excessive settlement of one side of the tank ☐ N/A ☐ SAT ☐ UNSAT		
- Cracked, spalled or deteriorated ringwall ☐ N/A ☐ SAT ☐ UNSAT -		
For tanks on concrete foundation – tank grounding ☐ N/A ☐ SAT ☐ UNSAT		
Piping & Shell Connections i.e. nozzles, MWs, mixers, steam traps and valves:		
- Cracks ☐ N/A ☐ SAT ☐ UNSAT Corrosion ☐ N/A ☐ SAT ☐ UNSAT		
- Distortions ☐ N/A ☐ SAT ☐ UNSAT Leakage ☐ N/A ☐ SAT ☐ UNSAT		
- Grounding connections ☐ N/A ☐ SAT ☐ UNSAT		
- Do all applicable vents, drains and bleeders have plugs? ☐ N/A ☐ YES ☐ NO		
Tank, Shell, Roof and Bottom:		
- Leaks (including spills and overfills) ☐ N/A ☐ SAT ☐ UNSAT		
- Visual inspection of under bottom leak detection ☐ N/A ☐ SAT ☐ UNSAT		
- Corrosion ☐ N/A ☐ SAT ☐ UNSAT		
- Cracks ☐ N/A ☐ SAT ☐ UNSAT Bulges ☐ N/A ☐ SAT ☐ UNSAT		
- Labels (DOT Diamond, Tank No., Shell Nozzles, etc) ☐ N/A ☐ SAT ☐ UNSAT		
- Gauge hatch - operational/fully functional ☐ N/A ☐ SAT ☐ UNSAT		
- gasket in place and in good condition ☐ N/A ☐ SAT ☐ UNSAT		
- secured tightly closed ☐ N/A ☐ SAT ☐ UNSAT		
- (IFR/Cone) Access/Inspection hatches closed ☐ N/A ☐ SAT ☐ UNSAT		
Vent hoods closed ☐ N/A ☐ SAT ☐ UNSAT		
- (IFR) Access hatch accessible? ☐ N/A ☐ YES ☐ NO		
If yes, open roof access hatch and inspect for visible openings, oil & visible seal defects ☐ N/A ☐ SAT ☐ UNSAT		
- (IFR/EFR) Product level above minimum fill ☐ N/A ☐ SAT ☐ UNSAT		
- (EFR) Roof free of oil ☐ N/A ☐ SAT ☐ UNSAT		
Vacuum Breaker(s) closed ☐ N/A ☐ SAT ☐ UNSAT		
Rim Seals - No visible gaps or defects ☐ N/A ☐ SAT ☐ UNSAT		
Rim Vents closed ☐ N/A ☐ SAT ☐ UNSAT		
Gauge Tube Emission Control ☐ N/A ☐ SAT ☐ UNSAT		
Floating Roof ladder and ground cables ☐ N/A ☐ SAT ☐ UNSAT		
All other openings in Floating Roof closed ☐ N/A ☐ SAT ☐ UNSAT		
Roof drain working and normally closed ☐ N/A ☐ SAT ☐ UNSAT		
Dikes: ☐ This Section N/A		
- Access. ☐ N/A ☐ SAT ☐ UNSAT Clear of weeds, etc ☐ N/A ☐ SAT ☐ UNSAT		
- Erosion ☐ N/A ☐ SAT ☐ UNSAT Housekeeping ☐ N/A ☐ SAT ☐ UNSAT		
- Cracks in masonry fire walls ☐ N/A ☐ SAT ☐ UNSAT		
- No openings in the dike wall ☐ N/A ☐ SAT ☐ UNSAT		
- Pipe intrusions through the dike wall sealed ☐ N/A ☐ SAT ☐ UNSAT		
- Drainage and general condition ☐ N/A ☐ SAT ☐ UNSAT		
- Any accumulation of water? Hydrocarbon? ☐ N/A ☐ SAT ☐ UNSAT		
- Drain valve operated and okay ☐ N/A ☐ SAT ☐ UNSAT		
- Drain valve secured in the closed position ☐ N/A ☐ SAT ☐ UNSAT		
- No open excavations in dike area ☐ N/A ☐ SAT ☐ UNSAT		
Tk Gauges: Auto ☐ N/A ☐ SAT ☐ UNSAT Board ☐ N/A ☐ SAT ☐ UNSAT		
Independent High Level Alarm Test (pull lever):		
- HH Alarm ☐ N/A ☐ SAT ☐ UNSAT 2nd Alarm ☐ N/A ☐ SAT ☐ UNSAT		
General Comments: ☐ SAT ☐ UNSAT		

ATG Gauge _____ Secondary Gauge _____ Hand Gauge _____ Board Gauge _____ Water Cut _____

Computer Gauge _____ Hand Temp _____ Local Temp _____ Auto Temp _____

Submit completed form to Operations' Supervision — FORM: Monthly AST Inspection Report, Last Rev. 4/23/2009

Paper copies are uncontrolled; latest copy can be obtained from TDMS. — Date Printed: 3/24/2011

Secondary Containment Inspection

Secondary Containment Checklist

Inspected by:	Date:	Asset No.:

Inspection Items	YES	NO	NA	Remarks
Dike or Berm System				
1. Is there any precipitation in the dike that needs to be drained?	☐	☐	☐	
2. Is there anything wrong with the functionality of the drainage valves?	☐	☐	☐	
3. Are there holes or cracks in the dike or berm?	☐	☐	☐	

Is Condition Present

Inspection Item	YES	NO	NA	Remarks
Dike or Berm Systems				
1. Is debris present in the dike/berm?	☐	☐	☐	
2. Is there erosion of earthen dike/berm system?	☐	☐	☐	
3. Is there any discoloration due to oil?	☐	☐	☐	
4. Is there any spilled or leaked material inside the dike/berm?	☐	☐	☐	
Oil Bearing Sewer Containment Systems				
1. Is debris present that prevents proper sewer flow or causes sewer to backup?	☐	☐	☐	
2. Is spilled or leaking material present?	☐	☐	☐	

Note: If the answer to any of the questions is "Yes", a corrective action item should be entered in the tracking system.

Records: Environmental Department keeps a copy for 5 years.

APPENDIX H

HAZARD EVALUATION

Page

NRC OSRO Response for Group 5 Submerged Oils.....H-2

National Response Corporation **Equipment Types: Boom/Portable Storage/Skimmer/Vacuum System/Vessel**
Resource Availability By Type

Zone: Toledo, OH **TOLEDO DEMO - Case# DM13-0381**
September 25, 2013

00 to 06 hours (* Does not include recall/mobilization time)

Boom

>=6 and <18 inch

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
12" Boom	0	2000	0	0	ICN	Rudolph	OH	00:45
12" Boom	0	1000	0	0	ICN	Rudolph	OH	00:45
12" Boom	0	300	0	0	ICN	Mcdonald	PA	05:33
10" Boom	0	1300	0	0	ICN	Mcdonald	PA	05:33
12" Boom	0	125	0	0	ICN	Merrillville	IN	05:34
8" Boom	0	2450	0	0	ICN	New Matamoras	OH	05:35
12" Boom	0	450	0	0	ICN	Indianapolis	IN	05:36
10" Boom	0	1252	0	0	ICN	Pittsburgh	PA	05:41
8" Boom	0	350	0	0	ICN	Mooresville	IN	05:52
Sub Total >=6 and <18 inch:		**9227**	**0**	**0**				

>18 and <42 inch

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
24" Boom	0	1000	0	0	ICN	Cleveland	OH	02:45
24" Boom	0	1000	0	0	ICN	Middletown	OH	04:26
24" Boom	0	1000	0	0	ICN	East Liverpool	OH	04:49
30" Boom	0	100	0	0	ICN	Erie	PA	05:07
24" Boom	0	6050	0	0	ICN	Mcdonald	PA	05:33
24" Boom	0	4250	0	0	ICN	New Matamoras	OH	05:35
Sub Total >18 and <42 inch:		**13400**	**0**	**0**				

>42 inch

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
60" Boom	0	50	0	0	ICN	Mcdonald	PA	05:33
44" Boom	0	1100	0	0	ICN	East Chicago	IN	05:49
Sub Total >42 inch:		**1150**	**0**	**0**				

18"

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
18" Boom	0	1000	0	0	ICN	Toledo	OH	00:07
18" Boom	0	4000	0	0	ICN	Rudolph	OH	00:45
18" Boom	0	4000	0	0	ICN	Ypsilanti	MI	01:06
18" Boom	0	500	0	0	ICN	Findlay	OH	01:07
18" Boom	0	11400	0	0	ICN	Detroit	MI	01:23
18" Boom	0	2100	0	0	ICN	Sterling Heights	MI	01:54
18" Boom	0	1500	0	0	ICN	Sterling Heights	MI	02:01
18" Boom	0	1200	0	0	ICN	Middleburg Heights	OH	02:34
18" Boom	0	3000	0	0	ICN	Cleveland	OH	02:45
18" Boom	0	100	0	0	ICN	North Canton	OH	03:27
18" Boom	0	100	0	0	ICN	Elkhart	IN	03:36
18" Boom	0	2200	0	0	ICN	Huber Heights	OH	03:37
18" Boom	0	500	0	0	ICN	Cincinnati	OH	04:47
18" Boom	0	2000	0	0	ICN	East Liverpool	OH	04:51
18" Boom	0	5500	0	0	ICN	Cincinnati	OH	05:07
18" Boom	0	1200	0	0	ICN	Batavia	OH	05:10
18" Boom	0	200	0	0	ICN	Indianapolis	IN	05:33
18" Boom	0	1500	0	0	ICN	Indianapolis	IN	05:36
18" Boom	0	100	0	0	ICN	Cuddy	PA	05:37
18" Boom	0	100	0	0	ICN	Schererville	IN	05:48
18" Boom	0	1000	0	0	ICN	Whiting	IN	05:49
18" Boom	0	13000	0	0	ICN	East Chicago	IN	05:49
18" Boom	0	3000	0	0	ICN	Mooresville	IN	05:52

00 to 06 hours (* Does not include recall/mobilization time)

Sub Total 18":	**59200**	**0**	**0**
Total Boom:	**82977**	**0**	**0**

Portable Storage

Frac Tank

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Frac Tank	0	4	0	1036	ICN	Toledo	OH	00:07
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	2	0	1000	ICN	North Canton	OH	03:27
Frac Tank	0	6	0	2568	ICN	Huber Heights	OH	03:37
Frac Tank	0	10	0	4770	ICN	East Liverpool	OH	04:49
Frac Tank	0	1	0	523	ICN	Cincinnati	OH	05:07
Frac Tank	0	2	0	856	ICN	Miamitown	OH	05:07
Frac Tank	0	1	0	500	ICN	Cuddy	PA	05:37
Frac Tank	0	16	0	960	ICN	East Chicago	IN	05:49
Sub Total Frac Tank:		**60**	**0**	**21213**				

Portable Tank

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Portable Tank	0	4	0	116	ICN	Toledo	OH	00:07
Tank Truck	0	1	0	162	ICN	Detroit	MI	01:23
Tank Truck	0	1	0	166	ICN	Detroit	MI	01:23
Tank Trailer	0	1	0	119	ICN	Cleveland	OH	02:45
Poly Tote	0	2	0	12	ICN	North Canton	OH	03:27
Poly Tank	0	1	0	7	ICN	North Canton	OH	03:27
Poly Tank	0	1	0	35	ICN	North Canton	OH	03:27
Poly Tote	0	2	0	12	ICN	Elkhart	IN	03:36
Poly Tank	0	1	0	7	ICN	Elkhart	IN	03:36
Poly Tank	0	1	0	35	ICN	Elkhart	IN	03:36
Poly Tank	0	2	0	24	ICN	Merrillville	IN	05:34
Poly Tank	0	1	0	7	ICN	Cuddy	PA	05:37
Poly Tank	0	1	0	35	ICN	Cuddy	PA	05:37
Poly Tote	0	2	0	12	ICN	Cuddy	PA	05:37
Tank Truck	0	18	0	3006	ICN	Carnegie	PA	05:39
Tank Truck	0	3	0	465	ICN	Carnegie	PA	05:39
Poly Tote	0	2	0	12	ICN	Schererville	IN	05:48
Poly Tank	0	1	0	7	ICN	Schererville	IN	05:48
Poly Tank	0	1	0	35	ICN	Schererville	IN	05:48
Tank Truck	0	5	0	655	ICN	East Chicago	IN	05:49
Tank Truck	0	6	0	540	ICN	East Chicago	IN	05:49
Poly Storage Tank	0	4	0	188	ICN	Mooresville	IN	05:52
Sub Total Portable Tank:		**61**	**0**	**5657**				

Tank Truck

00 to 06 hours (* Does not include recall/mobilization time)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Static Trailer	0	1	0	128	ICN	Ypsilanti	MI	01:06
Jumbo Tanker	0	1	0	285	ICN	Ypsilanti	MI	01:06
Tank Truck	0	4	0	304	ICN	East Chicago	IN	05:49
Tank Truck	0	2	0	104	ICN	East Chicago	IN	05:49
Sub Total Tank Truck:		**8**	**0**	**821**				
Total Portable Storage:		**129**	**0**	**27691**				

Skimmer

Drum

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Elastec TDS136 Skimmer	0	1	480	0	ICN	Toledo	OH	00:07
Elastec Mini Max Skimmer	0	1	137	0	ICN	Rudolph	OH	00:45
Elastec Mini Max Skimmer	0	1	137	0	ICN	Rudolph	OH	00:45
Elastec Magnum 100	0	1	686	0	ICN	Rudolph	OH	00:45
Elastec Magnum 100	0	1	686	0	ICN	Rudolph	OH	00:45
Elastec Magnum 100	0	1	686	0	ICN	Rudolph	OH	00:45
Elastec Magnum 100	0	1	686	0	ICN	Rudolph	OH	00:45
Elastec Magnum 100	0	1	686	0	ICN	Rudolph	OH	00:45
Elastec Magnum 100	0	1	686	0	ICN	Rudolph	OH	00:45
Elastec Mini Max Skimmer	0	1	137	0	ICN	Rudolph	OH	00:45
Elastec TDS136 Skimmer	0	1	480	0	ICN	Rudolph	OH	00:45
Elastec TDS136 Skimmer	0	1	480	0	ICN	Rudolph	OH	00:45
Elastec TDS136 Skimmer	0	1	480	0	ICN	Rudolph	OH	00:45
Elastec Magnum 100	0	1	686	0	ICN	Rudolph	OH	00:45
Elastec Magnum 200	0	1	1371	0	ICN	Rudolph	OH	00:45
Elastec Magnum 200	0	1	1371	0	ICN	Rudolph	OH	00:45
Crucial 1D18P24 Skimmer	0	1	171	0	ICN	Detroit	MI	01:23
Medium Drum Skimmer	0	2	480	0	ICN	Detroit	MI	01:23
Crucial 1D18P36 Skimmer	0	2	480	0	ICN	Sterling Heights	MI	01:54
Small Drum Skimmer	0	3	513	0	ICN	Sterling Heights	MI	01:54
Elastec TDS118 Skimmer	0	1	240	0	ICN	Huber Heights	OH	03:37
Small Drum Skimmer	0	1	171	0	ICN	Carroll	OH	03:56
Small Drum Skimmer	0	1	171	0	ICN	East Liverpool	OH	04:51
Small Drum Skimmer	0	2	342	0	ICN	Indianapolis	IN	05:33
Elastec TDS136 Skimmer	0	1	480	0	ICN	Indianapolis	IN	05:36
Small Drum Skimmer	0	3	513	0	ICN	Carnegie	PA	05:39
Elastec Mini-Max Skimmer	0	2	274	0	ICN	East Chicago	IN	05:49
Elastec TDS136 Skimmer	0	6	2880	0	ICN	East Chicago	IN	05:49
Elastec Mini-Max Skimmer	0	2	274	0	ICN	East Chicago	IN	05:49
Medium Drum Skimmer	0	1	240	0	ICN	Mooresville	IN	05:52
Sub Total Drum:		**44**	**17104**	**0**				

Floating Suction

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Manta Ray Skimmer	0	1	315	0	ICN	Detroit	MI	01:23
Manta Ray Skimmer	0	1	315	0	ICN	Huber Heights	OH	03:37
Douglas 4300 SkimPac	0	1	480	0	ICN	Huber Heights	OH	03:37
Vikoma Fasflo Skimmer	FFP-014	1	2112	0	NRC	Cincinnati	OH	05:07
Acme Weir Head Skimmer	WH-109	1	0	0	NRC	Cincinnati	OH	05:07
Manta Ray Skimmer	0	1	315	0	ICN	Miamitown	OH	05:07
Floating Suction Skimmer	0	1	274	0	ICN	East Chicago	IN	05:49
Sub Total Floating Suction:		**7**	**3811**	**0**				

Oleophilic Disk

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
NRC Weir Disk Skimmer	WD-107	1	1371	24	NRC	Cincinnati	OH	05:07
Vikoma Komara 12K Skimmer	0	1	480	0	ICN	East Chicago	IN	05:49
Sub Total Oleophilic Disk:		**2**	**1851**	**24**				

Oleophilic Rope Mop

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)

00 to 06 hours (* Does not include recall/mobilization time)

Rope Mop Skimmer	0	1	75	0	ICN	Detroit	MI	01:23
Sub Total Oleophilic Rope Mop:		**1**	**75**	**0**				
Total Skimmer:		**54**	**22841**	**24**				

Vacuum System

Loader

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Skid Mount Vac	0	1	891	65	ICN	Rudolph	OH	00:45
Vacuum Drum Loader	0	2	686	0	ICN	Cincinnati	OH	05:07
Sub Total Loader:		**3**	**1577**	**65**				

Vacuum Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Vacuum Trailer	0	1	343	120	ICN	Cincinnati	OH	05:07
Sub Total Vacuum Trailer:		**1**	**343**	**120**				

Vacuum Transfer Unit

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Vacuum Transfer Unit	0	1	343	12	ICN	Cleveland	OH	02:45
Guzzler	0	1	343	71	ICN	Cleveland	OH	02:45
Vacuum Unit	0	1	343	78	ICN	East Liverpool	OH	04:49
Vacuum Transfer Unit	109	1	6857	24	NRC	Cincinnati	OH	05:07
Skid Mount Vac	0	1	343	24	ICN	Cincinnati	OH	05:07
Skid Mount Vac	0	1	343	12	ICN	Cincinnati	OH	05:07
Vacuum Variety	0	15	5145	0	ICN	Mooresville	IN	05:52
Sub Total Vacuum Transfer Unit:		**21**	**13717**	**221**				

Vacuum Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Vacuum Truck	0	4	1372	80	ICN	Toledo	OH	00:07
Vacuum Truck	0	1	343	70	ICN	Rudolph	OH	00:45
Vacuum Truck	0	1	343	70	ICN	Ypsilanti	MI	01:06
Vacuum Truck	0	1	343	70	ICN	Ypsilanti	MI	01:06
Vacuum Truck	0	1	343	70	ICN	Ypsilanti	MI	01:06
Vacuum Truck	0	1	343	70	ICN	Ypsilanti	MI	01:06
Vacuum Truck	0	1	343	70	ICN	Ypsilanti	MI	01:06
Vacuum Truck	0	1	343	70	ICN	Ypsilanti	MI	01:06
Vacuum Truck	0	1	343	107	ICN	Detroit	MI	01:23
Vacuum Truck	0	1	343	131	ICN	Detroit	MI	01:23
Vacuum Truck	0	1	343	119	ICN	Detroit	MI	01:23
Vacuum Truck	0	1	343	143	ICN	Detroit	MI	01:23
Vacuum Truck	0	4	1372	192	ICN	Detroit	MI	01:23
Vacuum Truck	0	2	686	166	ICN	Detroit	MI	01:23
Vacuum Truck	0	3	1029	213	ICN	Detroit	MI	01:23
Vacuum Truck	0	1	343	71	ICN	Cleveland	OH	02:34
Vacuum Trailer	0	1	343	120	ICN	Cleveland	OH	02:45
Vacuum Truck	0	2	686	142	ICN	Cleveland	OH	02:45
Vacuum Truck	0	4	1372	284	ICN	North Canton	OH	03:27
Vacuum Truck	0	4	1372	284	ICN	Elkhart	IN	03:36
Vacuum Truck	0	25	8575	1775	ICN	Huber Heights	OH	03:37
Vacuum Truck	0	2	686	120	ICN	Huber Heights	OH	03:37
Vacuum Truck	0	2	686	142	ICN	New Philadelphia	OH	03:49
Vacuum Truck	0	5	1715	355	ICN	Carroll	OH	03:56
Vacuum Truck	0	1	343	71	ICN	Middletown	OH	04:26
Vacuum Truck	0	1	343	83	ICN	Middletown	OH	04:26
Vacuum Truck	0	1	343	70	ICN	Cincinnati	OH	04:47
Vacuum Truck	0	1	343	74	ICN	East Liverpool	OH	04:49
Vacuum Truck	0	1	343	71	ICN	Steubenville	OH	05:01
Vacuum Truck	0	3	1029	213	ICN	Cincinnati	OH	05:07
Vacuum Truck	0	11	3773	1045	ICN	Miamitown	OH	05:07
Vacuum Truck	0	1	343	71	ICN	Indianapolis	IN	05:33
Vacuum Truck	0	2	686	142	ICN	Merrillville	IN	05:34

00 to 06 hours (* Does not include recall/mobilization time)

Pump Truck	0	1	651	71	ICN	Merrillville	IN	05:34
Vacuum Truck	0	35	12005	4200	ICN	Indianapolis	IN	05:36
Vacuum Truck	0	4	1372	284	ICN	Cuddy	PA	05:37
Vacuum Truck	0	2	686	142	ICN	Washington	PA	05:38
Vacuum Truck	0	1	343	67	ICN	Carnegie	PA	05:39
Vacuum Truck	0	4	1372	284	ICN	Carnegie	PA	05:39
Vacuum Truck	0	4	1372	316	ICN	Carnegie	PA	05:39
Vacuum Truck	0	1	343	24	ICN	Carnegie	PA	05:39
Vacuum Truck	0	1	343	71	ICN	Carnegie	PA	05:39
Vacuum Truck	0	4	1372	284	ICN	Schererville	IN	05:48
Vacuum Truck	0	11	3773	1573	ICN	Whiting	IN	05:49
Vacuum Truck	0	12	4116	852	ICN	East Chicago	IN	05:49
Vacuum Truck	0	15	5145	1065	ICN	East Chicago	IN	05:49
Vacuum Truck	0	1	343	120	ICN	Hammond	IN	05:50
Vacuum Truck	0	1	343	71	ICN	Mooresville	IN	05:52
Sub Total Vacuum Truck:		**189**	**65135**	**16198**				
Total Vacuum System:		**214**	**80772**	**16604**				

Vessel

Deployment Craft (< 25 foot)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
24' Deployment Craft	0	1	0	0	ICN	Toledo	OH	00:07
14' Deployment Craft	0	1	0	0	ICN	Toledo	OH	00:07
18' Deployment Craft	0	1	0	0	ICN	Toledo	OH	00:12
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
12' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
18' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
18' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
24' Deployment Craft	0	1	0	0	ICN	Detroit	MI	01:23
20' Deployment Craft	0	1	0	0	ICN	Detroit	MI	01:23
13' Deployment Craft	0	1	0	0	ICN	Detroit	MI	01:23
20' Deployment Craft	0	2	0	0	ICN	Detroit	MI	01:23
17' Deployment Craft	0	1	0	0	ICN	Detroit	MI	01:23
14' Deployment Craft	0	4	0	0	ICN	Sterling Heights	MI	01:54
18' Deployment Craft	0	1	0	0	ICN	Sterling Heights	MI	01:54
12' Deployment Craft	0	1	0	0	ICN	Sterling Heights	MI	01:54
16' Deployment Craft	0	1	0	0	ICN	Sterling Heights	MI	01:54
John Boat	0	13	0	0	ICN	Marshall	MI	02:28
20' Deployment Craft	0	2	0	0	ICN	Middleburg Heights	OH	02:34
16' Deployment Craft	0	1	0	0	ICN	Middleburg Heights	OH	02:34
21' Deployment Craft	0	1	0	0	ICN	Cleveland	OH	02:45
14' Deployment Craft	0	1	0	0	ICN	Cleveland	OH	02:45
12' Deployment Craft	0	1	0	0	ICN	Cleveland	OH	02:45
14' Deployment Craft	0	1	0	0	ICN	North Canton	OH	03:27
14' Deployment Craft	0	1	0	0	ICN	Elkhart	IN	03:36
16' Deployment Craft	0	1	0	0	ICN	Huber Heights	OH	03:37
16' Jon Boat	0	2	0	0	ICN	Middletown	OH	04:26
Response Boat	0	1	0	0	ICN	Cincinnati	OH	04:47
21' Deployment Craft	0	1	0	0	ICN	East Liverpool	OH	04:49
24' Deployment Craft	0	2	0	0	ICN	East Liverpool	OH	04:49
14' Deployment Craft	0	1	0	0	ICN	East Liverpool	OH	04:51
22' Deployment Craft	0	1	0	0	ICN	East Liverpool	OH	04:51
16' Deployment Craft	0	1	0	0	ICN	Steubenville	OH	05:01

00 to 06 hours (* Does not include recall/mobilization time)

24' Deployment Craft	0	1	0	0	ICN	Cincinnati	OH	05:07
14' Deployment Craft	0	2	0	0	ICN	Cincinnati	OH	05:07
22' Deployment Craft	0	1	0	0	ICN	Cincinnati	OH	05:07
23' Deployment Craft	0	1	0	0	ICN	Erie	PA	05:07
21' Deployment Craft	0	1	0	0	ICN	Erie	PA	05:07
20' Deployment Craft	0	1	0	0	ICN	Batavia	OH	05:10
16' Deployment Craft	0	1	0	0	ICN	Batavia	OH	05:10
15' Deployment Craft	0	1	0	0	ICN	Dayton	KY	05:12
18' Deployment Craft	0	1	0	0	ICN	Dayton	KY	05:12
20' Deployment Craft	0	1	0	0	ICN	Indianapolis	IN	05:16
14' Deployment Craft	0	2	0	0	ICN	Indianapolis	IN	05:33
12' Deployment Craft	0	4	0	0	ICN	Indianapolis	IN	05:33
14' Deployment Craft	0	2	0	0	ICN	Merrillville	IN	05:34
12' Deployment Craft	0	1	0	0	ICN	Indianapolis	IN	05:36
14' Deployment Craft	0	1	0	0	ICN	Cuddy	PA	05:37
20' Deployment Craft	0	1	0	0	ICN	Cuddy	PA	05:37
24' Deployment Craft	0	1	0	0	ICN	Carnegie	PA	05:39
23' Deployment Craft	0	1	0	0	ICN	Carnegie	PA	05:39
15' Deployment Craft	0	1	0	0	ICN	Carnegie	PA	05:39
14' Deployment Craft	0	10	0	0	ICN	Carnegie	PA	05:39
12' Deployment Craft	0	1	0	0	ICN	Carnegie	PA	05:39
16' Deployment Craft	0	2	0	0	ICN	Pittsburgh	PA	05:41
14' Deployment Craft	0	1	0	0	ICN	Schererville	IN	05:48
14' Deployment Craft	0	1	0	0	ICN	Whiting	IN	05:49
14' Deployment Craft	0	4	0	0	ICN	East Chicago	IN	05:49
18' Deployment Craft	0	1	0	0	ICN	East Chicago	IN	05:49
20' Deployment Craft	0	2	0	0	ICN	East Chicago	IN	05:49
24' Deployment Craft	0	3	0	0	ICN	East Chicago	IN	05:49
17' Deployment Craft	0	2	0	0	ICN	East Chicago	IN	05:49
15' Deployment Craft	0	1	0	0	ICN	East Chicago	IN	05:49
John Boat	0	3	0	0	ICN	Mooresville	IN	05:52
Sub Total Deployment Craft (< 25 foot):		**114**	**0**	**0**				

Deployment Craft (> 25 foot)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
27' Deployment Craft	0	1	0	0	ICN	Detroit	MI	01:23
28' Deployment Craft	0	1	0	0	ICN	Sterling Heights	MI	02:01
25' Skiff	0	1	0	0	ICN	Middletown	OH	04:26
28' Deployment Craft	0	1	0	0	ICN	Cincinnati	OH	05:07
26' Deployment Craft	0	1	0	0	ICN	Erie	PA	05:07
28' Deployment Craft	0	2	0	0	ICN	Carnegie	PA	05:39
Sub Total Deployment Craft (> 25 foot):		**7**	**0**	**0**				
Total Vessel:		**121**	**0**	**0**				
Total 00 to 06 hours:			**103613**	**44319**				
Running Total from 0 to unknown:			**103613**	**44319**				

06 to 12 hours (* Does not include recall/mobilization time)

Boom

>=6 and <18 inch

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
12" Boom	0	3150	0	0	ICN	Apollo	PA	06:11
6" Boom	0	1050	0	0	ICN	Apollo	PA	06:11
10" Boom	0	400	0	0	ICN	Wheeling	IL	06:29
12" Boom	0	1500	0	0	ICN	Ashland	KY	06:32
10" Boom	0	300	0	0	ICN	Charleston	WV	07:12
8" Boom	0	2300	0	0	ICN	Charleston	WV	07:12
12" Boom	0	400	0	0	ICN	Wauwatosa	WI	07:12
12" Hard Boom	0	420	0	0	ICN	Louisville	KY	07:25
12" Boom	0	1500	0	0	ICN	Lock Haven	PA	09:10
8" Boom	0	2000	0	0	ICN	Nitro	WV	09:25
10" Boom	0	1000	0	0	ICN	Wood River	IL	11:19
10" Boom	0	400	0	0	ICN	St. Louis	MO	11:52
12" Boom	0	900	0	0	ICN	Paducah	KY	11:57
Sub Total >=6 and <18 inch:		**15320**	**0**	**0**				

>18 and <42 inch

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
20" Boom	0	1400	0	0	ICN	Apollo	PA	06:11
36" Boom	0	2000	0	0	ICN	Apollo	PA	06:11
19" Boom	0	1000	0	0	ICN	Burlington	Canada	06:24
24" Boom	0	1500	0	0	ICN	Ashland	KY	06:32
24" Boom	0	200	0	0	ICN	Lemont	IL	06:34
24" Boom	0	2000	0	0	ICN	Cross Lanes	WV	06:54
24" Boom	0	3000	0	0	ICN	Charleston	WV	07:12
36" Boom	0	1000	0	0	ICN	Germantown	WI	07:17
19" Boom	0	200	0	0	ICN	St. Ignace	MI	08:27
Snare Boom (Pom-Pom)	0	4	0	0	ICN	St. Ignace	MI	08:27
24" Boom	0	1500	0	0	ICN	Lock Haven	PA	09:10
24" Boom	0	2000	0	0	ICN	Baltimore	MD	11:27
10" Boom	0	400	0	0	ICN	Nashville	TN	11:54
Sub Total >18 and <42 inch:		**16204**	**0**	**0**				

>42 inch

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
48' Boom Trailer	0	5000	0	0	ICN	Goodlettsville	TN	11:40
Sub Total >42 inch:		**5000**	**0**	**0**				

18"

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
18" Boom	BM21-723	1000	0	0	NRC	South Holland	IL	06:03
18" Boom	0	4700	0	0	ICN	South Holland	IL	06:03
18" Boom	0	22500	0	0	ICN	Glenwood	IL	06:03
18" Boom	BM18-430	6800	0	0	NRC	Apollo	PA	06:11
18" Boom	BM18-739	1600	0	0	NRC	Apollo	PA	06:11
18" Boom	0	3225	0	0	ICN	Apollo	PA	06:11
18" Boom	0	7000	0	0	ICN	Monee	IL	06:16
Containment Boom	0	11200	0	0	ICN	Monee	IL	06:16
Containment Boom	0	11500	0	0	ICN	Monee	IL	06:16
18" Boom	0	500	0	0	ICN	Ashland	KY	06:26
18"Boom	0	11500	0	0	ICN	Wheeling	IL	06:29
18" Boom	0	3750	0	0	ICN	South Point	OH	06:32
18" Boom	0	2200	0	0	ICN	New Lenox	IL	06:33
18" Boom	0	3200	0	0	ICN	Lemont	IL	06:34
18" Boom	0	1200	0	0	ICN	Lemont	IL	06:34
18" Boom	BM18-736	3000	0	0	NRC	Shelbyville	KY	07:00
18" Boom	0	2600	0	0	ICN	Shelbyville	KY	07:00
18" Boom	0	100	0	0	ICN	North Aurora	IL	07:06
18" Boom	0	500	0	0	ICN	Crestwood	KY	07:08

06 to 12 hours (* Does not include recall/mobilization time)

18" Boom	0	1500	0	0	ICN	Menomonee Falls	WI	07:13
18" Boom	0	15400	0	0	ICN	Germantown	WI	07:17
18" Boom	0	100	0	0	ICN	Sheboygan	WI	07:21
18" Boom	BM18-433	7000	0	0	NRC	Rogers City	MI	07:25
18" Boom	BM21-719	1000	0	0	NRC	Rogers City	MI	07:25
18" Boom	BM18-727	1000	0	0	NRC	Rogers City	MI	07:25
18" Boom	BM18-735	3000	0	0	NRC	Nicholasville	KY	07:28
18" Boom	0	4900	0	0	ICN	Louisville	KY	07:34
18" Boom	0	2200	0	0	ICN	De Pere	WI	08:03
18" Boom	0	550	0	0	ICN	St. Ignace	MI	08:27
18" Boom	BM18-432	7000	0	0	NRC	Green Bay	WI	08:34
18" Boom	0	1000	0	0	ICN	Peoria	IL	09:15
18" Boom	0	2000	0	0	ICN	Newburgh	IN	09:19
18" Boom	0	1000	0	0	ICN	Evansville	IN	09:27
18" Boom	0	300	0	0	ICN	Elmira	NY	09:53
18" Boom	0	2000	0	0	ICN	Sunbury	PA	10:06
18" Boom	0	1000	0	0	ICN	Blountville	TN	10:15
18" Boom	BM18-364	100	0	0	NRC	Oswego	NY	10:46
18" Boom	BM21-720	1000	0	0	NRC	Oswego	NY	10:46
18" Boom	0	2600	0	0	ICN	Knoxville	TN	11:04
18" Boom	0	1100	0	0	ICN	Lorton	VA	11:09
18" Boom	0	500	0	0	ICN	East Syracuse	NY	11:12
Harbor Boom	0	100	0	0	ICN	East Syracuse	NY	11:12
18" Boom	0	2000	0	0	ICN	Fredericksburg	VA	11:13
18" Boom	0	1000	0	0	ICN	Laurel	MD	11:15
18" Boom	0	1000	0	0	ICN	Laurel	MD	11:15
18" Boom	0	9000	0	0	ICN	Laurel	MD	11:15
18" Boom	BM21-416	4000	0	0	NRC	Wood River	IL	11:19
18" Boom	0	2000	0	0	ICN	Wood River	IL	11:19
18" Boom	0	5000	0	0	ICN	Baltimore	MD	11:25
18" Boom	0	3000	0	0	ICN	Baltimore	MD	11:26
18" Boom	0	10000	0	0	ICN	Baltimore	MD	11:27
18" Boom	0	1800	0	0	ICN	Baltimore	MD	11:27
18" Boom	0	300	0	0	ICN	Baltimore	MD	11:27
18" Boom	BM18-737	3000	0	0	NRC	St. Louis	MO	11:40
18" Boom	0	2000	0	0	ICN	Calvert City	KY	11:40
18" Boom	0	1700	0	0	ICN	St. Louis	MO	11:52
18" Boom	0	2300	0	0	ICN	Nashville	TN	11:52
18" Boom	0	2000	0	0	ICN	Nashville	TN	11:54
18" Boom	0	1000	0	0	ICN	St. Louis	MO	11:56
18" Boom	0	2800	0	0	ICN	Paducah	KY	11:57
Sub Total 18":		**208325**	**0**	**0**				
Total Boom:		**244849**	**0**	**0**				

Portable Storage

Barge - Portable

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Portable Barge Set	101-102	1	0	238	NRC	Oswego	NY	10:46
Sub Total Barge - Portable:		**1**	**0**	**238**				

Dracone/Bladder

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Canflex FCB-43E Bladder	BC-53	1	0	100	NRC	Rogers City	MI	07:25
Sub Total Dracone/Bladder:		**1**	**0**	**100**				

Frac Tank

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Frac Tank	0	30	0	14280	ICN	Apollo	PA	06:11
Frac Tank	0	3	0	714	ICN	Apollo	PA	06:11
Frac Tank	0	1	0	357	ICN	Newburgh	IN	09:19
Frac Tank	0	1	0	357	ICN	Newburgh	IN	09:19

06 to 12 hours (* Does not include recall/mobilization time)

Frac Tank	0	1	0	429	ICN	Norway	MI	10:16
Frac Tank	0	3	0	1500	ICN	Stafford	VA	11:12
Frac Tank	0	2	0	952	ICN	Laurel	MD	11:15
Frac Tank	0	3	0	1500	ICN	Baltimore	MD	11:27
Frac Tank	0	1	0	500	ICN	Goodlettsville	TN	11:40
Sub Total Frac Tank:		**45**	**0**	**20589**				

Portable Tank

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Pillow Tank	ELS-44	1	0	24	NRC	South Holland	IL	06:03
Pillow Tank	ELS-09	1	0	24	NRC	South Holland	IL	06:03
Pillow Tank	ELS-10	1	0	24	NRC	South Holland	IL	06:03
Pillow Tank	ELS-11	1	0	24	NRC	South Holland	IL	06:03
Portable Tank	0	3	0	321	ICN	Glenwood	IL	06:03
Pillow Tank	ELS-42	1	0	24	NRC	Apollo	PA	06:11
Pillow Tank	ELS-43	1	0	24	NRC	Apollo	PA	06:11
Tank Trailer	0	1	0	143	ICN	Monee	IL	06:16
Cement Tank	0	1	0	190	ICN	Burlington	Canad	06:24
Poly Tank	0	1	0	12	ICN	Burlington	Canad	06:24
Portable Tank	0	4	0	648	ICN	Wheeling	IL	06:29
Portable Tank	0	70	0	33320	ICN	Wheeling	IL	06:29
Portable Tank	0	40	0	4280	ICN	Wheeling	IL	06:29
Portable Tank	0	2	0	286	ICN	Shelbyville	KY	07:00
Vacuum Tanker Trailer	0	1	0	130	ICN	Shelbyville	KY	07:00
Poly Tote	0	2	0	12	ICN	North Aurora	IL	07:06
Poly Tank	0	1	0	7	ICN	North Aurora	IL	07:06
Poly Tank	0	1	0	35	ICN	North Aurora	IL	07:06
Portable Tank	0	2	0	0	ICN	Wauwatosa	WI	07:12
Pillow Tank	ELS-30	1	0	24	NRC	Rogers City	MI	07:25
Pillow Tank	ELS-31	1	0	24	NRC	Rogers City	MI	07:25
Portable Tank	0	5	0	180	ICN	Louisville	KY	07:34
Tank Truck	0	1	0	167	ICN	Louisville	KY	07:34
Poly Tank	0	1	0	6	ICN	St. Ignace	MI	08:27
Poly Tank	0	1	0	5	ICN	St. Ignace	MI	08:27
Portable Tank	0	3	0	285	ICN	Peoria	IL	09:15
Portable Tank	0	4	0	572	ICN	Peoria	IL	09:15
Tanker Truck	0	4	0	476	ICN	Nitro	WV	09:25
Portable Tank	0	1	0	357	ICN	Evansville	IN	09:27
Poly Tank	0	1	0	47	ICN	Blountville	TN	10:15
Poly/Steel Tank	0	1	0	12	ICN	Blountville	TN	10:15
Poly Tank	0	1	0	8	ICN	Blountville	TN	10:15
Pillow Tank	PT-01	1	0	24	NRC	Oswego	NY	10:46
Pillow Tank	PT-02	1	0	24	NRC	Oswego	NY	10:46
Pillow Tank	PT-03	1	0	24	NRC	Oswego	NY	10:46
Pillow Tank	PT-04	1	0	24	NRC	Oswego	NY	10:46
Portable Tank	0	3	0	144	ICN	Knoxville	TN	11:04
Poly Tank	0	4	0	32	ICN	Knoxville	TN	11:04
Poly Tank	0	2	0	24	ICN	East Syracuse	NY	11:12
Portable Tank	0	5	0	60	ICN	Fredericksburg	VA	11:13
Poly Tank	0	5	0	40	ICN	Baltimore	MD	11:26
Storage Container	0	1	0	59	ICN	Baltimore	MD	11:27
Portable Tank	0	1	0	476	ICN	St. Louis	MO	11:52
Portable Tank	0	1	0	47	ICN	St. Louis	MO	11:52
Portable Tank	0	5	0	180	ICN	St. Louis	MO	11:52
Portable Tank	0	2	0	18	ICN	St. Louis	MO	11:52
Portable Tank	0	2	0	12	ICN	St. Louis	MO	11:52
Portable Tank	0	1	0	12	ICN	Nashville	TN	11:52
Poly Tank	0	5	0	40	ICN	Nashville	TN	11:52
Poly Tank	0	2	0	48	ICN	Nashville	TN	11:52
Sub Total Portable Tank:		**203**	**0**	**42979**				

Tank Truck

06 to 12 hours (* Does not include recall/mobilization time)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Storage Trailers	0	18	0	0	ICN	Apollo	PA	06:11
Tanks Trucks	0	1	0	0	ICN	Louisville	KY	07:25
Tank Trailer	0	1	0	0	ICN	Syracuse	NY	11:10
Sub Total Tank Truck:		**20**	**0**	**0**				
Total Portable Storage:		**270**	**0**	**63906**				

Skimmer

Drum

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Crucial Double Drum 18H-36 Skimmer	CD-002	1	480	0	NRC	South Holland	IL	06:03
Elastec TDS118 Skimmer	0	4	960	0	ICN	South Holland	IL	06:03
Elastec TDS118 Skimmer	0	1	240	0	ICN	Apollo	PA	06:11
Double Drum Skimmer	0	6	4116	0	ICN	Monee	IL	06:16
Double Drum Skimmer	0	8	10968	0	ICN	Monee	IL	06:16
Elastec TDS118 Skimmer	0	1	240	0	ICN	Ashland	KY	06:26
Medium Drum Skimmer	0	1	240	0	ICN	Wheeling	IL	06:29
Elastec TDS136 Skimmer	0	1	480	0	ICN	New Lenox	IL	06:33
Small Drum Skimmer	0	1	171	0	ICN	Lemont	IL	06:34
Elastec TDS136 Skimmer	0	1	480	0	ICN	Lemont	IL	06:34
Crucial 1D18P36 Skimmer	0	1	240	0	ICN	Cross Lanes	WV	06:54
Elastec TDS118 Skimmer	0	1	240	0	ICN	Shelbyville	KY	07:00
Elastec TDS118 Skimmer	0	1	240	0	ICN	Menomonee Falls	WI	07:13
Elastec TDS136 Skimmer	0	1	480	0	ICN	Germantown	WI	07:17
Small Drum Skimmer	0	1	171	0	ICN	Louisville	KY	07:34
Small Drum Skimmer	0	3	513	0	ICN	Evansville	IN	09:27
Large Drum Skimmer	0	1	480	0	ICN	Blountville	TN	10:15
Medium Drum Skimmer	0	1	240	0	ICN	Knoxville	TN	11:04
Elastec TDS118 Skimmer	0	2	480	0	ICN	Stafford	VA	11:12
Elastec TDS118 Skimmer	0	2	480	0	ICN	Laurel	MD	11:15
Small Drum Skimmer	0	1	171	0	ICN	Wood River	IL	11:19
Elastec TDS136 Skimmer	0	1	480	0	ICN	Wood River	IL	11:19
Medium Drum Skimmer	0	1	240	0	ICN	Baltimore	MD	11:26
Elastec TDS136 Skimmer	0	1	480	0	ICN	Baltimore	MD	11:27
Elastec TDS118 Skimmer	0	2	480	0	ICN	Baltimore	MD	11:27
Elastec Mini Max Skimmer	0	1	137	0	ICN	Baltimore	MD	11:27
Elastec TDS118 Skimmer	0	1	240	0	ICN	Baltimore	MD	11:27
Medium Drum Skimmer	0	1	240	0	ICN	Goodlettsville	TN	11:40
Small Drum Skimmer	0	2	342	0	ICN	Calvert City	KY	11:40
Large Drum Skimmer	0	1	480	0	ICN	Nashville	TN	11:52
Small Drum Skimmer	0	1	171	0	ICN	Nashville	TN	11:54
Elastec TDS118 Skimmer	0	1	240	0	ICN	St. Louis	MO	11:56
Small Drum Skimmer	0	1	171	0	ICN	Paducah	KY	11:57
Sub Total Drum:		**54**	**25811**	**0**				

Floating Suction

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Vikoma Fasflo Skimmer	FFP-013	1	2112	0	NRC	Apollo	PA	06:11
Acme Weir Head Skimmer	WH-107	1	0	0	NRC	Apollo	PA	06:11
Vikoma Fasflo Skimmer	FFP-015	1	2112	0	NRC	Apollo	PA	06:11
Acme 39T Skimmer	0	1	1371	0	ICN	Apollo	PA	06:11
Megator Vacuum Skimmer	0	1	377	0	ICN	Apollo	PA	06:11
Manta Ray Skimmer	0	1	315	0	ICN	Apollo	PA	06:11
Duck Bill Skimmer	0	1	549	0	ICN	Monee	IL	06:16
Vikoma Fasflo Skimmer	FFP-011	1	2112	0	NRC	South Point	OH	06:32
Douglas 4300 SkimPac	0	2	960	0	ICN	Germantown	WI	07:17
Douglas 4300 Skimpac	0	2	960	0	ICN	De Pere	WI	08:03
Douglas 2300 SkimPac	0	1	274	0	ICN	St. Ignace	MI	08:27
Douglas 4300 SkimPac	0	2	960	0	ICN	Neenah	WI	08:45
Manta Ray Skimmer	0	1	315	0	ICN	Knoxville	TN	11:04

06 to 12 hours (* Does not include recall/mobilization time)

Manta Ray Skimmer	0	1	315	0	ICN	Fredericksburg	VA	11:13
Vikoma Fasflo Skimmer	FFP-003	1	2112	0	NRC	Wood River	IL	11:19
Vikoma Fasflo Skimmer	FFP-017	1	2112	0	NRC	Baltimore	MD	11:27
Acme Weir Head Skimmer	WH-220	1	0	0	NRC	Baltimore	MD	11:27
Skim Pak Skimmer	0	1	233	0	ICN	Baltimore	MD	11:27
Weir Skimmer	0	2	2058	0	ICN	Baltimore	MD	11:27
Vikoma Fasflo Skimmer	FFP-018	1	2112	0	NRC	Paducah	KY	11:57
Sub Total Floating Suction:		**24**	**21359**	**0**				

Multi Skimmer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Action 24 Skimmer	AP-115	1	823	0	NRC	Rogers City	MI	07:25
Action 18 Skimmer	AP-18-727	1	446	0	NRC	Rogers City	MI	07:25
Action 24 Skimmer	AP-116	1	823	0	NRC	Oswego	NY	10:46
Sub Total Multi Skimmer:		**3**	**2092**	**0**				

Oleophilic Disk

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Crucial ORD Disk Skimmer	ORD-005	1	342	0	NRC	Apollo	PA	06:11
NRC Weir Disk Skimmer	WD-105	1	1371	24	NRC	Apollo	PA	06:11
Sub Total Oleophilic Disk:		**2**	**1713**	**24**				

Oleophilic Rope Mop

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Rope Mop	0	1	1200	0	ICN	Baltimore	MD	11:27
Sub Total Oleophilic Rope Mop:		**1**	**1200**	**0**				

Weir

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Alpha Weir Skimmer	0	1	1360	0	ICN	South Holland	IL	06:03
Weir Skimmer	0	2	274	0	ICN	Glenwood	IL	06:03
Sub Total Weir:		**3**	**1634**	**0**				
Total Skimmer:		**87**	**53809**	**24**				

Vacuum System

Loader

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Skid Mounted Vac	0	1	206	71	ICN	Apollo	PA	06:11
Vacuum Loader	0	3	1029	213	ICN	Burlington	Canad	06:24
Vacuum Drum Loader	0	1	343	0	ICN	Cross Lanes	WV	06:54
Sub Total Loader:		**5**	**1578**	**284**				

Vacuum Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Vacuum Trailer	0	1	1621	124	ICN	Apollo	PA	06:11
Vacuum Trailer	0	1	1651	155	ICN	Apollo	PA	06:11
Vacuum Trailer	0	2	686	262	ICN	Apollo	PA	06:11
Vacuum Trailer	0	1	343	131	ICN	Apollo	PA	06:11
Vacuum Trailer	0	2	3260	260	ICN	Apollo	PA	06:11
Vacuum Trailer	0	2	3306	310	ICN	Apollo	PA	06:11
Vacuum Trailer	0	1	343	95	ICN	Burlington	Canad	06:24
Vacuum Trailer	0	1	343	178	ICN	Burlington	Canad	06:24
Vacuum Trailer	0	4	1372	568	ICN	Ashland	KY	06:32
Vacuum Tanker Trailer	0	1	343	52	ICN	Shelbyville	KY	07:00
Vacuum Trailer	0	1	343	71	ICN	Sunbury	PA	10:06
Vacuum Trailer	0	1	343	125	ICN	Lorton	VA	11:09
Vacuum Trailer	0	1	343	119	ICN	Syracuse	NY	11:10
Vacuum Trailer	0	1	343	142	ICN	Laurel	MD	11:15
Vacuum Tank Trailer	0	1	2057	119	ICN	Baltimore	MD	11:27
Sub Total Vacuum Trailer:		**21**	**16697**	**2711**				

Vacuum Transfer Unit

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)

06 to 12 hours (* Does not include recall/mobilization time)

Vacuum Transfer Unit	107	1	6857	24	NRC	Apollo	PA	06:11
Vacuum Unit	0	1	686	24	ICN	Monee	IL	06:16
Vacuum Unit	0	1	686	12	ICN	Monee	IL	06:16
Skid Mount Vac	0	1	343	24	ICN	Cross Lanes	WV	06:54
Vacuum Transfer Unit	220	1	6857	24	NRC	Baltimore	MD	11:27
Super Sucker Vacuum	0	1	343	120	ICN	St. Louis	MO	11:52
Sub Total Vacuum Transfer Unit:		**6**	**15772**	**228**				

Vacuum Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Vacuum Truck	0	1	754	71	ICN	Glenwood	IL	06:03
Vacuum Truck	0	1	343	166	ICN	Glenwood	IL	06:03
Vacuum Truck	0	1	1463	76	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	1600	86	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	343	79	ICN	Apollo	PA	06:11
Vacuum Trailer	0	1	1444	76	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	1475	102	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	1575	55	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	1600	86	ICN	Apollo	PA	06:11
Vacuum Trailer	0	1	1273	67	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	1273	67	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	1805	95	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	718	52	ICN	Apollo	PA	06:11
Vacuum Truck	0	2	686	158	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	1803	95	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	1447	76	ICN	Apollo	PA	06:11
Vacuum Truck	0	3	1029	300	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	343	79	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	343	71	ICN	Monee	IL	06:16
Vacuum Truck	0	4	1372	476	ICN	Monee	IL	06:16
Vacuum Truck	0	1	343	143	ICN	Monee	IL	06:16
Vacuum Truck	0	9	3087	1179	ICN	Monee	IL	06:16
Vacuum Truck	0	1	343	90	ICN	Monee	IL	06:16
Vacuum Truck	0	1	343	57	ICN	Ashland	KY	06:26
Vacuum Truck	0	2	1508	142	ICN	Wheeling	IL	06:29
Vacuum Truck	0	5	1715	830	ICN	Wheeling	IL	06:29
Vacuum Truck	0	2	686	48	ICN	Ashland	KY	06:32
Vacuum Truck	0	7	2401	497	ICN	Ashland	KY	06:32
Vacuum Truck	0	4	1372	284	ICN	New Lenox	IL	06:33
Vacuum Truck	0	6	2058	426	ICN	Lemont	IL	06:34
Vacuum Truck	0	1	343	71	ICN	Cross Lanes	WV	06:54
Vacuum Truck	0	2	686	166	ICN	Cross Lanes	WV	06:54
Vacuum Truck	0	1	343	70	ICN	Shelbyville	KY	07:00
Vacuum Truck	0	1	343	70	ICN	Shelbyville	KY	07:00
Vacuum Truck	0	1	343	52	ICN	Shelbyville	KY	07:00
Vacuum Truck	0	2	686	152	ICN	Shelbyville	KY	07:00
Vacuum Truck	0	1	343	71	ICN	Shelbyville	KY	07:00
Vacuum Truck	0	2	686	142	ICN	Shelbyville	KY	07:00
Vacuum Truck	0	4	1372	284	ICN	North Aurora	IL	07:06
Vacuum Truck	0	2	686	142	ICN	Wauwatosa	WI	07:12
Pump Truck	0	3	1953	213	ICN	Wauwatosa	WI	07:12
Vacuum Truck	0	11	3773	660	ICN	Germantown	WI	07:17
Vacuum Truck	0	10	3430	1200	ICN	Sheboygan	WI	07:21
Vacuum Truck	0	1	343	71	ICN	Amherst	NY	07:23
Vacuum Truck	0	1	343	76	ICN	Amherst	NY	07:23
Vacuum Truck	0	1	343	71	ICN	Louisville	KY	07:25
Vacuum Truck	0	3	1029	213	ICN	Louisville	KY	07:34
Vacuum Truck	0	5	1715	600	ICN	Louisville	KY	07:38
Vacuum Truck	0	5	1715	655	ICN	Fort Atkinson	WI	08:09
Vacuum Truck	0	1	343	71	ICN	Kaukauna	WI	08:36
Pump Truck	0	2	1302	142	ICN	Kaukauna	WI	08:36

06 to 12 hours (* Does not include recall/mobilization time)

Vacuum Truck	0	1	343	71	ICN	Rochester	NY	09:00
Liquid Vac Truck	0	1	3086	71	ICN	Peoria	IL	09:15
Vacuum Truck	0	1	343	71	ICN	Newburgh	IN	09:19
Vacuum Truck	0	6	2058	720	ICN	Nitro	WV	09:25
Vacuum Truck	0	2	686	142	ICN	Evansville	IN	09:27
Vacuum Truck	0	1	343	78	ICN	Evansville	IN	09:27
Vacuum Truck	0	4	1372	284	ICN	Sunbury	PA	10:06
Vacuum Truck	0	1	343	71	ICN	Blountville	TN	10:15
Vacuum Truck	0	1	343	71	ICN	Norway	MI	10:16
Vacuum Truck	0	1	343	71	ICN	Waverly	NY	10:18
Vacuum Truck	0	2	686	96	ICN	Wausau	WI	11:01
Vacuum Truck	0	1	343	50	ICN	Knoxville	TN	11:04
Vacuum Truck	0	1	343	75	ICN	Lorton	VA	11:09
Vacuum Truck	0	1	343	71	ICN	Syracuse	NY	11:10
Vacuum Truck	0	1	343	71	ICN	Syracuse	NY	11:10
Vacuum Truck	0	1	343	48	ICN	Syracuse	NY	11:10
Vacuum Truck	0	1	343	77	ICN	Syracuse	NY	11:10
Vacuum Truck	0	1	343	71	ICN	Syracuse	NY	11:10
Vacuum Tractor	0	1	343	71	ICN	East Syracuse	NY	11:12
Vacuum Truck	0	2	686	142	ICN	East Syracuse	NY	11:12
Vacuum Tank Truck	0	1	2057	83	ICN	Stafford	VA	11:12
Vacuum Tank Truck	0	1	2057	76	ICN	Stafford	VA	11:12
Vacuum Tank Truck	0	1	2057	76	ICN	Stafford	VA	11:12
Vacuum Truck	0	2	686	166	ICN	Fredericksburg	VA	11:13
Vacuum Truck	0	1	343	71	ICN	Fredericksburg	VA	11:13
Vacuum Truck	0	2	686	142	ICN	Laurel	MD	11:15
Vacuum Truck	0	1	343	59	ICN	Laurel	MD	11:15
Vacuum Truck	0	9	3087	639	ICN	Wood River	IL	11:19
Vacuum Truck	0	3	1029	360	ICN	Baltimore	MD	11:25
Vacuum Truck	0	1	343	120	ICN	Baltimore	MD	11:26
Vacuum Tanker	0	1	343	71	ICN	Baltimore	MD	11:26
Vacuum Truck	0	1	343	83	ICN	Baltimore	MD	11:26
Vacuum Tank Truck	0	1	2057	83	ICN	Baltimore	MD	11:27
Vacuum Tank Truck	0	1	2057	76	ICN	Baltimore	MD	11:27
Vacuum Tank Truck	0	1	2057	83	ICN	Baltimore	MD	11:27
Vacuum Tank Truck	0	1	2057	71	ICN	Baltimore	MD	11:27
Vacuum Tank Truck	0	1	2057	76	ICN	Baltimore	MD	11:27
Vacuum Tank Truck	0	1	2057	95	ICN	Baltimore	MD	11:27
Vacuum Tank Truck	0	1	2057	71	ICN	Baltimore	MD	11:27
Vacuum Tank Truck	0	1	2057	71	ICN	Baltimore	MD	11:27
Vacuum Truck	0	1	343	130	ICN	Baltimore	MD	11:27
Vacuum Truck	0	1	343	75	ICN	Baltimore	MD	11:27
Vacuum Truck	0	1	343	76	ICN	Baltimore	MD	11:27
Vacuum Truck	0	1	343	70	ICN	Goodlettsville	TN	11:40
Vacuum Truck	0	1	343	70	ICN	Goodlettsville	TN	11:40
Vac Truck	0	1	343	130	ICN	Goodlettsville	TN	11:40
Vacuum Truck	0	1	343	71	ICN	Calvert City	KY	11:40
Vacuum Truck	0	1	754	71	ICN	St. Louis	MO	11:52
Vacuum Truck	0	1	343	83	ICN	Nashville	TN	11:52
Vacuum Truck	0	1	343	71	ICN	Nashville	TN	11:52
Vacuum Truck	0	1	343	71	ICN	Nashville	TN	11:52
Vacuum Truck	0	2	3428	158	ICN	Nashville	TN	11:54
Vacuum Truck	0	17	5831	1207	ICN	St. Louis	MO	11:56
Vacuum Truck	0	4	1372	480	ICN	St. Louis	MO	11:56
Vacuum Truck	0	1	1714	79	ICN	Paducah	KY	11:57
Sub Total Vacuum Truck:		**222**	**118400**	**19057**				
Total Vacuum System:		**254**	**152447**	**22280**				

Vessel

Deck Barge

06 to 12 hours (* Does not include recall/mobilization time)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
BUDA I Work Barge	0	1	0	0	ICN	Detroit	MI	08:26
BUDA II Vacuum Barge	0	1	0	0	ICN	Detroit	MI	08:26
Sub Total Deck Barge:		**2**	**0**	**0**				

Deployment Craft (< 25 foot)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
18' Deployment Craft	0	1	0	0	ICN	South Holland	IL	06:03
20' Deployment Craft	0	1	0	0	ICN	South Holland	IL	06:03
14' Deployment Craft	0	1	0	0	ICN	South Holland	IL	06:03
John Boat	0	16	0	0	ICN	Glenwood	IL	06:03
13' Deployment Craft	0	1	0	0	ICN	Apollo	PA	06:11
22' Deployment Craft	0	1	0	0	ICN	Apollo	PA	06:11
20' Deployment Craft	0	1	0	0	ICN	Apollo	PA	06:11
18' Deployment Craft	0	1	0	0	ICN	Apollo	PA	06:11
20' Deployment Craft	0	1	0	0	ICN	Apollo	PA	06:11
16' Deployment Craft	0	1	0	0	ICN	Apollo	PA	06:11
24' Deployment Craft	0	1	0	0	ICN	Apollo	PA	06:11
12' Deployment Craft	0	2	0	0	ICN	Apollo	PA	06:11
16' Deployment Craft	0	5	0	0	ICN	Apollo	PA	06:11
18' Deployment Craft	0	1	0	0	ICN	Monee	IL	06:16
14" Deployment Craft	0	1	0	0	ICN	Monee	IL	06:16
24' Deployment Craft	0	1	0	0	ICN	Monee	IL	06:16
12' Deployment Craft	0	3	0	0	ICN	Monee	IL	06:16
13' Deployment Craft	0	1	0	0	ICN	Monee	IL	06:16
10' Deployment Craft	0	1	0	0	ICN	Monee	IL	06:16
16' Deployment Craft	0	2	0	0	ICN	Burlington	Canada	06:24
20' Response Boat	0	1	0	0	ICN	Ashland	KY	06:26
John Boat	0	2	0	0	ICN	Wheeling	IL	06:29
Work Flat	0	13	0	0	ICN	South Point	OH	06:32
22' Deployment Craft	0	4	0	0	ICN	South Point	OH	06:32
18' Deployment Craft	0	2	0	0	ICN	South Point	OH	06:32
16' Deployment Craft	0	4	0	0	ICN	Ashland	KY	06:32
18' Deployment Craft	0	1	0	0	ICN	Ashland	KY	06:32
18' Deployment Craft	0	1	0	0	ICN	New Lenox	IL	06:33
14' Deployment Craft	0	1	0	0	ICN	New Lenox	IL	06:33
14' Deployment Craft	0	1	0	0	ICN	Lemont	IL	06:34
14' Deployment Craft	0	1	0	0	ICN	Lemont	IL	06:34
24' Deployment Craft	0	2	0	0	ICN	Lemont	IL	06:34
24' Deployment Craft	0	1	0	0	ICN	Lemont	IL	06:34
22' Deployment Craft	0	1	0	0	ICN	Cross Lanes	WV	06:54
14' Deployment Craft	0	1	0	0	ICN	Cross Lanes	WV	06:54
11' Deployment Craft	0	1	0	0	ICN	Cross Lanes	WV	06:54
20' Response Boat	0	1	0	0	ICN	Shelbyville	KY	07:00
14' Deployment Craft	0	1	0	0	ICN	North Aurora	IL	07:06
14' Deployment Craft	0	1	0	0	ICN	Wauwatosa	WI	07:12
16' Deployment Craft	0	1	0	0	ICN	Menomonee Falls	WI	07:13
18.5' Deployment Craft	0	1	0	0	ICN	Menomonee Falls	WI	07:13
19' Deployment Craft	0	1	0	0	ICN	Germantown	WI	07:17
16' Deployment Craft	0	4	0	0	ICN	Germantown	WI	07:17
Small Boat w/ Trolling Motor	0	1	0	0	ICN	Louisville	KY	07:25
Response Boat	0	1	0	0	ICN	Louisville	KY	07:25
24' Deployment Craft	0	1	0	0	ICN	Louisville	KY	07:34
18' Deployment Craft	0	1	0	0	ICN	Louisville	KY	07:34
12' Deployment Craft	0	1	0	0	ICN	Louisville	KY	07:34
18' Deployment Craft	0	1	0	0	ICN	Louisville	KY	07:34
19' Deployment Craft	0	1	0	0	ICN	Louisville	KY	07:34
14' Deployment Craft	0	1	0	0	ICN	De Pere	WI	08:03
18' Deployment Craft	0	1	0	0	ICN	De Pere	WI	08:03
20' Deployment Craft	0	1	0	0	ICN	De Pere	WI	08:03
14' Rowboat	0	1	0	0	ICN	St. Ignace	MI	08:27

06 to 12 hours (* Does not include recall/mobilization time)

17' Deployment Craft	0	1	0	0	ICN	St. Ignace	MI	08:27
21' Deployment Craft	0	2	0	0	ICN	Neenah	WI	08:45
18' Deployment Craft	0	1	0	0	ICN	Newburgh	IN	09:19
14' Deployment Craft	0	1	0	0	ICN	Nitro	WV	09:25
20' Deployment Craft	0	1	0	0	ICN	Nitro	WV	09:25
20' Deployment Craft	0	1	0	0	ICN	Evansville	IN	09:27
12' Deployment Craft	0	4	0	0	ICN	Evansville	IN	09:27
14' Deployment Craft	0	2	0	0	ICN	Evansville	IN	09:27
18' Deployment Craft	0	1	0	0	ICN	Sunbury	PA	10:06
16' Deployment Craft	0	1	0	0	ICN	Blountville	TN	10:15
14' Deployment Craft	0	1	0	0	ICN	Wausau	WI	11:01
16' Deployment Craft	0	1	0	0	ICN	Knoxville	TN	11:04
19' Deployment Craft	0	1	0	0	ICN	Knoxville	TN	11:04
18' Deployment Craft	0	1	0	0	ICN	Lorton	VA	11:09
20' Deployment Craft	0	1	0	0	ICN	Lorton	VA	11:09
10' Deployment Craft	0	1	0	0	ICN	Lorton	VA	11:09
18' Deployment Craft	0	1	0	0	ICN	Syracuse	NY	11:10
14' Deployment Craft	0	1	0	0	ICN	Syracuse	NY	11:10
13' Deployment Craft	0	2	0	0	ICN	Stafford	VA	11:12
19' Deployment Craft	0	1	0	0	ICN	Fredericksburg	VA	11:13
16' Deployment Craft	0	1	0	0	ICN	Fredericksburg	VA	11:13
24' Deployment Craft	0	1	0	0	ICN	Laurel	MD	11:15
15' Deployment Craft	0	2	0	0	ICN	Laurel	MD	11:15
20' Deployment Craft	0	5	0	0	ICN	Binghamton	NY	11:17
24' Deployment Craft	0	1	0	0	ICN	Wood River	IL	11:19
16' Deployment Craft	0	1	0	0	ICN	Wood River	IL	11:19
14' Deployment Craft	0	1	0	0	ICN	Baltimore	MD	11:25
16' Deployment Craft	0	1	0	0	ICN	Baltimore	MD	11:25
20' Deployment Craft	0	2	0	0	ICN	Baltimore	MD	11:26
13' Deployment Craft	0	2	0	0	ICN	Baltimore	MD	11:27
12' Deployment Craft	0	15	0	0	ICN	Baltimore	MD	11:27
22' Deployment Craft	0	1	0	0	ICN	Baltimore	MD	11:27
14' Deployment Craft	0	5	0	0	ICN	Baltimore	MD	11:27
15' Deployment Craft	0	9	0	0	ICN	Baltimore	MD	11:27
16' Deployment Craft	0	6	0	0	ICN	Baltimore	MD	11:27
16' Deployment Craft	0	12	0	0	ICN	Baltimore	MD	11:27
14' Deployment Craft	0	4	0	0	ICN	Baltimore	MD	11:27
21' Deployment Craft	0	8	0	0	ICN	Baltimore	MD	11:27
24' Deployment Craft	0	1	0	0	ICN	Baltimore	MD	11:27
18' Deployment Craft	0	1	0	0	ICN	Baltimore	MD	11:27
19' Deployment Craft	0	1	0	0	ICN	Baltimore	MD	11:27
14' Deployment Craft	0	1	0	0	ICN	Baltimore	MD	11:27
24' Response Boat	0	1	0	0	ICN	Kingston	TN	11:30
16' Deployment Craft	0	1	0	0	ICN	Kingston	TN	11:30
24' Response Boat	0	1	0	0	ICN	Goodlettsville	TN	11:40
24' Response Boat	0	2	0	0	ICN	Goodlettsville	TN	11:40
20' Deployment Craft	0	1	0	0	ICN	Calvert City	KY	11:40
John Boat	0	2	0	0	ICN	St. Louis	MO	11:52
16' Deployment Craft	0	1	0	0	ICN	Nashville	TN	11:52
19' Deployment Craft	0	1	0	0	ICN	Nashville	TN	11:52
12' Deployment Craft	0	1	0	0	ICN	Nashville	TN	11:52
18' Deployment Craft	0	1	0	0	ICN	St. Louis	MO	11:56
Sub Total Deployment Craft (< 25 foot):		**220**	**0**	**0**				

Deployment Craft (> 25 foot)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
26' Deployment Craft	0	1	0	0	ICN	South Holland	IL	06:03
28' Deployment Craft	0	1	0	0	ICN	Monee	IL	06:16
30' Deployment Craft	0	1	0	0	ICN	Monee	IL	06:16
28' Spill Response Vessel	0	3	0	0	ICN	South Point	OH	06:32
26' Rescue Boat	0	1	0	0	ICN	Shelbyville	KY	07:00

06 to 12 hours (* Does not include recall/mobilization time)

27' Response Boat	0	1	0	0	ICN	Shelbyville	KY	07:00
26' Command Boat	0	1	0	0	ICN	St. Ignace	MI	08:27
29' Deployment Craft	0	1	0	0	ICN	Blountville	TN	10:15
29' Deployment Craft	0	1	0	0	ICN	Knoxville	TN	11:04
27' Deployment Craft	0	1	0	0	ICN	Lorton	VA	11:09
29' Deployment Craft	0	1	0	0	ICN	Fredericksburg	VA	11:13
26' Deployment Craft	0	1	0	0	ICN	Baltimore	MD	11:25
59' Deployment Craft	0	1	0	0	ICN	Nashville	TN	11:52
28' Deployment Craft	0	1	0	0	ICN	Nashville	TN	11:54
26' Deployment Craft	0	1	0	0	ICN	Paducah	KY	11:57
Sub Total Deployment Craft (> 25 foot):		**17**	**0**	**0**				

WorkBoat

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Response Boat	0	1	0	0	ICN	Newburgh	IN	09:19
Tracker	0	1	0	0	ICN	Syracuse	NY	11:10
Pontoon Boat	0	1	0	0	ICN	Syracuse	NY	11:10
Sub Total WorkBoat:		**3**	**0**	**0**				
Total Vessel:		**242**	**0**	**0**				
Total 06 to 12 hours:			**206256**	**86210**				
Running Total from 0 to unknown:			**309869**	**130529**				

NATIONAL RESPONSE CORPORATION

National Response Corporation
Group V Oil Response

Behavior:

A spill of Group V fuel oil can have complex behavioral patterns, depending on the API gravity of the oil, the homogeneity of the mixture, the density and salinity of the receiving water, and the physical setting of the spill site. Denser-than-water oil is expected to mix in the water column as oil drops rather than large, cohesive mats. Oil can accumulate on the bottom under calm currents, so releases of very heavy oil in harbors with dredged channels and berths could readily sink and form pools of oil on the bottom. Releases in areas subject to tidal and river flow are likely to be kept in suspension in the water column by currents. If the oil is poorly mixed, the spill could separate into components that can float, suspend and sink simultaneously. The loss of the light components through evaporation is not thought to be an important mechanism through which floating oils eventually sink; however the accumulation of sand within the floating particles is a major factor.

Spills of Group V fuel oils that sink or become neutrally buoyant are more than likely going to be difficult to locate and assess. The best options for locating submerged oil include aerial observations, sonar equipment, and underwater video and diver surveys. All methods have certain advantages and disadvantages and rely mostly in part to the visibility, depth and sea conditions of the water.

Location:

Once located, sunken oil has historically not been contained but instead tended to accumulate in natural collection areas. Any oil that is mobilized by currents is not contained. Although bottom booms have been proposed, they will likely not be effective in any kind of a bottom current, or even properly deployed on the bottom in an effective location. Realistically, the only likely containment of sinking oil will occur naturally as the oil accumulates in low areas on the bottom of the spill site.

Containment:

The containment of oil that is suspended or mixed into the water column is feasible only where the currents are very weak. Options include silt curtains or fine mesh nets coupled with a surface boom to contain the floating or re-floating fraction of the oil. The effective use of silt curtains would require contractors experienced in the proper deployment and

NATIONAL RESPONSE CORPORATION

maintenance of the curtain, in addition to the use of the curtain in an area with little to no current.

Recovery:

The recovery of any sunken oil has proven to be just as difficult and expensive as locating and containing the oil. The primary methods used in the past have been manual removal by divers, dredging, removal by diver-directed pump and vacuum systems, and the use of robotic pumping systems. Again, each methodology contains its own inherent advantages and disadvantages. Manual removal involves the collection of the oil by divers into bags or containers. This method has some advantages including the recovery of little additional sediment, waste or water, divers are able to pick up relatively small pieces of product, and finally the recovered oil can be placed directly into suitable containers for disposal, negating the need for intermediate storage. The biggest disadvantage of manual removal is the slow rate of recovery, which creates the potential for the oil to spread to other areas before being recovered.

Recovery using a pump and/or vacuum system has historically been the most widely used removal method for sunken oil. They are more often than not diver directed and the suction head modified so that the diver can manually open and close the valve. Even with the diver controlled valve, large volumes of oily water are generated with this method. This necessitates the use of facilities for oil/water separation and the discharge of the separated water back into the ocean. This decanting procedure in and of itself can be very problematic if the majority of the Group V oil is heavier than water and only part of the oil tends to re-float.

Dredging is the fastest method for removing sunken oil from the bottom, but it is likely to generate very large volumes of oil water and sediment that must be handled, treated, and disposed of.

Finally, the recovery of oil that is suspended in the water column poses the most difficult challenge. Fish nets have not been very successful for recovery of firm tar balls; they are likely to be even less effective with liquid oil droplets. In any case, the net mesh size would have to be matched to the oil droplet size. Heavy accumulations would clog the nets making them very heavy, and traces of liquid oil would drain from the nets as they were lifted from the water. In addition, the nets could be used only once.

In conclusion, the locating, containment and recovery of submerged Group V oil will be an extremely laborious, time consuming and expensive undertaking in which we can only hope that the natural setting of the spill can facilitate a quick and cost effective response.

NATIONAL RESPONSE CORPORATION

Please find below NRC's oil spill independent contractors that have divers on staff and can respond and have experience to a Group V oil spill response and the dedicated NRC response equipment that would be used in a Group V response.

NRC Dedicated Group V Response Recovery Equipment

- 36 - Vacuum Transfer Units
- 9 - Desmi DOP-250 Screw Pumps
- 44 - Portable Barge Sets; approx. 10,000 gal. storage capacity each.

Response Contractors (both in and out of network)

- Millers Launch (Staten Island, NY)
- Eason Diving (Charleston, SC)
- AMPOL (New Iberia, LA)
- Randive Inc. (New Jersey)
- Walker Diving (New Jersey)
- Miller Environmental Group (Calverton, NY)
- Ken's Marine (Bayonne, NJ)
- Cliff Berry Inc. (Port Everglades, Fl)
- Pit Hog (Somerset, WI)
- Gulf Atlantic Pump and Dredge Company (Lake City, FL)
- Atlantic Diving (Wilmington, NC)
- Bordeaux Salvage and Construction (Wilmington, NC)
- Fore River Dock Dredge (Portland, ME)
- Bull Dredging (Neptune Beach, FL)
- NRCES Environmental (Seattle, WA)
- Devine Diving and Salvage (Portland, OR)
- Muldoon Marine (LA/LB, CA)
- Global Diving & Salvage (Seattle, WA)
- Resolve Marine & Salvage (Ft Lauderdale, FL)
- Crofton Diving (Portsmouth, VA)
- Marion Hill Associates (New Brighton, PA)
- Weeks Marine (Cranford, NJ)
- Great Lakes Diving Co. (Stevensville, MI)
- Marine Pollution Control (Detroit, MI)
- Sea Brex Marine, Inc. (Stevensville, MI)
- Black Dog Divers (Portsmouth, NH)
- Hulcher Services, Inc. (Denton, TX)

NATIONAL RESPONSE CORPORATION

Response Contractors (both in and out of network)

- Northwest Underwater Construction LLC (Vancouver, WA)
- Ballard Diving & Salvage Inc. (Seattle, WA)
- Canders Dive (Bangor, ME)
- Cal Dive International (Houston, TX)

A Partial List of Dredging Equipment

- 2 - Ellicott Dredge Model MC915, 23' depth, 8" discharge (Bull Dredging: Jacksonville, Fl)
- 1 - Ellicott Dredge, 19 " discharge (Subcontracted to Bull Dredging: Jacksonville, Fl)
- 1 - Innovative Material Systems Dredge Model IMS 4010, 10 " discharge (Subcontracted to Bull Dredging, Jacksonville Fl.)
- 4 - Open Cavity Submersible Dredge Pumps. (Cliff Berry Inc: Port Everglades, Fl)
- 2 - Pit Hog Electric remote control lagoon pump - Model ERCLP60, 600-1000 gpm and 15 ft. depth, extendable to 50ft. (Pit Hog: Somerset, WI)
- 1 - "Little Monster" dredge by H&H Pump and dredge w/ 20 ft. depth. (Gulf Atlantic Pump and Dredge Company)
- Large Duckbill Dredge System (Ft Lauderdale, FL)
- 1 - Weeks 551 Bucket 25 cu yd 2,100 hp
- 1 - Weeks 549 Bucket 18 cu yd 1,399 hp
- 1 – R & N Weeks Hopper Barge 4,000 cy
- 1 - BTD – 51 Hydraulic 24" 3,860 hp
- 1 - Weeks 550 Bucket 25 cu yd 2,100 hp

Detection & Tracking

- 3 - Side Scan Sonar Systems: (Ocean Systems, St. Petersburg FL, North Star Marine, Cape May, NJ and Northwest Underwater Construction LLC, Vancouver, WA)
- 1 - Underwater Surveillance Cameras (Miller, Staten Island, NY)
- 1 - Side Scan Sonar system (Marion Hill Associates, New Brighton, PA)
- 1 - Roxanne Submerged Oil Detection System. (Ocean Systems: St. Petersburg Fl.)
- 1 - 2-man submarine (Fore River Dock Dredge, ME)
- 1 – Edge Tech Model 272 analog sonar (Ft Lauderdale, FL)

4

NATIONAL RESPONSE CORPORATION

Silt Curtain

- 1,000 ft – Medium Weight, 8 ft depth silt curtain (Long Island, NY)

VSORS

- Vessel submerged oil recovery system (VSORS) – A VSORS is a pipe or heavy chains with absorbents attached, suspended within the water column.
- Bottom Snare samplers to determine if oil is traveling along bottom to protect intakes.

Miscellaneous Recovery Equipment

Personnel, support boats, recovery skimmers, pumps, cranes, deck & spud barges, clamshell buckets, commercial diving and salvage gear, containment boom, and detection sonar.

5

APPENDIX I

EVACUATION PLAN

Evacuation Plan I-2

Evacuation Diagram I-6

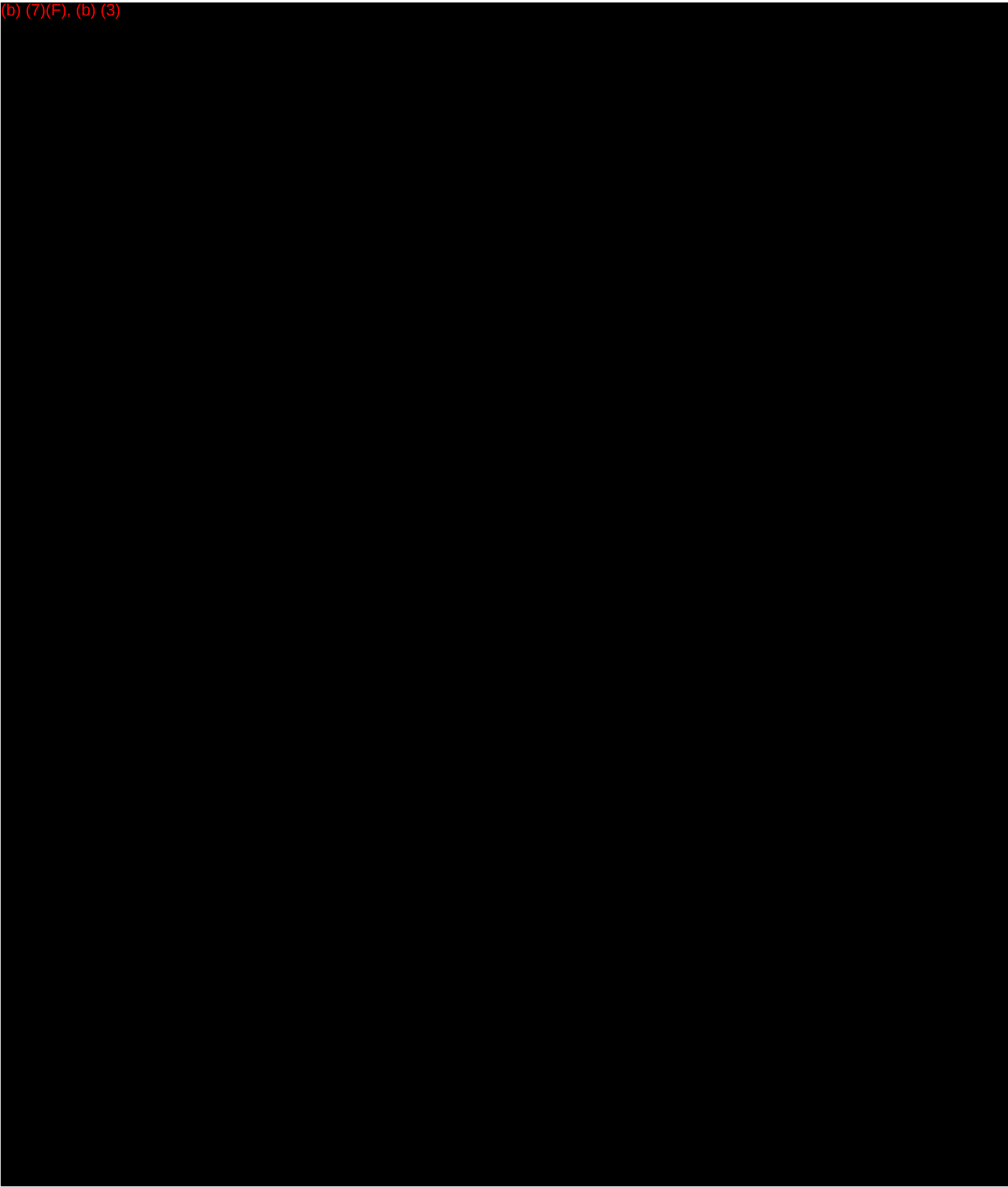
EVACUATION PLAN

(b) (7)(F), (b) (3)

[redacted]

EVACUATION PLAN (Cont'd)

(b) (7)(F), (b) (3)



EVACUATION PLAN (Cont'd)

(b) (7)(F), (b) (3)

[redacted]

EVACUATION PLAN (Cont'd)

(b) (7)(F), (b) (3)

[redacted]

EVACUATION DIAGRAM (a)

Evacuation
muster point
for roll call.

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

SPILL RESPONSE CONTRACT CERTIFICATION

National Response Corporation (NRC) certifies that has **PBF Holding Co., LLC and Toledo Refining Company LLC** "ensured, by contract or other approved means, the availability of private personnel and equipment necessary to respond, to the maximum extent practicable, to a worst case or medium case discharge" for the below named Facilities. NRC agrees that the Client has the right to name NRC and its resources, including those within its Independent Contractor Network (ICN) for Oil Pollution Act of 1990 (OPA) coverage for the below named Facilities. NRC has filed its Spill Response Plan Appendix with the U.S. Coast Guard, and that the Client is authorized to reference this Appendix in their Facility Response Plan. This Appendix presently covers all ports in the U.S. East, West and Gulf Coasts, Great Lakes and the U.S. Caribbean. NRC reserves the right to rescind this authorization in the event of termination of its contractual arrangements with the Facilities.

Entered Facilities:

Toledo Refining Company LLC Refinery Operations
Toledo Refining Company LLC Terminal Operations
Toledo Refining Company LLC Dock Operations
Toledo Refining Company LLC Pipeline Operations

Acknowledged by: Date: **April 25, 2014**

National Response Corporation

_____
President

February, 2014
PREP Credit Report

Dear Client:

Please find attached the - ***NRC 2013 Annual Preparedness for Response Exercise Program (PREP) Equipment Deployment Summary Report*** (Attachment A) for review and retention with an accompanying Letter of Attestation (Attachment B). This report documents OSRO equipment deployment exercise information in compliance with the National Preparedness for Response Exercise Program (PREP) Guidelines for reportable and evaluated on-water equipment deployments during exercises, training and actual spill responses. It provides information necessary for your OSRO equipment deployment credit for the 2013 calendar year.

This report documents deployment of the various types of skimming systems and boom that NRC owns or controls for classification purposes. It includes equipment aboard our Oil Spill Response Vessels and at Independent Contractor Network (ICN) facilities dispersed throughout the various Captain of the Port zones. The information categories include:

COTP ZONE - The COTP Zone in which the response equipment was deployed
LOCATION - The geographical location (city/state) in which the equipment was deployed.
SKIMMING EQUIPMENT - Each type of skimmer in the NRC owned or controlled equipment Inventory. A numeric figure in the columns for each type of skimmer indicates the number of times that personnel at a particular facility or Vessel have activated and deployed this type of skimming system in the water.
BOOM EQUIPMENT - The type and amount of boom deployed by personnel assigned to a particular facility and vessel.

Each Independent Contractor Network (ICN) Participant facility, of which there are over one hundred, has an active file that feeds data to the Summary Report.

NRC's dispersant program includes access to 6 spray aircraft throughout the US, such as DC-4's and a DC-6. NRC conducts dispersant aircraft training through internal exercises on a routine basis.

ICN facility equipment deployment records are held at each facility and at NRC Headquarters in Great River, NY. These internal historical records identify each equipment deployment occurrence by:

- NRC Control No.
- Date of deployment
- Event description - actual spill incident, equipment training or exercise
- Type of environment - sheltered , protected or unsheltered
- Type of skimming system deployed
- Type and quantity of boom deployed

If you have any questions regarding this report, contact Christopher Eilers at 631.328.2517. Please ensure individuals responsible for the PREP program in your organization receive this report. If you would like additional copies they are located on our Web site, which is www.nrcc.com under the client access portion. Widest dissemination of this document is encouraged.

Sincerely,

Steven A. Candito
President

Regional Breakdown

Northeast Region
Regional Manager: John Hielscher
3500 Sunrise Highway, Great River, NY 11739
(631)328-2524 Office
(b) (6) Mobile
States Covered:
Indiana, Michigan, Ohio, New York, Pennsylvania, Maryland, Delaware, New Jersey, Connecticut, Vermont, Massachusetts, Rhode Island, New Hampshire, Maine, West Virginia, Virginia

South Region
Regional Manager: John Robinson
17350 State Highway 249 – Suite 355, Houston, TX 77064
(713)965-4165 Office
(b) (6) Mobile
States Covered:
Texas, Louisiana, Arkansas, Oklahoma, Kansas, Nebraska, Colorado, New Mexico, Mississippi, Alabama

Southeast Region
Regional Manager: Jason DeSantis
104 River Lane, Ormond Beach, FL 32176
(386)441-7719 Office
(b) (6) Mobile
States Covered:
Kentucky, Tennessee, North Carolina, South Carolina, Georgia, Florida, Missouri, Illinois, Iowa, Minnesota, Wisconsin

Pacific Northwest Region
Regional Manager: Bart Dodson
9520 10th AVE, Seattle, WA 98108
(206)607-3010 Office
(b) (6) Mobile
States Covered: Washington, Oregon, Idaho, Montana, Wyoming, Hawaii, North Dakota, South Dakota

West Region
VP/General Manager: Todd Roloff
1805 Ferry Point Road, Alameda, CA 94501
(510)749-4121 Office
(b) (6) Mobile
States Covered: California, Nevada, Utah, Arizona

Caribbean Region
Regional Manager: David Aviles
P.O. Box 9022750, San Juan, PR 00902
(787)789-2000 Office
(b) (6) Mobile
Islands Covered: Puerto Rico, St. Thomas, St. Croix, St. Lucia

Aruba
Regional Manager: James Haeghaert
Bungalow 251, First Ave., Seroe Colorado, San Nicholas, Aruba
Islands Covered: Aruba

2013 ANNUAL PREP EQUIPMENT DEPLOYMENT SUMMARY

NRC USCG OSRO # 0016

Attachment A

Date	COTP Zone	Contractor Name	Location	Boom 6"-18"	Boom 19"-42"	Skimmer Drum, Brush,	Skimmer Floating Suction	Skimmer Belt	Skimmer Rope	Region
1/1/2013	Pittsburgh	McCutcheon Enterprise	Apollo, PA	2400'						Northeast
1/6/2013	Baltimore	Miller Environmental Group	Baltimore, MD	400'		1				Northeast
1/11/2013	Delaware Bay	Miller Environmental Group	Philadelphia, PA	400'		1				Northeast
1/14/2013	New York	Miller Environmental Group	Staten Island, NY	13600'		8				Northeast
1/27/2013	New York	Miller Environmental Group	Astoria, NY	1000'						Northeast
2/4/2013	Delaware Bay	Miller Environmental Group	Milford, DE	400'			2			Northeast
2/11/2013	New York	Miller Environmental Group	Newburgh, NY	1800'						Northeast
2/26/2013	Delaware Bay	Miller Environmental Group	Marcus Hook, PA	1500'		1				Northeast
2/28/2013	Long Island Sound	Miller Environmental Group	Long Island, NY	2000'	2000'					Northeast
3/16/2013	New York	Miller Environmental Group	Astoria, NY	1000'						Northeast
3/18/2013	Boston	National Response Corporation	Boston, MA	1000'		1				Northeast
3/20/2013	Baltimore	Miller Environmental Group	Baltimore, MD	1000'		1				Northeast
3/20/2013	Boston	Boston Line Service	Revere, MA	1500'						Northeast
3/21/2013	Southeastern New England	Moran Environmental Recovery	Buzzards Bay, MA	1300'		1				Northeast
4/4/2013	New York	Miller Environmental Group	Lawrence, NY	1000'						Northeast
4/10/2013	Boston	Boston Line Service	Boston, MA	1000'						Northeast
4/10/2013	Ohio Valley	National Response Corporation	Cincinnati, OH			1				Northeast
4/19/2013	Long Island Sound	Miller Environmental Group	Port Jefferson, NY	100'						Northeast
4/25/2013	Southeastern New England	Coast Line Service	Providence, RI	1500'						Northeast
5/4/2013	Baltimore	Miller Environmental Group	Baltimore, MD	1000'		1				Northeast
5/9/2013	New York	Miller Environmental Group	Gowanus, NY	200'						Northeast
5/10/2013	Southeastern New England	Moran Environmental Recovery	Woodshole, MA	1100'		1				Northeast
5/15/2013	Pittsburgh	National Response Corporation	Apollo, PA	100'		1				Northeast
5/25/2013	Delaware Bay	Moran Environmental Recovery	Delaware, DE	900'			1			Northeast
6/3/2013	New York	Moran Environmental Recovery	New York, NY	1000'			1			Northeast
6/5/2013	Buffalo	National Response Corporation	Buffalo, NY	1000'		1				Northeast
6/12/2013	Boston	Boston Line Service	East Boston, MA	1000'						Northeast
6/12/2013	Southeastern New England	Coast Line Service	Providence, RI	1000'						Northeast
6/19/2013	Boston	Boston Line Service	East Boston, MA	1000'						Northeast
6/20/2013	Northern New England	National Response Corporation	Bangor, ME	1000'		1				Northeast
6/20/2013	Southeastern New England	Coast Line Service	Providence, RI	1600'						Northeast
6/22/2013	Boston	Boston Line Service	Deer Island, MA	1000'						Northeast
6/26/2013	Ohio Valley	Evergreen Environmental	Ohio River	400'						Northeast
7/8/2013	Hampton Roads	Moran Environmental Recovery	Chesapeake Bay, VA	1800'		1				Northeast
7/11/2013	Ohio Valley	Evergreen Environmental	Ohio River Kramers Lane	900'						Northeast
7/11/2013	Sault Ste. Marie	National Response Corporation	Rogers City, MI	2000'		2				Northeast
7/16/2013	Hampton Roads	Moran Environmental Recovery	Portsmouth, VA	200						Northeast
7/17/2013	Delaware Bay	Miller Environmental Group	Pennsauken, NJ	2000'			1			Northeast

Date	COTP Zone	Contractor Name	Location	Boom 6"-18"	Boom 19"-42"	Skimmer Drum, Brush,	Skimmer Floating Suction	Skimmer Belt	Skimmer Rope	Region
8/3/2013	Upper Mississippi Rive	Evergreen Environmental	Evansville, IN	400'						Northeast
8/5/2013	New York	National Response Corporation	Staten Island, NY					1		Northeast
8/8/2013	Baltimore	Miller Environmental Group	Baltimore, MD	1000'		1				Northeast
8/8/2013	Delaware Bay	Miller Environmental Group	Paulsboro, NJ	1500'		1				Northeast
8/8/2013	New York	Moran Environmental Recovery	New York, NY	1000'		1				Northeast
8/13/2013	Upper Mississippi Rive	National Response Corporation	Beulah, ND	500'		1				Northeast
8/28/2013	Delaware Bay	Miller Environmental Group	Delaware City, DE	1200'		2	2			Northeast
9/2/2013	Delaware Bay	Miller Environmental Group	Delaware City, DE	600'		2	2			Northeast
9/4/2013	New York	Miller Environmental Group	Staten Island, NY	500'						Northeast
9/7/2013	Hampton Roads	National Response Corporation	Norfolk, VA	1000'		1				Northeast
9/11/2013	Boston	Boston Line Service	Everett, MA	1000'						Northeast
9/12/2013	Boston	Boston Line Service	Chelsea, MA	1000'						Northeast
9/13/2013	New York	Miller Environmental Group	Staten Island, NY	2000'						Northeast
9/13/2013	Upper Mississippi Rive	Summit Environmental	Evansville, IN	600'	500'	2				Northeast
9/15/2013	New York	Miller Environmental Group	Staten Island, NY	3600'		1				Northeast
9/16/2013	New York	National Response Corporation	New York, NY		200'			1	1	Northeast
9/24/2013	Delaware Bay	Miller Environmental Group	Marcus Hook, PA	1500'		1				Northeast
9/25/2013	Ohio Valley	Evergreen Environmental	Ohio River Greenwood Boat Ramp	500'		1				Northeast
9/26/2013	Southeastern New England	Coast Line Service	Providence, RI	1500'						Northeast
9/29/2013	Upper Mississippi Rive	Summit Environmental	Evansville, IN	1000'		2				Northeast
10/2/2013	New York	Miller Environmental Group	Newburgh, NY	1800'						Northeast
10/7/2013	Baltimore	Miller Environmental Group	Salisbury, MD	1000'						Northeast
10/8/2013	Upper Mississippi Rive	Summit Environmental	Evansville, IN	1000'		1				Northeast
10/9/2013	Baltimore	Miller Environmental Group	Baltimore, MD	200'						Northeast
10/9/2013	New York	Miller Environmental Group	Haverstraw, NY	1300'						Northeast
10/17/2013	Long Island Sound	Miller Environmental Group	Riverhead, NY	1000'						Northeast
10/22/2013	Upper Mississippi Rive	Summit Environmental	Evansville, IN	1000'		1				Northeast
10/23/2013	Delaware Bay	Miller Environmental Group	Philadelphia, PA	1000'			1			Northeast
10/24/2013	Delaware Bay	Miller Environmental Group	Wilmington, DE	600'						Northeast
10/29/2013	Delaware Bay	Miller Environmental Group	Wilmington, DE	200'						Northeast
10/29/2013	Delaware Bay	Moran Environmental Recovery	Philadelphia, PA	1100'			1			Northeast
11/11/2013	Southeastern New England	Coast Line Service	Providence, RI	1000'						Northeast
11/12/2013	Boston	Boston Line Service	Everett, MA	1500'						Northeast
11/12/2013	New York	Miller Environmental Group	Newburgh, NY	2000'						Northeast
11/25/2013	Southeastern New England	Coast Line Service	Providence, RI	1000'						Northeast
11/26/2013	Southeastern New England	Coast Line Service	Providence, RI	1200'						Northeast
12/13/2013	Boston	Boston Line Service	Quincy, MA	1000'						Northeast
12/18/2013	Boston	Boston Line Service	East Boston, MA	1000'						Northeast
12/31/2013	New York	National Response Corporation	Staten Island, NY						1	Northeast
2/28/2013	Puget Sound	National Response Corporation	Nea Bay, WA			1				Northwest
4/11/2013	Portland	National Response Corporation	Columbia River, WA				1			Northwest
5/11/2013	Puget Sound	National Response Corporation	San Juans, WA	1000'						Northwest
6/5/2013	Puget Sound	National Response Corporation	Woodinville, WA				1			Northwest

Date	COTP Zone	Contractor Name	Location	Boom 6"-18"	Boom 19"-42"	Skimmer Drum, Brush,	Skimmer Floating Suction	Skimmer Belt	Skimmer Rope	Region
8/23/2013	Puget Sound	Moran Environmental Recovery	Renton, WA	300'		1				Northwest
8/31/2013	Puget Sound	National Response Corporation	Ferndale, WA			1				Northwest
9/17/2013	Puget Sound	National Response Corporation	Seattle, WA			1				Northwest
9/30/2013	Puget Sound	National Response Corporation	Seattle, WA	400'		1				Northwest
10/2/2013	Puget Sound	Moran Environmental Recovery	Eagle Harbor, WA	1100'		1				Northwest
11/8/2013	Puget Sound	National Response Corporation	Port Townsend, WA	200'						Northwest
12/2/2013	Puget Sound	National Response Corporation	Imperium, WA					1		Northwest
1/22/2013	San Juan	National Response Corporation	Guayanilla Bay			1		1		PR/ USVI
1/31/2013	San Juan	Caribbean Enviromarine Services	Pier 1, San Juan		2000'		1			PR/ USVI
5/20/2013	San Juan	National Response Corporation	Cul de Sac Bay St. Lucia				3			PR/ USVI
11/18/2013	San Juan	National Response Corporation	St. Thomas, USVI	3000'		3	3	1	1	PR/ USVI
11/18/2013	San Juan	National Response Corporation	St. Thomas		1000'	1				PR/ USVI
11/18/2013	San Juan	National Response Corporation	VIWAPA Facility St. Croix		1000'	1				PR/ USVI
11/19/2013	San Juan	National Response Corporation	Yabacoa Bay		1000'	1	1		1	PR/ USVI
11/20/2013	San Juan	Caribbean Enviromarine Services	Yabucoa Marine Terminal	1000'					1	PR/ USVI
1/4/2013	New Orleans	OMI Environmental Solutions	Venice, LA	400'						South
1/5/2013	New Orleans	OMI Environmental Solutions	Gretna, LA	400'						South
1/7/2013	Morgan City	OMI Environmental Solutions	Weeks Island, LA	300'						South
1/19/2013	Morgan City	OMI Environmental Solutions	Concordia, LA	600'						South
1/27/2013	Lower Mississippi River	USES	Vicksburg, MS	5000'		4				South
2/27/2013	Mobile	SWS	Decatur, AL	800'						South
3/8/2013	Mobile	Oil Recovery Company	Mobile, AL	1500'						South
3/16/2013	Morgan City	National Response Corporation	Grand Isle, LA		2000'	1				South
4/7/2013	Corpus Christi	Miller Environmental Services	Ingleside, TX	900'						South
4/27/2013	Corpus Christi	Miller Environmental Services	Ingleside, TX	900'						South
5/1/2013	Corpus Christi	Miller Environmental Services	Ingleside, TX	500'						South
5/1/2013	Corpus Christi	Miller Environmental Services	Ingleside, TX	500'						South
5/2/2013	Port Arthur	OMI Environmental Solutions	Port Arthur, TX	400						South
5/11/2013	Port Arthur	OMI Environmental Solutions	Beaumont, TX	400'						South
5/15/2013	Corpus Christi	Miller Environmental Services	Corpus Christi, TX	1800'			1			South
5/15/2013	Corpus Christi	Miller Environmental Services	Corpus Christi, TX	1800'						South
5/17/2013	Mobile	Oil Recovery Company	Mobile, AL	900'						South
6/5/2013	Houston Galveston	National Response Corporation	Galveston, TX	100'				1	1	South
6/5/2013	Houston Galveston	National Response Corporation	Galveston, TX		1100'			1	1	South

Date	COTP Zone	Contractor Name	Location	Boom 6"-18"	Boom 19"-42"	Skimmer Drum, Brush,	Skimmer Floating Suction	Skimmer Belt	Skimmer Rope	Region
6/10/2013	Mobile	Oil Recovery Company	Mobile, AL	1200'						South
6/18/2013	Morgan City	National Response Corporation	Grand Isle, LA		200'	1				South
6/26/2013	Corpus Christi	National Response Corporation	Corpus Christi, TX			1			2	South
6/26/2013	Houston Galveston	National Response Corporation	Galveston, TX	1100'				1	1	South
6/26/2013	Houston Galveston	National Response Corporation	Galveston, TX		1100'			1	1	South
7/28/2013	Morgan City	National Response Corporation	Grand Isle, LA			1				South
7/30/2013	Corpus Christi	National Response Corporation	Corpus Christi, TX		1200'			1		South
8/1/2013	Corpus Christi	Miller Environmental Services	Aransas Pass, TX	200'						South
8/5/2013	Houston Galveston	OMI Environmental Solutions	LaPorte, TX	1600'						South
8/23/2013	Morgan City	National Response Corporation	Grand Isle, LA		2100'	1				South
8/28/2013	Corpus Christi	National Response Corporation	Corpus Christi, TX		100'					South
8/28/2013	Morgan City	National Response Corporation	Grand Isle, LA	300'		1				South
9/9/2013	Corpus Christi	Miller Environmental Services	Ingleside, TX	1500'						South
9/9/2013	Corpus Christi	Miller Environmental Services	Ingleside, TX	1500'						South
9/11/2013	Houston Galveston	National Response Corporation	Galveston, TX		400'			1	1	South
9/11/2013	New Orleans	OMI Environmental Solutions	Plaquemine, LA	500'			1			South
9/23/2013	Port Arthur	OMI Environmental Solutions	Lake Arthur, LA	100'						South
9/27/2013	Corpus Christi	National Response Corporation	Corpus Christi, TX						2	South
10/15/2013	Corpus Christi	National Response Corporation	Cotulla, TX	1000'		1				South
11/16/2013	Morgan City	OMI Environmental Solutions	Patterson, LA	500'		1				South
11/21/2013	Port Arthur	OMI Environmental Solutions	Cameron, LA	500'						South
11/27/2013	Morgan City	OMI Environmental Solutions	Intracoastal, LA	200'						South
12/4/2013	St. Petersburg	National Response Corporation	Tampa, FL			1				South
12/16/2013	Morgan City	OMI Environmental Solutions	Fourchon, LA	660'						South
12/18/2013	Corpus Christi	National Response Corporation	Corpus Christi, TX			1			2	South
1/5/2013	Mobile	Oil Recovery Company	Mobile, AL	1000'						South
1/30/2013	Corpus Christi	National Response Corporation	Corpus Christi, TX			1		1	2	South
2/8/2013	Port Arthur	Clean Harbors	Port Arthur, TX	1000'						South
3/19/2013	Mobile	National Response Corporation	Mobile, AL				1	1		South
4/23/2013	Morgan City	National Response Corporation	Grand Isle, LA			1				South
8/1/2013	Corpus Christi	Miller Environmental Services	Aransas Pass, TX	200'						South
8/9/2013	Corpus Christi	National Response Corporation	Aransas Pass, TX		1400'					South
8/26/2013	Mobile	SWS	Mobile, AL	1000'						South
12/16/2013	Port Arthur	Clean Harbors	Port Arthur, TX	1000'						South
1/29/2013	St. Petersburg	SWS	St. Petersburg, FL	1200'						Southeast
2/10/2013	St. Petersburg	SWS	St. Petersburg, FL	1200'						Southeast
2/14/2013	St. Petersburg	Moran Environmental Recovery	St. Johns River, FL	1000'		1	1			Southeast
2/16/2013	Miami	CBI	Ft. Lauderdale, FL	1800'						Southeast
2/20/2013	Charleston	National Response Corporation	North Charleston, SC	4000'		1	1			Southeast
2/20/2013	Charleston	National Response Corporation	North Charleston, SC		100'	2				Southeast
2/21/2013	St. Petersburg	Diversified Environmental Services	Tampa, FL	600'						Southeast
2/23/2013	St. Petersburg	SWS	St. Petersburg, FL	1200'						Southeast
2/26/2013	Savannah	National Response Corporation	Savannah, GA			1				Southeast

Date	COTP Zone	Contractor Name	Location	Boom 6"-18"	Boom 19"-42"	Skimmer Drum, Brush,	Skimmer Floating Suction	Skimmer Belt	Skimmer Rope	Region
2/26/2013	Savannah	National Response Corporation	Savannah River, GA	4100'			1			Southeast
3/20/2013	Miami	CBI	Ft. Lauderdale, FL	1000'						Southeast
3/20/2013	Miami	National Response Corporation	Miami, FL				1	1		Southeast
3/20/2013	Miami	National Response Corporation	Miami, FL		100'	1				Southeast
4/9/2013	St. Petersburg	SWS	St. Petersburg, FL		3000'					Southeast
4/23/2013	Miami	SWS	Ft. Lauderdale, FL	1000'						Southeast
4/24/2013	Key west	National Response Corporation	Key west, FL	3000'		1				Southeast
5/1/2013	Ohio Valley	First Environmental	Macon, GA	400'						Southeast
5/8/2013	Charleston	Moran Environmental Recovery	Hawthorne, SC	1100'		1	1			Southeast
5/16/2013	Ohio Valley	SWS	Nashville, TN	300'						Southeast
5/21/2013	Charleston	Moran Environmental Recovery	Charleston, SC	700'			1			Southeast
6/10/2013	Ohio Valley	Evergreen Environmental	Louisville, KY	500'						Southeast
6/13/2013	Ohio Valley	SWS	Nashville, TN	3000'						Southeast
6/13/2013	St. Petersburg	SWS	Tampa, FL	1000'						Southeast
6/27/2013	Miami	CBI	Ft. Lauderdale, FL	400'						Southeast
6/27/2013	Miami	SWS	Ft. Lauderdale, FL	1000'						Southeast
6/28/2013	Miami	National Response Corporation	Miami, FL		2200'	1				Southeast
7/8/2013	Savannah	SWS	Savannah, GA	1200'						Southeast
7/9/2013	St. Petersburg	Diversified Environmental Services	Tampa, FL	700'						Southeast
7/24/2013	Ohio Valley	Evergreen Environmental	Central City, KY	400'						Southeast
7/25/2013	St. Petersburg	SWS	Tampa, FL	100'						Southeast
7/26/2013	Ohio Valley	SWS	Nashville, TN		1					Southeast
7/28/2013	Miami	National Response Corporation	Miami, FL	100'		2	2	1	1	Southeast
7/29/2013	Mobile	SWS	Pensacola, FL	360'						Southeast
7/29/2013	Ohio Valley	SWS	Nashville, TN	300'		1				Southeast
8/7/2013	Jacksonville	National Response Corporation	Jacksonville, FL	500'		3	4			Southeast
8/12/2013	Miami	CBI	Ft. Lauderdale, FL	120'						Southeast
8/15/2013	Delaware Bay	National Response Corporation	Delaware Bay	1000'		1				Southeast
8/23/2013	St. Petersburg	Moran Environmental Recovery	St. Johns River, FL	1300'		1	1			Southeast
8/30/2013	St. Petersburg	SWS	Tampa, FL	1200'						Southeast
9/18/2013	Savannah	Moran Environmental Recovery	Savannah River, GA	1000'		1				Southeast
9/25/2013	Jacksonville	Jacksonville Pollution Control	Jacksonville, FL	2600'		1				Southeast
9/25/2013	Jacksonville	National Response Corporation	Port Canaveral, FL			1				Southeast
10/9/2013	Jacksonville	SWS	Jacksonville, FL	1000'						Southeast
10/9/2013	Ohio Valley	Evergreen Environmental	Central City, KY	400'						Southeast
10/12/2013	Charleston	Moran Environmental Recovery	Mount Pleasant, SC	800'			1			Southeast
10/17/2013	Long Island Sound	National Response Corporation	Long Island, NY	1000'		1				Southeast
10/24/2013	Upper Mississippi River	National Response Corporation	Paducah, KY	2200'			1			Southeast
10/25/2013	Ohio Valley	SWS	Louisville, KY	1000'						Southeast
10/25/2013	St. Petersburg	Diversified Environmental Services	Tampa, FL	500'						Southeast
11/1/2013	Savannah	First Environmental	Waycross, GA	200'						Southeast
11/5/2013	Miami	National Response Corporation	Miami, FL	1000'		1				Southeast
11/19/2013	St. Petersburg	SWS	Tampa, FL	1000'		1				Southeast

Date	COTP Zone	Contractor Name	Location	Boom 6"-18"	Boom 19"-42"	Skimmer Drum, Brush,	Skimmer Floating Suction	Skimmer Belt	Skimmer Rope	Region
11/20/2013	St. Petersburg	Diversified Environmental Services	Tampa, FL	400'						Southeast
11/20/2013	St. Petersburg	SWS	Tampa, FL	500'						Southeast
11/23/2013	St. Petersburg	National Response Corporation	Tampa, FL		4000'	3	1			Southeast
11/30/2013	Miami	National Response Corporation	Miami, FL		2200'	1				Southeast
12/11/2013	St. Petersburg	SWS	Tampa, FL	500'						Southeast
12/12/2013	St. Petersburg	SWS	Tampa, FL			1				Southeast
1/9/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
1/9/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 164		1400'					West
1/9/2013	San Francisco	National Response Corporation	Alameda Point, CA		5000'					West
1/11/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
1/11/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 165		1400'					West
1/17/2013	San Francisco	National Response Corporation	Folsom Lake, CA	1080'						West
1/18/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
1/18/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
1/18/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 166		1400'					West
1/18/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 167		1400'					West
1/22/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
1/22/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 168		1400'					West
1/25/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
1/25/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 169		1400'					West
1/25/2013	San Francisco	National Response Corporation	Feather River, Pluma County	800'	1200'					West
2/12/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
2/12/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 170		1400'					West
2/13/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
2/13/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 171		1400'					West
2/14/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
2/14/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 172		1400'					West
2/27/13	San Diego	National Response Corporation	San Diego County, CA	500'						West
3/8/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
3/8/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 173		1400'					West
3/11/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
3/18/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
3/21/2013	San Francisco	National Response Corporation	Lake Herman Benicia, CA	300'						West
3/26/2013	San Francisco	National Response Corporation	Humboldt Bay	3500'						West
3/26/13	San Francisco	National Response Corporation	Humboldt Bay		3500					West
3/28/13	Portland	National Response Corporation	Contra Costa Water District		100'					West
4/2/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
4/2/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 174		1400'					West
4/3/13	San Francisco	National Response Corporation	Blue Lake, CA		800'					West
4/4/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
4/4/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1100'					West
4/4/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 175		1400'					West
4/8/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West

Date	COTP Zone	Contractor Name	Location	Boom 6"-18"	Boom 19"-42"	Skimmer Drum, Brush,	Skimmer Floating Suction	Skimmer Belt	Skimmer Rope	Region
4/8/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 176		1400'					West
4/9/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
4/9/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 177		1400'					West
4/9/2013	San Francisco	National Response Corporation	Bay Farm Eel Graas, CA		2000'					West
4/12/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
4/12/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 178		1400'					West
4/25/13	San Francisco	National Response Corporation	Nustar, Crockett CA.		600'					West
4/26/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
4/26/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 179		1400'					West
4/26/13	San Francisco	National Response Corporation	Pier 3 Alameda Point		300'					West
4/29/13	San Francisco	National Response Corporation	Pier 3 Alameda Point		300'					West
5/3/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
5/3/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 180		1400'					West
5/7/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
5/7/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 181		1400'					West
5/9/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1000'	2	2			West
5/9/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1100'					West
5/9/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 182		1400'					West
5/9/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth T-15		1000'	3	1			West
5/13/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
5/13/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 183		1400'					West
5/16/2013	San Francisco	National Response Corporation	Berth 32 Port of Oakland, CA	600'				1		West
5/23/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
5/23/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 184		1400'					West
5/23/13	San Francisco	National Response Corporation	Pier 92 Port of San Francisco		600'		1			West
5/24/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
5/24/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 185		1400'					West
5/29/13	San Francisco	National Response Corporation	Santa FE Channel Richmond CA.		2000'					West
5/31/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
5/31/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 186		1400'					West
6/4/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
6/4/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 187		1400'					West
6/12/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
6/12/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 188		1400'					West
6/17/13	San Francisco	National Response Corporation	Pier 50 Port of San Francisco		1800'					West
6/18/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
6/18/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 189		1400'					West
6/19/13	San Diego	National Response Corporation	San Diego County, CA	500'						West
6/19/13	San Francisco	National Response Corporation	BP/ARCO Richmond CA.		600'					West
6/25/13	San Francisco	National Response Corporation	Golden Gate Ferry San Francisco		500'					West
6/26/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
6/26/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 190		1400'					West
6/27/13	San Francisco	National Response Corporation	BP/ARCO Richmond CA.		1000'					West

Date	COTP Zone	Contractor Name	Location	Boom 6"-18"	Boom 19"-42"	Skimmer Drum, Brush,	Skimmer Floating Suction	Skimmer Belt	Skimmer Rope	Region
7/1/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
7/1/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 191		1400'					West
7/3/13	San Francisco	National Response Corporation	Berth 2 Port of Stockton		1400'					West
7/4/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
7/4/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 192		1400'					West
7/5/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1100'					West
7/5/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 193		1400'					West
7/11/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
7/11/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 194		1400'					West
7/15/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
7/15/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 195		1400'					West
7/17/13	San Francisco	National Response Corporation	150 Metcalf road, San Jose CA.		300'					West
7/18/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
7/18/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 196		1400'					West
7/26/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
7/26/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 197		1400'					West
8/1/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
8/1/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 198		1400'					West
8/7/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
8/7/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 199		1400'					West
8/11/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
8/11/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 200		1400'					West
8/13/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
8/13/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 201		1400'					West
8/14/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
8/14/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 202		1400'					West
8/21/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
8/21/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 203		1400'					West
8/23/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
8/23/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 204		1400'					West
9/3/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
9/3/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 205		1400'					West
9/10/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
9/10/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 206		1400'					West
9/17/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
9/17/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 207		1400'					West
9/18/2013	San Diego	National Response Corporation	San Diego County, CA	500'						West
9/25/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
9/25/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 208		1400'					West
10/1/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
10/1/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 209		1400'					West
10/3/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
10/3/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 210		1400'					West

Date	COTP Zone	Contractor Name	Location	Boom 6"-18"	Boom 19"-42"	Skimmer Drum, Brush,	Skimmer Floating Suction	Skimmer Belt	Skimmer Rope	Region
10/8/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400					West
10/8/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 211		1400'					West
10/12/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400					West
10/12/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1100'					West
10/12/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 101		1100'					West
10/12/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 212		1400'					West
10/16/13	San Francisco	National Response Corporation	Cogswell Marsh, Hayward CA		1000'					West
10/16/13	San Francisco	National Response Corporation	Steinberger Slough, Redwood city CA		1000'					West
10/17/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
10/17/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 213		1400'					West
10/25/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
10/25/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 214		1400'					West
11/2/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
11/6/2013	San Diego	National Response Corporation	San Diego County, CA	800'						West
11/9/2013	San Diego	National Response Corporation	San Diego County, CA	1000'						West
11/12/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 215		1400'					West
11/14/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1100'					West
11/14/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 101		1100'					West
11/15/13	San Francisco	National Response Corporation	Martinez Marina, Marina CA.		2000'			1		West
11/18/13	San Francisco	National Response Corporation	BP/ARCO Richmond CA.		600'					West
11/19/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
11/19/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 216		1400'					West
11/20/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
11/20/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 217		1400'					West
11/23/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
11/23/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 218		1400'					West
12/10/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
12/10/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 219		1400'					West
12/18/2013	San Francisco	National Response Corporation	Humboldt Bay	200'						West
12/18/13	San Francisco	National Response Corporation	Humboldt Bay		200					West
12/19/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
12/19/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 220		1400'					West
12/29/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
12/29/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 221		1400'					West

ATTESTATION

I, Steven A. Candito, President of National Response Corporation (NRC), an Oil Spill Removal Organization (OSRO) with full OSRO classifications in all Captain of the Port Zones, for all operating environments within our Area of Service do hereby attest, based upon the information provided to me by the members of the NRC Independent Contractor Network, each of whom are responsible for similar attestations to their own clients under the National Preparedness for Response Exercise Program and based on my own personal knowledge, that boom and skimming systems, more than adequate to satisfy the OSRO field equipment deployment drill requirements of OPA '90 have been deployed on your behalf in the United States East Coast, Gulf Coast, West Coast, Inland River and Caribbean Regions within the most recent calendar year. Further that NRC-owned equipment is inspected and maintained under a formal preventive maintenance program. Personnel training requirements are met through a formal equipment deployment-training program. The personnel who deployed the equipment demonstrated their ability to successfully deploy and operate the equipment and the equipment was in good working order. Further, records of these deployments are maintained at our headquarters in Great River, New York, USA.

Date: 13 February 2014

Steven A. Candito
President
National Response Corporation

Attachment B

National Response Corporation
Resource Availability By Type

Equipment Types: **Boom/Portable Storage/Skimmer/Support Equipment/Transfer Pump/Vacuum System/Vessel**

Zone: Toledo, OH

Toledo - Case# DM14-0175
April 25, 2014

00 to 06 hours (* Does not include recall/mobilization time)

Boom

>=6 and <18 inch

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
12" Boom	0	2000	0	0	ICN	Rudolph	OH	00:45
12" Boom	0	1000	0	0	ICN	Rudolph	OH	00:45
12" Boom	0	300	0	0	ICN	Mcdonald	PA	05:33
10" Boom	0	1300	0	0	ICN	Mcdonald	PA	05:33
12" Boom	0	125	0	0	ICN	Merrillville	IN	05:34
8" Boom	0	2450	0	0	ICN	New Matamoras	OH	05:35
12" Boom	0	450	0	0	ICN	Indianapolis	IN	05:36
10" Boom	0	1252	0	0	ICN	Pittsburgh	PA	05:41
8" Boom	0	350	0	0	ICN	Mooresville	IN	05:52
Sub Total >=6 and <18 inch:		**9227**	**0**	**0**				

>18 and <42 inch

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
24" Boom	0	1000	0	0	ICN	Cleveland	OH	02:45
24" Boom	0	1000	0	0	ICN	Middletown	OH	04:26
24" Boom	0	1000	0	0	ICN	East Liverpool	OH	04:49
30" Boom	0	100	0	0	ICN	Erie	PA	05:07
24" Boom	0	6050	0	0	ICN	Mcdonald	PA	05:33
24" Boom	0	4250	0	0	ICN	New Matamoras	OH	05:35
Sub Total >18 and <42 inch:		**13400**	**0**	**0**				

>42 inch

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
60" Boom	0	50	0	0	ICN	Mcdonald	PA	05:33
44" Boom	0	1100	0	0	ICN	East Chicago	IN	05:49
Sub Total >42 inch:		**1150**	**0**	**0**				

18"

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
18" Boom	0	1000	0	0	ICN	Toledo	OH	00:07
18" Boom	0	4000	0	0	ICN	Rudolph	OH	00:45
18" Boom	0	4000	0	0	ICN	Ypsilanti	MI	01:06
18" Boom	0	500	0	0	ICN	Findlay	OH	01:07
18" Boom	0	11400	0	0	ICN	Detroit	MI	01:23
18" Boom	0	2100	0	0	ICN	Sterling Heights	MI	01:54
18" Boom	0	1500	0	0	ICN	Sterling Heights	MI	02:01
18" Boom	0	1200	0	0	ICN	Middleburg Heights	OH	02:34
18" Boom	0	3000	0	0	ICN	Cleveland	OH	02:45
18" Boom	0	100	0	0	ICN	North Canton	OH	03:27
18" Boom	0	100	0	0	ICN	Elkhart	IN	03:36
18" Boom	0	2200	0	0	ICN	Huber Heights	OH	03:37
18" Boom	0	500	0	0	ICN	Cincinnati	OH	04:47
18" Boom	0	2000	0	0	ICN	East Liverpool	OH	04:51
18" Boom	0	5500	0	0	ICN	Cincinnati	OH	05:07
18" Boom	0	1200	0	0	ICN	Batavia	OH	05:10
18" Boom	0	200	0	0	ICN	Indianapolis	IN	05:33
18" Boom	0	1500	0	0	ICN	Indianapolis	IN	05:36
18" Boom	0	100	0	0	ICN	Cuddy	PA	05:37
18" Boom	0	100	0	0	ICN	Schererville	IN	05:48
18" Boom	0	1000	0	0	ICN	Whiting	IN	05:49
18" Boom	0	13000	0	0	ICN	East Chicago	IN	05:49
18" Boom	0	3000	0	0	ICN	Mooresville	IN	05:52

00 to 06 hours (* Does not include recall/mobilization time)

Sub Total 18":	**59200**	**0**	**0**
Total Boom:	**82977**	**0**	**0**

Portable Storage

Frac Tank

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Frac Tank	0	4	0	1036	ICN	Toledo	OH	00:07
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	2	0	1000	ICN	North Canton	OH	03:27
Frac Tank	0	6	0	2568	ICN	Huber Heights	OH	03:37
Frac Tank	0	10	0	4770	ICN	East Liverpool	OH	04:49
Frac Tank	0	1	0	523	ICN	Cincinnati	OH	05:07
Frac Tank	0	2	0	856	ICN	Miamitown	OH	05:07
Frac Tank	0	1	0	500	ICN	Cuddy	PA	05:37
Frac Tank	0	16	0	960	ICN	East Chicago	IN	05:49
Sub Total Frac Tank:		**60**	**0**	**21213**				

Portable Tank

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Portable Tank	0	4	0	116	ICN	Toledo	OH	00:07
Tank Truck	0	1	0	162	ICN	Detroit	MI	01:23
Tank Truck	0	1	0	166	ICN	Detroit	MI	01:23
Tank Trailer	0	1	0	119	ICN	Cleveland	OH	02:45
Poly Tote	0	2	0	12	ICN	North Canton	OH	03:27
Poly Tank	0	1	0	7	ICN	North Canton	OH	03:27
Poly Tank	0	1	0	35	ICN	North Canton	OH	03:27
Poly Tote	0	2	0	12	ICN	Elkhart	IN	03:36
Poly Tank	0	1	0	7	ICN	Elkhart	IN	03:36
Poly Tank	0	1	0	35	ICN	Elkhart	IN	03:36
Poly Tank	0	2	0	24	ICN	Merrillville	IN	05:34
Poly Tank	0	1	0	7	ICN	Cuddy	PA	05:37
Poly Tank	0	1	0	35	ICN	Cuddy	PA	05:37
Poly Tote	0	2	0	12	ICN	Cuddy	PA	05:37
Tank Truck	0	18	0	3006	ICN	Carnegie	PA	05:39
Tank Truck	0	3	0	465	ICN	Carnegie	PA	05:39
Poly Tote	0	2	0	12	ICN	Schererville	IN	05:48
Poly Tank	0	1	0	7	ICN	Schererville	IN	05:48
Poly Tank	0	1	0	35	ICN	Schererville	IN	05:48
Tank Truck	0	5	0	655	ICN	East Chicago	IN	05:49
Tank Truck	0	6	0	540	ICN	East Chicago	IN	05:49
Poly Storage Tank	0	4	0	188	ICN	Mooresville	IN	05:52
Sub Total Portable Tank:		**61**	**0**	**5657**				

Tank Truck

00 to 06 hours (* Does not include recall/mobilization time)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Static Trailer	0	1	0	128	ICN	Ypsilanti	MI	01:06
Jumbo Tanker	0	1	0	285	ICN	Ypsilanti	MI	01:06
Tank Truck	0	4	0	304	ICN	East Chicago	IN	05:49
Tank Truck	0	2	0	104	ICN	East Chicago	IN	05:49
Sub Total Tank Truck:		**8**	**0**	**821**				
Total Portable Storage:		**129**	**0**	**27691**				

Skimmer

Drum

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Elastec TDS136 Skimmer	0	1	480	0	ICN	Toledo	OH	00:07
Elastec Magnum 100	0	1	686	0	ICN	Rudolph	OH	00:45
Elastec Magnum 100	0	1	686	0	ICN	Rudolph	OH	00:45
Elastec Magnum 200	0	1	1371	0	ICN	Rudolph	OH	00:45
Elastec Mini Max Skimmer	0	1	137	0	ICN	Rudolph	OH	00:45
Elastec TDS136 Skimmer	0	1	480	0	ICN	Rudolph	OH	00:45
Elastec TDS136 Skimmer	0	1	480	0	ICN	Rudolph	OH	00:45
Elastec TDS136 Skimmer	0	1	480	0	ICN	Rudolph	OH	00:45
Elastec Magnum 100	0	1	686	0	ICN	Rudolph	OH	00:45
Elastec Magnum 100	0	1	686	0	ICN	Rudolph	OH	00:45
Elastec Magnum 100	0	1	686	0	ICN	Rudolph	OH	00:45
Elastec Magnum 100	0	1	686	0	ICN	Rudolph	OH	00:45
Elastec Magnum 100	0	1	686	0	ICN	Rudolph	OH	00:45
Elastec Magnum 200	0	1	1371	0	ICN	Rudolph	OH	00:45
Elastec Mini Max Skimmer	0	1	137	0	ICN	Rudolph	OH	00:45
Elastec Mini Max Skimmer	0	1	137	0	ICN	Rudolph	OH	00:45
Medium Drum Skimmer	0	2	480	0	ICN	Detroit	MI	01:23
Crucial 1D18P24 Skimmer	0	1	171	0	ICN	Detroit	MI	01:23
Crucial 1D18P36 Skimmer	0	2	480	0	ICN	Sterling Heights	MI	01:54
Small Drum Skimmer	0	3	513	0	ICN	Sterling Heights	MI	01:54
Elastec TDS118 Skimmer	0	1	240	0	ICN	Huber Heights	OH	03:37
Small Drum Skimmer	0	1	171	0	ICN	Carroll	OH	03:56
Small Drum Skimmer	0	1	171	0	ICN	East Liverpool	OH	04:51
Small Drum Skimmer	0	2	342	0	ICN	Indianapolis	IN	05:33
Elastec TDS136 Skimmer	0	1	480	0	ICN	Indianapolis	IN	05:36
Small Drum Skimmer	0	3	513	0	ICN	Carnegie	PA	05:39
Elastec Mini-Max Skimmer	0	2	274	0	ICN	East Chicago	IN	05:49
Elastec TDS136 Skimmer	0	6	2880	0	ICN	East Chicago	IN	05:49
Elastec Mini-Max Skimmer	0	2	274	0	ICN	East Chicago	IN	05:49
Medium Drum Skimmer	0	1	240	0	ICN	Mooresville	IN	05:52
Sub Total Drum:		**44**	**17104**	**0**				

Floating Suction

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Manta Ray Skimmer	0	1	315	0	ICN	Detroit	MI	01:23
Manta Ray Skimmer	0	1	315	0	ICN	Huber Heights	OH	03:37
Douglas 4300 SkimPac	0	1	480	0	ICN	Huber Heights	OH	03:37
Manta Ray Skimmer	0	1	315	0	ICN	Miamitown	OH	05:07
Floating Suction Skimmer	0	1	274	0	ICN	East Chicago	IN	05:49
Sub Total Floating Suction:		**5**	**1699**	**0**				

Oleophilic Disk

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
NRC Weir Disk Skimmer	WD-107	1	1371	24	NRC	Cincinnati	OH	05:07
Vikoma Komara 12K Skimmer	0	1	480	0	ICN	East Chicago	IN	05:49
Sub Total Oleophilic Disk:		**2**	**1851**	**24**				

Oleophilic Rope Mop

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Rope Mop Skimmer	0	1	75	0	ICN	Detroit	MI	01:23
Sub Total Oleophilic Rope Mop:		**1**	**75**	**0**				

00 to 06 hours (* Does not include recall/mobilization time)

Total Skimmer:	**52**	**20729**	**24**	

Support Equipment

Ancillary Gear

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
20 yd. Soil Boxes	0	4	0	0	ICN	Middletown	OH	04:26
Sub Total Ancillary Gear:		**4**	**0**	**0**				

ATV

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
ATV	0	1	0	0	ICN	Findlay	OH	01:07
ATV	0	2	0	0	ICN	Detroit	MI	01:23
ATV	0	2	0	0	ICN	North Canton	OH	03 27
ATV	0	2	0	0	ICN	Elkhart	IN	03:36
ATV	0	1	0	0	ICN	Indianapolis	IN	05:16
ATV	0	2	0	0	ICN	Schererville	IN	05:48
ATV	0	4	0	0	ICN	East Chicago	IN	05:49
Sub Total ATV:		**14**	**0**	**0**				

Blower

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Boom Inflator	0	2	0	0	ICN	Cincinnati	OH	05:07
Sub Total Blower:		**2**	**0**	**0**				

Compressor

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Compressor	0	2	0	0	ICN	Toledo	OH	00:07
Compressor	0	1	0	0	ICN	Findlay	OH	01:07
Air Compressor	0	1	0	0	ICN	Sterling Heights	MI	01:54
Air Compressor	0	1	0	0	ICN	Cleveland	OH	02:45
Compressor	0	1	0	0	ICN	North Canton	OH	03:27
Compressor	0	1	0	0	ICN	Elkhart	IN	03:36
Compressor	0	2	0	0	ICN	Cincinnati	OH	05:07
Compressor	0	1	0	0	ICN	Batavia	OH	05:10
Air Compressor	0	1	0	0	ICN	Indianapolis	IN	05:33
Compressor	0	2	0	0	ICN	Indianapolis	IN	05:36
Compressor	0	1	0	0	ICN	Cuddy	PA	05:37
Air Compressors	0	4	0	0	ICN	Carnegie	PA	05:39
Compressor	0	3	0	0	ICN	Pittsburgh	PA	05:41
Compressor	0	1	0	0	ICN	Schererville	IN	05:48
Compressor	0	2	0	0	ICN	Mooresville	IN	05:52
Sub Total Compressor:		**24**	**0**	**0**				

Crane Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Sidebooms/Padded	0	4	0	0	ICN	Walbridge	OH	00:07
Grapple Truck	0	1	0	0	ICN	Washington	PA	05:38
Sidebooms/Padded	0	2	0	0	ICN	Washington	PA	05:38
Crane	0	1	0	0	ICN	Hammond	IN	05:50
Grapple Truck	0	1	0	0	ICN	Hammond	IN	05:50
Sidebooms/Padded	0	2	0	0	ICN	Columbus	IN	05:58
Sub Total Crane Truck:		**11**	**0**	**0**				

Dump Truck/Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Dump Truck	0	2	0	0	ICN	North Canton	OH	03:27
Dump Truck	0	1	0	0	ICN	Groveport	OH	03 38
Dump Truck	0	2	0	0	ICN	Carroll	OH	03:56
Dump Truck	0	1	0	0	ICN	Indianapolis	IN	05:16
Dump Truck	0	1	0	0	ICN	Merrillville	IN	05:34
Dump Truck	0	2	0	0	ICN	Cuddy	PA	05:37
Dump Trailer	0	4	0	0	ICN	Carnegie	PA	05 39
Dump Truck	0	8	0	0	ICN	Carnegie	PA	05:39

00 to 06 hours (* Does not include recall/mobilization time)

Ton Dump	0	2	0	0	ICN	Carnegie	PA	05:39
Sub Total Dump Truck/Trailer:		**23**	**0**	**0**				

Earth Moving Equipment

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
977 Track Loader	0	1	0	0	ICN	Walbridge	OH	00:07
325 Excavator	0	1	0	0	ICN	Walbridge	OH	00:07
Backhoe	0	2	0	0	ICN	Toledo	OH	00:07
Skid Loader	0	1	0	0	ICN	Findlay	OH	01:07
Bobcat	0	1	0	0	ICN	Detroit	MI	01:23
Skid Steer	0	2	0	0	ICN	Marshall	MI	02:28
Excavator	0	1	0	0	ICN	North Canton	OH	03:27
Skid Steer	0	1	0	0	ICN	North Canton	OH	03:27
Excavator	0	1	0	0	ICN	Elkhart	IN	03:36
Skid Steer	0	1	0	0	ICN	Elkhart	IN	03:36
Skid Steer	0	2	0	0	ICN	Groveport	OH	03:38
Excavator	0	3	0	0	ICN	Groveport	OH	03:38
Backhoe	0	1	0	0	ICN	Groveport	OH	03:38
Multi Terrain Loader	0	1	0	0	ICN	Groveport	OH	03:38
Gator	0	1	0	0	ICN	Groveport	OH	03:38
Excavator	0	2	0	0	ICN	Carroll	OH	03:56
Skid Steer	0	1	0	0	ICN	Carroll	OH	03:56
Skidsteer	0	1	0	0	ICN	Cincinnati	OH	04:47
Skidloader	0	4	0	0	ICN	East Liverpool	OH	04:49
Track Loader	0	1	0	0	ICN	Batavia	OH	05:10
Trackhoe	0	1	0	0	ICN	Batavia	OH	05:10
Backhoe	0	1	0	0	ICN	Indianapolis	IN	05:33
Skid Steer	0	1	0	0	ICN	Indianapolis	IN	05:33
Backhoe	0	1	0	0	ICN	Merrillville	IN	05:34
Skid Steer	0	1	0	0	ICN	Merrillville	IN	05:34
Backhoe	0	1	0	0	ICN	Indianapolis	IN	05:36
977 Track Loader	0	1	0	0	ICN	Washington	PA	05:38
Trac Skid Loader	0	4	0	0	ICN	Carnegie	PA	05:39
Bulldozer	0	2	0	0	ICN	Carnegie	PA	05:39
Bobcat	0	1	0	0	ICN	Pittsburgh	PA	05:41
Excavator	0	1	0	0	ICN	Schererville	IN	05:48
Skid Steer	0	1	0	0	ICN	Schererville	IN	05:48
Track Excavator	0	1	0	0	ICN	East Chicago	IN	05:49
Skid Steer Loader	0	4	0	0	ICN	East Chicago	IN	05:49
Track Excavator	0	1	0	0	ICN	East Chicago	IN	05:49
Track Loader	0	1	0	0	ICN	East Chicago	IN	05:49
Hydro-Excavator Truck	0	5	0	0	ICN	East Chicago	IN	05:49
Hydro-Jetter Truck	0	12	0	0	ICN	East Chicago	IN	05:49
Backhoe	0	1	0	0	ICN	East Chicago	IN	05:49
Loader- Front End	0	1	0	0	ICN	East Chicago	IN	05:49
Track Loader	0	1	0	0	ICN	Hammond	IN	05:50
Dozer	0	1	0	0	ICN	Hammond	IN	05:50
Skid Steer	0	3	0	0	ICN	Mooresville	IN	05:52
977 Track Loader	0	1	0	0	ICN	Columbus	IN	05:58
Sub Total Earth Moving Equipment:		**77**	**0**	**0**				

Flatbed Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Drop Deck Trailer	0	5	0	0	ICN	Detroit	MI	01:23
Flatbed Trailer	0	2	0	0	ICN	Detroit	MI	01:23
Stakebed	0	1	0	0	ICN	Sterling Heights	MI	02:01
Stakebed	0	1	0	0	ICN	Middleburg Heights	OH	02:34
Low Boy Trailer	0	1	0	0	ICN	Groveport	OH	03:38
Flatbed Trailer	212	1	0	0	NRC	Cincinnati	OH	05:07
Flatbed Trailer	0	1	0	0	ICN	Dayton	KY	05:12
Deck Trailer	0	1	0	0	ICN	Merrillville	IN	05:34
Flatbed Trailer	0	2	0	0	ICN	Carnegie	PA	05:39

00 to 06 hours (* Does not include recall/mobilization time)

Lowboy Trailer	0	3	0	0	ICN	Carnegie	PA	05:39
Flatbed Trailer	0	2	0	0	ICN	Carnegie	PA	05:39
Drop Deck Trailer	0	2	0	0	ICN	East Chicago	IN	05:49
Low Boy Trailer	0	1	0	0	ICN	Mooresville	IN	05:52
Sub Total Flatbed Trailer:		**23**	**0**	**0**				

Fork Lift

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Forklift	0	1	0	0	ICN	Findlay	OH	01:07
Fork Lift	0	1	0	0	ICN	Cleveland	OH	02:34
Fork Lift	0	1	0	0	ICN	Groveport	OH	03:38
Fork Lift	0	1	0	0	ICN	Carroll	OH	03:56
Forklift	0	1	0	0	ICN	Merrillville	IN	05:34
Fork Lift	0	3	0	0	ICN	Carnegie	PA	05:39
Sub Total Fork Lift:		**8**	**0**	**0**				

Generator

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Generator	0	3	0	0	ICN	Toledo	OH	00:07
Generator	0	1	0	0	ICN	Sterling Heights	MI	02:01
Generator	0	1	0	0	ICN	Marshall	MI	02:28
Generator	0	1	0	0	ICN	Middleburg Heights	OH	02:34
Generator	0	2	0	0	ICN	North Canton	OH	03:27
Generator	0	2	0	0	ICN	Elkhart	IN	03:36
Generator	0	1	0	0	ICN	Carroll	OH	03:56
Generator	0	3	0	0	ICN	Cincinnati	OH	05:07
Generator	0	2	0	0	ICN	Batavia	OH	05:10
Generator	0	1	0	0	ICN	Indianapolis	IN	05:16
Generator	0	2	0	0	ICN	Indianapolis	IN	05:33
Generator	0	2	0	0	ICN	Indianapolis	IN	05:36
Generator	0	2	0	0	ICN	Cuddy	PA	05:37
Generator	0	3	0	0	ICN	Pittsburgh	PA	05:41
Generator	0	2	0	0	ICN	Schererville	IN	05:48
Sub Total Generator:		**28**	**0**	**0**				

Light Plant

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Light Tower	0	2	0	0	ICN	Marshall	MI	02 28
Light Stand	0	6	0	0	ICN	Pittsburgh	PA	05:41
Sub Total Light Plant:		**8**	**0**	**0**				

Pick-Up Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Pick-Up Truck	0	5	0	0	ICN	Toledo	OH	00:07
Operational Vehicle	0	20	0	0	ICN	Detroit	MI	01:23
Pick-Up Truck	0	3	0	0	ICN	Sterling Heights	MI	01:54
Pick-Up Truck	0	3	0	0	ICN	Sterling Heights	MI	02:01
Pick-Up Truck	0	27	0	0	ICN	Marshall	MI	02:28
Pick-Up Truck	0	1	0	0	ICN	Cleveland	OH	02:34
Pick-Up Truck	0	2	0	0	ICN	Middleburg Heights	OH	02:34
Pick-Up Truck	0	7	0	0	ICN	Cleveland	OH	02:45
Pick-Up Truck	0	32	0	0	ICN	Huber Heights	OH	03:37
Pick-Up Truck	0	2	0	0	ICN	Groveport	OH	03:38
Pick-Up Truck	0	2	0	0	ICN	Carroll	OH	03:56
Pick-Up Truck	0	1	0	0	ICN	Steubenville	OH	05:01
Pick-Up Truck	0	7	0	0	ICN	Cincinnati	OH	05:07
Pick-Up Truck	0	15	0	0	ICN	Miamitown	OH	05:07
Pick-Up Truck	0	2	0	0	ICN	Dayton	KY	05:12
Trailblazer	0	2	0	0	ICN	Indianapolis	IN	05:16
Pick-Up Truck	0	1	0	0	ICN	Indianapolis	IN	05:16
Pick-Up Truck	0	3	0	0	ICN	Merrillville	IN	05:34
Pick-Up Truck	0	20	0	0	ICN	Carnegie	PA	05:39
Pick-Up Truck	0	4	0	0	ICN	Pittsburgh	PA	05:41

00 to 06 hours (* Does not include recall/mobilization time)

Rack Body	0	4	0	0	ICN	East Chicago	IN	05:49
Service Truck	0	3	0	0	ICN	East Chicago	IN	05:49
Sub Total Pick-Up Truck:		**166**	**0**	**0**				

Power Pack

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Power Pack	DPP-10-107	1	0	0	NRC	Cincinnati	OH	05:07
Sub Total Power Pack:		**1**	**0**	**0**				

Pressure Washer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Pressure Washer	0	2	0	0	ICN	Toledo	OH	00:07
Power Washer	0	2	0	0	ICN	Rudolph	OH	00:45
Water Blaster	0	1	0	0	ICN	Ypsilanti	MI	01:06
Power Washer	0	10	0	0	ICN	Ypsilanti	MI	01:06
Water Blaster	0	5	0	0	ICN	Ypsilanti	MI	01:06
Pressure Washer	0	2	0	0	ICN	Findlay	OH	01:07
Pressure Washer	0	3	0	0	ICN	Sterling Heights	MI	01:54
Hot Pressure Washer	0	1	0	0	ICN	Sterling Heights	MI	02:01
Pressure Washer Trailer	0	2	0	0	ICN	Marshall	MI	02:28
Pressure Washer	0	3	0	0	ICN	Middleburg Heights	OH	02:34
Pressure Washer- Hot	0	4	0	0	ICN	Cleveland	OH	02:45
Water Blaster	0	35	0	0	ICN	Huber Heights	OH	03:37
Water Blaster Trailer	0	3	0	0	ICN	Groveport	OH	03:38
Hot Pressure Washer	0	1	0	0	ICN	Groveport	OH	03:38
Pressure Washer-Hot	0	1	0	0	ICN	Carroll	OH	03:56
Pressure Washer-Hot/Cold	0	2	0	0	ICN	Steubenville	OH	05:01
Pressure Washer-Hot	0	3	0	0	ICN	Cincinnati	OH	05:07
Pressure Washer-Cold	0	3	0	0	ICN	Cincinnati	OH	05:07
Water Blaster	0	15	0	0	ICN	Miamitown	OH	05:07
Hot Water Pressure Washer	0	4	0	0	ICN	Batavia	OH	05:10
Hot Water Pressure Washer	0	4	0	0	ICN	Indianapolis	IN	05:16
Pressure Washer- Hot	0	2	0	0	ICN	Merrillville	IN	05:34
Pressure Washer	0	4	0	0	ICN	Indianapolis	IN	05:36
Pressure Water Blaster	0	10	0	0	ICN	Carnegie	PA	05:39
Pressure Cleaner	0	2	0	0	ICN	Pittsburgh	PA	05:41
Pressure Washer	0	2	0	0	ICN	Whiting	IN	05:49
Pressure Washer Trailer	0	1	0	0	ICN	Mooresville	IN	05:52
Sub Total Pressure Washer:		**127**	**0**	**0**				

Roll Off Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Roll Off Trailer	0	1	0	0	ICN	Groveport	OH	03 38
Roll Off Trailer	0	1	0	0	ICN	Carroll	OH	03:56
Roll Off Trailer	0	5	0	0	ICN	Carnegie	PA	05:39
Sub Total Roll Off Trailer:		**7**	**0**	**0**				

Roll-Off Boom Container

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Roll-off Boxes	0	5	0	0	ICN	Mooresville	IN	05:52
Sub Total Roll-Off Boom Container:		**5**	**0**	**0**				

Roll Off Container

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Roll-Off Container	0	143	0	0	ICN	Toledo	OH	00:07
Roll-Off Boxes	0	14	0	0	ICN	Detroit	MI	01:23
Roll-Off Boxes	0	8	0	0	ICN	Marshall	MI	02:28
Roll-OffContainer	0	2	0	0	ICN	North Canton	OH	03:27
Roll-Off Container	0	2	0	0	ICN	North Canton	OH	03:27
Roll-Off Boxes	0	30	0	0	ICN	Huber Heights	OH	03:37
Roll-Off Container	0	5	0	0	ICN	Groveport	OH	03:38
Roll-Off Container	0	2	0	0	ICN	Groveport	OH	03:38
Roll-Off Container	0	25	0	0	ICN	New Philadelphia	OH	03:49

00 to 06 hours (* Does not include recall/mobilization time)

Roll-Off Container	0	2	0	0	ICN	Carroll	OH	03:56
Roll-Off Container	0	50	0	0	ICN	East Liverpool	OH	04:49
Roll--Off Container	0	5	0	0	ICN	Miamitown	OH	05:07
Roll-Off Box	0	4	0	0	ICN	Merrillville	IN	05:34
Roll-Off Container	0	2	0	0	ICN	Cuddy	PA	05:37
Roll-Off Container	0	2	0	0	ICN	Cuddy	PA	05:37
Roll-Off Container	0	150	0	0	ICN	Carnegie	PA	05:39
Sub Total Roll-Off Container:		**446**	**0**	**0**				

Roll-off Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Roll-Off Truck	0	1	0	0	ICN	Sterling Heights	MI	01:54
Roll-off Truck	0	1	0	0	ICN	Marshall	MI	02:28
Roll-Off Truck	0	3	0	0	ICN	Huber Heights	OH	03:37
Roll-off Truck	0	4	0	0	ICN	Carroll	OH	03:56
Roll-off Truck	0	8	0	0	ICN	Carnegie	PA	05:39
Roll-off Truck	0	1	0	0	ICN	Mooresville	IN	05:52
Sub Total Roll-off Truck:		**18**	**0**	**0**				

SCBA

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
SCBA	0	2	0	0	ICN	Sterling Heights	MI	01:54
SCBA	0	3	0	0	ICN	Sterling Heights	MI	02:01
SCBA	0	2	0	0	ICN	Marshall	MI	02:28
SCBA	0	10	0	0	ICN	Cincinnati	OH	05:07
SCBA	0	3	0	0	ICN	Batavia	OH	05:10
SCBA	0	4	0	0	ICN	Indianapolis	IN	05:33
SCBA	0	4	0	0	ICN	Mooresville	IN	05:52
Sub Total SCBA:		**28**	**0**	**0**				

Side Boom

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
ide Boom Padded	0	3	0	0	ICN	Hammond	IN	05 50
Sub Total Side Boom		**3**	**0**	**0**				

Support Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Box Truck	0	1	0	0	ICN	Cincinnati	OH	05:07
Sub Total Support Truck:		**1**	**0**	**0**				

Truck - Semi

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Tractors	0	3	0	0	ICN	Detroit	MI	01:23
Roll-Off Frame w/Tractor	0	1	0	0	ICN	Cleveland	OH	02:45
Tractor	0	12	0	0	ICN	Huber Heights	OH	03:37
Tractor	0	1	0	0	ICN	Groveport	OH	03:38
Tractor	0	1	0	0	ICN	Carroll	OH	03:56
Truck- Semi	0	2	0	0	ICN	Cincinnati	OH	05:07
Tractor Trailer Trucks	0	3	0	0	ICN	Merrillville	IN	05:34
Utility Truck	0	5	0	0	ICN	Indianapolis	IN	05:36
Roll-Off Truck	0	1	0	0	ICN	East Chicago	IN	05:49
Box Truck	0	1	0	0	ICN	Mooresville	IN	05:52
Sub Total Truck - Semi:		**30**	**0**	**0**				

Utility Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Utility Trailer	0	1	0	0	ICN	Toledo	OH	00:07
Utility Trailer	0	3	0	0	ICN	Toledo	OH	00:12
Boom Trailer	0	2	0	0	ICN	Sterling Heights	MI	01:54
Cargo Trailer	0	2	0	0	ICN	Sterling Heights	MI	02:01
Job Trailer	0	2	0	0	ICN	Marshall	MI	02:28
Utility Trailer	0	1	0	0	ICN	Cleveland	OH	02:34
Cargo Trailer	0	2	0	0	ICN	Middleburg Heights	OH	02:34
Boom Trailer	0	1	0	0	ICN	Middleburg Heights	OH	02:34

00 to 06 hours (* Does not include recall/mobilization time)

Utility Trailer	0	1	0	0	ICN	Cleveland	OH	02:45
Hot Water Pressure Washer Trailer	0	1	0	0	ICN	North Canton	OH	03:27
Confined Space Entry Trailer	0	1	0	0	ICN	North Canton	OH	03:27
Hot Water Pressure Washer Trailer	0	1	0	0	ICN	Elkhart	IN	03:36
Confined Space Entry Trailer	0	1	0	0	ICN	Elkhart	IN	03:36
Utility Trailer	0	14	0	0	ICN	Groveport	OH	03:38
Utility Trailer	0	4	0	0	ICN	Carroll	OH	03:56
Emergency Response Trailer	0	1	0	0	ICN	Middletown	OH	04:26
Utility Trailer	0	2	0	0	ICN	Steubenville	OH	05:01
Boom Trailer	0	4	0	0	ICN	Cincinnati	OH	05:07
Boom Trailer	0	1	0	0	ICN	Batavia	OH	05:10
Cargo Trailer	0	1	0	0	ICN	Batavia	OH	05:10
Utility Trailer	0	2	0	0	ICN	Dayton	KY	05:12
Utility Trailer	0	3	0	0	ICN	Indianapolis	IN	05:16
Response Trailer	0	1	0	0	ICN	Indianapolis	IN	05:36
Drum Truck	0	2	0	0	ICN	Indianapolis	IN	05:36
Hot Water Pressure Washer Trailer	0	1	0	0	ICN	Cuddy	PA	05:37
Confined Space Entry Trailer	0	1	0	0	ICN	Cuddy	PA	05:37
Utility Trailers	0	8	0	0	ICN	Carnegie	PA	05:39
Utility Trailers	0	4	0	0	ICN	Carnegie	PA	05:39
Decontamination Trailer	0	2	0	0	ICN	Carnegie	PA	05:39
Response Trailer	0	2	0	0	ICN	Carnegie	PA	05:39
Hot Water Pressure Washer Trailer	0	1	0	0	ICN	Schererville	IN	05:48
Confined Space Entry Trailer	0	1	0	0	ICN	Schererville	IN	05:48
Job Trailer	0	4	0	0	ICN	Mooresville	IN	05:52
Sub Total Utility Trailer:		**78**	**0**	**0**				

Utility Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Stakebed	0	3	0	0	ICN	Detroit	MI	01:23
Stake Truck	0	1	0	0	ICN	Sterling Heights	MI	01:54
Utility Truck	0	6	0	0	ICN	North Canton	OH	03:27
Utility Truck	0	4	0	0	ICN	Elkhart	IN	03:36
Emergency Response Truck	0	1	0	0	ICN	Huber Heights	OH	03:37
Box Truck	0	1	0	0	ICN	Groveport	OH	03:38
Club Car	0	1	0	0	ICN	Groveport	OH	03:38
Utility Truck	0	1	0	0	ICN	Carroll	OH	03:56
Box Truck	0	1	0	0	ICN	Indianapolis	IN	05:16
Box Truck	0	1	0	0	ICN	Merrillville	IN	05:34
Response Truck	0	1	0	0	ICN	Merrillville	IN	05:34
Utility Trucks	0	6	0	0	ICN	Cuddy	PA	05:37
Utility Truck	0	1	0	0	ICN	Carnegie	PA	05:39
Stake Bed Truck	0	5	0	0	ICN	Carnegie	PA	05:39
Utility Truck	0	4	0	0	ICN	Schererville	IN	05:48
Sub Total Utility Truck:		**37**	**0**	**0**				

Van Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Spill Response Trailer	0	1	0	0	ICN	Rudolph	OH	00:45
Spill Response Trailer	0	1	0	0	ICN	Rudolph	OH	00:45
Response Trailer	0	3	0	0	ICN	Detroit	MI	01:23
48' Van Trailer	0	1	0	0	ICN	Detroit	MI	01:23
Response Trailer	0	2	0	0	ICN	Sterling Heights	MI	01:54
Spill Response Trailer	0	3	0	0	ICN	Cleveland	OH	02:45
Boom Trailer	0	3	0	0	ICN	Cleveland	OH	02:45
Response Trailer	0	2	0	0	ICN	North Canton	OH	03:27
Response Trailer	0	2	0	0	ICN	Elkhart	IN	03:36
Emergency Response Trailer	0	1	0	0	ICN	Huber Heights	OH	03:37
ER Trailer	0	1	0	0	ICN	Cincinnati	OH	04:47
Roll-Off Trailer	0	1	0	0	ICN	Cincinnati	OH	05:07
Van Trailer	0	2	0	0	ICN	Cincinnati	OH	05:07
Response Trailer	0	4	0	0	ICN	Cincinnati	OH	05:07

00 to 06 hours (* Does not include recall/mobilization time)

Emergency Response/Job Trailer	0	5	0	0	ICN	Indianapolis	IN	05:33
Response Trailer	0	1	0	0	ICN	Merrillville	IN	05:34
Van Trailer	0	2	0	0	ICN	Merrillville	IN	05:34
Response Trailer	0	3	0	0	ICN	Cuddy	PA	05:37
Box Van Trailer	0	1	0	0	ICN	Carnegie	PA	05:39
Box Trailer	0	1	0	0	ICN	Carnegie	PA	05:39
Boom Trailer	0	3	0	0	ICN	Carnegie	PA	05:39
Box Vans	0	5	0	0	ICN	Carnegie	PA	05:39
Response Trailer	0	3	0	0	ICN	Pittsburgh	PA	05:41
Response Trailer	0	2	0	0	ICN	Schererville	IN	05:48
Boom Trailer	0	7	0	0	ICN	East Chicago	IN	05:49
Equipment Trailer	0	3	0	0	ICN	East Chicago	IN	05:49
Equipment Trailer	0	4	0	0	ICN	East Chicago	IN	05:49
Sub Total Van Trailer:		**67**	**0**	**0**				
Total Support Equipment:		**1236**	**0**	**0**				

Transfer Pump

Centrifugal

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Transfer Pump	0	9	0	0	ICN	Toledo	OH	00:07
Trash Pump	0	6	0	0	ICN	Rudolph	OH	00 45
Trash Pump	0	1	0	0	ICN	Rudolph	OH	00:45
Submersible Pump	0	6	0	0	ICN	Detroit	MI	01:23
Transfer Pump	0	3	0	0	ICN	Sterling Heights	MI	01:54
Centrifugal Pump	0	20	0	0	ICN	Marshall	MI	02:28
Drum Vacuum Pump	0	5	0	0	ICN	Cleveland	OH	02:45
2" Double Diaphragm	0	2	0	0	ICN	Middletown	OH	04:26
Transfer Pump	0	1	0	0	ICN	Cincinnati	OH	05:07
Transfer Pump	0	11	0	0	ICN	Indianapolis	IN	05:36
Fire Pump	0	18	0	0	ICN	Carnegie	PA	05:39
Vane Pump	0	1	0	0	ICN	Carnegie	PA	05:39
Sub Total Centrifugal:		**83**	**0**	**0**				

Diaphragm

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Transfer Pump	0	4	0	0	ICN	Sterling Heights	MI	01:54
Diaphragm Pump	0	1	0	0	ICN	Sterling Heights	MI	02:01
Poly Pump	0	1	0	0	ICN	Sterling Heights	MI	02:01
Diaphhragm Pump	0	1	0	0	ICN	Middleburg Heights	OH	02:34
Trash Pump	0	1	0	0	ICN	Cleveland	OH	02:45
Double Diaphragm Pump	0	5	0	0	ICN	Cleveland	OH	02:45
Double Diaphragm Chemical Pump	0	2	0	0	ICN	North Canton	OH	03:27
Double Diaphragm Non-Chem Pump	0	2	0	0	ICN	North Canton	OH	03:27
Double Diaphragm Chem Pump	0	2	0	0	ICN	Elkhart	IN	03:36
Double Diaphragm Non-Chem Pump	0	2	0	0	ICN	Elkhart	IN	03:36
Diaphragm Acid Pump	0	1	0	0	ICN	Groveport	OH	03:38
Transfer Pump	0	1	0	0	ICN	Cincinnati	OH	04:47
Diaphragm Acid Pump	0	1	0	0	ICN	Steubenville	OH	05:01
Transfer Pump	0	8	0	0	ICN	Cincinnati	OH	05:07
Transfer Pump	0	1	0	0	ICN	Cincinnati	OH	05:07
Diaphragm Pump	0	1	0	0	ICN	Batavia	OH	05:10
Poly Diaphragm Pump	0	2	0	0	ICN	Batavia	OH	05:10
Diaphragm Pump	0	2	0	0	ICN	Indianapolis	IN	05:33
Diaphragm Acid Pump	0	1	0	0	ICN	Indianapolis	IN	05:33
Double Diaphragm Chemical Pump	0	2	0	0	ICN	Cuddy	PA	05:37
Double Diaphragm Non-Chem Pump	0	2	0	0	ICN	Cuddy	PA	05:37
Transfer Pump	0	1	0	0	ICN	Carnegie	PA	05:39
Diaphragm Pump	0	30	0	0	ICN	Carnegie	PA	05:39
Diaphragm Pump	0	2	0	0	ICN	Pittsburgh	PA	05:41
Diaphragm Pump	0	1	0	0	ICN	Pittsburgh	PA	05:41
Double Diaphragm Chem Pump	0	2	0	0	ICN	Schererville	IN	05:48

00 to 06 hours (* Does not include recall/mobilization time)

Double Diaphragm Non-Chem Pump	0	2	0	0	ICN	Schererville	IN	05:48
Diaphragm Pump	0	2	0	0	ICN	Mooresville	IN	05:52
Sub Total Diaphragm:		**83**	**0**	**0**				

Pneumatic

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Pneumatic Pump	0	2	0	0	ICN	Cincinnati	OH	05:07
Sub Total Pneumatic:		**2**	**0**	**0**				

Trash Pump

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Trash Pump	0	6	0	0	ICN	Batavia	OH	05:10
Trash Pump	0	2	0	0	ICN	Indianapolis	IN	05:33
Trash Pump	0	18	0	0	ICN	Carnegie	PA	05:39
Trash Pump	0	2	0	0	ICN	Pittsburgh	PA	05:41
Sub Total Trash Pump:		**28**	**0**	**0**				
Total Transfer Pump:		**196**	**0**	**0**				

Vacuum System

Loader

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Skid Mount Vac	0	1	891	65	ICN	Rudolph	OH	00:45
Vacuum Drum Loader	0	2	686	0	ICN	Cincinnati	OH	05:07
Sub Total Loader:		**3**	**1577**	**65**				

Vacuum Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Vacuum Trailer	0	1	343	120	ICN	Cincinnati	OH	05:07
Sub Total Vacuum Trailer:		**1**	**343**	**120**				

Vacuum Transfer Unit

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Vacuum Transfer Unit	0	1	343	12	ICN	Cleveland	OH	02:45
Guzzler	0	1	343	71	ICN	Cleveland	OH	02:45
Vacuum Unit	0	1	343	78	ICN	East Liverpool	OH	04:49
Skid Mount Vac	0	1	343	24	ICN	Cincinnati	OH	05:07
Skid Mount Vac	0	1	343	12	ICN	Cincinnati	OH	05:07
Vacuum Variety	0	15	5145	0	ICN	Mooresville	IN	05:52
Sub Total Vacuum Transfer Unit:		**20**	**6860**	**197**				

Vacuum Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Vacuum Truck	0	4	1372	80	ICN	Toledo	OH	00:07
Vacuum Truck	0	1	343	70	ICN	Rudolph	OH	00:45
Vacuum Truck	0	1	343	70	ICN	Ypsilanti	MI	01:06
Vacuum Truck	0	1	343	70	ICN	Ypsilanti	MI	01:06
Vacuum Truck	0	1	343	70	ICN	Ypsilanti	MI	01:06
Vacuum Truck	0	1	343	70	ICN	Ypsilanti	MI	01:06
Vacuum Truck	0	1	343	70	ICN	Ypsilanti	MI	01:06
Vacuum Truck	0	1	343	70	ICN	Ypsilanti	MI	01:06
Vacuum Truck	0	1	343	107	ICN	Detroit	MI	01:23
Vacuum Truck	0	1	343	131	ICN	Detroit	MI	01:23
Vacuum Truck	0	1	343	119	ICN	Detroit	MI	01:23
Vacuum Truck	0	1	343	143	ICN	Detroit	MI	01:23
Vacuum Truck	0	4	1372	192	ICN	Detroit	MI	01:23
Vacuum Truck	0	2	686	166	ICN	Detroit	MI	01:23
Vacuum Truck	0	3	1029	213	ICN	Detroit	MI	01:23
Vacuum Truck	0	1	343	71	ICN	Cleveland	OH	02:34
Vacuum Trailer	0	1	343	120	ICN	Cleveland	OH	02:45
Vacuum Truck	0	2	686	142	ICN	Cleveland	OH	02:45
Vacuum Truck	0	4	1372	284	ICN	North Canton	OH	03:27
Vacuum Truck	0	4	1372	284	ICN	Elkhart	IN	03:36
Vacuum Truck	0	25	8575	1775	ICN	Huber Heights	OH	03:37

00 to 06 hours (* Does not include recall/mobilization time)

Vacuum Truck	0	2	686	120	ICN	Huber Heights	OH	03:37
Vacuum Truck	0	2	686	142	ICN	New Philadelphia	OH	03:49
Vacuum Truck	0	5	1715	355	ICN	Carroll	OH	03:56
Vacuum Truck	0	1	343	71	ICN	Middletown	OH	04:26
Vacuum Truck	0	1	343	83	ICN	Middletown	OH	04:26
Vacuum Truck	0	1	343	70	ICN	Cincinnati	OH	04:47
Vacuum Truck	0	1	343	74	ICN	East Liverpool	OH	04:49
Vacuum Truck	0	1	343	71	ICN	Steubenville	OH	05:01
Vacuum Truck	0	3	1029	213	ICN	Cincinnati	OH	05:07
Vacuum Truck	0	11	3773	1045	ICN	Miamitown	OH	05:07
Vacuum Truck	0	1	343	71	ICN	Indianapolis	IN	05:33
Vacuum Truck	0	2	686	142	ICN	Merrillville	IN	05:34
Pump Truck	0	1	651	71	ICN	Merrillville	IN	05:34
Vacuum Truck	0	35	12005	4200	ICN	Indianapolis	IN	05:36
Vacuum Truck	0	4	1372	284	ICN	Cuddy	PA	05:37
Vacuum Truck	0	2	686	142	ICN	Washington	PA	05:38
Vacuum Truck	0	1	343	24	ICN	Carnegie	PA	05:39
Vacuum Truck	0	1	343	71	ICN	Carnegie	PA	05:39
Vacuum Truck	0	1	343	67	ICN	Carnegie	PA	05:39
Vacuum Truck	0	4	1372	284	ICN	Carnegie	PA	05:39
Vacuum Truck	0	4	1372	316	ICN	Carnegie	PA	05:39
Vacuum Truck	0	4	1372	284	ICN	Schererville	IN	05:48
Vacuum Truck	0	11	3773	1573	ICN	Whiting	IN	05:49
Vacuum Truck	0	12	4116	852	ICN	East Chicago	IN	05:49
Vacuum Truck	0	15	5145	1065	ICN	East Chicago	IN	05:49
Vacuum Truck	0	1	343	120	ICN	Hammond	IN	05:50
Vacuum Truck	0	1	343	71	ICN	Mooresville	IN	05:52
Sub Total Vacuum Truck:		**189**	**65135**	**16198**				
Total Vacuum System:		**213**	**73915**	**16580**				

Vessel

Deployment Craft (< 25 foot)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
24' Deployment Craft	0	1	0	0	ICN	Toledo	OH	00:07
14' Deployment Craft	0	1	0	0	ICN	Toledo	OH	00:07
18' Deployment Craft	0	1	0	0	ICN	Toledo	OH	00:12
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
18' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
18' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
12' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
24' Deployment Craft	0	1	0	0	ICN	Detroit	MI	01:23
20' Deployment Craft	0	1	0	0	ICN	Detroit	MI	01:23
20' Deployment Craft	0	2	0	0	ICN	Detroit	MI	01:23
17' Deployment Craft	0	1	0	0	ICN	Detroit	MI	01:23
13' Deployment Craft	0	1	0	0	ICN	Detroit	MI	01:23
14' Deployment Craft	0	4	0	0	ICN	Sterling Heights	MI	01:54
18' Deployment Craft	0	1	0	0	ICN	Sterling Heights	MI	01:54
12' Deployment Craft	0	1	0	0	ICN	Sterling Heights	MI	01:54
16' Deployment Craft	0	1	0	0	ICN	Sterling Heights	MI	01:54
John Boat	0	13	0	0	ICN	Marshall	MI	02:28
20' Deployment Craft	0	2	0	0	ICN	Middleburg Heights	OH	02:34
16' Deployment Craft	0	1	0	0	ICN	Middleburg Heights	OH	02:34
21' Deployment Craft	0	1	0	0	ICN	Cleveland	OH	02:45

00 to 06 hours (* Does not include recall/mobilization time)

14' Deployment Craft	0	1	0	0	ICN	Cleveland	OH	02:45
12' Deployment Craft	0	1	0	0	ICN	Cleveland	OH	02:45
14' Deployment Craft	0	1	0	0	ICN	North Canton	OH	03:27
14' Deployment Craft	0	1	0	0	ICN	Elkhart	IN	03:36
16' Deployment Craft	0	1	0	0	ICN	Huber Heights	OH	03:37
16' Jon Boat	0	2	0	0	ICN	Middletown	OH	04:26
Response Boat	0	1	0	0	ICN	Cincinnati	OH	04:47
21' Deployment Craft	0	1	0	0	ICN	East Liverpool	OH	04:49
24' Deployment Craft	0	2	0	0	ICN	East Liverpool	OH	04:49
14' Deployment Craft	0	1	0	0	ICN	East Liverpool	OH	04:51
22' Deployment Craft	0	1	0	0	ICN	East Liverpool	OH	04:51
16' Deployment Craft	0	1	0	0	ICN	Steubenville	OH	05:01
24' Deployment Craft	0	1	0	0	ICN	Cincinnati	OH	05:07
14' Deployment Craft	0	2	0	0	ICN	Cincinnati	OH	05:07
22' Deployment Craft	0	1	0	0	ICN	Cincinnati	OH	05:07
23' Deployment Craft	0	1	0	0	ICN	Erie	PA	05:07
21' Deployment Craft	0	1	0	0	ICN	Erie	PA	05:07
20' Deployment Craft	0	1	0	0	ICN	Batavia	OH	05:10
16' Deployment Craft	0	1	0	0	ICN	Batavia	OH	05:10
15' Deployment Craft	0	1	0	0	ICN	Dayton	KY	05:12
18' Deployment Craft	0	1	0	0	ICN	Dayton	KY	05:12
20' Deployment Craft	0	1	0	0	ICN	Indianapolis	IN	05:16
14' Deployment Craft	0	2	0	0	ICN	Indianapolis	IN	05:33
12' Deployment Craft	0	4	0	0	ICN	Indianapolis	IN	05:33
14' Deployment Craft	0	2	0	0	ICN	Merrillville	IN	05:34
12' Deployment Craft	0	1	0	0	ICN	Indianapolis	IN	05:36
14' Deployment Craft	0	1	0	0	ICN	Cuddy	PA	05:37
20' Deployment Craft	0	1	0	0	ICN	Cuddy	PA	05:37
15' Deployment Craft	0	1	0	0	ICN	Carnegie	PA	05:39
14' Deployment Craft	0	10	0	0	ICN	Carnegie	PA	05:39
12' Deployment Craft	0	1	0	0	ICN	Carnegie	PA	05:39
24' Deployment Craft	0	1	0	0	ICN	Carnegie	PA	05:39
23' Deployment Craft	0	1	0	0	ICN	Carnegie	PA	05:39
16' Deployment Craft	0	2	0	0	ICN	Pittsburgh	PA	05:41
14' Deployment Craft	0	1	0	0	ICN	Schererville	IN	05:48
14' Deployment Craft	0	1	0	0	ICN	Whiting	IN	05:49
14' Deployment Craft	0	4	0	0	ICN	East Chicago	IN	05:49
24' Deployment Craft	0	3	0	0	ICN	East Chicago	IN	05:49
18' Deployment Craft	0	1	0	0	ICN	East Chicago	IN	05:49
20' Deployment Craft	0	2	0	0	ICN	East Chicago	IN	05:49
17' Deployment Craft	0	2	0	0	ICN	East Chicago	IN	05:49
15' Deployment Craft	0	1	0	0	ICN	East Chicago	IN	05:49
John Boat	0	3	0	0	ICN	Mooresville	IN	05:52
Sub Total Deployment Craft (< 25 foot):		**114**	**0**	**0**				

Deployment Craft (> 25 foot)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
27' Deployment Craft	0	1	0	0	ICN	Detroit	MI	01:23
28' Deployment Craft	0	1	0	0	ICN	Sterling Heights	MI	02:01
25' Skiff	0	1	0	0	ICN	Middletown	OH	04:26
28' Deployment Craft	0	1	0	0	ICN	Cincinnati	OH	05:07
26' Deployment Craft	0	1	0	0	ICN	Erie	PA	05:07
28' Deployment Craft	0	2	0	0	ICN	Carnegie	PA	05:39
Sub Total Deployment Craft (> 25 foot):		**7**	**0**	**0**				
Total Vessel:		**121**	**0**	**0**				
Total 00 to 06 hours:			**94644**	**44295**				
Running Total from 0 to unknown:			**94644**	**44295**				

06 to 12 hours (* Does not include recall/mobilization time)

Boom

>=6 and <18 inch

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
12" Boom	0	3150	0	0	ICN	Apollo	PA	06:11
6" Boom	0	1050	0	0	ICN	Apollo	PA	06:11
10" Boom	0	400	0	0	ICN	Wheeling	IL	06:29
12" Boom	0	1500	0	0	ICN	Ashland	KY	06:32
10" Boom	0	300	0	0	ICN	Charleston	WV	07:12
8" Boom	0	2300	0	0	ICN	Charleston	WV	07:12
12" Boom	0	400	0	0	ICN	Wauwatosa	WI	07:12
12" Hard Boom	0	420	0	0	ICN	Louisville	KY	07:25
12" Boom	0	1500	0	0	ICN	Lock Haven	PA	09:10
8" Boom	0	2000	0	0	ICN	Nitro	WV	09:25
10" Boom	0	1000	0	0	ICN	Wood River	IL	11:19
10" Boom	0	400	0	0	ICN	St. Louis	MO	11:52
12" Boom	0	900	0	0	ICN	Paducah	KY	11:57
Sub Total >=6 and <18 inch:		**15320**	**0**	**0**				

>18 and <42 inch

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
20" Boom	0	1400	0	0	ICN	Apollo	PA	06:11
36" Boom	0	2000	0	0	ICN	Apollo	PA	06:11
19" Boom	0	1000	0	0	ICN	Burlington	Canada	06:24
24" Boom	0	1500	0	0	ICN	Ashland	KY	06:32
24" Boom	0	200	0	0	ICN	Lemont	IL	06:34
24" Boom	0	2000	0	0	ICN	Cross Lanes	WV	06:54
24" Boom	0	3000	0	0	ICN	Charleston	WV	07:12
36" Boom	0	1000	0	0	ICN	Germantown	WI	07:17
19" Boom	0	200	0	0	ICN	St. Ignace	MI	08:27
Snare Boom (Pom-Pom)	0	4	0	0	ICN	St. Ignace	MI	08:27
24" Boom	0	1500	0	0	ICN	Lock Haven	PA	09:10
24" Boom	0	2000	0	0	ICN	Baltimore	MD	11:27
10" Boom	0	400	0	0	ICN	Nashville	TN	11:54
Sub Total >18 and <42 inch:		**16204**	**0**	**0**				

>42 inch

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
48' Boom Trailer	0	5000	0	0	ICN	Goodlettsville	TN	11:40
Sub Total >42 inch:		**5000**	**0**	**0**				

18"

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
18" Boom	BM21-723	1000	0	0	NRC	South Holland	IL	06:03
18" Boom	0	4700	0	0	ICN	South Holland	IL	06:03
18" Boom	0	22500	0	0	ICN	Glenwood	IL	06:03
18" Boom	BM18-430	6800	0	0	NRC	Apollo	PA	06:11
18" Boom	BM18-739	1600	0	0	NRC	Apollo	PA	06:11
18" Boom	0	3225	0	0	ICN	Apollo	PA	06:11
18" Boom	0	7000	0	0	ICN	Monee	IL	06:16
Containment Boom	0	11200	0	0	ICN	Monee	IL	06:16
Containment Boom	0	11500	0	0	ICN	Monee	IL	06:16
18" Boom	0	500	0	0	ICN	Ashland	KY	06:26
18"Boom	0	11500	0	0	ICN	Wheeling	IL	06:29
18" Boom	0	3750	0	0	ICN	South Point	OH	06:32
18" Boom	0	2200	0	0	ICN	New Lenox	IL	06:33
18" Boom	0	3200	0	0	ICN	Lemont	IL	06:34
18" Boom	0	1200	0	0	ICN	Lemont	IL	06:34
18" Boom	BM18-736	3000	0	0	NRC	Shelbyville	KY	07:00
18" Boom	0	2600	0	0	ICN	Shelbyville	KY	07:00
18" Boom	0	100	0	0	ICN	North Aurora	IL	07:06
18" Boom	0	500	0	0	ICN	Crestwood	KY	07:08

06 to 12 hours (* Does not include recall/mobilization time)

18" Boom	0	1500	0	0	ICN	Menomonee Falls	WI	07:13
18" Boom	0	15400	0	0	ICN	Germantown	WI	07:17
18" Boom	0	100	0	0	ICN	Sheboygan	WI	07:21
18" Boom	BM18-433	7000	0	0	NRC	Rogers City	MI	07:25
18" Boom	BM21-719	1000	0	0	NRC	Rogers City	MI	07:25
18" Boom	BM18-727	1000	0	0	NRC	Rogers City	MI	07:25
18" Boom	BM18-735	3000	0	0	NRC	Nicholasville	KY	07:28
18" Boom	0	4900	0	0	ICN	Louisville	KY	07:34
18" Boom	0	2200	0	0	ICN	De Pere	WI	08:03
18" Boom	0	550	0	0	ICN	St. Ignace	MI	08:27
18" Boom	BM18-432	7000	0	0	NRC	Green Bay	WI	08:34
18" Boom	0	1000	0	0	ICN	Peoria	IL	09:15
18" Boom	0	2000	0	0	ICN	Newburgh	IN	09:19
18" Boom	0	1000	0	0	ICN	Evansville	IN	09:27
18" Boom	0	300	0	0	ICN	Elmira	NY	09:53
18" Boom	0	2000	0	0	ICN	Sunbury	PA	10:06
18" Boom	0	1000	0	0	ICN	Blountville	TN	10:15
18" Boom	BM18-364	100	0	0	NRC	Oswego	NY	10:46
18" Boom	BM21-720	1000	0	0	NRC	Oswego	NY	10:46
18" Boom	0	2600	0	0	ICN	Knoxville	TN	11:04
18" Boom	0	1100	0	0	ICN	Lorton	VA	11:09
18" Boom	0	500	0	0	ICN	East Syracuse	NY	11:12
Harbor Boom	0	100	0	0	ICN	East Syracuse	NY	11:12
18" Boom	0	2000	0	0	ICN	Fredericksburg	VA	11:13
18" Boom	0	1000	0	0	ICN	Laurel	MD	11:15
18" Boom	0	1000	0	0	ICN	Laurel	MD	11:15
18" Boom	0	9000	0	0	ICN	Laurel	MD	11:15
18" Boom	BM21-416	4000	0	0	NRC	Wood River	IL	11:19
18" Boom	0	2000	0	0	ICN	Wood River	IL	11:19
18" Boom	0	3000	0	0	ICN	Baltimore	MD	11:26
18" Boom	0	10000	0	0	ICN	Baltimore	MD	11:27
18" Boom	0	1800	0	0	ICN	Baltimore	MD	11:27
18" Boom	0	300	0	0	ICN	Baltimore	MD	11:27
18" Boom	BM18-737	3000	0	0	NRC	St. Louis	MO	11:40
18" Boom	0	2000	0	0	ICN	Calvert City	KY	11:40
18" Boom	0	1700	0	0	ICN	St. Louis	MO	11:52
18" Boom	0	2300	0	0	ICN	Nashville	TN	11:52
18" Boom	0	2000	0	0	ICN	Nashville	TN	11:54
18" Boom	0	1000	0	0	ICN	St. Louis	MO	11:56
18" Boom	BM18-353	100	0	0	NRC	Paducah	KY	11:57
18" Boom	0	2800	0	0	ICN	Paducah	KY	11:57
Sub Total 18":		**203425**	**0**	**0**				
Total Boom:		**239949**	**0**	**0**				

Portable Storage

Barge - Portable

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Portable Barge Set	101-102	1	0	238	NRC	Oswego	NY	10:46
Portable Barge Set	600-601	1	0	238	NRC	Paducah	KY	11:57
Sub Total Barge - Portable:		**2**	**0**	**476**				

Dracone/Bladder

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Canflex FCB-43E Bladder	BC-53	1	0	100	NRC	Rogers City	MI	07:25
Sub Total Dracone/Bladder:		**1**	**0**	**100**				

Frac Tank

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Frac Tank	0	30	0	14280	ICN	Apollo	PA	06:11
Frac Tank	0	3	0	714	ICN	Apollo	PA	06:11
Frac Tank	0	1	0	357	ICN	Newburgh	IN	09:19

06 to 12 hours (* Does not include recall/mobilization time)

Frac Tank	0	1	0	357	ICN	Newburgh	IN	09:19
Frac Tank	0	1	0	429	ICN	Norway	MI	10:16
Frac Tank	0	3	0	1500	ICN	Stafford	VA	11:12
Frac Tank	0	2	0	952	ICN	Laurel	MD	11:15
Frac Tank	0	3	0	1500	ICN	Baltimore	MD	11:27
Frac Tank	0	1	0	500	ICN	Goodlettsville	TN	11:40
Sub Total Frac Tank:		**45**	**0**	**20589**				

Portable Tank

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Pillow Tank	ELS-44	1	0	24	NRC	South Holland	IL	06:03
Pillow Tank	ELS-09	1	0	24	NRC	South Holland	IL	06:03
Pillow Tank	ELS-10	1	0	24	NRC	South Holland	IL	06:03
Pillow Tank	ELS-11	1	0	24	NRC	South Holland	IL	06:03
Portable Tank	0	3	0	321	ICN	Glenwood	IL	06:03
Tank Trailer	0	1	0	143	ICN	Monee	IL	06:16
Cement Tank	0	1	0	190	ICN	Burlington	Canada	06:24
Poly Tank	0	1	0	12	ICN	Burlington	Canada	06:24
Portable Tank	0	4	0	648	ICN	Wheeling	IL	06:29
Portable Tank	0	70	0	33320	ICN	Wheeling	IL	06:29
Portable Tank	0	40	0	4280	ICN	Wheeling	IL	06:29
Portable Tank	0	2	0	286	ICN	Shelbyville	KY	07:00
Vacuum Tanker Trailer	0	1	0	130	ICN	Shelbyville	KY	07:00
Poly Tote	0	2	0	12	ICN	North Aurora	IL	07:06
Poly Tank	0	1	0	7	ICN	North Aurora	IL	07:06
Poly Tank	0	1	0	35	ICN	North Aurora	IL	07:06
Portable Tank	0	2	0	0	ICN	Wauwatosa	WI	07:12
Pillow Tank	ELS-30	1	0	24	NRC	Rogers City	MI	07:25
Pillow Tank	ELS-31	1	0	24	NRC	Rogers City	MI	07:25
Pillow Tank	ELS-62	1	0	24	NRC	Rogers City	MI	07:25
Pillow Tank	ELS-63	1	0	24	NRC	Rogers City	MI	07:25
Tank Truck	0	1	0	167	ICN	Louisville	KY	07:34
Portable Tank	0	5	0	180	ICN	Louisville	KY	07:34
Poly Tank	0	1	0	6	ICN	St. Ignace	MI	08:27
Poly Tank	0	1	0	5	ICN	St. Ignace	MI	08:27
Portable Tank	0	3	0	285	ICN	Peoria	IL	09:15
Portable Tank	0	4	0	572	ICN	Peoria	IL	09:15
Tanker Truck	0	4	0	476	ICN	Nitro	WV	09:25
Portable Tank	0	1	0	357	ICN	Evansville	IN	09:27
Poly Tank	0	1	0	47	ICN	Blountville	TN	10:15
Poly/Steel Tank	0	1	0	12	ICN	Blountville	TN	10:15
Poly Tank	0	1	0	8	ICN	Blountville	TN	10:15
Pillow Tank	PT-01	1	0	24	NRC	Oswego	NY	10:46
Pillow Tank	PT-02	1	0	24	NRC	Oswego	NY	10:46
Pillow Tank	PT-03	1	0	24	NRC	Oswego	NY	10:46
Pillow Tank	PT-04	1	0	24	NRC	Oswego	NY	10:46
Portable Tank	0	3	0	144	ICN	Knoxville	TN	11:04
Poly Tank	0	4	0	32	ICN	Knoxville	TN	11:04
Poly Tank	0	2	0	24	ICN	East Syracuse	NY	11:12
Portable Tank	0	5	0	60	ICN	Fredericksburg	VA	11:13
Poly Tank	0	5	0	40	ICN	Baltimore	MD	11:26
Storage Container	0	1	0	59	ICN	Baltimore	MD	11:27
Portable Tank	0	1	0	476	ICN	St. Louis	MO	11:52
Portable Tank	0	1	0	47	ICN	St. Louis	MO	11:52
Portable Tank	0	5	0	180	ICN	St. Louis	MO	11:52
Portable Tank	0	2	0	18	ICN	St. Louis	MO	11:52
Portable Tank	0	2	0	12	ICN	St. Louis	MO	11:52
Portable Tank	0	1	0	12	ICN	Nashville	TN	11:52
Poly Tank	0	5	0	40	ICN	Nashville	TN	11:52
Poly Tank	0	2	0	48	ICN	Nashville	TN	11:52
Sub Total Portable Tank:		**203**	**0**	**42979**				

06 to 12 hours (* Does not include recall/mobilization time)

Tank Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Storage Trailers	0	18	0	0	ICN	Apollo	PA	06:11
Tanks Trucks	0	1	0	0	ICN	Louisville	KY	07:25
Tank Trailer	0	1	0	0	ICN	Syracuse	NY	11:10
Sub Total Tank Truck:		**20**	**0**	**0**				
Total Portable Storage:		**271**	**0**	**64144**				

Skimmer

Drum

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Crucial Double Drum 18H-36 Skimmer	CD-002	1	480	0	NRC	South Holland	IL	06:03
Elastec TDS118 Skimmer	0	4	960	0	ICN	South Holland	IL	06:03
Elastec TDS118 Skimmer	0	1	240	0	ICN	Apollo	PA	06:11
Double Drum Skimmer	0	6	4116	0	ICN	Monee	IL	06:16
Double Drum Skimmer	0	8	10968	0	ICN	Monee	IL	06:16
Elastec TDS118 Skimmer	0	1	240	0	ICN	Ashland	KY	06:26
Medium Drum Skimmer	0	1	240	0	ICN	Wheeling	IL	06:29
Elastec TDS136 Skimmer	0	1	480	0	ICN	New Lenox	IL	06:33
Small Drum Skimmer	0	1	171	0	ICN	Lemont	IL	06:34
Elastec TDS136 Skimmer	0	1	480	0	ICN	Lemont	IL	06:34
Crucial 1D18P36 Skimmer	0	1	240	0	ICN	Cross Lanes	WV	06:54
Elastec TDS118 Skimmer	0	1	240	0	ICN	Shelbyville	KY	07:00
Elastec TDS118 Skimmer	0	1	240	0	ICN	Menomonee Falls	WI	07:13
Elastec TDS136 Skimmer	0	1	480	0	ICN	Germantown	WI	07:17
Small Drum Skimmer	0	1	171	0	ICN	Louisville	KY	07:34
Small Drum Skimmer	0	3	513	0	ICN	Evansville	IN	09:27
Large Drum Skimmer	0	1	480	0	ICN	Blountville	TN	10:15
Medium Drum Skimmer	0	1	240	0	ICN	Knoxville	TN	11:04
Elastec TDS118 Skimmer	0	2	480	0	ICN	Stafford	VA	11:12
Elastec TDS118 Skimmer	0	2	480	0	ICN	Laurel	MD	11:15
Small Drum Skimmer	0	1	171	0	ICN	Wood River	IL	11:19
Elastec TDS136 Skimmer	0	1	480	0	ICN	Wood River	IL	11:19
Medium Drum Skimmer	0	1	240	0	ICN	Baltimore	MD	11:26
Elastec TDS136 Skimmer	0	1	480	0	ICN	Baltimore	MD	11:27
Elastec TDS118 Skimmer	0	2	480	0	ICN	Baltimore	MD	11:27
Elastec Mini Max Skimmer	0	1	137	0	ICN	Baltimore	MD	11:27
Elastec TDS118 Skimmer	0	1	240	0	ICN	Baltimore	MD	11:27
Medium Drum Skimmer	0	1	240	0	ICN	Goodlettsville	TN	11:40
Small Drum Skimmer	0	2	342	0	ICN	Calvert City	KY	11:40
Large Drum Skimmer	0	1	480	0	ICN	Nashville	TN	11:52
Small Drum Skimmer	0	1	171	0	ICN	Nashville	TN	11:54
Elastec TDS118 Skimmer	0	1	240	0	ICN	St. Louis	MO	11:56
Small Drum Skimmer	0	1	171	0	ICN	Paducah	KY	11:57
Sub Total Drum:		**54**	**25811**	**0**				

Floating Suction

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Vikoma Fasflo Skimmer	FFP-013	1	2112	0	NRC	Apollo	PA	06:11
Acme Weir Head Skimmer	WH-107	1	0	0	NRC	Apollo	PA	06:11
Vikoma Fasflo Skimmer	FFP-015	1	2112	0	NRC	Apollo	PA	06:11
Manta Ray Skimmer	0	1	315	0	ICN	Apollo	PA	06:11
Acme 39T Skimmer	0	1	1371	0	ICN	Apollo	PA	06:11
Megator Vacuum Skimmer	0	1	377	0	ICN	Apollo	PA	06:11
Duck Bill Skimmer	0	1	549	0	ICN	Monee	IL	06:16
Vikoma Fasflo Skimmer	FFP-011	1	2112	0	NRC	South Point	OH	06:32
Douglas 4300 SkimPac	0	2	960	0	ICN	Germantown	WI	07:17
Douglas 4300 Skimpac	0	2	960	0	ICN	De Pere	WI	08:03
Douglas 2300 SkimPac	0	1	274	0	ICN	St. Ignace	MI	08:27
Douglas 4300 SkimPac	0	2	960	0	ICN	Neenah	WI	08:45

06 to 12 hours (* Does not include recall/mobilization time)

Manta Ray Skimmer	0	1	315	0	ICN	Knoxville	TN	11:04
Manta Ray Skimmer	0	1	315	0	ICN	Fredericksburg	VA	11:13
Vikoma Fasflo Skimmer	FFP-003	1	2112	0	NRC	Wood River	IL	11:19
Vikoma Fasflo Skimmer	FFP-017	1	2112	0	NRC	Baltimore	MD	11:27
Acme Weir Head Skimmer	WH-220	1	0	0	NRC	Baltimore	MD	11:27
Skim Pak Skimmer	0	1	233	0	ICN	Baltimore	MD	11:27
Weir Skimmer	0	2	2058	0	ICN	Baltimore	MD	11:27
Vikoma Fasflo Skimmer	FFP-018	1	2112	0	NRC	Paducah	KY	11:57
Sub Total Floating Suction:		**24**	**21359**	**0**				

Multi Skimmer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Action 24 Skimmer	AP-115	1	823	0	NRC	Rogers City	MI	07:25
Action 18 Skimmer	AP-18-727	1	446	0	NRC	Rogers City	MI	07:25
Action 24 Skimmer	AP-116	1	823	0	NRC	Oswego	NY	10:46
Sub Total Multi Skimmer:		**3**	**2092**	**0**				

Oleophilic Disk

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
NRC Weir Disk Skimmer	WD-105	1	1371	24	NRC	Apollo	PA	06:11
Sub Total Oleophilic Disk:		**1**	**1371**	**24**				

Oleophilic Rope Mop

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Rope Mop	0	1	1200	0	ICN	Baltimore	MD	11:27
Sub Total Oleophilic Rope Mop:		**1**	**1200**	**0**				

Weir

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Alpha Weir Skimmer	0	1	1360	0	ICN	South Holland	IL	06:03
Weir Skimmer	0	2	274	0	ICN	Glenwood	IL	06:03
Sub Total Weir:		**3**	**1634**	**0**				
Total Skimmer:		**86**	**53467**	**24**				

Support Equipment

Ancillary Gear

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Power Pack	0	1	0	0	ICN	Wausau	WI	11:01
Sub Total Ancillary Gear:		**1**	**0**	**0**				

ATV

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
ATV	0	2	0	0	ICN	Apollo	PA	06:11
ATV	0	1	0	0	ICN	Monee	IL	06:16
ATV	0	2	0	0	ICN	North Aurora	IL	07:06
Four-Wheeler	0	1	0	0	ICN	St. Ignace	MI	08:27
ATV	0	1	0	0	ICN	Knoxville	TN	11:04
ATV	0	1	0	0	ICN	Nashville	TN	11:52
Sub Total ATV:		**8**	**0**	**0**				

Blower

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Boom Inflator	0	2	0	0	ICN	Glenwood	IL	06:03
Boom Inflator	0	1	0	0	ICN	Wheeling	IL	06:29
Boom Inflator	0	1	0	0	ICN	Cross Lanes	WV	06:54
Blower	0	3	0	0	ICN	Sunbury	PA	10:06
Blower	0	8	0	0	ICN	Knoxville	TN	11:04
Blower	0	2	0	0	ICN	Fredericksburg	VA	11:13
Blower	0	3	0	0	ICN	Baltimore	MD	11:26
Blower	0	4	0	0	ICN	St. Louis	MO	11:52
Blower	0	3	0	0	ICN	Nashville	TN	11:52
Sub Total Blower:		**27**	**0**	**0**				

Communications

06 to 12 hours (* Does not include recall/mobilization time)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Command Trailer	0	1	0	0	ICN	Monee	IL	06:16
Mobile Command Center	0	1	0	0	ICN	Louisville	KY	07:25
Sub Total Communications:		**2**	**0**	**0**				

Compressor

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Compressor	0	2	0	0	ICN	Glenwood	IL	06:03
Compressor	0	4	0	0	ICN	Apollo	PA	06:11
Compressor	0	3	0	0	ICN	Monee	IL	06:16
Compressor	0	2	0	0	ICN	Burlington	Canada	06:24
Air Compressor	0	1	0	0	ICN	Wheeling	IL	06:29
Compressor	0	6	0	0	ICN	Lemont	IL	06:34
Air Compressor	0	1	0	0	ICN	Cross Lanes	WV	06:54
Compressor	0	1	0	0	ICN	North Aurora	IL	07:06
Compressor	0	1	0	0	ICN	Wauwatosa	WI	07:12
Compressor	0	1	0	0	ICN	Menomonee Falls	WI	07:13
Air Compressor	0	2	0	0	ICN	Amherst	NY	07:23
Air Compressor	0	1	0	0	ICN	Louisville	KY	07:25
Compressor	0	4	0	0	ICN	Louisville	KY	07:34
Compressor	0	2	0	0	ICN	St. Ignace	MI	08:27
Compressor	0	2	0	0	ICN	Rochester	NY	09:00
Air Compressors	0	3	0	0	ICN	Evansville	IN	09:27
Compressor	0	1	0	0	ICN	Sunbury	PA	10:06
Compressor	0	1	0	0	ICN	Blountville	TN	10:15
Air Compressor	0	1	0	0	ICN	Waverly	NY	10:18
Compressor	0	2	0	0	ICN	Knoxville	TN	11:04
Compresssor	0	2	0	0	ICN	Syracuse	NY	11:10
Air Compressor	0	2	0	0	ICN	East Syracuse	NY	11:12
Compressor	0	3	0	0	ICN	Fredericksburg	VA	11:13
Compressor	0	1	0	0	ICN	Laurel	MD	11:15
Compressor	0	3	0	0	ICN	Wood River	IL	11:19
Compressor	0	1	0	0	ICN	Harriman	TN	11:26
Compressor	0	2	0	0	ICN	Baltimore	MD	11:26
Air Compressor 175 cfm	0	1	0	0	ICN	Baltimore	MD	11:27
Air Compressor 185 cfm	0	1	0	0	ICN	Baltimore	MD	11:27
Air Compressor	0	2	0	0	ICN	Calvert City	KY	11:40
Air Compressor	0	5	0	0	ICN	St. Louis	MO	11:52
Compressor	0	4	0	0	ICN	Nashville	TN	11:52
Sub Total Compressor:		**68**	**0**	**0**				

Crane Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Crane Truck	0	2	0	0	ICN	Apollo	PA	06:11
Crane	0	2	0	0	ICN	Chicago	IL	06:14
Sidebooms/Padded	0	2	0	0	ICN	New Oxford	PA	10:11
100T Crane	0	1	0	0	ICN	auget	IL	11 39
Sidebooms/Padded	0	2	0	0	ICN	Sauget	IL	11:39
Sub Total Crane Truck:		**9**	**0**	**0**				

Dump Truck/Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Dump Truck	0	5	0	0	ICN	Apollo	PA	06:11
Dump Trailer	0	8	0	0	ICN	Apollo	PA	06:11
Dump Truck	0	2	0	0	ICN	Ashland	KY	06:32
ER Trailer	0	2	0	0	ICN	Louisville	KY	07:25
Dump Truck	0	1	0	0	ICN	Rochester	NY	09:00
Dump Trailer	0	1	0	0	ICN	Evansville	IN	09:27
Dump Truck	0	1	0	0	ICN	Waverly	NY	10:18
Dump Truck	0	1	0	0	ICN	Fredericksburg	VA	11:13
Dump Trailer	0	2	0	0	ICN	n	VA	11:19
Dump Truck W/ Lift Gate	0	1	0	0	ICN	Goodlettsville	TN	11:40

06 to 12 hours (* Does not include recall/mobilization time)

Dump Truck	0	3	0	0	ICN	Goodlettsville	TN	11:40
Guzzler	0	3	0	0	ICN	Goodlettsville	TN	11:40
Dump Truck	0	1	0	0	ICN	St. Louis	MO	11:52
Dump Truck	0	1	0	0	ICN	Paducah	KY	11:57
Dump Truck	0	1	0	0	ICN	Paducah	KY	11:57
Dump Truck	0	1	0	0	ICN	Paducah	KY	11:57
Sub Total Dump Truck/Trailer:		**34**	**0**	**0**				

Earth Moving Equipment

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Skid Steer	0	2	0	0	ICN	South Holland	IL	06:03
Skid Steer	0	1	0	0	ICN	Glenwood	IL	06:03
Backhoe	0	1	0	0	ICN	Apollo	PA	06:11
Excavator	0	1	0	0	ICN	Apollo	PA	06:11
Backhoe	0	1	0	0	ICN	Apollo	PA	06:11
Bulldozer	0	1	0	0	ICN	Apollo	PA	06:11
Backhoe	0	1	0	0	ICN	Apollo	PA	06:11
Skid Steer Loader	0	4	0	0	ICN	Apollo	PA	06:11
325 Excavator	0	1	0	0	ICN	Chicago	IL	06:14
966 Wheel Loader	0	1	0	0	ICN	Chicago	IL	06:14
Backhoe	0	1	0	0	ICN	Monee	IL	06:16
Skid Steer	0	1	0	0	ICN	Burlington	Canada	06:24
Trackhoes	0	2	0	0	ICN	Hunker	PA	06:28
Skid Steer	0	2	0	0	ICN	Wheeling	IL	06:29
Skid Loader	0	4	0	0	ICN	Ashland	KY	06:32
Backhoe	0	2	0	0	ICN	Lemont	IL	06:34
Loader	0	1	0	0	ICN	Lemont	IL	06:34
Skid Steer	0	1	0	0	ICN	Shelbyville	KY	07:00
Earth Moving Equipment	0	6	0	0	ICN	Shelbyville	KY	07:00
Excavator	0	1	0	0	ICN	North Aurora	IL	07:06
Skid Steer	0	1	0	0	ICN	North Aurora	IL	07:06
Skid Steer	0	1	0	0	ICN	Louisville	KY	07:25
Backhoe	0	1	0	0	ICN	Louisville	KY	07:34
Loader	0	1	0	0	ICN	Louisville	KY	07:34
Backhoe Loader	0	1	0	0	ICN	Rochester	NY	09:00
Skid Steer	0	1	0	0	ICN	Newburgh	IN	09:19
Backhoe	0	8	0	0	ICN	Evansville	IN	09:27
Dozer	0	5	0	0	ICN	Evansville	IN	09:27
Skid Steer	0	4	0	0	ICN	Evansville	IN	09:27
Grader	0	2	0	0	ICN	Evansville	IN	09:27
Compactors	0	6	0	0	ICN	Evansville	IN	09:27
Excavators	0	4	0	0	ICN	Evansville	IN	09:27
Telehandlers	0	2	0	0	ICN	Evansville	IN	09:27
Wheel Loader	0	1	0	0	ICN	Evansville	IN	09:27
977 Track Loader	0	1	0	0	ICN	New Oxford	PA	10:11
325 Excavator	0	1	0	0	ICN	New Oxford	PA	10:11
Skid Steer	0	1	0	0	ICN	New Oxford	PA	10:11
Track Loader	0	1	0	0	ICN	Galesburg	IL	10:16
Excavator	0	1	0	0	ICN	Galesburg	IL	10:16
Backhoe Loader	0	1	0	0	ICN	Waverly	NY	10:18
Excavator	0	1	0	0	ICN	Waverly	NY	10:18
Backhoe	0	1	0	0	ICN	Knoxville	TN	11:04
Backhoe	0	1	0	0	ICN	Syracuse	NY	11:10
Skid Steer	0	1	0	0	ICN	Fredericksburg	VA	11:13
Backhoe	0	1	0	0	ICN	Fredericksburg	VA	11:13
Backhoe	0	1	0	0	ICN	Wood River	IL	11:19
Loader	0	1	0	0	ICN	Wood River	IL	11:19
Backhoe	0	1	0	0	ICN	Baltimore	MD	11:27
Bobcat w/ Attachment	0	1	0	0	ICN	Kingston	TN	11:30
325 Excavator	0	1	0	0	ICN	Sauget	IL	11:39
D5G Dozer	0	1	0	0	ICN	Sauget	IL	11:39

06 to 12 hours (* Does not include recall/mobilization time)

Track Loader	0	1	0	0	ICN	Sauget	IL	11:39
Bobcat W/ Attachment	0	4	0	0	ICN	Goodlettsville	TN	11:40
Excavator	0	2	0	0	ICN	Goodlettsville	TN	11:40
Backhoes	0	2	0	0	ICN	Goodlettsville	TN	11:40
Dozer 58 E	0	1	0	0	ICN	Goodlettsville	TN	11:40
Loader	0	1	0	0	ICN	Goodlettsville	TN	11:40
Skid Steer	0	1	0	0	ICN	Calvert City	KY	11:40
Backhoes	0	2	0	0	ICN	Calvert City	KY	11:40
Skid Steer	0	2	0	0	ICN	St. Louis	MO	11:52
Excavator-Mini	0	2	0	0	ICN	St. Louis	MO	11:52
Bobcat	0	1	0	0	ICN	Nashville	TN	11:52
Tractor	0	4	0	0	ICN	Paducah	KY	11:57
Backhoe	0	1	0	0	ICN	Paducah	KY	11:57
Loader	0	1	0	0	ICN	Paducah	KY	11:57
Sub Total Earth Moving Equipment:		**115**	**0**	**0**				

Flatbed Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Flatbed Trailer	0	1	0	0	ICN	South Holland	IL	06:03
Stakebed	0	3	0	0	ICN	South Holland	IL	06:03
Flatbed Trailer	360	1	0	0	NRC	Apollo	PA	06:11
Flatbed Trailer	704	1	0	0	NRC	Apollo	PA	06:11
Lowboy Trailer	0	3	0	0	ICN	Apollo	PA	06:11
Drop Deck Trailer	0	3	0	0	ICN	Apollo	PA	06:11
Lowboy Trailer	0	1	0	0	ICN	Wheeling	IL	06:29
Flatbed Trailer	0	3	0	0	ICN	Shelbyville	KY	07:00
Lowboy Trailer	0	1	0	0	ICN	Louisville	KY	07:34
Flatbed Trailer	0	1	0	0	ICN	Rochester	NY	09:00
LowboyTrailer	0	2	0	0	ICN	Evansville	IN	09:27
Flatbed Trailer	0	3	0	0	ICN	Blountville	TN	10:15
Flatbed Trailer	0	1	0	0	ICN	Waverly	NY	10:18
Flatbed Trailer	364	1	0	0	NRC	Oswego	NY	10:46
Flatbed Trailer	0	1	0	0	ICN	Knoxville	TN	11:04
Flatbed Trailer	0	4	0	0	ICN	Knoxville	TN	11:04
Flatbed Trailer	0	1	0	0	ICN	Syracuse	NY	11:10
Flatbed Trailer	0	3	0	0	ICN	Syracuse	NY	11:10
Flatbed Trailer	0	4	0	0	ICN	Fredericksburg	VA	11:13
Flatbed Trailer	0	1	0	0	ICN	Fredericksburg	VA	11:13
Car Carrier	0	1	0	0	ICN	n	VA	11:19
Lowboy Flatbed Trailer	0	1	0	0	ICN	Wood River	IL	11:19
Flatbed Trailer	0	1	0	0	ICN	Baltimore	MD	11:26
Flatbed Trailer	0	1	0	0	ICN	Baltimore	MD	11:26
Flatbed Trailer	317	1	0	0	NRC	Baltimore	MD	11:27
Flatbed Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
20' Response Trailer	0	8	0	0	ICN	Goodlettsville	TN	11:40
Flatbed Trailer	0	1	0	0	ICN	Nashville	TN	11:52
Flatbed Trailer	0	6	0	0	ICN	Nashville	TN	11:52
Flatbed Trailer	353	1	0	0	NRC	Paducah	KY	11:57
Flatbed Trailer	701	1	0	0	NRC	Paducah	KY	11:57
Sub Total Flatbed Trailer:		**62**	**0**	**0**				

Fork Lift

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Fork Lift	0	1	0	0	ICN	Glenwood	IL	06:03
Forklift	0	1	0	0	ICN	Apollo	PA	06:11
Fork Lift	0	1	0	0	ICN	Wheeling	IL	06:29
Forklift	0	1	0	0	ICN	Wauwatosa	WI	07:12
Fork Lift	0	1	0	0	ICN	Amherst	NY	07:23
Forklift	0	1	0	0	ICN	Kaukauna	WI	08:36
Fork Lift	0	1	0	0	ICN	Waverly	NY	10:18
Forklift	0	1	0	0	ICN	St. Louis	MO	11:52
Sub Total Fork Lift:		**8**	**0**	**0**				

06 to 12 hours (* Does not include recall/mobilization time)

Generator

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Generator	0	2	0	0	ICN	South Holland	IL	06:03
Generator	0	8	0	0	ICN	Glenwood	IL	06 03
Generator	0	15	0	0	ICN	Apollo	PA	06:11
Generator	0	2	0	0	ICN	Monee	IL	06:16
Generator	0	1	0	0	ICN	Burlington	Canada	06:24
Generator	0	10	0	0	ICN	Wheeling	IL	06:29
Generator	0	2	0	0	ICN	Lemont	IL	06 34
Generator	0	1	0	0	ICN	Cross Lanes	WV	06:54
Generators	0	2	0	0	ICN	North Aurora	IL	07:06
Generator	0	2	0	0	ICN	Wauwatosa	WI	07:12
Generator	0	2	0	0	ICN	Menomonee Falls	WI	07:13
Generator	0	1	0	0	ICN	Louisville	KY	07:25
Generator	0	2	0	0	ICN	Louisville	KY	07:34
Generator	0	2	0	0	ICN	St. Ignace	MI	08:27
Generator	0	1	0	0	ICN	Kaukauna	WI	08:36
Generator	0	2	0	0	ICN	Rochester	NY	09:00
Generator	0	4	0	0	ICN	Evansville	IN	09:27
Generator	0	3	0	0	ICN	Sunbury	PA	10:06
Generator	0	3	0	0	ICN	Blountville	TN	10:15
Generator	0	1	0	0	ICN	Waverly	NY	10:18
Generator	0	4	0	0	ICN	Knoxville	TN	11:04
Generator	0	5	0	0	ICN	Syracuse	NY	11:10
Generator	0	2	0	0	ICN	East Syracuse	NY	11:12
3500w Generator	0	2	0	0	ICN	Stafford	VA	11:12
Generator	0	3	0	0	ICN	Fredericksburg	VA	11:13
Generator	0	2	0	0	ICN	Laurel	MD	11:15
Generator	0	1	0	0	ICN	Binghamton	NY	11:17
Generator	0	2	0	0	ICN	Wood River	IL	11:19
Generator	0	1	0	0	ICN	Baltimore	MD	11:26
1000w Generator	0	7	0	0	ICN	Baltimore	MD	11:27
3500w Generator	0	1	0	0	ICN	Baltimore	MD	11:27
Generator	0	1	0	0	ICN	Calvert City	KY	11:40
Generator	0	5	0	0	ICN	St. Louis	MO	11:52
Generator	0	4	0	0	ICN	Nashville	TN	11:52
Sub Total Generator:		**106**	**0**	**0**				

Light Plant

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Light Plants	0	3	0	0	ICN	Apollo	PA	06:11
Light Tower	0	1	0	0	ICN	Monee	IL	06:16
Light Stand	0	1	0	0	ICN	Sunbury	PA	10:06
Light Plant	0	4	0	0	ICN	Knoxville	TN	11:04
Light Plant	0	1	0	0	ICN	Fredericksburg	VA	11:13
Light Plant	0	3	0	0	ICN	Baltimore	MD	11:26
Light Plant	0	2	0	0	ICN	Nashville	TN	11:52
Sub Total Light Plant:		**15**	**0**	**0**				

Pick-Up Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Pick-Up Truck	0	4	0	0	ICN	South Holland	IL	06:03
Pick-Up Truck	0	10	0	0	ICN	Glenwood	IL	06:03
Pick-Up Truck	0	27	0	0	ICN	Apollo	PA	06:11
Pick-Up Truck	0	6	0	0	ICN	Monee	IL	06:16
Pick-Up Truck	0	5	0	0	ICN	Burlington	Canada	06:24
Pick-Up Truck	0	16	0	0	ICN	Wheeling	IL	06:29
Pick-Up Truck	0	6	0	0	ICN	South Point	OH	06:32
Pick-Up Truck	0	6	0	0	ICN	New Lenox	IL	06:33
Pick-Up Truck	0	3	0	0	ICN	Cross Lanes	WV	06:54
Pick-Up Truck	0	4	0	0	ICN	Wauwatosa	WI	07:12

06 to 12 hours (* Does not include recall/mobilization time)

Pick-Up Truck	0	2	0	0	ICN	Menomonee Falls	WI	07:13
Pick-Up Truck	0	10	0	0	ICN	Germantown	WI	07:17
Pick-Up Truck	0	5	0	0	ICN	Sheboygan	WI	07:21
Pick-Up Truck	0	8	0	0	ICN	Amherst	NY	07:23
Crew Vehicle	0	1	0	0	ICN	Louisville	KY	07:25
Pick-Up Truck	0	1	0	0	ICN	Nicholasville	KY	07:28
Pick-Up Truck	0	2	0	0	ICN	De Pere	WI	08:03
Pick-Up Truck	0	1	0	0	ICN	Kaukauna	WI	08:36
Pick-Up Truck	0	2	0	0	ICN	Neenah	WI	08:45
Pick-Up Truck	0	4	0	0	ICN	Rochester	NY	09:00
Pick-Up Truck	0	2	0	0	ICN	Newburgh	IN	09:19
Pick-Up Truck	0	12	0	0	ICN	Nitro	WV	09:25
Pick-Up Truck	0	48	0	0	ICN	Evansville	IN	09:27
Pick-Up Truck	0	3	0	0	ICN	Sunbury	PA	10:06
Pick-Up Truck	0	1	0	0	ICN	Blountville	TN	10:15
Pick-Up Truck	0	1	0	0	ICN	Blountville	TN	10:15
Pick-Up Truck	0	3	0	0	ICN	Waverly	NY	10:18
Pick-up truck	0	2	0	0	ICN	Wausau	WI	11:01
Pick-Up Truck	0	2	0	0	ICN	Knoxville	TN	11:04
Pick-Up Truck	0	16	0	0	ICN	Syracuse	NY	11:10
Pick-Up Truck	0	3	0	0	ICN	East Syracuse	NY	11:12
Pick-Up Truck	0	4	0	0	ICN	East Syracuse	NY	11:12
Pick-Up Truck	0	1	0	0	ICN	Stafford	VA	11:12
Pick-Up Truck	0	1	0	0	ICN	Stafford	VA	11:12
Pick-Up Truck	0	1	0	0	ICN	Stafford	VA	11:12
Pick-Up Truck	0	5	0	0	ICN	Fredericksburg	VA	11:13
Pick-Up Truck	0	8	0	0	ICN	Laurel	MD	11:15
Pick-Up Truck	0	2	0	0	ICN	Binghamton	NY	11:17
Pick-Up Truck	0	6	0	0	ICN	Wood River	IL	11:19
Pick-Up Truck	0	1	0	0	ICN	Baltimore	MD	11:26
Pick-Up Truck	0	4	0	0	ICN	Baltimore	MD	11:26
Pick-Up Truck	0	1	0	0	ICN	Baltimore	MD	11:26
Pick-Up Truck	0	1	0	0	ICN	Baltimore	MD	11:27
Pick-Up Truck	0	1	0	0	ICN	Baltimore	MD	11:27
Pick-Up Truck	0	1	0	0	ICN	Baltimore	MD	11:27
Pick-Up Truck	0	1	0	0	ICN	Baltimore	MD	11:27
Pick-Up Truck	0	1	0	0	ICN	Baltimore	MD	11:27
Pick-Up Truck	0	1	0	0	ICN	Baltimore	MD	11:27
Pick-Up Truck	0	1	0	0	ICN	Baltimore	MD	11:27
Pick-Up Truck	0	2	0	0	ICN	Calvert City	KY	11:40
Pick-Up Truck	0	8	0	0	ICN	St. Louis	MO	11:52
Pick-Up Truck	0	7	0	0	ICN	Nashville	TN	11:52
Pick-Up Truck	0	17	0	0	ICN	St. Louis	MO	11:56
Pick-Up Truck	0	2	0	0	ICN	Paducah	KY	11:57
Pick-Up Truck	0	1	0	0	ICN	Paducah	KY	11:57
Pick-Up Truck	0	1	0	0	ICN	Paducah	KY	11:57
Sub Total Pick-Up Truck:	**294**	**0**	**0**					

Power Pack

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Power Pack	DPPC-118	1	0	0	NRC	South Holland	IL	06:03
Power Pack	DPP-20-102	1	0	0	NRC	Apollo	PA	06:11
Power Pack	DPP-10-105	1	0	0	NRC	Apollo	PA	06:11
Power Pack	DPP-20-112	1	0	0	NRC	South Point	OH	06:32
Power Pack	DPP-AP-115	1	0	0	NRC	Rogers City	MI	07:25
Power Pack	DPP-18-727	1	0	0	NRC	Rogers City	MI	07:25
Hydraulic Power Pack	0	1	0	0	ICN	De Pere	WI	08:03
Power Pack	0	2	0	0	ICN	Neenah	WI	08:45
Power Pack	DPP-AP-116	1	0	0	NRC	Oswego	NY	10:46
Power Pack	DPP-20-113	1	0	0	NRC	Wood River	IL	11:19
Power Pack	DPP-20-103	1	0	0	NRC	Paducah	KY	11:57
Sub Total Power Pack:	**12**	**0**	**0**					

06 to 12 hours (* Does not include recall/mobilization time)

Pressure Washer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Pressure Washer	0	3	0	0	ICN	South Holland	IL	06:03
Pressure Washe Trailer	0	1	0	0	ICN	South Holland	IL	06:03
Pressure Washer	0	1	0	0	ICN	Glenwood	IL	06:03
Pressure Washer	0	3	0	0	ICN	Glenwood	IL	06:03
Pressure Washer Trailer	0	3	0	0	ICN	Glenwood	IL	06:03
Pressure Washer- Hot	0	6	0	0	ICN	Apollo	PA	06:11
Pressure Washer- Hot	0	1	0	0	ICN	Monee	IL	06:16
Pressure Washer-Cold	0	2	0	0	ICN	Monee	IL	06:16
Blaster	0	2	0	0	ICN	Burlington	Canada	06:24
Pressure Washer	0	2	0	0	ICN	Wheeling	IL	06:29
Pressure Washer Trailer	0	2	0	0	ICN	Wheeling	IL	06:29
Pressure Washer	0	5	0	0	ICN	Lemont	IL	06:34
Pressure Washer-Cold	0	1	0	0	ICN	Cross Lanes	WV	06:54
Pressure Washer-Hot	0	2	0	0	ICN	Cross Lanes	WV	06:54
Pressure Washer	0	2	0	0	ICN	Wauwatosa	WI	07:12
Pressure Washer	0	1	0	0	ICN	Menomonee Falls	WI	07:13
Pressure Washer	0	2	0	0	ICN	Amherst	NY	07:23
Pressure Washer	0	1	0	0	ICN	Louisville	KY	07:25
Pressure Washer	0	6	0	0	ICN	Louisville	KY	07:34
Water Blaster	0	15	0	0	ICN	Louisville	KY	07:38
Pressure Washer	0	1	0	0	ICN	Kaukauna	WI	08:36
Presssure Washer	0	2	0	0	ICN	Rochester	NY	09:00
Pressure Wash- Hot	0	1	0	0	ICN	Newburgh	IN	09:19
Pressure Washer	0	3	0	0	ICN	Sunbury	PA	10:06
Pressure Cleaner	0	1	0	0	ICN	Blountville	TN	10:15
Pressure Washer- Hot	0	1	0	0	ICN	Blountville	TN	10:15
Pressure Washer	0	1	0	0	ICN	Waverly	NY	10:18
Pressure Cleaner	0	1	0	0	ICN	Knoxville	TN	11:04
Pressure Washer-Hot	0	1	0	0	ICN	Knoxville	TN	11:04
Pressure Washer	0	1	0	0	ICN	Syracuse	NY	11:10
3000 psi Pressure Washer	0	1	0	0	ICN	Stafford	VA	11:12
Pressure Washer-Hot	0	2	0	0	ICN	Fredericksburg	VA	11:13
Pressure Cleaner	0	2	0	0	ICN	Fredericksburg	VA	11:13
Pressure Washer	0	3	0	0	ICN	Laurel	MD	11:15
Pressure Washer- Hot	0	4	0	0	ICN	Laurel	MD	11:15
Pressure Waher & Trailer	0	1	0	0	ICN	Binghamton	NY	11:17
Pressure Washer	0	4	0	0	ICN	Wood River	IL	11:19
Pressure Washer-Hot	0	1	0	0	ICN	Baltimore	MD	11:26
3000 psi Pressure Washer	0	1	0	0	ICN	Baltimore	MD	11:27
3000 psi Pressure Washer	0	1	0	0	ICN	Baltimore	MD	11:27
3000 psi Pressure Washer	0	1	0	0	ICN	Baltimore	MD	11:27
3000 psi Pressure Washer	0	1	0	0	ICN	Baltimore	MD	11:27
Pressure Washer	0	4	0	0	ICN	St. Louis	MO	11:52
Pressure Washer Trailer	0	2	0	0	ICN	St. Louis	MO	11:52
Pressure Washer- Hot	0	2	0	0	ICN	Nashville	TN	11:52
Pressure Cleaner	0	2	0	0	ICN	Nashville	TN	11:52
High Pressure Washer	0	2	0	0	ICN	Nashville	TN	11:52
Hydro-Blaster	0	8	0	0	ICN	St. Louis	MO	11:56
Pressure Washer	0	2	0	0	ICN	St. Louis	MO	11:56
Sub Total Pressure Washer:		**118**	**0**	**0**				

Response Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Response Truck	0	1	0	0	ICN	Ashland	KY	06:26
Sub Total Response Truck:		**1**	**0**	**0**				

Roll Off Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Roll-Off Trailer	0	6	0	0	ICN	Monee	IL	06:16

06 to 12 hours (* Does not include recall/mobilization time)

Roll Off Trailer	0	1	0	0	ICN	Sunbury	PA	10:06
Sub Total Roll Off Trailer:		**7**	**0**	**0**				

Roll-Off Container

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Roll-Off Container	0	210	0	0	ICN	Apollo	PA	06:11
Emergency Response Container	0	2	0	0	ICN	Apollo	PA	06:11
Roll-Off Container	0	25	0	0	ICN	Monee	IL	06:16
Roll-Off Container	0	100	0	0	ICN	Hunker	PA	06:28
Roll-Off Box	0	58	0	0	ICN	Wheeling	IL	06:29
Vacuum Boxes	0	2	0	0	ICN	Wheeling	IL	06:29
Roll-Off Container	0	25	0	0	ICN	Ashland	KY	06:32
Roll-Off Boxes	0	4	0	0	ICN	New Lenox	IL	06:33
Roll-Off Container	0	5	0	0	ICN	Cross Lanes	WV	06:54
Roll-Off Box	0	4	0	0	ICN	Shelbyville	KY	07:00
Roll-Off Boxes	0	30	0	0	ICN	Germantown	WI	07:17
Roll-Off Container	0	25	0	0	ICN	Nitro	WV	09:25
Roll-Off Container	0	10	0	0	ICN	Sunbury	PA	10:06
Roll-Off Container	0	4	0	0	ICN	Norway	MI	10:16
Roll-Off Container	0	3	0	0	ICN	Waverly	NY	10:18
Roll-Off Container	0	10	0	0	ICN	Laurel	MD	11:15
30 Yard Roll Off Container	0	12	0	0	ICN	Goodlettsville	TN	11:40
20 Yard Roll Off Container	0	4	0	0	ICN	Goodlettsville	TN	11:40
40 Yard Roll Off Container	0	5	0	0	ICN	Goodlettsville	TN	11:40
Roll-Off Box	0	2	0	0	ICN	St. Louis	MO	11:52
Roll-Off Container	0	31	0	0	ICN	Paducah	KY	11:57
Sub Total Roll-Off Container:		**571**	**0**	**0**				

Roll-off Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Roll-Off Truck	0	1	0	0	ICN	New Lenox	IL	06:33
Roll-Off Truck	0	3	0	0	ICN	Germantown	WI	07:17
Roll-Off Truck	0	2	0	0	ICN	Nitro	WV	09:25
Roll-Off Truck	0	1	0	0	ICN	Norway	MI	10:16
Sub Total Roll-off Truck:		**7**	**0**	**0**				

SCBA

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
SCBA	0	4	0	0	ICN	South Holland	IL	06:03
SCBA	0	6	0	0	ICN	Monee	IL	06:16
SCBA	0	6	0	0	ICN	Wheeling	IL	06:29
SCBA	0	3	0	0	ICN	Cross Lanes	WV	06:54
SCBA	0	2	0	0	ICN	Menomonee Falls	WI	07:13
SCBA	0	2	0	0	ICN	Amherst	NY	07:23
SCBA	0	8	0	0	ICN	Evansville	IN	09:27
SCBA	0	3	0	0	ICN	Sunbury	PA	10:06
SCBA	0	6	0	0	ICN	Blountville	TN	10:15
SCBA	0	12	0	0	ICN	Knoxville	TN	11:04
SCBA	0	2	0	0	ICN	East Syracuse	NY	11:12
SCBA	0	5	0	0	ICN	Fredericksburg	VA	11:13
SCBA	0	4	0	0	ICN	Laurel	MD	11:15
SCBA	0	4	0	0	ICN	Binghamton	NY	11:17
SCBA	0	4	0	0	ICN	Baltimore	MD	11:26
SCBA	0	2	0	0	ICN	Kingston	TN	11:30
SCBA	0	4	0	0	ICN	Goodlettsville	TN	11:40
SCBA	0	2	0	0	ICN	Calvert City	KY	11:40
SCBA	0	4	0	0	ICN	Nashville	TN	11:52
Sub Total SCBA:		**83**	**0**	**0**				

Side Boom

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Sideboom-Padded	0	2	0	0	ICN	Chicago	IL	06:14
Sideboom-Padded	0	2	0	0	ICN	Galesburg	IL	10:16

06 to 12 hours (* Does not include recall/mobilization time)

Sub Total Side Boom:	**4**	**0**	**0**

Spares Van Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Semi Trailer	0	1	0	0	ICN	Peoria	IL	09:15
Sub Total Spares Van Trailer:		**1**	**0**	**0**				

Steam Cleaner

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Steam Cleaner	0	1	0	0	ICN	St. Ignace	MI	08:27
Sub Total Steam Cleaner:		**1**	**0**	**0**				

Truck - Semi

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Cube Van	0	1	0	0	ICN	Glenwood	IL	06:03
Roll-Off Truck	0	11	0	0	ICN	Apollo	PA	06:11
Tractor	0	18	0	0	ICN	Apollo	PA	06:11
Tractor	0	16	0	0	ICN	Monee	IL	06:16
Tractor	0	2	0	0	ICN	Burlington	Canada	06:24
Cube Truck	0	2	0	0	ICN	Burlington	Canada	06:24
Box Truck	0	3	0	0	ICN	Wheeling	IL	06:29
Utility Truck	0	12	0	0	ICN	Lemont	IL	06:34
Tilt Truck	0	1	0	0	ICN	Newburgh	IN	09:19
Tractors	0	4	0	0	ICN	Evansville	IN	09:27
Semi Tractors	0	2	0	0	ICN	Evansville	IN	09:27
Tractor	0	1	0	0	ICN	Sunbury	PA	10:06
Tractor	0	1	0	0	ICN	Waverly	NY	10:18
Tractor	0	1	0	0	ICN	Syracuse	NY	11:10
Frame Truck	0	1	0	0	ICN	Fredericksburg	VA	11:13
Tanker	0	3	0	0	ICN	Fredericksburg	VA	11:13
Road Tractor	0	1	0	0	ICN	Fredericksburg	VA	11:13
Tractor	0	1	0	0	ICN	Laurel	MD	11:15
Box Truck	0	3	0	0	ICN	St. Louis	MO	11:52
Roll-Off Truck	0	1	0	0	ICN	St. Louis	MO	11:52
Sub Total Truck - Semi:		**85**	**0**	**0**				

Utility Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Fast Response Trailer	723	1	0	0	NRC	South Holland	IL	06:03
Utility Trailer	0	6	0	0	ICN	South Holland	IL	06:03
Emergency Response/Job Trailer	0	10	0	0	ICN	Glenwood	IL	06:03
Fast Response Trailer	754	1	0	0	NRC	Apollo	PA	06:11
Pressure Washer Trailer	0	1	0	0	ICN	Monee	IL	06:16
Utility Trailer	0	4	0	0	ICN	Monee	IL	06:16
Cargo Trailer	0	1	0	0	ICN	Ashland	KY	06:26
Job Trailer	0	10	0	0	ICN	Wheeling	IL	06:29
High Hazard Trailer	0	1	0	0	ICN	Wheeling	IL	06:29
Response Trailer	0	1	0	0	ICN	Ashland	KY	06:32
Utility Trailer	0	2	0	0	ICN	Lemont	IL	06:34
Response Trailer	0	1	0	0	ICN	Lemont	IL	06:34
Drum Truck	0	4	0	0	ICN	Lemont	IL	06:34
Boom Trailer	0	1	0	0	ICN	Cross Lanes	WV	06:54
Fast Response Trailer	736	1	0	0	NRC	Shelbyville	KY	07:00
Utility Trailer	0	1	0	0	ICN	Shelbyville	KY	07:00
Utility Trailer	0	7	0	0	ICN	Shelbyville	KY	07:00
Response Trailer	0	3	0	0	ICN	Shelbyville	KY	07:00
Hot Water Pressure Washer Trailer	0	1	0	0	ICN	North Aurora	IL	07:06
Confined Space Entry Trailer	0	1	0	0	ICN	North Aurora	IL	07:06
Utility Trailer	0	1	0	0	ICN	Menomonee Falls	WI	07:13
Boom Trailer	0	4	0	0	ICN	Germantown	WI	07:17
Water Treatment Trailer	0	1	0	0	ICN	Germantown	WI	07:17
Utility Trailer	0	2	0	0	ICN	Amherst	NY	07:23
Spill Trailer	0	2	0	0	ICN	Amherst	NY	07:23

06 to 12 hours (* Does not include recall/mobilization time)

Decon Trailer	0	1	0	0	ICN	Amherst	NY	07:23
Fast Response Trailer	719	1	0	0	NRC	Rogers City	MI	07:25
Fast Response Trailer	727	1	0	0	NRC	Rogers City	MI	07:25
Fast Response Trailer	735	1	0	0	NRC	Nicholasville	KY	07:28
ER Trailer	0	1	0	0	ICN	Nicholasville	KY	07:28
Utility Trailer	0	1	0	0	ICN	Louisville	KY	07:34
Utility Truck	0	5	0	0	ICN	Louisville	KY	07:34
Boom Trailer	0	1	0	0	ICN	De Pere	WI	08:03
Utility Trailer	0	2	0	0	ICN	Rochester	NY	09:00
Water Treatment Trailer	0	1	0	0	ICN	Evansville	IN	09:27
Spill Trailer	0	1	0	0	ICN	Sunbury	PA	10:06
Utility Trailer	0	1	0	0	ICN	Blountville	TN	10:15
Spill Trailer	0	1	0	0	ICN	Waverly	NY	10:18
Utility Trailer	0	1	0	0	ICN	Waverly	NY	10:18
Fast Response Trailer	720	1	0	0	NRC	Oswego	NY	10:46
Boom Trailer	0	1	0	0	ICN	Knoxville	TN	11:04
Chemical Transfer Trailer	0	1	0	0	ICN	Knoxville	TN	11:04
Utility Trailer	0	2	0	0	ICN	Knoxville	TN	11:04
Utility Trailer	0	3	0	0	ICN	Syracuse	NY	11:10
Cargo Trailer	0	1	0	0	ICN	Syracuse	NY	11:10
Storage Trailer	0	1	0	0	ICN	Syracuse	NY	11:10
Decon Trailer	0	3	0	0	ICN	Syracuse	NY	11:10
Equipment Trailer	0	1	0	0	ICN	Stafford	VA	11:12
Boom Trailer	0	1	0	0	ICN	Fredericksburg	VA	11:13
Utility Trailer	0	1	0	0	ICN	Fredericksburg	VA	11:13
Boom Trailer	0	2	0	0	ICN	Laurel	MD	11:15
Utility Trailer	0	4	0	0	ICN	Binghamton	NY	11:17
Response Trailer	0	1	0	0	ICN	Wood River	IL	11:19
Utility Trailer	0	4	0	0	ICN	Baltimore	MD	11:26
Equipment Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Equipment Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Equipment Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Equipment Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Fast Response Trailer	737	1	0	0	NRC	St. Louis	MO	11:40
Job Trailer	0	6	0	0	ICN	St. Louis	MO	11:52
Boom Trailer	0	1	0	0	ICN	Nashville	TN	11:52
Utility Trailer	0	5	0	0	ICN	Nashville	TN	11:52
Sub Total Utility Trailer:		**131**	**0**	**0**				

Utility Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Box Truck	0	1	0	0	ICN	Glenwood	IL	06:03
Emergency Response Truck	0	3	0	0	ICN	Apollo	PA	06:11
Service Vehicles	0	10	0	0	ICN	Apollo	PA	06:11
Van	0	3	0	0	ICN	Apollo	PA	06:11
Gator	0	1	0	0	ICN	Apollo	PA	06:11
Stake Body	0	1	0	0	ICN	Monee	IL	06:16
Box Truck	0	1	0	0	ICN	Cross Lanes	WV	06:54
Utility Truck	0	4	0	0	ICN	North Aurora	IL	07:06
Box Truck	0	1	0	0	ICN	Wauwatosa	WI	07:12
Response Truck	0	2	0	0	ICN	Wauwatosa	WI	07:12
Stake Truck	0	2	0	0	ICN	De Pere	WI	08:03
Response Truck	0	1	0	0	ICN	Kaukauna	WI	08:36
Box Truck	0	1	0	0	ICN	Kaukauna	WI	08:36
Stake Truck	0	3	0	0	ICN	Neenah	WI	08:45
Box Van	0	1	0	0	ICN	Rochester	NY	09:00
SUV	0	1	0	0	ICN	Rochester	NY	09:00
Service Trucks	0	3	0	0	ICN	Peoria	IL	09:15
Stake Body	0	1	0	0	ICN	Sunbury	PA	10:06
Sport Utility Vehicle	0	1	0	0	ICN	Blountville	TN	10:15
Box Van	0	2	0	0	ICN	Waverly	NY	10:18

06 to 12 hours (* Does not include recall/mobilization time)

Box Truck	0	1	0	0	ICN	Knoxville	TN	11:04
Frame Truck	0	1	0	0	ICN	Knoxville	TN	11:04
Sport Utility Vehicle	0	1	0	0	ICN	Knoxville	TN	11:04
Box Van	0	5	0	0	ICN	Syracuse	NY	11:10
SUV	0	4	0	0	ICN	East Syracuse	NY	11:12
Stake Body	0	1	0	0	ICN	Laurel	MD	11:15
Box Truck	0	1	0	0	ICN	Binghamton	NY	11:17
Utility Truck	0	1	0	0	ICN	Baltimore	MD	11:27
Utility Truck	0	1	0	0	ICN	Baltimore	MD	11:27
Utility Truck	0	1	0	0	ICN	Baltimore	MD	11:27
Utility Truck	0	1	0	0	ICN	Baltimore	MD	11:27
Utility Truck	0	1	0	0	ICN	Baltimore	MD	11:27
Sport Utility Vehicle	0	2	0	0	ICN	Nashville	TN	11:52
Sub Total Utility Truck:		**64**	**0**	**0**				

Van Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Roll-Off Trailer	0	2	0	0	ICN	Glenwood	IL	06:03
Van Trailer	430	1	0	0	NRC	Apollo	PA	06:11
Van Trailer	0	8	0	0	ICN	Apollo	PA	06:11
Roll-Off Trailer	0	7	0	0	ICN	Apollo	PA	06:11
Hypalon Lined Trailers	0	5	0	0	ICN	Apollo	PA	06:11
Emergency Response Trailer	0	3	0	0	ICN	Apollo	PA	06:11
Van Truck	0	4	0	0	ICN	Monee	IL	06:16
Van Trailer	0	11	0	0	ICN	Monee	IL	06:16
Response Trailer	0	2	0	0	ICN	Monee	IL	06:16
Boom Trailer	0	2	0	0	ICN	Burlington	Canada	06:24
SpillTrailer	0	3	0	0	ICN	Burlington	Canada	06:24
Roll-Off Trailer	0	4	0	0	ICN	Wheeling	IL	06:29
Van Trailer	0	14	0	0	ICN	Wheeling	IL	06:29
Response Trailer	0	1	0	0	ICN	South Point	OH	06:32
Emergency Response	0	2	0	0	ICN	New Lenox	IL	06:33
Response Trailer	0	1	0	0	ICN	Cross Lanes	WV	06:54
Boom Trailer	0	1	0	0	ICN	Shelbyville	KY	07:00
Response Trailer	0	2	0	0	ICN	North Aurora	IL	07:06
Van Trailer	0	1	0	0	ICN	Wauwatosa	WI	07:12
Response Trailer	0	1	0	0	ICN	Wauwatosa	WI	07:12
Response Trailer	0	1	0	0	ICN	Germantown	WI	07:17
Response Van	0	1	0	0	ICN	Sheboygan	WI	07:21
Box Van	0	2	0	0	ICN	Amherst	NY	07:23
Van Trailer	433	1	0	0	NRC	Rogers City	MI	07:25
Emergency Response Trailer	0	1	0	0	ICN	Louisville	KY	07:25
Response Trailer	0	1	0	0	ICN	Louisville	KY	07:38
Emergency Response Trailer	0	1	0	0	ICN	De Pere	WI	08:03
Boom Trailer	0	1	0	0	ICN	St. Ignace	MI	08:27
Cargo Trailer	0	1	0	0	ICN	St. Ignace	MI	08:27
Van Trailer	432	1	0	0	NRC	Green Bay	WI	08:34
Response Trailer	0	1	0	0	ICN	Neenah	WI	08:45
Spill Trailer	0	2	0	0	ICN	Rochester	NY	09:00
Spill Response Trailer	0	1	0	0	ICN	Peoria	IL	09:15
Boom Trailer	0	1	0	0	ICN	Newburgh	IN	09:19
Response Trailer	0	1	0	0	ICN	Newburgh	IN	09:19
Truck Trailer	0	1	0	0	ICN	Newburgh	IN	09:19
Emergency Response Traile	0	1	0	0	ICN	Nitro	WV	09:25
Emergency Response/Job Trailer	0	20	0	0	ICN	Evansville	IN	09:27
Response Trailer	0	1	0	0	ICN	Blountville	TN	10:15
Response Trailer	0	1	0	0	ICN	Blountville	TN	10:15
Boom Trailer	0	2	0	0	ICN	Blountville	TN	10:15
Response Trailer	0	1	0	0	ICN	Norway	MI	10:16
Emergency Response Traile	0	1	0	0	ICN	Wausau	WI	11:01
Response Trailer	0	1	0	0	ICN	Knoxville	TN	11:04

06 to 12 hours (* Does not include recall/mobilization time)

Response Trailer	0	1	0	0	ICN	Knoxville	TN	11:04
Boom Trailer	0	1	0	0	ICN	Syracuse	NY	11:10
Spill Trailer	0	1	0	0	ICN	Syracuse	NY	11:10
Response Trailer	0	1	0	0	ICN	Fredericksburg	VA	11:13
Response Trailer	0	1	0	0	ICN	Fredericksburg	VA	11:13
Response Trailer	0	2	0	0	ICN	Laurel	MD	11:15
Cube Van	0	1	0	0	ICN	Laurel	MD	11:15
Van Trailer	416	1	0	0	NRC	Wood River	IL	11:19
EmergencyResponse Trailer	0	1	0	0	ICN	Baltimore	MD	11:26
Emergency Response Trailer	0	1	0	0	ICN	Baltimore	MD	11:26
Cargo Box Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Cargo Box Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Cargo Box Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Cargo Box Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Cargo Box Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Sorbent Boom Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
20' Response Trailer	0	1	0	0	ICN	Kingston	TN	11:30
48' Sorbent Boom Trailer	0	1	0	0	ICN	Goodlettsville	TN	11:40
Emergency Response/Job Trailer	0	1	0	0	ICN	Calvert City	KY	11:40
Response Trailer	0	1	0	0	ICN	Nashville	TN	11:52
Response Trailer	0	3	0	0	ICN	Nashville	TN	11:52
Emergency Response	0	2	0	0	ICN	St. Louis	MO	11:56
Response Van	0	1	0	0	ICN	Paducah	KY	11:57
Sub Total Van Trailer:		**148**	**0**	**0**				

Weir-Disk Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Weir-Disk Trailer	WDT-105	1	0	0	NRC	Apollo	PA	06:11
Sub Total Weir-Disk Trailer:		**1**	**0**	**0**				

Workboat Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Workboat Trailer	0	1	0	0	ICN	Rochester	NY	09:00
Boat Trailer	0	2	0	0	ICN	Newburgh	IN	09:19
Boat Trailer	0	4	0	0	ICN	Syracuse	NY	11:10
Work Boat Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Work Boat Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Work Boat Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Work Boat Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Work Boat Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Sub Total Workboat Trailer:		**13**	**0**	**0**				
Total Support Equipment:		**1996**	**0**	**0**				

Transfer Pump

Bladeless

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Transfer Pump	0	2	0	0	ICN	Neenah	WI	08:45
Sub Total Bladeless:		**2**	**0**	**0**				

Centrifugal

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Centrifugal Pump	0	1	0	0	ICN	Glenwood	IL	06:03
Transfer Pump	0	6	0	0	ICN	Monee	IL	06:16
Centrifugal Pump	0	1	0	0	ICN	Wheeling	IL	06:29
Hydraulic Pump	0	1	0	0	ICN	Shelbyville	KY	07:00
Transfer Pump	0	1	0	0	ICN	St. Ignace	MI	08:27
Hydraulic Pump	0	1	0	0	ICN	Newburgh	IN	09:19
Portable Pump	0	1	0	0	ICN	Lorton	VA	11:09
Stainless Steel Pump	0	1	0	0	ICN	Fredericksburg	VA	11:13
Submersible Pump	0	2	0	0	ICN	Fredericksburg	VA	11:13
Submersible Pump	0	2	0	0	ICN	Laurel	MD	11:15

06 to 12 hours (* Does not include recall/mobilization time)

Transfer Pump	0	26	0	0	ICN	Wood River	IL	11:19
Centrifugall Pump	0	2	0	0	ICN	St. Louis	MO	11:52
Centrifugal Pump	0	2	0	0	ICN	St. Louis	MO	11:52
Electrical Pump	0	1	0	0	ICN	Nashville	TN	11:52
Polypropylene Pump	0	1	0	0	ICN	Nashville	TN	11:52
Stainless Steel Pump	0	1	0	0	ICN	Nashville	TN	11:52
Transfer Pump	0	1	0	0	ICN	Paducah	KY	11:57
Sub Total Centrifugal:		**51**	**0**	**0**				

Diaphragm

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Diaphragm Pump	0	2	0	0	ICN	South Holland	IL	06:03
Trash Pump	0	5	0	0	ICN	South Holland	IL	06:03
Diaphragm Pump	0	7	0	0	ICN	Glenwood	IL	06:03
Transfer Pump	0	10	0	0	ICN	Monee	IL	06:16
Transfer Pump	0	2	0	0	ICN	Burlington	Canada	06:24
Diaphragm Pump	0	6	0	0	ICN	Wheeling	IL	06:29
Manual Daphragm Pump	0	1	0	0	ICN	Cross Lanes	WV	06:54
Double Diaphragm Pump	0	2	0	0	ICN	Cross Lanes	WV	06:54
2" Diaphragm	0	1	0	0	ICN	Shelbyville	KY	07:00
1 1/2" Diaphragm	0	1	0	0	ICN	Shelbyville	KY	07:00
Double Diaphragm Chem Pump	0	2	0	0	ICN	North Aurora	IL	07:06
Double Diaphragm Non-Chem Pump	0	2	0	0	ICN	North Aurora	IL	07:06
Diaphragm Pump	0	2	0	0	ICN	Wauwatosa	WI	07:12
Transfer Pump	0	2	0	0	ICN	Menomonee Falls	WI	07:13
Diaphragm Pump	0	1	0	0	ICN	Amherst	NY	07:23
2" Diaphragm	0	1	0	0	ICN	Newburgh	IN	09:19
Diaphragm Pump	0	4	0	0	ICN	Evansville	IN	09:27
Diaphragm Acid Pump	0	2	0	0	ICN	Evansville	IN	09:27
Diaphragm Pump	0	3	0	0	ICN	Blountville	TN	10:15
Trash Pump	0	7	0	0	ICN	Knoxville	TN	11:04
Diaphragm Pump	0	3	0	0	ICN	Knoxville	TN	11:04
Diaphragm Pump	0	1	0	0	ICN	Knoxville	TN	11:04
Transfer Pump	0	2	0	0	ICN	East Syracuse	NY	11:12
Diaphragm Pump	0	6	0	0	ICN	Fredericksburg	VA	11:13
Diaphragm Pump	0	1	0	0	ICN	Fredericksburg	VA	11:13
Transfer Pump	0	8	0	0	ICN	Laurel	MD	11:15
Diaphragm Pump	0	2	0	0	ICN	Binghamton	NY	11:17
Diaphragm Pump	0	2	0	0	ICN	Baltimore	MD	11:26
2" Diaphragm Pump	0	3	0	0	ICN	Kingston	TN	11:30
2" Wash Pump	0	2	0	0	ICN	Goodlettsville	TN	11:40
2" Air Diaphragm Pump	0	3	0	0	ICN	Goodlettsville	TN	11:40
2" Poly Diaphragm Pump	0	2	0	0	ICN	Goodlettsville	TN	11:40
2" Gas Diaphragm Pump	0	1	0	0	ICN	Goodlettsville	TN	11:40
3" Air Diaphragm Pump	0	1	0	0	ICN	Goodlettsville	TN	11:40
3" Gas Diaphragm Pump	0	1	0	0	ICN	Goodlettsville	TN	11:40
Diaphragm Acid Pump	0	2	0	0	ICN	Calvert City	KY	11:40
Diaphragm Pump	0	5	0	0	ICN	St. Louis	MO	11:52
Diaphragm Pump	0	2	0	0	ICN	Nashville	TN	11:52
Trash Pump	0	1	0	0	ICN	Nashville	TN	11:52
Diaphragm Pump	0	1	0	0	ICN	Nashville	TN	11:52
Wash Pump	0	12	0	0	ICN	Paducah	KY	11:57
Sub Total Diaphragm:		**124**	**0**	**0**				

Pneumatic

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Pneumatic Pump	0	2	0	0	ICN	Monee	IL	06:16
Transfer Pump	0	1	0	0	ICN	St. Ignace	MI	08:27
Transfer Pump	0	1	0	0	ICN	St. Ignace	MI	08:27
Sub Total Pneumatic:		**4**	**0**	**0**				

Trash Pump

06 to 12 hours (* Does not include recall/mobilization time)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Trash Pump	0	4	0	0	ICN	Cross Lanes	WV	06:54
Trash Pump	0	2	0	0	ICN	Rochester	NY	09:00
Trash Pump	0	3	0	0	ICN	Evansville	IN	09:27
Trash Pump	0	1	0	0	ICN	Blountville	TN	10:15
Trash Pump	0	2	0	0	ICN	Lorton	VA	11:09
Trash Pump	0	1	0	0	ICN	Syracuse	NY	11:10
Trash Pump	0	2	0	0	ICN	Fredericksburg	VA	11:13
Trash Pump	0	2	0	0	ICN	Laurel	MD	11:15
Trash Pump	0	1	0	0	ICN	Baltimore	MD	11:26
Trash Pump	0	2	0	0	ICN	Baltimore	MD	11:27
Trash Pump	0	1	0	0	ICN	Calvert City	KY	11:40
Sub Total Trash Pump:		**21**	**0**	**0**				
Total Transfer Pump:		**202**	**0**	**0**				

Vacuum System

Loader

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Skid Mounted Vac	0	1	206	71	ICN	Apollo	PA	06:11
Vacuum Loader	0	3	1029	213	ICN	Burlington	Canada	06:24
Vacuum Drum Loader	0	1	343	0	ICN	Cross Lanes	WV	06:54
Sub Total Loader:		**5**	**1578**	**284**				

Vacuum Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Vacuum Trailer	0	1	1621	124	ICN	Apollo	PA	06:11
Vacuum Trailer	0	1	1651	155	ICN	Apollo	PA	06:11
Vacuum Trailer	0	2	686	262	ICN	Apollo	PA	06:11
Vacuum Trailer	0	1	343	131	ICN	Apollo	PA	06:11
Vacuum Trailer	0	2	3260	260	ICN	Apollo	PA	06:11
Vacuum Trailer	0	2	3306	310	ICN	Apollo	PA	06:11
Vacuum Trailer	0	1	343	95	ICN	Burlington	Canada	06:24
Vacuum Trailer	0	1	343	178	ICN	Burlington	Canada	06:24
Vacuum Trailer	0	4	1372	568	ICN	Ashland	KY	06:32
Vacuum Tanker Trailer	0	1	343	52	ICN	Shelbyville	KY	07:00
Vacuum Trailer	0	1	343	71	ICN	Sunbury	PA	10:06
Vacuum Trailer	0	1	343	125	ICN	Lorton	VA	11:09
Vacuum Trailer	0	1	343	119	ICN	Syracuse	NY	11:10
Vacuum Trailer	0	1	343	142	ICN	Laurel	MD	11:15
Vacuum Tank Trailer	0	1	2057	119	ICN	Baltimore	MD	11:27
Sub Total Vacuum Trailer:		**21**	**16697**	**2711**				

Vacuum Transfer Unit

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Vacuum Transfer Unit	107	1	6857	24	NRC	Apollo	PA	06:11
Vacuum Unit	0	1	686	24	ICN	Monee	IL	06:16
Vacuum Unit	0	1	686	12	ICN	Monee	IL	06:16
Skid Mount Vac	0	1	343	24	ICN	Cross Lanes	WV	06:54
Vacuum Transfer Unit	220	1	6857	24	NRC	Baltimore	MD	11:27
Super Sucker Vacuum	0	1	343	120	ICN	St. Louis	MO	11:52
Sub Total Vacuum Transfer Unit:		**6**	**15772**	**228**				

Vacuum Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Vacuum Truck	0	1	754	71	ICN	Glenwood	IL	06:03
Vacuum Truck	0	1	343	166	ICN	Glenwood	IL	06:03
Vacuum Truck	0	1	1600	86	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	1463	76	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	343	79	ICN	Apollo	PA	06 11
Vacuum Trailer	0	1	1444	76	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	1475	102	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	1575	55	ICN	Apollo	PA	06:11

06 to 12 hours (* Does not include recall/mobilization time)

Vacuum Truck	0	1	1600	86	ICN	Apollo	PA	06:11
Vacuum Trailer	0	1	1273	67	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	1805	95	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	1273	67	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	718	52	ICN	Apollo	PA	06:11
Vacuum Truck	0	2	686	158	ICN	Apollo	PA	06 11
Vacuum Truck	0	1	1803	95	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	1447	76	ICN	Apollo	PA	06:11
Vacuum Truck	0	3	1029	300	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	343	79	ICN	Apollo	PA	06:11
Vacuum Truck	0	4	1372	476	ICN	Monee	IL	06:16
Vacuum Truck	0	1	343	143	ICN	Monee	IL	06:16
Vacuum Truck	0	1	343	71	ICN	Monee	IL	06:16
Vacuum Truck	0	9	3087	1179	ICN	Monee	IL	06:16
Vacuum Truck	0	1	343	90	ICN	Monee	IL	06:16
Vacuum Truck	0	1	343	57	ICN	Ashland	KY	06:26
Vacuum Truck	0	2	1508	142	ICN	Wheeling	IL	06:29
Vacuum Truck	0	5	1715	830	ICN	Wheeling	IL	06:29
Vacuum Truck	0	2	686	48	ICN	Ashland	KY	06:32
Vacuum Truck	0	7	2401	497	ICN	Ashland	KY	06:32
Vacuum Truck	0	4	1372	284	ICN	New Lenox	IL	06:33
Vacuum Truck	0	6	2058	426	ICN	Lemont	IL	06:34
Vacuum Truck	0	1	343	71	ICN	Cross Lanes	WV	06:54
Vacuum Truck	0	2	686	166	ICN	Cross Lanes	WV	06:54
Vacuum Truck	0	1	343	70	ICN	Shelbyville	KY	07:00
Vacuum Truck	0	1	343	70	ICN	Shelbyville	KY	07:00
Vacuum Truck	0	1	343	52	ICN	Shelbyville	KY	07:00
Vacuum Truck	0	2	686	152	ICN	Shelbyville	KY	07:00
Vacuum Truck	0	1	343	71	ICN	Shelbyville	KY	07:00
Vacuum Truck	0	2	686	142	ICN	Shelbyville	KY	07:00
Vacuum Truck	0	4	1372	284	ICN	North Aurora	IL	07:06
Vacuum Truck	0	2	686	142	ICN	Wauwatosa	WI	07:12
Pump Truck	0	3	1953	213	ICN	Wauwatosa	WI	07:12
Vacuum Truck	0	11	3773	660	ICN	Germantown	WI	07:17
Vacuum Truck	0	10	3430	1200	ICN	Sheboygan	WI	07:21
Vacuum Truck	0	1	343	76	ICN	Amherst	NY	07:23
Vacuum Truck	0	1	343	71	ICN	Louisville	KY	07:25
Vacuum Truck	0	3	1029	213	ICN	Louisville	KY	07:34
Vacuum Truck	0	5	1715	600	ICN	Louisville	KY	07:38
Vacuum Truck	0	5	1715	655	ICN	Fort Atkinson	WI	08:09
Vacuum Truck	0	1	343	71	ICN	Kaukauna	WI	08:36
Pump Truck	0	2	1302	142	ICN	Kaukauna	WI	08:36
Vacuum Truck	0	1	343	71	ICN	Rochester	NY	09:00
Liquid Vac Truck	0	1	3086	71	ICN	Peoria	IL	09:15
Vacuum Truck	0	1	343	71	ICN	Newburgh	IN	09:19
Vacuum Truck	0	6	2058	720	ICN	Nitro	WV	09:25
Vacuum Truck	0	2	686	142	ICN	Evansville	IN	09:27
Vacuum Truck	0	1	343	78	ICN	Evansville	IN	09:27
Vacuum Truck	0	4	1372	284	ICN	Sunbury	PA	10:06
Vacuum Truck	0	1	343	71	ICN	Blountville	TN	10:15
Vacuum Truck	0	1	343	71	ICN	Norway	MI	10:16
Vacuum Truck	0	1	343	71	ICN	Waverly	NY	10:18
Vacuum Truck	0	2	686	96	ICN	Wausau	WI	11:01
Vacuum Truck	0	1	343	50	ICN	Knoxville	TN	11:04
Vacuum Truck	0	1	343	75	ICN	Lorton	VA	11:09
Vacuum Truck	0	1	343	71	ICN	Syracuse	NY	11:10
Vacuum Truck	0	1	343	71	ICN	Syracuse	NY	11:10
Vacuum Truck	0	1	343	48	ICN	Syracuse	NY	11:10
Vacuum Truck	0	1	343	71	ICN	Syracuse	NY	11:10
Vacuum Truck	0	1	343	77	ICN	Syracuse	NY	11:10
Vacuum Tractor	0	1	343	71	ICN	East Syracuse	NY	11:12

06 to 12 hours (* Does not include recall/mobilization time)

Vacuum Truck	0	2	686	142	ICN	East Syracuse	NY	11:12
Vacuum Tank Truck	0	1	2057	83	ICN	Stafford	VA	11:12
Vacuum Tank Truck	0	1	2057	76	ICN	Stafford	VA	11:12
Vacuum Tank Truck	0	1	2057	76	ICN	tafford	VA	11 12
Vacuum Truck	0	2	686	166	ICN	Fredericksburg	VA	11:13
Vacuum Truck	0	1	343	71	ICN	Fredericksburg	VA	11:13
Vacuum Truck	0	2	686	142	ICN	Laurel	MD	11:15
Vacuum Truck	0	1	343	59	ICN	Laurel	MD	11:15
Vacuum Truck	0	9	3087	639	ICN	Wood River	IL	11:19
Vacuum Truck	0	1	343	120	ICN	Baltimore	MD	11:26
Vacuum Tanker	0	1	343	71	ICN	Baltimore	MD	11:26
Vacuum Truck	0	1	343	83	ICN	Baltimore	MD	11:26
Vacuum Tank Truck	0	1	2057	95	ICN	Baltimore	MD	11:27
Vacuum Tank Truck	0	1	2057	71	ICN	Baltimore	MD	11:27
Vacuum Tank Truck	0	1	2057	71	ICN	Baltimore	MD	11:27
Vacuum Tank Truck	0	1	2057	83	ICN	Baltimore	MD	11:27
Vacuum Tank Truck	0	1	2057	76	ICN	Baltimore	MD	11:27
Vacuum Tank Truck	0	1	2057	83	ICN	Baltimore	MD	11:27
Vacuum Tank Truck	0	1	2057	71	ICN	Baltimore	MD	11:27
Vacuum Tank Truck	0	1	2057	76	ICN	Baltimore	MD	11:27
Vacuum Truck	0	1	343	130	ICN	Baltimore	MD	11:27
Vacuum Truck	0	1	343	75	ICN	Baltimore	MD	11:27
Vacuum Truck	0	1	343	76	ICN	Baltimore	MD	11:27
Vacuum Truck	0	1	343	70	ICN	Goodlettsville	TN	11:40
Vacuum Truck	0	1	343	70	ICN	Goodlettsville	TN	11:40
Vac Truck	0	1	343	130	ICN	Goodlettsville	TN	11:40
Vacuum Truck	0	1	343	71	ICN	Calvert City	KY	11:40
Vacuum Truck	0	1	754	71	ICN	St. Louis	MO	11:52
Vacuum Truck	0	1	343	83	ICN	Nashville	TN	11:52
Vacuum Truck	0	1	343	71	ICN	Nashville	TN	11:52
Vacuum Truck	0	1	343	71	ICN	Nashville	TN	11:52
Vacuum Truck	0	2	3428	158	ICN	Nashville	TN	11:54
Vacuum Truck	0	17	5831	1207	ICN	St. Louis	MO	11:56
Vacuum Truck	0	4	1372	480	ICN	St. Louis	MO	11:56
Vacuum Truck	0	1	1714	79	ICN	Paducah	KY	11:57
Sub Total Vacuum Truck:		**218**	**117028**	**18626**				
Total Vacuum System:		**250**	**151075**	**21849**				

Vessel

Deck Barge

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
BUDA I Work Barge	0	1	0	0	ICN	Detroit	MI	08:26
BUDA II Vacuum Barge	0	1	0	0	ICN	Detroit	MI	08:26
Sub Total Deck Barge:		**2**	**0**	**0**				

Deployment Craft (< 25 foot)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
18' Deployment Craft	0	1	0	0	ICN	South Holland	IL	06:03
20' Deployment Craft	0	1	0	0	ICN	South Holland	IL	06:03
14' Deployment Craft	0	1	0	0	ICN	South Holland	IL	06:03
John Boat	0	16	0	0	ICN	Glenwood	IL	06 03
22' Deployment Craft	0	1	0	0	ICN	Apollo	PA	06:11
20' Deployment Craft	0	1	0	0	ICN	Apollo	PA	06:11
13' Deployment Craft	0	1	0	0	ICN	Apollo	PA	06:11
18' Deployment Craft	0	1	0	0	ICN	Apollo	PA	06:11
20' Deployment Craft	0	1	0	0	ICN	Apollo	PA	06 11
24' Deployment Craft	0	1	0	0	ICN	Apollo	PA	06:11
16' Deployment Craft	0	1	0	0	ICN	Apollo	PA	06:11
12' Deployment Craft	0	2	0	0	ICN	Apollo	PA	06:11
16' Deployment Craft	0	5	0	0	ICN	Apollo	PA	06:11

06 to 12 hours (* Does not include recall/mobilization time)

18' Deployment Craft	0	1	0	0	ICN	Monee	IL	06:16
14" Deployment Craft	0	1	0	0	ICN	Monee	IL	06:16
24' Deployment Craft	0	1	0	0	ICN	Monee	IL	06:16
12' Deployment Craft	0	3	0	0	ICN	Monee	IL	06:16
13' Deployment Craft	0	1	0	0	ICN	Monee	IL	06:16
10' Deployment Craft	0	1	0	0	ICN	Monee	IL	06:16
16' Deployment Craft	0	2	0	0	ICN	Burlington	Canada	06:24
20' Response Boat	0	1	0	0	ICN	Ashland	KY	06:26
John Boat	0	2	0	0	ICN	Wheeling	IL	06:29
Work Flat	0	13	0	0	ICN	South Point	OH	06:32
18' Deployment Craft	0	2	0	0	ICN	South Point	OH	06:32
22' Deployment Craft	0	4	0	0	ICN	South Point	OH	06:32
16' Deployment Craft	0	4	0	0	ICN	Ashland	KY	06:32
18' Deployment Craft	0	1	0	0	ICN	Ashland	KY	06:32
18' Deployment Craft	0	1	0	0	ICN	New Lenox	IL	06:33
14' Deployment Craft	0	1	0	0	ICN	New Lenox	IL	06:33
14' Deployment Craft	0	1	0	0	ICN	Lemont	IL	06:34
14' Deployment Craft	0	1	0	0	ICN	Lemont	IL	06:34
24' Deployment Craft	0	2	0	0	ICN	Lemont	IL	06:34
24' Deployment Craft	0	1	0	0	ICN	Lemont	IL	06:34
22' Deployment Craft	0	1	0	0	ICN	Cross Lanes	WV	06:54
14' Deployment Craft	0	1	0	0	ICN	Cross Lanes	WV	06:54
11' Deployment Craft	0	1	0	0	ICN	Cross Lanes	WV	06:54
20' Response Boat	0	1	0	0	ICN	Shelbyville	KY	07:00
14' Deployment Craft	0	1	0	0	ICN	North Aurora	IL	07:06
14' Deployment Craft	0	1	0	0	ICN	Wauwatosa	WI	07:12
16' Deployment Craft	0	1	0	0	ICN	Menomonee Falls	WI	07:13
18.5' Deployment Craft	0	1	0	0	ICN	Menomonee Falls	WI	07:13
19' Deployment Craft	0	1	0	0	ICN	Germantown	WI	07:17
16' Deployment Craft	0	4	0	0	ICN	Germantown	WI	07:17
Small Boat w/ Trolling Motor	0	1	0	0	ICN	Louisville	KY	07:25
Response Boat	0	1	0	0	ICN	Louisville	KY	07:25
12' Deployment Craft	0	1	0	0	ICN	Louisville	KY	07:34
24' Deployment Craft	0	1	0	0	ICN	Louisville	KY	07:34
18' Deployment Craft	0	1	0	0	ICN	Louisville	KY	07:34
18' Deployment Craft	0	1	0	0	ICN	Louisville	KY	07:34
19' Deployment Craft	0	1	0	0	ICN	Louisville	KY	07:34
14' Deployment Craft	0	1	0	0	ICN	De Pere	WI	08:03
18' Deployment Craft	0	1	0	0	ICN	De Pere	WI	08:03
20' Deployment Craft	0	1	0	0	ICN	De Pere	WI	08:03
14' Rowboat	0	1	0	0	ICN	St. Ignace	MI	08:27
17' Deployment Craft	0	1	0	0	ICN	St. Ignace	MI	08:27
21' Deployment Craft	0	2	0	0	ICN	Neenah	WI	08:45
18' Deployment Craft	0	1	0	0	ICN	Newburgh	IN	09:19
14' Deployment Craft	0	1	0	0	ICN	Nitro	WV	09:25
20' Deployment Craft	0	1	0	0	ICN	Nitro	WV	09:25
20' Deployment Craft	0	1	0	0	ICN	Evansville	IN	09:27
12' Deployment Craft	0	4	0	0	ICN	Evansville	IN	09:27
14' Deployment Craft	0	2	0	0	ICN	Evansville	IN	09:27
18' Deployment Craft	0	1	0	0	ICN	Sunbury	PA	10:06
16' Deployment Craft	0	1	0	0	ICN	Blountville	TN	10:15
14' Deployment Craft	0	1	0	0	ICN	Wausau	WI	11:01
16' Deployment Craft	0	1	0	0	ICN	Knoxville	TN	11:04
19' Deployment Craft	0	1	0	0	ICN	Knoxville	TN	11:04
18' Deployment Craft	0	1	0	0	ICN	Lorton	VA	11:09
20' Deployment Craft	0	1	0	0	ICN	Lorton	VA	11:09
10' Deployment Craft	0	1	0	0	ICN	Lorton	VA	11:09
18' Deployment Craft	0	1	0	0	ICN	Syracuse	NY	11:10
14' Deployment Craft	0	1	0	0	ICN	Syracuse	NY	11:10
13' Deployment Craft	0	2	0	0	ICN	Stafford	VA	11:12
19' Deployment Craft	0	1	0	0	ICN	Fredericksburg	VA	11:13

06 to 12 hours (* Does not include recall/mobilization time)

16' Deployment Craft	0	1	0	0	ICN	Fredericksburg	VA	11:13
24' Deployment Craft	0	1	0	0	ICN	Laurel	MD	11:15
15' Deployment Craft	0	2	0	0	ICN	Laurel	MD	11:15
20' Deployment Craft	0	5	0	0	ICN	Binghamton	NY	11:17
24' Deployment Craft	0	1	0	0	ICN	Wood River	IL	11:19
16' Deployment Craft	0	1	0	0	ICN	Wood River	IL	11:19
20' Deployment Craft	0	2	0	0	ICN	Baltimore	MD	11:26
13' Deployment Craft	0	2	0	0	ICN	Baltimore	MD	11:27
12' Deployment Craft	0	15	0	0	ICN	Baltimore	MD	11:27
14' Deployment Craft	0	5	0	0	ICN	Baltimore	MD	11:27
15' Deployment Craft	0	9	0	0	ICN	Baltimore	MD	11:27
16' Deployment Craft	0	6	0	0	ICN	Baltimore	MD	11:27
16' Deployment Craft	0	12	0	0	ICN	Baltimore	MD	11:27
14' Deployment Craft	0	4	0	0	ICN	Baltimore	MD	11:27
21' Deployment Craft	0	8	0	0	ICN	Baltimore	MD	11:27
22' Deployment Craft	0	1	0	0	ICN	Baltimore	MD	11:27
24' Deployment Craft	0	1	0	0	ICN	Baltimore	MD	11:27
18' Deployment Craft	0	1	0	0	ICN	Baltimore	MD	11:27
19' Deployment Craft	0	1	0	0	ICN	Baltimore	MD	11:27
14' Deployment Craft	0	1	0	0	ICN	Baltimore	MD	11:27
24' Response Boat	0	1	0	0	ICN	Kingston	TN	11:30
16' Deployment Craft	0	1	0	0	ICN	Kingston	TN	11:30
24' Response Boat	0	1	0	0	ICN	Goodlettsville	TN	11:40
24' Response Boat	0	2	0	0	ICN	Goodlettsville	TN	11:40
20' Deployment Craft	0	1	0	0	ICN	Calvert City	KY	11:40
John Boat	0	2	0	0	ICN	St. Louis	MO	11:52
16' Deployment Craft	0	1	0	0	ICN	Nashville	TN	11:52
19' Deployment Craft	0	1	0	0	ICN	Nashville	TN	11:52
12' Deployment Craft	0	1	0	0	ICN	Nashville	TN	11:52
18' Deployment Craft	0	1	0	0	ICN	St. Louis	MO	11:56
Sub Total Deployment Craft (< 25 foot):		**218**	**0**	**0**				

Deployment Craft (> 25 foot)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
26' Deployment Craft	0	1	0	0	ICN	South Holland	IL	06:03
28' Deployment Craft	0	1	0	0	ICN	Monee	IL	06:16
30' Deployment Craft	0	1	0	0	ICN	Monee	IL	06:16
28' Spill Response Vessel	0	3	0	0	ICN	South Point	OH	06:32
26' Rescue Boat	0	1	0	0	ICN	Shelbyville	KY	07:00
27' Response Boat	0	1	0	0	ICN	Shelbyville	KY	07:00
26' Command Boat	0	1	0	0	ICN	St. Ignace	MI	08:27
29' Deployment Craft	0	1	0	0	ICN	Blountville	TN	10:15
29' Deployment Craft	0	1	0	0	ICN	Knoxville	TN	11:04
27' Deployment Craft	0	1	0	0	ICN	Lorton	VA	11:09
29' Deployment Craft	0	1	0	0	ICN	Fredericksburg	VA	11:13
59' Deployment Craft	0	1	0	0	ICN	Nashville	TN	11:52
28' Deployment Craft	0	1	0	0	ICN	Nashville	TN	11:54
26' Deployment Craft	0	1	0	0	ICN	Paducah	KY	11:57
Sub Total Deployment Craft (> 25 foot):		**16**	**0**	**0**				

WorkBoat

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Response Boat	0	1	0	0	ICN	Newburgh	IN	09:19
Tracker	0	1	0	0	ICN	Syracuse	NY	11:10
Pontoon Boat	0	1	0	0	ICN	Syracuse	NY	11:10
Sub Total WorkBoat:		**3**	**0**	**0**				
Total Vessel:		**239**	**0**	**0**				
Total 06 to 12 hours:			**204542**	**86017**				
Running Total from 0 to unknown:			**299186**	**130312**				

POTENTIAL SPILL SOURCES AND CONTAINER IDENTIFICATION
(*Any container that stores oil*)

Container I.D.	Substance Stored *(Oil & Haz. Substance)*	Maximum Capacity *(Bbls)*	Container Type *(i.e. floating roof, fixed roof, etc.)*	Year Built	Potential Failure	Rate of Flow	Failure / Cause *(Record cause and date of any Tank failure which has resulted in a loss of tank contents)*	Direction of Flow	Secondary Containment Capacity
TOLEDO REFINERY									
		(b) (7)(F), (b) (3)					Section 9-4 contains loss history for previous 3 years.	Drainage escaping from the containment area would travel to the OBS.	(b) (7)(F), (b) (3)
15	CSO		Cone Roof	1971	Leak/ Rupture	----	“”		
124	Temporarily Out of Service		Cone Roof	1920	Leak/ Rupture	----	“”		
125	Tetramer		Cone Roof	1920	Leak/ Rupture	----	“”		
128	Nonene		Cone-int fltr	1920	Leak/ Rupture	----	“”		
129	Nonene		Cone-int fltr	1953	Leak/ Rupture	----	“”		
130	LGO		Floating Roof	1929	Leak/ Rupture	----	“”		
131	Naphtha		Floating Roof	1965	Leak/ Rupture	----	“”		
134	CSO		Cone Roof	1993	Leak/ Rupture	----	“”		
137	Benzene		Cone-int fltr	1962	Leak/ Rupture	----	“”		
138	Benzene		Cone-int fltr	1962	Leak/ Rupture	----	“”		
139	Alkylate		Cone-int fltr	1962	Leak/ Rupture	----	“”		
140	Alkylate		Floating Roof	1962	Leak/ Rupture	----	“”		
141	Naphtha		Cone-int fltr	1965	Leak/ Rupture	----	“”		
142	Temporarily Out of Service		Cone-int fltr	1965	Leak/ Rupture	----	“”		
143	Toluene		Cone-int fltr	1968	Leak/ Rupture	----	“”		
144	Xylene		Cone-int fltr	1972	Leak/ Rupture	----	“”		
151	Naphtha		Cone-int fltr	1968	Leak/ Rupture	----	“”		
152	Naphtha		Cone-int fltr	1968	Leak/ Rupture	----	“”		
153	LSD		Cone-int fltr	1996	Leak/ Rupture	----	“”		
154	Heavy Gas Oil		Cone Roof	1950	Leak/ Rupture	----	“”		
155	Catalytic Gasoline		Cone-int fltr	1949	Leak/ Rupture	----	“”		
156	Raffinate		Cone-int fltr	1949	Leak/ Rupture	----	“”		
159	Temporarily Out of Service		Cone Roof	1929	Leak/ Rupture	----	“”		

Container I.D.	Substance Stored *(Oil & Haz. Substance)*	Maximum Capacity *(Bbls)*	Container Type *(i.e. floating roof, fixed roof, etc.)*	Year Built	Potential Failure	Rate of Flow	Failure / Cause *(Record cause and date of any Tank failure which has resulted in a loss of tank contents)*	Direction of Flow	Secondary Containment Capacity
TOLEDO REFINERY									
163	Octane Components	(b) (7)(F), (b) (3)	Cone-int fltr	1952	Leak/ Rupture	----	"	Drainage escaping from the containment area would travel to the OBS.	(b) (7)(F), (b) (3)
164	LCO		Cone-int fltr	1953	Leak/ Rupture	----	"		
165	Catalytic Gasoline		Floating Roof	1957	Leak/ Rupture	----	"		
166	Catalytic Gasoline		Floating Roof	1957	Leak/ Rupture	----	"		
183	Temporarily Out Of Service		Cone Roof	1926	Leak/ Rupture	----	"		
185	Temporarily Out Of Service		Cone Roof	1926	Leak/ Rupture	----	"		
186	Temporarily Out Of Service		Cone Roof	1945	Leak/ Rupture	----	"		
191	LCO		Cone-int fltr	1955	Leak/ Rupture	----	"		
193	Toluene		Cone-int fltr	1994	Leak/ Rupture	----	"		
194	Xylene		Cone-int fltr	1994	Leak/ Rupture	----	"		
195	Benzene		Cone-int fltr	1994	Leak/ Rupture	----	"		
197	CSO		Cone Roof	1999	Leak/ Rupture	----	"		
199	CSO		Cone Roof	2001	Leak/ Rupture	----	"		
501	Temporarily Out Of Service		Cone-int fltr	1949	Leak/ Rupture	----	"		
502	Temporarily Out Of Service		Cone-int fltr	1949	Leak/ Rupture	----	"		
503	Gasoline Components		Cone-int fltr	1949	Leak/ Rupture	----	"		
504	LGO		Cone-int fltr	1949	Leak/ Rupture	----	"		
505	Slop Oil		Cone-int fltr	1993	Leak/ Rupture	----	"		
506	LGO		Cone-int fltr	1949	Leak/ Rupture	----	"		
507	LGO		Cone-int fltr	1949	Leak/ Rupture	----	"		
508	Temporarily Out Of Service		Cone Roof	1949	Leak/ Rupture	----	Section 9-4 contains loss history for previous 3 years.		
509	Heavy Gas Oil		Cone Roof	1949	Leak/ Rupture	----	"		
510	Temporarily Out Of Service		Cone-int fltr	1949	Leak/ Rupture	----	"		
1605	FO Additive		Horizontal	1961	Leak/ Rupture	----	"		
1612	Out of Service		Cone Roof	1967	Leak/ Rupture	----	"		
9201	Recycle Oil		Cone Roof	1967	Leak/ Rupture	----	"		
16029	FO Additive		Cone Roof	1990	Leak/ Rupture	----	"		

POTENTIAL SPILL SOURCES AND CONTAINER IDENTIFICATION
(*Any container that stores oil*)

Equipment I.D.	(Location) Service & Size	Substance Stored *(Oil & Haz. Substance)*	Average Quantity Stored *(Gallons)*	VOLTAGE	Equipment Type *(i.e. transformer, oil-filled equipment, etc.)*	Year Built	Potential Failure	Rate of Flow	Failure / Cause *(Record cause and date of any Tank failure which has resulted in a loss of tank contents)*	Direction of Flow	Secondary Containment Capacity
OPERATIONAL EQUIPMENT - TOLEDO REFINERY											
Plant 9/#2 Substation/#5 Substation Transformers & Oil Circuit Breakers											
#A1	Main Trans. #2 Sub (#1) 15,000 KVA	Transformer Oil	(b) (7)(F), (b) (3)	69KV /12.4 KV	Transformer	Unknown	Leak/Rupture	-----	Section 9-4 contains loss history for previous 3 years.	Primary drainage is to OBS	(b) (7)(F), (b) (3)
#A2	Main Trans. #2 Sub (#2) 15,000 KVA	Transformer Oil		69KV /12.4 KV	Transformer	Unknown	Leak/Rupture	-----	""		
#A3	Main Trans. #2 Sub (#3) 15,000 KVA	Transformer Oil		69KV /12.4 KV	Transformer	Unknown	Leak/Rupture	-----	""		
#A4	Main Trans. #2 Sub (#4) 15,000 KVA	Transformer Oil		69KV /12.4 KV	Transformer	Unknown	Leak/Rupture	-----	""		
#A5	Main Trans. #2 Sub (#5) 15,000 KVA	Transformer Oil		69KV /12.4 KV	Transformer	Unknown	Leak/Rupture	-----	""		
XFR-26-06 SS-2-1 (BOC)	Main Trans. #2 Sub (#6) 2,160 KVA	Transformer Oil		69KV /12.4 KV	Transformer	Unknown	Leak/Rupture	-----	""		
XFR-26-07 G1574-03	Main Trans. #2 Sub (#7) 2,160 KVA	Transformer Oil		69KV /12.4 KV	Transformer	2007	Leak/Rupture	------	---		
#A6	600 V (Sec. 600-1) 15,000 KVA	Transformer Oil		12.4KV/600 V	Transformer	Unknown	Leak/Rupture	-----	""		
#A7	600 V (Sec. 600-2) 15,000 KVA	Transformer Oil		12.4 KV / 600 V	Transformer	Unknown	Leak/Rupture	-----	""	Primary drainage is to OBS	
#A8	600 V (Sec 600-3) 15,000 KVA	Transformer Oil		12.4 KV / 600 V	Transformer	Unknown	Leak/Rupture	-----	""		

POTENTIAL SPILL SOURCES AND CONTAINER IDENTIFICATION
(*Any container that stores oil*)

Equipment I.D.	(Location) Service & Size	Substance Stored *(Oil & Haz. Substance)*	Average Quantity Stored *(Gallons)*	VOLTAGE	Equipment Type *(i.e. transformer, oil-filled equipment, etc.)*	Year Built	Potential Failure	Rate of Flow	Failure / Cause *(Record cause and date of any Tank failure which has resulted in a loss of tank contents)*	Direction of Flow	Secondary Containment Capacity
OPERATIONAL EQUIPMENT - TOLEDO REFINERY											
Plant 9/#2 Substation/#5 Substation Transformers & Oil Circuit Breakers (Continued)											
#A9	New, not in service 2,500 KVA	Transformer Oil	(b) (7)(F), (b) (3)	12.4 KV / 600 V	Transformer	Unknown	Leak/Rupture	-----	""		(b) (7)(F), (b) (3)
#A10	2400 V (Sec. 2400-1) 3,000 KVA	Transformer Oil		12.4 KV / 2400 V	Transformer	Unknown	Leak/Rupture	-----	Section 9-4 contains loss history for previous 3 years.	Primary drainage is to OBS	
#A11	2400 V (Sec. 2400-2) 3,000 KVA	Transformer Oil		12.4 KV / 2400 V	Transformer	Unknown	Leak/Rupture	-----	""		
B-12	C-9201 7,500 KVA	Transformer Oil		12.4 KV/ 4160 V	Transformer	Unknown	Leak/Rupture	-----	""		
B-13	C-9202 7,500 KVA	Transformer Oil		12.4 KV/ 4160 V	Transformer	Unknown	Leak/Rupture	-----	""		
B-14	C-9203 7,500 KVA	Transformer Oil		12.4 KV/4160 V	Transformer	Unknown	Leak/Rupture	-----	""		
C-15	9-4 MCC (East) 1,000 KV	Transformer Oil		12.4 KV / 600 V	Transformer	Unknown	Leak/Rupture	-----	""		
C-16	9-4 MCC (West) 1,000 KV	Transformer Oil		12.4KV/600 V	Transformer	Unknown	Leak/Rupture	-----	""		
6988	OCB-#2 Sub A Tank 69,000 V	Transformer Oil		69 KV	Circuit Breaker	Unknown	Leak/Rupture	-----	""	Primary drainage is to OBS	
6988	OCB-#2 Sub B Tank 69,000 V	Transformer Oil		69 KV	Circuit Breaker	Unknown	Leak/Rupture	-----	""		
6988	OCB-#2 Sub C Tank 69,000 V	Transformer Oil		69 KV	Circuit Breaker	Unknown	Leak/Rupture	-----	""		

POTENTIAL SPILL SOURCES AND CONTAINER IDENTIFICATION
(*Any container that stores oil*)

Equipment I.D.	(Location) Service & Size	Substance Stored *(Oil & Haz. Substance)*	Average Quantity Stored *(Gallons)*	VOLTAGE	Equipment Type *(i.e. transformer, oil-filled equipment, etc.)*	Year Built	Potential Failure	Rate of Flow	Failure / Cause *(Record cause and date of any Tank failure which has resulted in a loss of tank contents)*	Direction of Flow	Secondary Containment Capacity
OPERATIONAL EQUIPMENT - TOLEDO REFINERY											
Plant 9/#2 Substation/#5 Substation Transformers & Oil Circuit Breakers (Continued)											
6989	OCB-#2 Sub A Tank 69,000 V	Transformer Oil	(b) (7)(F), (b) (3)	69 KV	Circuit Breaker	Unknown	Leak/Rupture	-----	Section 9-4 contains loss history for previous 3 years.	Primary drainage is to OBS	(b) (7)(F), (b) (3)
6989	OCB-#2 Sub B Tank 69,000 V	Transformer Oil		69 KV	Circuit Breaker	Unknown	Leak/Rupture	-----	""		
6989	OCB-#2 Sub C Tank 69,000 V	Transformer Oil		69 KV	Circuit Breaker	Unknown	Leak/Rupture	-----	""		
6959	OCB-#2 Sub B Tank 69,000 V	Transformer Oil		69 KV	Circuit Breaker	Unknown	Leak/Rupture	-----	""		
6959	OCB-#2 Sub C Tank 69,000 V	Transformer Oil		69 KV	Circuit Breaker	Unknown	Leak/Rupture	-----	""		
6803	OCB-#2 Sub A Tank 69,000 V	Transformer Oil		69 KV	Circuit Breaker	Unknown	Leak/Rupture	-----	""		
6803	OCB-#2 Sub B Tank 69,000 V	Transformer Oil		69 KV	Circuit Breaker	Unknown	Leak/Rupture	-----	""		
6803	OCB-#2 Sub C Tank 69,000 V	Transformer Oil		69 KV	Circuit Breaker	Unknown	Leak/Rupture	-----	""		
6802	OCB-#2 Sub A Tank 69,000 V	Transformer Oil		69 KV	Circuit Breaker	Unknown	Leak/Rupture	-----	""		
6802	OCB-#2 Sub C Tank 69,000 V	Transformer Oil		69 KV	Circuit Breaker	Unknown	Leak/Rupture	-----	""		

POTENTIAL SPILL SOURCES AND CONTAINER IDENTIFICATION
(Any container that stores oil)

Equipment I.D.	(Location) Service & Size	Substance Stored *(Oil & Haz. Substance)*	Average Quantity Stored *(Gallons)*	VOLTAGE	Equipment Type *(i.e. transformer, oil-filled equipment, etc.)*	Year Built	Potential Failure	Rate of Flow	Failure / Cause *(Record cause and date of any Tank failure which has resulted in a loss of tank contents)*	Direction of Flow	Secondary Containment Capacity
OPERATIONAL EQUIPMENT - TOLEDO REFINERY											
Plant 9/#2 Substation/#5 Substation Transformers & Oil Circuit Breakers (Continued)											
6806	OCB-#2 Sub A Tank 69,000 V	Transformer Oil	(b) (7)(F), (b) (3)	69 KV	Circuit Breaker	Unknown	Leak/Rupture	-----	Section 9-4 contains loss history for previous 3 years.	Primary drainage is to OBS	(b) (7)(F), (b) (3)
6806	OCB-#2 Sub B Tank 69,000 V	Transformer Oil		69 KV	Circuit Breaker	Unknown	Leak/Rupture	-----	""		
6806	OCB-#2 Sub C Tank 69,000 V	Transformer Oil		69 KV	Circuit Breaker	Unknown	Leak/Rupture	-----	""		
#9 Substation											
#F-24	2400 V #9 Sub (North) 2,500 KVA	Transformer Oil		12.4 KV / 2400 V	Transformer	Unknown	Leak/Rupture	-----	Section 9-4 contains loss history for previous 3 years.	Primary drainage is to OBS	
#F-25	2400 V #9 Sub (South) 2,500 KVA	Transformer Oil		12.4 KV / 2400 V	Transformer	Unknown	Leak/Rupture	-----	""		
#F-27	600 V #9 Sub (South) 1,000 KVA	Transformer Oil		12.4 KV / 600 V	Transformer	Unknown	Leak/Rupture	-----	""		
#F-26	600 V #9 Sub (North) 1,000 KVA	Transformer Oil		12.4 KV / 600 V	Transformer	Unknown	Leak/Rupture	-----	""		
#30	Temporary Outside Fence 1,000 KVA	Transformer Oil		12.4 KV / 480 V	Transformer	Unknown	Leak/Rupture	-----	""		
#102	Temporary Inside Fence 1,000 KVA	Transformer Oil		12.4 KV / 480 V	Transformer	Unknown	Leak/Rupture	-----	""		

POTENTIAL SPILL SOURCES AND CONTAINER IDENTIFICATION
(*Any container that stores oil*)

Equipment I.D.	(Location) Service & Size	Substance Stored *(Oil & Haz. Substance)*	Average Quantity Stored *(Gallons)*	VOLTAGE	Equipment Type *(i.e. transformer, oil-filled equipment, etc.)*	Year Built	Potential Failure	Rate of Flow	Failure / Cause *(Record cause and date of any Tank failure which has resulted in a loss of tank contents)*	Direction of Flow	Secondary Containment Capacity
OPERATIONAL EQUIPMENT - TOLEDO REFINERY											
#9 Substation - Plant 2											
P-78	P/2 Precipitator 500 KVA	Transformer Oil	(b) (7)(F), (b) (3)	2400 V/480 V	Transformer	Unknown	Leak/Rupture	-----	Section 9-4 contains loss history for previous 3 years.	Primary drainage is to OBS	(b) (7)(F), (b) (3)
P-77	P/2 Precipitator 500 KVA	Transformer Oil		2400 V/480 V	Transformer	Unknown	Leak/Rupture	-----	""		
J-021-031-1	Transformer on Top of P/9 Precipitators 96 KVA	Transformer Oil		480 V / 53.5 KV	Rectifier	Unknown	Leak/Rupture	-----	""		
J-021-031-2	Transformer on Top of P/9 Precipitators 96 KVA	Transformer Oil		480 V / 53.5 KV	Rectifier	Unknown	Leak/Rupture	-----	""		
J-021-031-3	Transformer on Top of P/9 Precipitators 96 KVA	Transformer Oil		480 V / 53.5 KV	Rectifier	Unknown	Leak/Rupture	-----	""		
J-021-04-1	Transformer on Top of P/9 Precipitators 96 KVA	Transformer Oil		480 V / 53.5 KV	Rectifier	Unknown	Leak/Rupture	-----	""		

POTENTIAL SPILL SOURCES AND CONTAINER IDENTIFICATION
(*Any container that stores oil*)

Equipment I.D.	(Location) Service & Size	Substance Stored *(Oil & Haz. Substance)*	Average Quantity Stored *(Gallons)*	VOLTAGE	Equipment Type *(i.e. transformer, oil-filled equipment, etc.)*	Year Built	Potential Failure	Rate of Flow	Failure / Cause *(Record cause and date of any Tank failure which has resulted in a loss of tank contents)*	Direction of Flow	Secondary Containment Capacity
OPERATIONAL EQUIPMENT - TOLEDO REFINERY											
#9 Substation - Plant 2											
Plant 9/#2 Substation/#5 Substation Transformers & Oil Circuit Breakers (Continued)											
J-021-04-2	Transformer on Top of P/9 Precipitators 96 KVA	Transformer Oil	(b) (7)(F), (b) (3)	480 V / 53.5 KV	Rectifier	Unknown	Leak/Rupture	-----	Section 9-4 contains loss history for previous 3 years.	Primary drainage is to OBS	(b) (7)(F), (b) (3)
J-021-04-3	Transformer on Top of P/9 Precipitators 96 KVA	Transformer Oil		480 V / 53.5 KV	Rectifier	Unknown	Leak/Rupture	-----	“”		
R-73	Powertrain (P/2) 7,500 KVA	Transformer Oil		12.4 V / 4160 V	Transformer	Unknown	Leak/Rupture	-----	“”		
P-74	P/2 West Control Rm. 225 KVA	Transformer Oil		2400 V / 600 V	Transformer	Unknown	Leak/Rupture	-----	“”		
Plant 4 / Plant 5 / C-421 / #10 Substation / #3 Substation											
#3 Substation											
#D-19	600 V (West) 1,500 KVA	Transformer Oil	(b) (7)(F), (b) (3)	12.4 KV / 600 V	Transformer	Unknown	Leak/Rupture	-----	Section 9-4 contains loss history for previous 3 years.	Primary drainage is to OBS	(b) (7)(F), (b) (3)
#D-20	600 V (East) 1,500 KVA	Transformer Oil		12.4 KV / 600 V	Transformer	Unknown	Leak/Rupture	-----	“”		
#D-21	2400 V (West) 3350 KVA	Transformer Oil		12.4 KV / 2400 V	Transformer	Unknown	Leak/Rupture	-----	“”		
#D-22	2400 V (East) 3750 KVA	Transformer Oil		12.4 KV / 2400 V	Transformer	Unknown	Leak/Rupture	-----	“”		

POTENTIAL SPILL SOURCES AND CONTAINER IDENTIFICATION
(*Any container that stores oil*)

Equipment I.D.	(Location) Service & Size	Substance Stored *(Oil & Haz. Substance)*	Average Quantity Stored *(Gallons)*	VOLTAGE	Equipment Type *(i.e. transformer, oil-filled equipment, etc.)*	Year Built	Potential Failure	Rate of Flow	Failure / Cause *(Record cause and date of any Tank failure which has resulted in a loss of tank contents)*	Direction of Flow	Secondary Containment Capacity
OPERATIONAL EQUIPMENT - TOLEDO REFINERY (Cont'd)											
Plant 4 / Plant 5 / C-421 / #10 Substation / #3 Substation											
#10 Substation											
#E-23	C-421 15,000 KVA	Transformer Oil	(b) (7)(F), (b) (3)	12.4 KV / 4160 V	Transformer	Unknown	Leak/Rupture	-----	Section 9-4 contains loss history for previous 3 years.	Primary drainage is to OBS	(b) (7)(F), (b) (3)
#E-22	600 V / Sub. #10 (West) 1,500 KVA	Transformer Oil		12.4 KV / 600 V	Transformer	Unknown	Leak/Rupture	-----	""		
#E-4	600 V/Sub. #10 (East) 1,500 KVA	Transformer Oil		12.4 KV / 600 V	Transformer	Unknown	Leak/Rupture	-----	""		
Plant 4 & 5											
#E-47	P/4 Cooling Tower 1,000 KVA	Transformer Oil		2400 V / 480 V	Transformer	Unknown	Leak/Rupture	-----	Section 9-4 contains loss history for previous 3 years.	Primary drainage is to OBS	
#E-46	P/4 N East End 750 KVA	Transformer Oil		2400 V / 480 V	Transformer	Unknown	Leak/Rupture	-----	""		
V-501-East	P/5 Desalter V-501 50 KVA	Transformer Oil		575 V	Rectifier	Unknown	Leak/Rupture	-----	""		
V-501-Center	P/5 Desalter V-501 50 KVA	Transformer Oil		575 V	Rectifier	Unknown	Leak/Rupture	-----	""		
V-501-West	P/5 Desalter V-501 50 KVA	Transformer Oil		575 V	Rectifier	Unknown	Leak/Rupture	-----	""		
V-502-East	P/5 Desalter V-502 50 KVA	Transformer Oil		575 V	Rectifier	Unknown	Leak/Rupture	-----	""		
V-502 Center	P/5 Desalter V-502 50 KVA	Transformer Oil		575 V	Rectifier	Unknown	Leak/Rupture	-----	""		
V-502 West	P/5 Desalter V-502 50 KVA	Transformer Oil		575 V	Rectifier	Unknown	Leak/Rupture	-----	""		

POTENTIAL SPILL SOURCES AND CONTAINER IDENTIFICATION
(Any container that stores oil)

Equipment I.D.	(Location) Service & Size	Substance Stored *(Oil & Haz. Substance)*	Average Quantity Stored *(Gallons)*	VOLTAGE	Equipment Type *(i.e. transformer, oil-filled equipment, etc.)*	Year Built	Potential Failure	Rate of Flow	Failure / Cause *(Record cause and date of any Tank failure which has resulted in a loss of tank contents)*	Direction of Flow	Secondary Containment Capacity
OPERATIONAL EQUIPMENT - TOLEDO REFINERY (Cont'd)											
#1 Tank Farm (T&S)											
E-59	#29 Spheroid 300 KVA	Transformer Oil	(b) (7)(F), (b) (3)	2400 V / 600 V	Transformer	Unknown	Leak/Rupture	-----	Section 9-4 contains loss history for previous 3 years.	Primary drainage is to OBS	(b) (7)(F), (b) (3)
E-58	C-419 150 KVA	Transformer Oil		2400 V / 600 V	Transformer	Unknown	Leak/Rupture	-----	""		
Butane Pump SR	Butane Pumps 225 KVA	Transformer Oil		2400 V / 600 V	Transformer	Unknown	Leak/Rupture	-----	""		
SW #1	#29 Spheroid Switch 5 KVA	Transformer Oil		2400 V	Electrical Switch	Unknown	Leak/Rupture	-----	""		
SW #2	#29 Spheroid Switch 5 KVA	Transformer Oil		2400 V	Electrical Switch	Unknown	Leak/Rupture	-----	""		
SW #3	#29 Spheroid Switch 5 KVA	Transformer Oil		2400 V	Electrical Switch	Unknown	Leak/Rupture	-----	""		
15 PH (MCC)	575 #15 PH (MCC) 225 KVA	Transformer Oil		2400 V / 575 V	Transformer	Unknown	Leak/Rupture	-----	""		

POTENTIAL SPILL SOURCES AND CONTAINER IDENTIFICATION (Any container that stores oil)											
Equipment I.D.	**(Location) Service & Size**	**Substance Stored** *(Oil & Haz. Substance)*	**Average Quantity Stored** *(Gallons)*	**VOLTAGE**	**Equipment Type** *(i.e. transformer, oil-filled equipment, etc.)*	**Year Built**	**Potential Failure**	**Rate of Flow**	**Failure / Cause** *(Record cause and date of any Tank failure which has resulted in a loss of tank contents)*	**Direction of Flow**	**Secondary Containment Capacity**
OPERATIONAL EQUIPMENT - TOLEDO REFINERY (Cont'd)											
#1 Tank Farm (T&S) Continued											
#18 Switch	Switch for #18 Transformer 5 KVA	Transformer Oil	(b) (7)(F), (b) (3)	2400 V	Switch	Unknown	Leak/Rupture	-----	Section 9-4 contains loss history for previous 3 years.	Primary drainage is to OBS	(b) (7)(F), (b) (3)
BP-SR-1	Butane Pumps Switchrack 225 KVA	Transformer Oil		2400 V / 600 V	Transformer	Unknown	Leak/Rupture	-----	""		
E-5	East of #29 Spheroid 300 KVA	Transformer Oil		2400 V / 600 V	Transformer	Unknown	Leak/Rupture	-----	""		

POTENTIAL SPILL SOURCES AND CONTAINER IDENTIFICATION
(Any container that stores oil)

Equipment I.D.	(Location) Service & Size	Substance Stored *(Oil & Haz. Substance)*	Average Quantity Stored *(Gallons)*	VOLTAGE	Equipment Type *(i.e. transformer, oil-filled equipment, etc.)*	Year Built	Potential Failure	Rate of Flow	Failure / Cause *(Record cause and date of any Tank failure which has resulted in a loss of tank contents)*	Direction of Flow	Secondary Containment Capacity
OPERATIONAL EQUIPMENT - TOLEDO REFINERY (Cont'd)											
LSG (SS-95-01 New) (Have built-in containment area)											
TR-501	C-9501 1500 KVA	Transformer Oil	(b) (7)(F), (b) (3)	12.4 KV / 4160 V	Transformer	Unknown	Leak/Rupture	-----	Section 9-4 contains loss history for previous 3 years.	Built-in containment area	(b) (7)(F), (b) (3)
TR-201-B	LSG (SS-95-01) 2500 KVA	Transformer Oil		12.4 KV / 2400 V	Transformer	Unknown	Leak/Rupture	-----	"		
TR-201-A	LSG (SS-95-01) 2500 KVA	Transformer Oil		12.4 KV / 2400 V	Transformer	Unknown	Leak/Rupture	-----	"		
TR-401-A	LSG (SS-95-01) 2500 KVA	Transformer Oil		12.4 KV / 480 V	Transformer	Unknown	Leak/Rupture	-----	"		
TR-401-B	LSG (SS-95-01) 2500 KVA	Transformer Oil		12.4 KV / 480 V	Transformer	Unknown	Leak/Rupture	-----	"		
#1 Substation											
J-37	2400 (South) 3750 KVA	Transformer Oil		12.4 KV / 2400 V	Transformer	Unknown	Leak/Rupture	-----	Section 9-4 contains loss history for previous 3 years.	Primary drainage is to OBS	
J-36	2400 (North) 2500 KVA	Transformer Oil		12.4 KV / 2400 V	Transformer	Unknown	Leak/Rupture	-----	"		
J-39	600 (South) 1500 KVA	Transformer Oil		12.4 KV / 600 V	Transformer	Unknown	Leak/Rupture	-----	"		
J-38	600(North) 3750 KVA	Transformer Oil		12.4 KV / 600 V	Transformer	Unknown	Leak/Rupture	-----	"		

POTENTIAL SPILL SOURCES AND CONTAINER IDENTIFICATION
(Any container that stores oil)

Equipment I.D.	(Location) Service & Size	Substance Stored *(Oil & Haz. Substance)*	Average Quantity Stored *(Gallons)*	VOLTAGE	Equipment Type *(i.e. transformer, oil-filled equipment, etc.)*	Year Built	Potential Failure	Rate of Flow	Failure / Cause *(Record cause and date of any Tank failure which has resulted in a loss of tank contents)*	Direction of Flow	Secondary Containment Capacity
OPERATIONAL EQUIPMENT - TOLEDO REFINERY (Cont'd)											
Sales											
#43	480 V (Sales) 500 KVA	Transformer Oil	(b) (7)(F), (b) (3)	12.4 KV/ 480 V	Transformer	Unknown	Leak/Rupture	-----	Section 9-4 contains loss history for previous 3 years.		(b) (7)(F), (b) (3)
#44	600 V (Sales) 500 KVA	Transformer Oil		12.4 KV / 600 V	Transformer	Unknown	Leak/Rupture	-----	"		
Lab											
L-44	LAB 300 KVA	Transformer Oil		2400 V / 208 V	Transformer	Unknown	Leak/Rupture	-----	Section 9-4 contains loss history for previous 3 years.		
L-45	LAB 225 KVA	Transformer Oil		2400 V / 550 V	Transformer	Unknown	Leak/Rupture	-----	"		
Plant 3 Area (Switch Room)											
#69 (N-52)	P/3 Cooling Pumps 1000	Transformer Oil		2400 V / 600 V	Transformer	Unknown	Leak/Rupture	-----	"		
43	Fire Water Pumps 225	Transformer Oil		2400 V / 600 V	Transformer	Unknown	Leak/Rupture	-----	"		
#70 (N-56)	P/3 Cooling Tower Fans 500	Transformer Oil		2400 V / 600 V	Transformer	Unknown	Leak/Rupture	-----	"		

POTENTIAL SPILL SOURCES AND CONTAINER IDENTIFICATION
(Any container that stores oil)

Equipment I.D.	(Location) Service & Size	Substance Stored *(Oil & Haz. Substance)*	Average Quantity Stored *(Gallons)*	VOLTAGE	Equipment Type *(i.e. transformer, oil-filled equipment, etc.)*	Year Built	Potential Failure	Rate of Flow	Failure / Cause *(Record cause and date of any Tank failure which has resulted in a loss of tank contents)*	Direction of Flow	Secondary Containment Capacity
OPERATIONAL EQUIPMENT - TOLEDO REFINERY (Cont'd)											
Plant 3 Area (Switch Room) Continued											
Bus Tie	P/3 Switch Room 5 K	Transformer Oil	(b) (7)(F), (b) (3)	2400 V Switch	Switch	Unknown	Leak/Rupture	-----	Section 9-4 contains loss history for previous 3 years.		(b) (7)(F), (b) (3)
H-311	Feed to H-311 5 K	Transformer Oil		2400 V Switch	Switch	Unknown	Leak/Rupture	-----	"		
Feed From #1 Sub	New Feed from #1 Sub 5 K	Transformer Oil		2400 V Switch	Switch	Unknown	Leak/Rupture	-----	"		
Maintenance Buildings and Offices											
P-65	Maintenance Shop 1000 KVA	Transformer Oil		12.4 KV / 2400 V	Transformer	Unknown	Leak/Rupture	-----	"		
P-66	E/I Shop 112.5 KVA	Transformer Oil		2400 V / 208 V	Transformer	Unknown	Leak/Rupture	-----	"		
P-67	Main Office 1000 KVA	Transformer Oil		12.4 KV / 600 V	Transformer	Unknown	Leak/Rupture	-----	"		

POTENTIAL SPILL SOURCES AND CONTAINER IDENTIFICATION
(Any container that stores oil)

Equipment I.D.	(Location) Service & Size	Substance Stored *(Oil & Haz. Substance)*	Average Quantity Stored *(Gallons)*	VOLTAGE	Equipment Type *(i.e. transformer, oil-filled equipment, etc.)*	Year Built	Potential Failure	Rate of Flow	Failure / Cause *(Record cause and date of any Tank failure which has resulted in a loss of tank contents)*	Direction of Flow	Secondary Containment Capacity
OPERATIONAL EQUIPMENT - TOLEDO REFINERY (Cont'd)											
Plant #9 (Oil Filled Electrical Contactors (Starters)											
MS-9001-D	West of P/9 Water Cooler	Transformer Oil	(b) (7)(F), (b) (3)	2300 V	General Electric Motor Starter	Unknown	Leak/Rupture	-----	Section 9-4 contains loss history for previous 3 years.		(b) (7)(F), (b) (3)
MS-9001-E	West of P/9 Water Cooler	Transformer Oil		2300 V	General Electric Motor Starter	Unknown	Leak/Rupture	-----	""		
MS-9001-F	West of P/9 Water Cooler	Transformer Oil		2300 V	General Electric Motor Starter	Unknown	Leak/Rupture	-----	"		
MS-9301-B	SR-9207 A & B	Transformer Oil		2300 V	General Electric Motor Starter	Unknown	Leak/Rupture	-----	""		
MS-9263-F	SR-9207 A & B	Transformer Oil		2300 V	General Electric Motor Starter	Unknown	Leak/Rupture	-----	""		
MS-9257-B	SR-9207 A & B	Transformer Oil		2300 V	General Electric Motor Starter	Unknown	Leak/Rupture	-----	""		
MS-9301-A	SR-9207 A & B	Transformer Oil		2300 V	General Electric Motor Starter	Unknown	Leak/Rupture	-----	""		

POTENTIAL SPILL SOURCES AND CONTAINER IDENTIFICATION
(Any container that stores oil)

Equipment I.D.	(Location) Service & Size	Substance Stored *(Oil & Haz. Substance)*	Average Quantity Stored *(Gallons)*	VOLTAGE	Equipment Type *(i.e. transformer, oil-filled equipment, etc.)*	Year Built	Potential Failure	Rate of Flow	Failure / Cause *(Record cause and date of any Tank failure which has resulted in a loss of tank contents)*	Direction of Flow	Secondary Containment Capacity
OPERATIONAL EQUIPMENT - TOLEDO REFINERY (Cont'd)											
Plant #9 (Oil Filled Electrical Contactors (Starters) Continued											
MS-9302	SR-9207 A&B	Transformer Oil	(b) (7)(F), (b) (3)	2300 V	General Electric Motor Starter	Unknown	Leak/Rupture	-----	Section 9-4 contains loss history for previous 3 years.		(b) (7)(F), (b) (3)
MS-9265-B	SR-9207 A&B	Transformer Oil		2300 V	General Electric Motor Starter	Unknown	Leak/Rupture	-----	""		
MS-9116-B	SR-9206 A&B	Transformer Oil		2300 V	General Electric Motor Starter	Unknown	Leak/Rupture	-----	"		
MS-9104-B	SR-9206 A&B	Transformer Oil		2300 V	GE Limitamp Motor Starter	Unknown	Leak/Rupture	-----	""		
MS-91-07B	SR-9206 A&B	Transformer Oil		2300 V	GE Limitamp Motor Starter	Unknown	Leak/Rupture	-----	""		
MS-91-08B	SR-9206 A&B	Transformer Oil		2300 V	GE Limitamp Motor Starter	Unknown	Leak/Rupture	-----	""		
MS-9104-A	SR-9206 A&B	Transformer Oil		2300 V	GE Limitamp Motor Starter	Unknown	Leak/Rupture	-----	""		

POTENTIAL SPILL SOURCES AND CONTAINER IDENTIFICATION
(*Any container that stores oil*)

Source I.D.	Substance Held *(Oil & Haz. Substance)*	Average Quantity *(Gallons)*	Maximum Capacity *(Gallons)*	Source Type *(i.e. piping, separation equipment, etc.)*	Potential Failure	Rate of Flow	Direction of Flow	Secondary Containment Capacity
OTHER POTENTIAL SPILL SOURCES								
Piping	Various Hydrocarbons	(b) (7)(F), (b) (3)		Pipes/Valves/Fittings	Maintenance	Varies	Primary drainage is to OBS	(b) (7)(F), (b) (3)
Pumps	Various Hydrocarbons			Pump	Maintenance	Varies		
Loading Racks	Various Hydrocarbons			Tank Truck/ Tank Car	Overfill/Drips	Varies		
Plant 2 #1 932	Lube Oil			Drum Containment Shed	Leak/Rupture	-----		
Plant 2 #2 1058	Lube Oil			Drum Containment Shed	Leak/Rupture	-----		
Plant 4 #1 932	Lube Oil			Drum Storage Area	Leak/Rupture	-----		
Plant 4 #2 932	Lube Oil			Drum Storage Area	Leak/Rupture	-----		
Plant 6 OLB 1	Lube Oil			Drum Storage Area	Leak/Rupture	-----		
Plant 6 OLB 2	Lube Oil			Drum Storage Area	Leak/Rupture	-----		
Plant 6 OLB 3	Lube Oil			Drum Storage Area	Leak/Rupture	-----		
Plant 6 OLB 4	Lube Oil			Drum Storage Area	Leak/Rupture	-----		
Plant 6 OLB 5	Lube Oil			Drum Storage Area	Leak/Rupture	-----		
Plant 8-3 #1	Lube Oil			Drum Storage Area	Leak/Rupture	-----		
TK 8307	Lube Oil			Fixed Roof	Leak/Rupture	-----		
TK 8305	Lube/Turbine Oil			Fixed Roof	Leak/Rupture	-----		
Plant 9 OLB 1	Lube Oil			Drum Storage Area	Leak/Rupture	-----		
Plant 9 OLB 2	Lube Oil			Drum Storage Area	Leak/Rupture	-----		
Plant 9 OLB 3	Lube Oil			Drum Storage Area	Leak/Rupture	-----		

POTENTIAL SPILL SOURCES AND CONTAINER IDENTIFICATION
(*Any container that stores oil*)

Source I.D.	Substance Held *(Oil & Haz. Substance)*	Average Quantity *(Gallons)*	Maximum Capacity *(Gallons)*	Source Type *(i.e. piping, separation equipment, etc.)*	Potential Failure	Rate of Flow	Direction of Flow	Secondary Containment Capacity
OTHER POTENTIAL SPILL SOURCES (Cont'd)								
Plant 9 OLB 4	Lube Oil	(b) (7)(F), (b) (3)		Drum Storage Area	Leak/Rupture	-----	Primary drainage is to OBS	(b) (7)(F), (b) (3)
Plant 9 OLB 5	Lube Oil			Reservoir	Leak/Rupture	-----		
Plant 9 OLB 6	Lube Oil			Reservoir	Leak/Rupture	-----		
Plant 9 OLB 7	Lube Oil			Drum Storage Area	Leak/Rupture	-----		
Plant 9 OLB 8	Lube Oil			Drum Storage Area	Leak/Rupture	-----		
Plant 9 OLB 9	Lube Oil			Drum Storage Area	Leak/Rupture	-----		
Plant 9 OLB 10	Lube Oil			Tank	Leak/Rupture	-----		
Plant 9 OLB 11	Lube Oil			Drum Storage Area	Leak/Rupture	-----		
Plant 9 OLB 12	Lube Oil			Drum Storage Area	Leak/Rupture	-----		

HAZARD IDENTIFICATION TANKS COMPLETELY BURIED TANKS									
Container I.D.	**Unit Area**	**Substance Stored** *(Oil & Haz. Substance)*	**Maximum Capacity** *(Gallons)*	**Container Type** *(i.e. completely, partially buried)*	**Year Built**	**Potential Failure** *(Leak/Overflow)*	**Rate of Flow**	**Failure / Cause** *(Record cause and date of any Tank failure which has resulted in a loss of tank contents)*	**Direction of Flow**
REFINERY COMPLETELY AND PARTIALLY BURIED OR BUNKERED TANKS									
1	Refinery Garage	Gasoline	(b) (7)(F), (b) (3)	UST - Fiberglass	1980	Leak	---	*Section 9-4 contains loss history for previous 3 years.*	N/A
2	Refinery Garage	Gasoline		UST - Fiberglass	1980	Leak	---	""	N/A
3	Refinery Garage	Diesel Fuel		UST - Fiberglass	1980	Leak	---	""	N/A

APPENDIX L

DISCHARGE DETECTION SYSTEMS AND FACILITY SELF INSPECTIONS

Page

Discharge Detection L-2

General
Detection by Personnel
Automated Detection Systems

Security L-4

Discharge Detection

The Facility has a discharge detection program which consists of both manual (personnel) and automated detection systems. The Facility maintains the following documents which are related to Discharge Detection:

- Spill Prevention, Control, and Countermeasures (SPCC) Plan
- Emergency Procedures Manual

General

(b) (7)(F), (b) (3)



The following is a summary of the instructions and procedures as detailed in the above listed documents.

Detection by Personnel

- Daily Visual Inspections (including tanks, secondary containment, aboveground piping, etc.) during operating personnel rounds. Refer to Appendix G for sample Tank Inspection and Secondary Containment Inspection Checklists.
- Monthly inspection of tank gauges and cathodic protection readings.

Discharge Detection (Cont'd)

Detection by Personnel (Cont'd)

- The entire facility is adequately illuminated to provide security and safe operations at night.
- In the event of a spill at this Facility, refer to the notification information in Section 2.0 and the response information in Section 3.0 of this Plan.

Automated Detection Systems

- The tanks are equipped with high level alarms.

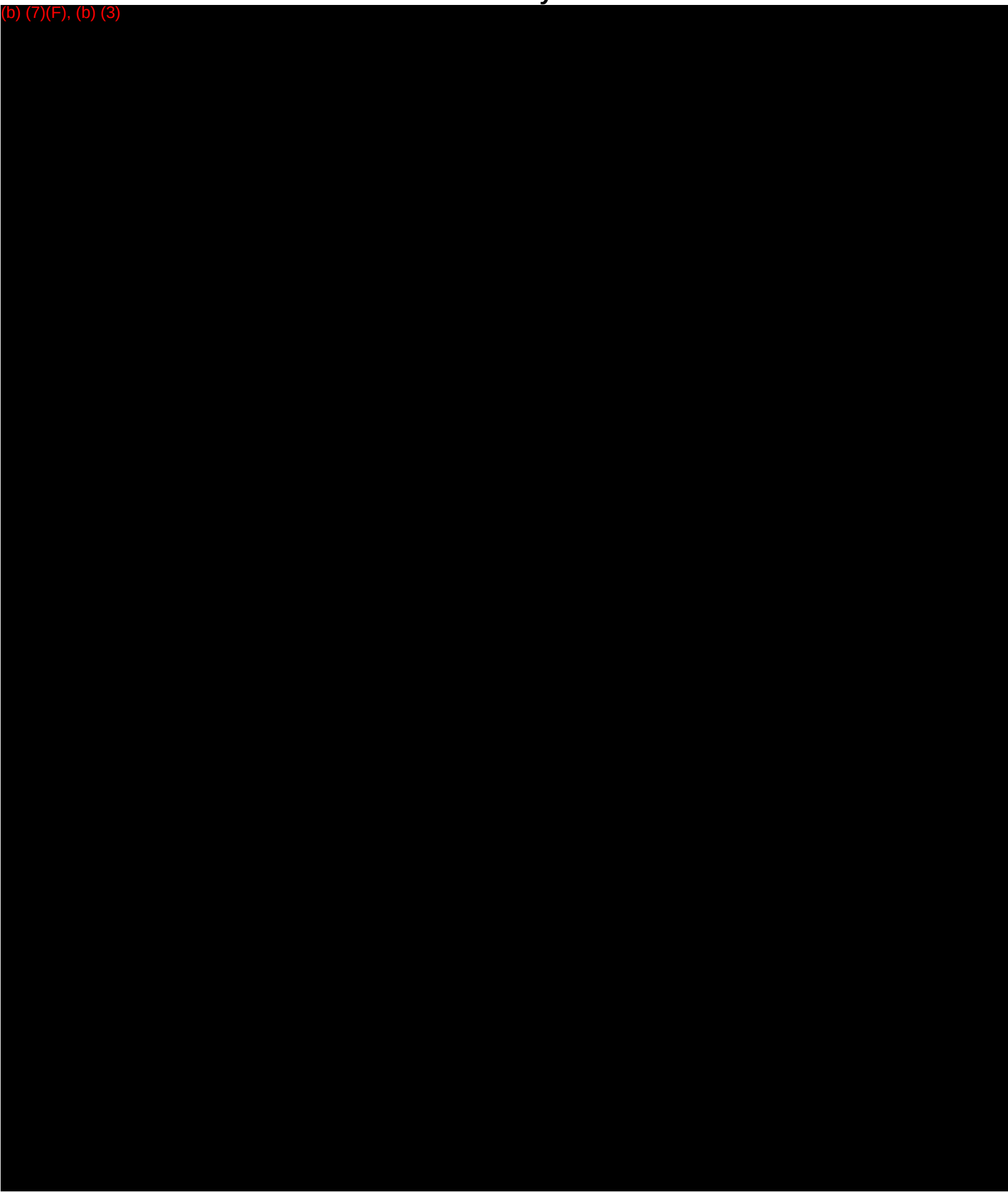
Aerial Observations

- Visual observation for distressed vegetation indicating discharge is conducted every two weeks by over-flying the pipeline.

Public Awareness and Reporting

- Newsletters are distributed to residents of property surrounding the pipeline. The residents are asked to report any odors or evidence of discharge, and provided with contact telephone numbers.

Security



APPENDIX M

NATIONAL RESPONSE SYSTEM

Page

National Contingency Plan (NCP) M-2

National Response Team (NRT) M-2

National Response Center (NRC) M-5

Regional Response Team (RRT) M-5

On-Scene Coordinators (OSC) M-6

National Strike Force (NSF) M-7

LIST OF FIGURES

Figure M-1.1 National Response System Organization M-3

Figure M-1.2 Federal Representation on National Response Team M-4

Figure M-1.3 U.S. Environmental Protection Agency (EPA) Regional Offices M-8

Figure M-1.4 U.S. Coast Guard (USCG) Districts M-9

NATIONAL RESPONSE SYSTEM

National Contingency Plan

In 1968, the National Oil and Hazardous Substance Pollution Contingency Plan (NCP) was established to coordinate Federal activities for preventing oil spills and mitigating environmental damages when spills occur. During June 1970, this plan was incorporated as part of the Code of Federal Regulations and applied to all navigable waters and adjoining shorelines of the United States. The plan was recently modified (September 1994) to implement changes made to the Clean Water Act by the Oil Pollution Act of 1990.

To ensure adequate preplanning and provisions for responding to oil spills, the National Contingency Plan established the National Response Center, the National Response Team, the Regional Response Center, Regional Response Teams and the On-Scene Coordinator (Figure M1.1).

National Response Team (NRT)

National planning and coordination for oil spill response is the responsibility of the National Response Team (NRT). The NRT is responsible for evaluating methods for responding to oil spills and hazardous substances spills, and recommending changes to the National Contingency Plan. The NRT also develops procedures to coordinate activities for federal, state and local governments, and private response organizations.

The NRT consists of representatives from each of the agencies shown in Figure J1.2. Normally, the NRT is chaired by the EPA representative while the USCG representative serves as the vice-chairman. If it is activated for spills within the coastal zone of the United States, the USCG representative will hold the chair.

The NRT can be activated when an oil spill exceeds the capability of the Regional Response Team in which it occurs, crosses national boundaries, or presents a significant threat to a population, national policy, property, or national resources; or when requested by any NRT member.

Once activated, the NRT may:

1. Monitor the spill, evaluate reports from the On-Scene Coordinator (OSC), and recommend appropriate actions for abating the spill.

2. Request oil spill response resources from federal, state, and local governments or private agencies.

3. Coordinate the supply of equipment, personnel, or technical advice to the affected region from other regions or districts.

FIGURE M-1.1

NATIONAL RESPONSE SYSTEM ORGANIZATION

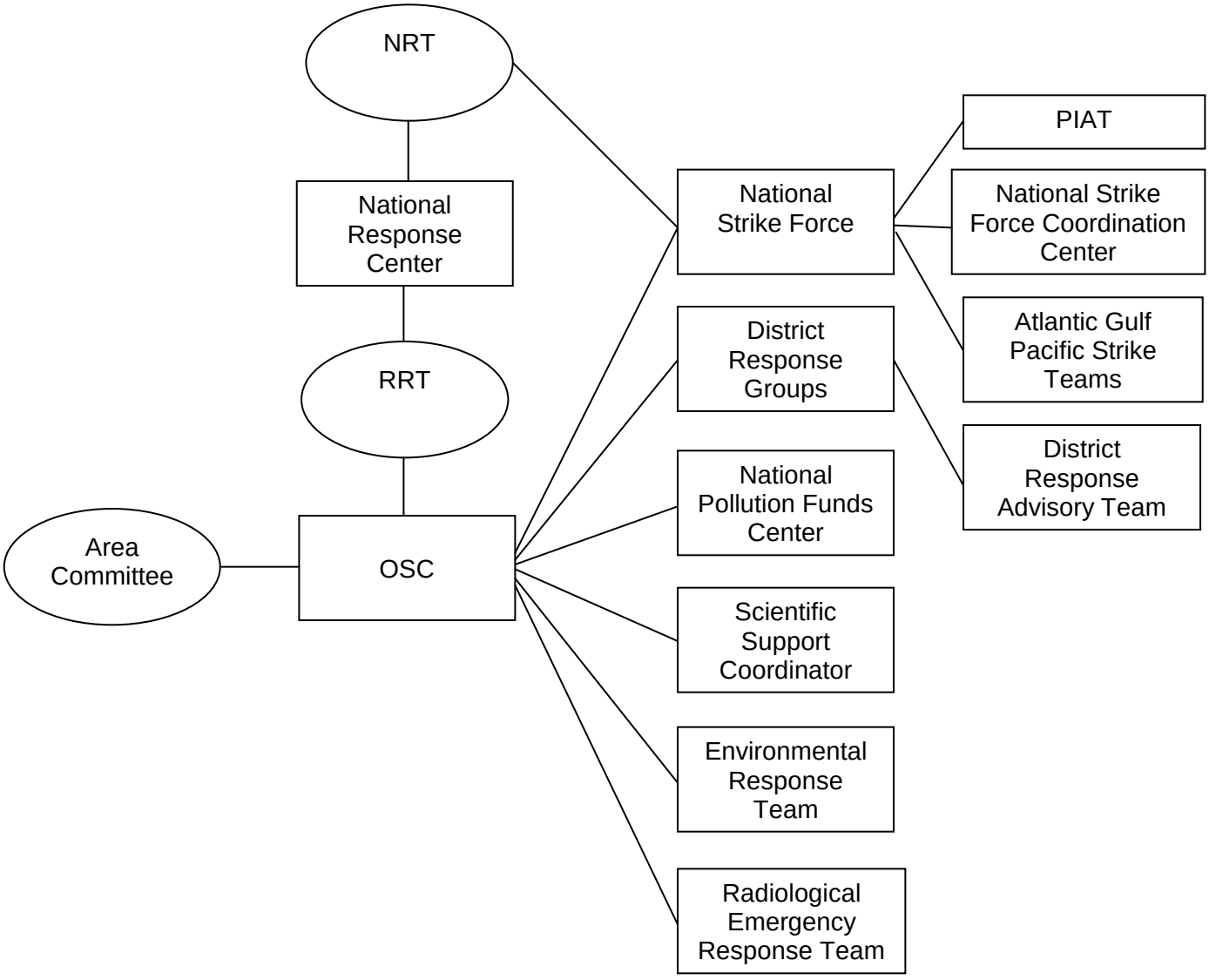
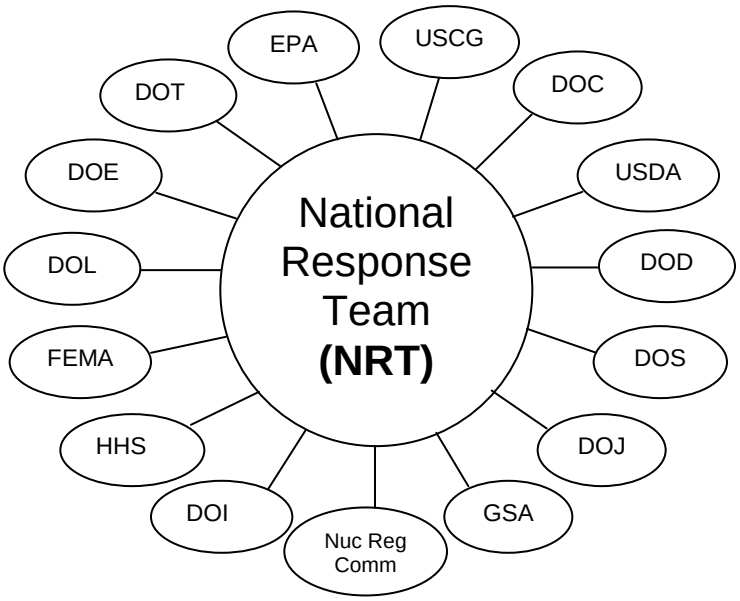


FIGURE M-1.2

FEDERAL REPRESENTATION ON NATIONAL RESPONSE TEAM



DOC	Department of Commerce Scientific expertise from NOAA for marine mammals & oil spill response	DOT	Department of Transportation Expertise on all modes of transporting oil & hazardous substances
DOD	Department of Defense Oil spill response equipment, ship salvage, and boarding & diving	EPA	Environmental Protection Agency Information on environmental impact of spills & provide scientific support coordination
DOE	Department of Energy Removal & disposal of radioactive contamination	FEMA	Federal Emergency Management Agency Coordinate civil emergency planning & mitigation efforts
DOH	Department of Health Assess health hazards associated with response operation & recommend steps for worker & public safety	GSA	General Services Administration Provides logistical and telecommunications support to federal agencies
DOI	Department of Interior Expertise on fish & wildlife	HHS	Department of Health and Human Services Assists with the assessment, preservation, and protection of human health and helps ensure the availability of essential human services
DOJ	Department of Justice Answer legal questions on spills & response actions	USCG	United States Coast Guard Establishes spill contingency planning requirements for vessels and facilities, and OSC responsibilities for wasteful zone
DOL	Department of Labor Expertise needed to minimize exposure to hazardous material during response operation	USDA	United States Department of Agriculture Input on the effect of soil contamination by hazardous and oil spills

National Response Center (NRC)

The National Response Center (NRC) receives and distributes reports regarding oil and hazardous substances spills. It is located at the USCG Headquarters in Washington, D.C., and can be contacted by dialing the phone number listed in Figure 2.5.

All oil spills must be reported to the National Response Center. If a direct report to the National Response Center is not practical, reports may be made to the USCG or EPA predesignated OSC for the geographic area where the spill occurs. If it is not possible to immediately notify the National Response Center or the predesignated OSC, reports may be made immediately to the nearest USCG unit provided that the spiller notifies the NRC as soon as possible. Once the NRC receives notification of a spill, it will promptly notify the appropriate OSC and authorize him to proceed with the appropriate response actions as outlined in the National Contingency Plan.

Regional Response Team (RRT)

The Regional Response Team (RRT) develops oil spill response contingency plans for specific regions of the United States. This team is staffed by representatives from the agencies shown in Figure M1.2 and may include representatives of local governments as agreed upon by the specific State in which the RRT is operative.

The RRT is jointly chaired by the EPA and USCG representatives. See Figures M1.3 and M1.4 for the EPA Regions and the USCG Districts respectively. When activated for inland spills, the EPA representative will be the chairperson. If activated for offshore spills, the USCG representative shall be the chairperson.

The RRT includes two (2) components: a standing team and an incident-specific team. The standing team:

1. reviews regional and local responses to various spills, recommends revisions to the National Contingency Plan, encourages state and local communities to improve their preparedness for oil spill response activities, and reviews actions performed by the On-Scene Coordinator.

2. performs advanced planning for dispersants, surface collection agents, burning agents, biological additives, or other chemical agents that are authorized by the National Contingency Plan.

The incident-specific response team can be activated if an oil spill exceeds the response capability available to the On-Scene Coordinator, if the spill crosses regional boundaries, or if a spill presents a substantial threat to human health and welfare, the environment, or significant amounts of property. It can be activated during a pollution emergency when requested by the Federal On-Scene Coordinator.

The incident-specific response team may:

1. monitor and evaluate reports from the On-Scene Coordinator and recommend specific actions for improving the response operation.

Regional Response Team (Cont'd)

2. request federal, state or local governments, or private organizations to provide resources for responding to the spill.

3. help the On-Scene Coordinator prepare information releases for the public.

4. recommend that a different OSC be designated for the response operation.

5. provide information that will assist the OSC to make timely and appropriate decisions for the response operations.

On-Scene Coordinators

On-Scene Coordinators (OSC) are predesignated by the U.S. Coast Guard or Environmental Protection Agency. The OSC collects pertinent facts about the spill, its source and cause, and the parties responsible for the spill. The OSC also determines the potential impact the spill could have on human health and welfare, and whether it presents a significant threat to the environment. In addition, the OSC establishes priorities for minimizing the impact of oil spills.

If the spiller assumes responsibility for the spill, the OSC will monitor the clean-up activity. Otherwise, the OSC will initiate the response operation and hire commercial contractors as required to clean up the spill as quickly as possible. If commercial resources are not available, the OSC will deploy federal resources. Reimbursement of any federal will be sought from the spiller expenditures after the response. Federal personnel and equipment can be obtained from the National Strike Force and the U.S. Navy.

When a spill report is received, the OSC will:

1. notify the Regional Response Team and National Response Center.

2. investigate the report to determine pertinent information such as the threat posed to public health and welfare, or the environment.

3 officially classify the size of the discharge and determine the course of action to be followed.

4. determine whether the spiller is properly carrying out the clean-up operation.

5. determine whether the State or local government has the capability to carry out response actions and if a contract or cooperative agreement has been established with the appropriate Fund Administrator for this purpose.

6. notify the Regional Response Team and the trustees of the affected natural resources in accordance with the applicable regional plan.

Within 60 days after a major oil spill, the OSC shall submit to the RRT a complete report on the response operation and the actions taken. A copy of this report will be submitted to the National Response Team. The format for this report is provided in the National Contingency Plan.

On-Scene Coordinators (Cont'd)

Each OSC is responsible for developing and updating Area Contingency Plans. Each plan should be a multi-agency effort involving all agencies that would have a role in the local response effort.

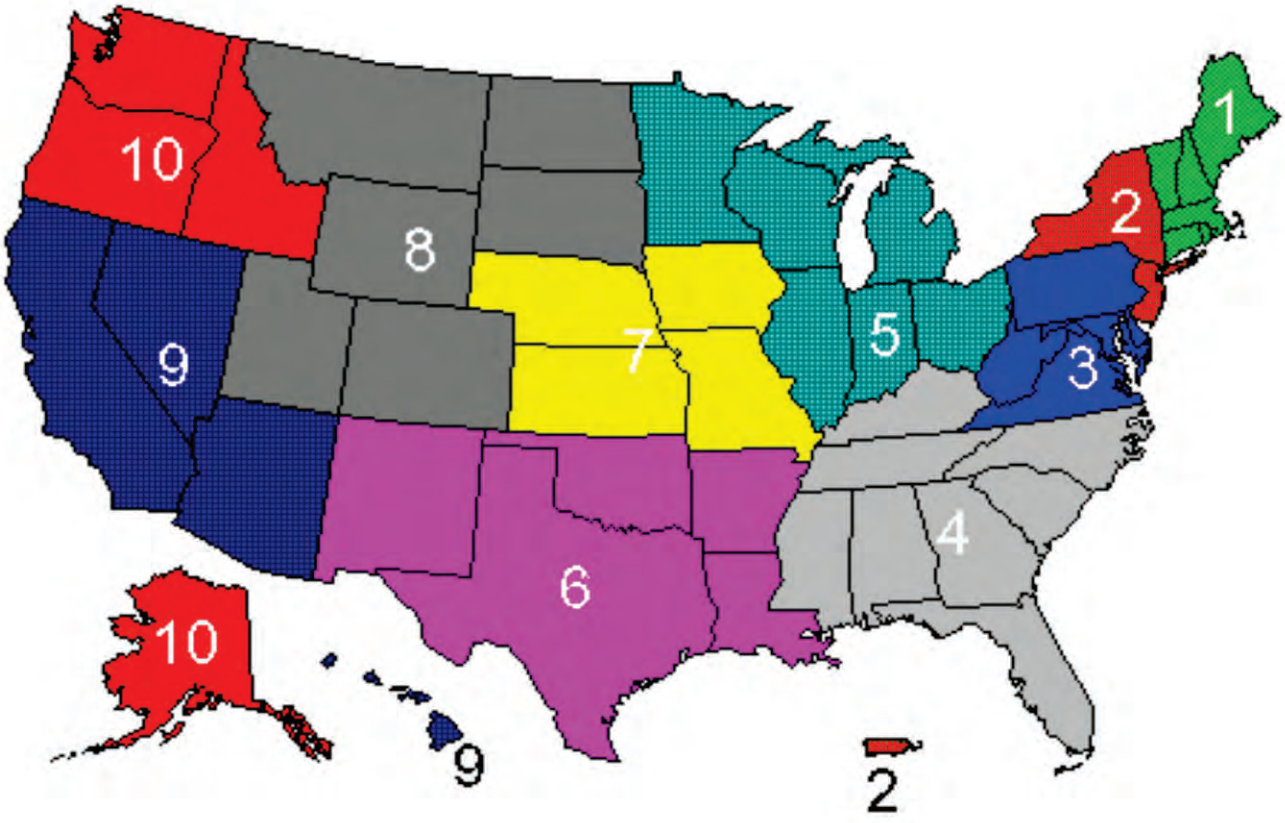
National Strike Force (NSF)

The National Strike Force (NSF) was formed in 1973 after the U.S. Coast Guard was charged with oversight and responsibilities for offshore oil spills under the Federal Water Pollution Control Act. The NSF consists of the Pacific, Gulf and the Atlantic Area Strike Teams. These teams provide experienced personnel and equipment necessary for assisting the OSC in responding to spills in U.S. waters.

The NSF is always on call and maintains a stock of specialized equipment for deployment anywhere in the nation and, in some cases, overseas. This equipment includes open water oil containment and recovery systems, high capacity pumps for transferring oil and chemicals, and protective clothing for working with hazardous materials. Most of this equipment is designed to fit into Coast Guard C-130 cargo planes or load onto flatbed trucks for fast response.

FIGURE M-1.3

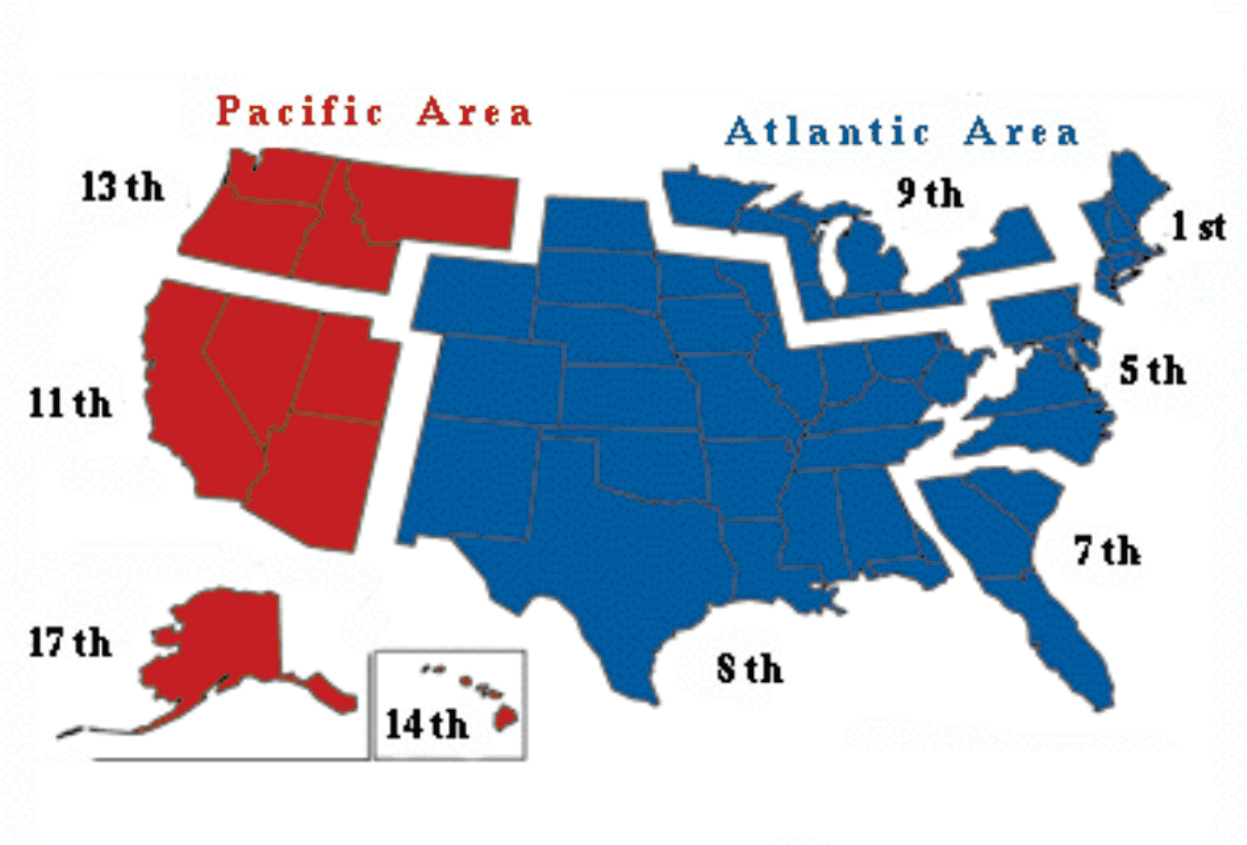
U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) REGIONAL OFFICES



EPA Region 1, Office John F. Kennedy Federal Bldg. Boston, MA 02203	EPA Region 2 Office 26 Federal Plaza New York, NY 10278	EPA Region 3 Office 1650 Arch Street Philadelphia, PA 19103-2029
EPA Region 4 Office 61 Forsythe, 11th Floor Atlanta, GA 30303	EPA Region 5 Office 77 West Jackson Blvd. Chicago, IL 60604	EPA Region 6 Office 1445 Ross Avenue Dallas, TX 75202
EPA Region 7 Office 726 Minnesota Avenue Kansas City, KS 66101	EPA Region 8 Office 999 18th Street Denver, CO 80202	EPA Region 9 Office Public Information Center 215 Fremont Street San Francisco, CA 94105
EPA Region 10 Office 1200 6th Avenue Seattle, WA 98101	U.S. EPA Office of Solid Waste 401 M Street SW Washington, DC 20460-5101	RCRA / Superfund Hotline (800) 424-9346 (in Washington, DC, (202) 879-2693)

FIGURE M-1.4

U.S. COAST GUARD (USCG) DISTRICTS



1st Coast Guard District Battery Park Building, Room 212 1st S. Street New York, NY 10004-5099 (212) 668-7114	11th Coast Guard District Coast Guard Island Building 51-1 Alameda, CA 94501-5100 (510) 437-3700
5th Coast Guard District Federal Building 431 Crawford Street Portsmouth, VA 23704-5004 (757) 398-6272	13th Coast Guard District 915 2nd Avenue, Suite #3352 Seattle, WA 98174-1067 (206) 220-7237
7th Coast Guard District Federal Building 909 S.E. 1st Ave., Room #954 Miami, FL 33131-3050 (305) 415-6683	14th Coast Guard District PJKK Federal Building 300 Ala Moana Blvd. Honolulu, HI 96850-4982 (808) 541-2121
8th Coast Guard District Hale Boggs Federal Building 501 Magazine Street New Orleans, LA 70130-3396 (504) 589-6198	17th Coast Guard District P.O. Box 25517 Juneau, AK 99802 (907) 463-2025
9th Coast Guard District 1240 E. 9th Street Cleveland, OH 44199-2060 (216) 902-6020	

* Note: These addresses may differ from those listed on the Distribution List.

APPENDIX N

GLOSSARY OF TERMS/ACRONYMS

PAGE

Glossary of Terms.....N-2

Acronyms N-11

GLOSSARY OF TERMS & ACRONYMS
GLOSSARY OF TERMS

This glossary contains definitions of terms that will be used frequently during the course of response operations.

Activate: The process of mobilizing personnel and/or equipment within the response organization to engage in response operations.

Activator: An individual in the response organization whose responsibilities include notifying other individuals or groups within the organization to mobilize personnel and/or equipment.

Adverse Weather: The weather conditions that will be considered when identifying response systems and equipment in a response plan for the applicable operating environment. Factors to consider include significant wave height, ice, temperature, weather - related visibility, and currents within the Captain of the Port (COTP) zone in which the systems or equipment are intended to function.

Agency Representative: Individual assigned to an incident from an agency who has been delegated full authority to make decisions on all matters affecting that agency's participation in response operations.

Area Committee: As defined by Sections 311(a)(18) and (j)(4) of CWA, as amended by OPA, means the entity appointed by the President consisting of members from Federal, State, and local agencies with responsibilities that include preparing an Area Contingency Plan for the area designated by the President. The Area Committee may include ex-officio (i.e., non-voting) members (e.g., industry and local interest groups).

Area Contingency Plan: As defined by Sections 311(a)(19) and (j)(4) of CWA, as amended by OPA, means the plan prepared by an Area Committee, that in conjunction with the NCP, shall address the removal of a discharge including a worst-case discharge and the mitigation or prevention of a substantial threat of such a discharge from a vessel, offshore facility, or onshore facility operating in or near an area designated by the President.

Average Most Probable Discharge: A discharge of the lesser of 50 barrels or 1% of the volume of the worst case discharge.

AWAY Team: A predesignated team from various departments in Houston, is responsible for arriving at the scene of an oil spill incident as soon as possible to provide both immediate and longer-term management of the field activities.

Barrel (bbl): Measure of space occupied by 42 U.S. gallons at 60 degrees Fahrenheit.

Bioremediation Agents: Means microbiological cultures, enzyme additives, or nutrient additives that are deliberately introduced into an oil discharge and that will significantly increase the rate of biodegradation to mitigate the effects of the discharge.

Boom: A piece of equipment or a strategy used to either contain free floating oil to a confined area or protect an uncontaminated area from intrusion by oil.

Booming Strategies: Strategic techniques which identify the location and quantity of boom required to protect certain areas. These techniques are generated by identifying a potential spill source and assuming certain conditions which would affect spill movement on water.

Bulk: Material that is stored or transported in a loose, unpackaged liquid, powder, or granular form capable of being conveyed by a pipe, bucket, chute, or belt system.

Captain of the Port Zone (COTP): Means a zone specified in 33 CFR and the seaward extension of that zone to the outer boundary of the exclusive economic zone (EEZ).

Chemical Agents: Means those elements, compounds, or mixtures that coagulate, disperse, dissolve, emulsify, foam, neutralize, precipitate, reduce, solubilize, oxidize, concentrate, congeal, entrap, fix, make the pollutant mass more rigid or viscous, or otherwise facilitate the mitigation of deleterious effects or the removal of the oil pollutant from the water. Chemical agents include biological additives, dispersants, sinking agents, miscellaneous oil spill control agents, and burning agents, but do not include solvents.

Clean-up Contractor: Persons contracted to undertake a response action to clean up a spill.

Cleanup: For the purposes of this document, cleanup refers to the removal and/or treatment of oil, hazardous substances, and/or the waste or contaminated materials generated by the incident. Cleanup includes restoration of the site and its natural resources.

Coastal Waters: For the purpose of classifying the size of discharges, means the waters of the coastal zone except for the Great Lakes and specified ports and harbors on inland rivers.

Coastal Zone: As defined for the purpose of the NCP, means all United States waters subject to the

GLOSSARY OF TERMS & ACRONYMS
GLOSSARY OF TERMS (Cont'd)

tide, United States waters of the Great Lakes, specified ports and harbors on inland rivers, waters of the contiguous zone, other waters of the high seas subject to the NCP, and the land surface or land substrata, ground waters, and ambient air proximal to those waters. The term coastal zone delineates an area of federal responsibility for response action. Precise boundaries are determined by EPA/USCG agreements and identified in federal regional contingency plans.

Coast Guard District Response Ground (DRG): As provided for by CWA sections 311(a)(20) and (j)(3), means the entity established by the Secretary of the department in which the USCG is operating within each USCG district and shall consist of: the combined USCG personnel and equipment, including firefighting equipment, of each port within the district; additional prepositioned response equipment; and a district response advisory team.

Command: The act of controlling manpower and equipment resources by virtue of explicit or delegated authority.

Command Post: A site located at a safe distance form the spill site where response decisions are made, equipment and manpower deployed, and communications handled. The Incident Commander and the On-Scene Coordinators may direct the on-scene response from this location.

Communications Equipment: Equipment that will be utilized during response operations to maintain communication between the Company employees, contractors, Federal/State/Local agencies. (Radio/ telephone equipment and links)

Containment Boom: A flotation/freeboard device, made with a skirt/curtain, longitudinal strength member, and ballast unit/weight designed to entrap and contain the product for recovery.

Contingency Plan: A document used by (1) federal, state, and local agencies to guide their planning and response procedures regarding spills of oil, hazardous substances, or other emergencies; (2) a document used by industry as a response plan to spills of oil, hazardous substances, or other emergencies occurring upon their vessels or at their facilities.

Contract or Other Approved Means: For OPA 90, a written contract with a response contractor; certification by the facility owner or operator that personnel and equipment are owned, operated, or under the direct control of the facility, and available within the stipulated times; active membership in a local or regional oil spill removal organization; and/or the facility's own equipment.

Critical Areas to Monitor: Areas which if impacted by spilled oil may result in threats to public safety or health.

Cultural Resources: Current, historic, prehistoric and archaeological resources which include deposits, structures, ruins, sites, buildings, graves, artifacts, fossils, or other objects of antiquity which provide information pertaining to the historical or prehistorical culture of people in the state as well as to the natural history of the state.

Damage Assessment: The process of determining and measuring damages and injury to the human environment and natural resources, including cultural resources. Damages include differences between the conditions and use of natural resources and the human environment that would have occurred without the incident, and the conditions and use that ensued following the incident. Damage assessment includes planning for restoration and determining the costs of restoration.

Decontamination: The removal of hazardous substances from personnel and their equipment necessary to prevent adverse health effects.

Discharge: Any spilling, leaking, pumping, pouring, emitting, emptying, or dumping.

Dispersants: Means those chemical agents that emulsify, disperse, or solubilize oil into the water column or promote the surface spreading of oil slicks to facilitate dispersal of the oil into the water column.

Diversion Boom: A floatation/freeboard device, made with a skirt/curtain, longitudinal strength member, and ballast unit/weight designed to deflect or divert the product towards a pick up point, or away from certain areas.

Drinking Water Supply: As defined by Section 101(7) of CERCLA, means any raw or finished water source that is or may be used by a public water system (as defined in the Safe Drinking Water Act) or as drinking water by one or more individuals.

Economically Sensitive Areas: Those areas of explicit economic importance to the public that due to their proximity to potential spill sources may require special protection and include, but are not limited to: potable and industrial water intakes; locks and dams; and public and private marinas.

Emergency Service: Those activities provided by state and local government to prepare for and carry out any activity to prevent, minimize, respond to, or recover from an emergency.

Environmentally Sensitive Areas: Streams and water bodies, aquifer recharge zones, springs, wetlands, agricultural areas, bird rookeries, endangered or threatened species (flora and fauna) habitat, wildlife preserves or conservation areas,

GLOSSARY OF TERMS & ACRONYMS
GLOSSARY OF TERMS (Cont'd)

parks, beaches, dunes, or any other area protected or managed for its natural resource value.

Exclusive Economic Zone (EEZ): means the zone contiguous to the territorial sea of the United States extending to a distance up to 200 nautical miles from the baseline from which the breadth of the territorial sea is measured.

Facility: Either an onshore facility or an offshore facility and includes, but is not limited to structures, equipment, and appurtenances thereto, used or capable of being used to transfer oil to or from a vessel or a public vessel. A facility includes federal, state, municipal, and private facilities.

Facility Operator: The person who owns, operates, or is responsible for the operation of the facility.

Federal Fund: The spill liability trust fund established under OPA.

Federal Regional Response Team: The federal response organization (consisting of representatives from selected federal and state agencies) which acts as a regional body responsible for planning and preparedness before an oil spill occurs and providing advice to the FOSC in the event of a major or substantial spill.

Federal Response Plan (FRP): Means the agreement signed by 25 federal departments and agencies in April 1987 and developed under the authorities of the Earthquake Hazards Reduction Act of 1977 and the Disaster Relief Act of 1974, as amended by the Stafford Disaster Relief Act of 1988.

First Responders, First Response Agency: A public health or safety agency (e.g., fire service or police department) charged with responding to a spill during the emergency phase and alleviating immediate danger to human life, health, safety, or property.

Handle: To transfer, transport, pump, treat, process, store, dispose of, drill for, or produce.

Harmful Quantity Of Oil: The presence of oil from an unauthorized discharge in a quantity sufficient either to create a visible film or sheen upon or discoloration of the surface of the water or a shoreline, tidal flat, beach, or marsh, or to cause a sludge or emulsion to be deposited beneath the surface of the water or on a shoreline, tidal flat, beach, or marsh.

Hazardous Material: Any nonradioactive solid, liquid, or gaseous substance which, when uncontrolled, may be harmful to humans, animals, or the environment. Including but not limited to substances otherwise defined as hazardous wastes, dangerous wastes, extremely hazardous wastes, oil, or pollutants.

Hazardous Substance: Any substance designed as such by the Administrator of the EPA pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act; regulated pursuant to Section 311 of the Federal Water Pollution Control Act, or discharged by the SERC.

Hazardous Waste: Any solid waste identified or listed as a hazardous waste by the Administrator of the EPA pursuant to the federal Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA), 42 U.S.C., Section 6901, et seq as amended. The EPA Administrator has identified the characteristics of hazardous wastes and listed certain wastes as hazardous in Title 40 of the Code of Federal Regulations, Part 261, Subparts C and D respectively.

HAZMAT: Hazardous materials or hazardous substances, exposure to which may result in adverse effects on health or safety of employees.

HAZWOPER: Hazardous Waste Operations and Emergency Response Regulations published by OSHA to cover worker safety and health aspects of response operations.

Heat Stress: Dangerous physical condition caused by over exposure to extremely high temperatures.

Hypothermia: Dangerous physical condition caused by over exposure to freezing temperatures.

Incident: Any event that results in a spill or release of oil or hazardous materials. Action by emergency service personnel may be required to prevent or minimize loss of life or damage to property and/or natural resources.

Incident Briefing Meeting: Held to develop a comprehensive, accurate, and up-to-date understanding of the incident, nature of status of control operations, and nature and status of response operations; ensure the adequacy of control and response operations; begin to organize control and response operations; and prepare for interactions with outside world.

Incident Command Post (ICP): That location at which all primary command functions are executed.

Incident Command System (ICS): The combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure, with responsibility for the management of assigned resources at an incident.

GLOSSARY OF TERMS & ACRONYMS
GLOSSARY OF TERMS (Cont'd)

Incident Commander (IC): The one individual in charge at any given time of an incident. The Incident Commander will be responsible for establishing a unified command with all on-scene coordinators.

Indian Tribe: As defined in OPA section 1001, means any Indian tribe, band, nation, or other organized group or community, but not including any Alaska Native regional or village corporation, which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians and has governmental authority over lands belonging to or controlled by the Tribe.

Initial Cleanup: Remedial action at a site to eliminate acute hazards associated with a spill. An initial clean-up action is implemented at a site when a spill of material is an actual or potentially imminent threat to public health or the environment, or difficulty of cleanup increases significantly without timely remedial action. All sites must be evaluated to determine whether initial cleanup is total cleanup, however, this will not be possible in all cases due to site conditions (i.e., a site where overland transport or flooding may occur).

Initial Notification: The process of notifying necessary the Company personnel and Federal/ State/Local agencies that a spill has occurred, including all pertinent available information surrounding the incident.

Initial Response Actions: The immediate actions that are to be taken by the spill observer after detection of a spill.

Inland Area means the area shoreward of the boundary lines defined in 46 CFR part 7, except that in the Gulf of Mexico, it means the area shoreward of the lines of demarcation (COLREG lines) as defined in §80.740 through 80.850 of this chapter. The inland area does not include the Great Lakes.

Inland Waters: State waters not considered coastal waters; lakes, rivers, ponds, streams, underground water, et. al.

Inland Zone: Means the environment inland of the coastal zone excluding the Great Lakes, and specified ports and harbors on inland rivers. The term inland zone delineates an area of federal responsibility for response action. Precise boundaries are determined by EPA/USCG agreements and identified in federal regional contingency plans.

Interim Storage Site: A site used to temporarily store recovered oil or oily waste until the recovered oil or oily waste is disposed of at a permanent disposal site. Interim storage sites include trucks, barges, and other vehicles, used to store waste until the transport begins.

Lead Agency: The government agency that assumes the lead for directing response activities.

Lead Federal Agency: The agency which coordinates the federal response to incident on navigable waters. The lead federal agencies are:

- **U.S. Coast Guard:** Oil and chemically hazardous materials incidents on navigable waters.
- **Environmental Protection Agency:** Oil and chemically hazardous materials incidents on inland waters.

Lead State Agency: The agency which coordinates state support to federal and/or local governments or assumes the lead in the absence of federal response.

Loading: Transfer from Facility to vehicle.

Local Emergency Planning Committee (LEPC): A group of local representatives appointed by the State Emergency Response Commission (SERC) to prepare a comprehensive emergency plan for the local emergency planning district, as required by the Emergency Planning and Community Right-to-know Act (EPCRA).

Local Response Team: Designated Facility individuals who will fulfill the roles determined in the oil spill response plan in the event of an oil or hazardous substance spill. They will supervise and control all response and clean-up operations.

Lower Explosive Limit: Air measurement utilized to determine the lowest concentration of vapors that support combustion. This measurement must be made prior to entry into a spill area.

Marinas: Small harbors with docks, services, etc. for pleasure craft.

Marine Transportation Related Facility (MTR Facility): means an on-shore facility, including piping and any structure used to transfer oil to or from a vessel, subject to regulation under 33 CFR Part 154 and any deepwater port subject to regulation under 33 CFR Part 150.

Maximum Extent Practicable: means the planning values derived from the planning criteria used to evaluate the response resources described in the Response Plan to provide on-water recovery capability and the shoreline protection and cleanup capability to conduct response activities for a worst case discharge from a facility in adverse weather.

Maximum Most Probable Discharge: means a discharge of lesser of 1,200 barrels or 10 percent of the volume of worst case discharge.

GLOSSARY OF TERMS & ACRONYMS
GLOSSARY OF TERMS (Cont'd)

Medium Discharge: Means a discharge greater than 2,100 gallons (50 Bbls) and less than or equal to 36,000 gallons (85+ Bbls) or 10% of the capacity of the largest tank, whichever is less and not to exceed the WCD.

National Contingency Plan: The plan prepared under the Federal Water Pollution Control Act (33 United State Code §1321 et seq) and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 United State Code § 9601 et seq), as revised from time to time.

National Pollution Funds Center (NPFC): Means the entity established by the Secretary of Transportation whose function is the administration of the Oil Spill Liability Trust Fund (OSLTF). Among the NPFC's duties are: providing appropriate access to the OSLTF for federal agencies and states for removal actions and for federal trustees to initiate the assessment of natural resource damages; providing appropriate access to the OSLTF for claims; and coordinating cost recovery efforts.

National Response System (NRS): Is the mechanism for coordinating response actions by all levels of government in support of the OSC. The NRS is composed of the NRT, RRTs, OSC, Area Committees, and Special Teams and related support entities.

National Strike Force (NSF): Is a special team established by the USCG, including the three USCG Strike Teams, the Public Information Assist Team (PIAT), and the National Strike Force Coordination Center. The NSF is available to assist OSCs in their preparedness and response duties.

National Strike Force Coordination Center (NSFCC): Authorized as the National Response Unit by CWA section 311(a)(23) and (j)(2), means the entity established by the Secretary of the department in which the USCG is operating at Elizabeth City, North Carolina, with responsibilities that include administration of the USCG Strike Teams, maintenance of response equipment inventories and logistic networks, and conducting a national exercise program.

Natural Resource: Land, fish, wildlife, biota, air, water, ground water, drinking water supplies, and other such resources belonging to, managed by, held in trust by, appertaining to or otherwise controlled by the state, federal government, private parties, or a municipality.

Navigable Waters: As defined by 40 CFR 110.1 means the waters of the United States, including the territorial seas. The term includes:

All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide;

Interstate waters, including interstate wetlands;

All other waters such as interstate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, and wetlands, the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters;

That are or could be used by interstate or foreign travelers for recreational or other purposes;

From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; and

That are used or could be used for industrial purposes by industries in interstate commerce.

All impoundments of waters otherwise defined as navigable waters under this section;

Tributaries of waters identified in paragraphs (a) through (d) of this definition, including adjacent wetlands; and

Wetlands adjacent to waters identified in paragraphs (a) through (e) of this definition: Provided, that waste treatment systems (other than cooling ponds meeting the criteria of this paragraph) are not waters of the United States.

Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act jurisdiction remains with EPA.

Nearshore Area: For OPA 90, the area extending seaward 12 miles from the boundary lines defined in 46 CFR Part 7, except in the Gulf of Mexico. In the Gulf of Mexico, it means the area extending seaward 12 miles from the line of demarcation defined in §80.740 - 80.850 of title 33 of the CFR.

Non-persistent or Group I Oil: A petroleum-based oil that, at the time of shipment, consists of hydrocarbon fractions:

1. At lease 50% of which by volume, distill at a temperature of 340 degrees C (645 degrees F);
2. At least 95% of which volume, distill at a temperature of 370 degrees C (700 degrees F).

Ocean: The open ocean, offshore area, and nearshore area as defined in this subpart.

Offshore area: The area up to 38 nautical miles

GLOSSARY OF TERMS & ACRONYMS
GLOSSARY OF TERMS (Cont'd)

seaward of the outer boundary of the nearshore area.

Oil or Oils: Naturally occurring liquid hydrocarbons at atmospheric temperature and pressure coming from the earth, including condensate and natural gasoline, and any fractionation thereof, including, but not limited to, crude oil, petroleum gasoline, fuel oil, diesel oil, oil sludge, oil refuse, and oil mixed with wastes other than dredged spoil. Oil does not include any substance listed in Table 302.4 of 40 CFR Part 302 adopted August 14, 1989, under Section 101(14) of the federal comprehensive environmental response, compensation, and liability act of 1980, as amended by P. L. 99-499.

Oil Spill Liability Trust Fund: Means the fund established under section 9509 of the Internal Revenue Code of 1986 (26 U.S.C. 9509).

Oil Spill Removal Organization: means an entity that provides response resources.

Oily Waste: Product contaminated waste resulting from a spill or spill response operations.

On-Scene Coordinator (OSC): Means the federal official predesignated by the EPA or the USCG to coordinate and direct response under subpart D.

On-site: Means the areal extent of contamination and all suitable areas in very close proximity to the contamination necessary for implementation of a response action.

Open Ocean: means the area from 38 nautical miles seaward of the outer boundary of the nearshore area, to the seaward boundary of the exclusive economic zone.

Owner or Operator: Any person, individual, partnership, corporation, association, governmental unit, or public or private organization of any character.

Persistent Oil: A petroleum-based oil that does not meet the distillation criteria for a non-persistent oil. For the purposes of this Appendix, persistent oils are further classified based on specific gravity as follows:

1. Group II specific gravity less than .85
2. Group III specific gravity between .85 and less than .95
3. Group IV specific gravity .95 and including 1.0
4. Group V specific gravity greater than 1.0

Plan Holder: The plan holder is the industry transportation related facility for which a response plan is required by federal regulation to be submitted by a vessel or facility's owner or operator.

Post Emergency Response: The portion of a response performed after the immediate threat of a release has been stabilized or eliminated and cleanup of the sites has begun.

Post Emergency: The phase of response operations conducted after the immediate threat of the release has been stabilized, and cleanup operations have begun.

Primary Response Contractors or Contractors: An individual, company, or cooperative that has contracted directly with the plan holder to provide equipment and/or personnel for the containment or cleanup of spilled oil.

Qualified Individual (QI): That person or entity who has authority to activate a spill cleanup contractors, act as liaison with the "On-Scene Coordinator" and obligate funds required to effectuate response activities.

Recreation Areas: Publicly accessible locations where social/sporting events take place.

Regional Response Team (RRT): The Federal response organization (consisting of representatives from selected Federal and State agencies) which acts as a regional body responsible for overall planning and preparedness for oil and hazardous materials releases and for providing advice to the OSC in the event of a major or substantial spill.

Remove or Removal: As defined by section 311(a)(8) of the CWA, refers to containment and removal of oil or hazardous substances from the water and shorelines or the taking of such other actions as may be necessary to minimize or mitigate damage to the public health or welfare (including, but not limited to, fish, shellfish, wildlife, public and private property, and shorelines and beaches) or to the environment. For the purpose of the NCP, the term also includes monitoring of action to remove discharge.

Response Activities: The containment and removal of oil from the water and shorelines, the temporary storage and disposal of recovered oil, or the taking of other actions as necessary to minimize or mitigate damage to public health or welfare, or the environment.

Response Contractors: Persons/companies contracted to undertake a response action to contain and/or clean up a spill.

Response Guidelines: Guidelines for initial response that are based on the type of product involved in the spill, these guidelines are utilized to determine clean-up methods and equipment.

Response Plan: A practical manual used by industry for responding to a spill. Its features include: (1) identifying the notifications sequence, responsibilities, response techniques, etc. in a easy to use format; (2) using decision trees, flowcharts, and checklists to insure the proper response for

GLOSSARY OF TERMS & ACRONYMS
GLOSSARY OF TERMS (Cont'd)

spills with varying characteristics; and (3) segregating information needed during the response from data required by regulatory agencies to prevent confusion during a spill incident.

Response Resources: All personnel and major items of equipment available, or potentially available, for assignment to incident tasks on which status is maintained.

Responsible Party: Any person, owner/operator, or facility that has control over an oil or hazardous substance immediately before entry of the oil or hazardous substance into the atmosphere or in or upon the water, surface, or subsurface land of the state.

Response Priorities: Mechanism used to maximize the effective use of manpower and equipment resources based upon their availability during an operational period.

Response Resources: All personnel and major items of equipment available, or potentially available, for assignment to incident tasks on which status is maintained.

Restoration: The actions involved in returning a site to its former condition.

Rivers and Canals: A body of water confined within the inland area that has a project depth of 12 feet or less, including the Intracoastal Waterway and other waterways artificially created for navigation.

Securing the Source: Steps that must be taken to stop discharge of oil at the source of the spill.

Sinking Agents: Means those additives applied to oil discharges to sink floating pollutants below the water surface.

Site Characterization: An evaluation of a cleanup site to determine the appropriate safety and health procedures needed to protect employees from identified hazards.

Site Conditions: Details of the area surrounding the facility, including shoreline descriptions, typical weather conditions, socioeconomic breakdowns, etc.

Site Safety and Health Plan: A site specific plan developed at the time of an incident that addresses:

- Safety and health hazard analysis for each operation.
- Personal protective equipment to be used.
- Training requirements for site workers.
- Medical surveillance requirements.
- Air monitoring requirements.
- Site control measures.
- Decontamination procedures.
- Emergency response procedures.
- Confined space entry procedures.

Site Security and Control: Steps that must be taken to provide safeguards needed to protect personnel and property, as well as the general public, to ensure an efficient clean-up operation.

Skimmers: Mechanical devices used to skim the surface of the water and recover floating oil. Skimmers fall into four basic categories (suction heads, floating weirs, oleophilic surface units, and hydrodynamic devices) which vary in efficiency depending on the type of oil and size of spill.

Snare Boom: Oil will adhere to the material of which this boom is made of and thus collect it.

Sorbents: Materials ranging from natural products to synthetic polymeric foams placed in confined areas to soak up small quantities of oil. Sorbents are very effective in protecting walkways, boat decks, working areas, and previously uncontaminated or cleaned areas.

Spill: An unauthorized discharge of oil or hazardous substance into the waters of the state.

Spill Observer: The first Facility individual who discovers a spill. This individual must function as the first responder and person-in-charge until relieved by an authorized supervisor.

Spill of National Significance (SONS): Means a spill which due to its severity, size, location, actual or potential impact on the public health and welfare or the environment, or the necessary response effort, is so complex that it requires extraordinary coordination of federal, state, local, and responsible party resources to contain and cleanup the discharge.

Spill Management Team: The personnel identified to staff the organizational structure identified in a response plan to manage response plan implementation.

Spill Response: All actions taken in responding to spills of oil and hazardous materials, e.g.: receiving and making notifications; information gathering and technical advisory phone calls; preparation for and travel to and from spill sites; direction of clean-up activities; damage assessments; report writing, enforcement investigations and actions; cost recovery; and program development.

Spill Response Personnel: Federal, state, local agency, and industry personnel responsible for participating in or otherwise involved in spill

response. All spill response personnel will be pre-approved on a list maintained in each region.

Staging Areas: Designated areas near the spill site accessible for gathering and deploying equipment and/or personnel.

State Emergency Response Commission (SERC): A group of officials appointed by the Governor to implement the provisions of Title III of the Federal Superfund Amendments and Re-authorization Act of 1986 (SARA). The SERC approves the State Oil and Hazardous Substance Discharge Prevention and Contingency Plan and Local Emergency Response Plans.

Surface Collecting Agents: Means those chemical agents that form a surface film to control the layer thickness of oil.

Surface Washing Agent: Is any product that removes oil from solid surfaces, such as beaches and rocks, through a detergency mechanism and does not involve dispersing or solubilizing the oil into the water column.

Tanker: A self-propelled tank vessel constructed or adapted primarily to carry or hazardous material in bulk in the cargo spaces.

Tidal Current Tables: Tables which contain the predicted times and heights of the high and low waters for each day of the year for designated areas.

Trajectory Analysis: Estimates made concerning spill size, location, and movement through aerial surveillance or computer models.

Transfer: Any movement of oil to, from, or within a vessel by means of pumping, gravitation, or displacement.

Trustee: Means an official of a federal natural resources management agency designated in subpart G of the NCP or a designated state official or Indian tribe or, in the case of discharges covered by the OPA, a foreign government official, who may pursue claims for damages under section 1006 of the OPA.

Underwriter: An insurer, a surety company, a guarantor, or any other person, other than an owner or operator of a vessel or facility, that undertakes to pay all or part of the liability of an owner or operator.

Unified Command: The method by which local, state, and federal agencies and the responsible party will work with the Incident Commander to:

- Determine their roles and responsibilities for a given incident.
- Determine their overall objectives for management of an incident.
- Select a strategy to achieve agreed-upon objectives.
- Deploy resources to achieve agreed-upon objectives.

Unified or Coordinated Command Meeting: Held to obtain agreement on strategic objectives and response priorities; review tactical strategies; engage in joint planning, integrate response operations; maximize use of resources; and minimize resolve conflicts.

Volunteers: An individual who donates their services or time without receiving monetary compensation.

Waste: Oil or contaminated soil, debris, and other substances removed from coastal waters and adjacent waters, shorelines, estuaries, tidal flats, beaches, or marshes in response to an unauthorized discharge. Waste means any solid, liquid, or other material intended to be disposed of or discarded and generated as a result of an unauthorized discharge of oil. Waste does not include substances intended to be recycled if they are in fact recycled within 90 days of their generation or if they are brought to a recycling facility within that time.

Waters of the U.S. - See Navigable Waters, page G-11.

GLOSSARY OF TERMS & ACRONYMS
GLOSSARY OF TERMS (Cont'd)

Wetlands: Those areas that are inundated or saturated by surface or groundwater at a frequency or duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include playa lakes, swamps, marshes, bogs, and similar areas such as sloughs, prairie potholes, wet meadows, prairie river overflows, mudflats, and natural ponds (40 CFR 112.2(y)).

Wildlife Rescue: Efforts made in conjunction with Federal and State agencies to retrieve, clean, and rehabilitate birds and wildlife affected by an oil spill.

Worst Case Discharge: The largest foreseeable discharge under adverse weather conditions. For facilities located above the high water line of coastal waters, a worst case discharge includes those weather conditions most likely to cause oil discharged from the facility to enter coastal waters.

GLOSSARY OF TERMS & ACRONYMS

ACRONYMS

AC - Area Committee
AOR - Area of Review
AQI - Alternate Qualified Individual
BIA - Bureau of Indian Affairs
BLM - Bureau of Land Management
BPD - Barrels Per Day
BOD - Biological Oxygen Demand
BOM - Bureau of Mines
CERCLA - Comprehensive Environmental Response, Compensation and Liability Act
CFR - Code of Federal Regulations
CHEMTREC - Chemical Transportation Emergency Center
COE - U. S. Army Corps of Engineers
CPI - Corrugated Plate Interceptor
CRZ - Contamination Reduction Zone
CWA - Clean Water Act (Federal - Public Law 100-4)
CWS - Community Water System
CZM - Coastal Zone Management
DECON - Decontamination
DOC - Department of Commerce
DOD - Department of Defense
DOE - Department of Energy
DOI - Department of Interior
DOJ - Department of Justice
DOL - Department of Labor
DOS - Department of State
DOT - Department of Transportation
DRAT - District Response Advisory Team
DRG - District Response Group
EBS - Emergency Broadcast System
EHS - Extremely Hazardous Substance
EMA - Emergency Management Agency
EMS - Emergency Medical Service
EOC - Emergency Operations Center
EPA - U. S. Environmental Protection Agency
EPCRA - The Emergency Planning and Right-to-Know Act of 1986 (Title III of SARA)
EQ - Environmental Quality
ERT - Environmental Response Team
ESA - Endangered Species Act
ETA - Estimated Time of Arrival
FAA - Federal Aviation Administration
FAX - Facsimile Machine
FCC - Federal Communications Commission
FEMA - Federal Emergency Management Agency
FOSC - Federal On-Scene Coordinator
FR - Federal Register
FRDA - Freshwater Resource Damage Assessment
FRF - Federal Revolving Fund
GIS - Geographic Information System
GSA - General Services Administration
HAZWOPER - Hazardous Waste Operations and Emergency Response
HHS - Department of Health and Human Services
IBRRC - International Bird Rescue Research Center
IOCC - Interstate Oil Compact Commission
LEPC - Local Emergency Planning Committee
LFL - Lower Flammable Limit
LOSC - Local On-Scene Coordinator
LRT - Local Response Team
MBL - Mobile
MMS - Minerals Management Service
MOU - Memorandum of Understanding
MSDS - Material Safety Data Sheet
MSO - Marine Safety Office
NCP - National Contingency Plan
NCWS - Non-Community Water System
NEPA - National Environmental Policy Act
NIOSH - National Institute for Occupational Safety and Health
NMFS - National Marine Fisheries Service
NOAA - National Oceanic and Atmospheric Administration (Department of Commerce)
NPDES - National Pollution Discharge Elimination System
NPFC - National Pollution Funds Center

GLOSSARY OF TERMS & ACRONYMS

ACRONYMS (Cont'd)

NPS - National Park Service
NRC - National Response Center
NRDA - Natural Resource Damage Assessment
NRS - National Response System
NRT - National Response Team
NSF - National Strike Force
NSFCC - National Strike Force Coordination Center
NTNCWS - Non -Transient Non-Community Water System
OPA - Oil Pollution Act
OPS - Office of Pipeline Safety (DOT)
OSC - On-Scene Coordinator
OSHA - Occupational Safety and Health Administration (USDL)
OSLTF - Oil Spill Liability Trust Fund
OSPRA - Oil Spill Prevention and Response Act
OSRO - Oil Spill Response Organization
PCB - Polychlorinated Biphenyls
PFD - Personal Flotation Device
PGR - Pager
PHMSA - Pipeline & Hazardous Materials Safety Association (DOT - OPS)
PIAT - Public Information Assist Team
POLREP - Pollution Report
PPE - Personal Protective Equipment
PPM - Parts Per Million
PSD - Prevention of Significant Deterioration
QI - Qualified Individual
RACT - Reasonably Achievable Control Technology
RCP - Regional Contingency Plan
RCRA - Resource Conservation and Recovery Act
RECON - Reconnaissance
REP - Radiological Emergency Preparedness
RERT - Radiological Emergency Response Team
RQ - Reportable Quantity
RRT - Regional Response Team
SARA - Superfund Amendments and Reauthorization Act
SCBA - Self Contained Breathing Apparatus
SDWA - Safe Drinking Water Act
SERC - State Emergency Response Commission
SIC - State Implementation Plan
SMT - Spill Management Team
SONS - Spill of National Significance
SOP - Standard Operating Procedure
SPCC - Spill Prevention Control and Countermeasures
SSC - Scientific Support Coordinator (NOAA)
STEL - Short Term Exposure Limits
SUPSALV - United States Navy Supervisor of Salvage
SWD - Salt Water Disposal
TSCA - Toxic Substances Control Act
TSDF - Treatment, Storage or Disposal Facility
UCS - Unified Command System
USACOE - U.S. Army Corps of Engineers
USCG - U.S. Coast Guard
USDA - U.S. Department of Agriculture
USDL - U.S. Department of Labor
USDOD - U.S. Department of Defense
USDOE - U.S. Department of Energy
USDW - Underground Source of Drinking Water
USFWS - U. S. Fish and Wildlife Services
USGS - U. S. Geological Survey
WCD - Worst Case Discharge

Facility Response Plan

Toledo Refining Company, LLC

Toledo # 2 Tank Farm

Physical Address:
2200 Pickle Road
Oregon, OH 43616

Mailing Address:
1819 Woodville Rd.
Oregon, OH 43616

TABLE OF CONTENTS

Section Heading	Description	Page
	Title Page	
Blue Section	EMERGENCY RESPONSE ACTION PLAN	ERAP1-44
Table of Contents	Table of Contents	TOC-1
	Cross Reference for EPA	TOC-4
	Cross Reference for Coast Guard	TOC-9
	Cross Reference for DOT/PHMSA	TOC-19
Foreword		
	Acknowledgment and Plan Approval	i
	Certification of QI and Alt. QI	ii
	Certification of Response Preparedness	iii
	Revision Record	iv
	Revision Record Signature Page	v
	Distribution List	vi
1.0 Introduction and Plan Content	1.1 Plan Purpose/Objectives	1-1
	1.2 Scope of Plan	1-1
	1.3 Plan Distribution Procedures	1-2
	1.4 Plan Review and Update Procedures	1-3
	1.5 Regulatory Compliance	1-5
	1.6 Discharge Classification	1-6
	a. Figure 1.1 Area Map	1-8
	b. Figure 1.1 (b) Site Location Map	1-9
	c. Figure 1.2 Facility Diagrams	1-10
	d. Figure 1.3 Facility Information	1-11
	e. Figure 1.4 Qualified Individuals	1-14
2.0 Notification Procedures	2.1 Internal Notification	2-1
	2.2 External Notification	2-2
	a. Figure 2.1 Internal Notification Sequence	2-5
	b. Figure 2.2 External Notification of Spill	2-6
	c. Figure 2.3 Discharge Form	2-7
	d. Figure 2.4 Internal Notification References	2-8
	e. Figure 2.5 External Notification References	2-9
3.0 Response Actions	3.1 Initial Response Actions	3-1
	a. Figure 3.1 – Specific incident response checklist	3-3
	b. Figure 3.2 – Product Specific Response – Crude	3-8
	c. Figure 3.3 – Product Specific Response –Gasoline	3-9
	3.2 Documentation of Initial Response Actions	3-11
	3.3 Oil Containment, Recovery and Disposal	3-11
	3.4 Storage/Disposal	3-12
	3.5 Sampling and Waste Analysis Procedures	3-12
	3.6 Safety Awareness	3-12

4.0 Response Teams	4.1 Introduction	4-1
	4.2 Qualified Individual	4-1
	4.3 Emergency Response Team	4-3
	4.4 Emergency Command Team	4-3
	4.5 Response Team Training	4-3
	4.6 Response Team Exercises	4-5
	4.7 Site Safety and Health Plan(s) Development	4-9
	Figure 4.1 Emergency Response Team	4-10
	Figure 4.2 Emergency Command Team	4-11
5.0 Response Equipment Resources	5.1 Toledo Refining Company, LLC Facility Response Equipment	5-1 5-1
	5.2 Contract Resources	5-1
	5.3 Cooperative Mutual Aid Resources	5-2
	5.4 Experts and Consultants	5-2
	5.5 Volunteers	5-2
	5.6 Communications	5-4
	Figure 5.1 – External Response Resources	5-5
	Figure 5.2 – Facility Response Equipment	
6.0 Spill Impact Considerations	6.1 Critical Areas to Protect	6-1
	6.2 Environmental/Socio-Economic Sensitivities	6-1
	6.3 Wildlife Protection and Rehabilitation	6-3
	6.4 Staging Areas	6-5
	6.5 Spill Volume Estimates	6-5
	6.6 Trajectory Analysis	6-5
	6.7 Containment and recovery of Spilled Product	6-6
	6.8 Use of Chemical Dispersants and In-Situ Burning	6-15
	Figure 6.1 – Wildlife Listing	6-16
	Figure 6.2 – Sensitive Areas Maps and Data Planning Distance Calculations	6-17
	Figure 6.3 – Oil Slick Estimator	6-19
	Figure 6.4 – Contingency Protocol For Wildlife	6-20
	Figure 6.5 – Cleanup Methods	6-21
	Figure 6.6 - Cleanup Methods by Habitat	6-22
7.0 Worse Case Discharge Analysis and Scenarios	7.1 Introduction	7-1
	7.2 Small/Average Most Probable Discharge	7-5
	7.3 Medium/Maximum Most Probable Discharge	7-8
	7.4 Worst Case Discharge	7-10
	7.5 Response Planning Volume Calculations	7-14
	7.6 U.S.DOT/PHMSA Discharge Calculations	7-15
8.0 Hazard Evaluations	8.1 Hazard Identification	8-1
	8.2 Vulnerability Analysis	8-3
	8.3 Analysis of the Potential for a Spill	8-7
	8.4 Reportable Oil Spill History	8-8
	Figure 8.1 – Site Drainage Plan (a)	8-13
	Figure 8.2 – Fire Protection System (b)	8-14

Appendices	Appendix A – Principles of Health, Environmental and Safety	
	Appendix B – Response Plan Cover Sheet	
	Appendix C - Discharge Response Times	
	Appendix D – Disposal Plan	
	Appendix E – Discharge Information Form	
	Appendix F – Management Team Roles	
	Appendix G – Sample Exercise documentation forms	
	Appendix H – Group V Oil Spill Response	
	Appendix I – Evacuation Plan	
	Appendix J – OSRO Contracts	
	Appendix K – Storage Tank Listing	
	Appendix L – Discharge detection systems and facility self inspections	
	Appendix M – National Response System	
	Appendix N – Glossary and Acronyms	

U.S. EPA - OPA 90
40 CFR Part 112.20(h) Final Rule - July 17, 2002
CROSS REFERENCE

§ 112.20 (h)	BRIEF DESCRIPTION	LOCATION in PLAN
(1)	***Emergency Response Action Plan***	-----
(1)(i)	The identity and telephone number of a qualified individual	ERAP - QI Info
(1)(ii)	The identity of individuals or organizations to be contacted in the event of a discharge	ERAP - Notifications
(1)(iii)	A description of information to pass to response personnel in the event of a reportable discharge	ERAP - Notifications
(1)(iv)	A description of the facility's response equipment and its location	ERAP - Facility Response Equip.
(1)(v)	A description of response personnel capabilities	ERAP - Local Response Team
(1)(vi)	Plans for evacuation of the Facility and a reference to community evacuation plans, as appropriate	ERAP - Evacuation Diagram
(1)(vii)	Plan Implementation - a description of immediate measures to secure the source of the discharge, and to provide adequate containment and drainage of spilled oil	ERAP - Initial Response Actions
(1)(viii)	A diagram of the facility	ERAP - Facility Diagram
(2)	***Facility information***	-----
	location and type of the facility	Fig 1.3
	the identity and tenure of the present owner and operator	Fig 1.3
	the identity of the qualified individual	Fig 1.3, 2.4
(3)	***Information about emergency response.***	-----
(3)(i)	The identity of private personnel and equipment	Fig 5.1
(3)(ii)	Evidence of contracts or other approved means for ensuring the availability of such personnel and equipment	App J
(3)(iii)	The identity and the telephone number of individuals or organizations to be contacted in the event of a discharge	Fig. 2.4, 2.5
(3)(iv)	A description of information to pass to response personnel	Fig 2.3
(3)(v)	A description of response personnel capabilities, including:	-----
	● duties of persons at the Facility during a response action	Fig 4.3, 4.4, App F
	● response times and qualifications...	§ 4.5, Fig 2.4
(3)(vi)	A description of the facility's response equipment including:	-----
	● location of the equipment	§ 5.2, App J, (Facility does maintain response equipment)
	● equipment testing	App G, (Facility does maintain response equipment)
(3)(vii)	Plans for evacuation of the Facility and a reference to community evacuation plans, as appropriate	App I
(3)(viii)	A diagram of evacuation routes	App I

U.S. EPA - OPA 90
40 CFR Part 112.20(h) Final Rule - July 17, 2002
CROSS REFERENCE

§ 112.20 (h)	BRIEF DESCRIPTION	LOCATION in PLAN
(3)(ix)	A description of the duties of the qualified individual that include	-----
(3)(ix)(A)	Activate internal alarms and hazard communications systems	§ 4.2
(3)(ix)(B)	Notify all response personnel, as needed	§ 4.2
(3)(ix)(C)	Identify the character, exact source, amount, and extent of release	§ 4.2
(3)(ix)(D)	Notify and provide necessary information to the appropriate Federal, State, and local authorities	§ 4.2
(3)(ix)(E)	Assess the interaction of the spilled substance with water and/or other substances stored at the Facility	§ 4.2
(3)(ix)(F)	Assess the possible hazards to human health and environment	§ 4.2
(3)(ix)(G)	Assess and implement prompt removal actions	§ 4.2
(3)(ix)(H)	Coordinate rescue and response actions	§ 4.2
(3)(ix)(I)	Use authority to immediately access company funding	§ 4.2
(3)(ix)(J)	Direct cleanup activities until properly relieved	§ 4.2
(4)	***Hazard evaluation***	-----
	Shall discuss the facility's known or reasonably identifiable history of discharges reportable under 40 CFR 110 for the entire life of the facility.	8.4
	identify areas within the facility where discharges could occur	§ 8
	what the potential effects would be on the affected environment	§ 8
(5)	***Response planning levels***	-----
(5)(i)	A worst case discharge, as calculated using the appropriate worksheet in appendix D	§ 1.2, § 7
(5)(ii)	A discharge of 2,100 gallons or less provided this amount is less than the WCD amount	§ 1.2, § 7
(5)(iii)	A discharge greater than 2,100 gallons and less than or equal to 36,000 gallons or 10 percent of the capacity of the largest tank, whichever is less	§ 1.2, § 7
(6)	***Discharge detection systems*** ... Describe the procedures and equipment used to detect discharges	App L
(7)	***Plan implementation***	------
(7)(i)	Response actions to be carried out by facility personnel or contracted personnel	§ 3.1, Fig 3.1, 3.2, 3.3
(7)(ii)	A description of the equipment to be used for each scenario	App J, § 7
(7)(iii)	Plans to dispose of contaminated cleanup materials	Section 3.4, App D
(7)(iv)	Measures to provide adequate containment and drainage of spilled oil	§ 3.1, Fig 3.1, 3.3
(8)	***Self-inspection, drills/exercises and response training***	-----
(8)(i)	A checklist and record of inspection for:	-----
	● tanks	App G
	● secondary containment	App G
	● response equipment	Fig 5.2, (Facility does

U.S. EPA - OPA 90
40 CFR Part 112.20(h) Final Rule - July 17, 2002
CROSS REFERENCE

§ 112.20 (h)	BRIEF DESCRIPTION	LOCATION in PLAN
(8)(ii)	A description of the drill/exercise program to be carried out under the response plan as described in § 112.21	§ 4.6
(8)(iii)	A description of the training program to be carried out under the response plan as described in § 112.21	§ 4.5
(8((iv)	Logs of:	-----
	● discharge prevention meetings	App G
	● training sessions	App G
	● drills/exercises	App G
(9)	***Diagrams***	-----
	● site plan	Fig 1.2
	● drainage plan	Section 8
(10)	***Security systems.*** The review plan shall include a description of facility security systems.	App L
(11)	***Response plan cover sheet***	App B

§ 112.21	BRIEF DESCRIPTION	LOCATION in PLAN
(a)	Develop and implement a facility response training program and a drill/exercise program.	-----
(b)	Develop a facility response training program to train personnel involved in response activities.	§ 4.5
(b)(1)	Proper instruction of facility personnel in the procedures to respond to discharges of oil and in applicable oil spill response laws, rules, and regulations`	§ 4.5
(b)(2)	Training shall be functional in nature according to job tasks for both supervisory and non-supervisory operational personnel	§ 4.5
(b)(3)	Trainers shall develop specific lesson plans on subject areas relevant to facility personnel involved in oil spill response and cleanup	§ 4.5
(c)	Develop a program of facility response drills/exercises, including evaluation procedures. Can follow PREP.	§ 4.6

U.S. EPA - OPA 90
40 CFR Part 112.20(h) Final Rule - July 17, 2002
CROSS REFERENCE

Appendix F to Part 112	BRIEF DESCRIPTION	LOCATION in PLAN
1.0	***Model Facility-Specific Response Plan***	-----
1.1	***Emergency Response Action Plan***	-----
	1. Qualified Individual Information	ERAP - QI Info
	2. Emergency Notification Phone List	ERAP - Notifications
	3. Spill Response Notification Form	ERAP - Notifications
	4. Response Equipment List and Location	ERAP - Facility Response Equipment
	5. Response Equipment Testing and Deployment	ERAP - Facility Response Equipment
	6. Facility Response Team	ERAP - Local Response Team
	7. Evacuation Plan	ERAP - Evacuation Diagram
	8. Plan Implementation - Immediate Actions	ERAP - Initial Response Actions
	9. Facility Diagram	ERAP - Facility Diagram
1.2	***Facility Information***	-----
1.2.1	Facility name and location	Fig 1.3
1.2.2	Latitude and Longitude	Fig 1.3
1.2.3	Wellhead Protection Area	Fig 1.3
1.2.4	Owner/operator	Fig 1.3
1.2.5	Qualified Individual	Fig 1.3, 2.4
1.2.6	Date of Oil Storage Start-up	Fig 1.3
1.2.7	Current Operation	Fig 1.3, § 8
1.2.8	Dates and Types of Substantial Expansion	Fig 1.3
1.3	***Emergency Response Information***	-----
1.3.1	Notification	§ 2.0 (all)
1.3.2	Response Equipment List and Location of Equipment	Fig 5.1, App J
1.3.3	Response Equipment Testing/Deployment Drills	5.2 and App G, (Facility does maintain response equipment)
1.3.4	Facility Response Personnel	§ 4.3, 4.4 Fig 2.4, 2.5
1.3.5	Evacuation Plans	App I
1.3.6	Qualified Individual's Duties	§ 4.2
1.4	***Hazard Evaluation***	-----
1.4.1	Hazard Identification	§ 8
1.4.2	Vulnerability Analysis	§ 8
1.4.3	Analysis of the Potential for an Oil Spill	§ 8

U.S. EPA - OPA 90
40 CFR Part 112.20(h) Final Rule - July 17, 2002
CROSS REFERENCE

Appendix F to Part 112	BRIEF DESCRIPTION	LOCATION in PLAN
1.4.4	Facility Reportable Oil Spill History	§ 8
1.5	***Discharge Scenarios***	-----
1.5.1	Small and Medium Discharges	§ 7
1.5.2	Worst Case Discharge	§ 7
1.6	***Discharge Detection Systems***	-----
1.6.1	Discharge Detection by Personnel	App L
1.6.2	Automated Discharge Detection	App L
1.7	***Plan Implementation***	-----
1.7.1	Response Resources for Small, Medium, and Worst Case Spills	Fig 5.1, App J, § 7
1.7.2	Disposal Plans	Section 3.4, App D
1.7.3	Containment and Drainage Planning	§ 3.1, Fig 3.1, § 8
1.8	***Self-Inspection, Drills/Exercises, and Response Training***	-----
1.8.1	Facility Self-Inspection	App G
1.8.1.1	Tank Inspection	App G
1.8.1.2	Response Equipment Inspection	Fig 5.2 (Facility does maintain response equipment)
1.8.1.3	Secondary Containment Inspection	
1.8.2	Facility Drills/Exercises	§ 4.6
1.8.2.1	Qualified Individual Notification Drill Log	App G
1.8.2.2	Spill Management Team Tabletop Exercise Log	App G
1.8.3	Response Training	§ 4.5
1.8.3.1	Personnel Response Training Log	App G
1.8.3.2	Discharge Prevention Meeting Log	AppG
1.9	***Diagrams***	-----
	(1) Site Plan Diagram	Fig 1.2
	(2) Site Drainage Plan Diagram	§ 8
	(3) Site Evacuation Plan Diagram	App I
1.10	***Security***	App L
2.0	***Response Plan Cover Sheet***	App B
3.0	***Acronyms***	App N

U.S. COAST GUARD - OPA 90
33 CFR 154 Final Rule – June 25, 2001
CROSS REFERENCE

§ 154.1030	DESCRIPTION OF GUIDELINE ITEM	SECTION
General response plan contents.		
(a)	The plan must be written in English.	Entire Plan
(b)	A response plan must be divided into sections	-----
(b)(1)	Introduction and plan contents.	§ 1.1
(b)(2)	Emergency response action plan:	-----
(b)(2)(i)	Notification procedures.	ERAP, § 2.1, 2.2
(b)(2)(ii)	Facility's spill mitigation procedures.	ERAP, § 2.0, 3.0, 4.0
(b)(2)(iii)	Facility's response activities.	ERAP, § 3.1, Fig 3.1, 3.2
(b)(2)(iv)	Fish and wildlife and sensitive environments.	ERAP, § 6.0
(b)(2)(v)	Disposal plan.	App D
(b)(3)	Training and Exercises:	-----
(b)(3)(i)	Training procedures.	§ 4.5
(b)(3)(ii)	Exercise procedures.	§ 4.6
(b)(4)	Plan review and update procedures.	§ 1.3, 1.4
(b)(5)	Appendices.	-----
(b)(5)(i)	Facility-specific information.	§ 1, Fig 1.1, 1.2, 1.3
(b)(5)(ii)	List of contacts.	§ 2.1, 2.2, Fig 2.4, 2.5
(b)(5)(iii)	Equipment lists and records.	§ 5.1, 5.2, App J
(b)(5)(iv)	Communications plan	§ 5.6
(b)(5)(v)	Site-specific safety and health plan.	§ 4.7
(b)(5)(vi)	List of acronyms and definitions.	App N
(b)(5)(vii)	A geographic-specific appendix ... mobile facility operates.	-----
(c)	... contained in § 154.1035, 154.1040, and 154.1041, as appropriate.	-----
(d)	...information required in § 154.1035, 154.1040, and 154.1041...	-----
(e)	... cross-reference ...	TOC
(f)	... be consistent with the NCP and ACP ...	Entire Plan, Acknowledgement Page

U.S. COAST GUARD - OPA 90
33 CFR 154 Final Rule – June 25, 2001
CROSS REFERENCE

§ 154.1035	DESCRIPTION OF GUIDELINE ITEM	SECTION(S)
Specific requirements for facilities that could reasonable be expected to cause significant and substantial harm to the environment.		
(a)	*Introduction and plan content.*	§ 1.0
(a)(1)	The facility's name, street address, city, county, state, ZIP code, facility telephone number, and tele-facsimile number, if so equipped...	Fig 1.3
(a)(2)	The facility's location ...	Fig 1.1, 1.2, 1.3
(a)(3)	... name, address, and procedures ... owner or operator ... 24-hour basis.	Fig 1.3
(a)(4)	A table of contents.	Foreword
(a)(5)	... cross index	TOC
(a)(6)	A record of change(s) to record information and plan updates.	Foreword
(b)	*Emergency Response Action Plan*...	-----
(b)(1)	Notification procedures.	ERAP, § 2.1, 2.2
(b)(1)(i)	... a prioritized list identifying the person(s) ... to be notified of a discharge or substantial threat of a discharge of oil ...	§ 2.1, 2.2, Fig 2.1, 2.2, 2.3, 2.4,2.5 '4.2, 4.3, Fig 4.1
(b)(1)(i)(A)	Facility response personnel, and Spill Management Team, oil spill removal organizations, and the qualified individual(s) ...	§ 2.1, 2.2,Fig 2.4,2.5 Section 4.2, 4.3, 4.4, 5.1, 5.2, 5.3
(b)(1)(i)(B)	Federal, State, or local agencies, as required.	§ 2.2, Fig 2.5
(b)(1)(ii)	... a form, ... which contains information to be provided in the initial and follow-up notifications to Federal, State, and local agencies ...	Fig 2.3, App E
(b)(2)	Facility's spill mitigation procedures.	§ 3.1, Fig 3.1, 3.2,3.3
(b)(2)(i)	..describe the volume(s) and oil groups..	§ 1.2, 6.5, § 7, § 8,
(b)(2)(i)(A)...(D)	...discharges from the MTR facility ... non-transportation related...	§ 1.2, § 7
(b)(2)(ii)	... must contain prioritized procedures for facility personnel to mitigate or prevent any discharge or substantial threat of a discharge of oil ...	§ 1.2, 2.1, 2.2, Fig 2.1, 2.2 § 3.0, Fig 3.1, 3.2, § 7
(b)(2)(ii)(A)...(G)	... Typical scenarios....	§ 1.2, 3.0, Fig 3.1, 3.2, § 7
(b)(2)(iii)	... a listing of equipment and the responsibilities of facility personnel to mitigate an average most probable discharge.	§ 3.0, Fig 3.1, § 5.1, 5.2, 5.3, 5.4, Fig 5.1, App J, § 7

U.S. COAST GUARD - OPA 90
33 CFR 154 Final Rule – June 25, 2001
CROSS REFERENCE

(b)(3)	Facility's response activities.	-----
(b)(3)(i)	... a description of the facility personnel's responsibilities ... pending the arrival of the qualified individual.	§ 3.1, Fig 3.1, 4.2, 4.3, 5.1
(b)(3)(ii)	... a description of the responsibilities and authority of the qualified individual and alternate as required in § 154.1026.	§ 4.2
(b)(3)(iii)	... describe the corporate organizational structure that will be used to manage the response actions, including ...	§ 4.3 fig. 4.1, 4.2
(b)(3)(iii)(A)..(H)	Command and control...Public Information...Safety... Liaison...Operations...Planning...Logistics...Finance.	§ 4.3, 4.4, Fig 4.1, 4.2, App F
(b)(3)(iv)	... identify the oil spill removal organization(s) and the Spill Management Team ...	§ 4.0, 5.0, App F
(b)(3)(iv)(A)	Be capable of providing the following response resources:	-----
(b)(3)(iv)(A)(1)	Equipment and supplies to meet..§154.1045, § 154.1047 or...	§ 5.1, 5.2, 5.3, 5.4, Fig 5.1, App J,
(b)(3)(iv)(A)(2)	Trained personnel necessary to continue operation...first 7 days of the response.	Fig 2.4, 2.5, § 4.3, 4.4, 5.0, Fig 5.1
(b)(3)(iv)(B)	...job descriptions for each Spill Management Team member...	App F
(b)(3)(v)	For mobile facilities ... the oil spill removal organization and the Spill Management Team in the applicable geographic-specific appendix...	N/A
(b)(4)	Fish and wildlife and sensitive environments.	-----
(b)(4)(i)	...identify areas of economic importance and environmental sensitivity..	§ 6.0, Fig 6.1, 6.2, § 8
(b)(4)(ii)	For a worst case discharge...this section must...	-----
(b)(4)(ii)(A)	List all fish and wildlife and sensitive environments identified in the ACP... ...	§ 6.3, Fig 6.1, 6.2, § 8
(b)(4)(ii)(B)	Describe all the response actions ... to protect these fish and wildlife and sensitive environments...	§ 3.1, 6.0, Fig 3.1, 3.2,3.3
(b)(4)(ii)(C)	Contain a map or chart showing the location of those fish and wildlife and sensitive environments ...	Fig 6.2

U.S. COAST GUARD - OPA 90
33 CFR 154 Final Rule – June 25, 2001
CROSS REFERENCE

§ 154.1035	DESCRIPTION OF GUIDELINE ITEM	SECTION(S)
(b)(4)(iii)	For a worst case discharge, ... identify appropriate equipment and required personnel to protect these areas...	§ 3.1, 4.2, 4.4, 5.0, 6.0, App J
(b)(4)(iii)(A)	Identify the appropriate equipment and required personnel to protect all fish and wildlife and sensitive environments ...	§ 2.0, 3.0, 4.0, 5.0, 6.0
(b)(4)(iii)(B)	Calculate the distances required by...by selecting one method described...	-----
(b)(4)(iii)(B)(1)	Distances calculated...	§ 7
(b)(4)(iii)(B)(2)	A spill trajectory or model may be substituted for distances...	-----
(b)(4)(iii)(B)(3)	The procedures contained in the Environmental Protection Agency's regulations...may be substituted for distances...	-----
(b)(4)(iii)(C)	Based on historical...COTP may require the additional fish and wildlife and sensitive environments	-----
(b)(5)	Disposal plan ...describe any actions to be taken or procedures to be used to ensure that all recovered oil and oil contaminated debris ...	App D
(c)	*Training and exercises.* To be divided into the following subsections:	-----
(c)(1)	Training procedures. ..must describe the training procedures ..	§ 4.5
(c)(2)	Exercise procedures. ... must describe the exercise program ...	§ 4.6
(d)	*Plan review and update procedures.* ... address the procedures ...	§ 1.3, 1.4
(e)	*Appendices.* ...must include appendices described...	-----
(e)(1)	Facility-specific information.. ... principal characteristics ...	-----
(e)(1)(i)	There must be a physical description of the facility...	Fig 1.2, 1.3, § 8
(e)(1)(ii)	...must identify the sizes, types, and number of vessels...	Fig 1.3, § 8
(e)(1)(iii)	...must identify the first valve(s) ...inside the secondary containment...	Fig 1.2, 1.3, Section 8

U.S. COAST GUARD - OPA 90
33 CFR 154 Final Rule – June 25, 2001
CROSS REFERENCE

§ 154.1035	DESCRIPTION OF GUIDELINE ITEM	SECTION(S)
(e)(1)(iv)	...must contain information on the oil(s) and hazardous material...	Fig 1.3 § 3.1, Fig 3.1, 3.2, MSDS at Facility
(e)(1)(iv)(A)	The generic or chemical name	Fig 1.3, § 3.1, Fig 3.1, 3.2, Section 8 MSDS at Facility
(e)(1)(iv)(B)	A description of the appearance and odor	Fig 1.3 § 3.1, Fig 3.1, 3.2, MSDS at Facility
(e)(1)(iv)(C)	The physical and chemical characteristics	Fig 1.3 § 3.1, Fig 3.1, 3.2, MSDS at Facility
(e)(1)(iv)(D)	The hazards involved in handling the oil(s) and hazardous...	Fig 1.3 § 3.1, Fig 3.1, 3.2, MSDS at Facility
(e)(1)(iv)(E)	A list of firefighting procedures and extinguishing agents effective with fires involving the oil(s) and hazardous materials	Fig 1.3 § 3.1, Fig 3.1, 3.2, MSDS at Facility
(e)(1)(v)	The appendix may contain any other information which the facility owner or operator determines to be pertinent...	-----
(e)(2)	List of contacts...	-----
(e)(2)(i)	The primary and alternate qualified individual(s) for the facility;	Fig 1.3, 2.4
(e)(2)(ii)	The contact(s) ... for activation of the response resources; and	Fig 1.3, 2.2, 2.5
(e)(2)(iii)	Appropriate Federal, State, and local officials.	Fig 2.5
(e)(3)	Equipment list and records. ... must include ...	-----
(e)(3)(i)	...list of equipment ... average most probable	§ 5.1, 5.2, App J
(e)(3)(ii)	...detailed listing of all the major equipment identified in the plan as belonging to an oil spill removal organization(s)...	§ 5.0, Fig 5.1, App J
(e)(3)(iii)	It is not necessary to list response equipment from oil spill removal organization(s) ... classified by the Coast Guard ... When it is necessary ... the list must include for each piece of equipment -	-----

U.S. COAST GUARD - OPA 90
33 CFR 154 Final Rule – June 25, 2001
CROSS REFERENCE

§ 154.1035	DESCRIPTION OF GUIDELINE ITEM	SECTION(S)
(e)(3)(iii)(A)	The type, make, model, and year of manufacture ... of the equipment;	N/A
(e)(3)(iii)(B)	For oil recovery devices, the effective daily recovery rate ...	N/A
(e)(3)(iii)(C)	For containment boom, ...height and type of end connectors;	N/A
(e)(3)(iii)(D)	The spill scenario in which the equipment will be used ...	N/A
(e)(3)(iii)(E)	The total daily capacity for storage and disposal of recovered oil;	N/A
(e)(3)(iii)(F)	For communication equipment, the type and amount of equipment ...	N/A
(e)(3)(iii)(G)	Location of the equipment; and	N/A
(e)(3)(iii)(H)	The date of the last inspection by the oil spill removal organization(s).	N/A
(e)(4)	*Communications plan* ...	§ 2.0, 4.0, 5.6
(e)(5)	*Site-specific safety and health plan* ...	§ 4.7
(e)(6)	*List of acronyms and definitions* ...	App N

U.S. COAST GUARD - OPA 90
33 CFR 154 Final Rule – June 25, 2001
CROSS REFERENCE

§ 154.1045	DESCRIPTION OF GUIDELINE ITEM	SECTION
Response plan development and evaluation criteria for facilities that handle, store, or transport Group I through Group IV petroleum oils.		
(a)	...facility that handles...Group I through Group IV petroleum oils..	-----
(a)(1)	..criteria in Table 1 ...identification of appropriate equipment..	-----
(a)(2)	...resources must be evaluated...including, but not limited to -	-----
(a)(2)(i)...(v)	Ice conditions; Debris; ... other appropriate....	-----
(a)(3(i)..(ii)	The COTP may reclassify a specific body of water or location ...	-----
(b)(1)...(3)	Response equipment must ---	App J, Section 7
(c)	...identify response resources...average most probable discharge...	§ 5.0, Fig 5.1, App J, Section 7
(c)(1)	1,000 feet of containment boom or two times the length of the largest vessel ... and the means of deploying and anchoring the boom ... within 1 hour of the detection of a spill;	§ 5.0, Fig 5.1, App J, Section 7
(c)(2)	...recovery devices and oil storage capacity ... within 2 hours ...	§ 5.0, Fig 5.1, App J, Section 7
(d)	... identify response resources ... maximum most probable discharge...	§ 5.0, Fig 5.1, App J, Section 7
(d)(1)	... include sufficient containment boom, oil recovery devices, and storage capacity for any recovery of up to the maximum most probable discharge planning volume...	App J, Section 7
(d)(2)	... resources must be appropriate for each group of oil ...	§ 5.0, App J, Section 7
(d)(3)	... must be positioned ... arrive ... scene of a discharge ...	-----
(d)(3)(i)	... within the specified times ...	Fig 5.1, App J
(d)(3)(ii)	In higher volume port areas ... within 6 hours ...	N/A
(d)(3)(iii)	In all other locations, ... within 12 hours ...	Fig 5.1, App J
(d)(4)	... COTP may impose additional operational restrictions ...	-----
(e)	... identify the response resources ... worst case discharge ...	§ 5.0, Fig 5.1, App J, Section 7
(e)(1)	The location must be suitable to meet the response times identified..	§ 5.0, App J, Section 7
(e)(2)	The response resources must be appropriate for ---	-----
(e)(2)(i)	The volume of the facility's worst case discharge;	App J, Section 7
(e)(2)(ii)	Group(s) of oil...handled, stored or transported by the facility; and	App J, Section 7

U.S. COAST GUARD - OPA 90
33 CFR 154 Final Rule – June 25, 2001
CROSS REFERENCE

§ 154.1045	DESCRIPTION OF GUIDELINE ITEM	SECTION
(e)(2)(iii)	The geographic area(s) in which the facility operates.	App J, § 7
(e)(3)	... sufficient boom, oil recovery devices, and storage capacity to recover the worst case discharge planning volumes.	§ 5.0, App J, § 7
(e)(4)	... quantity of response resources ... to respond ... to the worst case discharge to the maximum extent practicable.	§ 5.0, App J, §7
(e)(5)	... The following percentages of the response equipment ... must be capable of operating in waters of 6 feet or less depth.	-----
(e)(5)(i)	Offshore - 10 percent.	N/A
(e)(5)(ii)	Nearshore/inland/Great Lakes/rivers and canals - 20 percent.	§ 5.0, § 7
(e)(6)	... COTP may impose additional operational restrictions ...	-----
(f)	Response equipment ... must be capable of arriving on scene within the times specified in this paragraph ...	§ 5.0, App J, § 7
(g)	... response equipment identified for Level 1 plan credit must be capable of being mobilized and en route to the scene of a discharge within 2 hours of notification ...	§ 5.0, App J, § 7
(g)(1)	Either directly or through the qualified individual; and	§ 4.2, App J, § 7
(g)(2)	Within 30 minutes of a discovery ...	App J, Section 7
(h)	Response resources identified for Level 2 and Level 3 plan credit must be capable of arriving on scene within the time specified ...	App J, Section 7
(i)	... a facility that is located in any environment with year-round preapproval for use of dispersants, ... Group II or III persistent petroleum oils, may request a credit for up to 25 percent ...	N/A
(j)	... identify response resources with firefighting capability ...	Fig 1.2, 2.4, 2.5, Sect. 5.0
(k)	... identify equipment and required personnel ... to protect fish and wildlife and sensitive environments.	§ 5.0, App J
(k)(1)	... the identified response resources must include the quantities of boom sufficient to protect	§ 5.0, App J
(k)(2)	... resources and response methods ... must be consistent with the ... ACP in effect 6 months prior to initial plan submission or the annual plan review ...	§ 1.5, 3.1, 6.0, App J
(l)	The response plan for a facility that handles, stores, or transports Groups I through IV petroleum oils must identify an oil spill removal organization(s) with response resources that are available...	§ 5.0, Fig 5.1, App J

U.S. COAST GUARD - OPA 90
33 CFR 154 Final Rule – June 25, 2001
CROSS REFERENCE

§ 154.1045	DESCRIPTION OF GUIDELINE ITEM	SECTION
(l)(1)	Except as required in paragraph (l)(2) ... shoreline clean-up response resources required must be determined as described in Appendix C of this part.	§ 5.0, App J, Section 7
(l)(2)	... resources and response methods ... must be consistent with the ... ACP in effect 6 months prior to initial plan submission or the annual plan review ...	§ 1.5, 3.1, 6.0, App J
(m)	Appendix C ... quantity of response resources ... for the maximum most probable discharge volume, and for each worst case discharge response level.	App J, § 7
(m)(1)	Included in Appendix C of this part is a cap that recognizes the practical and technical limits of response capabilities ...	§ 7
(m)(2)	... Appendix C of this part lists the caps that will apply in ... February 18, 1998. ...facility whose estimated recovery capacity exceeds ... caps ... shall identify sources of additional equipment equal to twice the cap ... or the amount necessary to reach the calculated planning volume, whichever is lower.	§ 7
(n)(1)...(2)	The Coast Guard will initiate a review of cap increases and other requirements contained within this subpart ...	------

U.S. COAST GUARD - OPA 90
33 CFR 154 Final Rule – June 25, 2001
CROSS REFERENCE

§ 154.1047	BRIEF DESCRIPTION	SECTION
Response plan development and evaluation criteria for facilities that handle, store or transport Group V petroleum oils.		
(a)	…facility that handles…Group V petroleum oils	-----
(a)(1)	Procedures and strategies for responding to a worst case discharge…to the maximum extent practicable	Appendix H
(a)(2)	Sources of equipment and supplies necessary to locate, recover, and mitigate such a discharge	Appendix H
(b)	…ensure that any equipment identified…iscapable of operating in the conditions expected I the geographic area…	Appendix H
(b)(1)…(4)	Ice conditions-Debris-Temperature-Visibility	-----
(c)	…equipment must include…	-----
(c)(1)	Sonar sampling equipment, or other methods for locating the petroleum oil on the bottom or suspended in the water column	Appendix J
(c)(2)	Containment boom, sorbent boom, silt curtains, or other methods for containing the petroleum oil that may remain floating on the surface or to reduce spreading on the bottom	Appendix J
(c)(3)	Dredges, pumps, or other equipment necessary to recover petroleum oil from the bottom and shoreline	Appendix J
(c)(4)	Equipment necessary to assess the impact of such discharge; and	Appendix J
(c)(5)	Other equipment necessary to respond to a discharge involving the type of petroleum oil handled, stored or transported.	Appendix J
(d)	Response resources… (for) Group V…oil…must be capable of being at the spill site within 24 hours…	Appendix J
(e)	…must identify response resources with firefighting capability…must identify and ensure …the availability of adequate firefighting resources…just also identify an individual located at the facility to work with the fire department…	Fig 1.2, 2.5, Sect. 5.0

DOT/PHMSA 49 CFR Part 194
Interim Final Rule – February 23, 2005
CROSS REFERENCE

§ 194.105	BRIEF DESCRIPTION	LOCATION in PLAN
(a)	... determine the worst case discharge ... provide methodology, including calculations, used to arrive at the volume.	§ 1.2, Fig 1.3, § 7, § 8
(b)	The worst case discharge is the largest volume, in barrels, of the following:	-----
(b)(1)	... maximum release time in hours, plus the maximum shutdown response time in hours, multiplied by the maximum flow rate expressed in barrels per hour, plus the largest line drainage volume after shutdown of the line section(s) ...	Fig 1.3, § 7, § 8
(b)(2)	The largest foreseeable discharge for the line section(s) within a response zone, expressed in barrels, based on the maximum historic discharge, if one exists, adjusted for any subsequent corrective or preventative action taken.	Fig 1.3, § 7, § 8
(b)(3)	If the response zone contains one or more breakout tanks, the capacity of the single largest tank or battery of tanks within a single secondary containment system, adjusted for the capacity or size of the secondary containment system, expressed in barrels.	N/A

DOT/PHMSA 49 CFR Part 194
Interim Final Rule – February 23, 2005
CROSS REFERENCE

§ 194.107	BRIEF DESCRIPTION	LOCATION in PLAN
(a)	Each response plan must plan for resources for responding, to the maximum extent practicable, to a worst case discharge, and to a substantial threat of such a discharge.	§5.0, Fig 5.1, App J, Section 7
(b)	Each response plan must be consistent with the NCP and each applicable ACP. An operator must certify that it has reviewed the NCP and each applicable ACP and that the response plan is consistent with the existing NCP and each existing applicable ACP.	Ack & Plan Approval, § 1.5
(b)(1)	As a minimum to be consistent with the NCP a facility response plan must:	---
(b)(1)(i)	Demonstrate…clear understanding of the function of the Federal response structure, including procedures to notify the National response Center reflecting the relationship between the operator's response organization's role and the Federal on scene Coordinator's role in pollution response;	Fig. 2.3, 2.4 Sect. 4.3, App M
(b)(1)(ii)	Establish provisions to ensure the protection of safety at the response site; and	Sect. 3.1, 3.6, 4.8
(b)(1)(iii)	Identify the procedures to obtain any required Federal and State permissions for using alternative response strategies such as in-situ burning and dispersants as provided for in the applicable ACPs; and	Section 3.5, 6.8
(b)(2)	As a minimum, to be consistent with the applicable ACP the plan must	---
(b)(2)(i)	Address the removal of a worst case discharge and the mitigation or prevention of a substantial threat of a worst case discharge	Sect 6.0 Section 8
(b)(2)(ii)	Identify environmentally and economically sensitive areas;	Sect. 6.0, Fig 6.2
(b)(2)(iii)	Describe the responsibilities of the operator and of Federal, State, and local agencies in removing a discharge and in mitigating or preventing a substantial threat of a discharge; and	Section 1.1, 8, App F, J, M
(b)(2)(iv)	Establish the procedures for obtaining an expedited decision on use of dispersant or other chemicals	Sect 6.8, App M
(c)	Each response plan must include:	-----
(c)(1)	A core plan consisting of --	-----
(c)(1)(I)	An information summary as required in ' 194.113.	Fig 1.3
(c)(1)(ii)	Immediate notification procedures.	§ 2.0
(c)(1)(iii)	Spill detection and mitigation procedures.	§ 3.0, App L
(c)(1)(iv)	The name, address, and telephone number of the oil spill response organization, if appropriate.	Fig 2.5, Fig 5.1, App J
(c)(1)(v)	Response activities and response resources.	§ 3.0, 5.0, Fig 5.1, App J
(c)(1)(vi)	Names and telephone numbers of Federal, state, and local agencies which the operator expects to have pollution control responsibilities or support.	§ 2.2, Fig. 2.5
(c)(1)(vii)	Training procedures.	§ 4.5
(c)(1)(viii)	Equipment testing.	§ 5.1, App J
(c)(1)(ix)	Drill program…by following PREP guidelines (or) a program that is equivalent to PREP. The operator must describe the drill program in the response plan…	§ 4.6
(c)(1)(x)	Plan review and update procedures.	§ 1.4
(c)(2)	An appendix for each response zone. Each response zone appendix must include the information required in paragraph (d)(1) (I) to (ix) of this section that is specific to the response zone and the worst case discharge calculations.	Fig 1.3

DOT/PHMSA 49 CFR Part 194
Interim Final Rule – February 23, 2005
CROSS REFERENCE

§ 194.113	BRIEF DESCRIPTION	LOCATION in PLAN
(a)	The information summary for the core plan, required by ' 194.107, must include:	-----
(a)(1)	The name and address of the operator.	Fig 1.3
(a)(2)	For each response zone which contains one or more line sections that meet the criteria for determining significant and substantial harm as described in ' 194.103, a listing and description of the response zones, including county(s) and state(s).	Fig 1.3, § 7
(b)	The information summary for the response zone appendix, required in ' 194.107, must include:	-----
(b)(1)	The information summary for the core plan.	Fig 1.3
(b)(2)	The name and telephone number of the qualified individual available on a 24-hour basis.	Fig 1.3
(b)(3)	The description of the response zone, including county(s) and state(s), for those zones in which a worst case discharge could cause substantial harm to the environment.	Fig 1.3
(b)(4)	A list of line sections for each pipeline contained in the response zone, identified by milepost or survey station number, or other operator designation.	Fig 1.3
(b)(5)	The basis for the operator's determination of significant and substantial harm.	Fig 1.3
(b)(6)	The type of oil and volume of the worst case discharge.	Fig 1.3

§ 194.115	BRIEF DESCRIPTION	LOCATION in PLAN
(a)	Each operator shall identify and ensure, by contract or other approved means, the resources necessary to remove, to the maximum extent practicable, a worst case discharge and to mitigate or prevent a substantial threat of a worst case discharge.	§ 5.0, Fig 5.1, App J, § 7
(b)	An operator shall identify in the response plan the response resources which are available to respond within the time specified, after discovery of a worst case discharge, or to mitigate the substantial threat of such a discharge.	§ 5.0, Fig 5.1, App J, § 7

§ 194.117	BRIEF DESCRIPTION	LOCATION in PLAN
(a)	Each operator shall conduct training to ensure that:	-----
(a)(1)	All personnel know --	-----
(a)(1)(I)	Their responsibilities under the response plan	§ 4.5
(a)(1)(ii)	The name and address of, and the procedure for contacting, the operator on a 24-hour basis	Fig 1.3 § 2.0, Fig 2.4
(a)(1)(iii)	The name of, and procedures for contacting, the qualified individual on a 24-hour basis	§ 2.0, Fig 1.3, Fig. 2.4
(a)(2)	Reporting personnel know --	-----
(a)(2)(I)	The content of the information summary of the response plan.	Fig 1.3
(a)(2)(ii)	The toll-free telephone number of the National Response Center	Fig. 2.5
(a)(2)(iii)	The notification process	§ 2.0

DOT/PHMSA 49 CFR Part 194
Interim Final Rule – February 23, 2005
CROSS REFERENCE

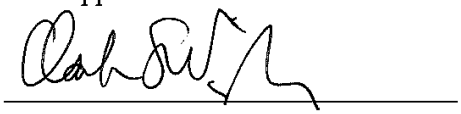
§ 194.117	BRIEF DESCRIPTION	LOCATION in PLAN
(a)(3)	Personnel engaged in response activities know --	-----
(a)(3)(I)	The characteristics and hazards of the oil discharged	Fig 3.2, Toledo Refining Company, LLC Online MSDS System (CHIPS), yearly CBT training modules, and Section 8
(a)(3)(ii)	The conditions that are likely to worsen emergencies, including the consequences of facility malfunctions or failures, and the appropriate corrective actions.	§ 3.0, Section 8
(a)(3)(iii)	The steps necessary to control any accidental discharge of oil and to minimize the potential for fire, explosion, toxicity, or environmental damage	§ 3.0
(a)(3)(iv)	The proper firefighting procedures and use of equipment, fire suits, and breathing apparatus	§ 1.2, 2.0, 3.0
(b)	Each operator shall maintain a training record for each individual that has been trained as required by this section. Theses records must be maintained in the following manner as long as the individual is assigned duties under the response plan	-----
(b)(1)	Records for operator personnel must be maintained at the operator's headquarters	§ 4.5
(b)(2)	Records for personnel engaged in response, other than operator personnel, shall be maintained as determined by the operator.	§ 4.5
(b)(3)	Nothing in this section relieves an operator from the responsibility to ensure that all response personnel are trained to meet the OSHA standards for emergency response operations in 29 CFR 1910.120 ...	§ 4.5

FACILITY RESPONSE PLAN

ACKNOWLEDGMENT AND PLAN APPROVAL

The information and procedures in this Plan must be treated as guidelines only. The user should determine to what extent it is practical and advisable to follow them. This decision may involve considerations not discussed in this Plan.

The information and procedures contained herein are considered to be accurate as of this date and are consistent with the National Contingency Plan (NCP) and applicable Area Contingency Plans (ACP).

Plan Approved: 

Date: April 28, 2014

Clark Wrigley
Refinery Manager
Toledo Refining Company, LLC

FACILITY RESPONSE PLAN

CERTIFICATION OF QUALIFIED INDIVIDUAL AND ALTERNATE QUALIFIED INDIVIDUAL

Toledo Refining Company, LLC hereby certifies to the Coast Guard, Environmental Protection Agency and the Department of Transportation that the individuals identified as Qualified Individual and Alternate Qualified Individual in this plan have the full authority in accordance with the applicable federal regulations and this plan to:

1. Activated and engage in contacting the oil spill removal organizations;
2. Act as liaison with the pre-designated Federal On-Scene Coordinator (FOSC), and;
3. Obligate funds required to carry out response activities.

April 28, 2014
Date

Clark Wrigley, Refinery Manager

STATE OF OHIO

COUTY OF LUCAS

This Certification of Qualified Individual and Alternate Qualified Individual was acknowledged before me on April 28, 2014 by CLARK WRIGLEY, Refinery Manager of Toledo Refining Company, LLC on behalf of said corporation

My Commission expires JAMES M. SCIARINI
Attorney at Law
Notary Public, State of Ohio
My Commission Has No Expiration Date.

FACILITY RESPONSE PLAN

CERTIFICATION OF RESPONSE PREPAREDNESS

Toledo Refining Company, LLC hereby certifies to the Pipeline and Hazardous Materials Safety Administration of the Department of Transportation that it had identified, and ensured by contract, or other means approved by the Pipeline and Hazardous Materials Safety Administration, the availability of private personnel and equipment to response, to the maximum extent practicable, to a worst case discharge or a substantial threat of such a discharge.

May 12, 2014
Date

Clark Wrigley, Refinery Manager

STATE OF OHIO

COUTY OF LUCAS

This Certification of Response Preparedness was acknowledged before me on,

May 12, 2014 by CLARK WRIGLEY,

Refinery Manager of Toledo Refining Company, LLC on behalf of said corporation

My Commission expires

[illegible] M. SCIARINI
Attorney at Law
Notary Public, State of Ohio
My Commission Has No Expiration Date.

FACILITY RESPONSE PLAN

REVISION RECORD

Note: It is the responsibility of the holder of this plan to insure that all changes and updates are made. The holder shall:

- Remove and Discard obsolete pages
- Replace obsolete pages with the updated pages.
- Record each revision on this form

Change Date	***Affected Page Numbers (s)***	***Description of Changes (s)***	***Name***
April, 2014	All manuals	Initial Version*	Elmer Dunberger

* Initial Version for Toledo Refining Company LLC with a Facility Response for each facility (Marine Terminal/Hocking Valley Dock, Tank Farm No. 2, and Main Refinery) within the Toledo Refining Company, LLC.

FACILITY RESPONSE PLAN

REVISION RECORD SIGNATURE PAGE

The following acknowledge they have reviewed the revisions, as noted on the revision record page.

_____	_____
Health, Safety & Security Lead	Date
_____	_____
Environmental Lead	Date
_____	_____
Emergency Response/Security Lead	Date
_____	_____
OPA 90 Responsible Person	Date

FACILITY RESPONSE PLAN

Distribution List

NOTE: The Distribution of this Plan is controlled by the Copy Number located on the front cover and title page. Plan Distribution Procedures are provided in Section 1.3 and the Plan Review and Update Procedures are provided in Section 1.4 and should be followed when making any and all changes.

COPY NUMBER	***PLAN HOLDER***	***LOCATION***
1. Volume 1, 2 and 3	Toledo Refining Company, LLC HR Conference Room 1819 Woodville Rd Oregon, OH 43616	Oregon, OH
2. Volume 1, 2 and 3	Toledo Refining Company, LLC Security Dispactch – Gate 1 1819 Woodville Rd Oregon, OH 43616	Oregon, OH
3. Volume 2	Toledo Refining Company, LLC Operator's office – Tank Farm #2 2200 Pickle Rd Oregon, OH 43616	Oregon, OH
4. Volume 3	Toledo Refining Company, LLC Operator's office – Marine Terminal 1900-2100 Front Street Toledo, OH 43605.	Oregon, OH
5. Volume 1,2 and 3	Toledo Refining Company, LLC Environmental Department 1819 Woodville Rd Oregon, OH 43616	Oregon, OH
6. Volume 1, 2 and 3	Toledo Refining Company, LLC FSS Office 1819 Woodville Rd Oregon, OH 43616	Oregon, OH
7. Volume 1, 2 and 3	Toledo Refining Company, LLC Laboratory Conference Room 1819 Woodville Rd Oregon, OH 43616	Oregon, OH
8. Volume 1, 2 and 3	FRP Coordinator U. S. EPA – Region 5 77 W. Jackson Boulevard, SE-5J Chicago, Illinois 60604	Chicago, IL
9. Volume 1, 2 and 3	Pipeline Response Plans Officer Pipeline and Hazardous Material Safety Administration 1200 New Jersey Avenue, SE.,. Washington, D.C. 20590-0001	Washington, D.C.
10. Volume 1, 2 and 3	U.S. Coast Guard Marine Safety Office 420 Madison - Suite 700 Toledo, OH 43604	Toledo, OH

Emergency Response Action Plan (ERAP)

Qualified Individual Information

(Section 1.2)

Figure 1.4

Qualified Individual and Alternates						
NAME	**RESPONSE TIME**	**ROLE**	**TRAINING LEVEL**	**OFFICE**	**HOME**	**OTHER**
Elmer Dunberger – Supervisor of Security & Emergency Response	10 minutes	Qualified Individual	40 Hrs. HAZWOPR 8 Hrs. Annual	419-698-6669	(b) (6)	
Keith A Dempsey- Emergency Response and Security Shift Supervisor	10 minutes	Alt. Qualified Individual	Annual	419-698-6663		
Ed Donnelly- Emergency Response and Security Shift Supervisor	10 minutes	Alt. Qualified Individual	Annual	419-698-6663		
Phil Wojcinski- Emergency Response and Security Shift Supervisor	10 minutes	Alt. Qualified Individual	Annual	419-698-6663		
Ken Adams- Emergency Response and Security Shift Supervisor	10 minutes	Alt. Qualified Individual	Annual	419-698-6663		
Kevin Kennedy-Emergency Response and Security Shift Supervisor	10 minutes	Alt. Qualified Individual	Annual	419-698-6663		

Emergency Notification List

(Section 1.3.1)

EXTERNAL NOTIFICATION REFERENCES - FIGURE 2.5

EXTERNAL NOTIFICATIONS			
AGENCY	**LOCATION**	**OFFICE**	**ALTERNATE**
National Response Center (NRC)	Washington, D.C.	(800) 424-8802	(202) 267-2675
Ohio EPA Office of Emergency Response (SERC)	Columbus, OH	(800) 282-9378 (In state)	(614) 224-0946
Lucas County (LEPC)	Toledo, OH	(419) 936-3550 (24 Hrs.)	
Ohio State Fire Marshall	Reynoldsburg, OH	(888) 252-0803	(614) 752-8200
OSHA (For Reportable Injury or Death)	Washington, D.C.	(800) 321-6742	
U.S. Environmental Protection Agency (EPA) Region V	Chicago, IL	(312) 353-2318 (24 Hrs.)	(312) 353-2000
U.S. Coast Guard, MSO	Toledo, OH	(419) 418-6050	313-568-9560
U. S. Fish and Wildlife Service (USFWS) Region III	Twin Cities, MN	(978) 281-9328 ext. 6506	
National Marine Fisheries Service, N.E. Region	Gloucester, MA	(978) 281-9300	
Toledo Division of Environmental Services	Toledo, OH	(419) 936-3015	(419) 245-1000
State Highway Patrol	Hamilton, OH	(513) 863-4606	
Ohio State Police	Toledo, OH	(419) 865-5544	
National Weather Service (Recorded Forecasts)	Toledo, OH	(216) 265-2370	
Toledo Water Treatment Plant	Toledo, OH	(419) 936-3021	
TV - Channel 13	Toledo, OH	(419) 531-1313	
TV - Channel 24	Toledo, OH	(419) 535-0024	
TV - Channel 11	Toledo, OH	(419) 248-1111	
TV - Channel 36	Toledo, OH	(419) 244-3600	
Radio - WSPD/WLQR	Toledo, OH	(419) 244-8321	
Radio - K-100	Toledo, OH	(419) 385-6397	
Radio - WGTE FM 91	Toledo, OH	(419) 380-4600	
Radio - WRQN	Toledo, OH	(419) 240-1935	
BP Toledo Refinery (main gate)	Toledo, OH	(419) 698-6451	(419) 698-6400 (Switchboard)
Toledo Public Utilities Dept. (water intakes)	Toledo, OH	(419) 936-3021	(419) 936-3067

EXTERNAL NOTIFICATION REFERENCES - FIGURE 2.5

LOCAL EMERGENCY SERVICES (DIAL 911 for All Police, Fire, and Ambulance Emergencies)			
SERVICE	**LOCATION**	**OFFICE**	**ALTERNATE**
Local Emergency Planning Committee	Toledo, OH	(419) 936-3550 (24 Hrs.)	
Oregon Fire Department	Oregon, OH	(419) 691-5787 (24 Hrs.)	
Toledo Fire / Rescue	Toledo, OH	(419) 245-1180 (24 Hrs.)	
St. Charles Hospital	Toledo, OH	(419) 696-7200	(419) 696-7300 ER
Local Water Supply System	Oregon, OH	(419) 698-7039	(419) 698-7064
	Toledo, OH	(419) 936-3021	(419) 936-3067
Bay Park Community Hospital	Toledo, OH	(419) 690-7900	(419) 690-7911 ER
St. Vincent Mercy Medical Center	Toledo, OH	(419) 251-4200	(419) 251-4354 ER

USCG CLASSIFIED OIL SPILL REMOVAL ORGANIZATIONS (OSRO) *				
COMPANY	**RESPONSE TIME**	**LOCATION**	**OFFICE**	**ALTERNATE**
Heritage Environmental Services	1 to 2 hours	Toledo, OH	419-729-1321 (24 Hrs)	
NRC-National Response Corporation	1 to 2 hours	Great River, NY	(800) 899-4672 (24 Hrs)	(631) 224-9141

ADDITIONAL RESPONSE RESOURCES				
COMPANY	**RESPONSE TIME**	**LOCATION**	**OFFICE**	**ALTERNATE**
Nature's Nursery	1 hour	Whitehouse, OH	419 877-0060	
C&W Tank Cleaning Company	1 hour	Oregon, OH	(419) 691-1995 (24 Hrs.)	(419) 466-5493
EQ	2 to 3 hours	Ypsilanti, MI	(800) 839-3975 (24Hrs)	(419)-346-0795
International Bird Rescue Center	24 hours to 48 hours	Berkeley, CA	(707) 207-0380	
Tri-State Bird Rescue	24 hours to 48 hours	Newark, DE	(302) 737-7241	(800) 710-0695 PGR (800) 710-0696 PGR

*** Note: Toledo Refining Co is also a member of the Northwest Ohio and Michigan Mutual Assistance District (419) 245-1180**

Spill Response Notification Form

(Section 1.3.1)

Information on Discharge*
Facility: _____

(A) Reporting Party	(B) Suspected Responsible Party
Name:	Name:
Phone:	Phone:
Job Position:	
Company:	Company:
Address:	Organization Type: ☐ Private Citizen ☐ Private Enterprise ☐ Public Utility ☐ Local Government ☐ State Government ☐ Federal Government
City:	City:
State:	State:
Zip:	Zip:
Were materials discharged: ☐ Yes ☐ No	
Calling for Responsible Party: ☐ Yes ☐ No	
Date and Time of report call:	
Other Notifications : ☐ USCG ☐ EPA ☐ State ☐ Other:	

- It is not necessary to wait for all information before calling the National Response Center (NRC) 1-800 424-8802 or direct telephone: 202-267-2675

Incident Description			
Source and /or Cause of incident:			
Date of Incident:	Time of Incident:		
Incident Address/Location Nearest City/Distance from City/Township Range Borough:			
Storage Tank Container: Above Ground: ☐ Below ground: ☐ Other: ☐			
Container capacity (bbls):			
Facility Capacity			
Tank Capacity (bbls):	Latitude:	Longitude:	River Mile:

Information on Discharge*

Facility: _____

Materials	
Material Discharged:	
Quantity in water: (include units)	
Response Action	
Actions Taken to Correct or Mitigate Incident:	
Impact	
Number of Injuries:	Number of Fatalities:
Evacuations required: ☐ Yes ☐ No ☐ Unknown	If Yes: Number Evacuated:
Any Damage: ☐ Yes ☐ No ☐ Unknown	If Yes: Damage in Dollars:
Additional Information	

Response Equipment List and Location

(Section 1.3.2)

FIGURE 5.2

FACILITY RESPONSE EQUIPMENT *

ITEM	LOCATION	QTY	WRHS CODE	INSPECTOR	DATE	COMMENTS
American Boom & Barrier Containment Boom	Refinery Fire Dept.	Sections totaling 700’	N/A			
Sea Arc 18’, 1994 with 100 HP Evinrude and accessories: rope, life jackets, tow bridals, anchors (Boat 492)	Refinery Fire Dept.	1 each	N/A			
Sea Arc 26’, 1991 with (2) 100 HP Evinrude and accessories: rope, life jackets, tow bridals, anchors, (400’) containment boom (Boat 491)	Refinery FD/Harrison Marina	1 each	N/A			
Containment Boom	HVD	900’	26-086-061			
Absorbent Boom	Refinery #2 Storehouse Area 217	10 bags; 4 - 10’ sections each	26-086-066			
Absorbent Pads	Refinery #1 Storehouse Area 12161	8 packs	26-086-063			
Creek Boom Trailer	Refinery FD	500’ Creek Boom	N/A			
Spill Control Trailer *	Refinery Fire Dept.	Inventory Attached	N/A			
River Boom Trailer	Refinery FD	500’ River boom	N/A			
Snow Boom Trailer	Refinery FD	1000’ Creek Boom	N/A			
Skimmers	Refinery	2 each	N/A			
Communications Equipment - mounted in Unit 5 - mounted in boat - hand held	Refinery Fire Dept.	 1 VHF; 1 marine 1 VHF; 1 marine 6 VHF; 6 marine	N/A			
(Unit 11) 1989 White/GMC 1500 GPM pumper with 54’ articulating boom	Refinery Fire Dept.	1 each	N/A			
(Unit 10) 1981 Pierce 1500 GPM pumper with 55’ aerial ladder	Refinery Fire Dept.	1 each	N/A			
(Unit 1) 2002 E-ONE pumper 3,500 GPM	Refinery Fire Dept.	1 each	N/A			
(Unit 12) 1975 Ford Flat Bed (Used as foam hauler)	Refinery Fire Dept.	1 each	N/A			
(Unit 9) 1995 Ford F-350 Super Duty Mini Pumper	Refinery FD	1 each	N/A			
(Unit 6) 2007 Ford F-350	Refinery Fire Dept.	1 each	N/A			
(Unit 5) 1980 GMC, Hazardous Materials Truck	Refinery Fire Dept.	1 each	N/A			

FIGURE 5.2

FACILITY RESPONSE EQUIPMENT (Cont'd)

* SPILL CONTROL TRAILER EQUIPMENT
(Staged at the Toledo Refining Company, LLC Fire Dept.)

Side	Qty	Description	Inspector	Date
Back Left Door	1	Wooden Handle Pitchfork		
	2	Wooden Handle Spade Shovel		
Left Rear Side	2	Expandable Gaff Hooks		
	1	8lb. Sledge Hammer (Fiberglass)		
	1	20lb ABC Fire Extinguisher		
	10	24" Metal Stakes		
1A (Top)	6	3M Half Masks		
	6pr	3M Cartridges		
	3	Suspenders		
	2	Nomex Coveralls (46R, 50R)		
	1 cs	Tyvek-Poly Coated (3XL)		
1B (Middle)	3	Rainsuits (4XL)		
	3	Rainsuits (5XL)		
	2	Duct Tape		
	4	Bee Bopper		
	10	Leather Gloves (XL)		
	1	Nitrile Glove (M)		
	1	Nitrile Glove (L)		
	4	Googles		
1C (Bottom)	2	Boots Size 12		
	3	Boots Size 13		
	1	Hip Waders - Neoprene (13)		
	1	Hip Waders - Rubber (13)		
2A (Top)	1	Scrubs in a Bucket		
	2	Box of Wyp-All		
	4	Inflatable Kiddie Pools		
	1	Box of Garbage Bags		
	1	Drain Cover		
	1	Wooden Plug Kit		
2B (Middle)	1	Chain Saw		
	1	Gal Bar Oil		
	1	40:1 Fuel Can (Chainsaw)		
	1	Barrel Pump w/ slide fitting		
	1	25 ft Air Hose w/threads		

2C (Bottom)	4	Sandbags (filled)		
	1	Box of Sandbags		
	1	Sandbag Scoop		
	2	Bags of Sand		
3A/B/C	2	Wheelbarrows		
	2	Wood Handle Scoop Shovels		
	1	Wood Handle Flat Shovel		
	1	Fiberglass Handle Flat Shovel		
	1	Fiberglass Spade Shovel		
	1	Broom		
	15	Ground Posts		
4A (Top)	4	Spill Attack Kits		
	2	Box Cobra Coil Sausages		
	2	Box Peat Sorb Pads		
	1	Box Sorbant Industrial Rug (36"x50')		
4B (Middle)	8	8"x10' Absorbent Boom		
4C (Bottom)	8	8"x10' Absorbent Boom		
5/6/7 A (Top)	12	4"x10' PVC Pipe		
	3	2"x4"x8'		
5B (Middle)	1	Roll Snow Fence		
	6	Rolls of Chicken Wire (1"x36"x25')		
5C (Bottom)	3	Bags of Pom Pom's		
	1	Bag of Collapsable LED Cones		
6B (Middle)	2	Rolls of Plastic Sheeting (20'x100')		
	1	Rolls of Plastic Sheeting (12x100')		
6C (Bottom)	2	Bags of Oil Dry		
	4	Sandbags (filled)		

7B (Middle)	7	Safety Vests		
	16	24" Metal Stakes		
	12	24" Wood Stakes		
	1	Box of Flashlights		
		*(3) C Cell Flashlight		
		*(3) 6 volt Flashlight		
		*Spare Batteries		
	1	Tool Box		
		*Small Sledge		
		*Utility Knife		
		*Crescent Wrench		
		*Screw Drivers (various)		
		*Twine		
7C (Bottom)	3	200' Dockline Rope Bags		
	2	Wheel Chocks		
	1	Rope Box		
		*(1)Large 50' Braided Rope		
		*(1) 50' Hemp Rope		
		*(10) 50' sections of Cord		
		*(3) 100' Red Anchor Rope		
		*(1) 50' Dockline		
		*(2) 25' Red Anchor Rope		
Right Rear Side	2	Expandable Gaff Hooks		
	1	Windsock		
	1	10 lb Sledgehammer		
	1	Hand Saw		
	1	20lb ABC Fire Extinguisher		
	10	24" Metal Stakes		
Right Rear Door	2	Push Broom		
	2	Fiberglass Handle Flat Shovel		

* Note: The equipment listed in Figure 5.2 is inspected on a routine basis and is deployed as stated in Section 4.0.

Response Equipment Testing and Deployment

(Section 1.3.4)

4.3 EMERGENCY RESPONSE TEAM (ERT) – See Figure F.1

The first Toledo Refining Company, LLC person on scene, typically the on-duty Emergency Response Shift Supervisor or the on-duty Fire Marshal, will function as the On-Scene Commander until the arrival of the Emergency Response Chief or the Emergency Response and Security Shift Supervisor. Transfer of command may take place as more senior management respond to the incident.

The number of local Emergency Response Team Personnel required to handle an incident controlled by the On-Scene Commander and will depend on the size and complexity of the incident. The On-Scene Commander is always responsible for directing the response activities and will assume the duties of all the primary positions until the duties can be delegated to other qualified personnel.

Refer to Appendix F of this plan for job descriptions of the primary response team positions.

4.4 EMERGENCY COMMAND TEAM (ECT) – See Figure 4.2

The Emergency Command Team is a group of personnel trained to manage incidents. This team is activated as necessary, dependent upon the magnitude of the incident.

The size of, and positions on, the Emergency Command Team are incident-dependent. Dialogue with the activating facility will determine which positions will be activated.

A fully-staffed Emergency Command Team is designed to cover all aspects of a comprehensive and prolonged incident response (Level III incident). During a prolonged response, additional personnel may be cascaded to the incident location, and more than one level within the Team may be involved to sustain 24-hour operations.

4.5 RESPONSE TEAM TRAINING

The Spill Management Team is staffed by specially trained personnel from various Toledo Refining Company, LLC departments, and/or by consultants. Toledo Refining Company, LLC requires that all response personnel, including contractors and casual labor, have the appropriate training necessary to serve on a response team during an emergency. Team members will receive training in the following:

Response Plan Review

All Spill Management Team members should review their Facility Response Plan at least annually, or whenever their job position or responsibilities change under the Plan. A copy of this Plan will be available at all times to the team members at the facility.

HAZWOPER (29 CFR 1910.120)

Federal and state regulations require that response team members maintain up-

to-date HAZWOPER training necessary to function in their assigned positions. At a minimum, Toledo Refining Company, LLC employees will receive "First Responder Awareness Level" training. All "Non-Toledo Refining Company, LLC" personnel responding to an incident must satisfy the applicable HAZWOPER training requirements of 29 CFR 1910.120.

OSHA HAZWOPER TRAINING REQUIREMENTS		
Responder Classification	**Required Training Hours**	**Refresher**
29 CFR 1910.120(q) Emergency Response		
First Responder - Awareness Level	2-4 hrs demonstration of competency	same
First Responder - Operations Level	8 hrs	8 hrs
Hazardous Materials Technician	24 hrs plus competency	8 hrs
Hazardous Materials Specialist	24 hrs plus competency in specialized areas	8 hrs
On-Scene Commander	24 hrs plus competency	8 hrs
29 CFR 1910.120(e) Clean Up Sites		
General Site Workers	40 hrs / 3 days on the job training	8 hrs
Occasional Workers (Limited Tasks)	24 hrs / 1 day on the job training	8 hrs
General Site Workers (Low Hazard)	24 hrs / 1 day on the job training	8 hrs
Supervisors	8 hrs supervisor training	8 hrs
29 CFR 1910.120(p)(7)(8) RCRA TSD Sites		
New Employees	24 hrs	8 hrs
Current Employees*	24 hrs	8 hrs

* Previous work experience and/or training certified as equivalent by employer.

4.5 RESPONSE TEAM TRAINING (Cont'd)

Unified Command System

Response team members will receive UCS training, and may also receive supplemental training in other, related general topics.

4.5.1 Volunteers

Toledo Refining Company, LLC will not use non-employee volunteers for emergency incident response, and no Toledo Refining Company, LLC provisions exist to train them. Volunteers may be used by government response entities, as allowed by applicable policies/procedures.

4.5.2 Training Records

Training records for local team members will be maintained at the facility according to Federal, state, and local government requirements (three years for the U.S. Coast Guard and RSPA and five years for the U.S. Environmental Protection Agency). Training records will be maintained

indefinitely for emergency response personnel as long as they maintain an active role, with assigned duties, on the response team.

4.6 RESPONSE TEAM EXERCISES

Spill Management Team members, government agencies, contractors, and other resources must participate in response exercises required by Federal, state, or local regulations. The drill program and elements covered will be completed as detailed in the "National Preparedness for Response Exercise Program (PREP) Guidelines." Toledo Refining Company, LLC will conduct announced and unannounced drills to maintain compliance, and each plan-holder must conduct at least one exercise annually. The following table lists the triennial exercise cycle for facilities (see PREP Guidelines for full details).

Triennial Cycle		
Total Number	**Frequency**	**Exercise Type/Description**
12	Quarterly	QI Notification Exercise
6	Semi-Annual	Equipment Deployment Exercise *(Facility-owned equipment)*
3	Annual	Spill Management Team Tabletop Exercise
3	Annual	Equipment Deployment Exercise *(facilities with OSRO-owned equipment)*
3	Annual	Unannounced Exercise *(not a separate exercise)* Actual response can be considered as an unannounced exercise.
NOTE: All response plan components must be exercised at least once in the cycle. Exercise records will be maintained at the Facility as follows: EPA – 5 years; USCG and RSPA – 3 years.		

4.6 RESPONSE TEAM EXERCISES (Cont'd)

Quarterly QI Notification Exercise

- **Scope:** Exercise communication between facility personnel and the QI(s) and/or designated alternate(s). At least once each year, one of the notification exercises should be conducted during non-business hours.

- **Objective:** Contact must be made with a QI or designated alternate, as identified in the Plan.

- **General:** All personnel receiving notification shall respond to the notification and verify their receipt of the notification. Personnel who do not respond should be contacted to determine whether or not they received the notification.

Annual and Semi-Annual Equipment Deployment Exercise (for facilities with equipment)

- **Scope:** Deploy and operate facility response equipment identified in the response plan. The equipment to be deployed must include the following, at a minimum:

  - 1,000 feet of representative type of boom;
  - one of each type of skimming system; or
  - the equipment necessary to respond to the facility's Small/Average Most Probable Discharge (AMPD), whichever is less.

- **Objective:** Demonstrate personnel's ability to deploy and operate response equipment. Ensure that the response equipment is in proper working order.

- **General:** The facility may take credit for actual equipment deployment to a spill, or for training sessions, as long as the activities are properly documented.

***Annual Equipment Deployment Exercise* (OSRO-owned equipment)**

- **Review:** The facility should determine that the OSRO(s) has completed the equipment deployment exercise requirements and has maintained the necessary documentation. The OSRO may deploy equipment at any location, so long as it occurs within an operating environment similar to the facility's.

- **Scope:** OSRO must deploy and operate response equipment identified in the response plan. The equipment to be deployed must include the following, at a minimum:

  - 1,000 feet of representative type of boom, and
  - One of each type of skimming system.

- **Objective:** OSRO personnel must demonstrate their ability to deploy and operate OSRO response equipment, and must ensure that its response equipment is in proper working order.

Annual Response Team Tabletop Exercise

- **Scope:** Exercise the response team's organization, communication, and decision- making in managing a spill response. Each team identified within the plan must conduct an annual Response Team Tabletop Exercise.

- **Objective:** Exercise the response team in a review of the following:

  - Knowledge of the Plan.
  - Proper notifications.
  - Communications system.

- Ability to access an OSRO.
- Coordination of internal spill response personnel.
- Transition from a local team to a regional team.
- Ability to effectively coordinate response activity with the National Response System (NRS) infrastructure.
- Ability to access information in the Area Contingency Plan.

- **General:** A minimum of one Response Team Tabletop Exercise in a triennial cycle will involve a Worst-Case Discharge scenario.

Government-Initiated Unannounced Exercise

- **Scope:** Upon request, the Facility is required to participate in only one unannounced exercise every 36 months from the date of the last government-initiated unannounced exercise.

Exercises are limited to approximately four hours in duration.

Exercises would involve response to a Small/Average Most Probable Discharge scenario.

Exercise would involve equipment deployment to respond to a spill scenario.

- **Objective:** Conduct proper notifications to respond to unannounced scenario of a Small/Average Most Probable Discharge.

  Demonstrate that the response is timely, conducted with an adequate amount of equipment for the scenario, and properly conducted.

- **General:** This exercise is only applicable to those facilities that are randomly chosen.

Area Exercises

- **Objective:** The purpose of the area exercise is to exercise the entire response community in a particular area. An area is defined as "that geographic area for which a separate and distinct Area Contingency Plan has been prepared, as described in OPA 90." The response community includes the federal, state, and local government and industry. The area exercises are designed to exercise the government and industry interface for spill response.

- **General:** The goal is to ensure that all areas of the country are exercised triennially. All of the area exercises will be developed by an exercise design team. The exercise design team is comprised of representatives from the federal, state, and local government and industry. A lead plan holder would lead each area exercise. The lead plan holder is the organization (government or industry) that holds the primary plan that is exercised in the area exercise. The lead plan holder would have the final word on designing the scope and scenario of the exercise.

Exercise Documentation

- All exercises should be documented and maintained at the facility; documentation should specify the:

  - Type of exercise;
  - Date and time of the exercise;
  - Description of the exercise;
  - Objectives met in the exercise;
  - Components of the response plan exercised; and
  - Lessons learned.

- Sample exercise forms are included in Appendix G. However, slight variations of the forms are acceptable and may be utilized at specific facilities.

- Exercise documentation should be kept on file for the required length of time depending on the regulating agency (three years for the U.S. Coast Guard and five years for the U.S. Environmental Protection Agency).

Exercise Planning and Design

- Designing and planning a spill response simulation exercise involves the determination of the appropriate spilled product discharge scenario and establishment of the framework for preparing, managing, and evaluating the exercise. It is the responsibility of the Emergency Response Manager to plan, carry out, and monitor drills and exercises.

Facility Response Team List

(Section 1.3.4)

FIGURE 2.4

INTERNAL NOTIFICATION REFERENCES

EMERGENCY RESPONSE TEAM						
NAME	**RESPONSE TIME**	**RESPONSIBILITY DURING RESPONSE ACTION**	**TRAINING LEVEL**	**OFFICE**	**HOME**	**OTHER**
Elmer Dunberger	10 Minutes (maximum)	Security Lead / Qualified Individual /Alternate QI	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6669	(b) (6)	
Ken Adams	15 minutes (*maximum*)	Emergency Response Shift Supervisor / QI / Alternate QI	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6663		
Keith Dempsey	15 minutes (maximum)	Emergency Response Shift Supervisor / QI / Alternate QI	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6663		
Ed Donnelly	10 minutes (*maximum*)	Emergency Response Shift Supervisor / QI / Alternate QI	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6663		
Kevin Kennedy	15 minutes (maximum)	Emergency Response Shift Supervisor / QI / Alternate QI	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6663		
Phil Wojcinski	10 minutes (*maximum*)	Emergency Response Shift Supervisor / QI / Alternate QI	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6663		
Cory Clark	15 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6628		
Chris Conley	20 minutes *(maximum)*	Emergency Response		419-697-2491		
Douglas Church	60 Minutes (maximum)	Emergency Response		419-698-6600		
Richard Cutcher	15 Minutes (maximum)	Emergency Response		419-698-6600		

EMERGENCY RESPONSE TEAM

NAME	RESPONSE TIME	RESPONSIBILITY DURING RESPONSE ACTION	TRAINING LEVEL	OFFICE	HOME	OTHER
Sandy Daniel	20 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6692	(b) (6)	
Justin Donley	15 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		
Jessie Duke	20 minutes (maximum)	Emergency Response		419-698-6600		
Fred Espinoza	15 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6608		
Craig Felbinger	20 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		
Daniel Flores	20 minutes (*maximum)*	Emergency Response		419-698-6600		
Dennis Flory	45 minutes *(maximum)*	Emergency Response		419-698-6600		
Dan Gresh	30 minutes	Emergency Response		419 698 6600		
Mike Jones	20 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6659		
Marty Koch	15 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6608		
John Kowalski	20 minutes (maximum)	Emergency Response		419-698-6600		

EMERGENCY RESPONSE TEAM

NAME	RESPONSE TIME	RESPONSIBILITY DURING RESPONSE ACTION	TRAINING LEVEL	OFFICE	HOME	OTHER
Mark Lambert	15 minutes *(maximum)*	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6974	(b) (6)	
Terry Mack	15 minutes (maximum)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		
Mike Mahr	20 minutes (maximum)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6772		
Tim Marshall	30 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		
Jason McVey	45 minutes (maximum)	Emergency Response		419-698-6600		
Rusty Miller	15 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		
Tim Musolf	20 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		
Kevin Rank	10 minutes (*maximum*)	Emergency Response		419-698-6600		
Thomas Saunders	10 minutes (maximum)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6608		
Nick Schnell	20 minutes (*maximum*)	Emergency Response		419-698-6600		
Rick Schroeder	20 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		

EMERGENCY RESPONSE TEAM						
NAME	**RESPONSE TIME**	**RESPONSIBILITY DURING RESPONSE ACTION**	**TRAINING LEVEL**	**OFFICE**	**HOME**	**OTHER**
Clark Timmons	15 minutes (maximum)	Emergency Response		419-698-6600	(b) (6) [redacted]	
Lloyd Wright	20 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		
Dave Yap	15 minutes (*maximum*)	Emergency Response		419-698-6600		
Brian Yost	20 minutes (*maximum*)	Emergency Response		419-698-6600		

FIGURE 2.4

INTERNAL NOTIFICATION REFERENCES (Cont'd)

EMERGENCY COMMAND TEAM						
NAME	**RESPONSE TIME**	**RESPONSIBILITY DURING RESPONSE ACTION**	**TRAINING LEVEL**	**OFFICE**	**HOME**	**OTHER**
Clark Wrigley	15 minutes (*maximum*)	Incident Commander	Annually	419-698-6622	(b) (6)	
Neal Sahni	20 minutes (*maximum*)	Deputy Incident Commander	Annually	419-698-6766		
James Sciarini	20 minutes (*maximum*)	Administration Officer	Annually	419-698-6709		
Olivia Summons	15 minutes (*maximum*)	Information Officer	Annually	419-698-6910		
Jeff Coleman	15 minutes (*maximum*)	Refinery Operations Officer	Annually	419-698-6745		
Eric Fannin	15 minutes (*maximum*)	Safety Officer	Annually	419-698-6868		
Chris McCormick	35 minutes (*maximum*)	Planning Section Chief	Annually	419-697-6547		
Daniel Ingram	20 minutes (*maximum*)	Logistics Section Chief	Annually	419-698-6717		
Nancy Perham	35 minutes (*maximum*)	Finance Officer	Annually	419-697-6549		
Elaine Moore	15 minutes (*maximum*)	Liaison Officer	Annually	419-698-6847		
Vickie Witty Davis	35 minutes (*maximum*)	Oil Flow Officer	Annually	419-698-6794		

EMERGENCY COMMAND TEAM						
NAME	**RESPONSE TIME**	**RESPONSIBILITY DURING RESPONSE ACTION**	**TRAINING LEVEL**	**OFFICE**	**HOME**	**OTHER**
Christine Shultz	15 minutes (*maximum*)	Documentation Unit Leader	Annually	419-698-6810	(b) (6)	
Richard Beans	30 minutes (maximum)	Communications Unit Leader	Annually	419-698-6637		

Evacuation Plan

(Section 1.3.5)

EVACUATION PLAN

(b) (7)(F), (b) (3)

[redacted]

EVACUATION PLAN (Cont'd)

(b) (7)(F), (b) (3)

[redacted]

EVACUATION PLAN (Cont'd)

(b) (7)(F), (b) (3)

[redacted]

EVACUATION DIAGRAM (a)

Evacuation
muster point
for roll call.

Immediate Action

(Section 1.7.1)

3.1 INITIAL RESPONSE ACTIONS (Cont'd)

FIRST TOLEDO REFINING COMPANY, LLC PERSON NOTIFIED/ON-SCENE

- _____ Follow the appropriate ***"Specific Incident Response Checklist"*** in Figure 3.1 and ***"Product Specific Response Considerations"*** in Figure 3.2.
- _____ Notify **Facility Shift Superintendent** of the incident.
- _____ Utilize local emergency services as necessary (police, fire, medical).
- _____ Notify the Pipeline Controllers, as appropriate.

On-Scene Commander (G-1 responding to scene)

- _____ **Evaluate the Severity**, Potential Impact, Safety Concerns, and Response Requirements based on the initial data provided by the first person on scene.
- _____ Assume the role of **Incident Commander**.
- _____ **Confirm safety** aspects at site, including need for personal protective equipment, sources of ignition, and potential need for evacuation.
- _____ Activate the **Emergency Response Team and Emergency Command Team**, as the situation demands.
- _____ Coordinate/perform **activation of additional spill response contractors,** as the situation demands (telephone reference is provided in Figure 2.5).
- _____ Coordinate/perform required notifications are completed.
- _____ Coordinate/perform **regulatory agency notification,** as the situation demands.
- _____ Proceed to spill site and **coordinate response and clean-up operations.**
- _____ Direct containment, dispersion, and/or clean-up operations in accordance with the Product Specific Response Considerations provided in Figures 3.2 and 3.3.

LOCAL RESPONSE TEAM

- _____ Assigned personnel will immediately respond to a discharge from the Facility, as the situation demands.
- _____ Perform response/clean-up operations as directed or coordinated by the Incident Commander.
- _____ Assist as directed at the spill site.

FIGURE 3.1

SPECIFIC INCIDENT RESPONSE CHECKLIST

Remember, Without Exception, Personnel Safety Is First Priority. Excessive Exposure To The Vapor And Liquid Stages Of The Spilled Product Should Be Avoided.

INITIAL RESPONSE

- _____ Take appropriate personal protective measures.
- _____ Call for medical assistance if an injury has occurred.
- _____ Check wind direction before investigating incidents where vapor cloud is a possibility.
- _____ Utilize LEL meter when you conduct an initial investigation to determine what has been released and the source.
- _____ Do not investigate on your own, take a buddy.
- _____ When you evacuate the Facility because of toxic or explosive vapors, make sure that you take the FRP, response checklists, cell phones, radios, etc. with you to the muster point.
- _____ At the evacuation muster point, take a head count to determine if anyone is missing.
- _____ If possible, block access to the hot zone and/or entire Facility (use vehicles, caution tape, traffic cones, etc.).
- _____ Restrict access to the spill site and adjacent area as the situation demands. Take any other steps necessary to minimize any threat to health and safety.
- _____ Verify the type of product and quantity released (Material Safety Data Sheets are retained separately at the Facility).
- _____ Advise personnel in the area of any potential threat and/or initiate evacuation procedures.
- _____ Use testing and sampling equipment to determine potential safety hazards, as the situation demands.
- _____ Identify/Isolate the source and minimize the loss of product, from a safe distance.
- _____ Take necessary fire response actions.
- _____ Eliminate possible sources of ignition in the near vicinity of the spill.
- _____ Notify Facility Management of the incident.

FIGURE 3.1

SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

LINE BREAK OR LEAK, SPECIFIC RESPONSE

- _____ Shut down pumping equipment.
- _____ Close upstream and downstream block valves.
- _____ Utilize Combustible Gas Indicator, O_2 meter, proper colormetric indicator and other air sampling measurements to assure that areas are safe to enter for continued response operations.
- _____ Mitigate spreading of the product, as the situation demands. Potential containment strategies include:
    - Earthen dike/berm
    - Ditching
    - Spreading sorbent material over the spill
- _____ Prevent the spill from entering the waterways, sewer, etc. to the greatest extent possible, from a safe distance.
- _____ If located within containment area, ensure that drainage valve(s) is "closed".
- _____ Drain the line section, as the situation demands.
- _____ Make all necessary repairs.
- _____ Return the line to service when repairs are complete.
- _____ Clean up spilled product to eliminate any possible environmental problems. Be alert for underground cables.
- _____ Inform local operators such as utilities, telephone company, railway.
- _____ If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in Section 6.0. Determine which of these may be threatened by the spill and direct the response operation to these locations. Initiate protection and recovery actions.
- _____ Complete follow-up and written reporting, as the situation demands.

FIGURE 3.1

SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

STORAGE TANK LEAK, SPECIFIC RESPONSE

- _____ Shut down all tank battery product movement operations and isolate the tank.
- _____ Initiate Confined Space Entry procedures, as applicable.
- _____ Ensure that the containment area drainage valve(s) is "closed".
- _____ If near tank bottom, consider filling tank with water and maintain water bottom to suspend the discharge.
- _____ Utilize Combustible Gas Indicator, O_2 meter, proper colormetric indicator and other air sampling measurements to assure that areas are safe to enter for continued response operations.
- _____ Block drainage of spilled material from traveling offsite.
- _____ Stop all traffic in hazardous area (inside and outside of property boundaries), as the situation demands.
- _____ Remove product from containment area (at a sump or in a low area) with an explosion proof pump, oil skimmer, and/or vacuum truck w/ skimmer attachments.
- _____ If applicable, process remaining product through the separator system.
- _____ Empty tank as soon as possible.
- _____ Make all necessary repairs. Return the line/tank to service when repairs are complete and tested.
- _____ Clean up product spill to eliminate any possible environmental problems. Be alert for underground cables.
- _____ Inform local operators such as utilities, telephone company, railway.
- _____ If necessary, call one (1) of the approved waste removal companies to remove the remaining sludge and residue from the containment area.
- _____ If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in Section 6.0 and ACP. Determine which of these may be threatened by the spill and direct the response to these locations. Initiate protection and recovery actions.
- _____ Complete follow-up and written reporting, as the situation demands.

FIGURE 3.1

SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

EXPLOSIONS AND/OR FIRE, SPECIFIC RESPONSE

- _____ Evacuate area.
- _____ Notify Fire Department.
- _____ Keep unnecessary people away.
- _____ Isolate hazard area and deny entry.
- _____ Stay upwind.
- _____ Keep out of low areas.
- _____ Attempt to control the fire until the fire department arrives. Do not risk injury.
- _____ Close all open valves.
- _____ Turn off all electrical power in the fire area or, if necessary, the entire Facility.
- _____ Employees are **NOT** to attempt to fight a large, fast spreading fire. Attempt to control small fires, to extinguish or prevent spreading, using whatever means are available (i.e. fire extinguisher, water, etc.).
- _____ If fire is located at a point where the incoming pipeline stream creates additional hazards, the Facility Personnel will hit the emergency shutdown button to close out the headgates, and notify the pipeline controllers of the problem.

All personnel are reminded that outsiders other than emergency services will not be allowed in the Facility during the time of an emergency, and that no statements will be issued to the media or other interested parties except by designated Facility Management. Be courteous with media representatives and direct them to the designated spokesman.

Fire hydrants, located in the vicinity of this Facility, operate at a pressure of 120-150 psi.

FIGURE 3.1

SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

VAPOR CLOUD (from a massive spill, line rupture, etc.), SPECIFIC RESPONSE

- _____ The person who discovers the vapor cloud will sound the alarm and notify the supervisor on duty and vacate the area.
- _____ **Remember: the only proper action in the presence of a vapor cloud is to get away from it. Do not shut off electrical equipment.**
- _____ All personnel will report to the evacuation muster point for roll call and further instructions.
- _____ After all personnel have been accounted for, the Facility Manager will initiate the following actions as deemed necessary:

    1. Shut down pipeline.
    2. Evacuation of adjacent property.
    3. Only the fire department will be permitted to enter the Facility.

- _____ Contact the appropriate agencies and potentially affected neighbors

FIGURE 3.2

PRODUCT SPECIFIC RESPONSE CONSIDERATIONS
for

CRUDE OIL SPILLS

Flash Point Range: Above 100°F

Remember, Without Exception, Personnel Safety Is First Priority. Excessive Exposure To The Vapor And Liquid Stages Of The Spilled Product Should Be Avoided.

Suggested physical response actions for these products are detailed below. It is important to note however, that each situation is unique and must be individually responded to. These procedures are considerations only. Actual circumstances may dictate that the procedures followed may differ somewhat from those listed below. ***The following are intended for guideline purposes only.***

These materials are not extremely flammable and the preferred response is containment and mechanical recovery.

___ Identify source and stop discharge if possible.

___ Obtain explosimeter and other air sampling measurements to assure that areas are safe to enter for continued response operations.

___ If spill occurs at the Refinery, every effort must be made to block any drainage to ditches to prevent product from escaping the containment area. Commence containment efforts for any product which has escaped.

___ Deploy spill response equipment and personnel in an attempt to contain and recover as much product as possible.

___ Advise people in the area of any potential threat and/or initiate evacuation. Inform local operators such as utilities, telephone company, railway, and tunnels as the situation demands.

___ Recover the product and affected soil. Be alert for underground cables and water bearing formations. Remember that product may penetrate deeper if impermeable natural layers are disturbed.

___ Determine the direction and expected duration of spill movement. Refer to the maps provided in Figure 6.1 for an overview of the area.

___ Request local authorities to establish traffic control in the area, as the situation demands.

___ If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in Section 6.0. Determine which of these may be threatened by the spill and direct the response operation to these locations. Initiate protection and recovery actions.

FIGURE 3.3

PRODUCT SPECIFIC RESPONSE CONSIDERATIONS
for
GASOLINE SPILLS

Flash Point Range: Below 100°F

Remember, Without Exception, Personnel Safety Is First Priority. Excessive Exposure To The Vapor And Liquid Stages Of The Spilled Product Should Be Avoided.

Suggested physical response actions for these products are detailed below. It is important to note however, that each situation is unique and must be individually responded to. These procedures are considerations only. Actual circumstances may dictate that procedures followed may differ somewhat from those listed below. ***The following are intended for guideline purposes only.***

These materials float on water and are extremely flammable. Containment of these materials may allow explosive concentrations to accumulate. The preferred response is to minimize impact to water and protect shorelines (storm sewers, creeks, rivers, etc.) from contamination, allow evaporation to occur, and contain/clean-up remaining product.

___ Identify source and stop discharge if possible.

___ Make appropriate notifications to regulatory agencies and internal Toledo Refining Company, LLC Management. (Refer to Figures 2.2 and 2.5 for notifications.)

___ Obtain explosimeter and other air sampling measurements to assure that areas are safe to enter for continued response operations.

___ Eliminate sources of vapor ignition.

___ Stay upwind and evacuate nonessential personnel.

___ Advise people in the area of any potential threat and/or initiate evacuation. Inform local operators such as utilities, telephone company, railway, and tunnels as the situation demands.

___ Minimize area of surface soil impacted by free product (e.g. damming). Contact with surface runoff or standing water should be prevented whenever possible.

___ Recover pooled hydrocarbon as soon as possible.

___ Free hydrocarbons may be floated with water to aid recovery if increased vapors and agitation can be avoided. The water will act as a barrier to reduce further infiltration of pure hydrocarbon into the soil. (NOTE: This water will later have to be removed and probably treated.)

___ If free hydrocarbon **IS NOT** present, do not add water to the impacted area.

FIGURE 3.3 (Cont'd)

PRODUCT SPECIFIC RESPONSE CONSIDERATIONS for

GASOLINE SPILLS

___ Remove heavily impacted soil (saturated with hydrocarbons, or very strong hydrocarbon smell) as soon as possible after product/water removal.

___ Place in a bin/rolloff or a waste pile lined on the bottom and covered on the top with plastic sheeting to prevent contact with rainwater and contamination of other areas.

___ Drums may be used for very small spill cleanups.

___ If removal of heavily-impacted soil is delayed or contaminated soil is left in place pending final disposition, the following action should be taken if the possibility of rain exists to minimize contact with rainfall:

- ___ Cover area with plastic sheeting, overlap seams, weigh down with sandbags;
- ___ Use shallow ditches to divert rainwater around contaminated site; and
- ___ Promptly remove any rainwater that does accumulate on the site.

___ The following steps should be taken together with the Toledo Refining Company, LLC Environmental Department to minimize long term risk from the site:

- ___ Sample contaminated soil still in place;
- ___ Characterize and dispose of removed soil;
- ___ Estimate proper cleanup target;
- ___ Remove and dispose of more soil, if necessary;
- ___ Install groundwater monitoring wells or monitor existing wells, if necessary; and
- ___ Provide follow-up communication with regulatory agencies, if necessary.

___ Recover the product and affected soil. Be alert for underground cables and water bearing formations. Remember that product may penetrate deeper if impermeable natural layers are disturbed.

___ Due to the low flash point of these products: (1) Use non-sparking systems, (2) Have fire trucks or firefighting equipment nearby, (3) Warn all involved of the product's flammability, and (4) Allow product to evaporate to the greatest extent possible.

___ Determine the direction and expected duration of spill movement. Refer to the maps provided in Figure 6.1 for an overview of the area.

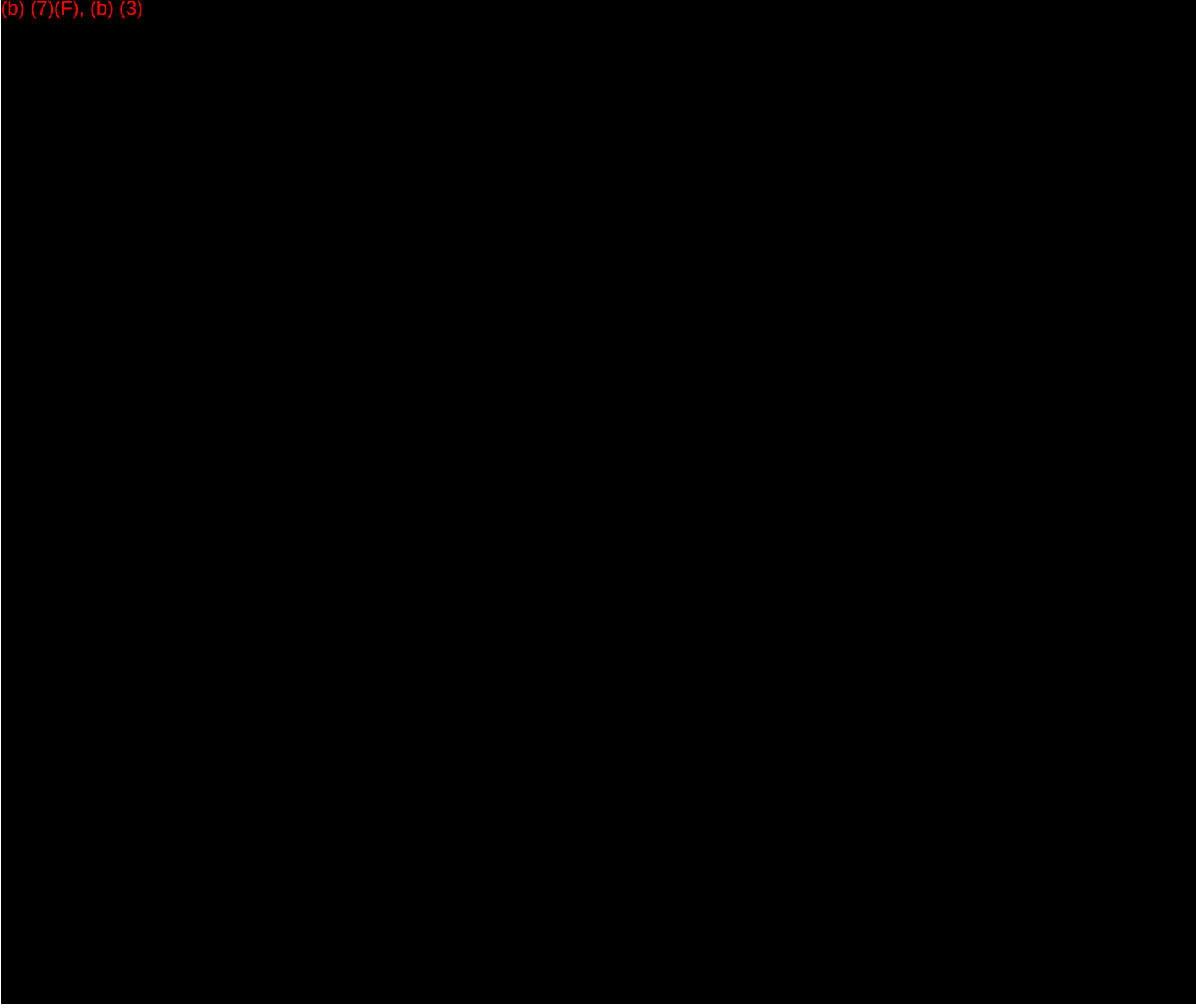
___ Request local authorities to establish traffic control in the area and to post a - "High Flammability" advisory, as the situation demands.

___ If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in Section 6.0. Determine which of these may be threatened by the spill and direct the response operation to these locations. Initiate protection and recovery actions.

Facility Diagram

(Section 1.9)

(b) (7)(F), (b) (3)



SITE LOCATION MAP
TANK FARM #2

1.0 INTRODUCTION AND PLAN CONTENT

1.1 PLAN PURPOSE/OBJECTIVES

The purpose of this Facility Response Plan (hereinafter referred to as "Plan") is to assist the Toledo Refining Company, LLC - Tank Farm #2 personnel prepare for and respond quickly and safely to a discharge originating from the Facility. The Plan provides techniques and guidelines for achieving an efficient, coordinated, and effective response to a discharge incident which may occur at the Facility.

The specific objectives of the Plan are to:

- Establish an Emergency Response Team, assign individuals to fill the positions on the team, and define the roles and responsibilities of team members.
- Define notification, activation, and mobilization procedures to be followed when a discharge occurs.
- Define organizational lines of responsibility to be adhered to during a response operation.
- Document equipment, manpower, and other resources available to assist with the response.
- Ensure compliance with Toledo Refining Company, LLC's Principles of Health, Environment and Safety (Appendix A).
- Ensure compliance with the federal, state, and local oil pollution regulations.
- Ensure consistency with the National Contingency Plan and Area Contingency Plan(s) for the area of operation.

1.2 SCOPE OF PLAN

This Plan contains prioritized procedures for personnel to mitigate or prevent any discharge resulting from operations. A description of the operations conducted at the Facility has been detailed in Figure 1.3 with additional information provided in the "Hazard Evaluation" in Appendix B. Facility spill mitigation procedures and response guidelines are provided in Section 3.0 for discharges that could result from any of the following scenarios:

- Tank overfill/failure
- Piping rupture/leak
- Explosion and/or fire
- Equipment failure (e.g. pumping system failure, relief valve failure, etc.)

1.2 SCOPE OF PLAN (Cont'd)

These scenarios could result in the following discharge volumes (as defined in EPA Final Rule 40 CFR Part 112, 33 CFR 154, and 49 CFR 194):

Discharge Scenario	Potential Oil Group	Planning Volumes		
		DOT/ PHMSA	EPA	Facility Maximum
Small/Average Most Probable	3/4	---	50 Bbls	50 Bbls
Medium/Maximum Most Probable	3/4	---	857 Bbls	1,200 Bbls
Worst Case	(b) (7)(F), (b) (3)			

These worst case discharge volumes are utilized in calculating the planning volume for response resources. The planning volume is used to determine the necessary on-water recovery capacity to respond within the three tiered response times. The identified oil spill recovery devices should be capable of arriving at the scene of a discharge within the time specified in Appendix C. Appendix C of this Plan demonstrates a series of calculations and planning volume determinations based on the applicable regulations. The inclusion of these calculations (Appendix C) is for demonstration of the response planning volumes and response capability necessary for on-water and on-shore recovery requirements as the result of the discharge scenarios outlined in the table above.

1.3 PLAN DISTRIBUTION PROCEDURES

The HSS Manager shall have the responsibility for distribution of the Plan. Distribution will be handled in the following manner:

- Distribution of the Plan is controlled by the number on the cover page. A distribution list is included in the Foreword to facilitate control.
- Company personnel who may be called upon to provide assistance during discharge response activities will have access to a copy of the plan for their use and training.
- It is the responsibility of any person holding a copy of the Plan to ensure that the copy is transferred to their replacement in the event of reassignment or change in responsibility.
- Various regulatory agencies will also be distributed a copy of the Plan. The list of agencies is detailed in the Distribution List located in the Foreword.

1.4 PLAN REVIEW AND UPDATE PROCEDURES

Annual Review/Update

The HSS Manager will coordinate with Facility Management to support the following plan review and update procedures.

- At least once each year review and make appropriate revisions as required by operational or organizational changes.
- At least once each year review and make appropriate revisions as required by changes in the names and telephone numbers detailed in Section 2.0.
- The HSS Manager will coordinate the word processing, publication, and distribution efforts of completing the revisions and maintaining the Plan.
- Plan review opportunities may occur during response team tabletop exercises or actual emergency responses.

Incorporation of Plan Revisions

The **plan holder**, immediately upon receipt of any revisions, shall

- Review and insert the revised pages into the Plan.
- Discard the obsolete pages.
- Record this action on the "Revision Record" page in the Foreword.

Agency Revision Requirements

- **EPA** - The Facility shall revise and resubmit revised portions of the Plan to the EPA Regional Administrator within 60 days of each facility change that may materially affect the response to a Worst Case Discharge.
- **DOT/PHMSA** - The Facility shall revise and resubmit changes to the Pipeline Response Plans Officer within 30 days. In addition, the entire plan shall be reviewed and resubmitted to PHMSA to obtain approval every five (5) years from the last plan approval date. If the plan is still current, PHMSA will accept a letter from the operator stating that the plan of file with the agency is still current and serves as the resubmitted plan for PHMSA to review for approval.
- **USCG** - Requires changes to be submitted in duplicated to the marine Safety Office in a timely manner (in duplicate). Plan review must occur within one (1) month of the anniversary date of the USCG approval letter. If no Changes are required, the Facilities shall submit a letter to the USCG stating “No Changes Required”.

1.4 PLAN REVIEW AND UPDATE PROCEDURES (Cont'd)

CONDITIONS REQUIRING CHANGES	EPA	DOT/PHMSA	USCG
Change in ownership of Facility and/or Pipeline.	✓	✓	✓
Relocation or replacement of portions of the Facility (including the pipeline) which in any way substantially affect the information included in this Plan, such as a change in the Worst Case Discharge volume.	✓	✓	✓
Emergency response procedures.		✓	✓
A change in the Qualified Individual.		✓	✓
A change in the NCP or an ACP that has significant impact on the equipment appropriate for response activities.		✓	✓
A change in the listings of economically important or environmentally sensitive areas identified in the applicable ACP in effect six (6) months prior to the plan review.	✓	✓	✓
Change in the Facility's configuration that materially alters the information included in the Plan (i.e. new construction).	✓	✓	✓
Change in the type of oil handled, stored, or transferred that materially alters the required response resources.	✓	✓	✓
A change in the name of the Oil Spill Removal Organization (OSRO).		✓	✓
Material change in capabilities of the Oil Spill Removal Organization(s) (OSROs) that provide equipment and personnel.	✓	✓	✓
Material change in the Facility's spill prevention and response procedures.	✓		
Any other changes that materially affect the implementation of the Plan.	✓	✓	✓
As a result of post incident or drill evaluations.		✓	✓

NOTE: Any agency may require revisions to this Plan at any time if deficiencies are found under their applicable regulations or during an actual response.

Submission of Revisions

Except as provided above, amendments to the following do not require approval by the Regional Administrator (RA):

- Personnel and telephone number lists included in the Plan.
- OSRO(s) change which does not result in a material change in support capabilities.

The RA shall be provided with a copy of such revisions. Facility shall submit the EPA issued Facility Identification Number with the changes.

1.5 REGULATORY COMPLIANCE

The development, maintenance, and utilization of this Plan implements company policy and addresses the following regulatory requirements and guidelines:

- Federal Spill Prevention, Control and Countermeasure Regulation: U. S. EPA Final Rule for Oil Pollution Prevention; Non-Transportation Related On-shore and Offshore Facilities (40 CFR Part 112 – as published on July 17, 2002).

A detailed cross-reference between the format of this Plan and that of the regulation is provided in Appendix D of the FRP.

- U.S. EPA Spill Prevention, Control, and Countermeasure (SPCC) regulations as published in 40 CFR Part 112.5.

- U.S. Department of Transportation (PHMSA) regulations as published in 49 CFR 194.

The applicable Area Contingency Plans for the Facility are:

- USCG Western Lake Erie Area Contingency Plan.

- U.S. Environmental Protection Agency - Region V, Chicago, IL.

The applicable National Contingency Plan for the Facility is:

- U.S. Environmental Protection Agency; National Oil and Hazardous Substances Pollution Contingency Plan; Final Rule.

General Applicability

This requirement applies to owners or operators of non-transportation related onshore and offshore facilities engages in drilling, producing, gathering, storing, processing, refining, transferring, distributing, using, or consuming oil and oil products, and that meet the each of the following criteria;

- Due to their location, could reasonably be expected to discharge oil in harmful quantities into or upon the navigable waters of the United States or Adjoining shorelines; **and**

- Has an aggregate aboveground storage capacity in excess of 1,320 gallons excluding containers less than 55 gallons; **or**

- Completely buried storage capacity in excess of 42,000 gallons, excluding any tanks, connected underground piping, underground ancillary equipment, and containment systems subject to the technical requirements of 40 CFR Part 280 or 281.

1.5 REGULATORY COMPLIANCE (Con't)

Submission of Spill Documentation

The Facility shall submit the documentation required by 40 CFR Part 112.4 to the EPA Regional Administrator within sixty (60) days whenever the Facility has a discharge event(s) that meets one of the following conditions:

- Discharges more than 1,000 gallons of oil (or oil products) into or upon the navigable waters of the United States or adjoining shorelines in a single spill event; or

- Discharges more than 42 gallons of oil (or oil products into the navigable waters of the United States in two (2) spill events within any 12 –month period.

A form detailing the documentation requirements to be included with this submission is provided in Appendix E.

1.6 DISCHARGE CLASSIFICATION

The severity of a discharge will have a bearing on the level of management involvement necessary and the extent of resource mobilization. The following definitions provide guidance in the early classification of discharges.

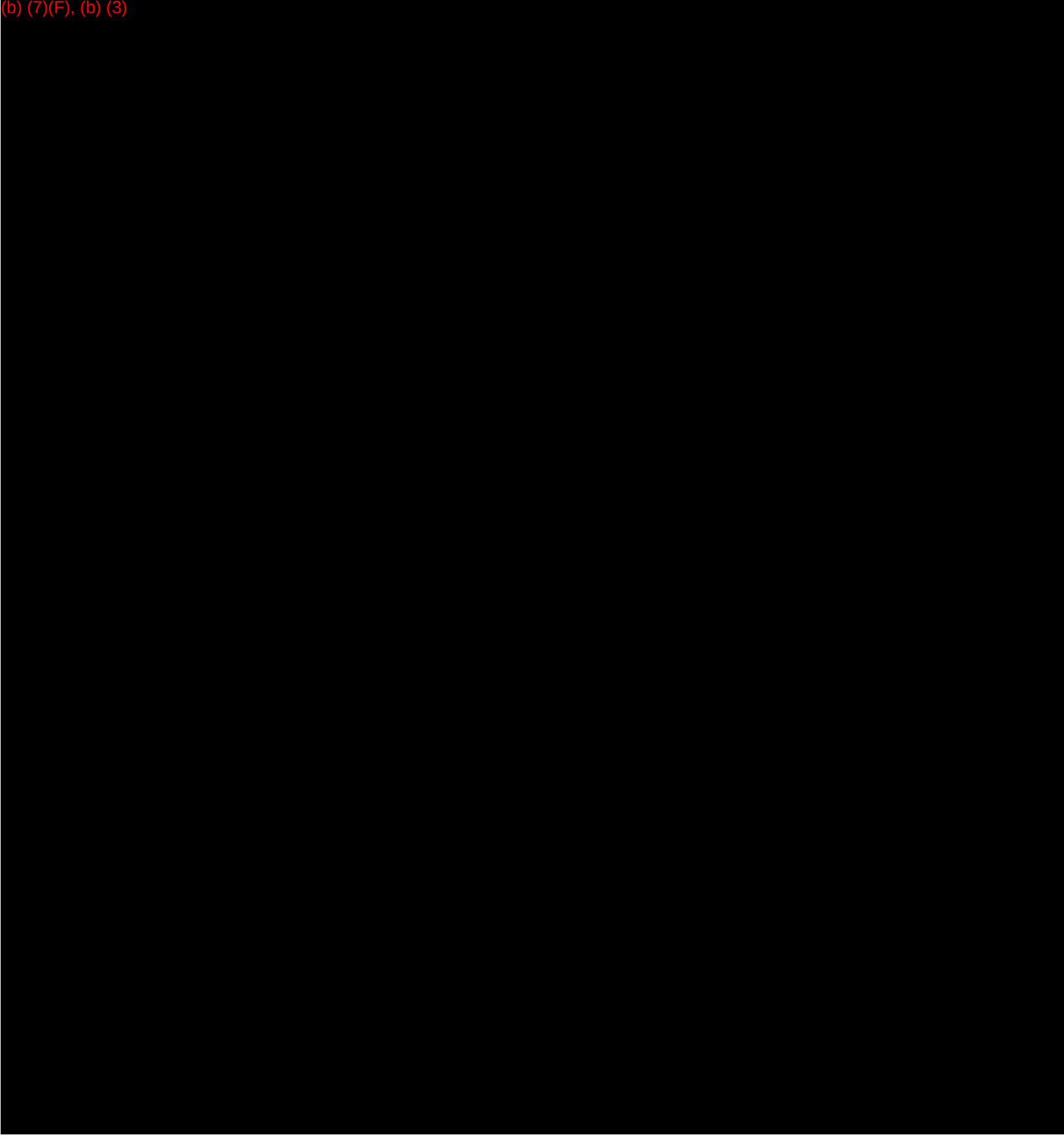
LEVEL I EVENT
Incident Command will normally be assumed by Facility Management. Spill Management Team support will be utilized on an as needed basis.
Exposure
The potential Public and Environmental exposure is moderate. The type and quantity of material released, while considering the overall nature of the incident (e.g. fire, proximity to private dwellings, etc.), will have moderate impact on the public and/or the environment.
Degree of Control
The incident can be controlled in a short period of time through implementation of the local resources available to the Facility (including contract resources).
Governmental Involvement
Government involvement will be moderate and generally restricted to State and Local levels.
Media Involvement
Media interest will be moderate and generally restricted to State and Local levels.

1.6 DISCHARGE CLASSIFICATION (Cont'd)

LEVEL II EVENT
Local Toledo Refining Company, LLC resources may have to be supplemented with Spill Management Team resources to manage the spill incident.
Exposure
The potential Public and Environmental exposure is moderately high. The type and quantity of material released, while considering the overall nature of the incident (e.g. fire, proximity to private dwellings, etc.), will have moderately high impact on the public and/or the environment.
Degree of Control
The incident can be brought under control in a moderate period of time through implementation of local resources available to the Facility (including contract resources) with possible implementation of regional resources.
Governmental Involvement
Government involvement will be moderately high and generally restricted to Regional levels.
Media Involvement
Media interest will be moderately high and generally restricted to Regional levels.

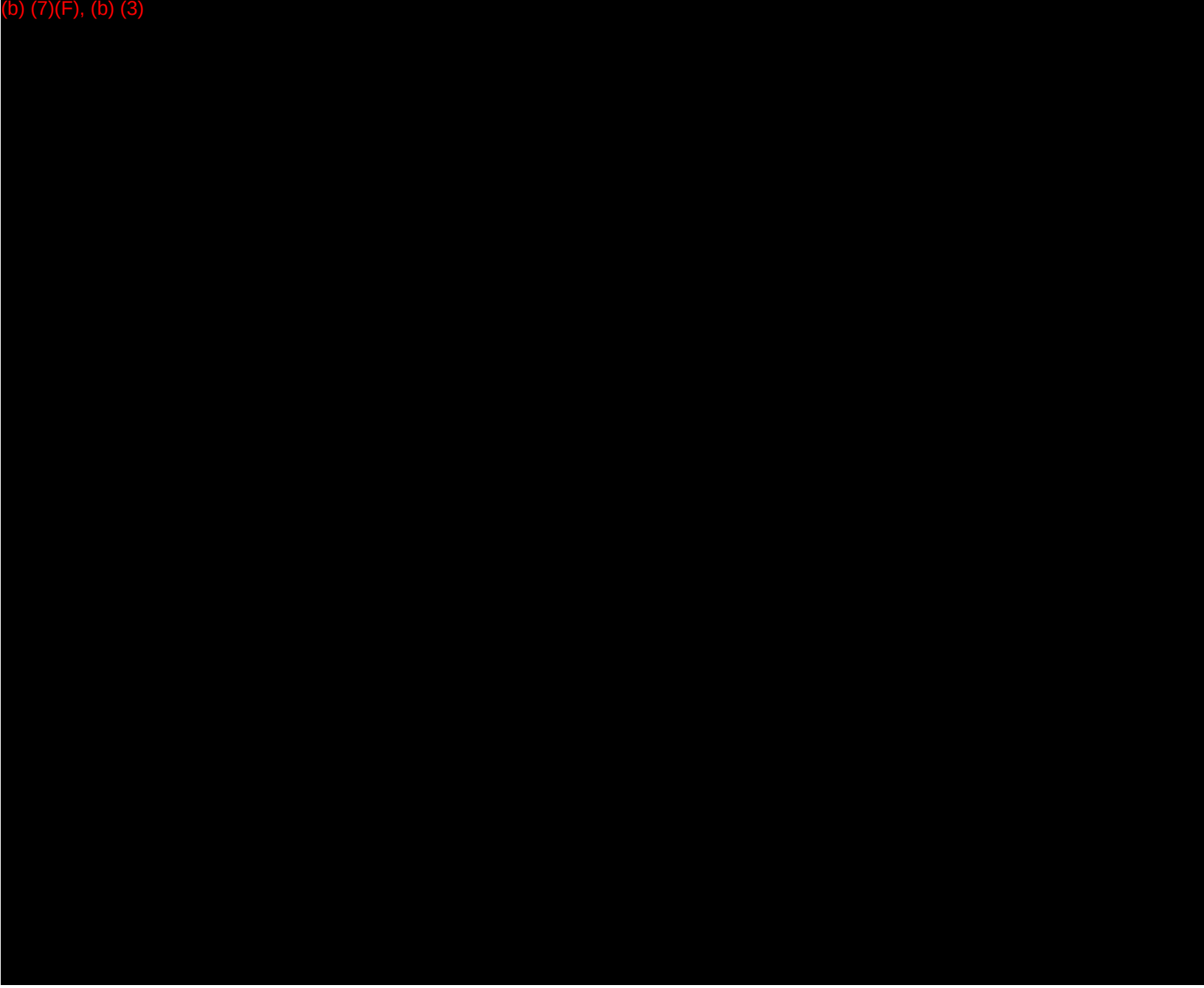
LEVEL III EVENT
Maximum Toledo Refining Company, LLC and external resources must be implemented to respond to the spill incident. Activation of the Toledo Refining Company, LLC Spill Management Team would be anticipated during a Level III incident.
Exposure
The potential Public and Environmental exposure is significant. The type and quantity of material released, while considering the overall nature of the incident (e.g. fire, proximity to private dwellings, etc.), will have significant impact on the public and/or the environment.
Degree of Control
Maximum Toledo Refining Company, LLC and third party resources must be implemented in order to gain control of the incident.
Governmental Involvement
Government involvement will be intense.
Media Involvement
Media interest will be high and may include national coverage.

(b) (7)(F), (b) (3)



AREA MAP

(b) (7)(F), (b) (3)



SITE LOCATION MAP

FIGURE 1.2

FACILITY DIAGRAM

FIGURE 1.3

FACILITY INFORMATION

GENERAL INFORMATION	
Facility Name:	Toledo Refining Company, LLC 2200 Pickle Rd. Oregon, OH 43616 (419) 698-6600 (Dispatcher) (419) 697-6423 FAX
EPA FRP ID#:	FRP05A0540
Owner Name:	Toledo Refining Company, LLC 1819 Woodville Road Oregon, OH 43616
Telephone/FAX:	Additional telephone references, including 24 hour numbers, for the Facility, Owner, and QI are provided in Figure 2.4.
Primary SIC Code:	2911
Primary NAICS Code:	493190
Date of Initial Oil Storage:	1920

FACILITY LOCATION	
County:	Lucas County, Ohio
Facility Latitude:	(b) (7)(F), (b) (3) [redacted]
Facility Longitude:	
Area Map:	Provided in Figure 1.1
Facility Diagram:	Provided in Figure 1.2
Wellhead Protection Area:	No Impact

FIGURE 1.3

FACILITY INFORMATION (Cont'd)

PHYSICAL DESCRIPTION - GENERAL

Description of Operation:

Toledo Refining Company, LLC is located in Oregon, Ohio. Toledo Refining Company, LLC #2 Tank Farm is located at the area bounded by Pickle Road, Wheeling Avenue, Brown Road, Groll and Dike Drives and CSX Railroad tracks. The main entrance is on Pickle Road.

- This Facility refines crude oil. Some oil storage is conducted at this Facility.
- Product is transferred to the Toledo Refining Company, LLC Marine Terminal and the No. 2 Tank Farm.
- A truck rack is located at this facility; however, only propane is transferred across this truck rack.

Products Handled:

- Crude Oil
- Gasoline
- Kerosene / Jet-A
- No. 2 Fuel Oil
- HCC Feed
- Additives

Note: Material Safety Data Sheets (MSDS) are maintained separately at the Facility.

Pipeline Response Zone Information Summary:

General:

- ***Since all maintenance/operational functions are conducted by Toledo Refining Company, LLC personnel located in the Toledo area, a single Response Zone (DOT/PHMSA response planning requirement under OPA 90) has been developed. Subsequently, the requirement for a Core Plan and a separate Response Zone Plan/Appendix for each Response Zone have been combined into this one Facility Response Plan.***

- There is one (1) company own DOT covered pipeline located at the No. 2 Tank Farm. This pipeline is approximately 2.5 mile in length and is a 12" diameter.

- DOT covered pipelines are used to transport refined products.

This FRP is written in English and understood by personnel responsible for carrying out the plan.

FIGURE 1.3

FACILITY INFORMATION (Cont'd)

PHYSICAL DESCRIPTION - GENERAL (Cont'd)

Pipeline Response Zone Information Summary (Cont'd):

Determination of Significant and Substantial Harm (DOT/PHMSA):

This Response Zone does not meet the criteria for "*Significant and Substantial Harm"* because the line sections are less than 10 miles (16 kilometers) in length.

Pipeline Specifications:

The basic specifications of the pipelines and the single Response Zone are as follows:

- **Product Types:** Refined Products
- **Pipe Detail:** 12" diameter

Response Resources:

- **Line Length:** approximately 2.5 miles (from Refinery to Buckeye)
- **DOT/PHMSA Worst Case Discharge:** (b) (7)(F), (b) (3)
- **Contracted resources:** Agreement numbers and classifications are detailed in Figure 5.1 and Appendix J.
- **Geographic Area:** See Figures 1.1, 1.2 and 6.2
- **Areas Traversed:** Oregon, Toledo, Lucas County, Ohio

DATES AND TYPES OF SUBSTANTIAL EXPANSIONS

- The last substantial tank expansions occurred in 1972 (tank 408/tank 409)
- Other historical expansions records are available in the refinery engineering files.

OTHER FACILITY DATA

- Additional facility data (including storage information) is provided in Appendix K and discharge detection and inspection information is provided in Appendix I.

QUALIFIED INDIVIDUALS

FIGURE 1.4

Qualified Individual and Alternates						
NAME	RESPONSE TIME	ROLE	TRAINING LEVEL	OFFICE	HOME	OTHER
Elmer Dunberger – Supervisor of Security & Emergency Response	10 minutes	Qualified Individual	40 Hrs. HAZWOPR 8 Hrs. Annual	419-698-6669	(b) (6)	
Keith A Dempsey- Emergency Response and Security Shift Supervisor	10 minutes	Alt. Qualified Individual	Annual	419-698-6663		
Ed Donnelly- Emergency Response and Security Shift Supervisor	10 minutes	Alt. Qualified Individual	Annual	419-698-6663		
Phil Wojcinski- Emergency Response and Security Shift Supervisor	10 minutes	Alt. Qualified Individual	Annual	419-698-6663		
Ken Adams- Emergency Response and Security Shift Supervisor	10 minutes	Alt. Qualified Individual	Annual	419-698-6663		
Kevin Kennedy-Emergency Response and Security Shift Supervisor	10 minutes	Alt. Qualified Individual	Annual	419-698-6663		

2.0 NOTIFICATION PROCEDURES

This section is a guide for notification procedures that should be implemented immediately after discovering a discharge incident and securing the source (if at all possible). Internal and external notifications are described separately for clarification purposes only. All notifications are of extreme importance and must be completed in a timely manner.

2.1 INTERNAL NOTIFICATION

The following internal notifications should be made for each emergency incident to the extent that the incident demands. An internal notification sequence is provided in Figure 2.1. In no event shall notification be delayed because the immediate supervisor is inaccessible. **Authorization is given to bypass management levels if necessary to provide immediate notification to upper management.** The Facility Spill Management Team will consist of members of the Emergency Response Team and the Emergency Command Team Teams, as well as contract personnel as the situation demands. The typical internal notification responsibilities for each person potentially involved in the initial response are as follows:

First Toledo Refining Company, LLC Person Notified/On-Scene

- ☐ Immediately notify **Facility Shift Superintendent.**

Facility Shift Superintendent

- ☐ Notify security dispatch. Coordinate with Environmental Department to notify all regulatory/governmental agencies and other emergency response organizations as defined in Section 2.2 as the situation demands.

Security Dispatch

- ☐ Notify **Qualified Individual (QI)** for first assessment
- ☐ **Coordinate** activation of additional response as directed by QI (including activation / mobilization of the Toledo Refining Company, LLC Emergency Command Team and Emergency Response team). Figure 2.4 provides contact information for the appropriate teams.

2.2 EXTERNAL NOTIFICATION

The following external notifications should be made in accordance with federal, state, and local regulations for all reportable discharges The Facility Superintendent shall ensure that the following required verbal notifications are made as the situation demands.

The Environmental Department shall ensure that an “Information on Discharge” form is completed for all required reportable FRP related discharges and written notifications are made as designated below.

Figure 2.5 provides a listing of potential external organization contact information.

Required Notifications

☐ **National Response Center (NRC)**
Verbal
Immediately for all spills that impact or threaten navigable water.

Written
In accordance with the applicable SPCC regulations, within 60 days to the U.S. Environmental Protection Agency for a spill in excess of 1,000 gallons (24 Bbls.) in a single event or two spill events within a twelve month period into or upon navigable waters of the United States or adjoining shorelines.

U.S. Environmental Protection Agency - Region V
77 West Jackson Blvd., 5th Floor
Chicago, IL 60604

☐ **Ohio EPA Office of Emergency Response (SERC)**
Verbal
Immediately for all spills that impact state air, land or waters.

Written
As requested by the agency. (Within 30 days)

Division of Emergency and Remedial Response
P. O. Box 1049
Columbus, OH 43216-1049

☐ **Local Emergency Planning Committee (LEPC)**
Verbal
For all spills which escape the boundary of the Facility.

Lucas County (LEPC)

Written
As the agency may request, depending on circumstances.

2.2 EXTERNAL NOTIFICATION (Cont'd)

Required Notifications (Cont'd)

☐ **Ohio State Fire Marshall**
Verbal
If the spill is in any way underground storage tank related, the Ohio State Fire Marshall must be notified if a (UST) containing flammable or combustible liquids have any release or suspected release to the local Fire Official and the State Fire Marshall within 24 hours.

Written
As requested by the agency.

Ohio State Fire Marshall
8895 East Main
Reynoldsberg, OH 43068

Other notification required will be made by the Emergency Command team, depending on the incident situation.

Other Notifications

☐ **Occupational Safety and Health Administration (OSHA)**
Immediately for incidents involving three (3) or more hospitalizations or one (1) or more deaths.

☐ **U.S. Environmental Protection Agency (EPA)**

- *Immediately for all spills that impact or threaten navigable water or adjoining shoreline. Notification to the EPA is typically accomplished by the call to the NRC.*

- *As per RCRA regulations, a written report on the incident must be submitted to the Regional Administrator within 15 days from the date of the incident.*

- *The report must include:*

  1. *Name, address, and telephone number of the owner or operator;*
  2. *Name, address, and telephone number of the Facility;*
  3. *Date, time, and type of incident (e.g., fire, explosion);*
  4. *Name and quantity of material(s) involved;*
  5. *The extent of injuries, if any;*
  6. *An assessment of actual or potential hazards to human health or the environment, where this is applicable; and*
  7. *Estimated quantity and disposition of recovered material that resulted from the incident.*

2.2 EXTERNAL NOTIFICATION (Cont'd)

Other Notifications (Cont'd)

☐ **U.S. Coast Guard - MSO (USCG)**
Immediately for all spills that impact or threaten navigable water or adjoining shoreline. Notification to the USCG is typically accomplished by the call to the NRC.

☐ **U.S. Fish and Wildlife Service (USFWS)**
Immediately for Wildlife Protection/Rehabilitation

☐ **Local Emergency Services**
Immediately for all Police, Fire, and Medical Emergencies

Dial 911

Police Department (Note for HVD/MT events Security Dispatch calls Toledo Fire non-emergency number)

Fire Department (Note for HVD/MT events Security Dispatch calls Toledo Fire non-emergency number)

Ambulance Service

☐ **Wildlife Rehabilitation Resources**

International Bird Rescue Center (Berkeley, CA)

Tri-State Bird Rescue Center

☐ **Neighbors**
Directly or with assistance from local police and fire agencies, inform all adjacent businesses and private citizens that might be immediately impacted.

SPILL REPORTING GUIDELINES

- Never include information which has **not been verified.**
- **Never speculate** as to the cause of an incident or make any acknowledgment of liability.
- **DOCUMENT:**
  - ☐ Agency notified
  - ☐ Time agency notified
  - ☐ Person notified
  - ☐ Content of message given
- **DO NOT DELAY** reporting due to incomplete information.

FIGURE 2.1

INTERNAL NOTIFICATION SEQUENCE

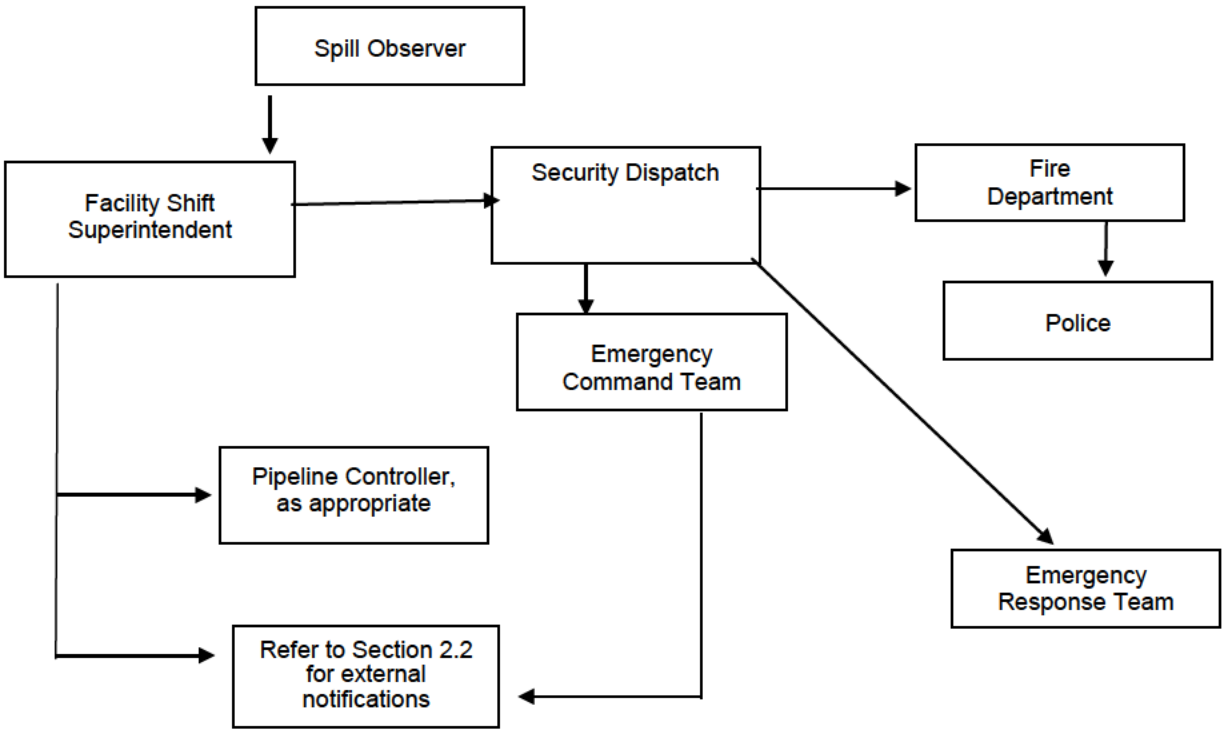
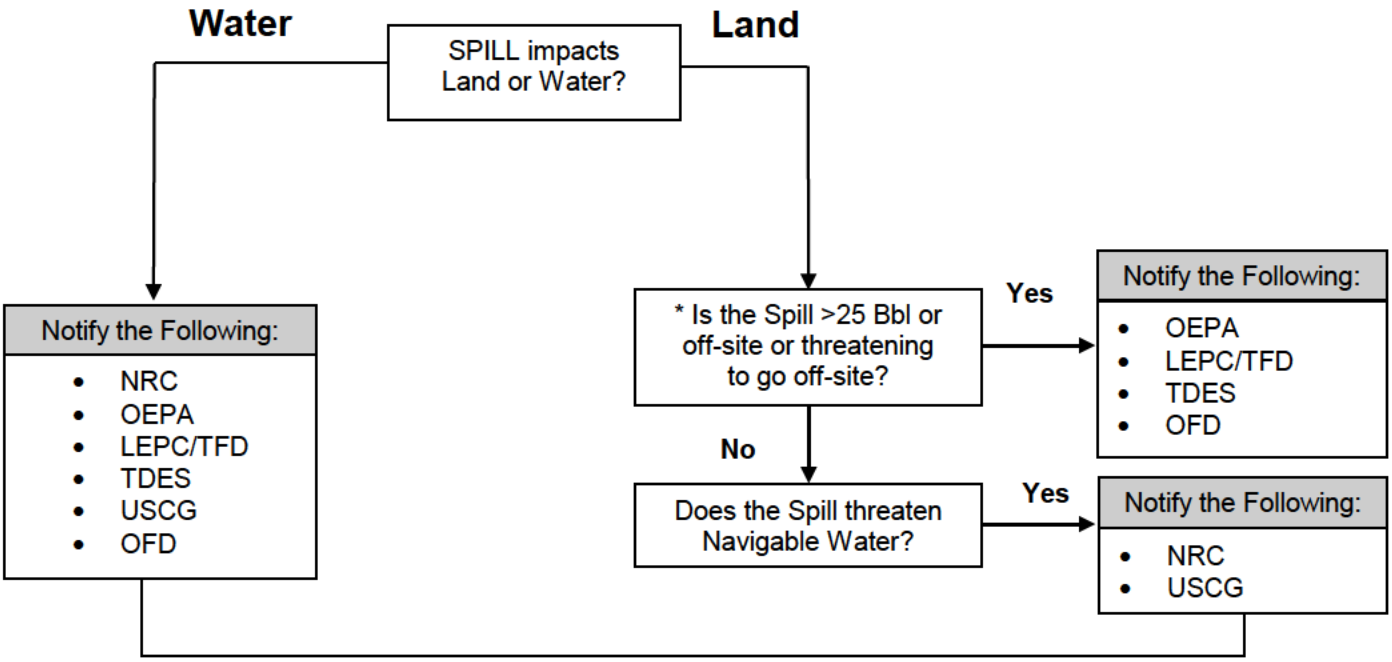


FIGURE 2.2

EXTERNAL NOTIFICATION OF SPILL



Acronyms:
• NRC = National Response Center • OEPA = Ohio Environmental Protection Agency • TFD = Toledo Fire Department • LEPC = Local Emergency Planning Committee • USCG = U.S. Coast Guard • OFD = Oregon Fire Department • TDES = Toledo Division of Environmental Services

* Ohio EPA requires that all spills that cause 25 gallons or more to be released offsite be reported

FIGURE 2.3

Information on Discharge form

Information on Discharge*

Facility: _____

(A) Reporting Party	(B) Suspected Responsible Party
Name:	Name:
Phone:	Phone:
Job Position:	
Company:	Company:
Address:	Organization Type: ☐ Private Citizen ☐ Private Enterprise ☐ Public Utility ☐ Local Government ☐ State Government ☐ Federal Government
City:	City:
State:	State:
Zip:	Zip:
Were materials discharged: ☐ Yes ☐ No	
Calling for Responsible Party: ☐ Yes ☐ No	
Date and Time of report call:	
Other Notifications : ☐ USCG ☐ EPA ☐ State ☐ Other:	

- It is not necessary to wait for all information before calling the National Response Center (NRC) 1-800 424-8802 or direct telephone: 202-267-2675

Incident Description			
Source and /or Cause of incident:			
Date of Incident:	Time of Incident:		
Incident Address/Location Nearest City/Distance from City/Township Range Borough:			
Storage Tank Container: Above Ground: ☐ Below ground: ☐ Other: ☐			
Container capacity (bbls):			
Facility Capacity			
Tank Capacity (bbls):	Latitude:	Longitude:	River Mile:

Information on Discharge*

Facility: _____

Materials	
Material Discharged:	
Quantity in water: (include units)	
Response Action	
Actions Taken to Correct or Mitigate Incident:	
Impact	
Number of Injuries:	Number of Fatalities:
Evacuations required: ☐ Yes ☐ No ☐ Unknown	If Yes: Number Evacuated:
Any Damage: ☐ Yes ☐ No ☐ Unknown	If Yes: Damage in Dollars:
Additional Information	

FIGURE 2.4

Internal Notification Contact Information

EMERGENCY RESPONSE TEAM

NAME	RESPONSE TIME	RESPONSIBILITY DURING RESPONSE ACTION	TRAINING LEVEL	OFFICE	HOME	OTHER
Elmer Dunberger	10 Minutes (maximum)	Security Lead / Qualified Individual /Alternate QI	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6669	(b) (6)	
Ken Adams	15 minutes (*maximum*)	Emergency Response Shift Supervisor / QI / Alternate QI	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6663		
Keith Dempsey	15 minutes (maximum)	Emergency Response Shift Supervisor / QI / Alternate QI	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6663		
Ed Donnelly	10 minutes (*maximum*)	Emergency Response Shift Supervisor / QI / Alternate QI	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6663		
Kevin Kennedy	15 minutes (maximum)	Emergency Response Shift Supervisor / QI / Alternate QI	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6663		
Phil Wojcinski	10 minutes (*maximum*)	Emergency Response Shift Supervisor / QI / Alternate QI	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6663		
Cory Clark	15 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6628		
Chris Conley	20 minutes *(maximum)*	Emergency Response		419-697-2491		
Douglas Church	60 Minutes (maximum)	Emergency Response		419-698-6600		
Richard Cutcher	15 Minutes (maximum)	Emergency Response		419-698-6600		
Sandy Daniel	20 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6692		

EMERGENCY RESPONSE TEAM

NAME	RESPONSE TIME	RESPONSIBILITY DURING RESPONSE ACTION	TRAINING LEVEL	OFFICE	HOME	OTHER
Justin Donley	15 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600	(b) (6)	
Jessie Duke	20 minutes (maximum)	Emergency Response		419-698-6600		
Fred Espinoza	15 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6608		
Craig Felbinger	20 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		
Daniel Flores	20 minutes (*maximum)*	Emergency Response		419-698-6600		
Dennis Flory	45 minutes *(maximum)*	Emergency Response		419-698-6600		
Dan Gresh	30 minutes	Emergency Response		419 698 6600		
Mike Jones	20 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6659		
Marty Koch	15 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6608		
John Kowalski	20 minutes (maximum)	Emergency Response		419-698-6600		
Mark Lambert	15 minutes *(maximum)*	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6974		
Terry Mack	15 minutes (maximum)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		

EMERGENCY RESPONSE TEAM						
NAME	**RESPONSE TIME**	**RESPONSIBILITY DURING RESPONSE ACTION**	**TRAINING LEVEL**	**OFFICE**	**HOME**	**OTHER**
Mike Mahr	20 minutes (maximum)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6772	(b) (6)	
Tim Marshall	30 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		
Jason McVey	45 minutes (maximum)	Emergency Response		419-698-6600		
Rusty Miller	15 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		
Tim Musolf	20 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		
Kevin Rank	10 minutes (*maximum*)	Emergency Response		419-698-6600		
Thomas Saunders	10 minutes (maximum)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6608		
Nick Schnell	20 minutes (*maximum*)	Emergency Response		419-698-6600		
Rick Schroeder	20 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		
Clark Timmons	15 minutes (maximum)	Emergency Response		419-698-6600		
Lloyd Wright	20 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		
Dave Yap	15 minutes (*maximum*)	Emergency Response		419-698-6600		

EMERGENCY RESPONSE TEAM						
NAME	**RESPONSE TIME**	**RESPONSIBILITY DURING RESPONSE ACTION**	**TRAINING LEVEL**	**OFFICE**	**HOME**	**OTHER**
Brian Yost	20 minutes (*maximum*)	Emergency Response		419-698-6600	(b) (6) [redacted]	

EMERGENCY COMMAND TEAM						
NAME	**RESPONSE TIME**	**RESPONSIBILITY DURING RESPONSE ACTION**	**TRAINING LEVEL**	**OFFICE**	**HOME**	**OTHER**
Clark Wrigley	15 minutes (*maximum*)	Incident Commander	Annually	419-698-6622	(b) (6)	
Neal Sahni	20 minutes (*maximum*)	Deputy Incident Commander	Annually	419-698-6766		
James Sciarini	20 minutes (*maximum*)	Administration Officer	Annually	419-698-6709		
Olivia Summons	15 minutes (*maximum*)	Information Officer	Annually	419-698-6910		
Joe Niedecken	15 minutes (*maximum*)	Refinery Operations Officer	Annually	419-698-6760		
Eric Fannin	15 minutes (*maximum*)	Safety Officer	Annually	419-698-6868		
Chris McCormick	35 minutes (*maximum*)	Planning Section Chief	Annually	419-697-6547		
Daniel Ingram	20 minutes (*maximum*)	Logistics Section Chief	Annually	419-698-6717		
Nancy Perham	35 minutes (*maximum*)	Finance Officer	Annually	419-697-6549		
Elaine Moore	15 minutes (*maximum*)	Liaison Officer	Annually	419-698-6847		
Vickie Witty Davis	35 minutes (*maximum*)	Oil Flow Officer	Annually	419-698-6794		
Christine Shultz	15 minutes (*maximum*)	Documentation Unit Leader	Annually	419-698-6810		

EMERGENCY COMMAND TEAM						
NAME	**RESPONSE TIME**	**RESPONSIBILITY DURING RESPONSE ACTION**	**TRAINING LEVEL**	**OFFICE**	**HOME**	**OTHER**
Richard Beans	30 minutes (maximum)	Communications Unit Leader	Annually	419-698-6637	(b) (6)	

FIGURE 2.5

External Notification Contact Information

EXTERNAL NOTIFICATIONS			
AGENCY	**LOCATION**	**OFFICE**	**ALTERNATE**
National Response Center (NRC)	Washington, D.C.	(800) 424-8802	(202) 267-2675
Ohio EPA Office of Emergency Response (SERC)	Columbus, OH	(800) 282-9378 (In state)	(614) 224-0946
Lucas County (LEPC)	Toledo, OH	(419) 936-3550 (24 Hrs.)	
Ohio State Fire Marshall	Reynoldsburg, OH	(888) 252-0803	(614) 752-8200
OSHA (For Reportable Injury or Death)	Washington, D.C.	(800) 321-6742	
U.S. Environmental Protection Agency (EPA) Region V	Chicago, IL	(312) 353-2318 (24 Hrs.)	(312) 353-2000
U.S. Coast Guard, MSO	Toledo, OH	(419) 418-6050	313-568-9560
U. S. Fish and Wildlife Service (USFWS) Region III	Twin Cities, MN	(978) 281-9328 ext. 6506	
National Marine Fisheries Service, N.E. Region	Gloucester, MA	(978) 281-9300	
Toledo Division of Environmental Services	Toledo, OH	(419) 936-3015	(419) 245-1000
State Highway Patrol	Hamilton, OH	(513) 863-4606	
Ohio State Police	Toledo, OH	(419) 865-5544	
National Weather Service (Recorded Forecasts)	Toledo, OH	(216) 265-2370	
Toledo Water Treatment Plant	Toledo, OH	(419) 936-3021	
TV - Channel 13	Toledo, OH	(419) 531-1313	
TV - Channel 24	Toledo, OH	(419) 535-0024	
TV - Channel 11	Toledo, OH	(419) 248-1111	
TV - Channel 36	Toledo, OH	(419) 244-3600	
Radio - WSPD/WLQR	Toledo, OH	(419) 244-8321	
Radio - K-100	Toledo, OH	(419) 385-6397	
Radio - WGTE FM 91	Toledo, OH	(419) 380-4600	
Radio - WRQN	Toledo, OH	(419) 240-1935	
BP Toledo Refinery (main gate)	Toledo, OH	(419) 698-6451	(419) 698-6400 (Switchboard)
Toledo Public Utilities Dept. (water intakes)	Toledo, OH	(419) 936-3021	(419) 936-3067

LOCAL EMERGENCY SERVICES (DIAL 911 for All Police, Fire, and Ambulance Emergencies)			
SERVICE	**LOCATION**	**OFFICE**	**ALTERNATE**
Local Emergency Planning Committee	Toledo, OH	(419) 936-3550 (24 Hrs.)	
Oregon Fire Department	Oregon, OH	(419) 691-5787 (24 Hrs.)	
Toledo Fire / Rescue	Toledo, OH	(419) 245-1180 (24 Hrs.)	
St. Charles Hospital	Toledo, OH	(419) 696-7200	(419) 696-7300 ER
Local Water Supply System	Oregon, OH	(419) 698-7039	(419) 698-7064
	Toledo, OH	(419) 936-3021	(419) 936-3067
Bay Park Community Hospital	Toledo, OH	(419) 690-7900	(419) 690-7911 ER
St. Vincent Mercy Medical Center	Toledo, OH	(419) 251-4200	(419) 251-4354 ER

USCG CLASSIFIED OIL SPILL REMOVAL ORGANIZATIONS (OSRO) *				
COMPANY	**RESPONSE TIME**	**LOCATION**	**OFFICE**	**ALTERNATE**
Heritage Environmental Services	1 to 2 hours	Toledo, OH	419-729-1321 (24 Hrs)	
NRC-National Response Corporation	1 to 2 hours	Great River, NY	(800) 899-4672 (24 Hrs)	(631) 224-9141

ADDITIONAL RESPONSE RESOURCES				
COMPANY	**RESPONSE TIME**	**LOCATION**	**OFFICE**	**ALTERNATE**
Nature's Nursery	1 hour	Whitehouse, OH	419 877-0060	
C&W Tank Cleaning Company	1 hour	Oregon, OH	(419) 691-1995 (24 Hrs.)	(419) 466-5493
EQ	2 to 3 hours	Ypsilanti, MI	(800) 839-3975 (24Hrs)	(419)-346-0795
International Bird Rescue Center	24 hours to 48 hours	Berkeley, CA	(707) 207-0380	
Tri-State Bird Rescue	24 hours to 48 hours	Newark, DE	(302) 737-7241	(800) 710-0695 PGR (800) 710-0696 PGR

*** Note: Toledo Refining Co is also a member of the Northwest Ohio and Michigan Mutual Assistance District (419) 245-1180**

3.0 RESPONSE ACTIONS

3.1 INITIAL RESPONSE ACTIONS

Initial response actions are those taken by local personnel immediately upon becoming aware of a discharge or emergency incident, before the Emergency Response Team (described in Section 4.0) is formed and functioning. Timely implementation of these initial steps is of the utmost importance because they can greatly affect the overall response operation.

It is important to note that **these actions are intended only as guidelines**. The appropriate response to a particular incident may vary depending on the nature and severity of the incident and on other factors that are not readily addressed. Note that, **without exception, personnel and public safety is first priority**.

The first Toledo Refining Company LLC person on scene will function as the person-in-charge until relieved by an authorized G-1 or Fire Marshal who will assume the position of On-scene Commander. Transfer of command will take place as more senior management respond to the incident.

The person functioning as **On-Scene Commander** during the initial response period **has the authority to take the steps necessary to control the situation and must not be constrained by these general guidelines**.

INITIAL RESPONSE ACTIONS - SUMMARY

- Personnel and Public Safety is first priority
- Eliminate sources of ignition
- If possible, Isolate the source of the discharge, minimize further flow
- Make internal notifications
- Activate the Local Response Team as necessary
- Activate response contractors and other external resources as necessary
- Monitor and control the containment and clean-up effort

3.1 INITIAL RESPONSE ACTIONS (Cont'd)

FIRST TOLEDO REFINING COMPANY LLC PERSON NOTIFIED/ON-SCENE

- _____ Follow the appropriate ***"Specific Incident Response Checklist"*** in Figure 3.1 and ***"Product Specific Response Considerations"*** in Figure 3.2.
- _____ Notify **Facility Shift Superintendent** of the incident.
- _____ Utilize local emergency services as necessary (police, fire, medical).
- _____ Notify the Pipeline Controllers, as appropriate.

On-Scene Commander (G-1 responding to scene)

- _____ **Evaluate the Severity**, Potential Impact, Safety Concerns, and Response Requirements based on the initial data provided by the first person on scene.
- _____ Assume the role of **Incident Commander**.
- _____ **Confirm safety** aspects at site, including need for personal protective equipment, sources of ignition, and potential need for evacuation.
- _____ Activate the **Emergency Response Team and Emergency Command Team**, as the situation demands.
- _____ Coordinate/perform **activation of additional spill response contractors,** as the situation demands (telephone reference is provided in Figure 2.5).
- _____ Coordinate/perform required notifications are completed.
- _____ Coordinate/perform **regulatory agency notification,** as the situation demands.
- _____ Proceed to spill site and **coordinate response and clean-up operations.**
- _____ Direct containment, dispersion, and/or clean-up operations in accordance with the Product Specific Response Considerations provided in Figures 3.2 and 3.3.

LOCAL RESPONSE TEAM

- _____ Assigned personnel will immediately respond to a discharge from the Facility, as the situation demands.
- _____ Perform response/clean-up operations as directed or coordinated by the Incident Commander.
- _____ Assist as directed at the spill site.

FIGURE 3.1

SPECIFIC INCIDENT RESPONSE CHECKLIST

Remember, Without Exception, Personnel Safety Is First Priority. Excessive Exposure To The Vapor And Liquid Stages Of The Spilled Product Should Be Avoided.

INITIAL RESPONSE

- _____ Take appropriate personal protective measures.
- _____ Call for medical assistance if an injury has occurred.
- _____ Check wind direction before investigating incidents where vapor cloud is a possibility.
- _____ Utilize LEL meter when you conduct an initial investigation to determine what has been released and the source.
- _____ Do not investigate on your own, take a buddy.
- _____ When you evacuate the Facility because of toxic or explosive vapors, make sure that you take the FRP, response checklists, cell phones, radios, etc. with you to the muster point.
- _____ At the evacuation muster point, take a head count to determine if anyone is missing.
- _____ If possible, block access to the hot zone and/or entire Facility (use vehicles, caution tape, traffic cones, etc.).
- _____ Restrict access to the spill site and adjacent area as the situation demands. Take any other steps necessary to minimize any threat to health and safety.
- _____ Verify the type of product and quantity released (Material Safety Data Sheets are retained separately at the Facility).
- _____ Advise personnel in the area of any potential threat and/or initiate evacuation procedures.
- _____ Use testing and sampling equipment to determine potential safety hazards, as the situation demands.
- _____ Identify/Isolate the source and minimize the loss of product, from a safe distance.
- _____ Take necessary fire response actions.
- _____ Eliminate possible sources of ignition in the near vicinity of the spill.
- _____ Notify Facility Management of the incident.

FIGURE 3.1

SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

LINE BREAK OR LEAK, SPECIFIC RESPONSE

- _____ Shut down pumping equipment.
- _____ Close upstream and downstream block valves.
- _____ Utilize Combustible Gas Indicator, O_2 meter, proper colormetric indicator and other air sampling measurements to assure that areas are safe to enter for continued response operations.
- _____ Mitigate spreading of the product, as the situation demands. Potential containment strategies include:
  - Earthen dike/berm
  - Ditching
  - Spreading sorbent material over the spill
- _____ Prevent the spill from entering the waterways, sewer, etc. to the greatest extent possible, from a safe distance.
- _____ If located within containment area, ensure that drainage valve(s) is "closed".
- _____ Drain the line section, as the situation demands.
- _____ Make all necessary repairs.
- _____ Return the line to service when repairs are complete.
- _____ Clean up spilled product to eliminate any possible environmental problems. Be alert for underground cables.
- _____ Inform local operators such as utilities, telephone company, railway.
- _____ If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in Section 6.0. Determine which of these may be threatened by the spill and direct the response operation to these locations. Initiate protection and recovery actions.
- _____ Complete follow-up and written reporting, as the situation demands.

FIGURE 3.1

SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

STORAGE TANK LEAK, SPECIFIC RESPONSE

- _____ Shut down all tank battery product movement operations and isolate the tank.
- _____ Initiate Confined Space Entry procedures, as applicable.
- _____ Ensure that the containment area drainage valve(s) is "closed".
- _____ If near tank bottom, consider filling tank with water and maintain water bottom to suspend the discharge.
- _____ Utilize Combustible Gas Indicator, O_2 meter, proper colormetric indicator and other air sampling measurements to assure that areas are safe to enter for continued response operations.
- _____ Block drainage of spilled material from traveling offsite.
- _____ Stop all traffic in hazardous area (inside and outside of property boundaries), as the situation demands.
- _____ Remove product from containment area (at a sump or in a low area) with an explosion proof pump, oil skimmer, and/or vacuum truck w/ skimmer attachments.
- _____ If applicable, process remaining product through the separator system.
- _____ Empty tank as soon as possible.
- _____ Make all necessary repairs. Return the line/tank to service when repairs are complete and tested.
- _____ Clean up product spill to eliminate any possible environmental problems. Be alert for underground cables.
- _____ Inform local operators such as utilities, telephone company, railway.
- _____ If necessary, call one (1) of the approved waste removal companies to remove the remaining sludge and residue from the containment area.
- _____ If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in Section 6.0 and ACP. Determine which of these may be threatened by the spill and direct the response to these locations. Initiate protection and recovery actions.
- _____ Complete follow-up and written reporting, as the situation demands.

FIGURE 3.1

SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

EXPLOSIONS AND/OR FIRE, SPECIFIC RESPONSE

- _____ Evacuate area.
- _____ Notify Fire Department.
- _____ Keep unnecessary people away.
- _____ Isolate hazard area and deny entry.
- _____ Stay upwind.
- _____ Keep out of low areas.
- _____ Attempt to control the fire until the fire department arrives. Do not risk injury.
- _____ Close all open valves.
- _____ Turn off all electrical power in the fire area or, if necessary, the entire Facility.
- _____ Employees are **NOT** to attempt to fight a large, fast spreading fire. Attempt to control small fires, to extinguish or prevent spreading, using whatever means are available (i.e. fire extinguisher, water, etc.).
- _____ If fire is located at a point where the incoming pipeline stream creates additional hazards, the Facility Personnel will hit the emergency shutdown button to close out the headgates, and notify the pipeline controllers of the problem.

All personnel are reminded that outsiders other than emergency services will not be allowed in the Facility during the time of an emergency, and that no statements will be issued to the media or other interested parties except by designated Facility Management. Be courteous with media representatives and direct them to the designated spokesman.

Fire hydrants, located in the vicinity of this Facility, operate at a pressure of 120-150 psi.

FIGURE 3.1

SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

VAPOR CLOUD (from a massive spill, line rupture, etc.), SPECIFIC RESPONSE

- _____ The person who discovers the vapor cloud will sound the alarm and notify the supervisor on duty and vacate the area.
- _____ **Remember: the only proper action in the presence of a vapor cloud is to get away from it. Do not shut off electrical equipment.**
- _____ All personnel will report to the evacuation muster point for roll call and further instructions.
- _____ After all personnel have been accounted for, the Facility Manager will initiate the following actions as deemed necessary:

    1. Shut down pipeline.
    2. Evacuation of adjacent property.
    3. Only the fire department will be permitted to enter the Facility.

- _____ Contact the appropriate agencies and potentially affected neighbors

FIGURE 3.2

PRODUCT SPECIFIC RESPONSE CONSIDERATIONS
for
CRUDE OIL SPILLS

Flash Point Range: Above 100°F

Remember, Without Exception, Personnel Safety Is First Priority. Excessive Exposure To The Vapor And Liquid Stages Of The Spilled Product Should Be Avoided.

Suggested physical response actions for these products are detailed below. It is important to note however, that each situation is unique and must be individually responded to. These procedures are considerations only. Actual circumstances may dictate that the procedures followed may differ somewhat from those listed below. ***The following are intended for guideline purposes only.***

These materials are not extremely flammable and the preferred response is containment and mechanical recovery.

___ Identify source and stop discharge if possible.

___ Obtain explosimeter and other air sampling measurements to assure that areas are safe to enter for continued response operations.

___ If spill occurs at the Refinery, every effort must be made to block any drainage to ditches to prevent product from escaping the containment area. Commence containment efforts for any product which has escaped.

___ Deploy spill response equipment and personnel in an attempt to contain and recover as much product as possible.

___ Advise people in the area of any potential threat and/or initiate evacuation. Inform local operators such as utilities, telephone company, railway, and tunnels as the situation demands.

___ Recover the product and affected soil. Be alert for underground cables and water bearing formations. Remember that product may penetrate deeper if impermeable natural layers are disturbed.

___ Determine the direction and expected duration of spill movement. Refer to the maps provided in Figure 6.1 for an overview of the area.

___ Request local authorities to establish traffic control in the area, as the situation demands.

___ If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in Section 6.0. Determine which of these may be threatened by the spill and direct the response operation to these locations. Initiate protection and recovery actions.

FIGURE 3.3

PRODUCT SPECIFIC RESPONSE CONSIDERATIONS for GASOLINE SPILLS

Flash Point Range: Below 100°F

Remember, Without Exception, Personnel Safety Is First Priority. Excessive Exposure To The Vapor And Liquid Stages Of The Spilled Product Should Be Avoided.

Suggested physical response actions for these products are detailed below. It is important to note however, that each situation is unique and must be individually responded to. These procedures are considerations only. Actual circumstances may dictate that procedures followed may differ somewhat from those listed below. ***The following are intended for guideline purposes only.***

These materials float on water and are extremely flammable. Containment of these materials may allow explosive concentrations to accumulate. The preferred response is to minimize impact to water and protect shorelines (storm sewers, creeks, rivers, etc.) from contamination, allow evaporation to occur, and contain/clean-up remaining product.

___ Identify source and stop discharge if possible.

___ Make appropriate notifications to regulatory agencies and internal Toledo Refining Company LLC Management. (Refer to Figures 2.2 and 2.5 for notifications.)

___ Obtain explosimeter and other air sampling measurements to assure that areas are safe to enter for continued response operations.

___ Eliminate sources of vapor ignition.

___ Stay upwind and evacuate nonessential personnel.

___ Advise people in the area of any potential threat and/or initiate evacuation. Inform local operators such as utilities, telephone company, railway, and tunnels as the situation demands.

___ Minimize area of surface soil impacted by free product (e.g. damming). Contact with surface runoff or standing water should be prevented whenever possible.

___ Recover pooled hydrocarbon as soon as possible.

___ Free hydrocarbons may be floated with water to aid recovery if increased vapors and agitation can be avoided. The water will act as a barrier to reduce further infiltration of pure hydrocarbon into the soil. (NOTE: This water will later have to be removed and probably treated.)

___ If free hydrocarbon **IS NOT** present, do not add water to the impacted area.

FIGURE 3.3 (Cont'd)

PRODUCT SPECIFIC RESPONSE CONSIDERATIONS for GASOLINE SPILLS

___ Remove heavily impacted soil (saturated with hydrocarbons, or very strong hydrocarbon smell) as soon as possible after product/water removal.

___ Place in a bin/rolloff or a waste pile lined on the bottom and covered on the top with plastic sheeting to prevent contact with rainwater and contamination of other areas.

___ Drums may be used for very small spill cleanups.

___ If removal of heavily-impacted soil is delayed or contaminated soil is left in place pending final disposition, the following action should be taken if the possibility of rain exists to minimize contact with rainfall:

- ___ Cover area with plastic sheeting, overlap seams, weigh down with sandbags;
- ___ Use shallow ditches to divert rainwater around contaminated site; and
- ___ Promptly remove any rainwater that does accumulate on the site.

___ The following steps should be taken together with the Toledo Refining Company LLC Environmental Department to minimize long term risk from the site:

- ___ Sample contaminated soil still in place;
- ___ Characterize and dispose of removed soil;
- ___ Estimate proper cleanup target;
- ___ Remove and dispose of more soil, if necessary;
- ___ Install groundwater monitoring wells or monitor existing wells, if necessary; and
- ___ Provide follow-up communication with regulatory agencies, if necessary.

___ Recover the product and affected soil. Be alert for underground cables and water bearing formations. Remember that product may penetrate deeper if impermeable natural layers are disturbed.

___ Due to the low flash point of these products: (1) Use non-sparking systems, (2) Have fire trucks or firefighting equipment nearby, (3) Warn all involved of the product's flammability, and (4) Allow product to evaporate to the greatest extent possible.

___ Determine the direction and expected duration of spill movement. Refer to the maps provided in Figure 6.1 for an overview of the area.

___ Request local authorities to establish traffic control in the area and to post a - "High Flammability" advisory, as the situation demands.

___ If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in Section 6.0. Determine which of these may be threatened by the spill and direct the response operation to these locations. Initiate protection and recovery actions.

3.2 DOCUMENTATION OF INITIAL RESPONSE ACTIONS

It is difficult, particularly during the first few minutes of an initial response operation to think about the importance of documentation. A log should be maintained which documents the history of the events and communications that occur during the response. When recording this information, it is important to remember that the log may become instrumental in legal proceedings, therefore:

- Record only facts, do not speculate.
- Do not criticize the efforts and/or methods of other people/operations.
- Do not speculate on the cause of the spill.
- Do not skip lines between entries or make erasures. If an error is made, draw a line through it, add the correct entry above or below it, and initial the change.
- Record the recommendations, instructions, and actions taken by government/ regulatory officials.
- Document conversations (telephone or in person) with government/regulatory officials.
- **Request that government/regulatory officials document and sign their recommendations or orders (especially if company personnel do not agree with the suggestions, instructions, or actions).**

3.3 OIL CONTAINMENT, RECOVERY AND DISPOSAL

After initial response has been taken to stop further spillage and notifications made to the required agencies, Toledo Refining Company LLC will begin spill containment, recovery, and disposal operations.

The Incident Commander will assess the size and hazards of the spill. The type of product, the location of the spill, and the predicted movement of the spill will be considered.

Based on this assessment, additional clean-up personnel and equipment will be dispatched to the site and deployed to control and contain the spill. Boom may be deployed in waterways to contain the spill and to protect socio-economic and environmentally sensitive areas. Booms may also be used in waterways to deflect or guide the spill to locations where it can more effectively be cleaned up using skimmers, vacuum trucks, or sorbent material. Clean-up equipment and material will be used in the manner most effective for rapid and complete clean-up of all spilled product.

Response and cleanup will continue until all recoverable product is removed, the environment is returned to its pre-spill state, and the unified command of Toledo Refining Company LLC's Incident Commander and the On-Scene Coordinators determine that further response and cleanup is no longer necessary.

3.4 STORAGE/DISPOSAL

Strict rules designed to ensure safe and secure handling of waste materials govern Toledo Refining Company LLC's waste disposal activities. To ensure proper disposal of recovered oil and associated debris, the following guidelines should be considered:

- In the event of a product spill, the Facility has limited capacity to store recovered product and water. Separated product is pumped to trucks to be carried to the Facility for processing.
- Oily debris will be segregated on site and containerized for temporary storage prior to disposal in accordance with RCRA/CERCLA regulations.
- Transportation of waste material will be performed in accordance with all applicable federal and state guidelines.
- Waste associated with the spill will be disposed of at Toledo Refining Company LLC pre-approved sites which have the necessary permits to accept the type of waste to be discharged.

Toledo Refining Company LLC's Disposal Specialist will coordinate activities and secure the necessary permits to ensure proper disposal or recycling of recovered product and debris. Refer to Appendix D for more disposal information.

3.5 SAMPLING AND WASTE ANALYSIS PROCEDURES

Toledo Refining Company LLC's sampling and waste analysis practices are governed by the regulations for the applicable state and the United States Environmental Protection Agency (EPA). These regulations outline methods and procedures for determining the chemical and physical characteristics of wastes generated by the Facility, including waste associated with spills, so that they may be properly stored, treated, or disposed of.

3.6 SAFETY AWARENESS

It is the corporate policy of Toledo Refining Company LLC to provide a safe workplace for all workers. All employees and contractors are responsible for maintaining the safety and health of all workers at the Facility and the response operations.

Prior to engaging in **any** spill response activity:

- All employees/contractors must have received orientation from Toledo Refining Company LLC's Safety Plan.
- All contractor response personnel must be in compliance with OSHA training requirements.
- All other personnel will have completed appropriate training for their position as outlined in Section 4.0.
- No employee/contractor shall engage in activities which place them at risk without the appropriate protective equipment and training.

All company and contract personnel are expected to comply with the Site Safety and Health Plan for each spill incident.

4.0 RESPONSE TEAMS

4.1 INTRODUCTION

This section describes organizational features and duties of the Toledo Refining Company, LLC Spill Management team. Toledo Refinery has a two tier response spill management team (SMT). There are two components that are based upon the Unified Command System (UCS) and are modular, the Emergency Response Team (ERT) and the Emergency Command Team (ECT)

- Level I Incident typically only creates impact in the local area and can be handled by the ERT.
- Level II Incident has regional impact and the ERT usually requires some additional assistance from members of the ECT.
- Level III Incident has impact nationally and usually requires the complete Spill Management Team to respond.

The key to an effective emergency response is a rapid, coordinated, tiered response by the affected unit/facility. Activation of the components of the Spill Management Team is determined by the magnitude of the incident.

The Emergency Response Team will provide first response to an incident at a facility. Additional Emergency Command Team support will respond, as requested and to the degree necessary, to incidents that exceed local capability. If additional response resources are needed, the On-Scene Commander can activate the full Spill Management Team (SMT).

The Toledo Refining Company, LLC response teams use the Unified Command System (UCS) to manage emergency response activities. Because UCS is a management tool that is readily adaptable to incidents of varying magnitude, it should be used for all emergency incidents. Staffing levels will be adjusted to meet specific response team needs, based on incident size, severity, and type of emergency.

An explanation of UCS and the roles and responsibilities for primary members of a response team is provided in Appendix F.

4.2 QUALIFIED INDIVIDUAL

Qualified Individuals (QI) have been identified. Arrangements have been made to ensure that a QI is available on a 24-hour basis. Additional qualified personnel are able to arrive at the facility in a reasonable time for an extended incident.

The Qualified Individual (QI) is responsible for coordinating with the Federal On-Scene Coordinator (FOSC), State On-Scene Coordinator (SOSC) and Local On-Scene Coordinator throughout the response.

A QI is required to:

- Be available on a 24-hour basis;
- Speak fluent English;
- Be located in the United States;
- Be familiar with the implementation of the response plan;
- Be trained in the responsibilities of the QI under the response plan;

4.2 QUALIFIED INDIVIDUAL (Cont'd)

- Be provided a document by the owner/operator designating them as a qualified individual and specifying their full authority to-

  (1) Activate and engage in contracting with oil spill removal organization(s) and other response related resources identified in the plan;
  (2) Act as a liaison with the predesignated Federal On-Scene Coordinator (OSC); and
  (3) Obligate funds required to carry out response activities.

- Activation of internal alarms and hazard communication systems to notify all facility personnel.

- Activation of response contractors and cooperatives in a timely manner.

- Notification of all response team personnel, as needed.

- Identification of the character, source, amount, and extent of the release, as well as other needed response items.

- Provision of necessary information to the appropriate Federal, state, and local authorities with designated response roles, including the National Response Center (NRC), State Emergency Response Commission (SERC), and local response agencies, as specified in the Facility Response Plan. Ensure Notification has been completed by Emergency Command Team.

- Assessment of the interaction of the spilled substance with water and/or other substances stored at the facility and notification of response personnel at the scene of that assessment.

- Assessment of the possible hazards to human health and the environment due to the release. This assessment must consider both the direct and indirect effects of the release (i.e., the effects of any toxic, irritating, or asphyxiating gases that may be generated or the effects of any hazardous surface water runoffs from water or chemical agents used to control fire and/or heat-induced explosion).

- Assessment and implementation of prompt removal actions to contain and remove the substance released, as appropriate.

- Coordination of rescue and response actions, as previously arranged with all response personnel.

- Ensurement that all provisions of the FRP have been properly addressed/ implemented.

- The accessing of company funding to initiate cleanup activities.

- Direction of cleanup activities until properly relieved of this responsibility.

4.3 EMERGENCY RESPONSE TEAM (ERT) – See Figure F.1

The first Toledo Refining Company, LLC person on scene, typically the on-duty Emergency Response Shift Supervisor or the on-duty Fire Marshal, will function as the On-Scene Commander until the arrival of the Emergency Response Chief or the Emergency Response and Security Shift Supervisor. Transfer of command may take place as more senior management respond to the incident.

The number of local Emergency Response Team Personnel required to handle an incident controlled by the On-Scene Commander and will depend on the size and complexity of the incident. The On-Scene Commander is always responsible for directing the response activities and will assume the duties of all the primary positions until the duties can be delegated to other qualified personnel.

Refer to Appendix F of this plan for job descriptions of the primary response team positions.

4.4 EMERGENCY COMMAND TEAM (ECT) – See Figure 4.2

The Emergency Command Team is a group of personnel trained to manage incidents. This team is activated as necessary, dependent upon the magnitude of the incident.

The size of, and positions on, the Emergency Command Team are incident-dependent. Dialogue with the activating facility will determine which positions will be activated.

A fully-staffed Emergency Command Team is designed to cover all aspects of a comprehensive and prolonged incident response (Level III incident). During a prolonged response, additional personnel may be cascaded to the incident location, and more than one level within the Team may be involved to sustain 24-hour operations.

4.5 RESPONSE TEAM TRAINING

The Spill Management Team is staffed by specially trained personnel from various Toledo Refining Company, LLC departments, and/or by consultants. Toledo Refining Company, LLC requires that all response personnel, including contractors and casual labor, have the appropriate training necessary to serve on a response team during an emergency. Team members will receive training in the following:

Response Plan Review

All Spill Management Team members should review their Facility Response Plan at least annually, or whenever their job position or responsibilities change under the Plan. A copy of this Plan will be available at all times to the team members at the facility.

HAZWOPER (29 CFR 1910.120)

Federal and state regulations require that response team members maintain up-to-date HAZWOPER training necessary to function in their assigned positions. At a minimum, Toledo Refining Company, LLC employees will receive “First Responder Awareness Level” training. All “Non-Toledo Refining Company, LLC” personnel responding to an incident must satisfy the applicable HAZWOPER training requirements of 29 CFR 1910.120.

OSHA HAZWOPER TRAINING REQUIREMENTS		
Responder Classification	**Required Training Hours**	**Refresher**
29 CFR 1910.120(q) Emergency Response		
First Responder - Awareness Level	2-4 hrs demonstration of competency	same
First Responder - Operations Level	8 hrs	8 hrs
Hazardous Materials Technician	24 hrs plus competency	8 hrs
Hazardous Materials Specialist	24 hrs plus competency in specialized areas	8 hrs
On-Scene Commander	24 hrs plus competency	8 hrs
29 CFR 1910.120(e) Clean Up Sites		
General Site Workers	40 hrs / 3 days on the job training	8 hrs
Occasional Workers (Limited Tasks)	24 hrs / 1 day on the job training	8 hrs
General Site Workers (Low Hazard)	24 hrs / 1 day on the job training	8 hrs
Supervisors	8 hrs supervisor training	8 hrs
29 CFR 1910.120(p)(7)(8) RCRA TSD Sites		
New Employees	24 hrs	8 hrs
Current Employees*	24 hrs	8 hrs

* Previous work experience and/or training certified as equivalent by employer.

4.5 RESPONSE TEAM TRAINING (Cont'd)

Unified Command System

Response team members will receive UCS training, and may also receive supplemental training in other, related general topics.

4.5.1 Volunteers

Toledo Refining Company, LLC will not use non-employee volunteers for emergency incident response, and no Toledo Refining Company, LLC provisions exist to train them. Volunteers may be used by government response entities, as allowed by applicable policies/procedures.

4.5.2 Training Records

Training records for local team members will be maintained at the facility according to Federal, state, and local government requirements (three years for the U.S. Coast Guard and PHMSA and five years for the U.S. Environmental Protection Agency). Training records will be maintained indefinitely for emergency response personnel as long as they maintain an active role, with assigned duties, on the response team.

4.6 RESPONSE TEAM EXERCISES

Spill Management Team members, government agencies, contractors, and other resources must participate in response exercises required by Federal, state, or local regulations. The drill program and elements covered will be completed as detailed in the "National Preparedness for Response Exercise Program (PREP) Guidelines." Toledo Refining Company, LLC will conduct announced and unannounced drills to maintain compliance, and each plan-holder must conduct at least one exercise annually. The following table lists the triennial exercise cycle for facilities (see PREP Guidelines for full details).

Triennial Cycle		
Total Number	**Frequency**	**Exercise Type/Description**
12	Quarterly	QI Notification Exercise
6	Semi-Annual	Equipment Deployment Exercise *(Facility-owned equipment)*
3	Annual	Spill Management Team Tabletop Exercise
3	Annual	Equipment Deployment Exercise *(facilities with OSRO-owned equipment)*
3	Annual	Unannounced Exercise *(not a separate exercise)* Actual response can be considered as an unannounced exercise.
NOTE: All response plan components must be exercised at least once in the cycle. Exercise records will be maintained at the Facility as follows: EPA – 5 years; USCG and PHMSA – 3 years.		

Quarterly QI Notification Exercise

- **Scope:** Exercise communication between facility personnel and the QI(s) and/or designated alternate(s). At least once each year, one of the notification exercises should be conducted during non-business hours.

- **Objective:** Contact must be made with a QI or designated alternate, as identified in the Plan.

- **General:** All personnel receiving notification shall respond to the notification and verify their receipt of the notification. Personnel who do not respond should be contacted to determine whether or not they received the notification.

Annual and Semi-Annual Equipment Deployment Exercise (for facilities with equipment)

- **Scope:** Deploy and operate facility response equipment identified in the response plan. The equipment to be deployed must include the following, at a minimum:

  - 1,000 feet of representative type of boom;
  - one of each type of skimming system; or
  - the equipment necessary to respond to the facility's Small/Average Most Probable Discharge (AMPD), whichever is less.

- **Objective:** Demonstrate personnel's ability to deploy and operate response equipment. Ensure that the response equipment is in proper working order.

- **General:** The facility may take credit for actual equipment deployment to a spill, or for training sessions, as long as the activities are properly documented.

***Annual Equipment Deployment Exercise* (OSRO-owned equipment)**

- **Review:** The facility should determine that the OSRO(s) has completed the equipment deployment exercise requirements and has maintained the necessary documentation. The OSRO may deploy equipment at any location, so long as it occurs within an operating environment similar to the facility's.

- **Scope:** OSRO must deploy and operate response equipment identified in the response plan. The equipment to be deployed must include the following, at a minimum:

  - 1,000 feet of representative type of boom, and
  - One of each type of skimming system.

- **Objective:** OSRO personnel must demonstrate their ability to deploy and operate OSRO response equipment, and must ensure that its response equipment is in proper working order.

Annual Response Team Tabletop Exercise

- **Scope:** Exercise the response team's organization, communication, and decision- making in managing a spill response. Each team identified within the plan must conduct an annual Response Team Tabletop Exercise.

- **Objective:** Exercise the response team in a review of the following:

  - Knowledge of the Plan.
  - Proper notifications.
  - Communications system.
  - Ability to access an OSRO.
  - Coordination of internal spill response personnel.
  - Transition from a local team to a regional team.
  - Ability to effectively coordinate response activity with the National Response System (NRS) infrastructure.
  - Ability to access information in the Area Contingency Plan.

- **General:** A minimum of one Response Team Tabletop Exercise in a triennial cycle will involve a Worst-Case Discharge scenario.

Government-Initiated Unannounced Exercise

- **Scope:** Upon request, the Facility is required to participate in only one unannounced exercise every 36 months from the date of the last government-initiated unannounced exercise.

Exercises are limited to approximately four hours in duration.

Exercises would involve response to a Small/Average Most Probable Discharge scenario.

Exercise would involve equipment deployment to respond to a spill scenario.

- **Objective:** Conduct proper notifications to respond to unannounced scenario of a Small/Average Most Probable Discharge.

  Demonstrate that the response is timely, conducted with an adequate amount of equipment for the scenario, and properly conducted.

- **General:** This exercise is only applicable to those facilities that are randomly chosen.

Area Exercises

- **Objective:** The purpose of the area exercise is to exercise the entire response community in a particular area. An area is defined as "that geographic area for which a separate and distinct Area Contingency Plan has been prepared, as described in OPA 90." The response community includes the federal, state, and local government and industry. The area exercises are designed to exercise the government and industry interface for spill response.

- **General:** The goal is to ensure that all areas of the country are exercised triennially. All of the area exercises will be developed by an exercise design team. The exercise design team is comprised of representatives from the federal, state, and local government and industry. A lead plan holder would lead each area exercise. The lead plan holder is the organization (government or industry) that holds the primary plan that is exercised in the area exercise. The lead plan holder would have the final word on designing the scope and scenario of the exercise.

Exercise Documentation

- All exercises should be documented and maintained at the facility; documentation should specify the:

  - Type of exercise;
  - Date and time of the exercise;
  - Description of the exercise;
  - Objectives met in the exercise;
  - Components of the response plan exercised; and
  - Lessons learned.

- Sample exercise forms are included in Appendix G. However, slight variations of the forms are acceptable and may be utilized at specific facilities.

- Exercise documentation should be kept on file for the required length of time depending on the regulating agency (three years for the U.S. Coast Guard and five years for the U.S. Environmental Protection Agency).

Exercise Planning and Design

- Designing and planning a spill response simulation exercise involves the determination of the appropriate spilled product discharge scenario and establishment of the framework for preparing, managing, and evaluating the exercise. It is the responsibility of the Emergency Response Manager to plan, carry out, and monitor drills and exercises.

4.7 SITE SAFETY AND HEALTH PLAN(S) DEVELOPMENT

The Incident Commander or Safety Representative is responsible for preparing a Site Safety and Health Plan that establishes site-specific policies, practices, and procedures to protect workers and the public from contacting potential chemical and/or physical hazards. A Site Safety and Health Plan will:

- Describe who is responsible for monitoring site safety.
- Characterize the risks associated with each operation that will be conducted in the area covered by the plan.
- Describe known chemical and physical hazards, and the measures that have been instituted to eliminate the hazards or reduce them to acceptable levels.
- Define the level of HAZWOPER training required for workers commensurate with their job responsibilities.
- Describe site control measures, and will include a site map.
- Describe decontamination procedures for personnel and equipment.

FIGURE 4.1

Emergency Response Team Structure

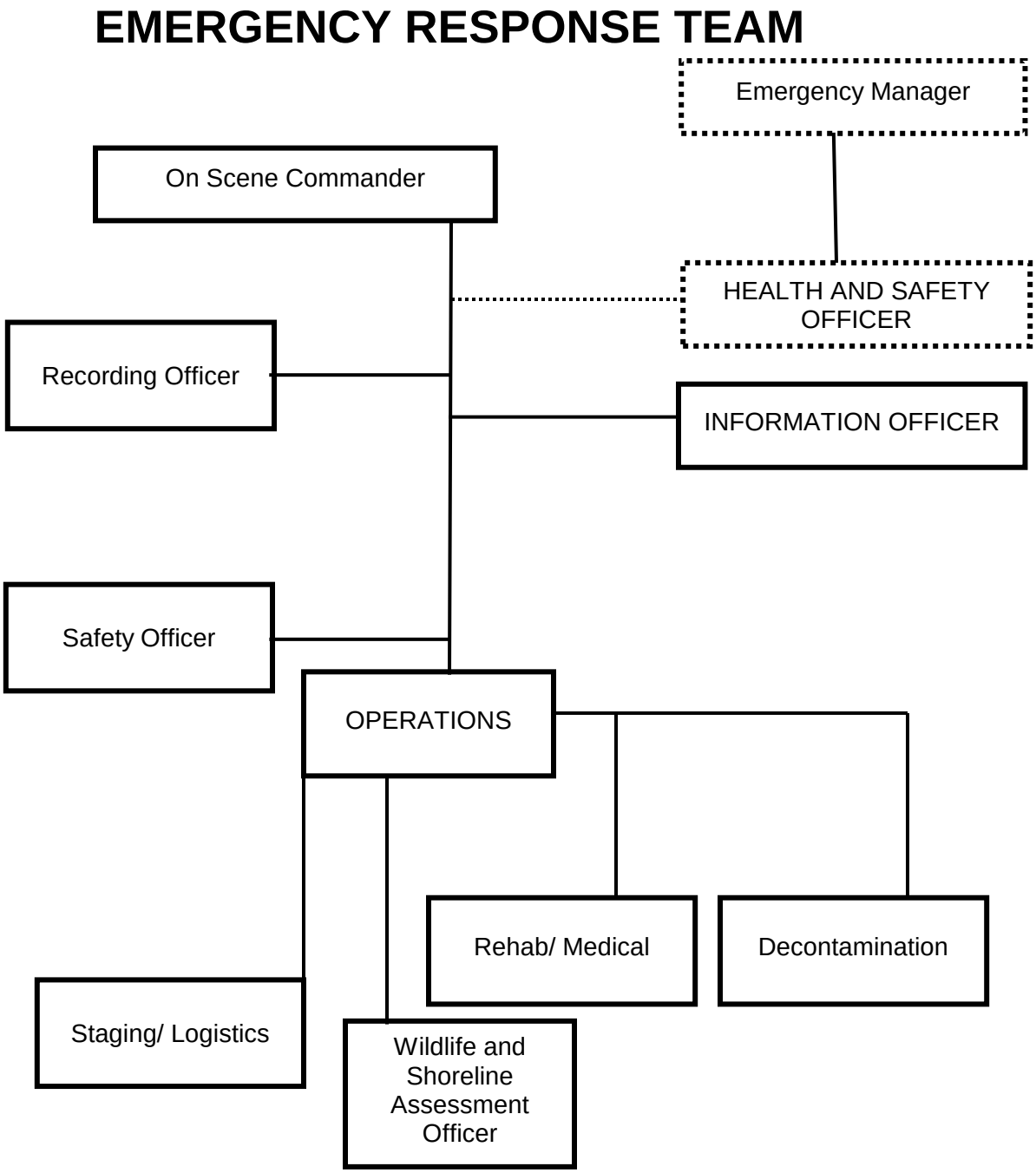
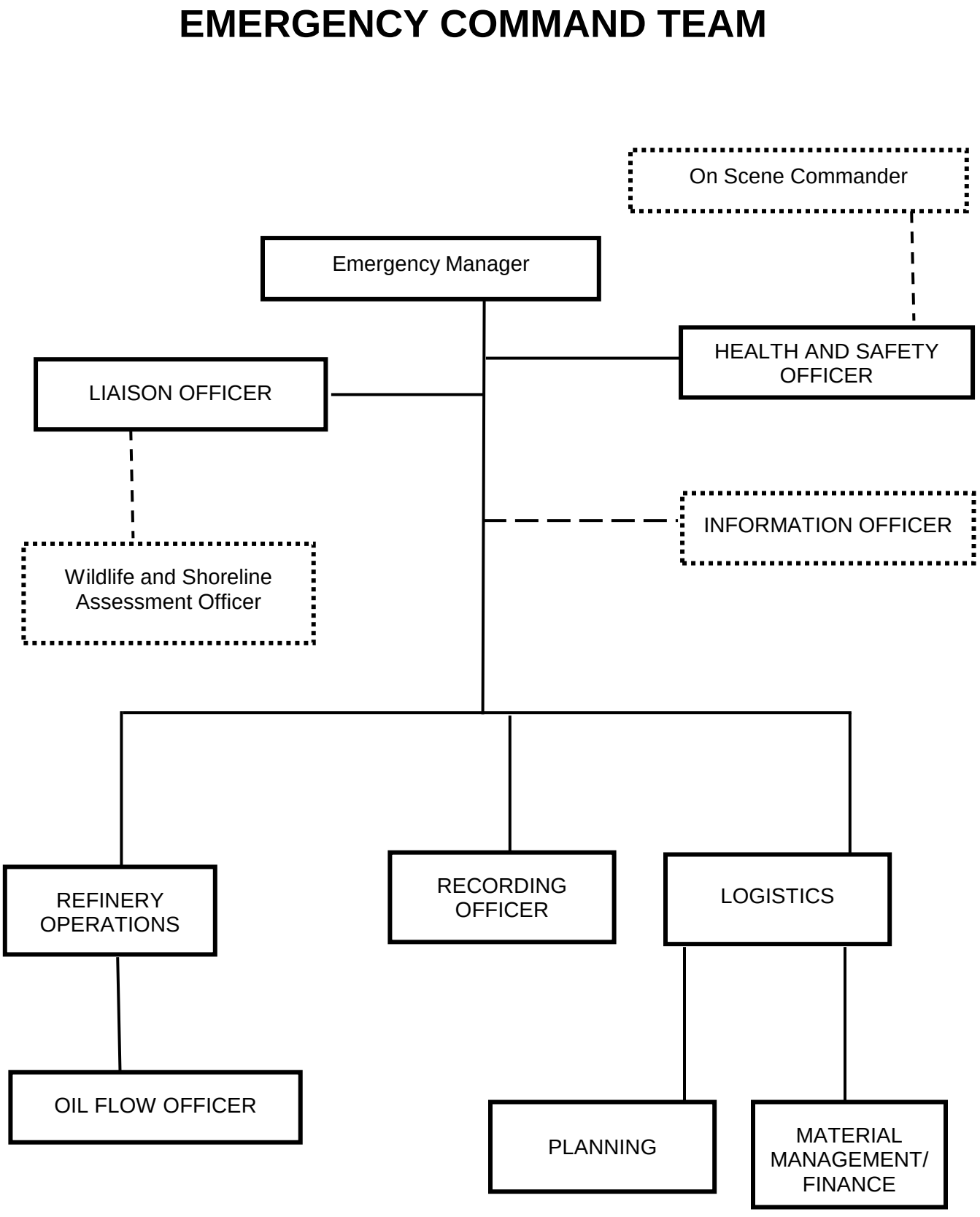


FIGURE 4.2

Emergency Command Team Structure



5.0 RESPONSE EQUIPMENT/RESOURCES

The following sections outline the various response equipment/resources available from the Toledo Refining Company LLC facility, Oil Spill Removal Organizations, and other outside resources.

5.1 FACILITY RESPONSE EQUIPMENT

The Facility is equipped with spill response equipment. This equipment is listed in Figure 5.2. The equipment listed in Figure 5.2 is inspected on a routine basis and is deployed as stated in Section 4.0. The Facility equipment is kept and maintained on site. This equipment is capable of initially containing the identified average most probable discharge of 50 barrels. The Facility also has contracts in place with Oil Spill Removal Organizations and other clean-up contractors for response to a discharge.

Toledo Refining Company LLC maintains firefighting resources to response to a fire at the Refinery and # 2 Tank Farm Facilities. The Oregon City Fire Department is available to provide additional resources as necessary. For the Marine Terminal and Hocking Valley Dock, the City of Toledo Fire Department is the primary responder, with secondary resources provided by Toledo Refining Company LLC. Fire response equipment is listed in Figure 5.2.

The Qualified Individual has the authority to activate Toledo Refining Company LLC resources or that of private contractors and other experts and consultants as the situation demands.

5.2 CONTRACT RESOURCES

In the event of a discharge which is beyond the initial response capabilities of the Emergency Response Team, contract manpower and equipment resources can be obtained through Oil Spill Removal Organization(s) (OSRO). These OSRO's can provide manpower and containment/clean-up equipment for the response operation on land, water, or adjacent shorelines. The resources will be secured from a Toledo Refining Company LLC approved contractor. Notification/implementation of these resources will typically be handled by the Refinery Management (QI). Figure 5.1 provides a quick reference to the Oil Spill Removal Organizations and details their response capability and estimated response times. Additional OSRO data, including equipment inventories and/or USCG certification data, is provided in Appendix J. **Telephone reference is provided in Figure 2.5.** *(Note: Toledo Refining Company LLC has a program in place to insure that each OSRO has a comprehensive maintenance program and applicable training / drills programs in place. Each OSRO is responsible for maintaining and inspecting their own equipment. The Facility is provided updated equipment deployment documentation on an annual basis and records are maintained for a five (5) year period.*

5.3 COOPERATIVE/MUTUAL AID RESOURCES

Toledo Refining Company LLC is a member of the Northwest Ohio – Michigan Mutual Assistance District (NOMMAD).

5.4 EXPERTS AND CONSULTANTS

Toledo Refining Company LLC maintains a relationship with various environmental and technical consultants that can provide support in the event of an emergency incident. These consultants can provide expertise and support in the areas of emergency response management, environmental services, site assessment, permitting, waste treatment, recycling, dewatering, hazardous waste disposal, and remediation. Implementation of these services should be coordinated through the Emergency Command Team.

5.5 VOLUNTEERS

Volunteers will not be utilized by Toledo Refining Company LLC for responding to spills originating from the Facility. All volunteers will be referred to the State or Federal On-Scene Coordinator (EPA).

5.6 COMMUNICATIONS

Effective and efficient communications systems are essential for emergency response at every level. The communications system will be utilized to gather information and current status reports as well as to provide coordination and direction to widely separated work groups involved in search, containment/ diversion, repair, traffic control, public control or evacuation, and restoration.

Lines of communication between the On-Scene Commander (OSC), Emergency Response Team, and the Emergency Command Team (ECT) members are demonstrated in the organization charts shown in Section 4.0. Communication of the overall spill response operation between the Facility and the responsible government agencies in the Federal Regional Response Team (RRT) will occur between the OSC and the Federal On-Scene Coordinator. Appendix J provides additional detail on the Federal Response Organization.

5.6.1 Central Communications System

Prearranged communication channels are of the utmost importance in dealing with Facility emergencies. The notification procedures and telephone contacts documented in Section 2.0 will be reviewed in accordance with the earlier documented updating procedures. The predetermined communications channels include the following:

- A list of emergency telephone numbers for internal management and emergency response personnel (Figure 2.4).
- A list of emergency telephone numbers for various external resources such as the fire and police department, medical, and regulatory agencies (Figure 2.5).
- A list of emergency telephone numbers for contract response resources (Figure 2.5).

5.6 COMMUNICATIONS (Cont'd)

5.6.2 Communications Equipment

Field communications during a spill response to a small or medium discharge will be handled via the existing Facility communications network. This network will utilize existing radios, telephones, beepers, FAX machines, and computers and will be maintained by Facility personnel. In the event of a Worst Case Discharge, field communications will be enhanced with other Toledo Refining Company LLC and contract resources as the situation demands.

5.6.3 Communication Types

Radios - Handheld and vehicle mounted radio sets are the most effective means of communication for the field response operation. The units are battery operated, multi-channeled, and have a typical range that will cover the area of the response operation. Additional radio sets and battery packs/charges will be necessary in the event of a prolonged response operation.

Telephone (Conventional) - Conventional land line telephones are the most effective means of communication for regulatory and advisory notifications during a spill response operation. Additional telephone lines can be installed in the event of a prolonged response operation.

Telephone (Cellular) - Cellular telephones allow for added mobility and response effectiveness. Cellular phones are commonly maintained by certain Facility personnel. Additional cellular phones can be secured in the event of a prolonged response operation.

Pagers - Pagers are used for rapid notification to field personnel when radio and telephone resources are limited. Most response team members carry a pager.

FAX Machines - FAX machines allow for a rapid transfer of information/documentation such as status reports/updates, written notifications, and purchase orders.

Computers - Computers are commonly used in networks which allow access to various other locations and company personnel. Computers also speed the consolidation of information and preparation of written reports.

FIGURE 5.1

EXTERNAL RESPONSE RESOURCES *

Toledo Captain of the Port (COTP) Zone							
USCG Classified Oil Spill Removal Organization (OSRO)							
OSRO Name	Contract Number	Environment Type	Facility Classification Level**				Shoreline Cleanup
			M	W1	W2	W3	
National Response Corporation		Great Lakes	X	X	X	X	Yes
		Inland/Nearshore	X	X	X	X	
		Rivers/Canals	X	X	X	X	
Heritage Environmental Services	4600000202	Great Lakes			X	X	
		Inland/Nearshore	X		X	X	
		Rivers/Canals	X	X	X	X	

Additional Response Resources		
Contractor Name	Contract Number	Response/Mobilization Time
EQ Industrial Service	4600000261	1 - 2 hours

*** Note**: Toledo Refining Company LLC is also a member of the NOMMAD

** Facility Classification Explanation can be found in Appendix C detailing Resource Quantities, Facility Response Times and Vessel Response times.

Toledo Refining Company LLC certifies that the Average Most Probable Discharge (AMPD) is covered by the facility or one or more of the Oil Spill Removal Organizations as indicated by the table above.

. FIGURE 5.2
FACILITY RESPONSE EQUIPMENT *

ITEM	LOCATION	QTY	WRHS CODE	INSPECTOR	DATE	COMMENTS
American Boom & Barrier Containment Boom	Refinery Fire Dept.	Sections totaling 700’	N/A			
Sea Arc 18’, 1994 with 100 HP evinrude and accessories: rope, life jackets, tow bridals, anchors (Boat 492)	Refinery Fire Dept.	1 each	N/A			
Sea Arc 26’, 1991 with (2) 100 HP evinrude and accessories: rope, life jackets, tow bridals, anchors, (400’) containment boom (Boat 491)	Refinery FD/Harrison Marina	1 each	N/A			
Containment Boom	HVD	900’	26-086-061			
Absorbent Boom	Refinery #2 Storehouse Area 217	10 bags; 4 - 10’ sections each	26-086-066			
Absorbent Pads	Refinery #1 Storehouse Area 12161	8 packs	26-086-063			
Creek Boom Trailer	Refinery FD	500’ Creek Boom	N/A			
Spill Control Trailer *	Refinery Fire Dept.	Inventory Attached	N/A			
River Boom Trailer	Refinery FD	500’ River boom	N/A			
Snow Boom Trailer	Refinery FD	1000’ Creek Boom	N/A			
Skimmers	Refinery	2 each	N/A			
Communications Equipment - mounted in Unit 5 - mounted in boat - hand held	Refinery Fire Dept.	 1 VHF; 1 marine 1 VHF; 1 marine 6 VHF; 6 marine	N/A			
(Unit 11) 1989 White/GMC 1500 GPM pumper with 54’ articulating boom	Refinery Fire Dept.	1 each	N/A			
(Unit 10) 1981 Pierce 1500 GPM pumper with 55’ aerial ladder	Refinery Fire Dept.	1 each	N/A			
(Unit 1) 2002 E-ONE pumper 3,500 GPM	Refinery Fire Dept.	1 each	N/A			
(Unit 12) 1975 Ford Flat Bed (Used as foam hauler)	Refinery Fire Dept.	1 each	N/A			
(Unit 9) 1995 Ford F-350 Super Duty Mini Pumper	Refinery FD	1 each	N/A			
(Unit 6) 2007 Ford F-350	Refinery Fire Dept.	1 each	N/A			
(Unit 5) 1980 GMC, Hazardous Materials Truck	Refinery Fire Dept.	1 each	N/A			

FIGURE 5.2
FACILITY RESPONSE EQUIPMENT (Cont'd)
* SPILL CONTROL TRAILER EQUIPMENT
(Staged at the Toledo Refining Company LLC Fire Dept.)

Side	Qty	Description	Inspector	Date
Back Left Door	1	Wooden Handle Pitchfork		
	2	Wooden Handle Spade Shovel		
Left Rear Side	2	Expandable Gaff Hooks		
	1	8lb. Sledge Hammer (Fiberglass)		
	1	20lb ABC Fire Extinguisher		
	10	24" Metal Stakes		
1A (Top)	6	3M Half Masks		
	6pr	3M Cartridges		
	3	Suspenders		
	2	Nomex Coveralls (46R, 50R)		
	1 cs	Tyvek-Poly Coated (3XL)		
1B (Middle)	3	Rainsuits (4XL)		
	3	Rainsuits (5XL)		
	2	Duct Tape		
	4	Bee Bopper		
	10	Leather Gloves (XL)		
	1	Nitrile Glove (M)		
	1	Nitrile Glove (L)		
	4	Googles		
1C (Bottom)	2	Boots Size 12		
	3	Boots Size 13		
	1	Hip Waders - Neoprene (13)		
	1	Hip Waders - Rubber (13)		
2A (Top)	1	Scrubs in a Bucket		
	2	Box of Wyp-All		
	4	Inflatable Kiddie Pools		
	1	Box of Garbage Bags		
	1	Drain Cover		
	1	Wooden Plug Kit		
2B (Middle)	1	Chain Saw		
	1	Gal Bar Oil		
	1	40:1 Fuel Can (Chainsaw)		
	1	Barrel Pump w/ slide fitting		
	1	25 ft Air Hose w/threads		

2C (Bottom)	4	Sandbags (filled)		
	1	Box of Sandbags		
	1	Sandbag Scoop		
	2	Bags of Sand		
3A/B/C	2	Wheelbarrows		
	2	Wood Handle Scoop Shovels		
	1	Wood Handle Flat Shovel		
	1	Fiberglass Handle Flat Shovel		
	1	Fiberglass Spade Shovel		
	1	Broom		
	15	Ground Posts		
4A (Top)	4	Spill Attack Kits		
	2	Box Cobra Coil Sausages		
	2	Box Peat Sorb Pads		
	1	Box Sorbant Industrial Rug (36"x50')		
4B (Middle)	8	8"x10' Absorbent Boom		
4C (Bottom)	8	8"x10' Absorbent Boom		
5/6/7 A (Top)	12	4"x10' PVC Pipe		
	3	2"x4"x8'		
5B (Middle)	1	Roll Snow Fence		
	6	Rolls of Chicken Wire (1"x36"x25')		
5C (Bottom)	3	Bags of Pom Pom's		
	1	Bag of Collapsable LED Cones		
6B (Middle)	2	Rolls of Plastic Sheeting (20'x100')		
	1	Rolls of Plastic Sheeting (12x100')		
6C (Bottom)	2	Bags of Oil Dry		
	4	Sandbags (filled)		
7B (Middle)	7	Safety Vests		
	16	24" Metal Stakes		
	12	24" Wood Stakes		
	1	Box of Flashlights		
		*(3) C Cell Flashlight		
		*(3) 6 volt Flashlight		
		*Spare Batteries		
	1	Tool Box		
		*Small Sledge		
		*Utility Knife		
		*Crescent Wrench		
		*Screw Drivers (various)		
		*Twine		

7C (Bottom)	3	200' Dockline Rope Bags		
	2	Wheel Chocks		
	1	Rope Box		
		*(1)Large 50' Braided Rope		
		*(1) 50' Hemp Rope		
		*(10) 50' sections of Cord		
		*(3) 100' Red Anchor Rope		
		*(1) 50' Dockline		
		*(2) 25' Red Anchor Rope		
Right Rear Side	2	Expandable Gaff Hooks		
	1	Windsock		
	1	10 lb Sledgehammer		
	1	Hand Saw		
	1	20lb ABC Fire Extinguisher		
	10	24" Metal Stakes		
Right Rear Door	2	Push Broom		
	2	Fiberglass Handle Flat Shovel		

* Note: The equipment listed in Figure 5.2 is inspected on a routine basis and is deployed as stated in Section 4.0.

6.0 SPILL IMPACT CONSIDERATIONS

6.1 CRITICAL AREAS TO PROTECT

The critical areas to protect are classified as high, moderate, and low sensitivity to oil. The Federal, State, and local authorities will further clarify these categories at the time of the response. The categories are defined as follows:

HIGH SENSITIVITY
● Areas which are high in productivity, abundant in many species, extremely sensitive, difficult to rehabilitate, or inhabited by threatened/endangered species. ● Areas which consist of forested areas, brush/grassy areas, wooded lake areas, freshwater marshes, wildlife sanctuaries/refuges, and vegetated river/stream banks.

MODERATE SENSITIVITY
● Areas of moderate productivity, somewhat resistant to the effects of oiling. ● Areas which consist of degraded marsh habitat, clay/silt banks with vegetated margins, and gravel/cobble beaches.

LOW SENSITIVITY
● Areas of low productivity, man-made structures, and/or high energy. ● Areas which consist of gravel, sand, or clay material, barren/ rocky riverbanks and lake edges, man-made structures, and concrete/compacted earthen drainage ditches.

6.2 ENVIRONMENTAL/SOCIO-ECONOMIC SENSITIVITIES

Environmental/Socio-economic Sensitivities are of extreme importance when planning a response effort. The health and safety of the public and the environment, as well as the protection of the various socio-economic sensitivities, must be promptly addressed in order to mitigate the extent of damage and minimize the cost of the clean-up effort.

All environmental/socio-economic sensitivities are worthy of protection, but must be prioritized during a response effort. When making decisions on which areas to designate as collection areas and which to protect, the following sources may be consulted:

- U.S. Fish and Wildlife Service and related state agencies
- Applicable Area Contingency Plans
- Other industry and private experts

6.2 ENVIRONMENTAL/SOCIO-ECONOMIC SENSITIVITIES (Cont'd)

The environmental and socio-economic sensitivities in the vicinity of the Facility can be divided into a number of categories. The following environmental/socio-economic sensitivity summary describes these categories which may be impacted by a discharge and should be addressed in the response:

Environmental:

- Environmentally sensitive areas are prevalent throughout any marine and/or terrestrial environment and may be affected by any potential discharge incident.

- Environmentally sensitive areas subjected to stress and sudden change may be severely damaged. All means of exclusion/diversion should be utilized during a response effort to minimize the impact on these areas.

Historical Areas:

- Properties listed in the National Register of Historic Places and Natural Landmarks are included in this category.

- These areas may need to be boomed off or otherwise protected to minimize impact.

Major Recreational Areas:

- A discharge affecting these areas may pose a public safety/health risk during a response effort.

- Shoreline access for personnel and equipment deployment (boats, boom, etc.) is typically available in these areas.

Marinas:

- These areas have a high degree of public exposure (personal and property) and should be boomed for protection.

- Boats and other water deployed equipment can often be deployed and/or obtained in these areas.

Residential Areas:

- These are areas with high public impact and may warrant evacuation in extreme cases.

- Cleanup must be performed with extreme caution due to extensive public exposure.

- Suburban Animal Hospital will be contacted to handle contaminated domestic animals.

6.2 ENVIRONMENTAL/SOCIO-ECONOMIC SENSITIVITIES (Cont'd)

Commercial Farming/Ranching Areas:

- Commercial Farming/Ranching Areas have the potential of human and livestock impact, as well as socio-economic impact in the potential loss of crops or loss of property use.

Water Intake Points:

- Commercial, industrial, municipal, and private water intakes are subject to impact.
- These areas may need to be boomed off or otherwise protected to minimize impact.

Wildlife Management Areas and Refuges:

- These areas have a high degree of exposure to threatened/endangered species and many other types of wildlife. Figure 6.1 contains a listing of the threatened/endangered species.
- Protection booming and clean-up efforts are high priority in these areas.

Figure 6.2 contains listings and tiles showing the locations of areas of Environmental/Socio-Economic Sensitivities. The information was obtained from the U.S. EPA Inland Sensitivity Atlases for Northwest Ohio and South East Michigan.

6.3 WILDLIFE PROTECTION AND REHABILITATION

Toledo Refining Company, LLC will work with Federal, State, and local agency personnel to provide labor and transportation to retrieve, clean, and rehabilitate birds and wildlife affected by an oil spill, as necessary. Figure 6.4 contains a contingency protocol for oiled wildlife which has been prepared for Toledo Refining Company, LLC by Tri-State Bird Rescue & Research Inc. Oversight of Toledo Refining Company, LLC's wildlife preservation activities and coordination with Federal, State, and local agencies during an oil spill is the responsibility of the Shoreline Assessment and Wildlife Officer under the direction of the On-scene Commander.

Special consideration should be given to the protection and rehabilitation of endangered species and other wildlife and their habitat in the event of an oil spill and subsequent response. Jurisdictional authorities should be notified and worked with closely on all response/clean-up actions related to wildlife protection and rehabilitation. Laws with significant penalties are in place to ensure appropriate protection of these species.

6.3.1 Endangered/Threatened Species

The U.S. Fish and Wildlife Service (USFWS) and related state agencies classify the status of various wildlife species in the potentially effected states. A summary of critical birds, reptiles, mammals, and rare plant species status for the state of Ohio are presented in Figure 6.1. The lists were printed directly from the Ohio Department of Natural Resources website. Potential locations of the species being identified in Figure 6.1 are shown in Figure 6.2.

6.3 WILDLIFE PROTECTION AND REHABILITATION (Cont'd)

6.3.2 Wildlife Rescue

Toledo Refining Company, LLC will work with Federal, State, and local agency personnel to provide labor and transportation to retrieve, clean, and rehabilitate wildlife affected by an oil spill, as the situation demands.

The following are items which should be considered for wildlife rescue and rehabilitation during a spill response:

- Bird relocation can be accomplished using a variety of deterrents, encouraging birds to avoid areas of spilled oil. Bird relocation can be accomplished by utilizing deterrent methods including:
  - Use of visual stimuli, such as inflatable bodies, owls, stationary figures, or helium balloons, etc.
  - Use of auditory stimuli, such as propane cannons, recorded sounds, or shell crackers.
  - Use of herding with aircraft, boats, vehicles, or people (as appropriate).
  - Use of capture and relocation.

6.3.3 Search and Rescue - Points to Consider

- **Toledo Refining Company, LLC's involvement should be limited to offering assistance as needed or requested by the agencies.**
- Prior to initiating any organized search and rescue plan, **authorization must be obtained from the appropriate federal/state agency.**
- **Initial search and rescue efforts, if needed, should be left up to the appropriate agencies.** They have the personnel, equipment, and training to immediately begin capturing contaminated wildlife.
- With or without authorization it must be anticipated that volunteer citizens will aid distressed/contaminated wildlife of their own. It is important to communicate that it may be illegal to handle wildlife without express authority from appropriate agencies. Provisions should be made to support an appropriate rehabilitator, however, **no support should be given to any unauthorized volunteer rescue efforts.**
- The regulatory agencies and response personnel should be provided the name and location of a qualified rehabilitator in the event contaminated wildlife is captured.

6.3 WILDLIFE PROTECTION AND REHABILITATION (Cont'd)

- Resources and contacts that can assist with wildlife rescue and rehabilitation are provided in Section 2.0. This list includes:
  - Outside rehabilitation organizations
  - Local regulatory agencies
  - Other resources

6.4 STAGING AREAS

When establishing personnel and equipment staging areas for a response to a Facility discharge, the following criteria should be evaluated:

- Access to waterborne equipment launching facilities and/or land equipment.
- Access to open space for staging/deployment of heavy equipment and personnel.
- Access to public services utilities (electricity, potable water, public phone, restroom and washroom facilities, etc.)
- Access to the environmental and socio-economically sensitive areas which are projected for impact.

6.5 SPILL VOLUME ESTIMATES

Quality spill volume estimates are required in order to evaluate the equipment and manpower requirements necessary to handle the response. The primary and most accurate method of estimating the spill volume is from tank gauging and/or pump rate estimates (depending on the type of incident which caused the spill). In the event that tank or pump estimates are not available, the secondary method of visual estimation can be performed by analyzing the color and size of the slick and converting that data with the information provided in Figure 6.3.

6.6 TRAJECTORY ANALYSIS

Oil spilled on water will react primarily to the effects of wind and current. The oil will tend to spread to a thin layer under the influence of gravity (primary) and chemical (secondary) forces. The following describes the behavior of oil on water:

- Oil will move in the direction and at the rate of the current under negligible wind conditions.
- Oil will move in the direction and at approximately 3.4 % of the velocity of the wind under negligible current conditions.
- The combined effects of wind and current on the oil should be carefully analyzed. A method of vector analysis can be performed to determine the net direction of movement (wind forces can work in addition to, against, or in many other combinations with the current).

6.6 TRAJECTORY ANALYSIS (cont'd)

- The primary method of surveillance for the Facility will be visual. Visual surveillance is not effective however in rain, fog, darkness, or heavy cloud cover. It is difficult to observe a slick on the water from a boat, dock or land due to the angle of observation. Aerial surveillance is the preferred method of visual surveillance because of the elevated view and the ability to cover a large area in a short period.

6.7 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT

General descriptions of various specific response techniques that may be applied during a response effort are discussed below. Company responders are free to use all or any combination of these methods as incident conditions require, provided they meet the appropriate safety standards and other requirements relative to the situation encountered. Data was obtained from reports, manuals and pamphlets prepared by the American Petroleum Institute, Environmental Protection Agency and the United States Coast Guard. The most effective cleanup of a product spill will result from an integrated combination of clean-up methods. Each operation should complement and assist related operations and not merely transfer spillage problems to areas where they could be more difficult to handle.

The spill should be assessed as soon as possible to determine the source, extent and location of travel. Terrain and other physical conditions down gradient of the spill site will determine the methods of control at a point in advance of the moving product. Often, the bulk of a spill can be contained at a single location or a few key locations in the immediate vicinity of the source point. When possible the executions of this type of initial containment strategy helps confine a spill to a relatively limited area. A listing of methods with precautions/recommendations is available in Figure 2.5. Figure 2.6 provides recommendations that match the methods with the type of the habitat impacted.

6.7.1 Spill on Land (Soil Surfaces)

- **Confinement Methods**

  Product can be trapped in ditches and gullies by earth dams. Where excavating machinery is available, dams can be bulldozed to contain lakes of product. Dams, small and large, should be effectively employed to protect priority areas such as inlets to drains, sewers, ducts and watercourses. These can be constructed of earth, sandbags, absorbents, planks or any other effective method. If time does not permit a large dam, many small ones can be made, each one holding a portion of the spill as it advances. The terrain will dictate the placement of the dams. If the spill is minor, natural dams or earth absorption will usually stop the product before it advances a significant distance. Cleanup is the main concern in such situations.

  In situations where vapors from a spill present a clear and present danger to property or life (possible ignition because of passing automobiles, nearby houses, or work vehicles approaching the area), spraying the surface of the spill with dispersant will greatly reduce the release of additional vapors from the product. This method is especially adapted to gasoline spills on soil surfaces.

6.7 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

6.7.1 Spill on Land (Soil Surfaces) (Cont'd)

- **Removal Methods**

  The recovery and removal of free product from soil surfaces is a difficult job. The best approaches at present seem to be:

  - Removal with suction equipment to tank truck if concentrated in volumes large enough to be picked up. Channels can be formed to drain pools of product into storage pits. The suction equipment can then be used.

  - Small pockets may have to be dipped up by hand.

  - If practicable after removal of the bulk of the spill, controlled burning presents the possibility of a fast, simple, and inexpensive method of destruction of the remainder of the product. If all other options have been executed and the site is still unsafe for further activity because explosive vapors persist, the vapors may need to be intentionally ignited to prevent an accumulation sufficient to become an explosive mixture, provided the other requirements of these guidelines for controlled burning are met.

Intentional ignition to remove released product should be utilized only if <u>all</u> of the following conditions are met:

- Other steps and procedures have been executed and a determination has been made that this is the safest remaining method of control.

- Intentional burning will not unduly damage the pipeline, adjacent property, or the environment.

- Controlled burning is permitted by government authorities. Local government authorities to be contacted may include city council, county board of commissioners, city or county fire chiefs, the county forestry commission or fire tower, and the local environmental protection agency. In seeking permission from these authorities, be prepared to convince them that adequate safety precautions have been and will be taken during the operation.

- Controlled burning is conducted with the consent of local landowners.

- Safety must always be a prime consideration when considering controlled burning of product. Sparks and heat radiation from large fires can start secondary fires and strong winds make fire control difficult. There must be no danger of the fire spreading beyond control limits. All persons must be at a safe distance from the edge of the inflammable area. Remember that all burning must be controlled burning.

6.7 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

6.7.2 Spill on Lake or Pond (calm or slow-moving water)

- **Confinement Methods**

  A lake or pond offers the best conditions for removal of product from water. Although the removal is no easy task, the lake or pond presents the favorable conditions of low or no current and low or no waves.

  The movement of product on a lake or pond is influenced mainly by wind. The product will tend to concentrate on one shore, bank or inlet. Booms should be set up immediately to hold the product in the confined area in the event of a change in wind direction.

  If the spill does not concentrate itself on or near a shore (no wind effect), then a sweeping action using boats and floating booms will be necessary. The essential requirement for this operation is that it be done very slowly. The booms should be moved at not more than 40 feet per minute. Once the slick is moved to a more convenient location (near shore), the normal operations of removal should begin.

  If the slick is small and thin (rainbow effect) and not near the shoreline, an absorbent boom instead of a regular boom should be used to sweep the area very slowly and absorb the slick. The product may not have to be moved to the shoreline.

- **Removal Methods**

  If the confined slick is thick enough, regular suction equipment may be used first; however, in most instances, a floating skimmer should be removed. If judged appropriate or useful, a surface collecting agent should be applied once the slick is isolated to facilitate the removal. The surface collecting agent will concentrate the product into a smaller area and make the floating skimmer work more efficiently. If the floating skimmer starts picking up excess water (slick becomes thin), do not stop using it if it is not removing any appreciable amount of product.

  Additions of more surface collecting agent from time to time may improve the skimming efficiency of the skimmer. It will continue to concentrate the slick into a smaller area, thus making the film thickness greater. Drawing the boom closer to the bank as product is removed will also keep film of product thicker. However, when the slick becomes too thin, the skimmer should be stopped and an absorbent applied (with a boat if necessary) to remove the final amounts.

  The floating skimmer (if speed is a must) or hand skimmers (if water is shallow enough) or both can be used to pick up the product-soaked absorbent. Before pumping the product-soaked absorbent with a floating skimmer, insure that the absorbent in question can be pumped and will not harm the pump. Several types are nonabrasive to pump internals. If the floating skimmer is used first, the product-soaked absorbent/water mixture should be pumped into a tank truck.

6.7 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

A better method of retrieving the product-soaked absorbent is to draw it in as close to the shore as possible with the booms used to confine the product initially. The absorbent can then be hand skimmed from the water surface and placed in drums, on plastic sheets or in lined roll-off boxes. It should then be disposed of by acceptable means.

The final rainbow on the surface can be removed with additions of more absorbent.

6.7.3 Spill on Small to Medium Size Streams (relatively fast-flowing creeks)

- **Confinement Methods**

The techniques used for product containment on fast-flowing shallow streams are quite different from the ones used on lakes, ponds, or other still bodies of water. The containment and removal processes require a calm stretch of water to allow the product to separate onto the surface of the water. If a calm stretch of water does not exist naturally, a deep slow-moving area should be created by damming. The dam can be constructed by using sandbags, planks or earth. If a dam is required, it should be situated at an accessible point where the stream has high enough banks. The dam should be constructed soundly and reinforced to support the product and water pressure.

- Underflow dam - The underflow dam is one method that can be used, especially on small creeks. The water is released at the bottom, of the dam using a pipe or pipes which are laid during construction of the dam. The flow rate through the pipe must be sufficient to keep the dam from overflowing. One method is to lay the pipe at an angle through the dam (while dam is being constructed) so that the height of the downstream end of the pipe will determine the height the water will rise behind the dam.

- Overflow dam – Another method of containment is the overflow type dam. The dam is constructed so that water flows over the dam, but a deep pool is created which slows the surface velocity of the water. Therefore, the condition of a calm stretch of water is met. The overflow dam may be used where larger flow rates (medium size creeks) of water are involved. With this type dam, a separate barrier (floating or stationary boom) must be placed across the pool created by the dam. The separate barrier arrests the surface layer of product.

  At the same time, the water is flowing under the barrier and over the top of the dam. The barrier should be placed at an angle of 45 % across the pool to decrease the effective water velocity beneath it. Also, it helps to concentrate the product at the bank and not all along the barrier. A second barrier should be placed approximately 10 to 15 feet downstream of the first one as a secondary back-up.

  The stationary boom type barrier should be made of wood planks or other suitable material. The stationary boom should be soundly constructed and sealed against the bank. The ends of the planks can be buried in the banks of the stream and timber stakes driven into the stream bed for support as needed. The necessary length of the boom will be approximately 1-1/2 times the width of the waterway. The plank boom

6.7 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

6.7.3 Spill on Small to Medium Size Streams (relatively fast-flowing creeks) (Cont'd)

should extend six to eight inches deep into the water and about two inches or higher above the water level. If the increase in velocity under the stationary boom is causing release of trapped product, it should be moved upward slightly. At no time should barrier be immersed more than 20% of the depth of the pool at the barrier location; that is, if the pool created by damming is three feet deep, do not exceed an immersion depth of seven inches with the barrier at the position the barrier is installed.

Another method used with the underflow dam is having the pipe or pipes sized to carry only a portion of the flow needed. The pipe would be placed at the bottom of the dam and level with the creek bed. The remaining flow of the creek could be siphoned or preferably pumped around the dam from a point away from the dam and from the deepest portion of the pool. The pumping or siphoning can be controlled to maintain the desired water level at the dam. The key is the removal of water through or around the dam at the lowest point in the basin. This prevents the oil from escaping with the released water.

A floating boom can be used in place of the stationary type if the created pool's size (bank to bank) and depth will permit. Since changing the depth and/or length of a standard floating boom in a small stream is difficult, the use of the separation of product and water. The advantages of using a floating boom are the speed of deployment and the fact that there is not need for additional support as with the stationary boom.

Multiple Impoundments – Since emergency built dams (either underflow or overflow) are seldom perfect, a series of dams is usually required. The first one or two will trap the bulk and the ones that are downstream will trap the last traces of product. Precautions should be taken to ensure that the foundations of emergency dams are not washed away by the released water. If earth is used to construct an overflow dam, a layer of earth-filled bags should be placed on top of the dam so erosion will not take place.

6.7.4 Spill on Small River and Streams

- **Removal Methods**

Once the containment dams are constructed, the problem or removal of the product from the water surface should be the prime consideration. The removal must be continuous or else build-up of product behind the dams or booms might lead to product escaping the traps.

The type of removal procedures used depends largely on the amount of product being trapped in a given span of time, if the amount of product moving down the stream is of sufficient quantity, the first dam or fixed boom would quite possibly trap enough for the floating skimmer to work efficiently. The skimmer will pump the product and possibly some water to a tank truck or other holding tank. Separated water may be released from the bottom of the tank truck if it becomes necessary. The absorbents (straw, ground corncobs, or other stocked absorbent) could then be used at downstream dams or booms. It is inadvisable to place an absorbent in the stream prior to or at the first dam in anticipation of the arriving

6.7 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

6.7.4 Spill on Small River and Streams(Cont'd)

product. Let the product accumulate at the first dam and use the floating skimmer to recover the product.

Disposal of gross amount of product-soaked absorbent would not then be a problem. Follow directions on use of each absorbent. Some are designed to be placed on water before product arrives (straw and other new types); others are intended only to be placed on the product after it accumulates on the water (ground corncobs and others). Plastic sheets should be used to place the product-soaked absorbent on as it is hand skimmed from the water. Alternatively, the material may be placed in drums or lined roll-off boxes.

If the amount of product in the stream is minor, a straw-bale may be constructed to filter out the product. The slowing of the water would not be necessary, but several dams might be necessary to ensure complete removal. The downstream dams would also offer protection when the upstream bales are removed, releasing traces of product. Straw-bale dams can also be used downstream from underflow and overflow dams for added protection.

Thus, the containment and removal of spilled product on small to medium fast-flowing streams might require a combination of underflow or overflow dams, fixed booms, skimmers, absorbents, and straw-bale dams to ensure a complete cleanup.

6.7.5 Spill on Large Streams and Rivers

- **Confinement Methods**

  The containment techniques differ considerably on large streams and rivers versus small streams. First, the smooth calm area of water necessary for product-water separation must be found along the stream or river rather than making one as with small streams. Floating booms (rather than fixed booms or dams) must be used to trap the surfaced product.

  Local conditions of current and wind must be considered when selecting the site for the boom. A point with a low water velocity near the bank, sufficient depth to operate the product removal equipment, and good access are required. The fact that wind may tend to concentrate the product against one bank must be considered. A smooth, undisturbed area of water is required immediately upstream of the boom to ensure that the product has opportunity to separate out onto the surface. The boom should be positioned where the current is at a minimum. It is more effective to boom at a wide, slow position than on a narrow, fast stretch of water.

  If the boom are positioned straight across a river or stream, at right angles to the flow, surface water tends to dive beneath the barrier (boom) when current velocities exceed about ½ knot (0.8 ft./sec.). However, if the current of the entire river is ½ knot or less, then a boom can be positioned straight across the river or large stream, but angled slightly in relation of the banks. By placing the boom at an angle to the banks, product on the surface is diverted along the boom to the side of the river.

6.7 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

6.7.5 Spill on Large Streams and Rivers (Cont'd)

The current velocity is usually much slower near the river bank than in the center and the product will move along the boom toward the bank for removal. A water-tight seal between the bank and the boom is essential. A secondary boom should be set up immediately downstream of the first one to capture the amounts that escape the upstream boom. A boom can be employed parallel to the river flow at the bank to form the seal with the booms used to trap the product.

Where the current velocity of the chosen site exceeds ½ knot, the boom should be positioned in two smooth curves from a point of maximum velocity (usually the center of the river) to both banks. However, this double-boom required product to be removed from both sides of the river. To determine the appropriate angle of boom placement and support (mooring) needed to hold the booms in position, the current velocity should be measured by timing a floating object which is 80% submerged over a distance of 100 feet. A time of 60 seconds over this distance indicates a water current of approximately 1 knot. For currents from 1 to 2.5 knots (1.7 to 4.2 ft./sec.), the more the boom will have to be angled acute to the bank. The length of the boom will have to be such to reach the center of the river. For currents between ½ and 1 knot (0.8 and 1.7 ft./sec.), the angle of employment can be enlarged.

The major load on the boom is taken by the terminal moorings, particularly the one in the center of the river. However, intermediate moorings are also required both to maintain the smooth curve of the boom to prevent breaking of the boom and to assist with preventing skirt deflection. The intermediate moorings are preferably positioned every 25 feet and must be adjusted to avoid the formation of indentations in the boom profile. These trap product in pockets, prevent its deflection to the bank, and also encourage diving currents. The moorings' ropes should be five times the water depth.

In certain situations, it might be advantageous to position booms to deflect the approaching spilled product to a slower moving area. Naturally, additional booms would have to be positioned around this slower moving area prior to deflecting the product to the area. This approach has been used along river which has lagoons, etc., with a very low current action. The recovery would take place in the lagoons and not along the river bank.

- **Removal Methods**

The product collected upstream of the floating booms in a large stream or river should be removed from the water surface as it accumulates. Regular suction equipment, a floating skimmer, and/or absorbents (including absorbent booms) should be used to remove the product as appropriate to the quantity being trapped in a given span of time. If the amount moving down the stream is of sufficient quantity, the primary floating boom would possibly trap enough for the floating skimmer to work efficiently. The skimmer will pump the product and some water to a tank truck or other holing tank.

6.7 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

6.7.5 Spill on Large Streams and Rivers (Cont'd)

The absorbents (type that can be placed on water before product arrival straw is an example) would then be used upstream of the secondary boom to absorb the underflow from the primary boom. An absorbent boom (Sea-Serpent) or other stocked absorbent boom can also be placed between the primary and secondary booms to help the other absorbents control the underflow from the primary boom. If the underflow from the primary boom is significant, then the type absorbent which can be placed on the water only after product is collected may be used. An example of this type of absorbent is ground corncobs. It is best to hand skim the saturated absorbents and place on plastic sheets. However, if the absorbent used can be pumped after product absorption and speed of removal is a necessity, the floating skimmer can be used to remove the product-soaked absorbent.

The disadvantage of pumping the product-soaked absorbent to a truck is the volume that will accumulate (skimmer will pump excess water) and the disposal problems associated with the large water/product-soaked absorbent mixture.

If the volume of product moving toward the boomed area is expected to be small, an absorbent (straw) should be placed in the river upstream of the primary and secondary booms. If regular booms are not necessary, a screen filter could be stretched across the river to contain the straw, or an absorbent boom could be constructed by tightly fastening hay bales together, forming a chain. Boats (either rented or furnished by contractors) would be necessary to retrieve the product-soaked absorbents.

6.7.6 Spill on Stream which Flows into Lake of Pond

There are certain locations along the pipeline where streams (small and large ones) flow into lakes or ponds at relatively short distances from the pipeline. It is conceivable that a spill that reached the streams in question could reach or almost reach the lakes before containment and recovery operations could be set up. If time permits for containment operations to be set up on the stream in question, it then would be handled as described above depending upon the stream size involved.

However, if product in the stream is near the lake site or if product is flowing into the lake with a significant amount yet to arrive, a different containment should be employed.

6.7 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

6.7.6 Spill on Stream which Flows into Lake of Pond (Cont'd)

- Confinement Methods

  Product on a stream flowing into a lake should be boomed as close to the entrance as possible. The boom should be positioned on the lake at an angle to the residential stream current so as to direct the surface water to a slower moving area. The area where the product is being deflected should be enclosed by booms to contain it. An additional boom for sweeping the product to the bank will be required. This area of containment should not have a current velocity of more than 1/2 knot (0.8 ft./sec.), preferably less.

- Removal Methods

  The removal of product from the lake or pond's surface would be handled as described earlier.

  For sizable releases, collected product will usually be pumped into tank trucks and transported to a storage facility. Tank trucks are available at several locations throughout.

6.7.7 Spill in a Mud or tidal Flat Area

- Confinement Methods

  Shoreline boom lined with absorbent boom should be placed at the surf line to prevent oil from washing up onto the flat area. If oiling has already occurred, the boom is used to prevent further oiling, and keep oil that has impacted the flat from spreading.

- Removal Methods

  Natural Recovery, Flooding, and Sorbents are the three preferred methods. Any invasive type of recovery method poses a risk of driving the oil into the substrate of the flat and endangering the biological organisms that live there. Invasive methods should only be used in order to protect more sensitive areas.

6.7.8 Spill in a Marsh or Wetland

- Confinement Method

  Shallow water booms should be placed around the perimeter of the area to prevent impact or contain oil to prevent spreading. Booming may be difficult due to a large number of trees and/or debris.

- Removal Methods

  Natural Recovery, Flooding, Sorbents, and Low-Pressure Cold-Water Flushing are the preferred methods. As with mud and tidal flats, invasive methods may do more harm than good. In-situ burning is also an option so long as there is enough water to protect the roots of the vegetation.

6.7.8 Spills of Group V Oils

Due to the unique characteristics of Group V oils when released into a waterway, a contracted OSRO has provided methods of containment and removal for this oil group. Please see Appendix H

6.7.9 Spills in Urban Areas

Oil spills in urban areas can greatly impact recreational use, human health, wildlife habitat(s) and potential beach or park closures. Manmade structures along waterways require unique protection strategies. Manmade structures could include vertical shore protection structures such as seawalls, piers, and bulkheads, as well as riprap revetments and groins, breakwaters and jetties. Vertical structures can be constructed of concrete, wood and corrugated metal. They usually extend below the water surface, although seawalls can have beaches or riprap in front of them. These structures are very common along developed shores, particularly in harbors, marinas, and residential areas. The range in degree of exposure to waves and currents varies widely from very low in dead-end canals, to very high on offshore breakwaters. Boat wakes can generate wave energy in otherwise sheltered areas.

Maintaining shipping or other kinds of vessel traffic through navigation channels or waterways during a spill response is a difficult consideration because there is usually economic and political pressure to re-establish normal operations as soon as possible. This consideration extends to vehicular traffic through urban areas. Deploying booms and skimmers or constructing recovery sites can conflict with such traffic for several days. Also, passage of deep-draft vessels through the waterway can suddenly change water level and flow or create wakes causing booms to fail. For these reasons, recovery efforts must be coordinated through the Unified Command to ensure the cooperation of all parties involved.

6.8 Use of Chemical Dispersants and In-Situ Burning

Toledo Refining Company, LLC will consider alternate means of oil recovery such as chemical dispersants and in-situ burning under the guidance and direction of the Region 5 and Ohio EPA, USCG, contracted OSROs, and Toledo Refining Company, LLC OSC.

Procedures for permissions and expedited decisions on the use of these alternate methods of oil recovery can be found in the Region 5 Oil and Hazardous Substances Integrated Contingency Plan, sections:

- 2.10.2 OSC Notification Responsibilities
- 3.3.2 Use of Chemical Agents
- 3.3.2.1 Application steps for Use of Chemical Spill Control Agent
- 3.3.3.2 Chemical Use Checklist
- 3.3.3 Use of In Situ Burning in U. S. EPA Region 5
- Appendix VII: Chemical Use Checklist
- Appendix VII: In Situ Burning of Oil as A Response Tool In Region 5

The complete Region 5 Oil and Hazardous Substances Integrated Contingency Plan may be found online at: http://Great-lakes.net/partners/epa/acp-rc

Figure 6.1

Endangered, Threatened, Species of Concern, Special Interest, Extirpated, or Extinct listing from Division of Wildlife

Ohio Department of Natural Resources
DIVISION OF WILDLIFE

Publication 5356
(R1012)

WILDLIFE THAT ARE CONSIDERED TO BE ENDANGERED, THREATENED, SPECIES OF CONCERN, SPECIAL INTEREST, EXTIRPATED, OR EXTINCT IN OHIO

October 2012

The Division of Wildlife's mission is to conserve and improve the fish and wildlife resources and their habitats, and promote their use and appreciation by the public so that these resources continue to enhance the quality of life for all Ohioans. The Division has legal authority over Ohio's fish and wildlife, which includes about 56 species of mammals, 200 species of breeding birds, 84 species and subspecies of amphibians and reptiles, 170 species of fish, 100 species of mollusks, and 20 species of crustaceans. In addition, there are thousands of species of insects and other invertebrates which fall under the Division's jurisdiction. Furthermore, Ohio law grants authority to the chief of the Division to adopt rules restricting the taking or possession of native wildlife threatened with statewide extirpation and to develop and periodically update a list of endangered species (Ohio Revised Code 1531.25).

The status of native wildlife species is very important to the Division. While the listing process identifies individual wildlife species needing protection, it also serves as a powerful tool in the Division's planning process. It provides direction for the allocation of personnel time and funds in Division programs and projects.

The first list of Ohio's endangered wildlife was adopted in 1974 and included 71 species. An extensive examination of the list is conducted every five years. The Division seeks input from our staff along with other noted professional and amateur wildlife experts across Ohio. In 2001, as part of our comprehensive management plan, the Division initiated a reevaluation of the endangered species list. During this process, the need for an additional state-list category was recognized and has been designated as "Special Interest." The name of the previous special interest category has been changed to "Species of Concern," but retains its original definition.

Therefore, in addition to endangered the Division uses five other categories: threatened, species of concern, special interest, extirpated, and extinct, to further define the status of selected wildlife. These categories and the species contained within them are dynamic and will be revised as our knowledge of the status of Ohio's wildlife evolves.

Definitions of these categories, a summary of the numbers of species and subspecies in each category, and the list of species and subspecies in each category follow:

ENDANGERED - A native species or subspecies threatened with extirpation from the state. The danger may result from one or more causes, such as habitat loss, pollution, predation, interspecific competition, or disease.

THREATENED - A species or subspecies whose survival in Ohio is not in immediate jeopardy, but to which a threat exists. Continued or increased stress will result in its becoming endangered.

SPECIES OF CONCERN - A species or subspecies which might become threatened in Ohio under continued or increased stress. Also, a species or subspecies for which there is some concern but for which information is insufficient to permit an adequate status evaluation. This category may contain species designated as a furbearer or game species but whose statewide population is dependent on the quality and/or quantity of habitat and is not adversely impacted by regulated harvest.

SPECIAL INTEREST - A species that occurs periodically and is capable of breeding in Ohio. It is at the edge of a larger, contiguous range with viable population(s) within the core of its range. These species have no federal endangered or threatened status, are at low breeding densities in the state, and have not been recently released to enhance Ohio's wildlife diversity. With the exception of efforts to conserve occupied areas, minimal management efforts will be directed for these species because it is unlikely to result in significant increases in their populations within the state.

EXTIRPATED - A species or subspecies that occurred in Ohio at the time of European settlement and that has since disappeared from the state.

EXTINCT - A species or subspecies that occurred in Ohio at the time of European settlement and that has since disappeared from its entire range.

Number of Species in Major Taxa Classified as Endangered, Threatened, Species of Concern, Special Interest, Extirpated, or Extinct in Ohio, October 2012.

Taxon	Endangered	Threatened	Species of Concern	Special Interest	Extirpated	Extinct
Mammals	4	2	19	1	10	0
Birds	14	5	14	33	5	2
Reptiles	4	4	11	0	0	0
Amphibians	5	1	2	0	0	0
Fishes	20	13	9	0	8	2
Mollusks	24	4	8	0	11	6
Crayfishes	0	2	3	0	0	0
Isopods	2	1	0	0	0	0
Pseudoscorpions	1	0	0	0	0	0
Dragonflies	13	3	1	0	0	0
Damselflies	3	3	0	0	0	0
Caddisflies	3	6	3	0	0	0
Mayflies	2	0	1	0	0	0
Midges	1	3	1	0	0	0
Crickets	0	0	1	0	0	0
Butterflies	8	1	2	1	1	0
Moths	14	4	22	11	0	0
Beetles	2	2	6	0	0	1
Total	120	54	103	46	35	11

OHIO's ENDANGERED SPECIES

(updated September 2013)

NOTE: *E & *T denote federal (U.S. Fish and Wildlife Service) listed endangered and threatened species respectively.

MAMMALS

Indiana myotis *E	*Myotis sodalis*
Allegheny woodrat	*Neotoma magister*
Black bear	*Ursus americanus*
Snowshoe hare	*Lepus americanus*

BIRDS

American bittern	*Botaurus lentiginosus*
Northern harrier	*Circus cyaneus*
King rail	*Rallus elegans*
Sandhill crane	*Grus canadensis*
Piping plover *E	*Charadrius melodus*
Common tern	*Sterna hirundo*
Black tern	*Chlidonias niger*
Bewick's wren	*Thryomanes bewickii*
Loggerhead shrike	*Lanius ludovicianus*
Kirtland's warbler *E	*Dendroica kirtlandii*
Lark sparrow	*Chondestes grammacus*
Snowy egret	*Egretta thula*
Cattle egret	*Bubulcus ibis*
Upland sandpiper	*Bartramia longicauda*

REPTILES

Copperbelly watersnake *T	*Nerodia erythrogaster neglecta*
Plains gartersnake	*Thamnophis radix*
Timber rattlesnake	*Crotalus horridus*
Eastern massasauga	*Sistrurus catenatus*

AMPHIBIANS

Eastern hellbender	*Cryptobranchus alleganiensis alleganiensis*
Blue-spotted salamander	*Ambystoma laterale*
Green salamander	*Aneides aeneus*
Cave salamander	*Eurycea lucifuga*
Eastern spadefoot	*Scaphiopus holbrookii*

FISHES

Ohio lamprey	*Ichthyomyzon bdellium*
Northern brook lamprey	*Ichthyomyzon fossor*
Mountain brook lamprey	*Ichthyomyzon greeleyi*
Lake sturgeon	*Acipenser fulvescens*
Shovelnose sturgeon	*Scaphirhynchus platorynchus*
Spotted gar	*Lepisosteus oculatus*
Shortnose gar	*Lepisosteus platostomus*
Cisco (or Lake herring)	*Coregonus artedi*
Goldeye	*Hiodon alosoides*
Shoal chub	*Macrhybopsis hyostoma*
Pugnose minnow	*Opsopoeodus emiliae*
Popeye shiner	*Notropis ariommus*
Longnose sucker	*Catostomus catostomus*
Northern madtom	*Noturus stigmosus*
Scioto madtom *E	*Noturus trautmani*
Pirate perch	*Aphredoderus sayanus*
Western banded killifish	*Fundulus diaphanus menona*
Spotted darter	*Etheostoma maculatum*
Iowa darter	*Etheostoma exile*
Gilt darter	*Percina evides*

MOLLUSKS

Snuffbox	*Epioblasma triquetra*
Ebonyshell	*Fusconaia ebenas*
Fanshell *E	*Cyprogenia stegaria*
Butterfly	*Ellipsaria lineolata*
Elephant-ear	*Elliptio crassidens crassidens*
Purple catspaw *E	*Epioblasma obliquata obliquata*
White catspaw *E	*Epioblasma obliquata perobliqua*
Northern rifffleshell *E	*Epioblasma torulosa rangiana*
Long-solid	*Fusconaia maculata maculata*
Pink mucket *E	*Lampsilis orbiculata*
Sharp-ridged pocketbook	*Lampsilis ovata*
Yellow sandshell	*Lampsilis teres*
Eastern pondmussel	*Ligumia nasuta*
Washboard	*Megalonaias nervosa*
Sheepnose	*Plethobasus cyphyus*

MOLLUSKS (CONT.)

Clubshell *E	*Pleurobema clava*
Ohio pigtoe	*Pleurobema cordatum*
Pyramid pigtoe	*Pleurobema rubrum*
Rabbitsfoot *T	*Quadrula cylindrica cylindrica*
Monkeyface	*Quadrula metanevra*
Wartyback	*Quadrula nodulata*
Purple lilliput	*Toxolasma lividus*
Rayed bean	*Villosa fabalis*
Little spectaclecase	*Villosa lienosa*

DRAGONFLIES

Hine's emerald *E	*Somatochlora hineana*
Mottled darner	*Aeshna clepsydra*
Plains clubtail	*Gomphus externus*
American emerald	*Cordulia shurtleffi*
Uhler's sundragon	*Helocordulia uhleri*
Frosted whiteface	*Leucorrhinia frigida*
Elfin skimmer	*Nannothemis bella*
Canada darner	*Aeshna canadensis*
Racket-tailed emerald	*Dorocordulia libera*
Brush-tipped emerald	*Somatochlora walshii*
Blue corporal	*Ladona deplanata*
Chalk-fronted corporal	*Ladona julia*
Yellow-sided skimmer	*Libellula flavida*

DAMSELFLIES

Lilypad forktail	*Ischnura kellicotti*
Seepage dancer	*Argia bipunctulata*
River jewelwing	*Calopteryx aequabilis*

CADDISFLIES

	Chimarra socia
	Oecetis eddlestoni
	Brachycentrus numerosus

MAYFLIES

	Rhithrogena pellucida
	Litobrancha recurvata

MIDGES

	Rheopelopia acra

BUTTERFLIES

Persius dusky wing	*Erynnis persius*
Frosted elfin	*Callophrys irus*
Karner blue *E	*Lycaeides melissa samuelis*
Purplish copper	*Lycaena helloides*
Swamp metalmark	*Calephelis muticum*
Regal fritillary	*Speyeria idalia*
Mitchell's satyr *E	*Neonympha mitchellii*
Grizzled skipper	*Pyrgus centaureae wyandot*

MOTHS

Unexpected cycnia	*Cycnia inopinatus*
Graceful underwing	*Catocala gracilis*
	Spartiniphaga inops
	Hypocoena enervata
	Papaipema silphii
	Papaipema beeriana
	Lithophane semiusta
	Trichoclea artesta
	Tricholita notata
	Melanchra assimilis
Pointed sallow	*Epiglaea apiata*
	Ufeus plicatus
	Ufeus satyricus
Hebard's noctuid moth	*Erythroecia hebardi*

BEETLES

Ohio cave beetle	*Pseudanophthalmus ohioensis*
American burying beetle *E	*Nicrophorus americanus*

ISOPODS

Fern cave isopod	*Caecidotea filicispeluncae*
Unnamed cave isopod	*Caecidotea sp. nov.*

PSEUDOSCORPIONS

Buckskin cave pseudoscorpion	*Apochthonius hobbsi*

OHIO's THREATENED SPECIES

(updated October 2012)

NOTE: *E & *T denote federal (U.S. Fish and Wildlife Service) listed endangered and threatened species respectively.

MAMMALS

Bobcat	*Lynx rufus*
Eastern harvest mouse	*Reithrodontomys humulis*

BIRDS

Black-crowned night-heron	*Nycticorax nycticorax*
Barn owl	*Tyto alba*
Least bittern	*Ixobrychus exilis*
Peregrine falcon	*Falco peregrinus*
Trumpeter swan	*Cygnus buccinator*

REPTILES

Kirtland's snake	*Clonophis kirtlandii*
Spotted turtle	*Clemmys guttata*
Blanding's turtle	*Emydoidea blandingii*
Lake Erie watersnake	*Nerodia sipedon insularum*

AMPHIBIANS

Mud salamander	*Pseudotriton montanus*

FISHES

Brook trout	*Salvelinus fontinalis*
Bigeye shiner	*Notropis boops*
Tonguetied minnow	*Exoglossum laurae*
Greater redhorse	*Moxostoma valenciennesi*
Channel darter	*Percina copelandi*
American eel	*Anguilla rostrata*
Paddlefish *M	*Polyodon spathula*
Bigmouth shiner	*Notropis dorsalis*
Lake chubsucker	*Erimyzon sucetta*
River darter	*Percina shumardi*
Tippecanoe darter	*Etheostoma tippecanoe*
Blue sucker	*Cycleptus elongatus*
Mountain madtom	*Noturus eleutherus*

MOLLUSKS

Black sandshell	*Ligumia recta*
Threehorn wartyback	*Obliquaria reflexa*
Fawnsfoot	*Truncilla donaciformis*
Pondhorn	*Uniomerus tetralasmus*

CRAYFISHES

Sloan's crayfish	*Orconectes sloanii*
Cavespring crayfish	*Cambarus tenebrosus*

DRAGONFLIES

Riffle snaketail	*Ophiogomphus carolus*
Harlequin darner	*Gomphaeschna furcillata*
Green-faced clubtail	*Gomphus viridifrons*

DAMSELFLIES

Boreal bluet	*Enallagma boreale*
Northern bluet	*Enallagma cyathigerum*
Marsh bluet	*Enallagma ebrium*

CADDISFLIES

	Psilotreta indecisa
	Hydroptila albicornis
	Hydroptila artesa
	Hydroptila koryaki
	Hydroptila talledaga
	Hydroptila valhalla

MIDGES

	Bethbilbeckia floridensis
	Apsectrotanypus johnsoni
	Radotanypus florens

BUTTERFLIES

Silver-bordered fritillary	*Boloria selene*

MOTHS

Wayward nymph	*Catocala antinympha*
	Spartiniphaga paruatela
	Fagitana littera
The pink-streak	*Faronta rubripennis*

BEETLES

	Cicindela hirticollis
Cobblestone tiger beetle	*Cicindela marginipennis*

ISOPODS

Frost cave isopod	*Caecidotea rotunda*

OHIO's SPECIES of CONCERN

(updated October 2012)

NOTE: *E & *T denote federal (U.S. Fish and Wildlife Service) listed endangered and threatened species respectively.

MAMMALS

Pygmy shrew	*Sorex hoyi*
Star-nosed mole	*Condylura cristata*
Eastern small-footed bat	*Myotis leibii*
Rafinesque's big-eared bat	*Corynorhinus rafinesquii*
Little brown bat	*Myotis lucifugus*
Big brown bat	*Eptesicus fuscus*
Tri-colored bat	*Perimyotis subflavus*
Northern long-eared bat	*Myotis septentrionalis*
Woodland jumping mouse	*Napaeozapus insignis*
Badger	*Taxidea taxus*
Ermine	*Mustela erminea*
Smoky shrew	*Sorex fumerus*
Deer mouse	*Peromyscus maniculatus*
Prairie vole	*Microtus ochrogaster*
Woodland vole	*Microtus pinetorum*
Southern bog lemming	*Synamptomys cooperi*
Silver-haired bat	*Lasionycteris noctivagans*
Red bat	*Lasiurus borealis*
Hoary bat	*Lasiurus cinereus*

BIRDS

Sharp-shinned hawk	*Accipiter striatus*
Sedge wren	*Cistothorus platensis*
Marsh wren	*Cistothorus palustris*
Henslow's sparrow	*Ammodramus henslowii*
Cerulean warbler	*Dendroica cerulea*
Prothonotary warbler	*Protonotaria citrea*
Black vulture	*Coragyps atratus*
Bobolink	*Dolichonyx oryzivorus*
Northern bobwhite	*Colinus virginianus*
Common moorhen	*Gallinula chloropus*
Great egret	*Ardea alba*
Sora rail	*Porzana carolina*
Virginia rail	*Rallus limicola*
Yellow-bellied sapsucker	*Sphyrapicus varius*

MOLLUSKS

Purple wartyback	*Cyclonaias tuberculata*
Wavy-rayed lampmussel	*Lampsilis fasciola*
Round pig-toe	*Pleurobema sintoxia*
Salamander mussel	*Simpsonaias ambigua*
Deertoe	*Truncilla truncata*
Elktoe	*Alasmidonta marginata*
Kidneyshell	*Ptychobranchus fasciolaris*
Creek heelsplitter	*Lasmigona compressa*

REPTILES

Eastern box turtle	*Terrapene carolina carolina*
Ouachita map turtle	*Graptemys ouachitensis*
Black kingsnake	*Lampropeltis getula nigra*
Eastern gartersnake (melanistic)	*Thamnophis sirtalis sirtalis*
Northern rough green-snake	*Opheodrys aestivus*
Eastern foxsnake	*Pantherophis gloydi*
Queensnake	*Regina septemvittata*
Little brown skink	*Scincella lateralis*
Smooth earthsnake	*Virginia valeriae*
Smooth greensnake	*Opheodrys vernalis*
Short-headed gartersnake	*Thamnophis brachystoma*

AMPHIBIANS

Four-toed salamander	*Hemidactylium scutatum*
Eastern cricket frog	*Acris crepitans crepitans*

FISHES	
Lake trout	*Salvelinus namaycush*
Lake whitefish	*Coregonus clupeaformis*
Burbot	*Lota lota*
Muskellunge	*Esox masquinongy*
River redhorse	*Moxostoma carinatum*
Eastern sand darter	*Ammocrypta pellucida*
Least darter	*Etheostoma microperca*
Blue catfish	*Ictalurus furcatus*
Longnose dace	*Rhinichthys cataractae*
CRAYFISHES	
Great Lakes crayfish	*Orconectes propinquus*
Northern crayfish	*Orconectes virilis*
Allegheny crayfish	*Orconectes obscurus*
DRAGONFLIES	
Tiger spiketail	*Cordulegaster erronea*
MAYFLIES	
	Maccaffertium ithica
MIDGES	
	Cantopelopia gesta
CADDISFLIES	
	Hydroptila chattanooga
	Asynarchus montanus
	Nemotaulius hostilis
BUTTERFLIES	
Two-spotted skipper	*Euphyes bimacula*
Dusted skipper	*Atrytonopsis hianna*
MOTHS	
Milnei's looper moth	*Euchlaena milnei*
Buck moth	*Hemileuca maia*
One-eyed sphinx	*Smerinthus cerisyi*
Precious underwing	*Catocala pretiosa*
	Macrochilo bivittata
	Phalaenostola hanhami
	Paectes abrostolella
	Capis curvata
	Tarachidia binocula
	Apamea mixta
	Agroperina lutosa
Columbine borer	*Papaipema leucostigma*
Bracken borer moth	*Papaipema pterisii*
Osmunda borer moth	*Papaipema speciosissima*
	Chytonix sensilis
	Amolita roseola
Goat sallow	*Homoglaea hircina*
	Brachylomia algens
Purple arches	*Polia purpurissata*
Scurfy quaker	*Homorthodes furfurata*
	Trichosilia manifesta
	Agonopterix pteleae
BEETLES	
Six-banded longhorn beetle	*Dryobius sexnotatus*
	Cicindela splendida
	Cicindela ancocisconensis
	Cicindela cursitans
	Cicindela cuprascens
	Cicindela macra
CRICKETS	
Laricis tree cricket	*Oecanthus laricis*

OHIO's SPECIES of INTEREST

(updated October 2012)

NOTE: *E & *T denote federal (U.S. Fish and Wildlife Service) listed endangered and threatened species respectively.

MAMMALS

Evening bat	*Nycticeius humeralis*

BIRDS

Canada warbler	*Wilsonia canadensis*
Magnolia warbler	*Dendroica magnolia*
Northern waterthrush	*Seiurus noveboracensis*
Winter wren	*Troglodytes troglodytes*
Black-throated blue warbler	*Dendroica caerulescens*
Brown creeper	*Certhia americana*
Chuck-will's-widow	*Caprimulgus carolinensis*
Bell's vireo	*Vireo bellii*
Long-eared owl	*Asio otus*
Mourning warbler	*Oporornis philadelphia*
Northern saw-whet owl	*Aegolius acadicus*
Pine siskin	*Carduelis pinus*
Purple finch	*Carpodacus purpureus*
Red-breasted nuthatch	*Sitta canadensis*
Short-eared owl	*Asio flammeus*
Western meadowlark	*Sturnella neglecta*
Golden-crowned kinglet	*Regulus satrapa*
Blackburnian warbler	*Dendroica fusca*
Wilson's snipe	*Gallinago delicata*
Gadwall	*Anas strepera*
Green-winged teal	*Anas crecca*
Northern pintail	*Anas acuta*
Northern shoveler	*Anas clypeata*
Redhead	*Aythya americana*
Ruddy duck	*Oxyura jamaicensis*
American black duck	*Anas rubripes*
Wilson's phalarope	*Phalaropus tricolor*
Yellow-headed blackbird	*Xanthocephalus xanthocephalus*
Common raven	*Corvus corax*
Dark-eyed junco	*Junco hyemalis*
Yellow-crowned night-heron	*Nyctanassa violacea*
Hermit thrush	*Catharus guttatus*
Least flycatcher	*Empidonax minimus*

BUTTERFLIES

Olympia marble	*Euchloe olympia*

MOTHS

Slender clearwing	*Hemaris gracilis*
	Sphinx lucitiosa
	Tathorhynchus exsiccatus
	Catocala marmorata
	Catocala maestosa
Subflava sedge borer moth	*Archanara subflava*
	Caradrina meralis
	Calophasia lunula
	Leucania insueta
	Protorthodes incincta
Variegated orange moth	*Epelis truncataria*

OHIO's EXTIRPATED SPECIES

(updated October 2012)

NOTE: *E & *T denote federal (U.S. Fish and Wildlife Service) listed endangered and threatened species respectively.

MAMMALS

Rice rat	*Oryzomys palustris*
Porcupine	*Erethizon dorsatum*
Timber wolf	*Canis lupus*
Marten	*Martes americanus*
Fisher	*Martes pennanti*
Mountain lion	*Puma concolor*
Lynx	*Lynx canadensis*
Wapiti (Elk)	*Cervus elaphus*
Bison	*Bison bison*
Southern red-backed vole	*Clethrionomys gapperi*

BIRDS

Swallow-tailed kite	*Elanoides forticatus*
Greater prairie-chicken	*Tympanuchus cupido*
Ivory-billed woodpecker	*Campephilus principalis*
Bachman's sparrow	*Aimophila aestivalis*
Golden-winged warbler	*Vermivora chrysoptera*

FISHES

Alligator gar	*Lepisosteus spatula*
Pugnose shiner	*Notropis anogenus*
Longhead darter	*Percina macrocephala*
Diamond darter	*Crystallaria circotti*
Spoonhead sculpin	*Cottus ricei*
Blackchin shiner	*Notropis heterodon*
Blacknose shiner	*Notropis heterolepis*
Mississippi silvery minnow	*Hybognathus nuchalis*

MOLLUSKS

Orange-footed pearly mussel *E	*Plethobasus cooperianus*
Rough pigtoe *E	*Pleurobema plenum*
Fat pocketbook *E	*Potamilus capax*
Winged mapleleaf *E	*Quadrula fragosa*
Mucket	*Actinonaias l. ligamentina*
Spectaclecase	*Cumberlandia monodonta*
Cracking pearly mussel *E	*Hemistena lata*
White wartyback	*Plethobasus cicatricosus*
Hickorynut	*Obovaria olivaria*
Ring pink	*Obovaria retusa*
Scale shell	*Leptodea leptodon*

BUTTERFLIES

Mustard white	*Pieris napi*

OHIO's EXTINCT SPECIES

(updated October 2012)

NOTE: *E & *T denote federal (U.S. Fish and Wildlife Service) listed endangered and threatened species respectively.

BIRDS

Passenger pigeon	*Ectopistes migratorius*
Carolina parakeet	*Conuropsis carolinensis*

FISHES

Harelip sucker	*Lagochila lacera*
Blue pike	*Sander vitreus glaucus*

MOLLUSKS

Leafshell	*Epioblasma flexuosa*
Forkshell	*Epioblasma lewisi*
Round snuffbox	*Epioblasma personata*
Cincinnati riffleshell	*Epioblasma phillipsi*
Scioto pigtoe	*Pleurobema bournianum*
Tubercled blossom	*Epioblasma torulosa torulosa*

BEETLES

Kramer's cave beetle	*Pseudanophthalmus krameri*

FIGURE 6.2

ENVIRONMENTAL SENSITIVITY MAPS AND PLANNING DISTANCE CALCULATIONS

Environmental Sensitivity Maps

The following Environmental Sensitivity Maps have been prepared utilizing U.S. Geological Survey 7.5 Minute Quadrangle Maps as the base. The maps include a key to the reference symbols located on each map.

Remember these maps are to be utilized as guidelines only. During a real response effort Federal, State, and Local agencies should be contacted to provide further assistance in the proper identification and protection of the various environmental and socio-economic sensitive areas.

Planning Distance Calculations

In order to calculate a planning distance from which to base the vulnerability analysis, we assumed that the area from the Refinery location along Otter Creek to the mouth of the Maumee River would be impacted, and possibly the area between Toledo Refining Company, LLC's dock and the mouth of the Maumee River. Given this assumption, we calculated a 27 hour planning distance, from the mouth of the Maumee River, based upon the formula for oil transport on a standing body of water as provided in Appendix F, Part 112 of Title 40, Section 3.0. The transport formula is based upon the theoretical condition that the oil will spread from the shoreline (mouth of the Maumee River) into a semi-circle (not accounting for wave or wind action). The formula solves for the area of a circle, divides this area by 2 to account for the semi-circular shape, and then calculates the radius of this circle in feet. After calculating the radius of this circle, the radius is extended by assuming that, under a 20 knot wind under storm conditions, the oil slick will move at 3 percent of the wind's speed. These calculations follow:

Given:

Constant conversion factor = 0.1643 (Appendix F, Part 112 of Title 40, Section 3.0).

Following through the equations we calculate:

Surface area covered by the worst case spill = A(1) = $2.75 \times 10^8 ft^2$
Area of circle divided by 2 to account for a semi-circular shape = A(2) = $(\pi r^2)/2$

Solving for the radius, r, using the relationship [A(1) = A(2)] we get:
$[2.75 \times 10^8 = (\pi r^2)/2]$

Therefore, r = 13,241 ft = 2.5 miles.

Assuming the following conditions: a 20 knot wind under storm conditions, that the slick travels at 3 percent of the wind's speed, and a response time of 27 hours, we calculate:

[1 knot = 1.15 miles/hour]
20 knots x 1.15 miles/hour/knot = 23 miles/hour
23 miles/hour x 0.03 = 0.69 miles/hour
27 hours x 0.69 miles/hour = 18.6 miles

FIGURE 6.2

ENVIRONMENTAL SENSITIVITY MAPS AND PLANNING DISTANCE CALCULATIONS (Cont'd)

The total distance (d) that the oil will travel from the mouth of the Maumee River is calculated as follows:

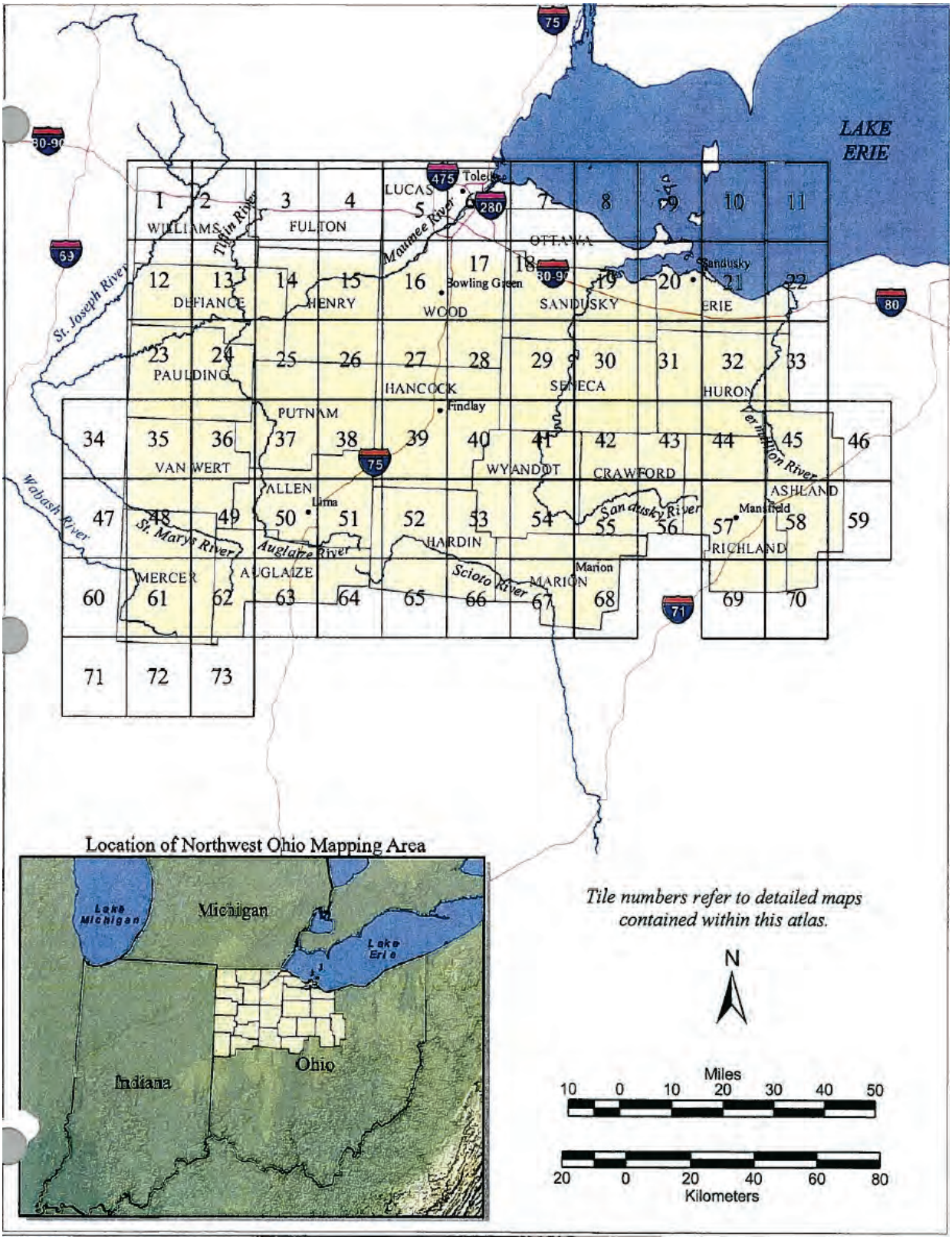
[Planning Distance = d = 18.6 miles + 2.5 miles = 21.1miles].

Based upon these calculations, our planning distance included:

(b) (7)(F), (b) (3)



In reviewing potentially impacted resources, our analysis considered all shoreline areas (including a distance of approximately ¼ mile inland) within the 27 hour planning area. Maps depicting potentially impacted resources within the 27 hour planning area have been developed and are presented in this figure.


LAKE ERIE
LUCAS
WILLIAMS
FULTON
OTTAWA
DEFIANCE
HENRY
WOOD
SANDUSKY
ERIE
PAULDING
HANCOCK
SENECA
HURON
PUTNAM
VAN WERT
WYANDOT
CRAWFORD
ALLEN
ASHLAND
HARDIN
RICHLAND
MERCER
AUGLAIZE
MARION
Toledo
Bowling Green
Findlay
Lima
Mansfield
Marion
Tiffin River
Maumee River
St. Joseph River
Wabash River
St. Marys River
Auglaize River
Scioto River
Sandusky River
Vermilion River
Location of Northwest Ohio Mapping Area
Lake Michigan
Michigan
Lake Erie
Indiana
Ohio
Tile numbers refer to detailed maps contained within this atlas.
N
Miles
10 0 10 20 30 40 50
20 0 20 40 60 80
Kilometers

MAP LEGEND

SENSITIVE SPECIES

Aquatic/Riparian Zone

- Vascular Plants
- Birds
- Amphibians and Reptiles
- Mammals
- Invertebrates
- Fish
- Natural Communities
- Icons Indicating Threatened or Endangered Status

Terrestrial Zone

- Vascular Plants
- Birds
- Amphibians and Reptiles
- Mammals
- Invertebrates
- Natural Communities
- Multiple Species Groupings

NATURAL RESOURCE AREAS

- F — Federal Managed Areas
- S — State Managed Areas
- R — Regional Managed Areas
- P — Private Managed Areas
- O — Other Environmentally Sensitive Aquatic Areas
- O — Other Environmentally Sensitive Terrestrial Areas

- F — Federal Designated Areas
- S — State Designated Areas
- R — Regional Designated Areas
- P — Private Designated Areas

- T — Tribal Land

OTHER SENSITIVE RESOURCES

- Marina
- Navigational Lock and Dam
- Water Intake (nonpotable)
- Water Intake (potable)

SHORELINE SENSITIVITY

- Low Sensitivity
- Low-Medium Sensitivity
- Medium-High Sensitivity
- High Sensitivity

POTENTIAL SPILL SOURCES

- Fixed Oil Storage Facility
- Marine Transfer Facility and/or Facility with more than 1 million gallons
- Pipeline

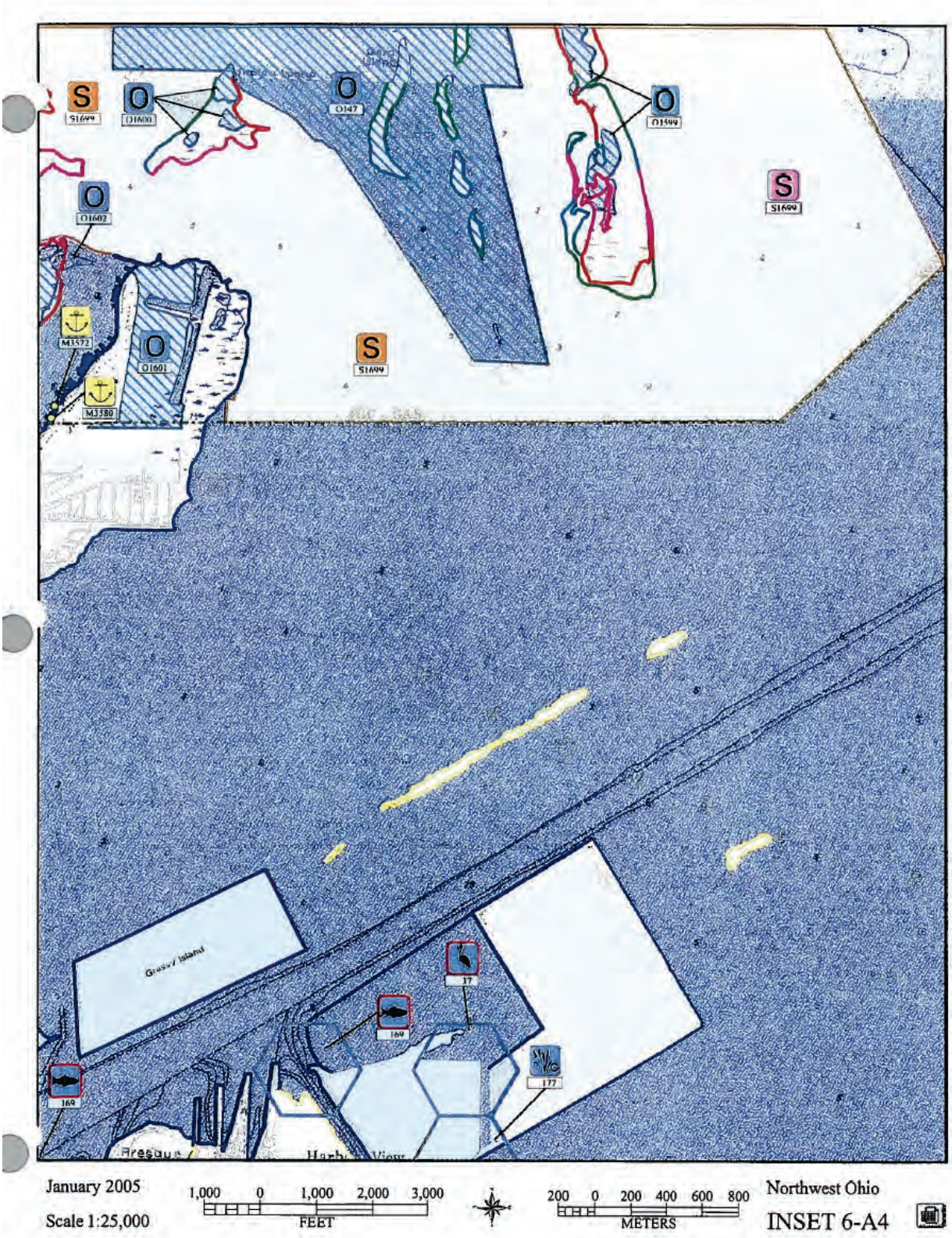
RESPONSE CONSIDERATIONS

- Ⓐ Boat Access
- Ⓓ Non-navigational Dam

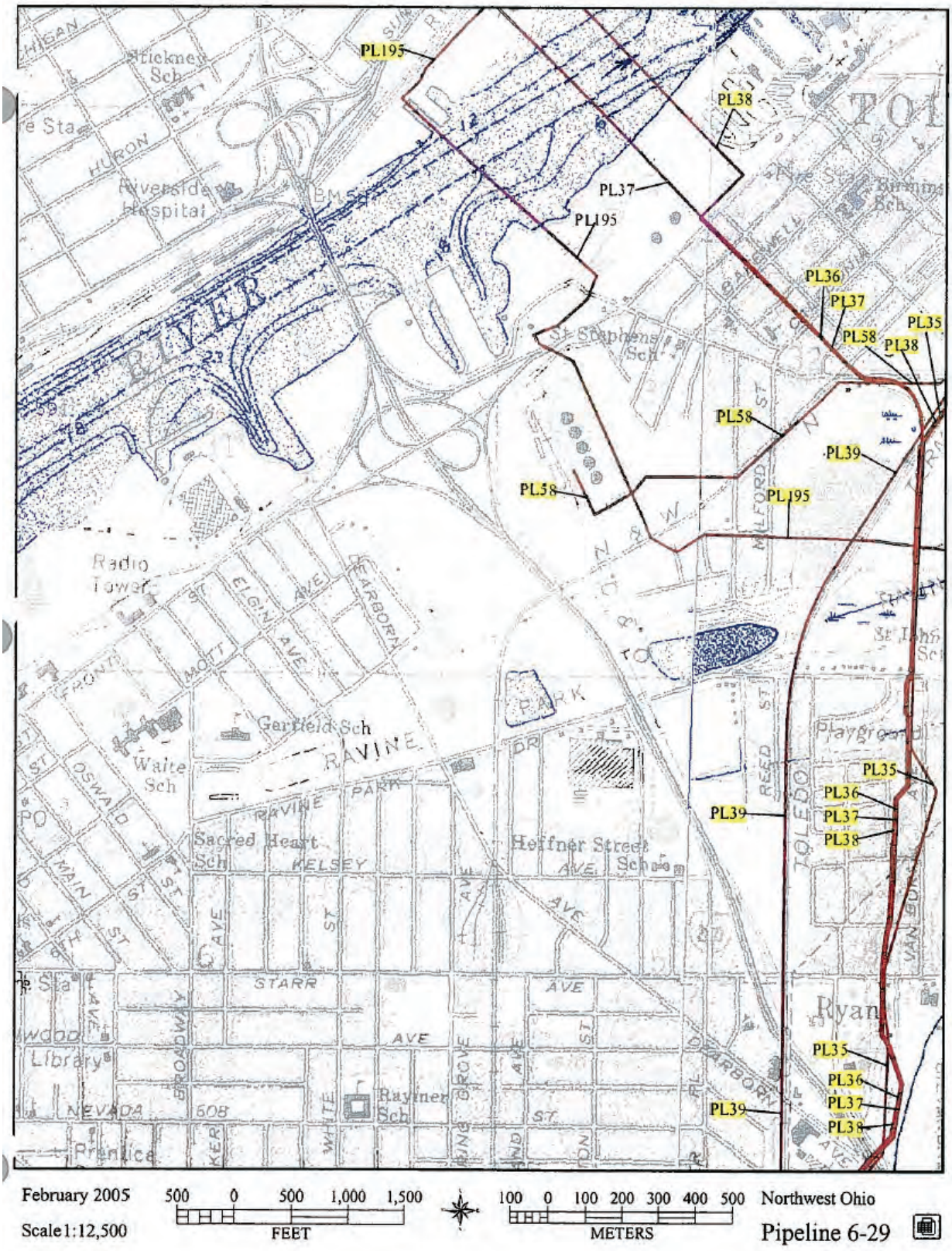
BOUNDARY DESIGNATIONS

- County Boundary
- Pipeline Inset Boundary

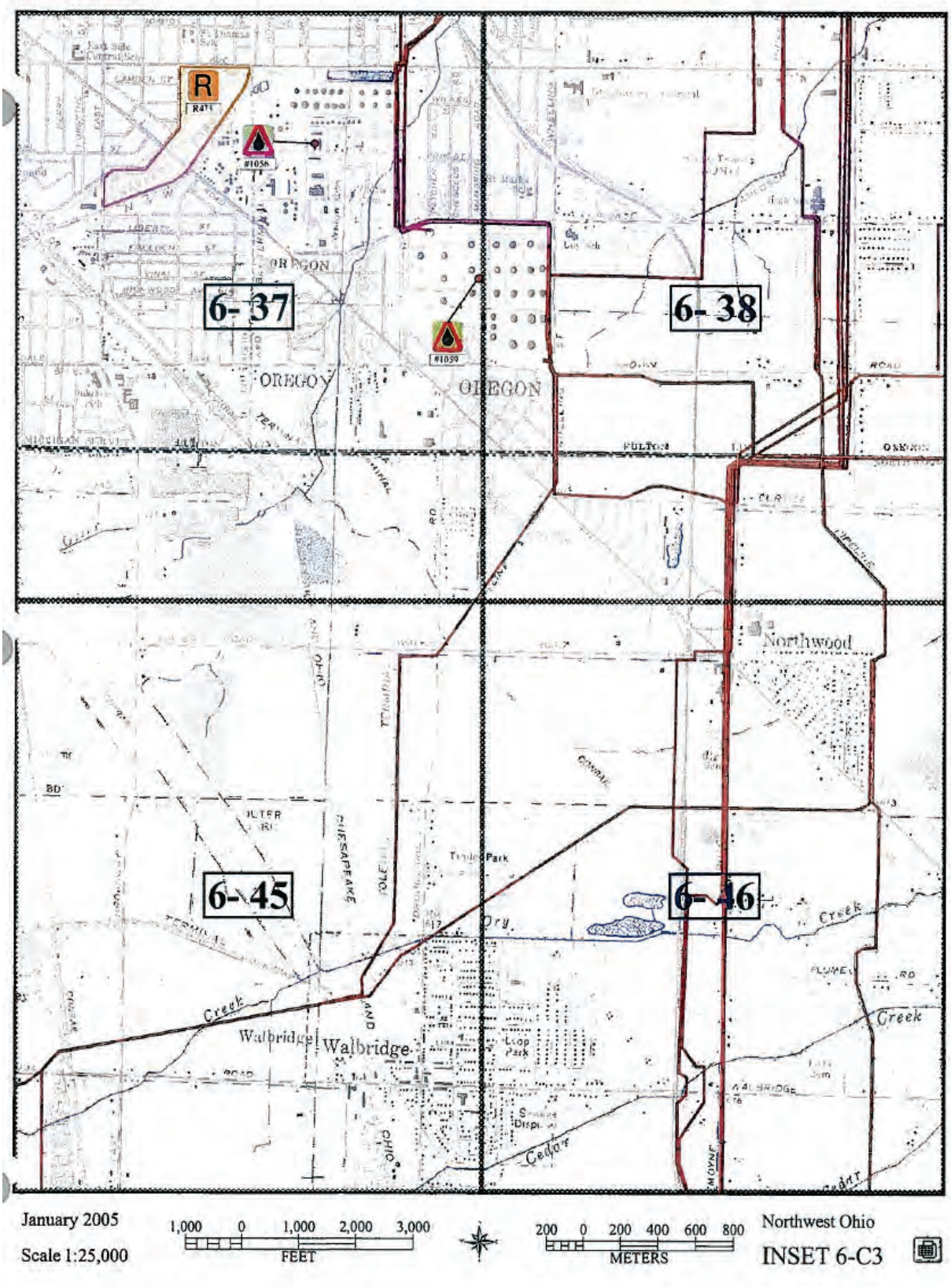
(b) (7)(F), (b) (3)

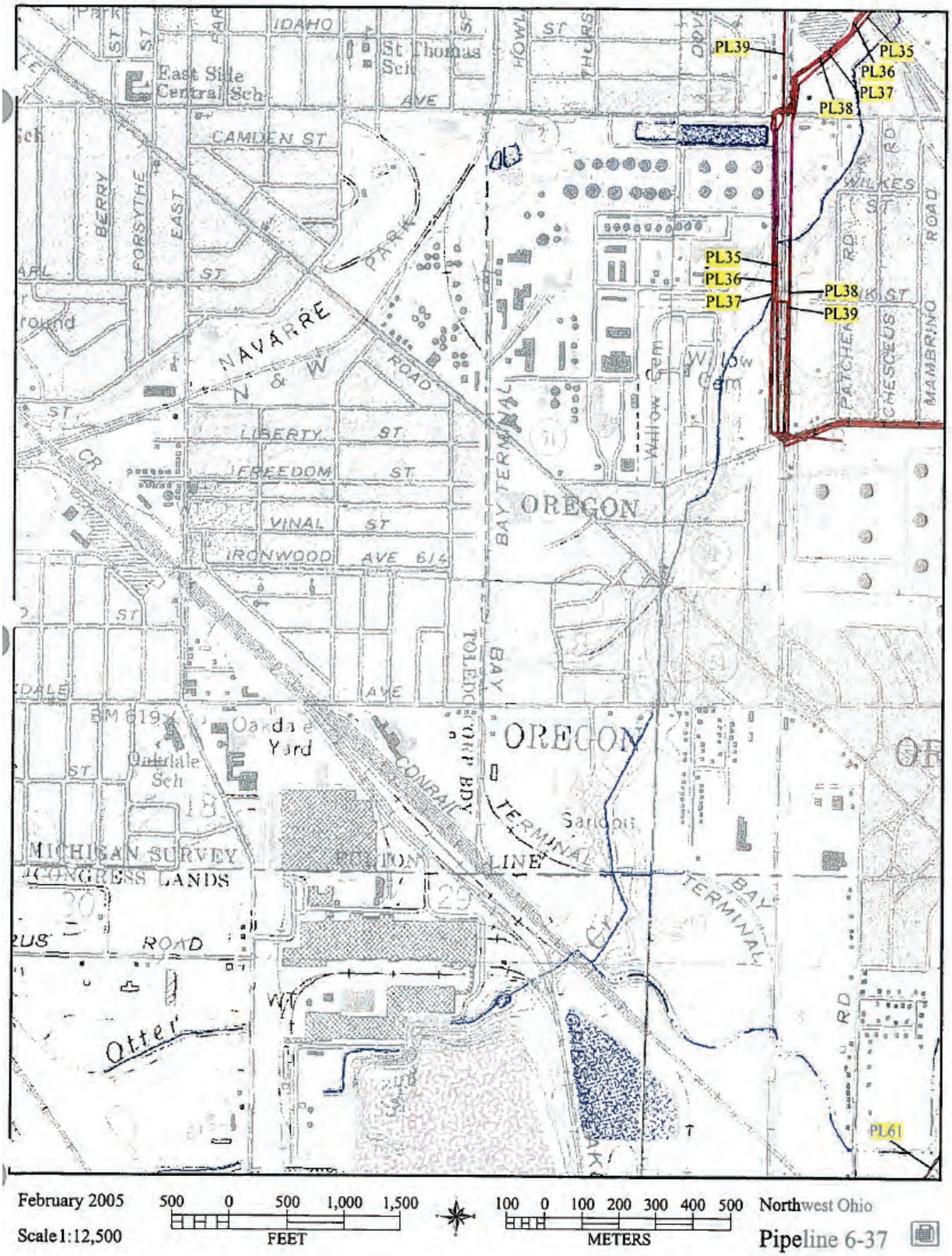

S
S1699
O
O1600
O
O147
O
O1599
O
O1602
S
S1699
O
O1601
M3572
M3580
Grassy Island
17
169
177
169
Presque
January 2005
Scale 1:25,000
1,000 0 1,000 2,000 3,000
FEET
200 0 200 400 600 800
METERS
Northwest Ohio
INSET 6-A4

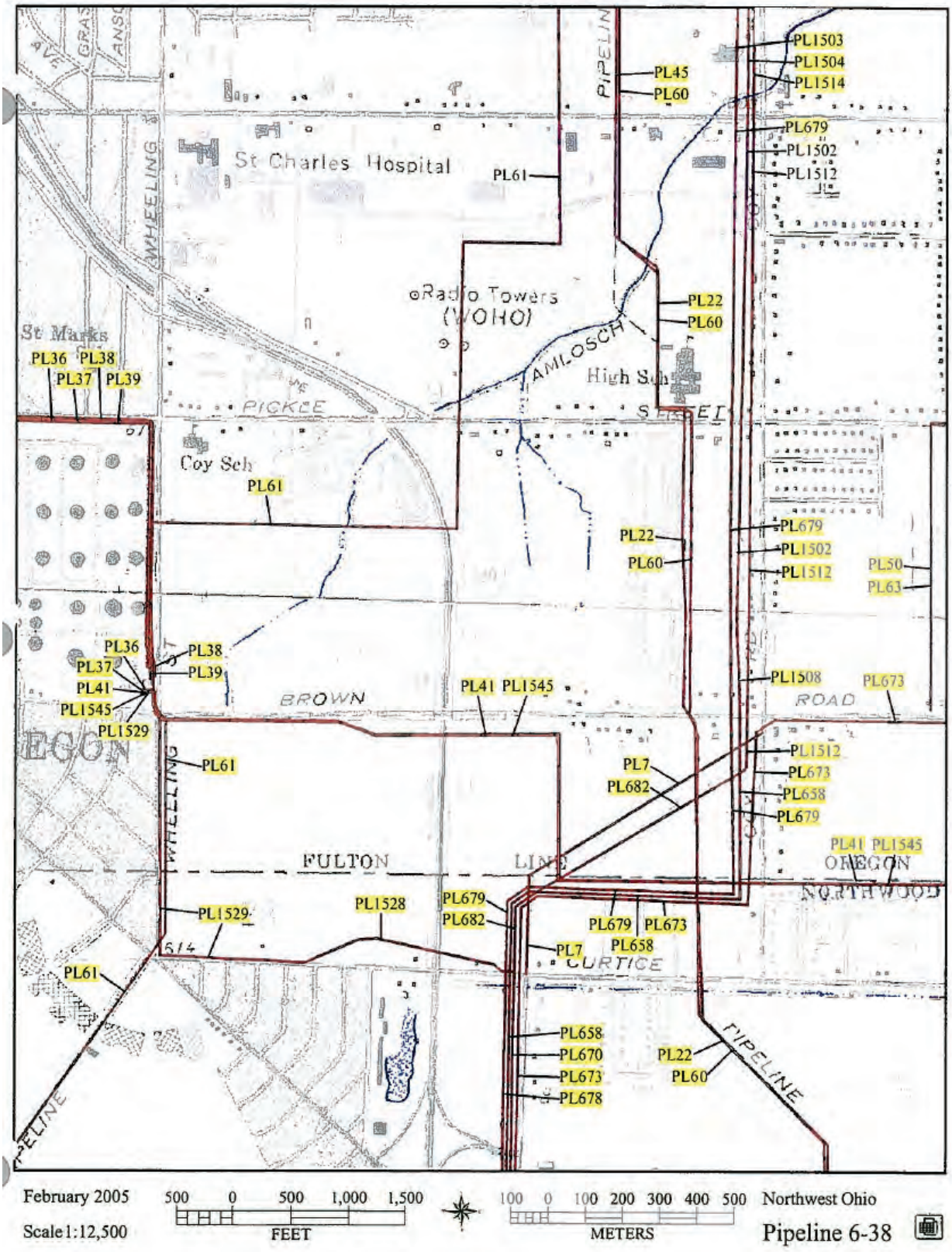
(b) (7)(F), (b) (3)


PL195
PL38
PL37
PL195
PL36
PL37
PL35
PL58
PL38
PL58
PL39
PL58
PL195
PL35
PL36
PL39
PL37
PL38
PL35
PL36
PL37
PL39
PL38
Riverside Hospital
Stickney Sch
St Stephens Sch
Radio Tower
Garfield Sch
Waite Sch
Sacred Heart Sch
Heffner Street Sch
Playground
Ryan
Rayiner Sch
Library
Prentice
RAVINE
PARK
STARR
NEVADA
HARBOR
MILFORD
TOLEDO
REED
February 2005
Scale 1:12,500
500 0 500 1,000 1,500
FEET
100 0 100 200 300 400 500
METERS
Northwest Ohio
Pipeline 6-29

(b) (7)(F), (b) (3)


R
#1056
#1059
OREGON
6-37
6-38
6-45
6-46
Northwood
Walbridge
Walbridge
Creek
Creek
Creek
January 2005
Scale 1:25,000
1,000 0 1,000 2,000 3,000
FEET
200 0 200 400 600 800
METERS
Northwest Ohio
INSET 6-C3


PL39
PL35
PL36
PL37
PL38
PL35
PL36
PL37
PL38
PL39
PL61
East Side Central Sch
St Thomas Sch
CAMDEN ST
IDAHO
AVE
NAVARRE
ROAD
N & W
LIBERTY ST
FREEDOM ST
VINAL ST
IRONWOOD AVE
BAY TERMINAL
OREGON
Oakdale Yard
Oakdale Sch
CONRAIL
TOLEDO
MICHIGAN SURVEY
CONGRESS LANDS
LINE
Otter
WILKES ROAD
PATCHEN
CHESCELUS
MAMBRINO
February 2005
Scale 1:12,500
500 0 500 1,000 1,500
FEET
100 0 100 200 300 400 500
METERS
Northwest Ohio
Pipeline 6-37


PL1503
PL1504
PL1514
PL45
PL60
PL679
PL1502
PL1512
St Charles Hospital
PL61
Radio Towers
(WOHO)
PL22
PL60
St Marks
PL36
PL38
PL37
PL39
PICKLE
AMLOSCH
High Sch
Coy Sch
PL61
PL22
PL60
PL679
PL1502
PL1512
PL50
PL63
PL36
PL38
PL37
PL39
PL41
PL1545
PL1529
BROWN
PL41 PL1545
PL1508
PL673
ROAD
PL61
PL7
PL682
PL1512
PL673
PL658
PL679
WHEELING
FULTON
LINE
PL41 PL1545
OREGON
NORTHWOOD
PL1529
PL1528
PL679
PL682
PL679
PL673
PL658
PL7
CURTICE
PL61
PL658
PL670
PL673
PL678
PL22
PL60
PIPELINE
February 2005
Scale 1:12,500
500 0 500 1,000 1,500
FEET
100 0 100 200 300 400 500
METERS
Northwest Ohio
Pipeline 6-38

Sensitive Species[a]

Listing	Contact Name	Emergency Phone	Contact Phone
Federal (Ohio) Elements	U.S. Fish and Wildlife Service	800-800-5923 to page 612-660-9062 (Stan Smith, Regional Spill Response Coordinator)	309-793-5800, ext. 515 or 524
State (Ohio) plants, communities	Ohio DNR: Division of Natural Areas and Preserves	614-265-6472	614-265-6453
State (Ohio) animals, fish, invertebrates	Ohio DNR: Division of Wildlife	614-265-6300	614-265-6329 Terrestrial, 614-265-6344 Aquatics
State	Indiana DNR Division of Fish and Wildlife Michigan Natural Features Inventory	None None	317-232-4080 517-373-9418

Managed Areas

Icon Number	Name	Category	Managing Agency	Waterbody	Emergency Phone	Contact Phone	Comments
R465	**Pearson Metropark**	Regional Park	Toledo Metropolitan Park District	Wolf Ditch	**419-243-5111**	419-691-3997	Remnant of Old Black Swamp. Half of park developed for recreation.
R470	**Cullen Park**	City Park	City of Toledo	Maumee Bay	**419-243-5111**	419-936-2874	
R471	**Detwiler Park**	City Park	City of Toledo	Detwiler Ditch, Maumee Bay	**419-243-5111**	419-936-2874	
R473	**Navarre Park**	City Park	City of Toledo	Maumee River	**419-243-5111**	419-936-2874	
R474	**Joe E. Brown Park**	City Park	City of Toledo	Ottawa River	**419-243-5111**	419-936-2874	
R475	**Sterling Park**	City Park	City of Toledo	Swan Creek	**419-243-5111**	419-936-2874	
R476	**Walbridge Park**	City Park	City of Toledo	Maumee River	**419-243-5111**	419-936-2874	
R478	**Highland Park**	City Park	City of Toledo	Swan Creek	**419-243-5111**	419-936-2874	
R483	**Swan Creek Metropark**	Regional Park	Toledo Metropolitan Park District	Swan Creek	**419-243-5111**	419-382-4664	Several very nice small oxbow lakes adjacent to Swan Creek. Very diverse plant and animal community.
R552	**Audubon Islands**	State Nature Preserve	Toledo Metropolitan Park District	Maumee River	**419-243-5111**	419-535-3050	Designated State Nature Preserve. Nesting and wildlife habitat with meadows and tallgrass prairie, mature floodplain woodland.
R553	**Bay View Park**	City Park	City of Toledo	Maumee River, Maumee Bay	**419-243-5111**	419-936-2874	Numerous marinas located in inlet. Along ship channel and next to water treatment plant.
R554	**Ravine Park**	City Park	City of Toledo	Duck Creek, Maumee Bay	**419-243-5111**	419-936-2874	

[a] 2003 Ohio Natural Heritage Data provided by the Ohio Department of Natural Resources, Division of Natural Areas and Preserves and Division of Wildlife
[a] 2003 Indiana Natural Heritage Data provided by the Indiana Department of Natural Resources, Division of Fish and Wildlife
[a] 2003 Michigan Natural Heritage Data provided by the Michigan Department of Natural Resources and the Michigan Natural Features Inventory

Contingency Protocol for Oiled Wildlife – The Toledo Refining Company LLC
November, 2005
PHMSA 000124686

Northwest Ohio Atlas – Tile 6 (Continued)

Managed Areas - Continued

Icon Number	Name	Category	Managing Agency	Waterbody	Emergency Phone	Contact Phone	Comments
R555	**Ottawa Park**	City Park	City of Toledo	Ottawa River	**419-243-5111**	419-936-2874	The Ottawa River bisects the property from southwest to the northeast.
R556	**Jermain Park**	City Park	City of Toledo	Ottawa River	**419-243-5111**	419-936-2874	The Ottawa River bisects the property from southwest to northeast.
R557	**Willys Park**	City Park	City of Toledo	Willys Creek, Ottawa River	**419-243-5111**	419-936-2874	
R5226	**Orleans Park**	City Park	Perrysburg City Parks and Recreation	Maumee River	**419-243-3441**	419-872-7966	Plenty of parking, fishing, grills, picnic tables and a nature walk along the river. 32 acres.
R5227	**Bicentennial Park**	City Park	Perrysburg City Parks and Recreation	rivercrest	**419-243-3441**	419-872-7966	Twinbrook Drive to Mark Lane. 19 acres with play equipment, soccer fields and a walking trail.
R5228	**Municipal Park**	City Park	Perrysburg City Parks and Recreation	Grassy Creek	**419-243-3441**	419-872-7966	18 acres. The park is currently undergoing renovation to include a walking trail between the ball fields.
R5229	**Three Meadows Park**	City Park	Perrysburg City Parks and Recreation	Grassy Creek	**419-243-3441**	419-872-7966	20 acres with 2 ponds for swimming, boating and fishing.
R5230	**Woodlands Park**	City Park	Perrysburg City Parks and Recreation	Grassy Creek	**419-243-3441**	419-872-7966	43 acres with community built play-grounds, a nature preserve and many beautiful gardens.
R5232	**W.W. Knight Nature Preserve**	County Park	Wood County Park District	Maumee River, Grassy Creek	**419-243-3441**	419-353-1897; 800-321-1897	Features distinct natural areas including woodlands, a native prairie, a pond, a constructed wetland and grassy meadows.
R5233	**Cedar Creek Preserve**	County Park	Wood County Park District	Cedar Creek	**419-243-3441**	419-353-1897; 800-321-1897	17 acre example of the former Black Swamp that once covered a large portion of northwest OH.
S529	**Wildlife Habitat Restoration Area**	Restoration Area	OH DNR Division of Wildlife	Henry Creek	**614-224-0946**	419-424-5000	Primarily upland habitats supporting warm and cool season grasses.
S1699	**Erie State Game Area**	State Game Area	Michigan Department of Natural Resources	North Maumee Bay, Lake Erie	**800-292-4706**	517-373-1263	

PHMSA 000124687

Other Environmentally Sensitive Areas

Icon Number	Additional Resource Area Name	Contact Agency	Waterbody	Emergency Phone	Contact Phone	Comments
O147	**Erie Marsh Reserve**	The Nature Conservancy	North Maumee Bay, Lake Erie	517-373-7660	312-759-8017	Total of 2168 acres. Migratory and nesting shorebirds, waterfowl, and avian species. Raptors during migration. Swamp mallow grows here.
O1594	**Otter Creek Wetland**	Great Lakes Wetland Consortium	Otter Creek, Maumee River, Maumee Bay	419-345-4917	734-971-9135	railroad; wetland is contiguous and contains some upland; point represents portion of wetland not recognized by OWI; industrial development exists
O1599	**Woodtick Peninsula Wetland**	Great Lakes Wetland Consortium	North Maumee Bay	734-240-7400	734-971-9135	wetland is contiguous and contains small ponds; part of large wetland complex including Herdendorf wetlands; industrial development exists
O1600	**Indian Island Wetland**	Great Lakes Wetland Consortium	North Maumee Bay	734-240-7400	734-971-9135	wetland is contiguous
O1601	**Carland Beach Wetland**	Great Lakes Wetland Consortium	North Maumee Bay	734-240-7400	734-971-9135	Remnant of much larger wetland; residential development exists.
O1602	**Ottawa River Mouth Wetland**	Great Lakes Wetland Consortium	North Maumee Bay	734-240-7400	734-971-9135	residential development exists
O1603	**Halfway Creek Wetland**	Great Lakes Wetland Consortium	North Maumee Bay	734-240-7400	734-971-9135	wetland is contiguous; residential development exists

Marinas

Icon Number	Name	Street Address	Waterbody	Slips	Fuel Available	Emergency Phone	Contact Phone
M2600	**American Marine**	2929 E. Sterns Road, Erie	Hoopers Run Creek, Lake Erie	80	No	734-243-7070	734-848-8501
M2603	**Andrews Boat Dock**	2937 E. Sterns Road, Erie	Maumee Bay, Lake Erie Access	146	No	734-243-7497, 734-243-7070	800-649-3777 734-848-3337
M2609	**Bay View Yacht Club**	Bay View Park, Toledo	Maumee Bay, Lake Erie	168	Yes	419-243-5111	419-729-0371
M2611	**Bi-State Marina**	2969 E Sterns, Erie	Hoopers Run Creek, Lake Erie		No	734-243-7070	734-848-4749
M2615	**Brenner Marine**	1 Main Street, Toledo	Maumee River	40	No	419-243-5111	419-691-4663
M2618	**Bush Marine**	5235 N Summit Street, Toledo	Ottawa River	250	No	419-243-5111	419-726-0794
M2639	**Erie Bay Harbor Marina**	7120 Summit Street, Erie	Halfway Creek, Lake Erie	250	Yes	888-423-0372	734-848-4550
M2658	**Jocketts Marina Dockage**	6213 Edgewater Drive, Toledo	Ottawa River, Maumee Bay	90	No	419-243-5111	419-726-9443
M2686	**New Harrison Marina**	3840 N Summit Street, Toledo	Maumee River, Maumee Bay	300	Yes	419-382-8225	419-729-1676
M2691	**Ottawa River Yacht Club**	5844 Edgewater Drive, Toledo	Ottawa River, Maumee Bay	182	Yes	419-243-5111	419-726-4101
M2696	**River Run Marina**	5813 Edgewater Drive, Toledo	Ottawa River, Maumee Bay			419-243-5111	419-727-1171
M2697	**River View Yacht Club**	5844 Edgewater Drive, Toledo	Ottawa River, Maumee Bay	220	Yes	419-243-5111	419-729-9421

Contingency Protocol for Oiled Wildlife – The Toledo Refining Company LLC November, 2005

PHMSA 000124688

Marinas - Continued

Icon Number	Name	Street Address	Waterbody	Slips	Fuel Available	Emergency Phone	Contact Phone
M2711	State Line Marina	7370 Perch Street, Erie	Hoopers Run Creek, N. Maumee Bay, Lake Erie Access	143	Yes	734-243-7497, 734-243-7070	734-848-8137
M2716	Toledo Yacht Club	Bay View Park, Toledo	Maumee Bay, Lake Erie	108	No	419-243-5111	419-726-3485
M2736	Cullen Park Ramp	Summit Street, Toledo	Maumee Bay		No	419-936-3076	419-936-2871 419-936-3085
M2740	Pier 75 Marina	299 Edwin Drive, Toledo	Maumee River		Yes	419-243-5111	419-242-7575
M2741	Harbor View Yacht Club	2180 Autokee, Oregon	Maumee Bay	130	No	419-243-5111	419-698-8128
M2742	Maumee River Yacht Club	2735 Broadway, Toledo	Maumee River	125	No	419-243-5111	419-382-3625
M2743	Toledo Sailing Club	2700 Broadway, Walbridge Park, Toledo	Maumee River	60	No	419-243-5111	419-382-5841
M3563	Burlens Dock	6316 Willow Place, Erie	Ottawa River, Maumee Bay Access	35	Yes	313-243-7070	N/A
M3568	Jo Jo's Marina	7371 Bass, Erie	Maumee Bay, Lake Erie			313-243-7070	734-848-2158
M3569	John Fisher's Marina	2961 Stems Road, Erie	Maumee Bay, Lake Erie			313-243-7070	734-848-8331
M3572	Lost Peninsula Marina	6300 Edgewater Drive, Erie	Maumee Bay, Lake Erie Access	700	Yes	734-723-7466, 734-723-7410	734-723-7466
M3580	River Cafe & Marina	6215 Edgewater Drive, Erie	Ottawa River, Lake Erie Access	6	No	313-243-7070	734-723-7405
M3582	Rodger Dodgers Lands End Marina	2941 E. Sterns Road, Erie	Hoopers Run Creek, Lake Erie Access	32	Yes	313-243-7070	734-828-4249
M3584	Shelter Cove Marina	2929 E. Sterns Road, Erie	Hoopers Run Creek, Lake Erie Access	80	No	734-243-7497	734-848-8501
M5132	Rossford Marina	100 Hannum Ave, Rossford	Maumee River	250	No	419-666-7390	419-661-4299
M5136	Perrysburg Boat Club	111 Water Street, Perrysburg	Maumee River	60	No	419-354-9137	419-874-6538

Surface Water Intakes

Icon Number	Name	Street Address	Waterbody	Water Use	Reserve Capacity	Intake Information	Comments	Emergency Phone	Contact Phone

[redacted] (b) (3), (b) (7)(F)

Contingency Protocol for Oiled Wildlife – The Toledo Refining Company LLC
November, 2005

PHMSA 000124689

Northwest Ohio Atlas – Tile 6 (Continued)

Oil Storage Facilities

Icon Number	Name	Operator	Street Address	Waterbody	Facility Response Plan	Marine Transfer Facility	Products Handled	Emergency Phone	Contact Phone
#1050	**Westway Terminal Company, Inc.**	Westway Terminal Company, Inc.	431 John Carey Dr., Toledo	Maumee River, Duck Creek	Yes	Yes	Vegetable Oils	**419-698-8031**	419-698-8031
#1051	**Oregon Facility**	Asphalt Materials, Inc.	940 N Wynn Rd, Oregon	Wynn Rd. Drainage Swale, Lake Erie	Yes	N/A	Asphalt-cutback,emul,multi, #1 & 2 Oils, Tall Oil	**419-693-0626/317-875-4670**	419-693-0626
#1052	**Toledo Facility**	Delta Fuels of Ohio	1820 Front Street, Toledo	Maumee River, Maumee Bay	Yes	Yes	Gasoline, Diesel, Ethanol	**419-620-8222 (p)/419-620-8282 (p)**	419-693-0983
#1053	**Toledo Edison Acme Station**	Centerior Energy Corporation	1401 Front Street, Toledo	Maumee River	Yes	N/A		**419-249-5700**	419-691-3581
#1054	**Toledo Emulsion Plant**	Bituminous Products, Inc.	352 George Hardy Dr, Toledo	Maumee River	Yes	N/A		**419-243-5111**	419-693-3933
#1055	**Toledo Refinery**	BP Exploration and Oil Company	4001 Cedar Point Rd, Oregon	Otter Creek, Driftmeyer Ditch	Yes	Yes	Gasoline, Aviation Fuel, Diesel, Asphalt, Kerosene	**419-698-6200**	419-698-6200
#1056	**Toledo Refinery**	Sun Company, Inc.	1819 Woodville Road, Oregon	Otter Creek, Amslosch Ditch	Yes	N/A	Gasoline	**419-698-6610**	419-698-6610
#1057	**Citgo Toledo Terminal**	Citgo Petroleum Corporation	1840 Otter Creek Road, Oregon	Otter Creek, Driftmeyer Ditch, Maumee Bay	Yes	Yes	Gasoline, LS & HS Diesel, Kerosene, Racing Fuel	**419-698-8055/419-440-6778 (p)**	419-698-8055
#1058	**Toledo Terminal**	Clark Refining and Marketing	2844 N. Summit, Toledo	Maumee River, Maumee Bay	Yes	Yes	Gasoline, Fuel Oil, Ethanol	**419-726-9741**	419-726-9741
#1059	**Toledo #2 Tank Farm**	Sun Refining/Marketing	1601 Woodville Rd, Toledo	Maumee River	Yes	N/A	Refined Oil	**419-698-6610**	419-698-6610
#1060	**Toledo Terminal**	BP Exploration and Oil Company	2450 Hill Avenue, Toledo	Williams Ditch, Swan Creek	Yes	No	Gasoline, Diesel, Jet-A, Aviation Gas, Kerosene	**800-842-6561**	419-537-9540
#1063	**Walbridge Facility**	Consolidated Rail Corp.	28531 E Broadway, Walbridge	Cedar Creek	Yes	No		**419-354-9001**	419-661-4885
#1066	**BP Oil Company**	BP Oil and Exploration Company	4128 Monroe, Toledo	Peterson Ditch	No	No	Gasoline	**800-842-6561**	419-537-9540
#4966	**Walbridge Facility CSXT**	CSZ Transportation Corp.	28531 E Broadway, Walbridge	Cedar Creek	No	No	Diesel Fuel	**419-661-4691**	419-661-4858 419-661-4691

Northwest Ohio Atlas – Tile 6 (Continued)

Pipelines

Icon Number	Company Name	Route Name	Number of Pipes in Route	Diameters	Products	Emergency Phone	Contact Phone	Active
PL1	**Buckeye Pipeline Company**	DS316BD001	1	16"	Product	**800-331-4115**	800-523-9420	Yes
PL7	**Buckeye Pipeline Company**	Sun Junction Idle	2	8"	Product	**800-331-4115**	800-523-9420	No
PL13	**Buckeye Pipeline Company**	DE150TO007	1	8.63"	Product	**800-331-4115**	800-523-9420	Yes
PL14	**Buckeye Pipeline Company**	DE150TO008	1	8.63"	Product	**800-331-4115**	800-523-9420	Yes
PL15	**Buckeye Pipeline Company**	DE150TO010	1	8.63"	Product	**800-331-4115**	800-523-9420	Yes
PL16	**Buckeye Pipeline Company**	DE150TO011	1	8.63"	Product	**800-331-4115**	800-523-9420	Yes
PL20	**Buckeye Pipeline Company**	DE150TO012	1	8.63"	Product	**800-331-4115**	800-523-9420	Yes
PL21	**Buckeye Pipeline Company**	DE150TO013	1	8.63"	Product	**800-331-4115**	800-523-9420	Yes
PL22	**Buckeye Pipeline Company**	DE150TO014	1	8.63"	Product	**800-331-4115**	800-523-9420	Yes
PL23	**Sunoco Inc.**	16" Crude	1	16"	Crude	**800-786-7440 419-691-4554**	313-292-8850 800-279-4602	Yes
PL31	**BP Oil Pipeline Company**	West Toledo 6"	1	6"	Product	**800-842-6561**	419-435-3789	Yes
PL32	**BP Oil Pipeline Company**	TR 6"	1	6"	Product	**800-842-6561**	419-435-3789	Yes
PL33	**Citgo Petroleum Corporation**	Inland Pipe	1	10"	Product	**419-698-8055**	419-698-8055	Yes
PL34	**Citgo Petroleum Corporation**	Dock Pipe	1	10"	Product	**419-698-8055**	419-698-8055	Yes
PL35	**Sunoco Inc.**	5 Crude Toledo Pump Station to York St.	1	16"	Crude	**800-786-7440 419-691-4554**	313-292-8850 800-279-4602	Yes
PL36	**Sunoco Inc.**	Toledo to Sarnia	2	8"	Product	**800-786-7440 419-691-4554**	313-292-8850 800-279-4602	Yes
PL37	**Sunoco Inc.**	Toledo Inkster 8"	2	8"	Product	**800-786-7440 419-691-4554**	313-292-8850 800-279-4602	Yes
PL38	**Sunoco Inc.**	37 Toledo Pump Station to Cedar Point Junction	1	12"	Product	**800-786-7440 419-691-4554**	313-292-8850 800-279-4602	Yes
PL39	**Sunoco Inc.**	Toledo Inkster 6"	2	6"	Product	**800-786-7440 419-691-4554**	313-292-8850 800-279-4602	Yes
PL41	**Sunoco Inc.**	13013 South Line	2	8"	Product	**800-786-7440 419-691-4554**	313-292-8850	Yes
PL43	**Clark Oil Company**	Toledo 6"	1	6"	Product	**219-931-2739**	419-726-9741	Yes
PL44	**Marathon Ashland Pipe Line LLC**	Tank Farm to Buckeye	1	8"	Product	**800-537-6644**	419-421-2121	Yes
PL45	**Buckeye Pipeline Company**	DE150TO015	1	8.63"	Product	**800-331-4115**	800-523-9420	Yes
PL46	**Buckeye Pipeline Company**	DE150TO016	1	8.63"	Product	**800-331-4115**	800-523-9420	Yes

PHMSA 000124691

Northwest Ohio Atlas – Tile 6 (Continued)

Pipelines - Continued

Icon Number	Company Name	Route Name	Number of Pipes in Route	Diameters	Products	Emergency Phone	Contact Phone	Active
PL47	Buckeye Pipeline Company	DE150TO017	1	8.63"	Product	800-331-4115	800-523-9420	Yes
PL48	Buckeye Pipeline Company	DE150TO018	1	8.63"	Product	800-331-4115	800-523-9420	Yes
PL49	Buckeye Pipeline Company	DE150TO009	1	8.63"	Product	800-331-4115	800-523-9420	Yes
PL50	Buckeye Pipeline Company	Sun Junction to Cedar Point	1	10"	Product	800-331-4115	800-523-9420	No
PL58	Buckeye Pipeline Company	CT999TO001	1	8"	Product	800-331-4115	800-523-9420	Yes
PL60	Marathon Ashland Pipe Line LLC	196	1	6"	Product	800-537-6644	419-422-2121	Yes
PL61	Sunoco Inc.	MV22 Main Line	2	22"	Crude	800-753-5531	600-371-4469	Yes
PL63	Buckeye Pipeline Company	Sun Junction to Cedar Point	2	10"	Product	800-331-4115	800-523-9420	No
PL64	BP Oil Pipeline Company	TR 10"	1	10"	Product	800-842-6561	419-435-3789	Yes
PL66	Sunoco Inc.	Toledo Pump Station to B.P. Oil Refiner	1	8"	Product	800-786-7440 419-691-4554	313-292-8850 /800-279-4602	Yes
PL195	Wolverine Pipe Line Company	Freedom Jct. to Toledo 16"	1	16"	Crude	888-337-5004 219-844-9510	616-323-2491	Yes
PL217	Sunoco Inc.	Toledo Inkster 6"	2	6"	Product	800-786-7440 419-691-4554	313-292-8850 800-279-4602	Yes
PL649	Buckeye Pipeline Company	CG301DC002	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL653	Buckeye Pipeline Company	CG302DS003	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL654	Buckeye Pipeline Company	CG302DS004	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL655	Buckeye Pipeline Company	CG302DS005	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL656	Buckeye Pipeline Company	CG302DS006	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL657	Buckeye Pipeline Company	CG302DS007	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL658	Buckeye Pipeline Company	CG302DS008	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL666	Buckeye Pipeline Company	CG414DL002	4	10.75"	Product	800-331-4115	800-523-9420	Yes
PL668	Buckeye Pipeline Company	CG414DL003	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL669	Buckeye Pipeline Company	CG414DL004	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL670	Buckeye Pipeline Company	CG414DL005	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL673	Buckeye Pipeline Company	CG416DS001	1	16"	Product	800-331-4115	800-523-9420	Yes
PL677	Buckeye Pipeline Company	DC301DL001	1	12.75"	Product	800-331-4115	800-523-9420	Yes

PHMSA 000124692

Pipelines - Continued

Icon Number	Company Name	Route Name	Number of Pipes in Route	Diameters	Products	Emergency Phone	Contact Phone	Active
PL678	Buckeye Pipeline Company	DC301DL002	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL679	Buckeye Pipeline Company	DL301DS001	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL682	Buckeye Pipeline Company	DL414DS001	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL743	Buckeye Pipeline Company	DS304WS002	3	12.75"	Product	800-331-4115	800-523-9420	Yes
PL778	Buckeye Pipeline Company	CG416DS002	4	16"	Product	800-331-4115	800-523-9420	Yes
PL798	Sunoco Inc.	Toledo – Brown Jct. Transfer Line	1	8"	Product	800-786-7440 419-691-4554	313-292-8850 800-279-4602	
PL1500	Buckeye Pipeline Company	DS211WW001	3	12.75"	Product	800-331-4115	800-523-9420	Yes
PL1501	Buckeye Pipeline Company	SM999DS001	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL1502	Buckeye Pipeline Company	CG302DS010	4	10.75"	Product	800-331-4115	800-523-9420	Yes
PL1503	Buckeye Pipeline Company	DL301DS002	4	10.75", 12.75"	Product	800-331-4115	800-523-9420	Yes
PL1504	Buckeye Pipeline Company	CG302DS011	4	10.75"	Product	800-331-4115	800-523-9420	Yes
PL1505	Buckeye Pipeline Company	DL301DS003	4	10.75", 12.75"	Product	800-331-4115	800-523-9420	Yes
PL1506	Buckeye Pipeline Company	PC999DS001	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL1507	Buckeye Pipeline Company	CG302DS012	4	10.75"	Product	800-331-4115	800-523-9420	Yes
PL1508	Buckeye Pipeline Company	CG302DS009	4	10.75"	Product	800-331-4115	800-523-9420	Yes
PL1509	Buckeye Pipeline Company	DL301DS004	4	10.75", 12.75"	Product	800-331-4115	800-523-9420	Yes
PL1510	Buckeye Pipeline Company	DS303WW001	3	12.75"	Product	800-331-4115	800-523-9420	Yes
PL1511	Buckeye Pipeline Company	CG302DS013	4	10.75"	Product	800-331-4115	800-523-9420	Yes
PL1512	Buckeye Pipeline Company	DL414DS002	4	10.75", 12.75"	Product	800-331-4115	800-523-9420	Yes
PL1513	Buckeye Pipeline Company	DS303WW002	3	12.75"	Product	800-331-4115	800-523-9420	Yes
PL1514	Buckeye Pipeline Company	DL414DS003	4	10.75", 12.75"	Product	800-331-4115	800-523-9420	Yes
PL1515	Buckeye Pipeline Company	DL414DS004	4	10.75", 12.75"	Product	800-331-4115	800-523-9420	Yes
PL1516	Buckeye Pipeline Company	DS304WS001	3	12.75"	Product	800-331-4115	800-523-9420	Yes
PL1518	Buckeye Pipeline Company	DS999AS001	1	8.63"	Product	800-331-4115	800-523-9420	Yes
PL1519	Buckeye Pipeline Company	DS999TA001	1	16"	Product	800-331-4115	800-523-9420	Yes
PL1520	Buckeye Pipeline Company	DS999TZ001	1	16"	Product	800-331-4115	800-523-9420	Yes
PL1521	Buckeye Pipeline Company	DS999TT001	1	16"	Product	800-331-4115	800-523-9420	Yes
PL1522	Buckeye Pipeline Company	DS999TR001	1	10"	Product	800-331-4115	800-523-9420	Yes

Contingency Protocol for Oiled Wildlife –The Toledo Refining Company LLC November, 2005

PHMSA 000124693

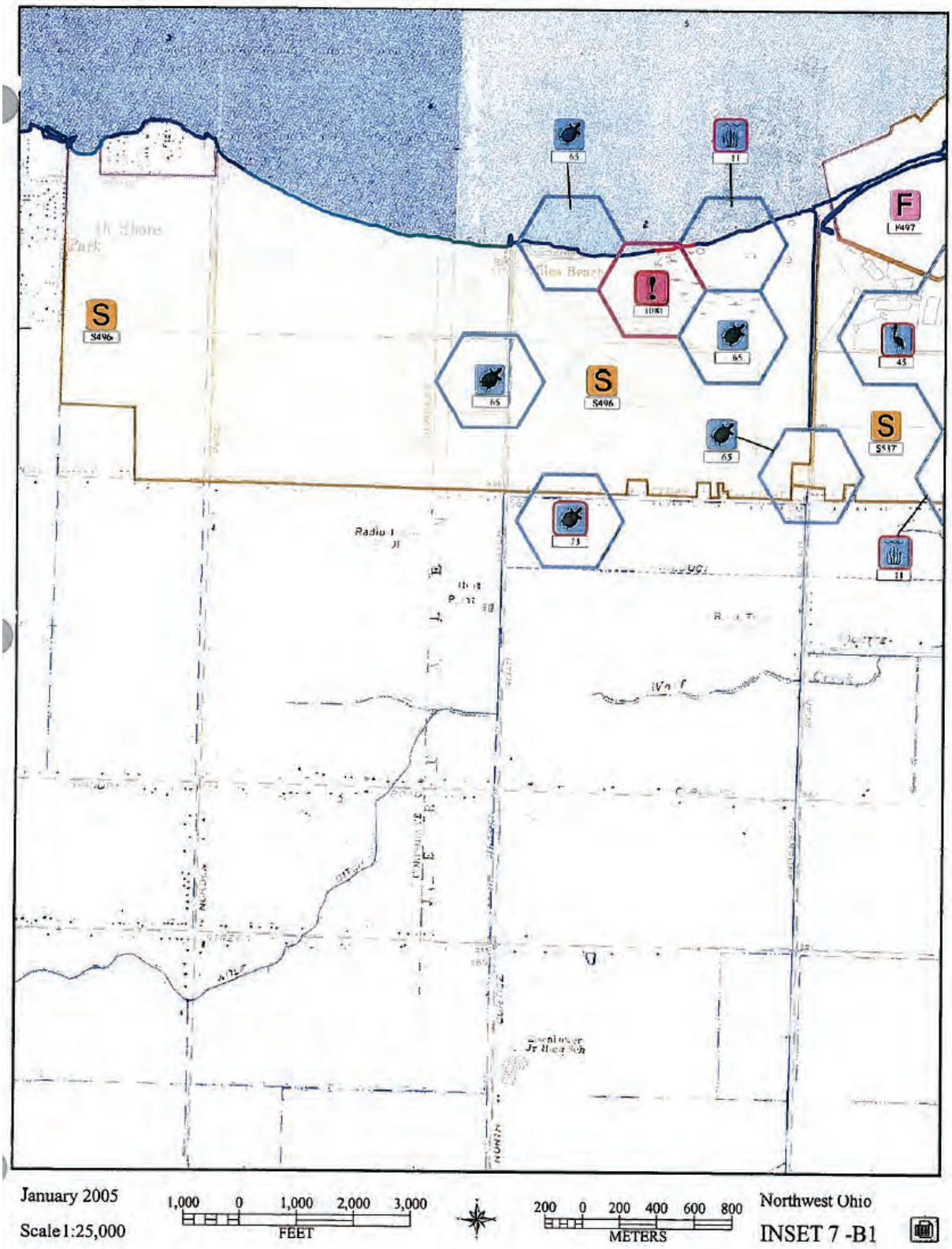
Northwest Ohio Atlas – Tile 6 (Continued)

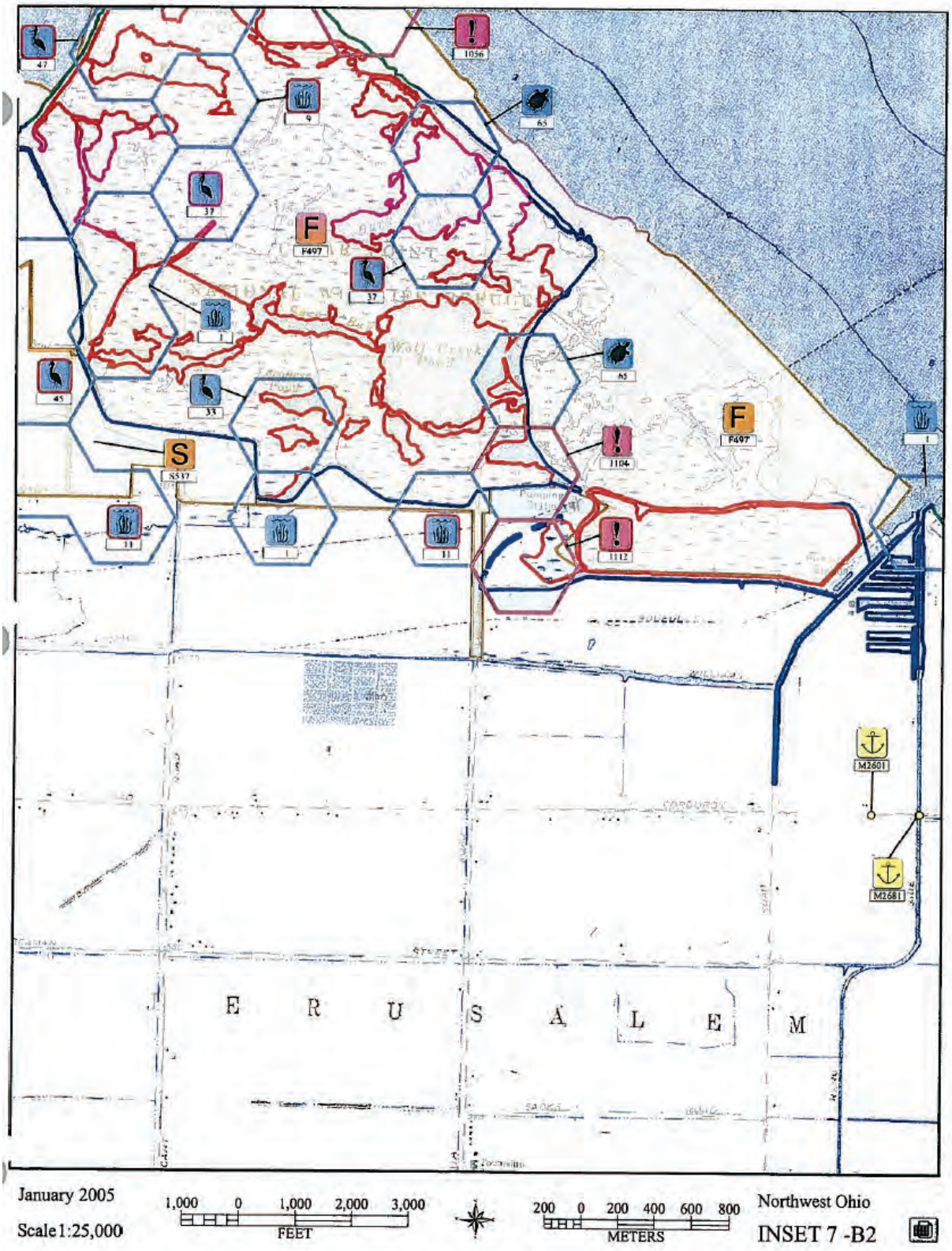
Pipelines - Continued

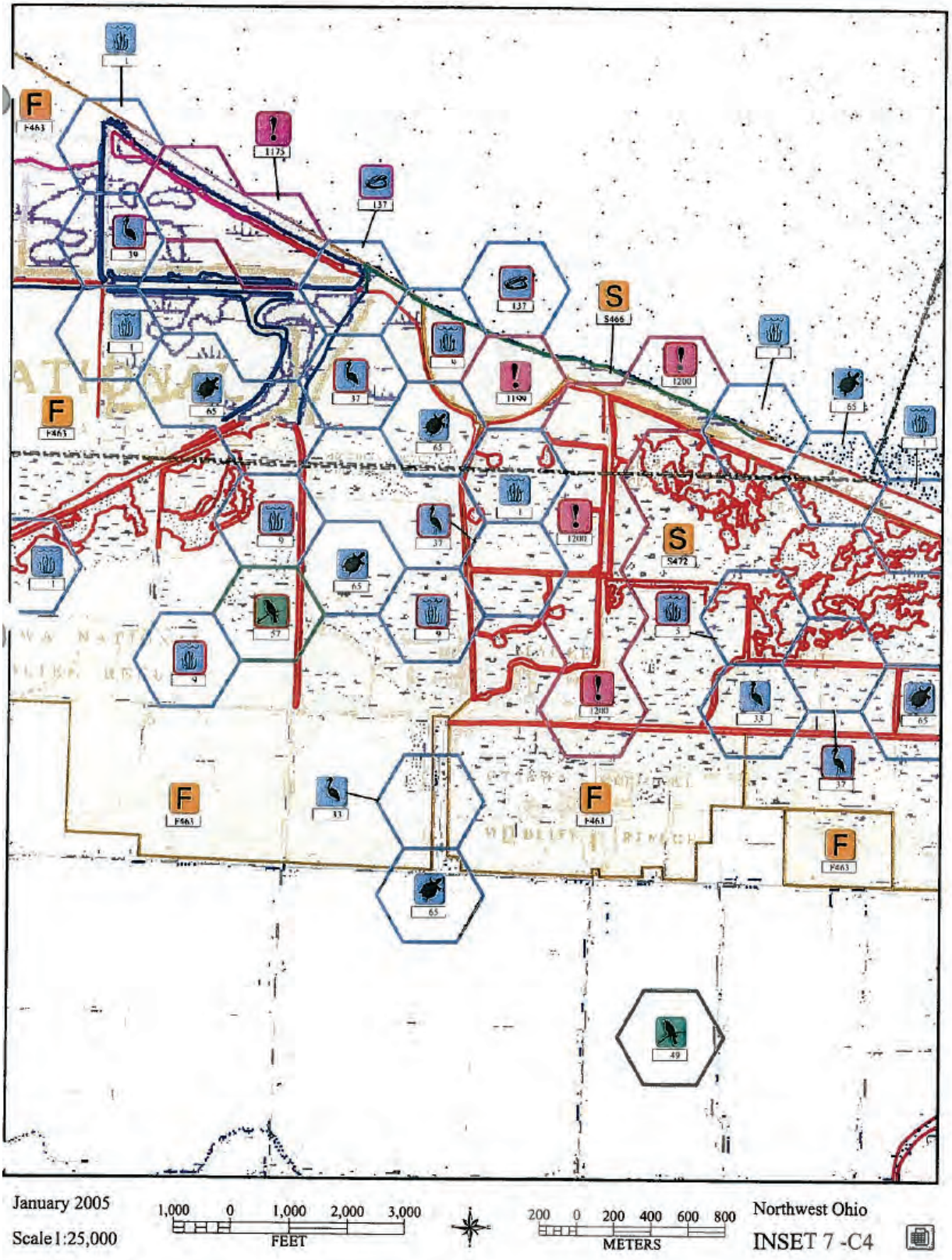
Icon Number	Company Name	Route Name	Number of Pipes in Route	Diameters	Products	Emergency Phone	Contact Phone	Active
PL1523	Buckeye Pipeline Company	DS999ST001	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL1524	Buckeye Pipeline Company	DS999PC001	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL1525	Buckeye Pipeline Company	DS999IC001	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL1526	Buckeye Pipeline Company	DS999CE001	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL1527	Buckeye Pipeline Company	DS999BK001	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL1528	Buckeye Pipeline Company	DL999SU001	1	8.63"	Product	800-331-4115	800-523-9420	Yes
PL1529	Buckeye Pipeline Company	DL999SU002	1	8.63"	Product	800-331-4115	800-523-9420	Yes
PL1532	Buckeye Pipeline Company	CT999TO002	1	8"	Product	800-331-4115	800-523-9420	Yes
PL1533	Buckeye Pipeline Company	CT999TO003	1	8"	Product	800-331-4115	800-523-9420	Yes
PL1534	Buckeye Pipeline Company	CT999TO004	1	8"	Product	800-331-4115	800-523-9420	Yes

PHMSA 000124694

(b) (7)(F), (b) (3)


January 2005
Scale 1:25,000
1,000 0 1,000 2,000 3,000
FEET
200 0 200 400 600 800
METERS
Northwest Ohio
INSET 7 -B1


F
F497
S
S517
F
F497
M2601
M2681
E R U S A L E M
January 2005
Scale 1:25,000
1,000 0 1,000 2,000 3,000
FEET
200 0 200 400 600 800
METERS
Northwest Ohio
INSET 7 -B2


F
F463
S
S466
S472
1175
1200
1100
137
39
65
37
57
33
49
January 2005
Scale 1:25,000
1,000 0 1,000 2,000 3,000
FEET
200 0 200 400 600 800
METERS
Northwest Ohio
INSET 7 -C4

Sensitive Species[a]

Listing	Contact Name	Emergency Phone	Contact Phone
Federal (Ohio) Elements	U.S. Fish and Wildlife Service	800-800-5923 to page 612-660-9062 (Stan Smith, Regional Spill Response Coordinator)	309-793-5800, ext. 515 or 524
State (Ohio) plants, communities	Ohio DNR: Division of Natural Areas and Preserves	614-265-6472	614-265-6453
State (Ohio) animals, fish, invertebrates	Ohio DNR: Division of Wildlife	614-265-6300	614-265-6329 Terrestrial, 614-265-6344 Aquatics
State	Indiana DNR Division of Fish and Wildlife	None	317-232-4080
	Michigan Natural Features Inventory	None	517-373-9418

Managed Areas

Icon Number	Name	Category	Managing Agency	Waterbody	Emergency Phone	Contact Phone	Comments
F463	**Ottawa National Wildlife Refuge**	National Wildlife Refuge	U. S. Fish and Wildlife Service	Lake Erie, Toussaint River	**800-759-8352**	419-898-0014	Contains 500+ acres of habitat managed for bald eagles, waterfowl, and other migratory birds. The refuge is protected by a dike.
F497	**Cedar Point National Wildlife Refuge**	National Wildlife Refuge	U.S. Fish and Wildlife Service	Lake Erie	**800-759-8352**	419-898-0014	2,500 acres of wetland habitat for bald eagles, waterfowl and other migratory birds. The refuge is protected by a dike except for the eagle nest area and Potters Marsh.
S466	**Crane Creek State Park**	State Park	OH DNR Division of Parks and Recreation	Crane Creek, Lake Erie	**614-224-0946**	419-836-7758	
S467	**Metzger Marsh State Wildlife Area**	State Wildlife Area	OH DNR Division of Wildlife	Lake Erie	**614-224-0946**	419-424-5000	
S469	**Toussaint State Wildlife Area**	State Wildlife Area	OH DNR Division of Wildlife	Toussaint Creek	**614-224-0946**	419-424-5000	
S472	**Magee Marsh State Wildlife Area**	Wildlife Area	OH DNR Division of Wildlife	Lake Erie	**614-224-0946**	419-898-0960	2,600 acre marshland located at crossing point of Mississippi and Atlantic Flyways, Two major migratory paths. Abundant waterfowl.
S496	**Maumee Bay State Park**	State Park	OH DNR Division of Parks and Recreation	Lake Erie (Maumee Bay)	**614-224-0946**	419-836-7758	Year-round facilities, including recreational and natural.
S537	**Mallard Club Marsh Wildlife Area**	Wildlife Area	OH DNR Division of Wildlife	Wolf Creek Pond, Lake Erie	**614-224-0946**	419-424-5000	

[a] 2003 Ohio Natural Heritage Data provided by the Ohio Department of Natural Resources, Division of Natural Areas and Preserves and Division of Wildlife
[a] 2003 Indiana Natural Heritage Data provided by the Indiana Department of Natural Resources, Division of Fish and Wildlife
[a] 2003 Michigan Natural Heritage Data provided by the Michigan Department of Natural Resources and the Michigan Natural Features Inventory

Contingency Protocol for Oiled Wildlife –The Toledo Refining Company LLC
November, 2005
PHMSA 000124699

Northwest Ohio Atlas – Tile 7 (Continued)

Marinas

Icon Number	Name	Street Address	Waterbody	Slips	Fuel Available	Emergency Phone	Contact Phone
M2601	**Anchor Pointe Boat-A-Minimum**	10905 Corduroy Road, Curtice	Lake Erie	587	No	**419-734-4404**	419-836-2455
M2680	**Meinke Marina East**	12805 Bono Road, Curtice	Wards Canal, Lake Erie			**419-734-4404**	419-898-1416
M2681	**Meinke Marina West**	10955 Corduroy Road, Curtice	Reno Side Cut Ditch, Lake Erie			**419-734-4404**	419-836-7774

Surface Water Intakes

Icon Number	Name	Street Address	Waterbody	Water Use	Reserve	Intake	Comments	Emergency	Contact

[redacted] (b) (3), (b) (7)(F)

Pipelines

Icon Number	Company Name	Route Name	Number of Pipes in Route	Diameters	Products	Emergency Phone	Contact Phone	Active
PL1	**Buckeye Pipeline Company**	DS316BD001	1	16"	Product	**800-331-4115**	800-523-9420	Yes

PHMSA 00012470O

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

Sensitive Species[a]

Listing	Contact Name	Emergency Phone	Contact Phone
Federal (Ohio) Elements	U.S. Fish and Wildlife Service	800-800-5923 to page 612-660-9062 (Stan Smith, Regional Spill Response Coordinator)	309-793-5800, ext. 515 or 524
State (Ohio) plants, communities	Ohio DNR: Division of Natural Areas and Preserves	614-265-6472	614-265-6453
State (Ohio) animals, fish, invertebrates	Ohio DNR: Division of Wildlife	614-265-6300	614-265-6329 Terrestrial, 614-265-6344 Aquatics
State	Indiana DNR Division of Fish and Wildlife Michigan Natural Features Inventory	None None	317-232-4080 517-373-9418

Managed Areas

Icon Number	Name	Category	Managing Agency	Waterbody	Emergency Phone	Contact Phone	Comments
F500	West Sister Island National Wildlife Refuge	National Wildlife Refuge	U.S. Fish and Wildlife Service	Lake Erie	800-759-8352	419-898-0014	80 acres of woodlands and brush managed as a National Wilderness Area for colonial nesting birds. Great blue heron, great egret, and cormorant nests.
F572	Rusha Creek Marsh (Private)	Private Wetland	U.S. Fish and Wildlife Service	Rusha Creek, Toussaint River	800-759-8352	614-469-6923	Coastal Wetlands.
F5253	Ottawa National Wildlife Refuge, Navarre unit	National Wildlife Refuge	U. S. Fish and Wildlife Service	Lake Erie, Toussaint River	800-759-8352	419-898-0014	Coastal Wetland.
F5254	Ottawa National Wildlife Refuge, Darby unit	National Wildlife Refuge	U. S. Fish and Wildlife Service	Lake Erie, Toussaint River	800-759-8352	419-898-0014	Coastal Wetland.
S466	Crane Creek State Park	State Park	Ohio DNR	Crane Creek, Lake Erie	614-224-0946	419-836-7758	
S469	Toussaint State Wildlife Area	State Wildlife Area	OH DNR Division of Wildlife	Toussaint Creek	614-224-0946	419-424-5000	
S472	Magee Marsh State Wildlife Area	Wildlife Area	OH DNR Division of Wildlife	Lake Erie	614-224-0946	419-898-0960	2,600 acre marshland located at crossing point of Mississippi and Atlantic Flyways, Two major migratory paths. Abundant waterfowl.

[a] 2003 Ohio Natural Heritage Data provided by the Ohio Department of Natural Resources, Division of Natural Areas and Preserves and Division of Wildlife
[a] 2003 Indiana Natural Heritage Data provided by the Indiana Department of Natural Resources, Division of Fish and Wildlife
[a] 2003 Michigan Natural Heritage Data provided by the Michigan Department of Natural Resources and the Michigan Natural Features Inventory

Contingency Protocol for Oiled Wildlife –The Toledo Refining Company LLC
November, 2005
PHMSA 00124704

Northwest Ohio Atlas – Tile 8 (Continued)

Marinas

Icon Number	Name	Street Address	Waterbody	Slips	Fuel Available	Emergency Phone	Contact Phone
M2610	**Beef Creek Marina**	4385 Rider Road, Oak Harbor	Toussaint Creek, Lake Erie			419-734-4404	419-898-1829
M2617	**Brown's Marina**	4305 N Rider Road, Oak Harbor	Lake Erie			419-734-4404	419-898-1820
M2638	**East Side Marina**	10221 Locust Point Road, Oak Harbor	Lake Erie	388	No	419-734-4404	419-285-2204
M2640	**Fenwick Marina**	10261 W State Route 2, Oak Harbor	Turtle Creek Bay, Lake Erie			419-734-4404	419-898-7009
M2642	**Floro's Marina**	6627 Thompson Road, Oak Harbor	Toussaint River, Lake Erie			419-734-4404	419-898-1572
M2655	**Inland Marina**	10644 W State Route 2, Oak Harbor	Turtle Creek Bay, Lake Erie			419-734-4404	419-898-5071
M2722	**Turtle Creek Access**	State Route 2 at Turtle Creek, Oak Harbor	Turtle Creek			419-734-4404	419-898-0960
M2723	**Turtle Point Marina**	10275 W Locust Point, Oak Harbor	Lake Erie	80	Yes	419-734-4404	419-898-2003
M2732	**Wild Wings Marina & RV Park**	6395 N Russell Road, Oak Harbor	Lake Erie			419-734-4404	419-898-1416

Surface Water Intakes

Icon Number	Name	Street Address	Waterbody	Water Use	Reserve Capacity	Intake Information	Comments	Emergency Phone	Contact Phone

[redacted] (b) (3), (b) (7)(F)

PHMSA 00012470S

Appendix B. Sensitive Species and Natural Communities

Icon	Species Group Name	State Threatened	State Endangered	Federal Threatened	Federal Endangered
1	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
5	Aquatic/Riparian Zone Vascular Plants	-	X	-	-
9	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
17	Upland Zone Vascular Plants	-	-	-	-
21	Upland Zone Vascular Plants	-	X	-	-
25	Upland Zone Vascular Plants	X	-	-	-
29	Upland Zone Vascular Plants	X	X	-	-
33	Aquatic/Riparian Zone Birds	-	-	-	-
37	Aquatic/Riparian Zone Birds	-	X	-	-
39	Aquatic/Riparian Zone Birds	-	X	X	-
41	Aquatic/Riparian Zone Birds	X	-	-	-
49	Terrestrial Zone Birds	-	-	-	-
53	Terrestrial Zone Birds	-	X	-	-
57	Terrestrial Zone Birds	X	-	-	-
65	Aquatic/Riparian Zone Amphibians and Reptiles	-	-	-	-
69	Aquatic/Riparian Zone Amphibians and Reptiles	-	X	-	-
71	Aquatic/Riparian Zone Amphibians and Reptiles	-	X	X	-
73	Aquatic/Riparian Zone Amphibians and Reptiles	X	-	-	-
102	Aquatic/Riparian Zone Mammals	-	X	-	X
113	Terrestrial Zone Mammals	-	-	-	-
129	Aquatic/Riparian Zone Invertebrates	-	-	-	-
133	Aquatic/Riparian Zone Invertebrates	-	X	-	-
134	Aquatic/Riparian Zone Invertebrates	-	X	-	X
137	Aquatic/Riparian Zone Invertebrates	X	-	-	-
142	Aquatic/Riparian Zone Invertebrates	X	X	-	X
161	Fish	-	-	-	-
165	Fish	-	X	-	-
169	Fish	X	-	-	-
177	Aquatic Natural Communities	-	-	-	-
193	Terrestrial Zone Natural Communities	-	-	-	-
1006	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Invertebrates	X	-	-	-
1013	Aquatic/Riparian Zone Vascular Plants	-	X	-	-
	Fish	-	X	-	-
1020	Aquatic/Riparian Zone Amphibians and Reptiles	-	X	X	-
	Aquatic/Riparian Zone Vascular Plants	-	X	-	-
	Upland Zone Vascular Plants	-	X	-	-
1021	Aquatic/Riparian Zone Vascular Plants	-	X	-	-
	Fish	-	X	-	-
1029	Aquatic/Riparian Zone Invertebrates	-	X	-	-
	Fish	-	-	-	-
1030	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Invertebrates	-	-	-	-

Sensitive Species and Natural Communities, continued

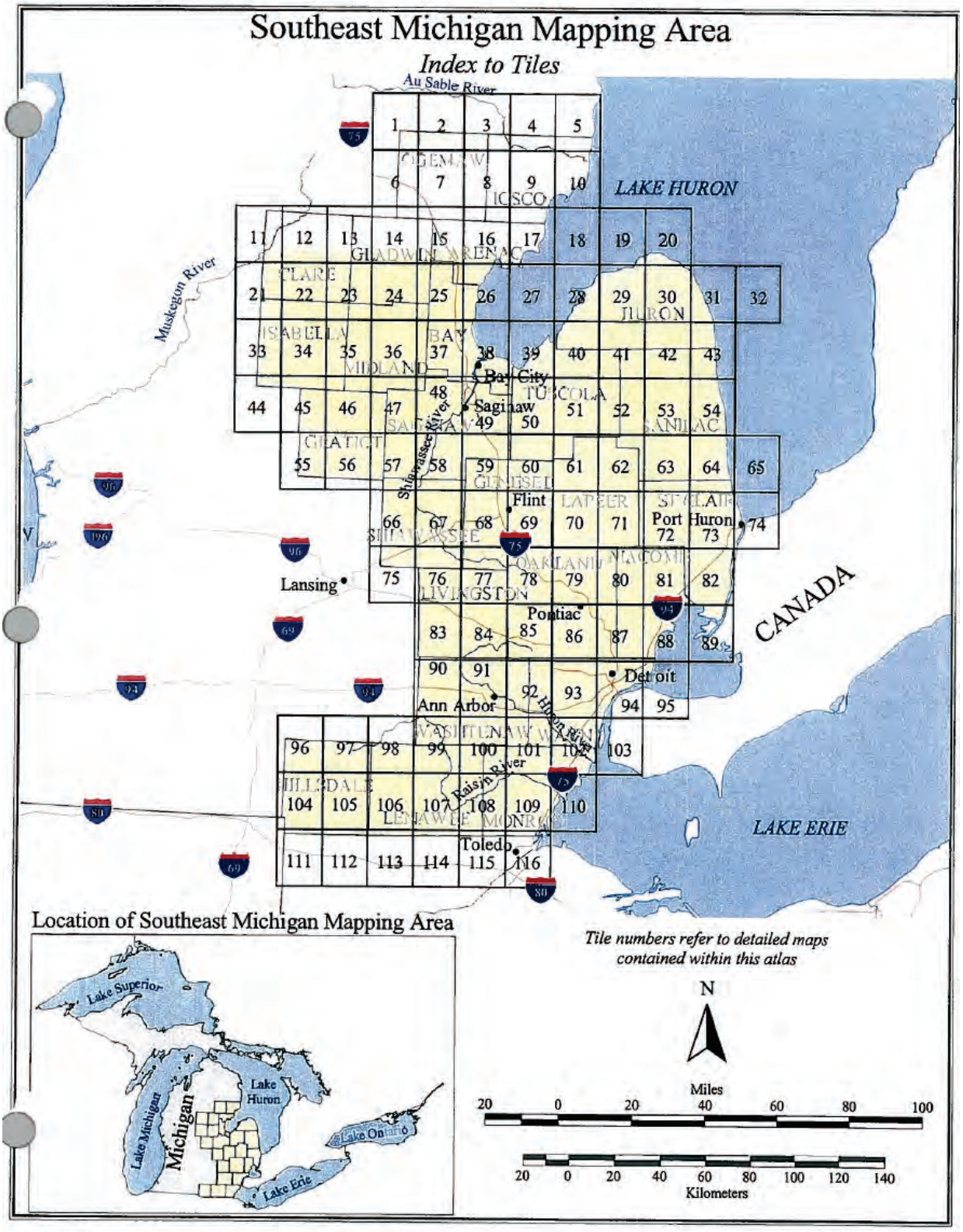
Icon	Species Group Name	State Threatened	State Endangered	Federal Threatened	Federal Endangered
1031	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Amphibians and Reptiles	X	X	X	-
	Aquatic/Riparian Zone Invertebrates	-	X	-	-
	Aquatic/Riparian Zone Vascular Plants	X	X	-	-
	Fish	X	-	-	-
	Terrestrial Zone Invertebrates	-	X	-	-
	Upland Zone Vascular Plants	X	-	-	-
1049	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1050	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1055	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	X	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1059	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1064	Aquatic/Riparian Zone Vascular Plants	-	X	-	-
	Upland Zone Vascular Plants	X	X	-	-
1069	Aquatic/Riparian Zone Invertebrates	X	-	-	-
	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
1076	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1080	Aquatic/Riparian Zone Invertebrates	X	-	-	-
	Fish	-	-	-	-
1081	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Invertebrates	-	X	-	X
1085	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1086	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	X	X	-	-
1089	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1092	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Amphibians and Reptiles	X	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	X	-	-
	Upland Zone Vascular Plants	X	-	-	-
1094	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Amphibians and Reptiles	-	-	-	-
1101	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1129	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Amphibians and Reptiles	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	-	X	-	-
1137	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1140	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	X	-	-	-

Sensitive Species and Natural Communities, continued

Icon	Species Group Name	State Threatened	State Endangered	Federal Threatened	Federal Endangered
1184	Aquatic/Riparian Zone Invertebrates	-	X	-	-
	Upland Zone Vascular Plants	-	X	-	-
1200	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1222	Aquatic/Riparian Zone Amphibians and Reptiles	X	-	-	-
	Aquatic/Riparian Zone Birds	X	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	X	-	-
1224	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1227	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
1246	Aquatic/Riparian Zone Amphibians and Reptiles	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1259	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	-	X	-	-
1301	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	-	X	-	-
	Upland Zone Vascular Plants	-	-	-	-
1302	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1303	Aquatic Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1306	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Fish	-	-	-	-
1309	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1311	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1318	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
1324	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Amphibians and Reptiles	X	-	-	-
	Aquatic/Riparian Zone Birds	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1332	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1334	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	X	-	-
	Upland Zone Vascular Plants	-	-	-	-
1341	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1342	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1345	Aquatic/Riparian Zone Amphibians and Reptiles	-	X	-	-
	Upland Zone Vascular Plants	-	-	-	-

Sensitive Species and Natural Communities, continued

Icon	Species Group Name	State Threatened	State Endangered	Federal Threatened	Federal Endangered
1350	Aquatic/Riparian Zone Amphibians and Reptiles	-	X	-	-
	Terrestrial Zone Invertebrates	-	X	-	-
1360	Aquatic/Riparian Zone Vascular Plants	X	X	-	-
	Upland Zone Vascular Plants	-	-	-	-
1380	Aquatic/Riparian Zone Birds	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
1384	Aquatic Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1398	Terrestrial Zone Birds	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1403	Aquatic/Riparian Zone Vascular Plants	-	X	-	-
	Upland Zone Vascular Plants	-	-	-	-
1406	Terrestrial Zone Birds	X	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
1408	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Invertebrates	-	X	-	-
1413	Terrestrial Zone Birds	X	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1427	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1428	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Invertebrates	-	-	-	-
1446	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Amphibians and Reptiles	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
1451	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1455	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1458	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
1462	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Birds	-	X	X	-
1464	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Invertebrates	-	X	-	-
1465	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
1470	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
1473	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1480	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1482	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Invertebrates	-	X	-	-


Southeast Michigan Mapping Area
Index to Tiles
Au Sable River
Muskegon River
Shiawassee River
Raisin River
LAKE HURON
LAKE ERIE
CANADA
Bay City
Saginaw
Flint
Port Huron
Lansing
Pontiac
Detroit
Ann Arbor
Toledo
1 2 3 4 5
6 7 8 9 10
11 12 13 14 15 16 17 18 19 20
21 22 23 24 25 26 27 28 29 30 31 32
33 34 35 36 37 38 39 40 41 42 43
44 45 46 47 48 49 50 51 52 53 54
55 56 57 58 59 60 61 62 63 64 65
66 67 68 69 70 71 72 73 74
75 76 77 78 79 80 81 82
83 84 85 86 87 88 89
90 91 92 93 94 95
96 97 98 99 100 101 102 103
104 105 106 107 108 109 110
111 112 113 114 115 116
Location of Southeast Michigan Mapping Area
Lake Superior
Lake Michigan
Michigan
Lake Huron
Lake Ontario
Lake Erie
Tile numbers refer to detailed maps contained within this atlas
N
Miles
20 0 20 40 60 80 100
20 0 20 40 60 80 100 120 140
Kilometers

MAP LEGEND

SENSITIVE SPECIES

Aquatic/Riparian Zone	Terrestrial Zone
Vascular Plants	Vascular Plants
Birds	Birds
Amphibians and Reptiles	Amphibians and Reptiles
Mammals	Mammals
Invertebrates	Invertebrates
Fish	Natural Communities
Natural Communities	Multiple Species Groupings

Icons Indicating Threatened or Endangered Status

NATURAL RESOURCE AREAS

Federal Managed Areas	Federal Designated Areas
State Managed Areas	State Designated Areas
Regional Managed Areas	Regional Designated Areas
Private Managed Areas	Private Designated Areas

Other Environmentally Sensitive Aquatic Areas

Other Environmentally Sensitive Terrestrial Areas

Tribal Land

OTHER SENSITIVE RESOURCES

- Marina
- Navigational Lock and Dam
- Water Intake (nonpotable)
- Water Intake (potable)

POTENTIAL SPILL SOURCES

- Fixed Oil Storage Facility
- Marine Transfer Facility and/or Facility with more than 1 million gallons
- Pipeline

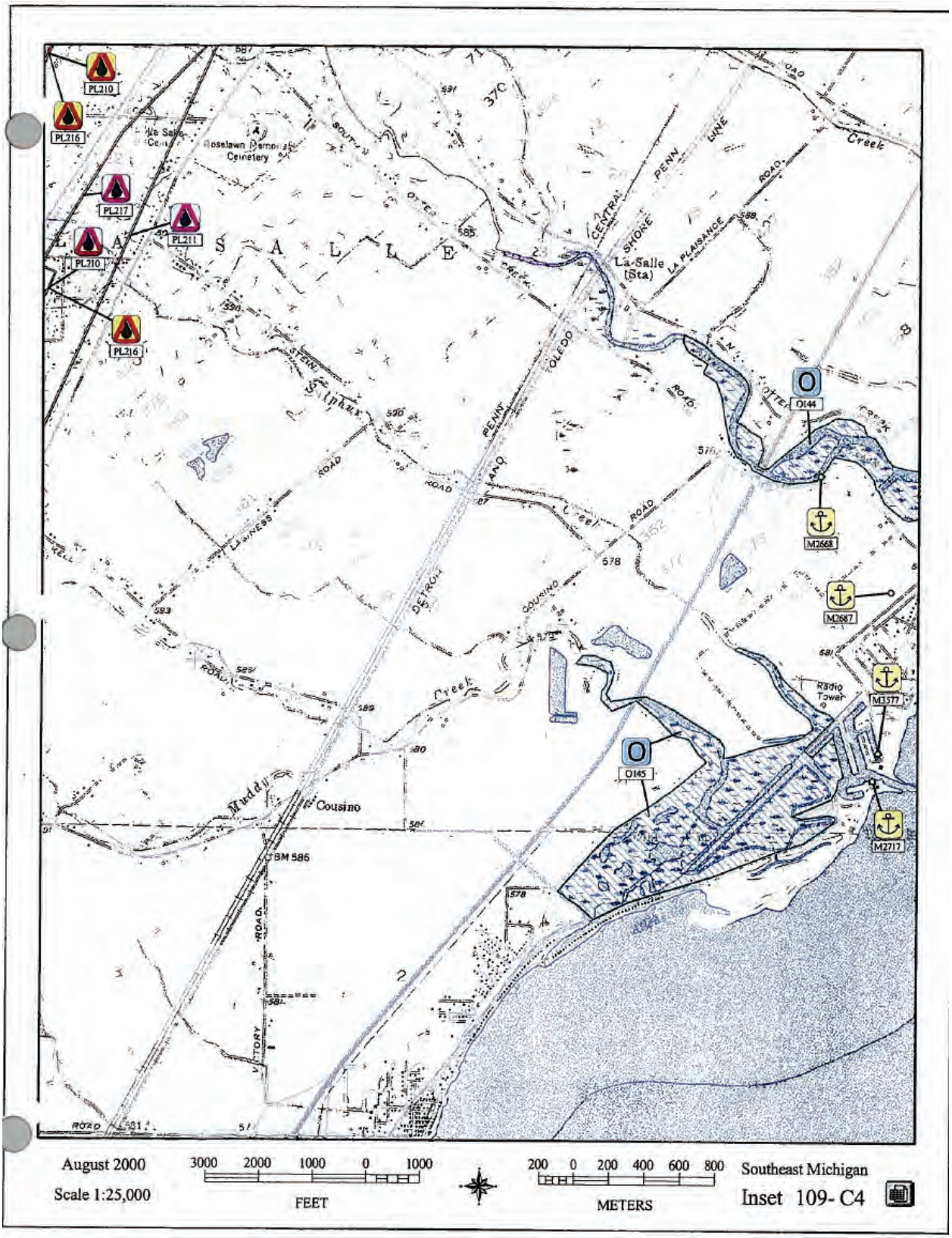
RESPONSE CONSIDERATIONS

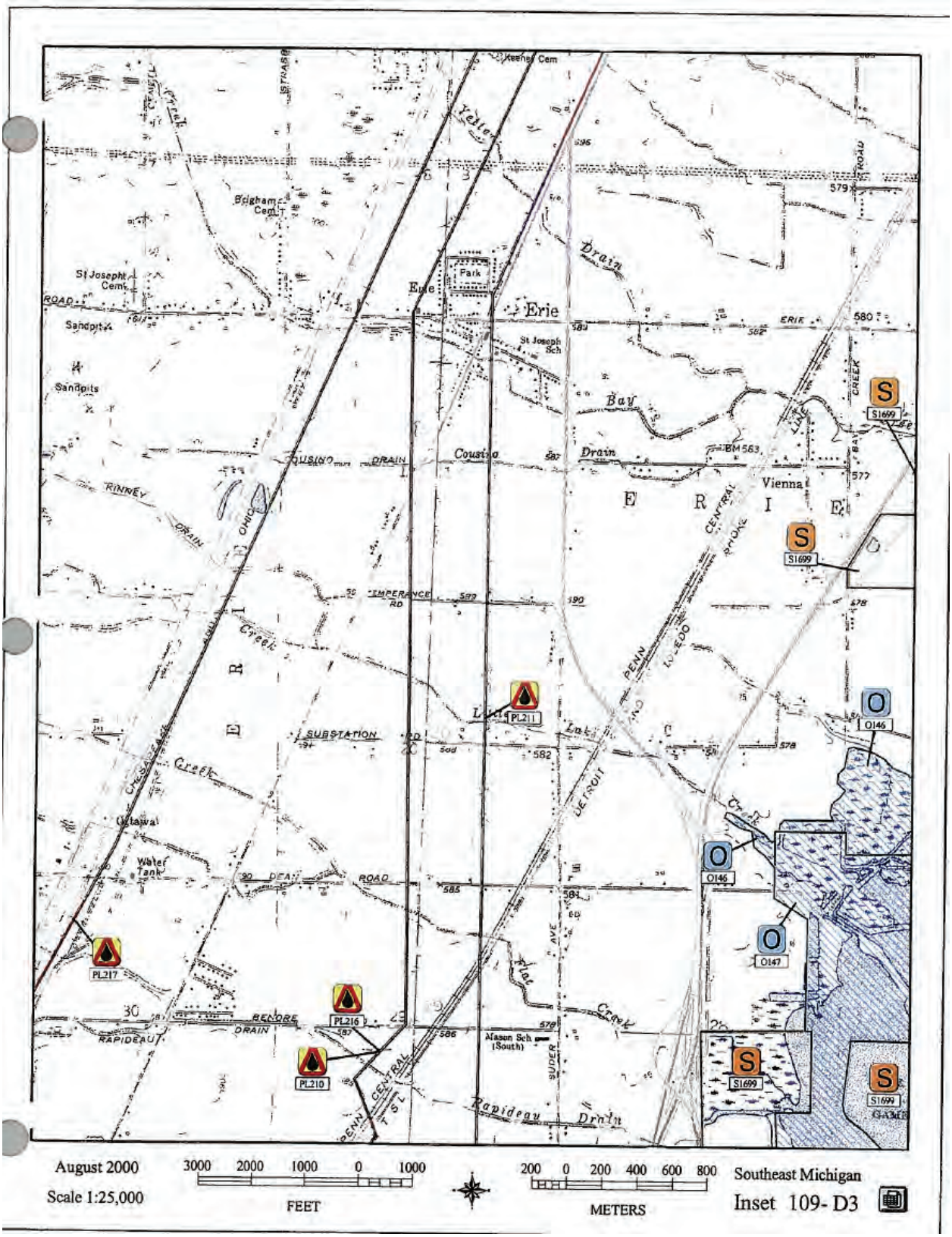
- Ⓐ Boat Access
- Ⓓ Non- navigational Dam

BOUNDARY DESIGNATIONS

- County Boundary
- EPA/Coast Guard Jurisdictional Boundary
- Pipeline Inset Boundary

(b) (7)(F), (b) (3)


PL210
PL216
PL217
PL211
PL210
PL216
LA SALLE
La Salle (Sta)
Roselawn Memorial Cemetery
CENTRAL SHORE LINE
PENN
LA PLAISANCE ROAD
TOLEDO
DETROIT
COUSINO
Creek
ROAD
O144
O145
M2668
M2687
M3577
M2717
Radio Tower
Cousino
BM 586
VICTORY
August 2000
Scale 1:25,000
3000 2000 1000 0 1000
FEET
200 0 200 400 600 800
METERS
Southeast Michigan
Inset 109- C4


Bigham Cem
St Joseph Cem
Sandpits
Erie
Park
St Joseph Sch
Bay
Cousino
Drain
Vienna
ERIE
Creek
Ottawa
Water Tank
SUBSTATION
ROAD
RAPIDEAU
DRAIN
Rapideau Drain
Flat Creek
Mason Sch (South)
PENN CENTRAL TSL
PL211
PL216
PL217
PL210
O146
O147
S1699
August 2000
Scale 1:25,000
3000 2000 1000 0 1000
FEET
200 0 200 400 600 800
METERS
Southeast Michigan
Inset 109- D3

(b) (7)(F), (b) (3)

Southeast Michigan Atlas – Tile 109

Sensitive Species Contact Data[a]

Listing	Contact Name	Emergency Phone	Contact Phone
Federal (Michigan)	U.S. Fish and Wildlife Service	none	517-351-2555
State (Michigan)	Michigan Natural Features Inventory	none	517-373-9418

Managed Areas

Icon Number	Name	Category	Managing Agency	Waterbody	Emergency Phone	Contact Phone	Comments
P1399	Monroe County Fairgrounds	Fairgrounds	Monroe County Fair Association	River Raisin, Lake Erie	313-243-7070	734-241-5775	
R1400	White Park	County Park	Monroe County	Indian Creek	313-243-7070	734-243-7011	
R1401	Parmelee Park	County Park	Monroe County	Springbrook Creek	313-243-7070	734-243-7011	
R1487	County Park	County Park	Monroe County	River Raisin	313-243-7070	734-243-7011	
S1699	Erie State Game Area	State Game Area	Michigan Department of Natural Resources	North Maumee Bay, Lake Erie	800-292-4706	517-373-1263	

Other Environmentally Sensitive Areas

Icon Number	Additional Resource Area Name	Contact Agency	Waterbody	Emergency Phone	Contact Phone	Comments
O144	Otter Creek Estuary (Private)	U.S. Fish and Wildlife Service	Otter Creek, Lake Erie	800-759-8352	614-469-6923	Site includes migratory waterfowl. Coastal Wetland.
O145	Muddy Creek Estuary (Private)	U.S. Fish and Wildlife Service	Muddy Creek, Allens Cove	800-759-8352	614-469-6923	Coastal Wetlands.
O146	Erie Marsh (Private)	U.S. Fish and Wildlife Service	North Maumee Bay	800-759-8352	614-469-6923	Coastal Wetlands connected to those of Erie State Game Area.
O147	Erie Marsh Reserve	The Nature Conservancy	North Maumee Bay, Lake Erie	517-373-7660	517-332-1741	Total of 2168 acres. Migratory and nesting shorebirds, waterfowl, and avian species. Raptors during migration. Swamp mallow grows here.

Marinas

Icon Number	Name	Address	Waterbody	River Mile	Slips	Fuel Available	Emergency Phone	Contact Phone
M2668	Lighthouse Marina	5800 S. Otter Creek Road, La Salle	Otter Creek, Lake Erie	N/A	170	Y	313-884-9324	734-242-0111
M2670	Luna Pier Harbour Club	10420 S. Harold Street, Luna Pier	Lapoint Drain, Lake Erie Access	N/A	393	Y	734-848-8777, 734-848-4310	734-848-8777
M2687	North Cape Yacht Club	11850 Toledo Beach Road, La Salle	Lake Erie	N/A			734-243-7070	734-242-5081
M2717	Toledo Beach Marina	11840 Toledo Beach Road, La Salle	Lake Erie	N/A	600	Y	419-262-8195	734-243-3800
M3577	North Cape Yacht Club	11850 Toledo Beach Road, La Salle	Lake Erie	N/A	150	N	734-241-2121	734-242-5081

[a] 2000 Michigan Natural Heritage Data provided by the Michigan Department of Natural Resources and the Michigan Natural Features Inventory

Southeast Michigan Atlas – Tile 109 (Continued)

Surface Water Intakes

Icon Number	Name	Address	Waterbody	River Mile	Water Use	Reserve Capacity	Intake Information	Comments	Emergency Phone	Contact Phone
[redacted]										(b) (3), (b) (7)(F)

Oil Storage Facilities

Icon Number	Name	Operator	Address	Waterbody	River Mile	Facility Response Plan	Marine Transfer Facility	Products Handled	Emergency Phone	Contact Phone
#3214	C. Barron & Sons, Inc.	C. Barron & Sons, Inc.	612 S. Roessler Street, Monroe	Raisin River	N/A	N	N	Gasoline, No. 2 H/S Fuel, No.1 L/S Fuel, Kerosene	734-241-8633	734-241-8633
#3216	Hachman Farm Supply, Inc.	Hachman Farm Supply, Inc.	627 W. Temperance Road, Temperance	Unknown	N/A	N	N	Gasoline, Kerosene, No. 2 Fuel Oil, Diesel	313-243-7070	734-847-3235
#3217	James L. Barron Oil Company	James L. Barron Oil Company	2466 Lewis Avenue, Ida	Pitts Drain	N/A				313-243-7070	313-269-9595
#3219	Monroe Oil Company	Monroe Oil Company	1125 W. Front Street, Monroe	River Raisin, Lake Erie Access	N/A				313-243-7070	734-241-8822
#3220	Store 284	Pilot Corporation	1200 Meadow Road, Monroe	River Raisin, Lake Erie Access	N/A				313-243-7070	313-457-3500

Pipelines

Icon Number	Company Name	Route Name	Number of Pipes in Route	Diameters	Products Carried in Line	Emergency Phone	Contact Phone
PL173	Buckeye Pipe Line Company	304	1	12"	PRD	800-331-4115	800-523-9420
PL174	Buckeye Pipe Line Company	303	1	12"	PRD	800-331-4115	800-523-9420
PL181	Buckeye Pipe Line Company	211	1	12"	PRD	800-331-4115	800-523-9420
PL195	Wolverine Pipe Line Company	Freedom Jct. to Toledo 16"	1	16"	CRD, PRD	888-337-5004/219-844-9510	616-323-2491
PL207	Buckeye Pipe Line Company	Sylvania Station to Samaria Station	1	8"	PRD	800-331-4115	800-523-9420
PL208	Buckeye Pipe Line Company	Cygnet to Ann Arbor Road	3	6"	PRD	800-331-4115	800-523-9420
PL209	Buckeye Pipe Line Company	Hasel Junction to Samaria Junction	2	8"	PRD	800-331-4115	800-523-9420
PL210	Sun Pipe Line Company	Toledo Inkster 8"	2	8"	PRD	800-786-7440/419-691-4554	313-292-8850/800-279-4602
PL211	Sun Pipe Line Company	Toledo Dearborn 6"	1	6"	PRD	800-786-7440/419-691-4554	313-292-8850/800-279-4602
PL212	Buckeye Pipe Line Company	Cygnet Station to Ann Arbor Road	3	6"	PRD	800-331-4115	800-523-9420
PL213	Mid-Valley Pipe Line Company	MV22	1	22"	CRD	800-265-7887	606-371-4469

Southeast Michigan Atlas – Tile 109 (Continued)

Pipelines (Continued)

Icon Number	Company Name	Route Name	Number of Pipes in Route	Diameters	Products Carried in Line	Emergency Phone	Contact Phone
PL215	Sun Pipe Line Company	16"	1	16"	CRD	800-786-7440/419-691-4554	313-292-8850/800-279-4602
PL216	Sun Pipe Line Company	Toledo to Sarnia	2	8"	PRD, LPG	800-786-7440/419-691-4554	313-292-8850/800-279-4602
PL217	Sun Pipe Line Company	Toledo Inkster 6"	2	6"	PRD, LPG	800-786-7440/419-691-4554	313-292-8850/800-279-4602
PL214	Marathon Ashland Pipe Line L.L.C.	Mosherville to Samaria 8"	1	8"	PRD	800-537-6644	419-421-2121
PL205	Marathon Ashland Pipe Line L.L.C.	Samaria to Detroit 16" Crude	1	16"	CRD	800-537-6644	419-421-2121

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

Southeast Michigan Atlas – Tile 110

Sensitive Species Contact Data[a]

Listing	Contact Name	Emergency Phone	Contact Phone
Federal (Michigan)	U.S. Fish and Wildlife Service	none	517-351-2555
State (Michigan)	Michigan Natural Features Inventory	none	517-373-9418

Managed Areas

Icon Number	Name	Category	Managing Agency	Waterbody	Emergency Phone	Contact Phone	Comments
R1398	Township Park	Township Park	Frenchtown Township	Stony Creek, Lake Erie	313-243-7070	313-289-1009	
S1691	Sterling State Park	State Park	Michigan Department of Natural Resources	Lake Erie, Brest Bay, River Raisin	800-292-4706	517-373-9990	

Other Environmentally Sensitive Areas

Icon Number	Additional Resource Area Name	Contact Agency	Waterbody	Emergency Phone	Contact Phone	Comments
O142	Swan Creek Estuary (Private)	U.S. Fish and Wildlife Service	Swan Creek, Lake Erie	800-759-8352	614-469-6923	Site includes American Lotus beds. Coastal Wetland.
O143	Plum Creek Estuary (Private)	U.S. Fish and Wildlife Service	Plum Creek, Lake Erie	800-759-8352	614-469-6923	Site includes Shorebirds and migratory waterfowl a American Lotus beds in Coastal Wetland.
O144	Otter Creek Estuary (Private)	U.S. Fish and Wildlife Service	Otter Creek, Lake Erie	800-759-8352	614-469-6923	Site includes migratory waterfowl. Coastal Wetland.

Marinas

Icon Number	Name	Address	Waterbody	River Mile	Slips	Fuel Available	Emergency Phone	Contact Phone
M2616	Brest Bay Marina	4088 Brest Road, Newport	Stony Creek	N/A	420	Y	734-243-7070	734-289-1234
M2626	Charlies Boat & Bait	13468 La Plaisance Road, Monroe	Woodchuck Creek	N/A	50	Y	734-243-4404	734-241-1545
M2634	Detroit Beach Boat Club	3028 Harbor View Drive, Monroe	Sandy Creek, Brest Bay	N/A	90	Y	734-243-7070	734-289-3222
M2647	Harbor Marine	13950 Bridge Drive, Monroe	La Plaisance Creek, La Plaisance Bay	N/A	24	Y	734-243-7070	734-241-2833
M2684	Monroe Marina	6647 N La Plaisance Creek Road, Monroe	La Plaisance Creek, La Plaisance Bay	N/A	46	N	734-243-7070	734-241-4624
M2692	Otter Creek Marina, Inc.	6305 Lakeview Avenue, La Salle	Otter Creek, Lake Erie	N/A	72	Y	734-241-0313	734-241-0313
M2695	Rivertront Marina	1560 E. Elm Avenue, Monroe	River Raisin, Lake Erie	N/A	84	Y	734-243-7070	734-242-0737
M2703	Roes Riverside Bait & Tackle	1509 E. Front Street, Monroe	River Raisin	N/A			734-243-7070	734-457-0188
M2713	Swan Boat Club	6332 Brancheau Road, Newport	Swan Creek, Lake St. Clair	N/A	129	Y	734-243-7070	734-586-2002
M2720	Trout's Yacht Basin	7970 Harbor Road, Monroe	La Plaisance Creek, La Plaisance Bay	N/A	100	Y	734-243-7070	734-242-5545
M3566	Erie Party Shoppe & Docks	6838 La Plaisance Road, Monroe	La Plaisance Creek, Lake Erie Access	N/A			313-243-7070	734-457-0006

[a] 2000 Michigan Natural Heritage Data provided by the Michigan Department of Natural Resources and the Michigan Natural Features Inventory

Southeast Michigan Atlas – Tile 110 (Continued)

Marinas (Continued)

Icon Number	Name	Address	Waterbody	River Mile	Slips	Fuel Available	Emergency Phone	Contact Phone
M3567	Flying Eagle Marina	13975 Lake Drive, Monroe	Lake Erie	N/A			313-243-7070	734-241-8776
M3570	La Plaisance Creek Marina	13931 Bridge Drive, Monroe	La Plaisance Creek, Lake Erie Access	N/A	61	N	734-457-9714	734-241-4460
M3574	Miller Boat Livery	6838 La Plaisance Road, Monroe	La Plaisance Creek, Lake Erie Access	N/A			313-243-7070	734-242-7734
M3575	Monroe Boat Club	7932 Harbor, Monroe	La Plaisance Creek, Lake Erie Access	N/A	125	N	313-243-7070	734-243-8935
M3578	O.P.M. Club	8000 Harbor Road, Monroe	La Plaisance Creek, Lake Erie Access	N/A	28	N	734-241-4637	

Surface Water Intakes

[redacted]

(b) (3), (b) (7)(F)

Icon Number	Name	Operator	Address	Waterbody	River Mile	Facility Response Plan	Marine Transfer Facility	Products Handled	Emergency Phone	Contact Phone
#3215	Fermi 2 Power Plant	Detroit Edison Company	6400 N. Dixie Highway, Newport	Lake Erie	N/A	Y	N	Refined Oil	734-586-5235	734-586-4970
#3218	Maybee Gas & Oil Company	Maybee Gas & Oil Company	3500 N. Monroe Street, Monroe	Roadside Ditch	N/A				313-243-7070	734-241-4808
#3221	Liquid Asphalt Production Plant	Thompson-McCully Oil Company	3125 E. Front Street, Monroe	River Raisin, Lake Erie Access	N/A	Y	Y	Liquid Asphalt	734-243-7070	734-241-1910

PHMSA 000124722

Southeast Michigan Atlas – Tile 110 (Continued)

Pipelines

Icon Number	Company Name	Route Name	Number of Pipes in Route	Diameters	Products Carried in Line	Emergency Phone	Contact Phone
PL210	Sun Pipe Line Company	Toledo Inkster 8"	2	8"	PRD	800-786-7440/419-691-4554	313-292-8850/800-279-4602
PL211	Sun Pipe Line Company	Toledo Dearborn 6"	1	6"	PRD	800-786-7440/419-691-4554	313-292-8850/800-279-4602
PL216	Sun Pipe Line Company	Toledo to Sarnia	2	8"	PRD, LPG	800-786-7440/419-691-4554	313-292-8850/800-279-4602
PL217	Sun Pipe Line Company	Toledo Inkster 6"	2	6"	PRD, LPG	800-786-7440/419-691-4554	313-292-8850/800-279-4602

Appendix B. Sensitive Species and Natural Communities

Icon	Species Group Name	State Threatened	State Endangered	Federal Threatened	Federal Endangered
1	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
5	Aquatic/Riparian Zone Vascular Plants	-	X	-	-
7	Aquatic/Riparian Zone Vascular Plants	-	X	X	-
9	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
11	Aquatic/Riparian Zone Vascular Plants	X	-	X	-
13	Aquatic/Riparian Zone Vascular Plants	X	X	-	-
15	Aquatic/Riparian Zone Vascular Plants	X	X	X	-
17	Upland Zone Vascular Plants	-	-	-	-
21	Upland Zone Vascular Plants	-	X	-	-
25	Upland Zone Vascular Plants	X	-	-	-
29	Upland Zone Vascular Plants	X	X	-	-
33	Aquatic/Riparian Zone Birds	-	-	-	-
37	Aquatic/Riparian Zone Birds	-	X	-	-
41	Aquatic/Riparian Zone Birds	X	-	-	-
49	Terrestrial Zone Birds	-	-	-	-
53	Terrestrial Zone Birds	-	X	-	-
54	Terrestrial Zone Birds	-	X	-	X
57	Terrestrial Zone Birds	X	-	-	-
65	Aquatic/Riparian Zone Amphibians and Reptiles	-	-	-	-
69	Aquatic/Riparian Zone Amphibians and Reptiles	-	X	-	-
73	Aquatic/Riparian Zone Amphibians and Reptiles	X	-	-	-
81	Terrestrial Zone Amphibians and Reptiles	-	-	-	-
102	Aquatic/Riparian Zone Mammals	-	X	-	X
105	Aquatic/Riparian Zone Mammals	X	-	-	-
117	Terrestrial Zone Mammals	-	X	-	-
129	Aquatic/Riparian Zone Invertebrates	-	-	-	-
133	Aquatic/Riparian Zone Invertebrates	-	X	-	-
134	Aquatic/Riparian Zone Invertebrates	-	X	-	X
137	Aquatic/Riparian Zone Invertebrates	X	-	-	-
142	Aquatic/Riparian Zone Invertebrates	X	X	-	X
145	Terrestrial Zone Invertebrates	-	-	-	-
150	Terrestrial Zone Invertebrates	-	X	-	X
153	Terrestrial Zone Invertebrates	X	-	-	-
161	Fish	-	-	-	-
165	Fish	-	X	-	-
169	Fish	X	-	-	-
177	Aquatic Natural Communities	-	-	-	-
193	Terrestrial Zone Natural Communities	-	-	-	-
1004	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Amphibians and Reptiles	-	-	-	-
1096	Aquatic Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1116	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1118	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Birds	X	-	-	-
1250	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1262	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
1267	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
1271	Aquatic Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-

Sensitive Species and Natural Communities, continued

Icon	Species Group Name	State Threatened	State Endangered	Federal Threatened	Federal Endangered
1277	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
1279	Aquatic Natural Communities	-	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
1290	Aquatic/Riparian Zone Invertebrates	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1291	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Amphibians and Reptiles	-	-	-	-
1302	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Terrestrial Zone Invertebrates	-	-	-	-
1309	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1315	Aquatic Natural Communities	-	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1320	Aquatic Natural Communities	-	-	-	-
	Terrestrial Zone Invertebrates	-	-	-	-
1332	Aquatic Natural Communities	-	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1344	Aquatic/Riparian Zone Birds	-	-	-	-
	Terrestrial Zone Birds	-	-	-	-
1355	Aquatic Natural Communities	-	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
1363	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
1365	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
1367	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
1369	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
1378	Terrestrial Zone Invertebrates	-	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
1419	Aquatic/Riparian Zone Amphibians and Reptiles	-	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1422	Terrestrial Zone Invertebrates	-	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1429	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1439	Terrestrial Zone Invertebrates	X	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1443	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1444	Terrestrial Zone Invertebrates	X	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1448	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1470	Aquatic/Riparian Zone Amphibians and Reptiles	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1478	Aquatic/Riparian Zone Birds	-	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-

Sensitive Species and Natural Communities, continued

Icon	Species Group Name	State Threatened	State Endangered	Federal Threatened	Federal Endangered
1511	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1512	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1522	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1537	Aquatic Natural Communities	-	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1545	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1546	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1547	Aquatic/Riparian Zone Amphibians and Reptiles	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1565	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1567	Aquatic/Riparian Zone Invertebrates	-	-	-	-
	Fish	-	-	-	-
1568	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1570	Aquatic/Riparian Zone Invertebrates	X	X	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
1573	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1574	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1575	Aquatic Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1589	Aquatic/Riparian Zone Birds	X	-	X	-
	Aquatic/Riparian Zone Invertebrates	X	-	-	-
	Fish	-	X	-	-
	Upland Zone Vascular Plants	X	-	-	-
1592	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	X	-	-
1595	Aquatic Natural Communities	-	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
1597	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1612	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Terrestrial Zone Invertebrates	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1619	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1644	Aquatic/Riparian Zone Amphibians and Reptiles	-	-	-	-
	Aquatic/Riparian Zone Invertebrates	-	-	-	-
	Terrestrial Zone Invertebrates	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1646	Aquatic/Riparian Zone Amphibians and Reptiles	X	-	-	-
	Terrestrial Zone Invertebrates	-	-	-	-

Sensitive Species and Natural Communities, continued

Icon	Species Group Name	State Threatened	State Endangered	Federal Threatened	Federal Endangered
1648	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Amphibians and Reptiles	X	-	-	-
1692	Aquatic/Riparian Zone Invertebrates	-	-	-	-
	Terrestrial Zone Invertebrates	-	-	-	-
1711	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1724	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1739	Aquatic/Riparian Zone Amphibians and Reptiles	-	-	-	-
	Aquatic/Riparian Zone Invertebrates	-	X	-	X
1751	Aquatic/Riparian Zone Amphibians and Reptiles	-	X	-	-
	Aquatic/Riparian Zone Invertebrates	-	X	-	X
1753	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1758	Aquatic/Riparian Zone Amphibians and Reptiles	-	X	-	-
	Aquatic/Riparian Zone Invertebrates	-	X	-	X
1771	Aquatic Natural Communities	-	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-

FIGURE 6.3

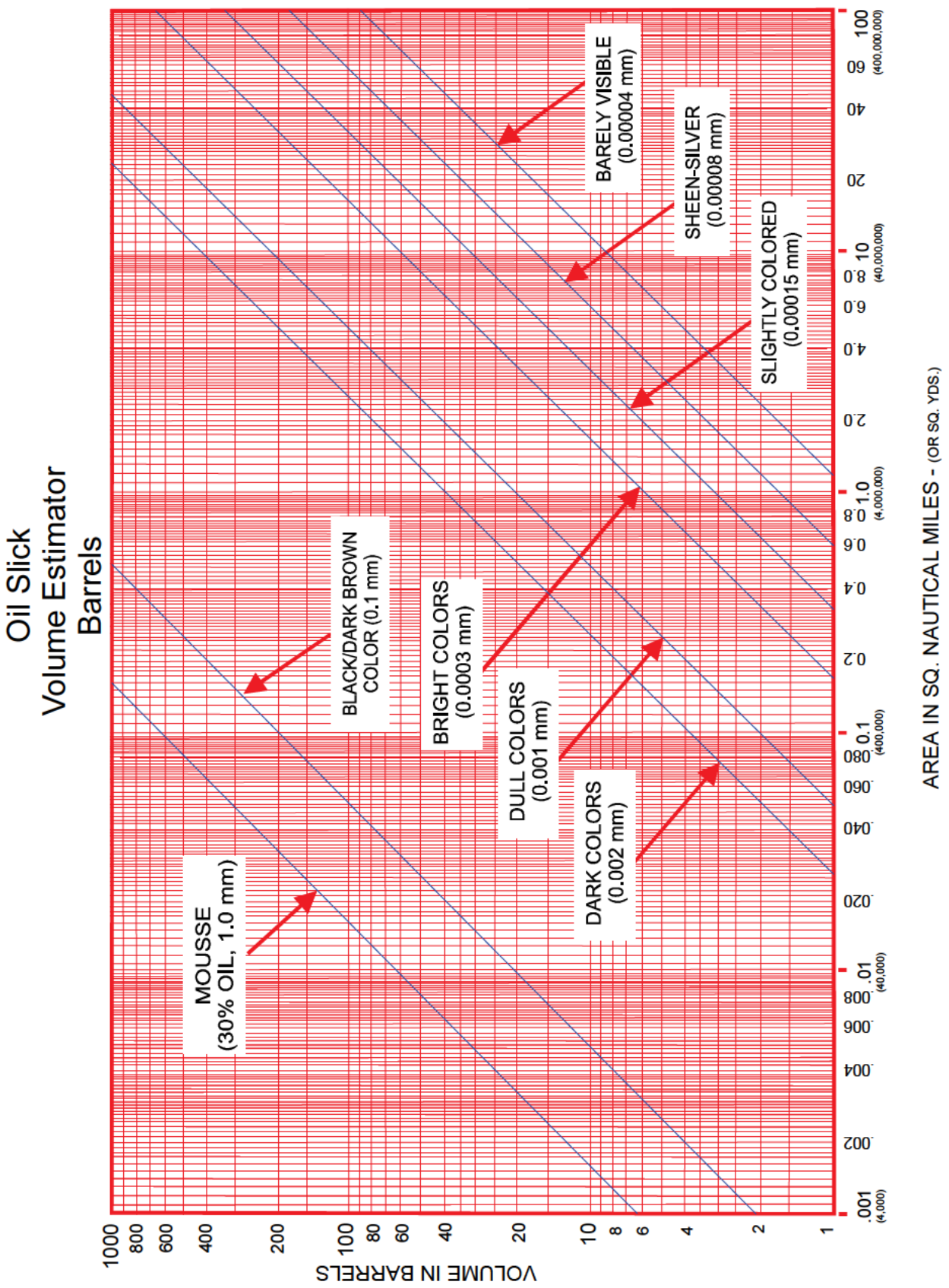

Oil Slick
Volume Estimator
Barrels
VOLUME IN BARRELS
1000
800
600
400
200
100
80
60
40
20
10
8
6
4
2
1
AREA IN SQ. NAUTICAL MILES - (OR SQ. YDS.)
.001 (4,000)
.002
.004
.006
.008
.01 (40,000)
.020
.040
.060
.080
0.1 (400,000)
0.2
0.4
0.6
0.8
1.0 (4,000,000)
2.0
4.0
6.0
8.0
10 (40,000,000)
20
40
60
100 (400,000,000)
MOUSSE (30% OIL, 1.0 mm)
BLACK/DARK BROWN COLOR (0.1 mm)
BRIGHT COLORS (0.0003 mm)
DULL COLORS (0.001 mm)
DARK COLORS (0.002 mm)
BARELY VISIBLE (0.00004 mm)
SHEEN-SILVER (0.00008 mm)
SLIGHTLY COLORED (0.00015 mm)

FIGURE 6.4

Contingency Protocol for Wildlife

Prepared for The Toledo Refining Company LLC.
Oregon, Ohio

Project Manager
Eileen Gilbert, B.S.

Project Team
Erica Miller, DVM
Heidi Stout, VMD
Kristine Evans
Katie Battaglia

Tri-State Bird Rescue & Research, Inc.
110 Possum Hollow Road
Newark, DE 19711

CONTINGENCY PROTOCOL FOR OILED WILDLIFE
For The Toledo Refining Company LLC. 2005

Initial Wildlife Response Protocol
Draft - Table of Contents

INTRODUCTION....3
GOALS OF THE WILDLIFE CONTINGENCY....3
OVERVIEW OF WILDLIFE RESPONSE
Strategies for Responding to an Oil Spill....4
Special Concerns in Oiled Wildlife Response....5-6
I. Federal Contacts....7
II. Ohio State Contacts....7
Checklist – Timely Response To Wildlife....8-9
WILDLIFE PERSONNEL RESPONSIBILITIES
Trustee Authorization and Oversight....10-11
Responsibilities on Initiation of the Wildlife Component of an Oil Spill Response....12
MIGRATORY BIRD PERMITS....12
PERSONNEL
Identifying Qualified Wildlife Responders....12
VOLUNTEER RESOURCES....13-14
OVERVIEW OF FACILITY AND EQUIPMENT NEEDS
Facility Needs and Setup....15
Site Safety....15
FACILITY REQUIREMENTS
Hot / Cold Water Capacity....16-17
Electric / Lighting....17
HVAC Systems....17-18
Communications....18
OCCUPATIONAL SAFETY AND HEALTH
Health & Safety Overview....18
Personnel Training9....18-19
Site Safety....19
Product Risks....19
Human Risk from Wildlife....20
Zoonoses....20-21
SITE SAFETY PLAN....22-24

INTRODUCTION

The Contingency Protocol for Oiled Wildlife for The Toledo Refining Company LLC (CPOW)

was developed to provide detailed information and guidance to assist refinery personnel, the wildlife resource trustees and local responders, during a major oil spill in which wildlife has been or could be affected.

The CPOW covers generic response protocols for addressing the immediate needs of wildlife threatened by or impacted by oil. It also provides the guidelines for disposing of the carcasses of wildlife that perish due to oil exposure or the complications of oil exposure, and wildlife that are euthanized.

RESPONSIBILITIES

The local wildlife agency, a Qualified Wildlife Responder and / or The Toledo Refining Company LLC. personnel should supervise implementation of this protocol. The priority for wildlife rehabilitation will be established based on current legislative restrictions and requirements and the prioritization of species at risk.

The level of response will be based on the potential for oiled animals.

GOALS OF THE WILDLIFE CONTINGENCY PLAN

A. To provide an operational template that assists The Toledo Refining Company LLC., the wildlife agencies, and supporting organizations in defining incident objectives pertaining to natural resources.

B. To provide an information base that enables the wildlife agencies and The Toledo Refining Company LLC. to: protect wildlife at risk of contamination by oil and oversee the wildlife response effort in a timely and effective manner.

OVERVIEW OF WILDLIFE RESPONSE

Wildlife response after oil spills is a complex challenge requiring a teamwork approach among wildlife management agencies, the responsible party, a contracted Qualified Wildlife Responder (outlined on page 13) and carefully trained volunteers. All wildlife actions must be coordinated with the wildlife agency or personnel beginning with the step of notification. The steps involved in notification and the general process of the wildlife component of an oil spill response (outlined on pages 7 - 9) are presented as a checklist.

Strategies for Responding to an Oil Spill

A. Keep Oil Away from Wildlife (Prevent/Reduce Impacts on Key Habitats)

The primary response strategy for wildlife protection emphasizes controlling the release and spread of spilled oil or hazardous substances at the source, in order to prevent or reduce contamination of wildlife and/or their habitats.

In general, spill control primary response strategies may include mechanical cleanup, protective booming, *in situ* burning and dispersant use. In addition, the primary response strategy includes the removal of contaminated debris, particularly contaminated food

sources (such as wildlife carcasses and oiled vegetation) both in water and on land.

In the event of an incident, The Toledo Refining Company LLC. should consult with local resource agencies regarding threats to wildlife to identify any specific actions that are appropriate for that incident. The Toledo Refining Company LLC. should also incur responsibility for implementation of the determined wildlife protection strategies.

B. Keep Un-oiled Wildlife Away from Oil (Field Assessment/Deterrents)

The secondary response strategy emphasizes keeping potentially affected wildlife away from impacted areas through the use of deterrent techniques.

Qualified and experienced observers must coordinate an immediate assessment of habitat and species at risk, followed by rapid implementation of wildlife deterrent efforts. Each hour and dollar spent preventing contamination before a wildlife impact can potentially save hundreds of hours and dollars during a response effort.

C. Respond to Oiled Wildlife

The tertiary response strategy, which is a last-resort strategy, addresses retrieval and treatment of oiled wildlife.

The key steps to effective retrieval of contaminated animals, both dead and alive, are:

- rapid selection and activation of a Qualified Wildlife Responder;
- rapid response by qualified field personnel;
- careful collection and documentation of contaminated animals and carcasses;
- timely and appropriate transportation of live animals to a wildlife response facility.

Special Concerns in Oiled Wildlife Response

Expertise in veterinary medicine, husbandry and biology is not a requirement for licensing to hold and treat wildlife; however, wildlife does benefit from professional care for traumatic injuries or diseases. More specifically, experienced professionals must be engaged to address the significant human safety and wildlife health issues inherent in dealing with wildlife contaminated in oil spills.

A. Human Health and Safety

Risks to staff and volunteers include:

- exposure to harmful components in the contaminant;
- traumatic injuries to humans caused by wild animals;
- exposure to zoonotic diseases -rabies, chlamydia, salmonella, cryptosporidia, endoparasites, etc.;
- job related injuries occurring on-site.

Prolonged hands-on contact with and/or general exposure to contaminated animals

requires more stringent protective measures than those specified for field clean-up workers. Large numbers of volunteers must be trained, scheduled and continually supervised with regard to both human and animal health and safety matters.

B. Wildlife Health Issues

For the rehabilitation effort to be successful, each oil-contaminated animal requires immediate and specialized care. When hundreds or even thousands of wild animals become oiled during a spill, the rescue effort becomes a strategically complicated, medically complex, crisis-oriented task.

To minimize mortality and maximize the rehabilitative effort, a rehabilitation facility must be identified, equipped and managed so as to function in a safe and effective manner.

C. Disease Outbreaks and Wildlife Health

Every effort must be made to prevent the transmission of disease from rehabilitated animals to free-roaming populations of wildlife. An epizootic disease is a disease that can affect large populations of animals over a short period of time. Epizootic diseases can be the result of bacterial, viral, fungal, parasitic or toxic agents and can cause widespread morbidity and mortality in wildlife populations. Wild animals contaminated by oil are exposed to stress factors in the wild and in captivity that can lower their resistance to diseases. Animals undergoing rehabilitation are confined in close quarters where spread of disease can be extremely rapid. In addition to causing sudden and high mortality within a rehabilitation facility, epizootic diseases can be introduced to geographic regions when an improperly "rehabilitated" animal is released and serves as a carrier to wild populations.

There is a risk that the release of diseased, rehabilitated animals can cause significant die-offs resulting in more damage to wildlife populations than the spill itself. This issue is addressed, in part, when trustees limit the responsibility of wildlife care to Qualified Wildlife Responders.

Natural Resource Trustee / Agency: Notification and Initiation of Response

When an oil spill impacts wildlife, or has a significant potential for impact, the Responsible Party and / or State or Federal On-Scene Coordinator (OSC) shall immediately contact the U.S. Fish and Wildlife Service (USFWS) and the Ohio Division of Fish and Wildlife. Primary and alternate contact points for each of the agencies are listed below; only one contact per agency is necessary because the person initially contacted will notify other personnel in his/her agency.

Date/Time	Person Contacted	By Whom	
			I. Federal Contacts:
_____	_____	_____	**National Response Center** *(24 hour phone number for reporting any hazardous material spill)* 1-800-424-8802
_____	_____	_____	**United States Coast Guard** Federal On-Scene Coordinator (FOSC) USCG MSO Toledo *(24 hour phone number for reporting any hazardous material spill)* 1-419-418-6050
_____	_____	_____	**United States Department of the Interior** Office of Environmental Policy Office: (215) 597-5378 Cell: (b) (6)
_____	_____	_____	**United States Fish and Wildlife Service** Primary Contact, Stan Smith Office: (612) 713-5335
			II. Ohio State Contacts:
_____	_____	_____	**Ohio Division of Fish and Wildlife (OhioF&W)** Primary contact, Carolyn Caldwell Office: (614)265-6329 24-hour: (614)799-9538
			III. QUALIFIED WILDLIFE RESPONDER: *(The QWR will select and activate the most appropriate of the pre-identified response facilities for the specific incident.)*
_____	_____	_____	**Tri-State Bird Rescue & Research, Inc.** 110 Possum Hollow Road Newark, DE 19711 Office: (302) 737-7241 Fax: (302) 737-9562 24 hour emergency pagers: (800) 710-0695 (800) 710-0696

CHECKLIST - TIMELY RESPONSE TO WILDLIFE: (Applicable to both pre- and post-spill activities)

In the event of a release that has contaminated or threatens to contaminate wildlife, the following people or agencies should be notified. Notifications may either be made by The Toledo Refining Company LLC. personnel or by the Qualified Wildlife Responder (QWR) on behalf of Sunoco. Once contracted, notifications should be completed by the QWR; this agreement should be confirmed at the time of their notification.

Assigned By Whom	Date / Time	Completed By Whom	Date / Time	
_____	_____	_____	_____	**I. NOTIFY WILDLIFE AGENCIES (RP)**
				II. IDENTIFY WILDLIFE AT RISK (Planning)
_____	_____	_____	_____	A. Species of Concern
_____	_____	_____	_____	B. Geographic Distribution
_____	_____	_____	_____	C. Seasonal Distribution
_____	_____	_____	_____	**II. IDENTIFY IMMEDIATE SPILL CONTROL OPTIONS AND THEIR CONSEQUENCES TO WILDLIFE RESOURCES (Operations)**
_____	_____	_____	_____	A. Mechanical (skimming, booms, dikes, berms)
_____	_____	_____	_____	B. Chemical (dispersants, herding agents, solidifiers)
_____	_____	_____	_____	C. Other (*in situ* burning)
				IV. IDENTIFY WILDLIFE PROTECTION OPTIONS (Planning / Operations)
_____	_____	_____	_____	A. Field/Air Assessments for Wildlife at Risk
_____	_____	_____	_____	B. Dispersing Non-oiled Animals
_____	_____	_____	_____	C. Pre-emptive Capture and Relocation of Non-oiled Animals
_____	_____	_____	_____	D. Retrieving Oiled Animals
_____	_____	_____	_____	**V. IDENTIFY AND CONTACT QUALIFIED WILDLIFE RESPONDER (RP)**

Assigned By Whom	Date / Time	Completed By Whom	Date / Time

©TSBR 1993, updated 2002

VI. DETERMINE RESPONSE TO OILED WILDLIFE (Operations - Wildlife Branch)

A. Search and Retrieval (dead and live oiled animals)
B. Field Care (stabilization)
C. Facility Setup
D. Training of Volunteers / Personnel
E. Medical and Rehabilitative Care
F. Records and Chain of Evidence
G. Pre-release Health Checks and Evaluations
H. Identification and Assessment of Release Sites
I. Release

Wildlife Personnel Responsibilities

Trustee Authorization and Oversight

Trustees are authorized to act on behalf of the public's best interest in the protection of natural resources. Full authority regarding protection and oversight of the rescue and rehabilitation of wildlife and fish remains with the trustees, although care for contaminated wildlife can be contracted by the Responsible Party, the Federal On-Scene Coordinator (FOSC), or other federal and state agencies as authorized.

Migratory birds are the species most often affected in oil spills. In these cases, the United States Fish & Wildlife Service serves as the lead agency for trustee response, coordinating with other trustees and providing oversight for the Qualified Wildlife Responder (QWR).

Effective wildlife response to oil spills requires a team approach as specialists in government and the private sector lend their skills to the response efforts. Oversight of this team effort, however, rests with the trustees. Clear definition and thorough understanding of trustee authorization and responsibilities, with regard to wildlife efforts in particular, will allow for the most timely and effective preparation and response to oil spill incidents.

A. Trustee Authorization

Authority and guidance for wildlife response following oil spills are contained in two federal plans:

- The National Multi-agency Oil and Hazardous Materials Contingency Plan (NCP 1968) assigns certain emergency response tasks to agencies with particular missions and expertise.

-The Fish and Wildlife and Sensitive Environment Plan fulfills the OPA 90 mandate for "immediate and effective protection, rescue and rehabilitation of, and the minimization of risk of damage to, fish and wildlife resources and their habitat that are harmed or that may be jeopardized by a discharge".

Department of the Interior

The US Fish & Wildlife Service, under the jurisdiction of the Department of the Interior (DOI), has trustee responsibility for birds which are listed under the Migratory Bird Treaty Act (16 USC 703-711) of 1972 (revised 1978) and for most threatened and endangered species under the Endangered Species Act (16-USC-1531-1544) of 1973.

The DOI also has trustee responsibility for sea otters, dugong, walrus and manatee under the Marine Mammal Protection Act (16 USC 1361-1407) of 1972.
The DOI is also a trustee for lands it manages, including the National Wildlife Refuges (administered by the DOI's U.S. Fish and Wildlife Service) and the National Seashores and Parks (administered by the DOI's National Park Service).

Department of Commerce / Department of the Interior

The Department of Commerce and the Department of the Interior share trustee responsibility for anadromous fish under the Anadromous Fish Conservation Act (16-USC-757a-757f). These two agencies also share trusteeship of threatened and

endangered sea turtles.

National Marine Fisheries Service

Trustee responsibility for other marine mammals (whales and seals) and sea turtles resides with National Marine Fisheries Service (NMFS), an agency of the Department of Commerce.

State Agencies

State agencies have trustee responsibilities for other game and non-game species not listed above. (States also may possess co-trustee responsibility for above-mentioned species.)

B. Oversight

Adapted from material produced by the Minnesota Wildlife Assistance Cooperative, Sartell, Minnesota.

1. General Permit Requirements

Federal Regulation 50 CFR 21.11 (1972; revised 1989) prohibits the possession of any bird listed under the Migratory Bird Treaty Act for any purpose, unless special permits have been issued for activities that show benefit to the migratory bird resource.

Most native species fall under the "protected" designation, including: all birds (except the Rock dove [pigeon], European starling and English house sparrow); all mammals with a hunting or trapping season; some reptiles, amphibians, fish and insects; and all endangered or threatened species. It is illegal to possess any protected species without the proper permits.

Required general permits and oil spill response permits from federal and state agencies should be obtained prior to collection, transportation, rehabilitation, or release of protected species. In special circumstances, permits can be obtained by the QWR at the time of a spill.

a. Federal Permits

Federal permits are necessary if birds that fall under the Migratory Bird Treaty Act, or endangered or threatened species are handled. Because sea turtles are protected under the Endangered Species Act, persons not authorized under the Act need special permits from the USFWS to handle them. Permits are obtained from the permit section of the USFWS Headquarters.

b. State Permits

State permits are required to possess and rehabilitate any wild animal in the State of Ohio.

2. Oversight of Retrieval and Rehabilitation Care

Care for contaminated wildlife can be contracted for by the RP, the FOSC or other federal and state agencies, as authorized. Migratory birds are the species most often affected in oil spills.

Responsibilities on Initiation of the Wildlife Component of an Oil Spill Response

Following the initiation of an oil spill response, the following actions will be taken:

1) The USFWS, NMFS, and Ohio Division of Fish & Wildlife may consult available reference material to determine significance of the resources in the impacted area(s).
2) The USFWS, NMFS, and Ohio Division of Fish & Wildlife may decide jointly on further involvement of each agency based upon the severity of the spill and species impacted under each agency's respective responsibilities.
3) The USFWS, NMFS, and Ohio Division of Fish & Wildlife may dispatch the most appropriate individual to inspect the spill site. This could be unilateral or cooperative effort, involving one or more of the agencies, and determined at the time of the spill, depending on the particular resources at risk.

TITLE 50, CODE OF FEDERAL REGULATIONS, PART 21
MIGRATORY BIRD PERMITS

21.11 (1972; revised 1989) General permit requirements

No person shall take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase or barter, any migratory bird, or the parts, nests, or eggs of such bird except as may be permitted under the terms of a valid permit issued pursuant to the provisions of this Part and Part 13, or as permitted by regulations in this Part or Part 20 (the hunting regulations).

[39 CFR 1178, Jan. 4, 1974, as amended at 46 CFR 42680, Aug. 24, 1981; 54 CFR 38151, Sept. 14, 1989.]

PERSONNEL

Identifying Qualified Wildlife Responders

An effective wildlife response / rehabilitation effort for oil contaminated animals requires supervision by personnel with demonstrated field experience in oil spill response. A Qualified Wildlife Responder (QWR) should be identified by the trustees and utilized for an oil spill response.

Wildlife response requires immediate coordination of efforts of all personnel. That can best be accomplished by identifying a Qualified Wildlife Responder in advance of oil spill incidents. Identification and selection of a QWR will allow for immediate response in the event of a spill. Immediate response by experienced oiled wildlife responders will insure delivery of the highest quality of treatment to the contaminated animals.

Possession of general wildlife rehabilitation permits does not indicate capabilities for oil spill response.

VOLUNTEER RESOURCES

A wildlife response effort involves many workers on multiple shifts; it benefits the response effort to have as many volunteers as possible trained in advance of spills as part of the contingency program. This type of preparation will limit the time and energy necessary during the initiation of a spill response and establishment of the wildlife response.

A. Volunteers

Because of the large number of volunteers that typically are needed in a wildlife response,

it is imperative that all of these volunteers be trained and supervised under a Qualified Wildlife Responder. In major spills, there may be two or three shifts per day, with each shift utilizing over 50 volunteer workers. Volunteers must be thoroughly trained, precisely scheduled for suitable tasks, and must be supervised at all times.

Volunteers working within the facility should be at least 18 years old. Jobs for younger volunteers can be identified as minimal risk, out-of-facility tasks. There is a place for everyone in oiled wildlife response, but the safety of humans and the welfare of the animals must be the highest priorities, not the emotional needs of the people who want to help. Not every concerned person/group can be a lead organization in a spill response.

It is recommended that volunteer training occur before a spill incident, as part of a contingency planning program. In the event of a spill, a previously trained volunteer base can then be put on alert and prepared to participate as soon as they are needed. Management by experienced personnel will minimize problems and strengthen teamwork.

B. Colleagues

While most wildlife rehabilitators and veterinarians cannot make the commitment of time needed to develop the resources to respond to major oil spills, many rehabilitators, veterinarians, and staff and volunteers from nature organizations will be willing to serve in a limited capacity during spill response efforts. The QWR, as the lead wildlife response organization, should be willing to identify each person's or organization's strengths and incorporate them into the wildlife response. Teamwork is the solution to a successful oil spill response.

C. Liability and Volunteer Criteria

All volunteers must be at least 18 years of age, in good health and have a current tetanus toxoid inoculation. Pregnant women and immuno-compromised individuals should not work directly with any wildlife - oiled or non-oiled. The Qualified Wildlife Responder/Trainer should be prepared to accept liability for training and oversight of volunteers and should require that a General Release of
Liability Form be signed before volunteers are allowed to work on the response effort. Volunteers must be able to donate a minimum of three shifts, (5 - 6 hours long), within the first two weeks of the spill response.

D. Training

1) During an oil spill involving wildlife there is an immediate need for large numbers of trained volunteers to work with the QWR.

2) With regard to human health and safety, in accordance with the National Contingency Plan, 40 CFR 300, all persons involved in a response action must comply with the OSHA safety standards. These standards vary according to the potential exposure risk to the individual relative to their assigned duty.

3) Establishing Goals for Training: raining for personnel can:

- enhance the speed and quality of a response involving wildlife following an oil spill;

- clarify the duties and the responsibilities of the spiller, clean-up contractor, state and national agencies, volunteers and the general public;
- significantly improve the treatment and the release rates for affected animals;
- considerably reduce cost of wildlife response by focusing efforts in a cost-effective manner;
- help to insure the safety of all those working in a wildlife response.

4) Training Agenda

Volunteer training on the effects of oil on wildlife should meet the guidelines set in Best Practices.

OVERVIEW OF FACILITY AND EQUIPMENT NEEDS

A. Facility Needs and Setup

Facility needs usually focus on the majority of species affected by a petroleum discharge, which historically, are avian. Facility requirements can vary significantly, depending on overall size of response, species and age of wildlife contaminated, the type of contamination, the season/weather, the location of the spill, and the rehabilitation effort. The facility needed will vary according to the needs of the specific spill situation, and should be determined by a representative of a wildlife response group with major spill response experience (Qualified Wildlife Responder).

Because facility requirements can vary so significantly, a permanent facility is not always advisable, and may actually be an impediment in providing the appropriate facility design for the situation. A suitable facility must have a large open space on the ground floor that can easily be configured and reconfigured to accommodate the changing needs of this unique form of wildlife rehabilitation. All rehabilitation efforts should be accommodated under one roof. Experience has taught that multiple buildings or a tent situation are ineffective and unsuitable. A warehouse, township garage, armory, motor pool or convention hall that is accessible to a trained labor force, is within a reasonable distance from hotel accommodations, and has adequate parking and exterior grounds could meet this requirement. If a facility is situated in a secure site, *e.g.* military instillation or refinery, entry needs for a fluctuating volunteer work force will have to be addressed. The facility may be located away from the spill site, provided that on-scene stabilization is administered prior to transportation. An oil spill stabilization site can be located at the time of a spill.

It is recommended that a list be assembled of potential sites within the identified high risk areas, and the these sites be physically reviewed by a Qualified Wildlife Responder. Once actual facilities have been identified, all costs, availability, and contract information should be reviewed every six months. A list of specific facility requirements and site evaluation forms follows.

B. Site Safety

Immediately following the retrofitting of a facility, a site safety plan must be initiated, preferably as a part of the contingency plan and/or as a part of the site selection process. The safety plan must include checklists for measures to avoid physical, chemical and biological hazards, and should contain emergency procedures and contact numbers. Site safety issues are addressed in this document. In addition, there is a form to be utilized in developing a

site-safety plan.

Facility and equipment requirements can vary significantly, depending on the factors discussed in the introduction. The actual quantities of materials needed will vary according to the needs of the specific spill situation, and should be determined by a Qualified Wildlife Responder.

FACILITY REQUIREMENTS

This list represents minimum facility needs for rehabilitating 100-150 oiled animals.
Space requirements:

- Front desk / Admissions	250 sq. ft.
- Logistics Office	250 sq. ft.
- Kitchen / Food storage	200 sq. ft.
- Husbandry/ Area (large central room)	1200 sq. ft.
- Supplies / Storage	250 sq. ft.
- Wildlife Cleaning Area I	750 sq. ft.
- Medical Treatment / Exam	200 sq. ft.
- Pathology / Lab / Cold Storage	100 sq. ft.
- Isolation Ward	200 sq. ft.
- Volunteer / Worker Rest Room	150 sq. ft.
- Bathrooms, Decon, Changing	200 sq. ft.
- Outside Pool Areas @ one 10' x 15' x 2' pool per 15 birds, + access and maintenance space	3300 sq. ft.
- Non-hazardous and hazardous (medical and oil) waste	
Indoor	50 sq. ft.
Outside	400 sq. ft.
- Outside area for oily waste water	300 sq. ft.
- Loading Dock / Parking for 50 (opposite side of building from outside cages)	5000 sq. ft.
Total interior sq. ft.	**3800 sq. ft.**
Total exterior sq. ft.	**9000 sq. ft.**
Total sq. ft.	**12,800 sq. ft.**

Note: If an existing wildlife rehabilitation center were to be used, it would require the above space in addition to the space allocated for any existing caseload. Animals impacted by an oil spill must be cared for separately from the in-house population.

HOT / COLD WATER CAPACITY

When selecting a wildlife response facility it is important that the water supply will not be contaminated by the oil spill. For preplanning purposes, potential facility locations should be selected in areas of low spill probability. All oily waste water must be collected and disposed of in accordance with federal and municipal regulations. The large quantities of rinse water, pool and general use water generated during a spill response are permitted access to most municipal systems. It is therefore inadvisable to select a location that relies on a septic system to handle

waste, for this large volume of water can exceed the designed capacity of most septic systems. Ideally, there should be external access to cold water supplies (*e.g., hose faucets on exterior of building)* for filling outdoor pools.

Due to the nature of wildlife rehabilitation, large amounts of water are used in many locations throughout the facility. It is therefore advisable that the facility should have floors that can tolerate being wet, with drains at least in the areas designated for cleaning activities.

- Cold Water Volume (pools and general use)	23360 gallons per day
- Hot Water Volume (animal cleaning only)	450 gph @ 40 degrees C.
	6750 gallons per day @ 15 hrs.
- Water Pressure (animal cleaning only)	50 - 60 psi.
- Water Hardness (animal cleaning only)	0.042 - 0.060 ppm

True sea birds (diving and pelagic species) cannot be successfully rehabilitated unless the water is maintained at the proper water hardness.

N.B. A potential facility suitable in terms of size, availability and location should not be discarded due to hot water and hardness capacities. Provided there is an adequate cold water supply, mobile hot water and treatment systems can be retrofitted into existing equipment without much difficulty.

ELECTRIC / LIGHTING

The electrical needs of a wildlife response facility are very similar to conventional factory operations in so far as the need for general and task lighting, with separately circuited outlets throughout the space capable of providing 20 amp protection. Because of potential risk of electric shock in wet areas, the addition of a ground fault interrupter (GFI) circuit breaker in those areas is desirable.

In addition to lighting and heat, ventilation and air conditioning (HVAC) systems, electric power will be used for hot water heaters, freezers, refrigerators, heat lamps, pet dryers, office and medical equipment, pool pumps and filters, power tools, etc.

- 200 amp 120/240 volt 3-wire single phase service with minimum of ten (10) 20 amp circuits in addition to the lighting and HAVC needs, with the ability to expand.

HVAC Systems

The three main concerns regarding air quality are:

1) Eliminating thermal stress to debilitated animals by providing a stable, draft free inside air temperature between 21- 26 degrees C;
2) Minimizing human and animal exposure to petroleum volatiles; and,
3) Minimizing animal exposure to pathogenic organisms (bacterial and fungal).

- Air within a wildlife response facility should be exchanged 6 times per hour within office space, 10 times per hour within large open areas involving animal care, and 20 times an hour within critical care and surgical areas and still maintain ambient temperatures.

- Typical HVAC systems used in industrial space are often forced air or closed re-

circulating systems which by themselves will not meet the above requirements. These systems will need to be augmented with portable filtration High-Efficiency Particulate Air (HEPA) filters and air exchange units. The design of the systems should be determined by the wildlife response group once the facility has been selected and the particulars of the animal caseload is known.

- Air quality in systems that employ return air filters can be enhanced through the replacement of the existing filters with an electrostatic type. This will not, however, preclude the need for HEPA type filtration and regular air exchanges as outlined above.

COMMUNICATIONS

Minimum of three (3) telephone lines (public, private, fax/modem) with the ability to add as needed.

OCCUPATIONAL SAFETY AND HEALTH

Health and Safety Overview

Contact with oil and oiled wildlife must be minimized through the use of personal protective equipment (PPE), ventilation and human hygiene. Field safety issues must also be considered. The following recommendations are general guidelines for an oiled wildlife response safety plan. These guidelines were designed to meet *The Occupational Safety and Health Act* of 1970 *Safety Standards (USA).* The 1970 *Safety Standards* do not apply to volunteers - only to employees. (Anku, 1994) In addition, the standards vary according to the potential exposure risk to the individual relative to their assigned duty. (Jennings, 1996) Regional requirements should be reviewed in order to ensure compliance specific to the response location.

A. Personnel Training

All individuals, employees or volunteers, must receive minimum instruction in Health and Safety concerns, including:

- "Right to Know" issues (potential hazards of the spilled product),
- basic first aid and/or emergency notification instruction in case of exposure to the product,
- the use of PPE as advised for the spilled product, and
- potential hazards encountered when working with wildlife in general, and methods to prevent or minimize these hazards.

Health and safety concerns for field personnel and transporters are included in **section 9**.

All team leaders in the wildlife response facility should meet national, state and local requirements for safety training in order to anticipate and avoid safety problems, instruct other staff and volunteers of these potential hazards, and respond to any emergencies. All other staff and volunteers should receive a minimum of four hours equivalent of Health and Safety instruction to prepare them to recognize, avoid and/or respond to any potential

health or safety hazard in the area in which they work.

Access to and from any wildlife staging area or rehabilitation facility must be restricted to only those individuals who have received the above training.

Because of the potential for exposure to toxins and disease, any individual who is immuno-compromised (presently sick with an infectious disease, on chemotherapy, has a liver disease or any immuno-compromising disease, etc.), is pregnant, or is under the age of 18 years, should not be allowed to work with wildlife (either petroleum-contaminated or non-contaminated).

B. Site Safety

A site safety plan must be initiated as soon as the staging and/or wildlife rehabilitation area is established. The safety plan must include:

1. checklists for measures to avoid physical, chemical and biological hazards
2. locations of emergency equipment (first aid kits, eye wash stations, fire extinguishers, etc.,)
3. floor plan of the facility indicating emergency exits
4. emergency procedures and contact numbers

General site safety guidelines apply to wildlife rehabilitation operations. The form in this section can be used as a guideline for developing individual site-safety plans.

C. Product Risks

Petroleum products, in, on and around wildlife may present a hazard to human health and safety. Various components in petroleum products can damage skin and conjunctivae of eyes on contact, lungs if inhaled, and the gastrointestinal tract if inadvertently ingested. Chronic and/or prolonged exposure may cause damage to the central nervous system and/or the reproductive system, and some cancers including skin cancer and leukemia.

Protective measures must be taken to avoid and/or minimize exposure. Individual risk factors such as pregnancy or history of liver disease should be taken into consideration when allowing personnel access to contaminated areas. Personal hygiene must be stressed during the decontamination process.

D. Human Risk from Wildlife

Specific human health and safety concerns in handling wildlife will vary with the species of animals involved, but some general guidelines should be followed. All individuals who will be handling oiled wildlife must be trained in proper capture and restraint techniques:

1. The head (beak or teeth) and feet (talons or claws) of most animals can cause serious injuries if the handler has received improper or incomplete training or is inconsiderate of the animal's needs because of haste or carelessness, etc.

2. Protective eyewear should be worn when working with birds with long, pointed beaks, and towels or gloves should be used to restrain the feet of all birds

(note: towels allow the handler to control the entire body of the bird without damaging feathers).

3. Animals should be held at waist-height, away from human faces.

4. At least two people should be present for any prolonged handling (examinations, washing, etc.)

5. Aggressive mammals should be controlled with nets or snare poles, and should be sedated for any prolonged handling.

Anyone handling wildlife should have a current tetanus shot (booster every 10 years). Anyone handling mammals should have a current rabies vaccination (titer checked every two years, and boosters given as needed).

E. Zoonoses

Unique to the wildlife aspect of an oil spill response is the potential hazard of zoonotic diseases, *i.e.*, diseases which can be transmitted from animals to humans. Of specific concern are the following diseases:

Birds:

Aspergillosis--a fungal disease causing respiratory problem in humans.
Chlamydiosis--a bacterial disease causing flu-like symptoms in people. Potentially fatal.
Salmonellosis--a bacterial disease causing diarrhea in humans.
Avian Tuberculosis--a bacterial disease causing skin lesions and occasionally respiratory problems in humans.
Histoplasmosis--a fungal disease causing pneumonia in humans.

Mammals:

Rabies--a viral disease causing central system (CNS) nervous disorder in humans. *Fatal if untreated.*
Giardia--a protozoal disease causing diarrhea in humans.
Baylisascaris--a parasite causing central nervous disorder and death in humans.
Campylobacteriosis--a bacterial disease causing diarrhea in humans.
Cryptosporidiosis--a protozoal disease causing diarrhea in humans.
Toxoplasmosis--a protozoal disease which may cause CNS disorder in humans.
Leptospirosis--a bacterial disease which may cause hepatitis, nephritis and meningitis in humans.

Vector-transmitted diseases:

These zoonotic diseases may not necessarily affect wildlife, which act as diseases for the reservoirs, but they do affect humans. These diseases are transmitted from the carrier animals to humans via parasites such as ticks, fleas and mosquitoes.

Rocky Mountain spotted fever--a rickettsial (bacteria-like) disease transmitted by ticks, which may cause rashes, headaches, nephritis, anemia and meningitis in humans.

Bubonic plague--a bacterial disease transmitted by fleas, which may cause swollen lymph nodes, septicemia, hemorrhages and death in humans.

Wearing gloves while cleaning animal cages and food bowls, washing hands with a disinfectant soap, wearing gloves and surgical mask while performing necropsies (postmortem examinations), and providing for adequate room ventilation will help to avoid contracting these diseases.

SITE SAFETY PLAN

Site Description

Site:_____

Location:_____

Building / Structure (s):_____

Outdoor area:_____

_____

Surrounding area: ____ industrial ____ residential ____ rural _____ other

Potential Weather Hazards: ____ heat stress ____ hyperthermia ____ fog ___ storms
____ frostbite ____ hypothermia ____ice ___ other

Site Organization

Safety Officer_____

Organization_____

Headquarters_____

Address_____

Team Leaders: Spill Manager_____

Logistics_____

Field Retrieval_____

Medical_____

Cleaning_____

Husbandry_____

Site Control

___ Restricted areas designated with signs
___ Restrictions (PPE) posted at entry
___ Sign-in / Sign-out
___ Predator control for outdoor facility

Product / Hazard Evaluation

Product identification_____

Contains: A) **Benzene** (crude, gasoline, military JP4, commercial JET B, aviation gasoline, gas oils, and feed stocks).
B) **PolyAromatic Hydrocarbons** (PAHs) (kerosene, diesels, military JP5, commercial JET A).
C) **Hydrogen sulfide** (sulfur hydroxide) (sour crudes).

Action: A) May cause dermatitis, nausea & eye irritation. Hematologic toxin and carcinogen. Wear full PPE. Wash hands & change before exiting site.

B) May cause dermatitis, nausea & eye irritation. Wear full PPE. Wash hands and change before exiting site.
C) Irritating to eyes & mucous membranes; pulmonary edema; asphyxiation; headaches, diarrhea, fatigue; CNS depressant. Irrigate eyes & provide respiratory support if exposed.

General Site Safety & Health Procedures Checklist

___ Fire extinguishers: ___ Medical Area ___ Washing Area

___ Whistles at fire extinguishers: ___ Medical Area ___ Washing Area

___ Fire exits marked and routes posted

___ First Aid Kits: ___ Medical Area ___ Washing Area

___ Electrical Cords grounded

___ MSDS posted

___ Eye wash station or flush bottles available

Checklist For Field Retrieval

___ Heat Stress: ___ Fluids available in rest area

___ Cold Stress: ___ Heated / Sheltered rest area ___ Warm fluids available in rest area ___ Blankets

___ Personal Flotation Devices (for water retrieval)

___ Insect Repellent

___ Snake Bite Kits

Personal Protective Equipment (PPE)

___ Required gear posted at entry
___ Tyveks ___ Gloves
___Aprons ___ Glasses

Decontamination Procedures

___ Rags/Towels for wiping off equipment & PPE clothing
___ Bin for disposal of contaminated clothing, towels
___ Bin for disposal of contaminate papers & boxes
____Wash stations for staff/volunteers leaving site
___ Storage area for PPE to be reused

Emergency Procedures

___ Identify local emergency numbers and post by telephone

Police: _____

Fire: _____

Ambulance/EMT/Hospital: _____

24 hour toxicology/poison hot line: _____

____ Identify safety personnel to whom injuries/accidents/hazards shall be reported

©Tri-State Bird Rescue & Research, Inc. 1994 eam, revised 2002

Figure 6.5

Cleanup Methods

Figure 6.5

Clean Up Methods			
Method	***Cautions***	***Don't use on…***	***Recommended for…***
Barriers/Berms		Safety concerns limit use on gasoline spills	Deflecting spills away from sensitive resources
Booming	Safety Concerns limit containment of gasoline spills Fast currents, shallow water, steep banks limits effectiveness.		Deflecting spills away from sensitive resources Driving slickes toward collection points in low current areas
Chemical Shoreline Pretreatment	Insufficient information on impact and effectiveness (particularly on manmade structures)		
Debris Removal	Degree of oiling warrants debris removal and disposal.		
Dispersants	Inhibit evaporation of gasoline	Shallow water depths (May result in high aquatic toxicity)	
Emulsion-Treating Agents		Gasoline (does not form emulsions) Shallow freshwater (insufficient toxicity data to evaluate impact)	
Flooding		Heavy oils (Leave large amounts of residuals) Gasoline spills (may transport the gasoline to more sensitive habitats)	Fresh/fluid oils

PHMSA 00124753

Figure 6.5

Method	***Cautions***	***Don't use on…***	***Recommended for…***
Herding Agents		Not effective on heavy oils (oil must be fluid)	Calm Conditions
High Pressure – Cold Water Flushing	High pressure jets may fluidize sand/soil and wash oiled sediments into sensitive areas.	Gasoline spills (may transport the gasoline to more sensitive habitats) Heavy oils (Leave large amounts of residuals)	Fresh/fluid medium crude oils
High Pressure – Hot Water Flushing	Will kill any attached organisms High pressure jets may fluidize sand/soil and wash oiled sediments into sensitive areas.		Heavy oil (heat liquefaction)
In-Situ Burning	Generates air pollution, thermal impact on biota and residue. Public Safety concerns Less environmental in winter (Snow and ice, plants dormant, fewer animals)	Lighter oils – may penetrate sand/soil leaving insufficient concentration to burn	Heavy oil accumulations
Low Pressure – Cold Water Flushing	Optimize pressure to minimize amount of material washed down-slope.	Heavy oils (Leave large amounts of residuals) Gasoline spills (may transport the gasoline to more sensitive habitats)	Fresh fluid oils

Figure 6.5

Method	***Cautions***	***Don't use on…***	***Recommended for…***
Low Pressure – Hot Water Flushing	Negative impact on any organisms present. Optimize pressure to minimize amount of material washed down-slope.		Heavy crudes (heat makes oil more fluid)
Manual Oil Removal/Cleaning		Small Persistent pockets of oil exposed on surface	Heavy oils in patches or crevices
Mechanical Oil Removal	Tends to remove large amounts of clean soil/sand/gravel with contaminated material May require very intrusive recovery techniques		High use areas where rapid removal is necessary.
Natural Microbe Seedling	May require chemical shoreline pretreatment. Insufficient information on available products, effectiveness or impact		
Natural Recovery	Sheltered bedrock may need cleanup because of slow natural removal rates For smaller spills only, larger spills may persist.	Heavy oils (will persist on all but most exposed shores)	Lighter oils/More exposed settings

PHMSA 00012475

Figure 6.5

Method	***Cautions***	***Don't use on…***	***Recommended for…***
Nutrient Enrichment	Nutrient overloading in poorly flushed areas	Gasoline Spills (Gas evaporates too rapidly) Weathered thick oil residues	Lighter oils that leave thin residues.
Physical Herding	Potential to drive oil into the water column or sediment May be only water to remove oil trapped in vegetation or debris		
Sediment Reworking			Lightly oiled and stained sediments
Shoreline Cleaning Agents	Individual products vary in their toxicity and recoverability		Sticky Oils
Skimming	Land Based Operations need site specific restrictions to minimize physical destruction		
Solidifiers	Early use may prevent pooled oil from penetrating deeper.	Heavy oils (too viscous)	Heavy accumulations of pooled oil Control chronic Sheening (including gasoline)
Sorbents	Overuse generates excess waste	Heavy oils (will be slow) Not applicable to gasoline spills (evaporate too rapidly) Large rivers or open water (oil spread and drift to rapidly)	Along riprap structures to recover residual sheening
Steam Cleaning and Sand Blasting	Will kill any organism present		Persistent oil removal for aesthetic reasons
Vacuum	Early use of vacuum will prevent deeper penetration	Not applicable to gasoline spills because of safety concerns	Thick/heavy oils Pooled oil in crevices

Figure 6.5

Method	***Cautions***	***Don't use on…***	***Recommended for…***
Vegetation Removal	Helps prevent secondary oiling of wildlife		
Visco-Elastic Agents		Heavy oils (too viscous) Gasoline spills (inhibition of evaporation)	

PHMSA 000124757

Figure 6.6

Clean up methods by Habitat Recommendations

Figure 6.6 – Clean Up Methods by Habitat Recommendations

Spill on Land (Habitat Response)					
Habitat Type	***Least Adverse Habitat Impact***	***Some Adverse Habitat Impact***	***Probable Adverse Habitat Impact***	***Most Adverse Habitat Impact***	***Insufficient Information***
Bedrock	Natural Recovery	Flooding/Low Pressure – Cold Water Flushing	Nutrient Enrichment	Steam Cleaning and Sand Blasting	Natural Microbe Seeding
	Debris Removal	High Pressure – Cold Water Flushing	High-Pressure, Hot – Water Flushing		
	Sorbents	Manual Oil Removal/Cleaning	Steam Cleaning and Sand Blasting		
		Vacuum			
		In-situ Burning			
		Shoreline Cleaning Agents			
		Solidifiers			
		Low Pressure – Hot Water Flushing			
Manmade Structures	Manual Oil Removal/Cleaning/ Debris Removal	Flooding	Nutrient Enrichment		Chemical Shoreline Pretreatment
	High Pressure – Cold Water Flushing	Low Pressure – Cold Water Flushing	Steam Cleaning and Sand Blasting		
	Sorbents	Low Pressure – Hot Water Flushing			
	Vacuum	High-Pressure, Hot –Water Flushing			
	Natural Recovery	Shoreline Cleaning Agents			
		Solidifiers			
		In-situ Burning			

Figure 6.6 – Clean Up Methods by Habitat Recommendations

Habitat Type	***Least Adverse Habitat Impact***	***Some Adverse Habitat Impact***	***Probable Adverse Habitat Impact***	***Most Adverse Habitat Impact***	***Insufficient Information***
Sand	Debris Removal		Low Pressure – Hot Water Flushing	High Pressure – Hot Water Flushing	Chemical Shoreline Pretreatment
	Natural Recovery	Mechanical Oil Removal		High Pressure – Cold Water Flushing	Natural Microbe Seeding
	Flooding	Low Pressure – Cold Water Flushing			
	Sorbents	Vacuum			
		Sediment Reworking			
		Nutrient Enrichment			
		Shoreline Cleaning Agents			
		Solidifiers			
		In-situ Burning			
Mixed Sand/Gravel	Debris Removal	Vacuum	High Pressure – Cold Water Flushing	High Pressure – Hot Water Flushing	Chemical Shoreline Pretreatment
	Natural Recovery	Manual Oil Removal/Cleaning	Low Pressure – Hot Water Flushing	Steam Cleaning	Natural Microbe Seeding
	Flooding	Sediment Reworking			
	Sorbents	Mechanical Oil Removal			
	Low Pressure – Cold Water Flushing	Shoreline Cleaning Agents			
		Nutrient Enrichment			
		In-situ Burning			
		Solidifiers			

Figure 6.6 – Clean Up Methods by Habitat Recommendations

Habitat Type	***Least Adverse Habitat Impact***	***Some Adverse Habitat Impact***	***Probable Adverse Habitat Impact***	***Most Adverse Habitat Impact***	***Insufficient Information***
Gravel	Debris Removal	Vacuum	Low Pressure – Hot Water Flushing	High Pressure – Hot Water Flushing	Chemical Shoreline Pretreatment
	Natural Recovery	High Pressure – Cold Water Flushing	Mechanical Oil Removal	Steam Cleaning	Natural Microbe Seeding
	Flooding	Nutrient Enrichment			
	Sorbents	Manual Oil Removal/Cleaning			
	Low Pressure – Cold Water Flushing	Sediment Reworking			
		Shoreline Cleaning Agents			
		In-situ Burning			
		Solidifiers			
Vegetated Shoreline	Natural Recovery	Sorbents	High Pressure – Cold Water Flushing	Low Pressure – Hot Water Flushing	Chemical Shoreline Pretreatment
	Flooding	Manual Oil Removal/Cleaning	Mechanical Oil Removal	High Pressure – Hot Water Flushing	Natural Microbe Seeding
	Low Pressure – Cold Water Flushing	Debris Removal		Sediment Reworking	Shoreline Cleaning Agents
		Vacuum		Solidifiers	
		Vegetation Removal			
		Nutrient Enrichment			
		In-Situ Burning			

Figure 6.6 – Clean Up Methods by Habitat Recommendations

Habitat Type	***Least Adverse Habitat Impact***	***Some Adverse Habitat Impact***	***Probable Adverse Habitat Impact***	***Most Adverse Habitat Impact***	***Insufficient Information***
Mud	Natural Recovery	Debris Removal	In-Situ Burning	Solidifiers	Chemical Shoreline Pretreatment
	Flooding	Vacuum	Low Pressure – Cold Water Flushing	Mechanical Oil Removal	Natural Microbe Seeding
	Sorbents		Manual Oil Removal/Cleaning	Sediment Reworking	
			Low Pressure – Hot Water Flushing	Shoreline Cleaning Agents	
				High Pressure – Cold Water Flushing	
				High Pressure – Hot Water Flushing	
Wetlands	Natural Recovery	In-Situ Burning	Vegetation Removal	High Pressure – Cold Water Flushing	Chemical Shoreline Pretreatment
	Sorbents	Vacuum	Manual Oil Removal/Cleaning	High Pressure – Hot Water Flushing	Natural Microbe Seeding
	Flooding	Debris Removal		Low Pressure – Hot Water Flushing	Nutrient Enrichment
	Low Pressure – Cold Water Flushing			Mechanical Oil Removal	Shoreline Cleaning Agents
				Sediment Reworking	
				Solidifiers	

Figure 6.6 – Clean Up Methods by Habitat Recommendations

Spill on Water (Habitat Response)					
Habitat Type	***Least Adverse Habitat Impact***	***Some Adverse Habitat Impact***	***Probable Adverse Habitat Impact***	***Most Adverse Habitat Impact***	***Insufficient Information***
Small Lake and Pond	Booming	Natural Recovery	Manual Oil Removal/Cleaning	Dispersants	Emulsion Treating Agents
	Skimming/Vacuum	In-situ Burning	Mechanical Oil Removal		Natural Microbe Seeding
	Sorbents	Herding Agents			
		Debris Removal			Nutrient Enrichment
		Vegetation Removal			
		Physical Herding			
		Visco-Elastic Agents/ Solidifiers			
Small River and Streams	Booming	Physical herding	Manual Oil Removal/Cleaning	Dispersants	Emulsion Treating Agents
	Skimming/Vacuum	Natural Recovery	Mechanical Oil Removal	Herding Agents	Natural Microbe Seeding
	Sorbents	Debris Removal			
	Barriers/Berms	Visco-Elastic Agents/ Solidifiers			
	Natural Recovery	Vegetation Removal			Nutrient Enrichment
		In-situ Burning			

Figure 6.6 – Clean Up Methods by Habitat Recommendations

Habitat Type	***Least Adverse Habitat Impact***	***Some Adverse Habitat Impact***	***Probable Adverse Habitat Impact***	***Most Adverse Habitat Impact***	***Insufficient Information***
Large River	Booming	Natural Recovery	Dispersants	Herding Agents	Nutrient Enrichment
	Skimming/Vacuum	Physical Herding		High Pressure – Cold Water Flushing	Natural Microbe Seeding
		Sorbents			
		In-situ Burning			
		Emulsion Treating Agents			
		Vegetation Removal			
		Debris Removal			
		Visco-Elastic Agent /Solidifiers			
		Manual Oil Removal/Cleaning			
		Mechanical Oil Removal			
Open Water	Booming	Physical Herding			Nutrient Enrichment
	Skimming/Vacuum	Sorbents			Natural Microbe Seeding
	In-situ Burning	Vegetation Removal			
	Natural Recovery	Emulsion Treating Agents			
	Low Pressure – Cold Water Flushing	Visco-Elastic Agent /Solidifiers			
		Dispersants			
		Herding Agents			
		Manual Oil Removal/Cleaning			
		Mechanical Oil Removal			

Figure 6.6 – Clean Up Methods by Habitat Recommendations

Habitat Type	***Least Adverse Habitat Impact***	***Some Adverse Habitat Impact***	***Probable Adverse Habitat Impact***	***Most Adverse Habitat Impact***	***Insufficient Information***
Sand	Debris Removal		Low Pressure – Hot Water Flushing	High Pressure – Hot Water Flushing	Chemical Shoreline Pretreatment
	Natural Recovery	Mechanical Oil Removal		High Pressure – Cold Water Flushing	Natural Microbe Seeding
	Flooding	Low Pressure – Cold Water Flushing			
	Sorbents	Vacuum			
		Sediment Reworking			
		Nutrient Enrichment			
		Shoreline Cleaning Agents			
		Solidifiers			
		In-situ Burning			
Mixed Sand/Gravel	Debris Removal	Vacuum	High Pressure – Cold Water Flushing	High Pressure – Hot Water Flushing	Chemical Shoreline Pretreatment
	Natural Recovery	Manual Oil Removal/Cleaning	Low Pressure – Hot Water Flushing	Steam Cleaning	Natural Microbe Seeding
	Flooding	Sediment Reworking			
	Sorbents	Mechanical Oil Removal			
	Low Pressure – Cold Water Flushing	Shoreline Cleaning Agents			
		Nutrient Enrichment			
		In-situ Burning			
		Solidifiers			

Section 7.1 - INTRODUCTION

The Facility is classified as a "Non-Transportation Related Onshore Facility" which operates in a NON-Higher Volume Port Area.

Non-Transportation Related Onshore Facilities must perform discharge calculations for the U.S. Environmental Protection Agency (EPA). The EPA discharge volume calculations are described as follows:

EPA Discharge Volume Calculation
• **Worst Case Discharge** *100% of the largest single tank plus the capacity of all other tanks without adequate secondary containment* • **Medium Discharge** *Discharge greater than 2,100 gallons (50 Bbls) and less than or equal to 36,000 gallons (857 Bbls) or 10% of the capacity of the largest tank and all tanks with inadequate secondary containment, whichever is less and not to exceed the WCD* • **Small Discharge** *Discharge of less than or equal to 2,100 gallons (50 Bbls), not to exceed the WCD*

USCG Discharge Volume Calculation
(b) (7)(F), (b) (3) [redacted]

Section 7.1 – INTRODUCTION (Cont'd)

DOT-PHMSA Discharge Volume Calculation

- **Worst Case Discharge (WCD)**
  The largest volume (Bbls) of the following:

  - *Pipeline's maximum release time (hrs), plus the maximum shutdown response time (hrs), multiplied by the maximum flow rate (Bbls/hr.), plus the largest line drainage volume after shutdown of the line section.*

  -- OR--

  - *Largest foreseeable discharge for the line section is based on the maximum historic discharge, if one exists, adjusted for any subsequent corrective action or preventive action taken*

  --OR--

  Capacity of the single largest breakout tank or battery of tanks within a single secondary containment system, adjusted for the capacity or size of the secondary containment system.

The following planning volume calculations must be performed to determine the required response resources for a Worst Case Discharge:

Planning Volume for On-Shore Recovery (OSR)

OSR **=** WCD*%Oil On Shore

Planning Volume for On-Water Recovery (OWR)

OWR **=** WCD*%Recovered Floating Oil

Recovery Capacity (RC)

RC = OWR*Emulsification Factor* On-Water Recovery Resource Mobilization Factors

The recovery capacity determined by these equations is compared to the appropriate response capability caps from the EPA tables; the actual contracted response amount is the lesser of the two values. If the calculated capacity exceeds the capability caps, sufficient response resources should be available for twice the amount of the caps or up to the total planning volume, whichever is less.

Section 7.1 – INTRODUCTION (Cont'd)

Scenario Types

The occurrence of a Small, Medium, or Worst Case Discharge could be the result of any number of scenarios at the Facility including:

- Tank overfill and/or failure.
- Piping rupture.
- Piping leak, under pressure and not under pressure.
- Explosion or fire.
- Equipment failure (e.g. pumping system failure, relief valve failure, or other general equipment relevant to operational activities associated with internal or external facility transfers).

Discharge Scenario	Potential Oil Group	Planning Volumes		
		DOT/ PHMSA	EPA	USCG
				Facility
Small/Average Most Probable	3/4	---	50 Bbls	50 Bbls
Medium/Maximum Most Probable	3/4	---	857 Bbls	1,200 Bbls
Worst Case	(b) (7)(F), (b) (3)			

The response actions to each of these scenarios are outlined in Section 3.1 and Figures 3.1, 3.2, and 3.3. The response resources are identified in a quick reference format in Figure 5.1 with additional detail on equipment and manpower provided in Appendix J. Facility response personnel list/telephone numbers and other internal/external resources telephone numbers are detailed in Figures 2.4 and 2.5.

Section 7.1 – INTRODUCTION (Cont'd)

(a) EPA TABLES

(b) FOR WORST CASE DISCHARGE RESPONSE RESOURCES DETERMINATION

AND REMOVAL CAPACITY PLANNING

Spill Location	(1) Rivers & Canals			(2) Nearshore/Inland/Great Lakes		
	3 Days			4 Days		
Sustainability of on-water oil recovery		D	E		D	E
Oil Group	% Natural Dissipation	% Recovered Floating Oil	% Oil On Shore	% Natural Dissipation	% Recovered Floating Oil	% Oil On Shore
I. Non-persistent oils	80	10	10	80	20	10
II. Light crudes	40	15	45	50	50	30
III. Medium crudes and fuels	20	15	65	30	50	50
IV. Heavy crudes and fuels	5	20	75	10	50	70

EMULSION FACTORS

F	
NON-PERSISTENT OIL	
Group I	1.0
PERSISTENT OIL	
Group II	1.8
Group III	2.0
Group IV	1.4
Group V	1.0

RESPONSE CAPABILITY CAPS (bbls/day)
(Maximum Required Recovery levels)

AREA	TIER 1	TIER 2	TIER 3
Rivers and Canals	(b) (7)(F), (b) (3)		
Great Lakes			
Inland/Nearshore			

ON-WATER OIL RECOVERY RESOURCE MOBILIZATION FACTORS

AREA	TIER 1	TIER 2	TIER 3
River	.30	.40	.60
Inland/Nearshore Great Lakes	.15	.25	.40

NOTE: These mobilization factors are for total resources mobilized, not incremental response resources.

RESPONSE TIME (hours)

AREA	TIER 1	TIER 2	TIER 3
Higher volume port area	(b) (7)(F), (b) (3)		
All Other			

Section 7.2 – RESPONSE CAPABILITY SCENARIOS

(c) Small Discharge = 50 Bbls

A small discharge at this Facility is considered to be a discharge that does not exceed 50 barrels (2,100 gallons).

Article II. Description

This size discharge would most likely occur due to minor equipment failures or human error. Examples may include, but not limited to,

- Pump seal leak
- Valve leak
- Container rupture
- Storage spill

The most likely location for a discharge of this size would be leaking Facility piping and would be crude oil, gasoline, #2 fuel oil, or kerosene.

This size discharge would likely be noticed quickly and appropriate clean up measures taken since product transfers are monitored by Facility personnel. These types of small spills are typically contained on the grounds of the Facility (earthen material or concrete). Adverse weather conditions would not hinder response efforts during a small discharge.

Article III. Prevention

Several steps can be taken to limit the number of occurrences and the amount of discharges. In particular, employees receive training periodically on the proper procedures for pipeline transfers. In addition, preventive maintenance of equipment is performed at regularly scheduled intervals to ensure that any weaknesses are discovered. Also, old or worn parts are replaced as needed. Annual product transfer and pipeline testing is the most important of these measures.

Article IV. Additional Comments

While the Facility's OSRO or spill contractor would be notified and the best method for containment determined, such discharges that are contained at the Facility could be diverted to the product tanks that are not at maximum capacity. Spills that enter Otter Creek can be handled by facility emergency response team or by response contract vacuum truck, absorbent pad and boom, or other equipment.

The closest body of navigable water is Otter Creek (see Figure 6.1). The storage tanks have adequate secondary containment so it is unlikely that a spill would reach Otter Creek or travel very far if it did. Finally, this type of spill is not one that is expected to result in a chain reaction of failures of other equipment.

Section 7.2 – RESPONSE CAPABILITY SCENARIOS (Cont'd)

(a) Small Discharge = 50 Bbls (Cont'd)

Response Requirement

The Facility shall identify sufficient resources, by contract or other approved means, to respond to a small discharge. The response resources shall, as appropriate, include:

- 1,000' of containment boom and a means of deploying it within one (1) hour of the discovery of a spill.
- Oil recovery devices with an effective daily recovery capacity equal to the amount of oil discharged in a *Small Discharge* or greater which is available at the Facility within two (2) hours of the detection of an oil discharge.
- Oil storage capacity for recovered oily material equivalent to twice the effective daily recovery rate.

Facility Response Resources/Capability

The Facility will respond to a ***Small Discharge*** with the manpower detailed in Figures 2.4 and 4.1 as well as local contract resources as detailed in Figure 2.5, 5.1, and Appendix J.

- A 50 Bbl discharge at the Facility typically will not escape the containment of the Facility.
- If a fifty (50) barrel discharge escaped the Facility it could flow to Otter Creek. However, due to the design of the containment area and the sewer systems, spilled product would be directed to the Toledo Refinery Sewer System.

Section 4.02

Offsite Impact

- Otter Creek is located within the immediate vicinity of the Facility. Therefore, the potential impact to wildlife and sensitive habitats does exist. The worst probable chain reaction to a spill of this type would be storm related. Severe weather could possible carry the product toward Maumee Bay.
- Oil containment and recovery devices can be secured from contract resources (with a minimum effective daily recovery capacity of 50 Bbls) and can be implemented at the Facility, as the situation demands.
- A minimum of 100 Bbls of oil storage capacity for recovered oily material can be secured from contractor resources or made available within the Facility's storage facilities, as the situation demands.
- Additional recovery and storage equipment may be secured from other Toledo Refining Company, LLC and contract resources, as the situation demands.

Section 7.2 – RESPONSE CAPABILITY SCENARIOS (Cont'd)

Small Discharge = 50 Bbls (Cont'd)
Notes: ● Equipment and manpower resources are detailed in Sections 4.0, 5.0, Figure 5.1, Figure 5.2 and Appendix J. ● Telephone references are provided in Figures 2.4 and 2.5. ● Response resources and actions for Group 5 oil spills are outlined in Appendix H.

Section 7.3 – RESPONSE CAPABILITY SCENARIOS

(a) Medium Discharge = 857 Bbls

A medium discharge at this Facility is considered to be a discharge that does not exceed 857 barrels (36,000 gallons).

Article V. Description

This size discharge would most likely occur due to a major equipment failure or during product transfer. Examples may include, but not limited to,

- Line or flange rupture
- Valve rupture
- Tank failure
- Tank overfill or failure
- Pipeline manifold rupture.

Because of dikes and other containment located throughout the Facility, it is very unlikely that the discharge would leave the Facility property or reach a navigable waterway before a spill containment could begin. However, the Facility is situated within close proximity to Otter Creek, so potential impact does exist. Adverse weather conditions would increase the chances of a discharge entering Otter Creek; however, the following response actions would minimize the impacts on sensitive areas.

Article VI. Prevention

Several steps can be taken to limit the number of occurrences and the amount of discharges. In particular, employees receive training periodically on the proper procedures for transfers to and from tanks (e.g. proper tank gauging procedures). This training includes what to do in the event of an unusual occurrence such as equipment rupture (i.e. how to transfer spilled material to the miscellaneous tank or product tanks).

In addition, preventive maintenance of equipment is performed at regularly scheduled intervals to ensure that any weaknesses are discovered, such as tank inspections and hydrostatic testings. Old or worn parts are replaced as needed. Storage tank ages can be referenced in Appendix K.

Article VII. Immediate Action

In the event of a medium size discharge, the OSRO or spill contractor would be notified. While waiting for the OSRO to arrive, qualified Facility personnel would complete internal and external notifications and begin initial deployment of facility owned equipment. Diked area containment of large spills can be handled with the use of contractor vacuum trucks. Medium discharges resulting from tank failure would more than likely be contained by the dike.

The Facility sits in close proximity to Otter Creek (see Figure 6.1) so the potential exists for a spill to reach navigable water. Therefore, the potential impact to environmentally sensitive areas does exist. Finally, the most likely chain reaction of failure would be fires resulting from accidental spark or downed power lines.

Section 7.3 – RESPONSE CAPABILITY SCENARIOS (Cont'd)

Medium Discharge = 857 Bbls (Cont'd)

Response Requirement

The Facility shall identify sufficient response resources, by contract or other approved means, to respond to a Medium Discharge. The response resources shall, as appropriate, include:

- Oil recovery devices with an effective daily recovery capacity equal to 50% of the *Medium Discharge* volume must be capable of arriving on scene within 12 hours.
- Sufficient quantity of containment boom must arrive within 12 hours for oil collection and containment and for protection of fish and wildlife and sensitive environments, as appropriate.
- Temporary storage capacity equal to twice the daily recovery capacity must be available.

(i) Facility Response Resources/Capability

The Facility will initially respond to a ***Medium Discharge*** with a similar response to the Small Discharge. Additional response resources will be activated from an Oil Spill Removal Organization(s) (OSRO) as detailed in Figures 2.5, 5.1, and Appendix C and will arrive within 12 hours.

- All resources shall be capable of arriving at the Facility within the applicable response level requirements (Level 1 = 12 hours; Level 2 = 36 hours; Level 3 = 60 hours)
- Oil recovery devices with an effective daily recovery capacity of 428 Bbls (50% of the Medium Discharge volume) secured from the OSRO(s) will be on scene within 12 hours.
- 857 Bbls of oil storage capacity for recovered oily material will be secured from the OSRO(s) and/or made available within the Facility's storage facilities.
- Containment boom for oil collection and containment and for protection of fish and wildlife and sensitive areas will be secured from the OSRO(s) in the event that the spill escapes the boundaries of the Facility and impacts Otter Creek.
- Diked area containment of large spills can be handled with the use of contractor equipment.

Notes:

- ● Equipment and manpower resources are detailed in Sections 4.0, 5.0, Figure 5.1, Figure 5.2 and Appendix J.
- Telephone references are provided in Figures 2.4 and 2.5.
- Response resources and actions for Group 5 oil spills are outlined in Appendix H.

Section 7.4 – RESPONSE CAPABILITY SCENARIOS

Worst Case Discharge = (b) (7)(F), (b) (3)

A worst-case discharge at this Facility is considered to be a discharge that does not exceed (b) (7)(F), (b) (3)

Article VIII. Description

This size discharge would most likely occur due to a natural disaster or catastrophic event. Examples may include, but not be limited to,

- Tank fire
- Earthquake-induced spills
- Catastrophic tank shell failure
- Tornado-induced spills
- Pipeline manifold rupture.

Diking and containment areas are located throughout the Facility. For a discharge this size to reach a navigable waterway, or leave the Facility property, diking would have to be damaged or destroyed (breached).

Article IX. Prevention

For a worst case discharge caused by a natural disaster, preparedness is more appropriate than prevention. The Facility employees receive training periodically on the proper procedures to deal with a natural disaster. Employees are also trained in steps to follow if the Facility must be evacuated (due to a tank fire or other emergency). In addition, preventive maintenance of tanks is performed at regularly scheduled intervals to ensure that any weaknesses are discovered. Storage tank ages can be located in Appendix k.

Article X. Worst Case Discharge And Adverse Weather

Calculation of the planning volume for a worst-case discharge are provided in this section. It should be noted that it is not practical to consider all the variables associated with different weather scenarios so the planning distance could alter slightly. Severe rain events and associated flooding would also increase the chances of an oil spill from leaving the property.

Probable chain reactions of failures would be induced by the weather conditions. They would include, but not be limited to, fires, health hazards, and discharges of more than one product.

Article XI. Worst Case Spill Pathway Scenario

In the event of tank rupture, the product may splash over the dike wall and flow toward Otter Creek.

For a spill that is confined to the land along the pathway, Facility personnel would have at least two (2) options by which to contain the spill:

- Dams
- Trenches

Section 7.4 – RESPONSE CAPABILITY SCENARIOS (Cont'd)

Worst Case Discharge = (b) (7)(F), (b) (3)

Article XII. Protection Of Groundwater

The chances of groundwater impact due to a spill are minimal because the pathway between the Facility and the waterway is improved and/or impervious to a large extent. However, if a spill moved downward through the soil horizons and reached the groundwater table, then it would be necessary to contain and recover the product.

If the groundwater is near the surface, a possible solution might be a trench or an existing ditch. The back side of the trench or ditch could be lined with a polyethylene sheeting material which can serve to collect product for transfer to the oil/water separator. The groundwater would then be allowed to continue in its movement. If, however, the contaminated area is large and slow moving, an open trench may not be the answer. A deflecting barrier could be used as a structure which is more permanent than a trench or ditch and that moves the skimmed floating product to an upright recovery culvert with slits cut in the sides to allow the product to move inside and filter out the rocks.

Deep groundwater recovery could be accomplished by using a cone of depression type of pumping method. By placing a well suction beneath the floating product and producing a funnel type of effect, the product could be brought to a general area. This cone of depression forms a greater area of product. The second pump shaft could then be placed in this region.

Article XIII. Ditch Containment

A spill may also be contained in storm water ditches. Some practical containment methods are:

- A board skimming device
- Earth dam and weir
- Wire fence filter boom
- Culvert weir
- Under flow dam

These methods are simple to construct and effective for containment.

Article XIV. Spills That Reach The Waterway

The Facility is located near Otter Creek (see Figure 6.2). The priority during larger spills is to prevent oil from reaching the waterway. Oil spill response organizations (OSROs) that are under contract with the Facility will be the initial responders. Some of these OSROs can initiate initial boom deployment and anchoring at the waterway within one hour. A Damage Assessment by the state and federal trustees would more than likely follow the response.

Section 7.4 – RESPONSE CAPABILITY SCENARIOS (Cont'd)

Worst Case Discharge = (b) (7)(F), (b) (3)

1) ***Response Requirement***

The Facility shall identify sufficient response resources, by contract or other approved means, to respond to a worst case discharge to the maximum extent practicable. The response resources shall, as appropriate, include:

- Sonar, sampling equipment, or other methods for locating the oil on the bottom or suspended in the water column.
- Containment boom, sorbent boom, silt curtains, or other methods for containing the oil that may remain floating on the surface or to reduce spreading on the bottom.
- Dredges, pumps, or other equipment necessary to recover oil from the bottom and shoreline.
- Equipment necessary to assess the impact of such discharges.
- Other appropriate equipment necessary to respond to a discharge involving the type of oil handled, stored, or transported.

2)

3) Facility Response Resources/Capability

The Facility will respond to a Worst Case Discharge (WCD) initially with a similar response as identified for a Small or Medium Discharge. Facility Management will initiate "immediate response actions" located in Section 3.0 immediately upon discovering a spill. Additional OSRO(s) will be activated as the situation demands. The response resources will be capable of arriving within the required response levels and will include:

- Oil recovery devices with an effective daily recovery capacity equal to the lesser of 50% of the WCD or the response caps will be secured from the OSRO(s) and other Toledo Refining Company, LLC resources. Any amount in excess of the required caps will be contracted for and responded to as part of the same response effort.
- Temporary storage capacity equal to twice the daily recovery capacity will be secured from OSRO(s), other Toledo Refining Company, LLC resources, or made available within the Facility's storage facilities.
- At least 20% of the on-water response equipment secured from the OSRO(s) and other Toledo Refining Company, LLC resources will be capable of operating in water of 6 feet or less depth.
- Containment boom for oil collection and containment and for protection of fish and wildlife and sensitive environments and socio-economic sensitivities will be secured from the OSRO(s) and other Toledo Refining Company, LLC resources.

Section 7.4 – RESPONSE CAPABILITY SCENARIOS (Cont'd)

Worst Case Discharge = [redacted]

Facility Response Resources/Capability (Cont'd)

- Resources capable of responding to a shoreline clean-up operation involving the calculated volume of oil and emulsified oil that might impact the shoreline will be secured from the OSRO(s) and other Toledo Refining Company, LLC resources.
- Overall response operations will be conducted under the Incident Command System with adequate Facility and Contract Response personnel to continue operations for a minimum of seven (7) days.

Notes:

- Equipment and manpower resources are detailed in Sections 4.0, 5.0, Figure 5.1, Figure 5.2 and Appendix J.
- Telephone references are provided in Figures 2.4 and 2.5.
- Response resources and actions for Group 5 oil spills are outlined in Appendix H.

Section 7.5 - Toledo Refining Company, LLC Tank Farm No. 2 Response Planning Volume Calculations

Location Data

Location Type	(b) (7)(F), (b) (3)
Port Type	
WCD Product Type	
Product Group	
Capacity of the Largest Single Tank (Bbls)	

Discharge Volumes/Calculations

Average Most Probable or Small Discharge (bbls)	(b) (7)(F), (b) (3)
Maximum Most Probable or Medium Discharge (bbls)	
Worst Case Discharge – Based on EPA criteria (bbls)	

Selected Calculation Factions (Based on EPA Tables)

Removal Capacity Planning Volume – Percent Natural Dissipation	20%
Removal Capacity Planning Volume – Percent Recovered Floating Oil	15%
Removal Capacity Planning Volume – Percent Oil Onshore	65%
Emulsification Factor	2
Tier 1 – On Water Oil Recovery Resource Mobilization Factor	30%
Tier 2 – On Water Oil Recovery Resource Mobilization Factor	40%
Tier 3 – On Water Oil Recovery Resource Mobilization Factor	60%

Response Planning Volume Calculations

On-Water Recovery Volume (bbls)	(b) (7)(F), (b) (3)
On-Shore Recovery Volume (bbls)	
Total Recovery Volume (bbls)	
Shoreline Cleanup Volume (bbls)	

	Tier 1	Tier 2	Tier3
On-Water Recovery Capacity (bbls/day)	(b) (7)(F), (b) (3)		
Shallow Water Response Capacity (bbls/day)			
Storage Capacity (bbls/day)			
On-Water Response Caps (bbls/day)			
Additional Response Req'd (bbls/day)			
Response Time (Hrs)			

Section 7.6 Toledo #2 Tank Farm U.S. DOT/PHMSA Worst Case Discharge Calculations

(b) (7)(F), (b) (3)

[redacted]

Section 8.1 - Hazard Identification

Loading / Unloading of Transportation Vehicles

Other than propane truck loading, transmix, and vacuum truck loading/unloading, the Facility does not conduct transfer operations (no rail, vessel).

Day-to-Day Operations

The day-to-day operations at the Facility that may present a risk of discharging oil or releasing a hazardous substance are:

- Loading/unloading storage tanks via pipeline transfer

Work such as piping replacement/repair is rare, and would only be done on portions of the system that are isolated from the active system.

There are no drainage troughs at this Facility. There are no weirs or pre-deployed boom at this Facility.

There are no sump pumps at this Facility.

Secondary Containment Volumes

Secondary containment is provided for the bulk storage tanks and/or transfer points at the Facility. The Facility has a strong spill response plan in place to address any spill.

Tanks:

Secondary Containment volumes for all bulk storage tanks are detailed on the "Hazard Identification Tanks" form located in this Appendix K.

The tanks at the No. 2 Tank Farm are surrounded by dikes constructed of compacted soil or other impervious material which provide secondary containment.

Drainage:

The No. 2 Tank Farm is tiled to direct all liquids to the oil-bearing sewer system. The sewer flows to the west and then north across Pickle Road, connects with the Toledo Refinery sewer system, and drains to the on-site wastewater treatment facility. The wastewater treatment facility is currently owned and operated by Treated Water Outsourcing (TWO) on behalf of Toledo Refining Company, LLC. The refinery sewer system and wastewater treatment facility provide additional containment for a potential spill at both the refinery and No. 2 Tank Farm. The wastewater treatment facility is located north of the refinery, along Navarre Avenue.

The wastewater treatment unit is designed to handle the volume of water from a 25-year, 24-hour storm ([redacted] or the flow of water from a 25-year one-hour storm ([redacted]). Should the flow exceed the design capacity, an emergency overflow exists to discharge the effluent to Otter Creek. The three (3) equalization/storage tanks are located in a diked area which would provide containment during of an equalization/storage tank overfill. The Refinery NPDES permit has been retained for this purpose.

Section 8.1 - Hazard Identification (cont'd)

Secondary Containment Volumes (Cont'd)

The secondary treatment section of the wastewater treatment unit consists of a conventional activated sludge system to biodegrade the dissolved organic contaminants. In the aeration tanks, large amounts of air are introduced to a mixture of equalized effluent and activated sludge. The treated effluent flows to the clarifiers where any sludge that is carried over settles out and is returned to the aeration tanks. The clarifier effluent flows to the sandfilter make-up sump. Most of the clarifier effluent is polished by the sandfilters and used as make-up water to the Refinery cooling towers. The remainder is sent to the City of Toledo Public Owned Treatment Works (POTW).

Normal Daily Throughput

The Normal Daily Throughput for the Facility:

Normal Daily Throughput	Average Daily Storage	Total Storage
(b) (7)(F), (b) (3)		

The Facility has sufficient tank volume to handle any potential increase in Facility receipts/transfers.

Section 8.2 - Vulnerability Analysis

Introduction

The vulnerability analysis addresses the potential effects (i.e., to human health, property, or the environment) of an oil spill originating from the Facility. Section 6.0 of this Plan provides general guidance to the responder for "Spill Impact Considerations", addressing response options for many of the specific sensitivities detailed below.

The area potentially affected by a spill originating from the Facility has a number of characteristics which require consideration in the event of a discharge.

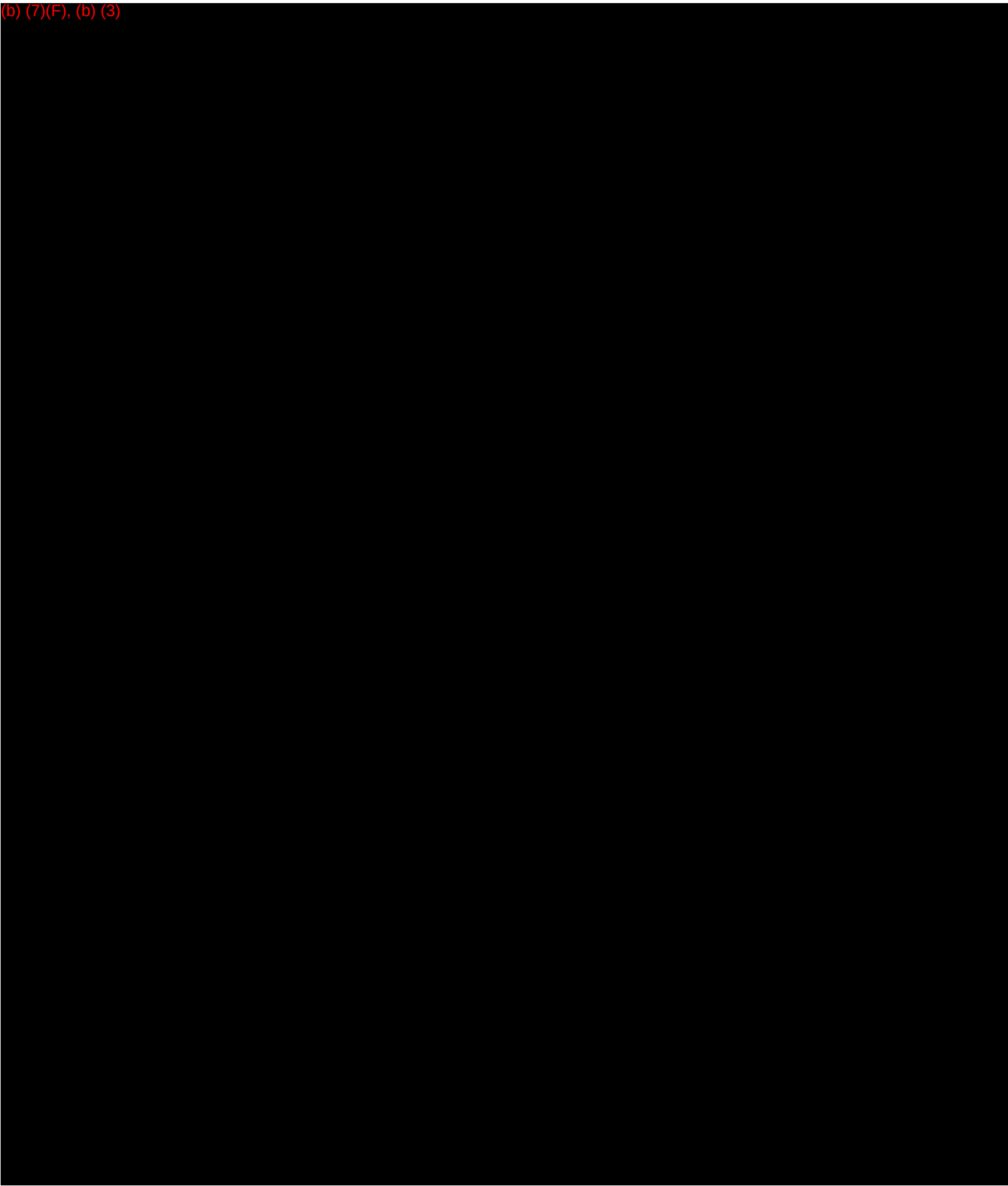
- The elevation at the No. 2 Tank Farm is generally even except for the containment dikes around the storage tanks. The land generally slopes to the north and west, toward Otter Creek.

Water Intakes

(b) (7)(F), (b) (3)

Section 8.2 - Vulnerability Analysis (Cont'd)

(b) (7)(F), (b) (3)



Section 8.2 - Vulnerability Analysis (Cont'd)

Wetlands, and other Sensitive Environments

Several wetlands were identified in Figure 6.2 Many of these sensitive areas are associated with state parks and wildlife refuges. Wetlands and wildlife refuges serve as high ecologically productive areas and therefore, if they become oiled, can result in high ecological loss Wetlands and other sensitive areas which were identified as potentially vulnerable to a spill are presented below:

- Cullen Park
- Navarre Park
- Ravine Park
- Woodtick Peninsula Wetland
- Carland Beach Wetland
- Detwiler Park
- Bay View Park
- Erie March Reserve
- Muddy Creek Estuary
- Otter Creek Estuary
- Sterling State Park
- Cedar Point National Wildlife Refuge
- Indian Island Wetland
- Ottawa National Wildlife Refuge
- Mallard Club Marsh Wildlife Area
- Magee Marsh State Wildlife Area
- Erie Marsh
- Erie State Game Area
- Maumee Bay State Park
- Metzger Marsh Wildlife Area
- Ottawa River Mouth Wetland
- Crane Creek State Park

During a response situation the USFWS and applicable state agencies should be contacted for information regarding wetlands and other sensitive environments. Upon contact the agencies will be able to:

- Identify and establish priorities for fish and wildlife, wetlands, and other sensitive environments requiring protection from any direct or indirect effects from a discharge.

- Identify potential environmental effects on fish and wildlife, wetlands, and other sensitive environments resulting from removal actions or countermeasures.

Fish and Wildlife

As there are a wide range of species present in the Maumee River and the Western portion of Lake Erie, the species potentially impacted would be quite diverse. Potential impacts that could result from an oil spill would include acute impacts (e.g., mortality) and chronic impacts (e.g., reduced reproductive success, growth). The following categories of fish and wildlife (and other biota) could potentially be impacted:

1. Migratory Waterfowl
2. Shorebirds
3. Raptors
4. Fish
5. Mammals
6. Reptiles and Amphibians
7. Invertebrates

Habitat areas for these species are identified in Figure 6.2.

Section 8.2 - Vulnerability Analysis (Cont'd)

Lakes and Streams

With the exception of Lake Erie, no lakes were identified as being potentially impacted due to a Toledo Refining Company, LLC release. However, several rivers and streams were identified as being potentially impacted by a discharge from the Facility, in particular, Otter Creek. Almost all of the rivers and streams would not receive any oiling except during a worst case discharge.

It is also possible that Duck Creek could be impacted. Both Otter and Duck Creek have wetlands that are adjacent to the creeks and would likely receive oiling if oil was present in either of the creeks.

The lakes, streams, and rivers that may be potentially impacted by a discharge originating at the Facility are identified on the maps in Figure 6.2.

Endangered Flora and Fauna

Many State natural resource departments contain a natural heritage division that maintains a list of the threatened and endangered resources within the State. Most resource agencies are unwilling to provide specific details on the exact locations of threatened and endangered species. However, in the event of an oil spill, the resource agencies can be contacted to obtain information on endangered resources during the course of an emergency (i.e., spill).

The endangered flora and fauna that may be potentially impacted by a discharge originating at the Facility are detailed in Figure 6.1.

Recreational Areas

(b) (7)(F), (b) (3)

[redacted]

Transportation Routes (air, land, and water)

No airport services would be at risk in the event of an oil spill from Toledo Refining Company, LLC. The Maumee River has been dredged to a depth of 25 feet to allow barges and other water traffic to move freely through the river. In the event of oiling, the Maumee River would likely be closed to
boat/shipping traffic. There are roads and highways that cross the Maumee River and run along Maumee Bay and Lake Erie; however, none of these transportation routes would be threatened in the event of oiling; however, road closures may occur. The Norfolk and Western, and the CSX railroad lines run through an area near Toledo Refining Company, LLC and Otter Creek. In the event of oiling, the potential does exist for the closure of these rail lines. The following transportation routes may be impacted from a release from this Facility:

(b) (7)(F), (b) (3)

[redacted]

The local emergency assistance agencies (police department, fire department, etc.) and the U.S. Coast Guard (as applicable) would be contacted for traffic control in the area of the discharge.

Section 8.2 - Vulnerability Analysis (Cont'd)

Utilities

Three (3) power plants were identified as potentially impacted due to a Toledo Refining Company, LLC release. This impact would occur mainly because these power plants have water intakes in areas where oil could accumulate. These power plants are listed below:

(b) (7)(F), (b) (3)

[redacted]

Other Areas of Economic Importance

The lakes and rivers are bordered by various dock facilities, other commercial facilities, and recreational/public use areas. These areas are identified on the maps in Figure 6.2.

Any evacuation efforts necessary for these areas will be coordinated with the local emergency assistance agencies (police department, fire department, etc.), State Police, U.S. Coast Guard, and other agencies as the situation demands. Telephone references are provided in Figure 2.5.

Section 8.3 - Analysis of the Potential for a Spill

The potential for a significant spill at the Facility is minimal due to the spill prevention measures that are in place and the operating procedures followed by facility personnel. The potential for a spill of sufficient magnitude to escape the Facility is very remote due to the spill mitigation measures inherent in the facility design.

Spill prevention measures include a number of discharge detection methods and various inspection procedures described further in Appendix L.

Tank age, as well as other tank information, can be found in the Hazard Identification Tanks table located in Appendix K.

Facility operating procedures are defined in the Procedures Manual. All personnel responsible for Facility operations are qualified. New personnel receive on-the-job training working with experienced operating personnel as well as training in the areas of safety, spill prevention, emergency response, and applicable pollution prevention laws, rules and regulations. They become qualified prior to assuming unsupervised operating responsibilities.

Spill mitigation measures include facility designs intended to direct releases to containment areas where they can be promptly controlled and cleaned up.

The horizontal range of a potential spill from this Facility is as follows: in the event that a spill does escape the Facility's boundaries, the spill could travel towards the Otter Creek, and eventually Lake Erie.

The Facility area is not typically subject to excessive damage from inclement weather such as hurricanes and floods. Although it is possible for tornadoes and floods to occur, there have been no spills at the Facility which were caused by natural disasters of this kind.

Other factors such as earthquake zones and Karst topography should be considered when evaluating the potential for a spill. The Facility is susceptible to minor earthquakes, according to the U.S. Geological Survey, however, a discharge has never resulted from an earthquake. The Facility is situated on an underlying layer of carbonate bedrock which has the potential to develop Karst. Though landslides are prevalent in a few areas of Ohio, the Facility is not in such an area where landslides are known to occur.

Section 8.4 - Reportable Oil Spill History

The Facility maintains a separate Oil Spill History file in the Facility office. The Facility's file contains the below listed information to the extent that such information is reasonably identifiable. Spill history prior to 2002 is available in the Environmental Department records

- Date of discharge.
- Location of discharge.
- Discharge cause(s).
- Material(s) discharged.
- Amount discharged.
- Amount of discharge that reached navigable waters.
- Amount recovered.
- Effectiveness and capacity of secondary containment.
- Clean-up actions taken.
- Steps taken to reduce possibility of recurrence.
- Total storage capacity of the tank(s) or impoundment(s) from which the material discharged.
- Enforcement actions.
- Effectiveness of monitoring equipment.
- Description of how spill was detected.

Date of discharge.	*Location of discharge*	*Discharge cause(s).*	*Material(s) discharged*	*Amount discharged*	*Amount of discharge that reached navigable waters.*	*Amount recovered.*	*Effectiveness and capacity of secondary containment.*	*Clean-up actions taken. (details available onsite)*	*Steps taken to reduce possibility of recurrence.*	*Enforcement actions.*	*Effectiveness of monitoring equipment.*	*Description of how spill was detected.*
11/14/2013	TF#2	Leak	Slop Oil	1600 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
4/14/2013	TF#2	Leak	Gasoline	93 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
4/14/2013	TF#2	Leak	Crude Oil	9.6 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
3/9/2013	TF#2	Leak	Gasoline	25 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
4/23/2011	TF#2	Leak	Crude Oil	153 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
9/12/2011	TF#2	Leak	Hydrocarbon	25 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
10/20/10	TF#2	Leak	Gasoline	345 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report

Date of discharge.	*Location of discharge*	*Discharge cause(s).*	*Material(s) discharged*	*Amount discharged*	*Amount of discharge that reached navigable waters.*	*Amount recovered.*	*Effectiveness and capacity of secondary containment.*	*Clean-up actions taken. (details available onsite)*	*Steps taken to reduce possibility of recurrence.*	*Enforcement actions.*	*Effectiveness of monitoring equipment.*	*Description of how spill was detected.*
07/08/10	TF#2	Leak	Diesel	437 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
04/09/10	TF#2	Leak	Diesel	35 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
08/16/09	TF#2	Leak	Diesel	31 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
08/10/09	TF#2	Leak/Stain	LCO	40 gallons	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
08/03/09	TF#2	Leak	LCO	1 bbl	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
05/13/09	TF#2	Leak	H2O	25 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
04/14/09	TF#2	Leak	Gas Oil	320 bbl gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
12/18/08	TF#2	Spill/Leak	Other - Crude Oil	5.76 bbl	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
04/25/08	TF#2	Spill/Leak	Other - Gasoline	8.2 bbl	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
04/15/08	TF#2	Spill/Leak	Other - Crude Oil	25 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report

Date of discharge.	*Location of discharge*	*Discharge cause(s).*	*Material(s) discharged*	*Amount discharged*	*Amount of discharge that reached navigable waters.*	*Amount recovered.*	*Effectiveness and capacity of secondary containment.*	*Clean-up actions taken. (details available onsite)*	*Steps taken to reduce possibility of recurrence.*	*Enforcement actions.*	*Effectiveness of monitoring equipment.*	*Description of how spill was detected.*
03/24/08	TF#2	Spill/Leak	Other - Crude Oil	~4.5 bbl	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
11/22/07	TF#2	Spill/Leak	LEF CRUDE	1 bbl	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
04/27/07	TF#2	spill/leak	Gasoline	25 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
02/08/07	TF#2	spill/leak	LSD	2 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
10/06/06	2-TF	Leak/Spill	LSD	3 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
06/30/06	2-TF	Leaks/Spills	LSD	2 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
05/18/06	2-TF	UG Leak	Gasoline	2 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
05/16/06	2-TF	UG Leak	Low Sulfur Diesel	1 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
03/24/06	2-TF	Leaks/Spills	Sour Naphtha	100 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
03/24/05	2-TF	Leaks/Spills	Gasoline	90 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
02/28/05	2-TF	Leaks/Spills	Jet Fuel	100 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
12/13/04	2-TF	Leaks/Spills	DCI-30 (Xylene)	15 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report

Date of discharge.	*Location of discharge*	*Discharge cause(s).*	*Material(s) discharged*	*Amount discharged*	*Amount of discharge that reached navigable waters.*	*Amount recovered.*	*Effectiveness and capacity of secondary containment.*	*Clean-up actions taken. (details available onsite)*	*Steps taken to reduce possibility of recurrence.*	*Enforcement actions.*	*Effectiveness of monitoring equipment.*	*Description of how spill was detected.*
12/02/04	2-TF	Leaks/Spills	gasoline	8 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
08/19/04	2-TF	UG Leak	Toluene	50 gals	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
07/06/04	2-TF	Leaks/Spills	Jet Fuel	1 bbl	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
05/04/04	2-TF	UG Leak	Jet Fuel	25 bbl	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
09/20/03	2-TF	Leak	Gasoline	100 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
09/18/03	2-TF	UG Leak	Gasoline	100 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
03/25/03	2-TF	Leak	Water/Xylene	40 gallons	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
10/07/02	2-TF	Line leak	LCO	35 gals	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
09/04/02	2-TF	Line leak	LCO	2 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
06/19/02	2-TF	Line leak	LCO	50 gals	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
03/11/02	2-TF	Line leak	Crude Oil	1.5 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
01/23/02	2-TF	Line leak	Toluene	3 bbls	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report

SITE DRAINAGE PLAN (a)

FIRE PROTECTION SYSTEM PLAN (b)

APPENDIX A

GENERAL INFORMATION

PAGE
Toledo Refining Company's Principles of Health, Safety and Environment A-2

Toledo Refining Company's Principles of Health, Safety and Environment

Protection of the Biosphere

We will reduce our overall emissions to the environment (air, water and land) with special emphasis on toxic substances. We will pay special attention to the protection of the surrounding environment at present facilities and when planning for new facilities or operations.

Sustainable Use of Natural Resources

We will minimize the use of water in our facility and strive to improve the quality of our water discharge streams. We will employ practical land management and conservation techniques to conserve the soils and forests at our facility. We will make efficient use of non-renewable natural resources through careful planning and employment of conservation techniques.

Reduction and Disposal of Wastes

We will continue to reduce and where possible eliminate waste through the use of source reduction, recycle/reuse and treatment techniques. The handling and disposal of all waste will be conducted in a safe and responsible fashion in accordance with regulatory standards.

Energy Conservation

We will conserve energy through careful selection of raw materials and energy sources and through cost effective improvements in our operations, including technological improvements in new energy-consuming processes. Environmental protection and sustainability will be considered in selecting new energy sources.

Risk Reduction

Our goal is to prevent HSE incidents such as environmental spills and releases, fires, explosions, injuries and illnesses and other accidents. We will utilize sound maintenance and work practices, safety-conscious design, employee training and incident investigations to minimize risks to our employees and the community in which we operate. We will be prepared to respond promptly and professionally should an incident occur.

Safe Products and Services

Through research, planning and analysis we will strive to minimize the environmental impact and health and safety hazards of our company products and services. We will counsel our employees and customers in the safe use and handling of our products and services and, where feasible, attempt to correct unsafe use. We will strive to eliminate the use of purchased products which pose known environmental hazards such as PCBs and CFCs.

Environmental Restoration

We will promptly correct any conditions in our operations which result in a significant health, safety or environmental impact. We will take responsibility for any harm caused by our operations to our employees, customers, the general public or the environment; to the extent feasible, we will also restore the environment.

Toledo Refining Company's Principles of Health, Safety and Environment (Cont'd)

Informing the Public

We will inform appropriate officials, employees, contractors, customers and the public about significant health, safety or environmental hazards related to our facility in a timely manner. We will regularly participate in dialogue with our neighboring community and its residents. No action will be taken against employees for reporting dangerous incidents or conditions to management or appropriate authorities.

Management Commitment

We will ensure that senior management is fully informed about pertinent HSE issues and take responsibility for carrying out HSE policy. We will consider demonstrated environmental commitment and HSE experience as factors in our selection of senior managers.

Audits and Reports

We support the concept of public accountability for HSE performance and intend to report on our progress in consistent, measurable terms.

RESPONSE PLAN COVER SHEET

Facility Name:	Toledo Refining Company, LLC – # 2 Tank Farm		
EPA FRP ID#:	FRP05A0540		
Facility Address:	2200 Pickle Rd Oregon, OH 43616.	1819 Woodville Rd Oregon, OH 43616.	
Phone Number: (24 hr)	(419) 698-6600	Fax Number:	(419) 697-6423
County:	Lucas County, OH	Primary SIC Code:	2911
Facility Start Date:	1895	Dun & Bradstreet:	005046511
Facility Latitude:	(b) (7)(F), (b) (3)	Facility Longitude:	(b) (7)(F), (b) (3)
NAICS Code	493190	Distance to Navigable Water:	<1/4 mile
Name of Protected Waterway or Environmentally Sensitive Area:	Otter Creek		

Owner Address:	Toledo Refining Company LLC 1819 Woodville Rd Oregon, OH 43616	Owner Phone Number (24 hr):	419-698-6600

Total Number of ASTs:	35	Largest AST Capacity: (gallons)	(b) (7)(F), (b) (3)
Total Number of USTs:	0	Total UST Storage: (gallons)	
Total Storage of Drums & Transformers that Contain Oil:			
Maximum Oil Storage Capacity (gallons):	(b) (7)(F), (b) (3)	Worst Case Discharge Amount (gallons):	
Number of Surface Impoundments:	0	Total Storage of Surface impoundments:	

Certification of the Applicability of the Substantial Harm Criteria

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons? Yes X No ___

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area? Yes ___ No X

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C–III to this appendix or a comparable formula[1]) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Plans: Fish and Wildlife and Sensitive Environments" (see Appendix E to this part, section 13, for availability) and the applicable Area Contingency Plan.
Yes X No ___

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III to this appendix or a comparable formula[1]) such that a discharge from the facility would shut down a public drinking water intake[2]? Yes X No ___

[1] If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

[2] For the purposes of 40 CFR part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).

5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil discharge in an amount greater than or equal to 10,000 gallons within the last 5 years? Yes X No ___

Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Signature

Refinery Manager
Title

Clark Wrigley
Name (Please type or print)

April 28, 2014
Date

APPENDIX C

RESPONSE RESOURCES

USCG CLASSIFIED OIL SPILL REMOVAL ORGANIZATIONS (OSROs)

Minimum Equipment Requirements for OSRO Classifications C-2

REVISED USCG OSRO CLASSIFICATIONS

The USCG has classified OSROs according to their response capabilities, within each Captain of the Port (COTP) zone, for vessels and for facilities in four types of environments. Response capabilities are rated A, B, C, D, or E as described below.

MINIMUM EQUIPMENT REQUIREMENTS FOR OSRO CLASSIFICATIONS			
Classification	**Resource Quantity Guidelines [2,3]**	**Maximum Facility Response Times**	**Maximum Vessel Response Times**
Rivers/Canals [1]			
A	Boom: 2,000 ft EDRC: 50 bbls TSC: 100 bbls	Boom Deployment: 1 hour EDRC/TSC: 2 hours	Boom Deployment: 1 hour EDRC/TSC: 2 hours
B	Containment Boom/Protective Boom: 4,000 ft / 4,000 ft EDRC: 1,250 bbls TSC: 2,500 bbls	High Volume Ports: 6 hours Other Ports: 12 hours	High Volume Ports: 12 hours Other Ports: 24 hours
C [4]	Containment Boom/Protective Boom: 4,000 ft / 10,000 ft EDRC: 1,875 bbls TSC: 3,000 bbls	High Volume Ports: 6 hours Other Ports: 12 hours	High Volume Ports: 12 hours Other Ports: 24 hours
D [4]	Containment Boom/Protective Boom: 4,000 ft / 16,000 ft EDRC: 3,750 bbls TSC: 6,000 bbls	High Volume Ports: 30 hours Other Ports: 36 hours	High Volume Ports: 36 hours Other Ports: 48 hours
E [4]	Containment Boom/Protective Boom: 4,000 ft / 22,000 ft EDRC: 7,500 bbls TSC: 12,000 bbls	High Volume Ports: 54 hours Other Ports: 60 hours	High Volume Ports: 60 hours Other Ports: 72 hours
Great Lakes			
A	Boom: 2,000 ft EDRC: 50 bbls TSC: 100 bbls	Boom Deployment: 1 hour EDRC/TSC: 2 hours	Boom Deployment: 1 hour EDRC/TSC: 2 hours
B	Containment Boom/Protective Boom: 6,000 ft / 6,000 ft EDRC: 1,250 bbls TSC: 2,500 bbls	All Ports: 6 hours	All Ports: 12 hours
C [4]	Containment Boom/Protective Boom: 12,000 ft / 12,000 ft EDRC: 6,350 bbls TSC: 10,000 bbls	All Ports: 12 hours	All Ports: 18 hours
D [4]	Containment Boom/Protective Boom: 18,000 ft / 18,000 ft EDRC: 12,300 bbls TSC: 20,000 bbls	All Ports: 36 hours	All Ports: 42 hours
E [4]	Containment Boom/Protective Boom: 24,000 ft / 24,000 ft EDRC: 25,000 bbls TSC: 40,000 bbls	All Ports: 60 hours	All Ports: 66 hours

REVISED USCG OSRO CLASSIFICATIONS (Cont'd)

Inland			
A	Boom: 2,000 ft / 6,000 ft EDRC: 50 bbls TSC: 100 bbls	Boom Deployment: 1 hour EDRC/TSC: 2 hours	Boom Deployment: 1 hour EDRC/TSC: 2 hours
B	Containment Boom/Protective Boom: 6,000 ft / 6,000 ft EDRC: 1,250 bbls TSC: 2,500 bbls	High Volume Ports: 6 hours Other Ports: 12 hours	High Volume Ports: 12 hours Other Ports: 24 hours
C [4]	Containment Boom/Protective Boom: 12,000 ft / 12,000 ft EDRC: 12,500 bbls TSC: 20,000 bbls	High Volume Ports: 6 hours Other Ports: 12 hours	High Volume Ports: 12 hours Other Ports: 24 hours
D [4]	Containment Boom/Protective Boom: 18,000 ft / 18,000 ft EDRC: 25,000 bbls TSC: 40,000 bbls	High Volume Ports: 30 hours Other Ports: 36 hours	High Volume Ports: 36 hours Other Ports: 48 hours
E [4]	Containment Boom/Protective Boom: 24,000 ft / 24,000 ft EDRC: 50,000 bbls TSC: 80,000 bbls	High Volume Ports: 54 hours Other Ports: 60 hours	High Volume Ports: 60 hours Other Ports: 72 hours
Oceans			
A	Boom: 2,000 ft EDRC: 50 bbls TSC: 100 bbls	Boom Deployment: 1 hour EDRC/TSC: 2 hours	Boom Deployment: 1 hour EDRC/TSC: 2 hours
B	Containment Boom/Protective Boom/Initial Response Boom [5]: 6,000 ft / 4,000 ft / 4,000 ft EDRC: 1,250 bbls TSC: 2,500 bbls	High Volume Ports: 6 hours Other Locations: 12 hours (for open ocean, plus travel time from shore)	High Volume Ports: 12 hours Other Locations: 24 hours (for open ocean, plus travel time from shore)
C	Containment Boom/Protective Boom/Initial Response Boom [5]: 12,000 ft / 7,000 ft / 5,000 ft EDRC: 12,500 bbls TSC: 20,000 bbls	High Volume Ports: 6 hours Other Locations: 12 hours (for open ocean, plus travel time from shore)	High Volume Ports: 12 hours Other Locations: 24 hours (for open ocean, plus travel time from shore)
D	Containment Boom/Protective Boom/Initial Response Boom [5]: 18,000 ft / 12,000 ft / 6,000 ft EDRC: 25,000 bbls TSC: 40,000 bbls	High Volume Ports: 30 hours Other Locations: 36 hours (for open ocean, plus travel time from shore)	High Volume Ports: 36 hours Other Locations: 48 hours (for open ocean, plus travel time from shore)
E	Containment Boom/Protective Boom/Initial Response Boom [5]: 24,000 ft / 16,000 ft / 8,000 ft EDRC: 50,000 bbls TSC: 80,000 bbls	High Volume Ports: 54 hours Other Locations: 60 hours (for open ocean, plus travel time from shore)	High Volume Ports: 60 hours Other Locations: 72 hours (for open ocean, plus travel time from shore)

[1] Rivers/canals include bodies of water, including the Intracoastal Waterway and other bodies artificially created for navigation, confined within an inland area and having a project depth of 12 feet (3.66 meters).

[2] EDRC stands for "effective daily recovery capacity" or the calculated recovery capacity of oil recovery devices determined by using a formula that takes into account limiting factors such as daylight, weather, sea state, and emulsified oil in the recovered material.

[3] TSC stands for "temporary storage capacity" meaning sufficient storage capacity equal to twice the EDRC of an OSRO. Temporary storage may include inflatable bladders, rubber barges, certified barge capacity, or other temporary storage that can be utilized on scene at a spill response and which is designed and intended for the storage of flammable or combustible liquids. It does not include vessels or barges of opportunity for which no pre-arrangements have been made. Fixed shore-based storage capacity, ensured available by contract or other means, will be acceptable.

[4] 20% of resources must be capable of operating in waters of 6 feet (1.82 meters) or less.

[5] Initial response boom amounts specify the amount of boom that must be available for immediate transport to the site of the spill as far as 50 miles offshore. The other boom can be moved to a shoreline point for transport as needed at a later time.

APPENDIX D

WASTE ANALYSIS / DISPOSAL PLAN

Page

Overview D-2

Handling Excavation Soils (Document No. 26) D-3

Internal Waste Material Handling and Disposal (Document No. 33) D-6

WASTE MANAGEMENT

OVERVIEW

This Section provides Toledo Refining Company policies and guidelines for waste classification, handling, transfer, storage and disposal techniques.

A major oil spill response would generate significant quantities of waste material ranging from oily debris and sorbent materials to sanitation water and used batteries. All these wastes need to be classified and separated (i.e., oily, liquid, etc.), transported from the site and treated and/or disposed of at approved disposal sites. Each of these activities demands that certain health and safety precautions be taken, which are strictly controlled by federal and state laws and regulations.

It is the responsibility of Toledo Refining Company's Waste Disposal Specialist to manage waste disposal needs during an oil spill cleanup in accordance with Toledo Refinery Environmental Procedures, Handling Excavation Soils (Document No. 26) and Internal Waste Material Handling and Disposal (Document No. 33. These documents are presented on the following pages.

Handling Excavation Soils
Document No. 26

Toledo Refining Company

1.0 Purpose/Scope

(Note: Agreements have been made with prior owners that historical undergound events may be covered by their costs and not PBF. It should be noted that the environmental department is tracking and billing previous owners for those such events. Please contact the environmental department should any of these events occur.)

1.1 Purpose: The purpose of this procedure is to provide guidance for the proper handling, sampling and disposal of potentially hydrocarbon contaminated soil which results from an excavation.

1.2 Scope / Applicability: This procedure applies to all refinery personnel that may direct excavation activities associated with potentially hydrocarbon-contaminated soil.

2.0 Definitions

2.1 Petroleum Contaminated Soil (PCS): Soil that has any amount of petroleum constituents in it, from any man made source such as line leaks, spills, or tank-bottom leaks.

2.2 RCRA: Resource Conservation and Recovery Act: The federal regulation that dictates management standards for solid and hazardous wastes. (40 CFR 260-280)

3.0 General Requirements

3.1 According to Ohio EPA letter (Environmental library file number 451), PCS is considered a waste if:

3.1.1 A governmental agency with proper regulatory authority requires that it be disposed of offsite, or

3.1.2 Toledo Refining Company decides to move it offsite, or

3.1.3 Toledo Refining Company considers the soil to be a waste.

3.2 PCS may be used as backfill for excavations, if conditions in Section 4.6 of this procedure are met.

3.3 If soil that is petroleum contaminated has been determined to be a waste and is intended for offsite disposal, the waste must be managed according to RCRA standards, and potentially managed as a hazardous waste. In this event contact the Environmental Department for guidance before starting the job, or as soon as it is decided that the soil is waste.

3.4 The person in charge of the soil excavation job must comply with all the requirements of CA training, including having approved contracts, scope, budget, work order, JSA, etc. for the work to be done.

4.0 Procedure/Process

4.1 Soil piles that are generated, as a response of a spill or line leak, must be treated as hydrocarbon contaminated until documented otherwise. If during other types of excavations, it becomes evident that the soil is contaminated, immediately cease excavation activities until a tarp or roll off box is secured for the contaminated soil only. Reminder: Any non-contaminated soil that comes into contact with hydrocarbon contaminated soil must then be considered contaminated.

4.2 For all excavations, place a sign on the soil pile, noting the origin of soil, and the date. The sign needs to be substantial / weather proof and permanently or firmly affixed to the pile. Signs may be handmade or made on a computer and placed in a plastic sheath. A blank line should be on the sign that can be completed when the determination is made as to if the soil may be reused or if the soil must be disposed of in an offsite facility.

4.3 If there is no evidence of contamination, as listed below. No further action required. Soil is presumed to be hydrocarbon contaminated if any of these conditions exist:

4.3.1 Surface water in an excavation in contact with the soil has a visible sheen,

4.3.2 The soil exhibits a visible and characteristic oil stain,

4.3.3 The soil has a characteristic hydrocarbon odor.

4.4 Guidelines for management of PCS and suspected PCS, to be followed by the individual responsible for the job (this may be RMF Foreman, Contract Administrator, Supervisor or Environmental Engineer):

4.4.1 When conducting a job, task, work order, etc., if PCS is encountered, notify the job supervisor and the Environmental Department immediately.

Note: There is no requirement to remove all PCS in every situation when it is encountered. Notifying the environmental department will allow records to be kept of known subsurface contamination.

4.4.2 Notify the Environmental Department contact for the area you are working in if any petroleum contaminated soil is to be left in place and backfilled.

4.4.3 The Environmental Department will keep a record of any known subsurface contamination that was left in place.

4.4.4 Segregate petroleum contaminated from uncontaminated soil.

4.4.5 Place PCS non-benzene, toluene, crude, xylene bearing contaminated soil on a plastic tarp or sheet. Cover soil pile with another plastic tarp or sheet to prevent rainwater from leaching through the contaminated soil and spread petroleum contamination. For PCS containing or suspected of containing benzene, toluene, crude or xylene see 4.4.6

Note: Tarp must remain in place until soil is properly reused or disposed.

4.4.6 Benzene, toluene, crude or xylene product requirements:

4.4.6.1 If the contaminated soil is known to have benzene, toluene, crude or xylene in it, do not place it on plastic, but instead place it into a roll off box and cover when not in active use. Besides benzene product itself, the following materials may be presumed to contain an appreciable amount of benzene: toluene, gasoline, reformates raffinate, wastewater slop oil, and crude oil.

4.4.6.2 Call the environmental department to get a rolloff box with a vapor-tight lid or cover delivered to the job site.

4.4.6.3 Call the environmental department to have the vapor tight lid on the rolloff box tested once it is loaded to ensure that <500 ppm VOC is detected at the lid-seal portion of the rolloff box with an approved monitoring instrument (Method 21). The environmental department can also ensure that the proper sampling is performed.

4.5 Sampling of contaminated soil is to be done by the individual responsible for the job (this may be the Contract Administrator, Supervisor, or Environmental Engineer):

4.5.1 Obtain clean sampling utensil(s) from the Toledo Refining Company laboratory or the environmental department.

Note**: Utensils must not have been in hydrocarbon contact, unless they have been thoroughly decontaminated.**

4.5.2 Obtain either a clean wide mouth glass jar or a NASCO Whirl-Pak bag from the Toledo Refining Company laboratory to use for sample collection.

4.5.3 Collect multiple samples from different corners/spots in the excavated soil, from several depths (at least 4" to 6" under dirt surface) and combine them into a composite sample.

4.5.4 Fill the sample bottle or bag with a representative sample from the composite sample that was made in Section 4.5.3 above.

Note: Sample must be representative or "worst case", so sample at areas where highest potential for contamination is possible.

4.5.5 Label the container which holds the composite sample with the following sample information:

4.5.5.1 Date, time sample was collected, person that collected the sample, sample name/origin.

4.5.5.2 Contact the Environmental Department to request analytical testing for the sample: These may include TPH (Total Petroleum Hydrocarbon), BTEX (benzene, toluene, ethylbenzene, and xylene), TCLP and flashpoint.

Note: If the sample is going to be used for a hazardous waste determination, contact the environmental department prior to taking the sample for special sampling requirements and to obtain sample preservation instructions.

4.5.6 A completed chain-of-custody (COC) form must accompany samples. The COC indicates the person who had custody or control of the sample starting at the time the sample was taken, and lists every transfer of custody at every point in transit to the off-site commercial laboratory. The Environmental Department will provide chain-of-custody forms, obtained from the commercial laboratory.

4.5.7 All soil samples will be sent to the Environmental Department for coordination of analytical work at an offsite laboratory.

4.5.8 The Environmental Department will:
4.5.8.1 Obtain contract with a qualified lab,
4.5.8.2 Have the lab pick up the samples from the refinery,
4.5.8.3 Receive all sample results from the offsite laboratory.
4.5.8.4 Forward analytical results to the appropriate person in charge.

Note: If a sample is to be shipped to an offsite lab, the refinery laboratory will assist with proper packaging and labeling to comply with DOT regulations.

4.6 Disposition of Petroleum Contaminated Soil (PCS)

4.6.1 Options for onsite re-use of soil contact the environmental department for guidelines.

4.6.2 No PCS shall be used as backfill on property that Toledo Refining Company does not own.

5.0 Monitoring and Reporting

5.1 The Environmental Department will receive the laboratory results from the offsite laboratory.

5.2 The laboratory report will be forwarded to the person who is responsible for the excavation if necessary.

6.0 Recordkeeping

6.1 The Environmental Department will keep the laboratory results on file for a period of 10 years.

Revision Log

Revision Date	Document Authorizer	Document Reviewer	Document Author	Revision Details
June 11, 2003	P Hanley	P Hanley	TNeuhart/SShelt	Added Checklist and modified section 3 and 4
June 15, 2006	P Hanley	P Hanley	S Shelt	Editorial changes, removed C&W
Sept 21, 2006	P Hanley	P Hanley	S Shelt	Editorial changes
March 27, 2007	P. Hanley	P. Hanley	S. Shelt	Revised for MACT changes
March 27, 2009	E. Moore	S. Shelt	S. Shelt	No changes required.
May 18, 2009				Administrative Update – Revised Revision date, updated revision log from 3/27/2009 review of procedure
June 27, 2011		S.Shelt		Adminstrative changes for TRC change-over only.
June 19, 2014	E. Moore	S. Shelt	S.Shelt	Adminstrative and minor changes olny.(Including the beginning note)

Internal Waste Material Handling and Disposal
Document No. 33

Toledo Refining Company

Material Handling and Disposal

Document Number: 33

1.0 Purpose/Scope

The purpose of this procedure is to describe the handling process for waste materials transported, relocated, and/or disposed internal to the refinery and in preparation for shipping material outside the facility.

2.0 Definitions

2.1 *Waste* – any material that has been abandoned, reached the end of its useful life, marked for disposal, and/or destined to be recycled off-site

2.2 *Flowable Waste* – A material meeting the definition of a waste that can be pumped or gravity fed

2.3 *Solid Waste* - A material meeting the definition of a waste that cannot be pumped or gravity fed

2.4 *DOT container* – A container approved by DOT for shipping materials over a public road. Liquid materials are to be in leak tight containers only. Note: solid materials are defined by passing "paint filter" test for landfills. If the material can not pass the "paint filter" test it is to be considered a liquid material and would require a leak tight container.

3.0 General Requirements

This procedure was created to ensure that Toledo Refining Company complies with the appropriate RCRA and DOT regulations. By documenting the transportation, relocation, and/or disposal of waste materials, Toledo Refining Company can more easily demonstrate compliance with federal, state, or local environmental regulations.

4.0 Procedure/Process

4.1 A Toledo Refining Company Representative requests Contractor to transport and/or remove a waste material within the boundaries of the refinery.

4.1.1 Flowable Wastes

- ♦ If waste material is flowable and is a petroleum product, the material can be off-loaded at one of several intra-refinery disposal sites, based on the amount of oil and water in the waste, per the flow chart entitled "Internal

Waste Material Handling and Disposal for Flowable Materials", which can be found in Appendix A. As a guideline; typical hydrocarbon and benzene containing material should go directly to wastewater treatment tanks. If material has a high concentration of water and no benzene the barrel dump can be utilized. The bundle pit should be used for only washing out trucks and during bundle washing. If the material may contain heavy solids then arrangements should be made to put into vac boxes or material may go directly into wastewater tanks depending on the solid content. Wastewater treatment operators should be notified ahead of time to confirm they are able to take any material to be put into their system.

- ♦ If waste material is flowable (not a petroleum product) and is polycase solid/liquid, the material shall be off-loaded in the designated polycase vacuum roll off for disposal or another tank suited for storing until disposal.

- ♦ If waste material is flowable (not a petroleum product or polycase liquid), the Toledo Refining Company Facility Shift Supervisor must be consulted for disposal instructions. *Note: This type material may include but is not limited to high COD, caustics or acid solutions and may require a drain rate before discharging to wastewater.*

4.1.2 Non-Flowable Wastes (Solids and Semi-Solids)

4.1.2.1 If waste material is non-flowable and the waste is suspect hazardous, Contractor is to contact Toledo Refining Company Environmental for verification as to whether sampling prior to staging and/or disposal is required.

- ♦ If sampling is required, the Contractor or environmental depart will use appropriate SW-846 sampling techniques and acquire the appropriate number of samples. A Toledo Refining Company representative may oversee this process. Refer to Environmental Document No. 213 for guidance on sampling techniques.

  After sampling, the waste is placed in an approved DOT container, labeled as a hazardous waste with the suspected or known waste code(s), and staged in the 90-day hazardous waste storage area until hazardous or non-hazardous determination is made from the laboratory sample results.

- ♦ If sampling is not required and the waste is a hazardous waste the waste is then placed in an approved DOT container, labeled as a hazardous waste with the known waste code(s), and staged on the 90-day hazardous waste storage pad until arrangements are made for appropriate off-site disposal.

4.1.2.2 If waste material is non-flowable and the waste is not suspect hazardous, the waste is solidified for load-bearing strength or free

liquids, if needed, and/or placed in an approved DOT container, labeled non-hazardous, and placed in the non-hazardous waste storage area until arrangements are made for appropriate off-site disposal.

4.1.3 If unsure of the appropriate final disposal site of any waste material, verify with Toledo Refining Company Environmental Department or Facility Shift Supervisor prior to movement or disposal.

4.2 Movement Documentation

4.2.1 All pertinent movement data is to be logged onto the "Toledo Refining Company Internal Waste Tracking Log" by the Contractor. After completion of daily "Toledo Refining Company Internal Waste Tracking Log," Contractor should return completed logs to Toledo Refining Company Environmental at the end of each calendar week.

4.2.2 Additions to the container inventory spreadsheet that is maintained by Contractor must be done after staging is complete.

5.0 Monitoring and Reporting

5.1 Individual tracking information from the "Toledo Refining Company Internal Waste Tracking Log" will be compiled daily by the contractor. Copies of this will be kept in the Environmental Department.

5.2 The "Roll-Off Box Status Report" should be compiled weekly and stored on the "X" drive of the Environmental Department.

6.0 Recordkeeping

Toledo Refining Company Environmental will maintain a copy of the completed "Toledo Refining Company Internal Waste Tracking Log" for a period of five (5) years. Toledo Refining Company will retain the completed "Toledo Refining Company Roll-Off Status Report" for a minimum period of 13 weeks.

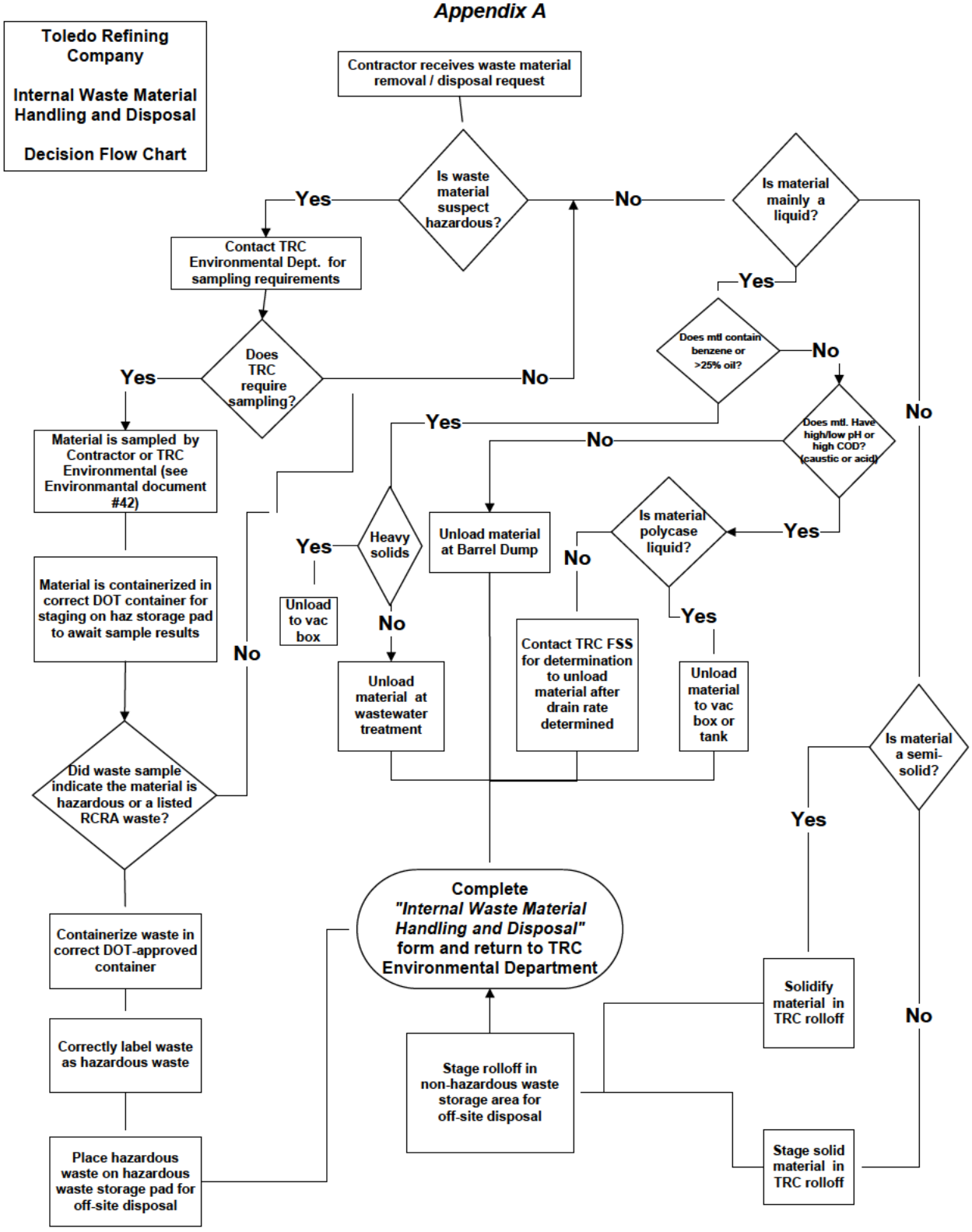
7.0 Records

Revision Log

Revision Date	Document Authorizer	Document Reviewer	Document Author	Revision Details
November 15, 2004	PHanley	PHanley	TNeuhart/SShelt	Fixed flowchart
November 19, 2004	PHanley	PHanley	TNeuhart/SShelt	To section 4.1 and Section 6
April 26, 2005	PHanley	PHanley	TNeuhart/SShelt	To Section 5.0 and 6.0
October 16, 2006	PHanley	Shelt	Shelt	Updated OEMS Info.

October 31, 2006	PHanley	Shelt	Shelt	Updated to include DOT container definition.
October 23, 2008	EMoore	SShelt	SShelt	Changed polycase material handling and Sampling plan document number due to new procedures.
November 1, 2010	E. Moore	S. Shelt	S.Shelt	Removed the 820 tank indication.
August 29, 2012	E. Moore	J. Romp	J. Romp	Updated Off-load points under 4.1.1: Removed TK-510. Changed U.S. Filter Slop Oil Tank to WWTU Slop Oil Tank. M. Rossnagel
November 30, 2012	E. Moore	E. Moore	S. Shelt	Minor wording and flow chart updates
March 22, 2013	E.Moore	E. Moore	S. Shelt	Revised Appendix A and section 4.1 to include wastewater treatment, benzene material, high COD and high/low pH items.

Appendix A


Toledo Refining Company
Internal Waste Material Handling and Disposal
Decision Flow Chart
Contractor receives waste material removal / disposal request
Is waste material suspect hazardous?
Yes
No
Is material mainly a liquid?
Contact TRC Environmental Dept. for sampling requirements
Does TRC require sampling?
Yes
No
Does mtl contain benzene or >25% oil?
Yes
No
Does mtl. Have high/low pH or high COD? (caustic or acid)
Yes
No
Material is sampled by Contractor or TRC Environmental (see Environmantal document #42)
Material is containerized in correct DOT container for staging on haz storage pad to await sample results
Heavy solids
Yes
No
Unload to vac box
Unload material at Barrel Dump
Is material polycase liquid?
Yes
No
Unload material at wastewater treatment
Contact TRC FSS for determination to unload material after drain rate determined
Unload material to vac box or tank
Did waste sample indicate the material is hazardous or a listed RCRA waste?
No
Is material a semi-solid?
Yes
No
Containerize waste in correct DOT-approved container
Correctly label waste as hazardous waste
Place hazardous waste on hazardous waste storage pad for off-site disposal
Complete "Internal Waste Material Handling and Disposal" form and return to TRC Environmental Department
Stage rolloff in non-hazardous waste storage area for off-site disposal
Solidify material in TRC rolloff
Stage solid material in TRC rolloff

Information on Discharge*
Facility: _____

(A) Reporting Party	(B) Suspected Responsible Party
Name:	Name:
Phone:	Phone:
Job Position:	
Company:	Company:
Address:	Organization Type: ☐ Private Citizen ☐ Private Enterprise ☐ Public Utility ☐ Local Government ☐ State Government ☐ Federal Government
City:	City:
State:	State:
Zip:	Zip:
Were materials discharged: ☐ Yes ☐ No	
Calling for Responsible Party: ☐ Yes ☐ No	
Date and Time of report call:	
Other Notifications : ☐ USCG ☐ EPA ☐ State ☐ Other:	

- It is not necessary to wait for all information before calling the National Response Center (NRC) 1-800 424-8802 or direct telephone: 202-267-2675

Incident Description			
Source and /or Cause of incident:			
Date of Incident:	Time of Incident:		
Incident Address/Location Nearest City/Distance from City/Township Range Borough:			
Storage Tank Container: Above Ground: ☐ Below ground: ☐ Other: ☐			
Container capacity (bbls):			
Facility Capacity			
Tank Capacity (bbls):	Latitude:	Longitude:	River Mile:

Information on Discharge*

Facility: _____

Materials	
Material Discharged:	
Quantity in water: (include units)	
Response Action	
Actions Taken to Correct or Mitigate Incident:	
Impact	
Number of Injuries:	Number of Fatalities:
Evacuations required: ☐ Yes ☐ No ☐ Unknown	If Yes: Number Evacuated:
Any Damage: ☐ Yes ☐ No ☐ Unknown	If Yes: Damage in Dollars:
Additional Information	

Toledo Refining Company

Toledo Refinery	***Document Authorizer:*** ***Health, Safety & Security Manager***
Issuing Dept: ***Health & Safety***	***Document Reviewer:*** ***Emergency Response & Security Supervisor***
Revision Date: ***February 18, 2011***	***Document Author:*** ***Emergency Response & Security Administrative Coordinator***
Next Review Date: ***February 18, 2016***	***Document Administrator:*** ***Emergency Response & Security Administrative Coordinator***

INITIAL RESPONSE

ASSIGNMENT

Primary: On-Duty Emergency Response Shift Supervisor

Secondary: On-Duty Senior Fire Marshal/Fire Marshal

The initial Response person is responding quickly to emergencies in (and in close proximity to) the Toledo Refining Company, LLC facilities, including the main refinery, Marine Terminal / Hocking Valley Dock and #2 Tank Farm. This person shall determine the initial actions to be taken to mitigate the emergency.

- Make initial "size up" of the emergency to determine the seriousness and what response is needed from internal personnel and Mutual Aid.
- Make initial set-up of equipment as needed to mitigate the emergency.
- Function as On-Scene Commander until the arrival of the Security Lead or designated relief.
- Utilize 'Incident Command Check Sheet'
    1. Reference note: Check sheet to be reviewed on the same schedule as this procedure.
- At the conclusion of the emergency:
    1. Report "All Clear" to the Dispatcher.
    2. See that all emergency response equipment is returned to the Firehouse and returned to a state of readiness.
    3. Return Fire Water System to state of readiness (firewater pumps, hydrants, monitors, etc.).

THE CONTROLLED VERSION OF THIS DOCUMENT CAN BE FOUND ON THE FACILITY INTRANET.

EMERGENCY RESPONSE TEAM PERSONNEL

ASSIGNMENT

Primary: Toledo Refining Company, LLC Emergency Response Team Personnel

Secondary: Mutual Aid Personnel

- Emergency Response Team personnel are responsible for carrying out the directives of the On-Scene Commander.
- Report to Refinery Fire Station and don appropriate Personal Protective Equipment for the emergency.
- Proceed to the location identified by the On-Scene Commander.
- Follow directives of On-Scene Commander to mitigate the emergency.
- At the conclusion of the emergency, assist in restoring all emergency response equipment to a ready state.

ON-SCENE COMMANDER

ASSIGNMENT

Primary: Security Lead

Secondary: Emergency Response Shift Supervisor

The On-Scene Commander is responsible for the “field” portion of the Emergency Response.

- Develop tactics for mitigation of the incident.
- Command field Emergency Response.
- Coordinate response with Command Personnel from other responding agencies.
- Maintain close communications and coordination with operations and tactical personnel.
- Maintain close communications with the “Emergency Command Center” and Emergency Manager, with updates on operations, emergency mitigation efforts, environmental impact, possible community impact, etc.
- Utilize cell phone to keep radio traffic to a minimum.
- Assess need for mutual aid/outside assistance

ON SCENE COMMAND POST SCRIBE

ASSIGNMENT

Primary: Process Safety Engineer

Secondary: Environmental Engineer

ROLES / RESPONSIBILITIES

- Immediately respond to Gate 1 for transport to On Scene Command Post (CP).
- Upon arrival at CP, begin transcription of CP communications (radio traffic, face to face discussions, etc.)
- Completion of all necessary Oil Spill Response Forms required
- Can be used by Incident Commander as necessary to facilitate the mitigation of the incident
- Provide situational report to ECC as needed per Incident Commander

EMERGENCY MANAGER

ASSIGNMENT

Primary: Refinery Manager

Secondary: Operations Manager

Tertiary: Area Manager(s)

The Emergency Manager is responsible for incident activities including the development and implementation of strategic decisions and for approving the ordering and releasing of resources.

- Report to Emergency Command Center. (Primary- HR Conference Room, Back-up- Lab Conference Room).
- Obtain incident briefing from On-Scene Commander.
- Activate Emergency Command Center.
- Assess incident situation.
- Activate elements of the Incident Command System as required by incident.
- Coordinate Emergency Command Center staff activity.
- Insure that all regulatory notifications and internal notifications are made by Facility Shift Superintendent or the Environmental Department.
- Depending on Incident, serve as or designate Media Spokesperson.
- Focus on “outside the gate” issues: insurance, neighbors, elected officials, other business groups.
- Get group to brainstorm on-going and/or longer-range issues from incident to work toward resolution of these issues when the immediate situation is handled.
- Ensure that the investigation of the incident is staffed and started.

OIL FLOW OFFICER

ASSIGNMENT

Primary: Planning & Economics Manager

Secondary: Senior Planning & Economics Advisor

- Report to Emergency Command Center (Primary- HR Conference Room, Back-up- Lab Conference Room).
- Obtain briefing from Emergency Manager.
- Assess oil flow impacts of the incident.
- Notify internal and external Supply Chain contacts as appropriate for the incident
- Prepare action plan to address oil flow/business impacts (communicate with the Emergency Manager in the Emergency Command Center).
- Implement Action Plan.
- Monitor incident and adjust action plan as the situation dictates.
- Prepare Economic Impact Assessment for follow-up report.

LIAISON OFFICER

ASSIGNMENT

Primary: Environmental Team Leader

Secondary: Environmental Engineer

The Liaison Officer is responsible for fulfilling requests from the Emergency Manager by providing coordination and appropriate management of all refinery resources.

- Report to Emergency Command Center. (Primary- HR Conference Room, Back-up- Lab Conference Room).
- Obtain briefing from Emergency Manager.
- Provide Primary interface with outside Environmental agencies.
- Assess need for community monitoring, working with Safety officer.
- Notify/update corporate officials as appropriate.
- If the event is an environmental incident only, prepare a one page summary (facts only, in bullet format) covering description, injuries, community impact, business impact, and current status. Send within 24 hours to Refinery Manager and HSE Manager for further distribution.
- Monitor incident operations to identify current or potential organizational problems.

HEALTH and SAFETY OFFICER

ASSIGNMENT

Primary: Health, Safety and Security Team Leader

Secondary: Process Safety Lead

The Safety Officer is responsible for monitoring the HS&S impact of the incident and determining what type of compliance action needs to be taken.

- Report to Emergency Command Center. (Primary- HR Conference Room, Back-up- Lab Conference Room).
- Obtain briefing from Emergency Manager.
- Assess the incident for health and safety impact on response personnel.
- Recommend a course of action to the Emergency Manager.
- Provide liaison between the Emergency Manager and OSHA/Department of Health personnel.
- If the event is an HS&S incident only, prepare a one page summary (facts only, in bullet format) covering description, injuries, community impact, business impact, and current status. Send within 24 hours to Refinery Manager and HSE Manager for further distribution.
- Dispatch appropriate representation to support the field's needs (i.e. Industrial Hygiene, Safety Engineer, security personnel, etc.).
- Liaison between On-Scene Commander and ECC

INFORMATION OFFICER

ASSIGNMENT

Primary: Public Relations

Secondary: Outside Public Relations Firm

The Information Officer is responsible for the formulation and release of information about the incident to the news media and other appropriate agencies and organizations.

- Report to Emergency Command Center. (Primary- HR Conference Room, Back-up- Lab Conference Room).
- Obtain briefing from Emergency Manager.
- Establish Incident Information Center.
- Prepare initial information summary as soon as possible after arrival.
- Obtain approval for release of information from Emergency Manager/Legal.
- Release information to News Media and post information in Emergency Command Center.
- Arrange press conferences with appropriate personnel.
- Respond to special requests for information.
- Stay in touch with News Media.
- Activate insurance claims process.

OPERATIONS FIELD LIAISON

ASSIGNMENT

Primary: Shift Supervisor

Secondary: Shift Supervisor

The Operations Field Liaison is responsible for providing a communications line to Emergency Personnel as to what is happening from an Operations standpoint, and to pass information to Operations Personnel as to Emergency Response activities.

- Report to Emergency (report to the On-Scene Commander).
- Maintain close communications and coordination with Operations and Emergency Response Personnel.

PLANNING OFFICER

ASSIGNMENT

Primary: Technical Manager

Secondary: Technical Support Lead Engineer

The Planning Officer is responsible for the collection, evaluation, dissemination and use of information about the development of the incident and status of resources.

- Report to Emergency Command Center. (Primary- HR Conference Room, Back-up- Lab Conference Room).
- Obtain briefing from Emergency Manager.
- Establish information requirements and reporting schedules for all Incident Command System organizational elements for use in preparing the Incident Action Plan.
- Prepare Incident Action Plan based on strategic and tactical options.
- Identify need for specialized resources. Assemble information of alternative strategies and tactics based on interface with On-Scene Command, Incident Potential, and other incident Command System information.
- Compile and display incident status summary information.
- Prepare recommendations for release of resources for review with the Emergency Manager.

LOGISTICS OFFICER

ASSIGNMENT

Primary: Maintenance Manager

Secondary: Projects and Reliability Manager

The Logistics Officer is responsible for providing facilities, services, and material in support of the incident response.

- Report to Emergency Command Center. (Primary- HR Conference Room, Back-up- Lab Conference Room).
- Obtain briefing from Emergency Manager.
- Identify service and support requirements for planned or expected operations.
- Coordinate and process requests for additional resources.
- Advise Emergency Manager on current service and support capabilities.
- Estimate future service and support requests.

RECORDING OFFICER

ASSIGNMENT

Primary: Human Resources Manager

Secondary: Human Resources Advisor (Services)

The Recording/Finance Officer is responsible for maintaining accurate and complete incident file records. The Recording/Finance Officer is also responsible for all financial and cost analysis aspects of the incident. This position should be heavily involved in the development and implementation of the Incident Action Plan.

- Report to Emergency Command Center. (Primary- HR Conference Room, Back-up- Lab Conference Room).
- Obtain briefing from Emergency Manager.
- Track status of all requests made to Emergency Command Center.
- Maintain Activity Log in chronological order.
- Provide Emergency Manager with status reports.
- Distribute information as needed.
- Compile notes and deliver to Emergency Manager after the incident.
- Establish finance unit in Main Office Building.
- Develop an operation plan for the finance function for the incident.
- Provide input on financial on cost matters.
- Insure that all financial obligation documents initiated at the incident are properly prepared and completed.

MATERIALS MANAGEMENT OFFICER

ASSIGNMENT

Primary: Purchasing Lead

Secondary: Purchasing Specialist

The Materials Management officer is responsible for providing facilities, services, and material in support of the incident response.

- Report to Emergency Command Center. (HR onsite incidents, Laboratory back-up location or designated off-site center).
- Obtain briefing from Emergency Manager.
- Assist Logistics Officer to obtain the required service and support for planned or expected operations.
- Assist with work orders, purchase orders, material tracking and contract services for additional resources.
- Assist Financial Officer with tracking costs of materials consumed.
- Ensure that Oil Spill Response Organization (OSRO) contracts are up-to-date.
- Ensure that agreements are in place and up-to-date for assistance such as vacuum trucks, baker tanks, etc…. in the event of a large incident.
    - Establish finance unit in Main Office Building.
    - Develop an operation plan for the finance function for the incident.
    - Provide input on financial on cost matters.
    - Insure that all financial obligation documents initiated at the incident are properly prepared and completed.

Revision Log

Revision Date	Document Authorizer	Document Reviewer	Document Author	Revision Details
10/25/02	P. Hanley	E. Dunberger	J. Utendorf	Intial Version
8/23/04				Added OEMS information
10/9/05	H. Szymanski	E. Dunberger	J. Utendorf	1. Changed review date to reflect annual review 2. Added role of Materials Management Officer
7/10/06	H. Szymanski	E. Dunberger	J. Utendorf	Changed 'Facility Manager' to 'Operations Manager'
3/28/07	H. Szymanski	E. Dunberger	J. Utendorf	Added Underlined text to 'Initial Response' page, made minor formatting corrections.
3/31/08	R. Vogel	E. Dunberger	J. Utendorf	Emergency Manager Primary, Secondary and Tertiary changed. Safety Officer secondary changed. Materials Management Officer secondary changed. Recording/Finance Officer secondary changed. Logistics Officer secondary changed. Safety and Liaison Officers reporting criteria updated. Corrected minor typos.
10/16/09	R. Vogel	E. Dunberger	K. Dempsey	Updated per revised FRP and staff restructuring.
3/17/11	R. Vogel	E. Dunberger	K. Dempsey	Updated document to reflect change of facility ownership. Added role of On Scene Command Post Scribe

APPENDIX G

MISCELLANEOUS FORMS

Page

Qualified Individual (QI) Notification Exercise - Internal Exercise Documentation G-2

Team Tabletop Exercise - Internal Exercise Documentation G-3

Equipment Deployment Exercise - Internal Exercise Documentation G-4

Discharge Prevention Meeting Log (Sample) G-5

Tank Inspection Checklist G-6

Secondary Containment Inspection Checklist G-7

Forms and Exercise Documentation File Maintenance Procedures

- Forms and exercise documentation records should be maintained in a separate file in the Facility's office filing system.
- These files must be available for presentation upon request by regulatory agency personnel.
- Facility also utilizes Coast Guard Incident Action Plan forms such as ICS201, ICS208, etc. Forms available on the Coast Guard Internet site.

Qualified Individuals (QIs) Notification Exercise
Procedure No. 77

Toledo Refinery – Health, Safety & Security Department

Qualified Individuals Notification Test			
Dispatcher Name:		**Time Text Message was Sent on the Phone System?**	
Emergency Response Shift Supervisor:		**Date of Test:**	

Qualified Individuals Notified	Time QI Called the Dispatcher	Comments
1. Elmer Dunberger		
2. Keith Dempsey		
3. Edward Donnelly		
4. Philip Wojcinski		
5.		

Note: It is not a requirement that 100% of the QI's return the call. Only the QI on call or a delegate is required to be available. This checklist documents that Toledo Refining Company, LLC has tested the system.

Records: Health, Safety & Security Department maintains original for 5 years.
HSE Manager receives copy.
Security Lead receives copy.

Reference Document for this record is Health, Safety & Security Procedure 76.

Spill Management Team Tabletop Exercise
Internal Exercise Documentation
Procedure No. 82

Table Top Exercise

1. Date Performed:			2a. Exercise or Actual Response:	
3. Location:			2b. If Exercise, Announced or Unannounced:	
4. Times:	Start Time:		5. Response plan scenario used simulated ☐ Average most probable discharge (gallons) ☐ Maximum most probable discharge _____ ☐ Worst case discharge	Size of Discharge
	Completion Time:			
6. Preplanned Objective No. 1:				
7. Preplanned Objective No. 2:				
8. Preplanned Objective No. 3:				
9. Preplanned Objective No.4:				
10. Preplanned Objective No.5:				
11. Lessons Learned/Corrective Action Items assigned (if necessary):				

Retain this form and other documentation related to this exercise on file for a period of 5 years.

_____

Certifying Signature - Incident Commander

Equipment Deployment Exercise (Semiannual)
Internal Exercise Documentation Form
Procedure No. 80

Equipment Deployment

1. Date Performed:			2a. Exercise or Actual Response:		
3. Deployment Location:			2b. If Exercise, Announced or Unannounced:		
4. Times:	Start Time:		5. Equipment Deployed was; (check all that apply)	☐ Facility Owned	☐ OSRO Owned
	Time OSRO called:		6. List Type and amount of all equipment deployed and number of support personnel employed:		
	Time On-scene:				
	Time boom deployed:				
	Time recovery equipment on-scene				
	Time Completed				

7. Describe goals of the deployment (Attach sketch of equipment deployments and booming strategies):
8. For deployment of facility owned equipment, was the amount of equipment deployed at least the amount necessary to respond to your facility's average most probable spill and deployed in the intended operating environment.
9. Did personnel responsible for its deployment in the event of an actual spill deploy the equipment?
☐ YES or ☐ NO.
10. Was all deployed equipment operational? If not, why not?
☐ YES or ☐ NO.
IF NO:
11. Identify which of the 15 core components were exercised during this particular exercise:
12. Lessons Learned/Corrective Action Items assigned (if necessary):

_____

Certifying Signature - Incident Commander

SAMPLE

DISCHARGE PREVENTION MEETING LOG

Date:	
Attendees:	

Subject/Issue	Required Action	Implementation

Tank Inspection Checklist

Monthly Aboveground Storage Tank Inspection Report

☐ External Floater (EFR) ☐ Internal Floater (IFR) ☐ Cone ☐ Other

Location:	Tank Status:	Tank Number:
Inspected By:	(INITIAL)	Date of Inspection:
Assess the condition of the following items:		**Remarks for "UNSAT" comments**
Ladders, Stairways, Platforms, and Walkways:		
- Corrosion ☐ N/A ☐ SAT ☐ UNSAT		
- Broken or missing parts ☐ N/A ☐ SAT ☐ UNSAT		
- Cracked, spalled or deteriorated concrete ☐ N/A ☐ SAT ☐ UNSAT		
- Area lighting ☐ N/A ☐ SAT ☐ UNSAT		
Foundations:		
- Build up or erosion of soil around tank bottom ☐ N/A ☐ SAT ☐ UNSAT		
- Excessive settlement of one side of the tank ☐ N/A ☐ SAT ☐ UNSAT		
- Cracked, spalled or deteriorated ringwall ☐ N/A ☐ SAT ☐ UNSAT -		
For tanks on concrete foundation – tank grounding ☐ N/A ☐ SAT ☐ UNSAT		
Piping & Shell Connections i.e. nozzles, MWs, mixers, steam traps and valves:		
- Cracks ☐ N/A ☐ SAT ☐ UNSAT Corrosion ☐ N/A ☐ SAT ☐ UNSAT		
- Distortions ☐ N/A ☐ SAT ☐ UNSAT Leakage ☐ N/A ☐ SAT ☐ UNSAT		
- Grounding connections ☐ N/A ☐ SAT ☐ UNSAT		
- Do all applicable vents, drains and bleeders have plugs? ☐ N/A ☐ YES ☐ NO		
Tank, Shell, Roof and Bottom:		
- Leaks (including spills and overfills) ☐ N/A ☐ SAT ☐ UNSAT		
- Visual inspection of under bottom leak detection ☐ N/A ☐ SAT ☐ UNSAT		
- Corrosion ☐ N/A ☐ SAT ☐ UNSAT		
- Cracks ☐ N/A ☐ SAT ☐ UNSAT Bulges ☐ N/A ☐ SAT ☐ UNSAT		
- Labels (DOT Diamond, Tank No., Shell Nozzles, etc) ☐ N/A ☐ SAT ☐ UNSAT		
- Gauge hatch - operational/fully functional ☐ N/A ☐ SAT ☐ UNSAT		
- gasket in place and in good condition ☐ N/A ☐ SAT ☐ UNSAT		
- secured tightly closed ☐ N/A ☐ SAT ☐ UNSAT		
- (IFR/Cone) Access/Inspection hatches closed ☐ N/A ☐ SAT ☐ UNSAT		
Vent hoods closed ☐ N/A ☐ SAT ☐ UNSAT		
- (IFR) Access hatch accessible? ☐ N/A ☐ YES ☐ NO		
If yes, open roof access hatch and inspect for visible openings, oil & visible seal defects ☐ N/A ☐ SAT ☐ UNSAT		
- (IFR/EFR) Product level above minimum fill ☐ N/A ☐ SAT ☐ UNSAT		
- (EFR) Roof free of oil ☐ N/A ☐ SAT ☐ UNSAT		
Vacuum Breaker(s) closed ☐ N/A ☐ SAT ☐ UNSAT		
Rim Seals - No visible gaps or defects ☐ N/A ☐ SAT ☐ UNSAT		
Rim Vents closed ☐ N/A ☐ SAT ☐ UNSAT		
Gauge Tube Emission Control ☐ N/A ☐ SAT ☐ UNSAT		
Floating Roof ladder and ground cables ☐ N/A ☐ SAT ☐ UNSAT		
All other openings in Floating Roof closed ☐ N/A ☐ SAT ☐ UNSAT		
Roof drain working and normally closed ☐ N/A ☐ SAT ☐ UNSAT		
Dikes: ☐ This Section N/A		
- Access. ☐ N/A ☐ SAT ☐ UNSAT Clear of weeds, etc ☐ N/A ☐ SAT ☐ UNSAT		
- Erosion ☐ N/A ☐ SAT ☐ UNSAT Housekeeping ☐ N/A ☐ SAT ☐ UNSAT		
- Cracks in masonry fire walls ☐ N/A ☐ SAT ☐ UNSAT		
- No openings in the dike wall ☐ N/A ☐ SAT ☐ UNSAT		
- Pipe intrusions through the dike wall sealed ☐ N/A ☐ SAT ☐ UNSAT		
- Drainage and general condition ☐ N/A ☐ SAT ☐ UNSAT		
- Any accumulation of water? Hydrocarbon? ☐ N/A ☐ SAT ☐ UNSAT		
- Drain valve operated and okay ☐ N/A ☐ SAT ☐ UNSAT		
- Drain valve secured in the closed position ☐ N/A ☐ SAT ☐ UNSAT		
- No open excavations in dike area ☐ N/A ☐ SAT ☐ UNSAT		
Tk Gauges: Auto ☐ N/A ☐ SAT ☐ UNSAT Board ☐ N/A ☐ SAT ☐ UNSAT		
Independent High Level Alarm Test (pull lever):		
- HH Alarm ☐ N/A ☐ SAT ☐ UNSAT 2nd Alarm ☐ N/A ☐ SAT ☐ UNSAT		
General Comments: ☐ SAT ☐ UNSAT		

ATG Gauge _____ Secondary Gauge _____ Hand Gauge _____ Board Gauge _____ Water Cut _____

Computer Gauge _____ Hand Temp _____ Local Temp _____ Auto Temp _____

Submit completed form to Operations' Supervision — FORM: Monthly AST Inspection Report, Last Rev. 4/23/2009

Paper copies are uncontrolled; latest copy can be obtained from TDMS. — Date Printed: 3/24/2011

Secondary Containment Inspection

Secondary Containment Checklist		
Inspected by:	**Date:**	**Asset No.:**

Inspection Items	YES	NO	NA	Remarks
Dike or Berm System				
1. Is there any precipitation in the dike that needs to be drained?	☐	☐	☐	
2. Is there anything wrong with the functionality of the drainage valves?	☐	☐	☐	
3. Are there holes or cracks in the dike or berm?	☐	☐	☐	

Is Condition Present				
Inspection Item	YES	NO	NA	Remarks
Dike or Berm Systems				
1. Is debris present in the d ke/berm?	☐	☐	☐	
2. Is there erosion of earthen dike/berm system?	☐	☐	☐	
3. Is there any discoloration due to oil?	☐	☐	☐	
4. Is there any spilled or leaked material inside the d ke/berm?	☐	☐	☐	
Oil Bearing Sewer Containment Systems				
1. Is debris present that prevents proper sewer flow or causes sewer to backup?	☐	☐	☐	
2. Is spilled or leaking material present?	☐	☐	☐	

Note: If the answer to any of the questions is "Yes", a corrective action item should be entered in the tracking system.

Records: Environmental Department keeps a copy for 5 years.

APPENDIX H

HAZARD EVALUATION

Page

NRC OSRO Response for Group 5 Submerged Oils.....H-2

National Response Corporation **Equipment Types: Boom/Portable Storage/Skimmer/Vacuum System/Vessel**
Resource Availability By Type

Zone: Toledo, OH

TOLEDO DEMO - Case# DM13-0381
September 25, 2013

00 to 06 hours (* Does not include recall/mobilization time)

Boom

>=6 and <18 inch

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
12" Boom	0	2000	0	0	ICN	Rudolph	OH	00:45
12" Boom	0	1000	0	0	ICN	Rudolph	OH	00:45
12" Boom	0	300	0	0	ICN	Mcdonald	PA	05:33
10" Boom	0	1300	0	0	ICN	Mcdonald	PA	05:33
12" Boom	0	125	0	0	ICN	Merrillville	IN	05:34
8" Boom	0	2450	0	0	ICN	New Matamoras	OH	05:35
12" Boom	0	450	0	0	ICN	Indianapolis	IN	05:36
10" Boom	0	1252	0	0	ICN	Pittsburgh	PA	05:41
8" Boom	0	350	0	0	ICN	Mooresville	IN	05:52
Sub Total >=6 and <18 inch:		**9227**	**0**	**0**				

>18 and <42 inch

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
24" Boom	0	1000	0	0	ICN	Cleveland	OH	02:45
24" Boom	0	1000	0	0	ICN	Middletown	OH	04:26
24" Boom	0	1000	0	0	ICN	East Liverpool	OH	04:49
30" Boom	0	100	0	0	ICN	Erie	PA	05:07
24" Boom	0	6050	0	0	ICN	Mcdonald	PA	05:33
24" Boom	0	4250	0	0	ICN	New Matamoras	OH	05:35
Sub Total >18 and <42 inch:		**13400**	**0**	**0**				

>42 inch

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
60" Boom	0	50	0	0	ICN	Mcdonald	PA	05:33
44" Boom	0	1100	0	0	ICN	East Chicago	IN	05:49
Sub Total >42 inch:		**1150**	**0**	**0**				

18"

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
18" Boom	0	1000	0	0	ICN	Toledo	OH	00:07
18" Boom	0	4000	0	0	ICN	Rudolph	OH	00:45
18" Boom	0	4000	0	0	ICN	Ypsilanti	MI	01:06
18" Boom	0	500	0	0	ICN	Findlay	OH	01:07
18" Boom	0	11400	0	0	ICN	Detroit	MI	01:23
18" Boom	0	2100	0	0	ICN	Sterling Heights	MI	01:54
18" Boom	0	1500	0	0	ICN	Sterling Heights	MI	02:01
18" Boom	0	1200	0	0	ICN	Middleburg Heights	OH	02:34
18" Boom	0	3000	0	0	ICN	Cleveland	OH	02:45
18" Boom	0	100	0	0	ICN	North Canton	OH	03:27
18" Boom	0	100	0	0	ICN	Elkhart	IN	03:36
18" Boom	0	2200	0	0	ICN	Huber Heights	OH	03:37
18" Boom	0	500	0	0	ICN	Cincinnati	OH	04:47
18" Boom	0	2000	0	0	ICN	East Liverpool	OH	04:51
18" Boom	0	5500	0	0	ICN	Cincinnati	OH	05:07
18" Boom	0	1200	0	0	ICN	Batavia	OH	05:10
18" Boom	0	200	0	0	ICN	Indianapolis	IN	05:33
18" Boom	0	1500	0	0	ICN	Indianapolis	IN	05:36
18" Boom	0	100	0	0	ICN	Cuddy	PA	05:37
18" Boom	0	100	0	0	ICN	Schererville	IN	05:48
18" Boom	0	1000	0	0	ICN	Whiting	IN	05:49
18" Boom	0	13000	0	0	ICN	East Chicago	IN	05:49
18" Boom	0	3000	0	0	ICN	Mooresville	IN	05:52

00 to 06 hours (* Does not include recall/mobilization time)

Sub Total 18":	**59200**	**0**	**0**
Total Boom:	**82977**	**0**	**0**

Portable Storage

Frac Tank

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Frac Tank	0	4	0	1036	ICN	Toledo	OH	00:07
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	2	0	1000	ICN	North Canton	OH	03:27
Frac Tank	0	6	0	2568	ICN	Huber Heights	OH	03:37
Frac Tank	0	10	0	4770	ICN	East Liverpool	OH	04:49
Frac Tank	0	1	0	523	ICN	Cincinnati	OH	05:07
Frac Tank	0	2	0	856	ICN	Miamitown	OH	05:07
Frac Tank	0	1	0	500	ICN	Cuddy	PA	05:37
Frac Tank	0	16	0	960	ICN	East Chicago	IN	05:49
Sub Total Frac Tank:		**60**	**0**	**21213**				

Portable Tank

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Portable Tank	0	4	0	116	ICN	Toledo	OH	00:07
Tank Truck	0	1	0	162	ICN	Detroit	MI	01:23
Tank Truck	0	1	0	166	ICN	Detroit	MI	01:23
Tank Trailer	0	1	0	119	ICN	Cleveland	OH	02:45
Poly Tote	0	2	0	12	ICN	North Canton	OH	03:27
Poly Tank	0	1	0	7	ICN	North Canton	OH	03:27
Poly Tank	0	1	0	35	ICN	North Canton	OH	03:27
Poly Tote	0	2	0	12	ICN	Elkhart	IN	03:36
Poly Tank	0	1	0	7	ICN	Elkhart	IN	03:36
Poly Tank	0	1	0	35	ICN	Elkhart	IN	03:36
Poly Tank	0	2	0	24	ICN	Merrillville	IN	05:34
Poly Tank	0	1	0	7	ICN	Cuddy	PA	05:37
Poly Tank	0	1	0	35	ICN	Cuddy	PA	05:37
Poly Tote	0	2	0	12	ICN	Cuddy	PA	05:37
Tank Truck	0	18	0	3006	ICN	Carnegie	PA	05:39
Tank Truck	0	3	0	465	ICN	Carnegie	PA	05:39
Poly Tote	0	2	0	12	ICN	Schererville	IN	05:48
Poly Tank	0	1	0	7	ICN	Schererville	IN	05:48
Poly Tank	0	1	0	35	ICN	Schererville	IN	05:48
Tank Truck	0	5	0	655	ICN	East Chicago	IN	05:49
Tank Truck	0	6	0	540	ICN	East Chicago	IN	05:49
Poly Storage Tank	0	4	0	188	ICN	Mooresville	IN	05:52
Sub Total Portable Tank:		**61**	**0**	**5657**				

Tank Truck

00 to 06 hours (* Does not include recall/mobilization time)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Static Trailer	0	1	0	128	ICN	Ypsilanti	MI	01:06
Jumbo Tanker	0	1	0	285	ICN	Ypsilanti	MI	01:06
Tank Truck	0	4	0	304	ICN	East Chicago	IN	05:49
Tank Truck	0	2	0	104	ICN	East Chicago	IN	05:49
Sub Total Tank Truck:		**8**	**0**	**821**				
Total Portable Storage:		**129**	**0**	**27691**				

Skimmer

Drum

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Elastec TDS136 Skimmer	0	1	480	0	ICN	Toledo	OH	00:07
Elastec Mini Max Skimmer	0	1	137	0	ICN	Rudolph	OH	00:45
Elastec Mini Max Skimmer	0	1	137	0	ICN	Rudolph	OH	00:45
Elastec Magnum 100	0	1	686	0	ICN	Rudolph	OH	00:45
Elastec Magnum 100	0	1	686	0	ICN	Rudolph	OH	00:45
Elastec Magnum 100	0	1	686	0	ICN	Rudolph	OH	00:45
Elastec Magnum 100	0	1	686	0	ICN	Rudolph	OH	00:45
Elastec Magnum 100	0	1	686	0	ICN	Rudolph	OH	00:45
Elastec Magnum 100	0	1	686	0	ICN	Rudolph	OH	00:45
Elastec Mini Max Skimmer	0	1	137	0	ICN	Rudolph	OH	00:45
Elastec TDS136 Skimmer	0	1	480	0	ICN	Rudolph	OH	00:45
Elastec TDS136 Skimmer	0	1	480	0	ICN	Rudolph	OH	00:45
Elastec TDS136 Skimmer	0	1	480	0	ICN	Rudolph	OH	00:45
Elastec Magnum 100	0	1	686	0	ICN	Rudolph	OH	00:45
Elastec Magnum 200	0	1	1371	0	ICN	Rudolph	OH	00:45
Elastec Magnum 200	0	1	1371	0	ICN	Rudolph	OH	00:45
Crucial 1D18P24 Skimmer	0	1	171	0	ICN	Detroit	MI	01:23
Medium Drum Skimmer	0	2	480	0	ICN	Detroit	MI	01:23
Crucial 1D18P36 Skimmer	0	2	480	0	ICN	Sterling Heights	MI	01:54
Small Drum Skimmer	0	3	513	0	ICN	Sterling Heights	MI	01:54
Elastec TDS118 Skimmer	0	1	240	0	ICN	Huber Heights	OH	03:37
Small Drum Skimmer	0	1	171	0	ICN	Carroll	OH	03:56
Small Drum Skimmer	0	1	171	0	ICN	East Liverpool	OH	04:51
Small Drum Skimmer	0	2	342	0	ICN	Indianapolis	IN	05:33
Elastec TDS136 Skimmer	0	1	480	0	ICN	Indianapolis	IN	05:36
Small Drum Skimmer	0	3	513	0	ICN	Carnegie	PA	05:39
Elastec Mini-Max Skimmer	0	2	274	0	ICN	East Chicago	IN	05:49
Elastec TDS136 Skimmer	0	6	2880	0	ICN	East Chicago	IN	05:49
Elastec Mini-Max Skimmer	0	2	274	0	ICN	East Chicago	IN	05:49
Medium Drum Skimmer	0	1	240	0	ICN	Mooresville	IN	05:52
Sub Total Drum:		**44**	**17104**	**0**				

Floating Suction

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Manta Ray Skimmer	0	1	315	0	ICN	Detroit	MI	01:23
Manta Ray Skimmer	0	1	315	0	ICN	Huber Heights	OH	03:37
Douglas 4300 SkimPac	0	1	480	0	ICN	Huber Heights	OH	03:37
Vikoma Fasflo Skimmer	FFP-014	1	2112	0	NRC	Cincinnati	OH	05:07
Acme Weir Head Skimmer	WH-109	1	0	0	NRC	Cincinnati	OH	05:07
Manta Ray Skimmer	0	1	315	0	ICN	Miamitown	OH	05:07
Floating Suction Skimmer	0	1	274	0	ICN	East Chicago	IN	05:49
Sub Total Floating Suction:		**7**	**3811**	**0**				

Oleophilic Disk

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
NRC Weir Disk Skimmer	WD-107	1	1371	24	NRC	Cincinnati	OH	05:07
Vikoma Komara 12K Skimmer	0	1	480	0	ICN	East Chicago	IN	05:49
Sub Total Oleophilic Disk:		**2**	**1851**	**24**				

Oleophilic Rope Mop

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)

00 to 06 hours (* Does not include recall/mobilization time)

Rope Mop Skimmer	0	1	75	0	ICN	Detroit	MI	01:23
Sub Total Oleophilic Rope Mop:		**1**	**75**	**0**				
Total Skimmer:		**54**	**22841**	**24**				

Vacuum System

Loader

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Skid Mount Vac	0	1	891	65	ICN	Rudolph	OH	00:45
Vacuum Drum Loader	0	2	686	0	ICN	Cincinnati	OH	05:07
Sub Total Loader:		**3**	**1577**	**65**				

Vacuum Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Vacuum Trailer	0	1	343	120	ICN	Cincinnati	OH	05:07
Sub Total Vacuum Trailer:		**1**	**343**	**120**				

Vacuum Transfer Unit

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Vacuum Transfer Unit	0	1	343	12	ICN	Cleveland	OH	02:45
Guzzler	0	1	343	71	ICN	Cleveland	OH	02:45
Vacuum Unit	0	1	343	78	ICN	East Liverpool	OH	04:49
Vacuum Transfer Unit	109	1	6857	24	NRC	Cincinnati	OH	05:07
Skid Mount Vac	0	1	343	24	ICN	Cincinnati	OH	05:07
Skid Mount Vac	0	1	343	12	ICN	Cincinnati	OH	05:07
Vacuum Variety	0	15	5145	0	ICN	Mooresville	IN	05:52
Sub Total Vacuum Transfer Unit:		**21**	**13717**	**221**				

Vacuum Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Vacuum Truck	0	4	1372	80	ICN	Toledo	OH	00:07
Vacuum Truck	0	1	343	70	ICN	Rudolph	OH	00:45
Vacuum Truck	0	1	343	70	ICN	Ypsilanti	MI	01:06
Vacuum Truck	0	1	343	70	ICN	Ypsilanti	MI	01:06
Vacuum Truck	0	1	343	70	ICN	Ypsilanti	MI	01:06
Vacuum Truck	0	1	343	70	ICN	Ypsilanti	MI	01:06
Vacuum Truck	0	1	343	70	ICN	Ypsilanti	MI	01:06
Vacuum Truck	0	1	343	70	ICN	Ypsilanti	MI	01:06
Vacuum Truck	0	1	343	107	ICN	Detroit	MI	01:23
Vacuum Truck	0	1	343	131	ICN	Detroit	MI	01:23
Vacuum Truck	0	1	343	119	ICN	Detroit	MI	01:23
Vacuum Truck	0	1	343	143	ICN	Detroit	MI	01:23
Vacuum Truck	0	4	1372	192	ICN	Detroit	MI	01:23
Vacuum Truck	0	2	686	166	ICN	Detroit	MI	01:23
Vacuum Truck	0	3	1029	213	ICN	Detroit	MI	01:23
Vacuum Truck	0	1	343	71	ICN	Cleveland	OH	02:34
Vacuum Trailer	0	1	343	120	ICN	Cleveland	OH	02:45
Vacuum Truck	0	2	686	142	ICN	Cleveland	OH	02:45
Vacuum Truck	0	4	1372	284	ICN	North Canton	OH	03:27
Vacuum Truck	0	4	1372	284	ICN	Elkhart	IN	03:36
Vacuum Truck	0	25	8575	1775	ICN	Huber Heights	OH	03:37
Vacuum Truck	0	2	686	120	ICN	Huber Heights	OH	03:37
Vacuum Truck	0	2	686	142	ICN	New Philadelphia	OH	03:49
Vacuum Truck	0	5	1715	355	ICN	Carroll	OH	03:56
Vacuum Truck	0	1	343	71	ICN	Middletown	OH	04:26
Vacuum Truck	0	1	343	83	ICN	Middletown	OH	04:26
Vacuum Truck	0	1	343	70	ICN	Cincinnati	OH	04:47
Vacuum Truck	0	1	343	74	ICN	East Liverpool	OH	04:49
Vacuum Truck	0	1	343	71	ICN	Steubenville	OH	05:01
Vacuum Truck	0	3	1029	213	ICN	Cincinnati	OH	05:07
Vacuum Truck	0	11	3773	1045	ICN	Miamitown	OH	05:07
Vacuum Truck	0	1	343	71	ICN	Indianapolis	IN	05:33
Vacuum Truck	0	2	686	142	ICN	Merrillville	IN	05:34

00 to 06 hours (* Does not include recall/mobilization time)

Pump Truck	0	1	651	71	ICN	Merrillville	IN	05:34
Vacuum Truck	0	35	12005	4200	ICN	Indianapolis	IN	05:36
Vacuum Truck	0	4	1372	284	ICN	Cuddy	PA	05:37
Vacuum Truck	0	2	686	142	ICN	Washington	PA	05:38
Vacuum Truck	0	1	343	67	ICN	Carnegie	PA	05:39
Vacuum Truck	0	4	1372	284	ICN	Carnegie	PA	05:39
Vacuum Truck	0	4	1372	316	ICN	Carnegie	PA	05:39
Vacuum Truck	0	1	343	24	ICN	Carnegie	PA	05:39
Vacuum Truck	0	1	343	71	ICN	Carnegie	PA	05:39
Vacuum Truck	0	4	1372	284	ICN	Schererville	IN	05:48
Vacuum Truck	0	11	3773	1573	ICN	Whiting	IN	05:49
Vacuum Truck	0	12	4116	852	ICN	East Chicago	IN	05:49
Vacuum Truck	0	15	5145	1065	ICN	East Chicago	IN	05:49
Vacuum Truck	0	1	343	120	ICN	Hammond	IN	05:50
Vacuum Truck	0	1	343	71	ICN	Mooresville	IN	05:52
Sub Total Vacuum Truck:		**189**	**65135**	**16198**				
Total Vacuum System:		**214**	**80772**	**16604**				

Vessel

Deployment Craft (< 25 foot)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
24' Deployment Craft	0	1	0	0	ICN	Toledo	OH	00:07
14' Deployment Craft	0	1	0	0	ICN	Toledo	OH	00:07
18' Deployment Craft	0	1	0	0	ICN	Toledo	OH	00:12
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
12' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
18' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
18' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
24' Deployment Craft	0	1	0	0	ICN	Detroit	MI	01:23
20' Deployment Craft	0	1	0	0	ICN	Detroit	MI	01:23
13' Deployment Craft	0	1	0	0	ICN	Detroit	MI	01:23
20' Deployment Craft	0	2	0	0	ICN	Detroit	MI	01:23
17' Deployment Craft	0	1	0	0	ICN	Detroit	MI	01:23
14' Deployment Craft	0	4	0	0	ICN	Sterling Heights	MI	01:54
18' Deployment Craft	0	1	0	0	ICN	Sterling Heights	MI	01:54
12' Deployment Craft	0	1	0	0	ICN	Sterling Heights	MI	01:54
16' Deployment Craft	0	1	0	0	ICN	Sterling Heights	MI	01:54
John Boat	0	13	0	0	ICN	Marshall	MI	02:28
20' Deployment Craft	0	2	0	0	ICN	Middleburg Heights	OH	02:34
16' Deployment Craft	0	1	0	0	ICN	Middleburg Heights	OH	02:34
21' Deployment Craft	0	1	0	0	ICN	Cleveland	OH	02:45
14' Deployment Craft	0	1	0	0	ICN	Cleveland	OH	02:45
12' Deployment Craft	0	1	0	0	ICN	Cleveland	OH	02:45
14' Deployment Craft	0	1	0	0	ICN	North Canton	OH	03:27
14' Deployment Craft	0	1	0	0	ICN	Elkhart	IN	03:36
16' Deployment Craft	0	1	0	0	ICN	Huber Heights	OH	03:37
16' Jon Boat	0	2	0	0	ICN	Middletown	OH	04:26
Response Boat	0	1	0	0	ICN	Cincinnati	OH	04:47
21' Deployment Craft	0	1	0	0	ICN	East Liverpool	OH	04:49
24' Deployment Craft	0	2	0	0	ICN	East Liverpool	OH	04:49
14' Deployment Craft	0	1	0	0	ICN	East Liverpool	OH	04:51
22' Deployment Craft	0	1	0	0	ICN	East Liverpool	OH	04:51
16' Deployment Craft	0	1	0	0	ICN	Steubenville	OH	05:01

00 to 06 hours (* Does not include recall/mobilization time)

24' Deployment Craft	0	1	0	0	ICN	Cincinnati	OH	05:07
14' Deployment Craft	0	2	0	0	ICN	Cincinnati	OH	05:07
22' Deployment Craft	0	1	0	0	ICN	Cincinnati	OH	05:07
23' Deployment Craft	0	1	0	0	ICN	Erie	PA	05:07
21' Deployment Craft	0	1	0	0	ICN	Erie	PA	05:07
20' Deployment Craft	0	1	0	0	ICN	Batavia	OH	05:10
16' Deployment Craft	0	1	0	0	ICN	Batavia	OH	05:10
15' Deployment Craft	0	1	0	0	ICN	Dayton	KY	05:12
18' Deployment Craft	0	1	0	0	ICN	Dayton	KY	05:12
20' Deployment Craft	0	1	0	0	ICN	Indianapolis	IN	05:16
14' Deployment Craft	0	2	0	0	ICN	Indianapolis	IN	05:33
12' Deployment Craft	0	4	0	0	ICN	Indianapolis	IN	05:33
14' Deployment Craft	0	2	0	0	ICN	Merrillville	IN	05:34
12' Deployment Craft	0	1	0	0	ICN	Indianapolis	IN	05:36
14' Deployment Craft	0	1	0	0	ICN	Cuddy	PA	05:37
20' Deployment Craft	0	1	0	0	ICN	Cuddy	PA	05:37
24' Deployment Craft	0	1	0	0	ICN	Carnegie	PA	05:39
23' Deployment Craft	0	1	0	0	ICN	Carnegie	PA	05:39
15' Deployment Craft	0	1	0	0	ICN	Carnegie	PA	05:39
14' Deployment Craft	0	10	0	0	ICN	Carnegie	PA	05:39
12' Deployment Craft	0	1	0	0	ICN	Carnegie	PA	05:39
16' Deployment Craft	0	2	0	0	ICN	Pittsburgh	PA	05:41
14' Deployment Craft	0	1	0	0	ICN	Schererville	IN	05:48
14' Deployment Craft	0	1	0	0	ICN	Whiting	IN	05:49
14' Deployment Craft	0	4	0	0	ICN	East Chicago	IN	05:49
18' Deployment Craft	0	1	0	0	ICN	East Chicago	IN	05:49
20' Deployment Craft	0	2	0	0	ICN	East Chicago	IN	05:49
24' Deployment Craft	0	3	0	0	ICN	East Chicago	IN	05:49
17' Deployment Craft	0	2	0	0	ICN	East Chicago	IN	05:49
15' Deployment Craft	0	1	0	0	ICN	East Chicago	IN	05:49
John Boat	0	3	0	0	ICN	Mooresville	IN	05:52
Sub Total Deployment Craft (< 25 foot):		**114**	**0**	**0**				

Deployment Craft (> 25 foot)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
27' Deployment Craft	0	1	0	0	ICN	Detroit	MI	01:23
28' Deployment Craft	0	1	0	0	ICN	Sterling Heights	MI	02:01
25' Skiff	0	1	0	0	ICN	Middletown	OH	04:26
28' Deployment Craft	0	1	0	0	ICN	Cincinnati	OH	05:07
26' Deployment Craft	0	1	0	0	ICN	Erie	PA	05:07
28' Deployment Craft	0	2	0	0	ICN	Carnegie	PA	05:39
Sub Total Deployment Craft (> 25 foot):		**7**	**0**	**0**				
Total Vessel:		**121**	**0**	**0**				
Total 00 to 06 hours:			**103613**	**44319**				
Running Total from 0 to unknown:			**103613**	**44319**				

06 to 12 hours (* Does not include recall/mobilization time)

Boom

>=6 and <18 inch

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
12" Boom	0	3150	0	0	ICN	Apollo	PA	06:11
6" Boom	0	1050	0	0	ICN	Apollo	PA	06:11
10" Boom	0	400	0	0	ICN	Wheeling	IL	06:29
12" Boom	0	1500	0	0	ICN	Ashland	KY	06:32
10" Boom	0	300	0	0	ICN	Charleston	WV	07:12
8" Boom	0	2300	0	0	ICN	Charleston	WV	07:12
12" Boom	0	400	0	0	ICN	Wauwatosa	WI	07:12
12" Hard Boom	0	420	0	0	ICN	Louisville	KY	07:25
12" Boom	0	1500	0	0	ICN	Lock Haven	PA	09:10
8" Boom	0	2000	0	0	ICN	Nitro	WV	09:25
10" Boom	0	1000	0	0	ICN	Wood River	IL	11:19
10" Boom	0	400	0	0	ICN	St. Louis	MO	11:52
12" Boom	0	900	0	0	ICN	Paducah	KY	11:57
Sub Total >=6 and <18 inch:		**15320**	**0**	**0**				

>18 and <42 inch

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
20" Boom	0	1400	0	0	ICN	Apollo	PA	06:11
36" Boom	0	2000	0	0	ICN	Apollo	PA	06:11
19" Boom	0	1000	0	0	ICN	Burlington	Canada	06:24
24" Boom	0	1500	0	0	ICN	Ashland	KY	06:32
24" Boom	0	200	0	0	ICN	Lemont	IL	06:34
24" Boom	0	2000	0	0	ICN	Cross Lanes	WV	06:54
24" Boom	0	3000	0	0	ICN	Charleston	WV	07:12
36" Boom	0	1000	0	0	ICN	Germantown	WI	07:17
19" Boom	0	200	0	0	ICN	St. Ignace	MI	08:27
Snare Boom (Pom-Pom)	0	4	0	0	ICN	St. Ignace	MI	08:27
24" Boom	0	1500	0	0	ICN	Lock Haven	PA	09:10
24" Boom	0	2000	0	0	ICN	Baltimore	MD	11:27
10" Boom	0	400	0	0	ICN	Nashville	TN	11:54
Sub Total >18 and <42 inch:		**16204**	**0**	**0**				

>42 inch

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
48' Boom Trailer	0	5000	0	0	ICN	Goodlettsville	TN	11:40
Sub Total >42 inch:		**5000**	**0**	**0**				

18"

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
18" Boom	BM21-723	1000	0	0	NRC	South Holland	IL	06:03
18" Boom	0	4700	0	0	ICN	South Holland	IL	06:03
18" Boom	0	22500	0	0	ICN	Glenwood	IL	06:03
18" Boom	BM18-430	6800	0	0	NRC	Apollo	PA	06:11
18" Boom	BM18-739	1600	0	0	NRC	Apollo	PA	06:11
18" Boom	0	3225	0	0	ICN	Apollo	PA	06:11
18" Boom	0	7000	0	0	ICN	Monee	IL	06:16
Containment Boom	0	11200	0	0	ICN	Monee	IL	06:16
Containment Boom	0	11500	0	0	ICN	Monee	IL	06:16
18" Boom	0	500	0	0	ICN	Ashland	KY	06:26
18"Boom	0	11500	0	0	ICN	Wheeling	IL	06:29
18" Boom	0	3750	0	0	ICN	South Point	OH	06:32
18" Boom	0	2200	0	0	ICN	New Lenox	IL	06:33
18" Boom	0	3200	0	0	ICN	Lemont	IL	06:34
18" Boom	0	1200	0	0	ICN	Lemont	IL	06:34
18" Boom	BM18-736	3000	0	0	NRC	Shelbyville	KY	07:00
18" Boom	0	2600	0	0	ICN	Shelbyville	KY	07:00
18" Boom	0	100	0	0	ICN	North Aurora	IL	07:06
18" Boom	0	500	0	0	ICN	Crestwood	KY	07:08

06 to 12 hours (* Does not include recall/mobilization time)

18" Boom	0	1500	0	0	ICN	Menomonee Falls	WI	07:13
18" Boom	0	15400	0	0	ICN	Germantown	WI	07:17
18" Boom	0	100	0	0	ICN	Sheboygan	WI	07:21
18" Boom	BM18-433	7000	0	0	NRC	Rogers City	MI	07:25
18" Boom	BM21-719	1000	0	0	NRC	Rogers City	MI	07:25
18" Boom	BM18-727	1000	0	0	NRC	Rogers City	MI	07:25
18" Boom	BM18-735	3000	0	0	NRC	Nicholasville	KY	07:28
18" Boom	0	4900	0	0	ICN	Louisville	KY	07:34
18" Boom	0	2200	0	0	ICN	De Pere	WI	08:03
18" Boom	0	550	0	0	ICN	St. Ignace	MI	08:27
18" Boom	BM18-432	7000	0	0	NRC	Green Bay	WI	08:34
18" Boom	0	1000	0	0	ICN	Peoria	IL	09:15
18" Boom	0	2000	0	0	ICN	Newburgh	IN	09:19
18" Boom	0	1000	0	0	ICN	Evansville	IN	09:27
18" Boom	0	300	0	0	ICN	Elmira	NY	09:53
18" Boom	0	2000	0	0	ICN	Sunbury	PA	10:06
18" Boom	0	1000	0	0	ICN	Blountville	TN	10:15
18" Boom	BM18-364	100	0	0	NRC	Oswego	NY	10:46
18" Boom	BM21-720	1000	0	0	NRC	Oswego	NY	10:46
18" Boom	0	2600	0	0	ICN	Knoxville	TN	11:04
18" Boom	0	1100	0	0	ICN	Lorton	VA	11:09
18" Boom	0	500	0	0	ICN	East Syracuse	NY	11:12
Harbor Boom	0	100	0	0	ICN	East Syracuse	NY	11:12
18" Boom	0	2000	0	0	ICN	Fredericksburg	VA	11:13
18" Boom	0	1000	0	0	ICN	Laurel	MD	11:15
18" Boom	0	1000	0	0	ICN	Laurel	MD	11:15
18" Boom	0	9000	0	0	ICN	Laurel	MD	11:15
18" Boom	BM21-416	4000	0	0	NRC	Wood River	IL	11:19
18" Boom	0	2000	0	0	ICN	Wood River	IL	11:19
18" Boom	0	5000	0	0	ICN	Baltimore	MD	11:25
18" Boom	0	3000	0	0	ICN	Baltimore	MD	11:26
18" Boom	0	10000	0	0	ICN	Baltimore	MD	11:27
18" Boom	0	1800	0	0	ICN	Baltimore	MD	11:27
18" Boom	0	300	0	0	ICN	Baltimore	MD	11:27
18" Boom	BM18-737	3000	0	0	NRC	St. Louis	MO	11:40
18" Boom	0	2000	0	0	ICN	Calvert City	KY	11:40
18" Boom	0	1700	0	0	ICN	St. Louis	MO	11:52
18" Boom	0	2300	0	0	ICN	Nashville	TN	11:52
18" Boom	0	2000	0	0	ICN	Nashville	TN	11:54
18" Boom	0	1000	0	0	ICN	St. Louis	MO	11:56
18" Boom	0	2800	0	0	ICN	Paducah	KY	11:57
Sub Total 18":		**208325**	**0**	**0**				
Total Boom:		**244849**	**0**	**0**				

Portable Storage

Barge - Portable

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Portable Barge Set	101-102	1	0	238	NRC	Oswego	NY	10:46
Sub Total Barge - Portable:		**1**	**0**	**238**				

Dracone/Bladder

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Canflex FCB-43E Bladder	BC-53	1	0	100	NRC	Rogers City	MI	07:25
Sub Total Dracone/Bladder:		**1**	**0**	**100**				

Frac Tank

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Frac Tank	0	30	0	14280	ICN	Apollo	PA	06:11
Frac Tank	0	3	0	714	ICN	Apollo	PA	06:11
Frac Tank	0	1	0	357	ICN	Newburgh	IN	09:19
Frac Tank	0	1	0	357	ICN	Newburgh	IN	09:19

06 to 12 hours (* Does not include recall/mobilization time)

Frac Tank	0	1	0	429	ICN	Norway	MI	10:16
Frac Tank	0	3	0	1500	ICN	Stafford	VA	11:12
Frac Tank	0	2	0	952	ICN	Laurel	MD	11:15
Frac Tank	0	3	0	1500	ICN	Baltimore	MD	11:27
Frac Tank	0	1	0	500	ICN	Goodlettsville	TN	11:40
Sub Total Frac Tank:		**45**	**0**	**20589**				

Portable Tank

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Pillow Tank	ELS-44	1	0	24	NRC	South Holland	IL	06:03
Pillow Tank	ELS-09	1	0	24	NRC	South Holland	IL	06:03
Pillow Tank	ELS-10	1	0	24	NRC	South Holland	IL	06:03
Pillow Tank	ELS-11	1	0	24	NRC	South Holland	IL	06:03
Portable Tank	0	3	0	321	ICN	Glenwood	IL	06:03
Pillow Tank	ELS-42	1	0	24	NRC	Apollo	PA	06:11
Pillow Tank	ELS-43	1	0	24	NRC	Apollo	PA	06:11
Tank Trailer	0	1	0	143	ICN	Monee	IL	06:16
Cement Tank	0	1	0	190	ICN	Burlington	Canad	06:24
Poly Tank	0	1	0	12	ICN	Burlington	Canad	06:24
Portable Tank	0	4	0	648	ICN	Wheeling	IL	06:29
Portable Tank	0	70	0	33320	ICN	Wheeling	IL	06:29
Portable Tank	0	40	0	4280	ICN	Wheeling	IL	06:29
Portable Tank	0	2	0	286	ICN	Shelbyville	KY	07:00
Vacuum Tanker Trailer	0	1	0	130	ICN	Shelbyville	KY	07:00
Poly Tote	0	2	0	12	ICN	North Aurora	IL	07:06
Poly Tank	0	1	0	7	ICN	North Aurora	IL	07:06
Poly Tank	0	1	0	35	ICN	North Aurora	IL	07:06
Portable Tank	0	2	0	0	ICN	Wauwatosa	WI	07:12
Pillow Tank	ELS-30	1	0	24	NRC	Rogers City	MI	07:25
Pillow Tank	ELS-31	1	0	24	NRC	Rogers City	MI	07:25
Portable Tank	0	5	0	180	ICN	Louisville	KY	07:34
Tank Truck	0	1	0	167	ICN	Louisville	KY	07:34
Poly Tank	0	1	0	6	ICN	St. Ignace	MI	08:27
Poly Tank	0	1	0	5	ICN	St. Ignace	MI	08:27
Portable Tank	0	3	0	285	ICN	Peoria	IL	09:15
Portable Tank	0	4	0	572	ICN	Peoria	IL	09:15
Tanker Truck	0	4	0	476	ICN	Nitro	WV	09:25
Portable Tank	0	1	0	357	ICN	Evansville	IN	09:27
Poly Tank	0	1	0	47	ICN	Blountville	TN	10:15
Poly/Steel Tank	0	1	0	12	ICN	Blountville	TN	10:15
Poly Tank	0	1	0	8	ICN	Blountville	TN	10:15
Pillow Tank	PT-01	1	0	24	NRC	Oswego	NY	10:46
Pillow Tank	PT-02	1	0	24	NRC	Oswego	NY	10:46
Pillow Tank	PT-03	1	0	24	NRC	Oswego	NY	10:46
Pillow Tank	PT-04	1	0	24	NRC	Oswego	NY	10:46
Portable Tank	0	3	0	144	ICN	Knoxville	TN	11:04
Poly Tank	0	4	0	32	ICN	Knoxville	TN	11:04
Poly Tank	0	2	0	24	ICN	East Syracuse	NY	11:12
Portable Tank	0	5	0	60	ICN	Fredericksburg	VA	11:13
Poly Tank	0	5	0	40	ICN	Baltimore	MD	11:26
Storage Container	0	1	0	59	ICN	Baltimore	MD	11:27
Portable Tank	0	1	0	476	ICN	St. Louis	MO	11:52
Portable Tank	0	1	0	47	ICN	St. Louis	MO	11:52
Portable Tank	0	5	0	180	ICN	St. Louis	MO	11:52
Portable Tank	0	2	0	18	ICN	St. Louis	MO	11:52
Portable Tank	0	2	0	12	ICN	St. Louis	MO	11:52
Portable Tank	0	1	0	12	ICN	Nashville	TN	11:52
Poly Tank	0	5	0	40	ICN	Nashville	TN	11:52
Poly Tank	0	2	0	48	ICN	Nashville	TN	11:52
Sub Total Portable Tank:		**203**	**0**	**42979**				

Tank Truck

06 to 12 hours (* Does not include recall/mobilization time)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Storage Trailers	0	18	0	0	ICN	Apollo	PA	06:11
Tanks Trucks	0	1	0	0	ICN	Louisville	KY	07:25
Tank Trailer	0	1	0	0	ICN	Syracuse	NY	11:10
Sub Total Tank Truck:		**20**	**0**	**0**				
Total Portable Storage:		**270**	**0**	**63906**				

Skimmer

Drum

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Crucial Double Drum 18H-36 Skimmer	CD-002	1	480	0	NRC	South Holland	IL	06:03
Elastec TDS118 Skimmer	0	4	960	0	ICN	South Holland	IL	06:03
Elastec TDS118 Skimmer	0	1	240	0	ICN	Apollo	PA	06:11
Double Drum Skimmer	0	6	4116	0	ICN	Monee	IL	06:16
Double Drum Skimmer	0	8	10968	0	ICN	Monee	IL	06:16
Elastec TDS118 Skimmer	0	1	240	0	ICN	Ashland	KY	06:26
Medium Drum Skimmer	0	1	240	0	ICN	Wheeling	IL	06:29
Elastec TDS136 Skimmer	0	1	480	0	ICN	New Lenox	IL	06:33
Small Drum Skimmer	0	1	171	0	ICN	Lemont	IL	06:34
Elastec TDS136 Skimmer	0	1	480	0	ICN	Lemont	IL	06:34
Crucial 1D18P36 Skimmer	0	1	240	0	ICN	Cross Lanes	WV	06:54
Elastec TDS118 Skimmer	0	1	240	0	ICN	Shelbyville	KY	07:00
Elastec TDS118 Skimmer	0	1	240	0	ICN	Menomonee Falls	WI	07:13
Elastec TDS136 Skimmer	0	1	480	0	ICN	Germantown	WI	07:17
Small Drum Skimmer	0	1	171	0	ICN	Louisville	KY	07:34
Small Drum Skimmer	0	3	513	0	ICN	Evansville	IN	09:27
Large Drum Skimmer	0	1	480	0	ICN	Blountville	TN	10:15
Medium Drum Skimmer	0	1	240	0	ICN	Knoxville	TN	11:04
Elastec TDS118 Skimmer	0	2	480	0	ICN	Stafford	VA	11:12
Elastec TDS118 Skimmer	0	2	480	0	ICN	Laurel	MD	11:15
Small Drum Skimmer	0	1	171	0	ICN	Wood River	IL	11:19
Elastec TDS136 Skimmer	0	1	480	0	ICN	Wood River	IL	11:19
Medium Drum Skimmer	0	1	240	0	ICN	Baltimore	MD	11:26
Elastec TDS136 Skimmer	0	1	480	0	ICN	Baltimore	MD	11:27
Elastec TDS118 Skimmer	0	2	480	0	ICN	Baltimore	MD	11:27
Elastec Mini Max Skimmer	0	1	137	0	ICN	Baltimore	MD	11:27
Elastec TDS118 Skimmer	0	1	240	0	ICN	Baltimore	MD	11:27
Medium Drum Skimmer	0	1	240	0	ICN	Goodlettsville	TN	11:40
Small Drum Skimmer	0	2	342	0	ICN	Calvert City	KY	11:40
Large Drum Skimmer	0	1	480	0	ICN	Nashville	TN	11:52
Small Drum Skimmer	0	1	171	0	ICN	Nashville	TN	11:54
Elastec TDS118 Skimmer	0	1	240	0	ICN	St. Louis	MO	11:56
Small Drum Skimmer	0	1	171	0	ICN	Paducah	KY	11:57
Sub Total Drum:		**54**	**25811**	**0**				

Floating Suction

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Vikoma Fasflo Skimmer	FFP-013	1	2112	0	NRC	Apollo	PA	06:11
Acme Weir Head Skimmer	WH-107	1	0	0	NRC	Apollo	PA	06:11
Vikoma Fasflo Skimmer	FFP-015	1	2112	0	NRC	Apollo	PA	06:11
Acme 39T Skimmer	0	1	1371	0	ICN	Apollo	PA	06:11
Megator Vacuum Skimmer	0	1	377	0	ICN	Apollo	PA	06:11
Manta Ray Skimmer	0	1	315	0	ICN	Apollo	PA	06:11
Duck Bill Skimmer	0	1	549	0	ICN	Monee	IL	06:16
Vikoma Fasflo Skimmer	FFP-011	1	2112	0	NRC	South Point	OH	06:32
Douglas 4300 SkimPac	0	2	960	0	ICN	Germantown	WI	07:17
Douglas 4300 Skimpac	0	2	960	0	ICN	De Pere	WI	08:03
Douglas 2300 SkimPac	0	1	274	0	ICN	St. Ignace	MI	08:27
Douglas 4300 SkimPac	0	2	960	0	ICN	Neenah	WI	08:45
Manta Ray Skimmer	0	1	315	0	ICN	Knoxville	TN	11:04

06 to 12 hours (* Does not include recall/mobilization time)

Manta Ray Skimmer	0	1	315	0	ICN	Fredericksburg	VA	11:13
Vikoma Fasflo Skimmer	FFP-003	1	2112	0	NRC	Wood River	IL	11:19
Vikoma Fasflo Skimmer	FFP-017	1	2112	0	NRC	Baltimore	MD	11:27
Acme Weir Head Skimmer	WH-220	1	0	0	NRC	Baltimore	MD	11:27
Skim Pak Skimmer	0	1	233	0	ICN	Baltimore	MD	11:27
Weir Skimmer	0	2	2058	0	ICN	Baltimore	MD	11:27
Vikoma Fasflo Skimmer	FFP-018	1	2112	0	NRC	Paducah	KY	11:57
Sub Total Floating Suction:		**24**	**21359**	**0**				

Multi Skimmer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Action 24 Skimmer	AP-115	1	823	0	NRC	Rogers City	MI	07:25
Action 18 Skimmer	AP-18-727	1	446	0	NRC	Rogers City	MI	07:25
Action 24 Skimmer	AP-116	1	823	0	NRC	Oswego	NY	10:46
Sub Total Multi Skimmer:		**3**	**2092**	**0**				

Oleophilic Disk

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Crucial ORD Disk Skimmer	ORD-005	1	342	0	NRC	Apollo	PA	06:11
NRC Weir Disk Skimmer	WD-105	1	1371	24	NRC	Apollo	PA	06:11
Sub Total Oleophilic Disk:		**2**	**1713**	**24**				

Oleophilic Rope Mop

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Rope Mop	0	1	1200	0	ICN	Baltimore	MD	11:27
Sub Total Oleophilic Rope Mop:		**1**	**1200**	**0**				

Weir

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Alpha Weir Skimmer	0	1	1360	0	ICN	South Holland	IL	06:03
Weir Skimmer	0	2	274	0	ICN	Glenwood	IL	06:03
Sub Total Weir:		**3**	**1634**	**0**				
Total Skimmer:		**87**	**53809**	**24**				

Vacuum System

Loader

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Skid Mounted Vac	0	1	206	71	ICN	Apollo	PA	06:11
Vacuum Loader	0	3	1029	213	ICN	Burlington	Canad	06:24
Vacuum Drum Loader	0	1	343	0	ICN	Cross Lanes	WV	06:54
Sub Total Loader:		**5**	**1578**	**284**				

Vacuum Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Vacuum Trailer	0	1	1621	124	ICN	Apollo	PA	06:11
Vacuum Trailer	0	1	1651	155	ICN	Apollo	PA	06:11
Vacuum Trailer	0	2	686	262	ICN	Apollo	PA	06:11
Vacuum Trailer	0	1	343	131	ICN	Apollo	PA	06:11
Vacuum Trailer	0	2	3260	260	ICN	Apollo	PA	06:11
Vacuum Trailer	0	2	3306	310	ICN	Apollo	PA	06:11
Vacuum Trailer	0	1	343	95	ICN	Burlington	Canad	06:24
Vacuum Trailer	0	1	343	178	ICN	Burlington	Canad	06:24
Vacuum Trailer	0	4	1372	568	ICN	Ashland	KY	06:32
Vacuum Tanker Trailer	0	1	343	52	ICN	Shelbyville	KY	07:00
Vacuum Trailer	0	1	343	71	ICN	Sunbury	PA	10:06
Vacuum Trailer	0	1	343	125	ICN	Lorton	VA	11:09
Vacuum Trailer	0	1	343	119	ICN	Syracuse	NY	11:10
Vacuum Trailer	0	1	343	142	ICN	Laurel	MD	11:15
Vacuum Tank Trailer	0	1	2057	119	ICN	Baltimore	MD	11:27
Sub Total Vacuum Trailer:		**21**	**16697**	**2711**				

Vacuum Transfer Unit

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)

06 to 12 hours (* Does not include recall/mobilization time)

Vacuum Transfer Unit	107	1	6857	24	NRC	Apollo	PA	06:11
Vacuum Unit	0	1	686	24	ICN	Monee	IL	06:16
Vacuum Unit	0	1	686	12	ICN	Monee	IL	06:16
Skid Mount Vac	0	1	343	24	ICN	Cross Lanes	WV	06:54
Vacuum Transfer Unit	220	1	6857	24	NRC	Baltimore	MD	11:27
Super Sucker Vacuum	0	1	343	120	ICN	St. Louis	MO	11:52
Sub Total Vacuum Transfer Unit:		**6**	**15772**	**228**				

Vacuum Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Vacuum Truck	0	1	754	71	ICN	Glenwood	IL	06:03
Vacuum Truck	0	1	343	166	ICN	Glenwood	IL	06:03
Vacuum Truck	0	1	1463	76	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	1600	86	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	343	79	ICN	Apollo	PA	06:11
Vacuum Trailer	0	1	1444	76	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	1475	102	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	1575	55	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	1600	86	ICN	Apollo	PA	06:11
Vacuum Trailer	0	1	1273	67	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	1273	67	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	1805	95	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	718	52	ICN	Apollo	PA	06:11
Vacuum Truck	0	2	686	158	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	1803	95	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	1447	76	ICN	Apollo	PA	06:11
Vacuum Truck	0	3	1029	300	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	343	79	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	343	71	ICN	Monee	IL	06:16
Vacuum Truck	0	4	1372	476	ICN	Monee	IL	06:16
Vacuum Truck	0	1	343	143	ICN	Monee	IL	06:16
Vacuum Truck	0	9	3087	1179	ICN	Monee	IL	06:16
Vacuum Truck	0	1	343	90	ICN	Monee	IL	06:16
Vacuum Truck	0	1	343	57	ICN	Ashland	KY	06:26
Vacuum Truck	0	2	1508	142	ICN	Wheeling	IL	06:29
Vacuum Truck	0	5	1715	830	ICN	Wheeling	IL	06:29
Vacuum Truck	0	2	686	48	ICN	Ashland	KY	06:32
Vacuum Truck	0	7	2401	497	ICN	Ashland	KY	06:32
Vacuum Truck	0	4	1372	284	ICN	New Lenox	IL	06:33
Vacuum Truck	0	6	2058	426	ICN	Lemont	IL	06:34
Vacuum Truck	0	1	343	71	ICN	Cross Lanes	WV	06:54
Vacuum Truck	0	2	686	166	ICN	Cross Lanes	WV	06:54
Vacuum Truck	0	1	343	70	ICN	Shelbyville	KY	07:00
Vacuum Truck	0	1	343	70	ICN	Shelbyville	KY	07:00
Vacuum Truck	0	1	343	52	ICN	Shelbyville	KY	07:00
Vacuum Truck	0	2	686	152	ICN	Shelbyville	KY	07:00
Vacuum Truck	0	1	343	71	ICN	Shelbyville	KY	07:00
Vacuum Truck	0	2	686	142	ICN	Shelbyville	KY	07:00
Vacuum Truck	0	4	1372	284	ICN	North Aurora	IL	07:06
Vacuum Truck	0	2	686	142	ICN	Wauwatosa	WI	07:12
Pump Truck	0	3	1953	213	ICN	Wauwatosa	WI	07:12
Vacuum Truck	0	11	3773	660	ICN	Germantown	WI	07:17
Vacuum Truck	0	10	3430	1200	ICN	Sheboygan	WI	07:21
Vacuum Truck	0	1	343	71	ICN	Amherst	NY	07:23
Vacuum Truck	0	1	343	76	ICN	Amherst	NY	07:23
Vacuum Truck	0	1	343	71	ICN	Louisville	KY	07:25
Vacuum Truck	0	3	1029	213	ICN	Louisville	KY	07:34
Vacuum Truck	0	5	1715	600	ICN	Louisville	KY	07:38
Vacuum Truck	0	5	1715	655	ICN	Fort Atkinson	WI	08:09
Vacuum Truck	0	1	343	71	ICN	Kaukauna	WI	08:36
Pump Truck	0	2	1302	142	ICN	Kaukauna	WI	08:36

06 to 12 hours (* Does not include recall/mobilization time)

Vacuum Truck	0	1	343	71	ICN	Rochester	NY	09:00
Liquid Vac Truck	0	1	3086	71	ICN	Peoria	IL	09:15
Vacuum Truck	0	1	343	71	ICN	Newburgh	IN	09:19
Vacuum Truck	0	6	2058	720	ICN	Nitro	WV	09:25
Vacuum Truck	0	2	686	142	ICN	Evansville	IN	09:27
Vacuum Truck	0	1	343	78	ICN	Evansville	IN	09:27
Vacuum Truck	0	4	1372	284	ICN	Sunbury	PA	10:06
Vacuum Truck	0	1	343	71	ICN	Blountville	TN	10:15
Vacuum Truck	0	1	343	71	ICN	Norway	MI	10:16
Vacuum Truck	0	1	343	71	ICN	Waverly	NY	10:18
Vacuum Truck	0	2	686	96	ICN	Wausau	WI	11:01
Vacuum Truck	0	1	343	50	ICN	Knoxville	TN	11:04
Vacuum Truck	0	1	343	75	ICN	Lorton	VA	11:09
Vacuum Truck	0	1	343	71	ICN	Syracuse	NY	11:10
Vacuum Truck	0	1	343	71	ICN	Syracuse	NY	11:10
Vacuum Truck	0	1	343	48	ICN	Syracuse	NY	11:10
Vacuum Truck	0	1	343	77	ICN	Syracuse	NY	11:10
Vacuum Truck	0	1	343	71	ICN	Syracuse	NY	11:10
Vacuum Tractor	0	1	343	71	ICN	East Syracuse	NY	11:12
Vacuum Truck	0	2	686	142	ICN	East Syracuse	NY	11:12
Vacuum Tank Truck	0	1	2057	83	ICN	Stafford	VA	11:12
Vacuum Tank Truck	0	1	2057	76	ICN	Stafford	VA	11:12
Vacuum Tank Truck	0	1	2057	76	ICN	Stafford	VA	11:12
Vacuum Truck	0	2	686	166	ICN	Fredericksburg	VA	11:13
Vacuum Truck	0	1	343	71	ICN	Fredericksburg	VA	11:13
Vacuum Truck	0	2	686	142	ICN	Laurel	MD	11:15
Vacuum Truck	0	1	343	59	ICN	Laurel	MD	11:15
Vacuum Truck	0	9	3087	639	ICN	Wood River	IL	11:19
Vacuum Truck	0	3	1029	360	ICN	Baltimore	MD	11:25
Vacuum Truck	0	1	343	120	ICN	Baltimore	MD	11:26
Vacuum Tanker	0	1	343	71	ICN	Baltimore	MD	11:26
Vacuum Truck	0	1	343	83	ICN	Baltimore	MD	11:26
Vacuum Tank Truck	0	1	2057	83	ICN	Baltimore	MD	11:27
Vacuum Tank Truck	0	1	2057	76	ICN	Baltimore	MD	11:27
Vacuum Tank Truck	0	1	2057	83	ICN	Baltimore	MD	11:27
Vacuum Tank Truck	0	1	2057	71	ICN	Baltimore	MD	11:27
Vacuum Tank Truck	0	1	2057	76	ICN	Baltimore	MD	11:27
Vacuum Tank Truck	0	1	2057	95	ICN	Baltimore	MD	11:27
Vacuum Tank Truck	0	1	2057	71	ICN	Baltimore	MD	11:27
Vacuum Tank Truck	0	1	2057	71	ICN	Baltimore	MD	11:27
Vacuum Truck	0	1	343	130	ICN	Baltimore	MD	11:27
Vacuum Truck	0	1	343	75	ICN	Baltimore	MD	11:27
Vacuum Truck	0	1	343	76	ICN	Baltimore	MD	11:27
Vacuum Truck	0	1	343	70	ICN	Goodlettsville	TN	11:40
Vacuum Truck	0	1	343	70	ICN	Goodlettsville	TN	11:40
Vac Truck	0	1	343	130	ICN	Goodlettsville	TN	11:40
Vacuum Truck	0	1	343	71	ICN	Calvert City	KY	11:40
Vacuum Truck	0	1	754	71	ICN	St. Louis	MO	11:52
Vacuum Truck	0	1	343	83	ICN	Nashville	TN	11:52
Vacuum Truck	0	1	343	71	ICN	Nashville	TN	11:52
Vacuum Truck	0	1	343	71	ICN	Nashville	TN	11:52
Vacuum Truck	0	2	3428	158	ICN	Nashville	TN	11:54
Vacuum Truck	0	17	5831	1207	ICN	St. Louis	MO	11:56
Vacuum Truck	0	4	1372	480	ICN	St. Louis	MO	11:56
Vacuum Truck	0	1	1714	79	ICN	Paducah	KY	11:57
Sub Total Vacuum Truck:		**222**	**118400**	**19057**				
Total Vacuum System:		**254**	**152447**	**22280**				

Vessel

Deck Barge

06 to 12 hours (* Does not include recall/mobilization time)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
BUDA I Work Barge	0	1	0	0	ICN	Detroit	MI	08:26
BUDA II Vacuum Barge	0	1	0	0	ICN	Detroit	MI	08:26
Sub Total Deck Barge:		**2**	**0**	**0**				

Deployment Craft (< 25 foot)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
18' Deployment Craft	0	1	0	0	ICN	South Holland	IL	06:03
20' Deployment Craft	0	1	0	0	ICN	South Holland	IL	06:03
14' Deployment Craft	0	1	0	0	ICN	South Holland	IL	06:03
John Boat	0	16	0	0	ICN	Glenwood	IL	06:03
13' Deployment Craft	0	1	0	0	ICN	Apollo	PA	06:11
22' Deployment Craft	0	1	0	0	ICN	Apollo	PA	06:11
20' Deployment Craft	0	1	0	0	ICN	Apollo	PA	06:11
18' Deployment Craft	0	1	0	0	ICN	Apollo	PA	06:11
20' Deployment Craft	0	1	0	0	ICN	Apollo	PA	06:11
16' Deployment Craft	0	1	0	0	ICN	Apollo	PA	06:11
24' Deployment Craft	0	1	0	0	ICN	Apollo	PA	06:11
12' Deployment Craft	0	2	0	0	ICN	Apollo	PA	06:11
16' Deployment Craft	0	5	0	0	ICN	Apollo	PA	06:11
18' Deployment Craft	0	1	0	0	ICN	Monee	IL	06:16
14" Deployment Craft	0	1	0	0	ICN	Monee	IL	06:16
24' Deployment Craft	0	1	0	0	ICN	Monee	IL	06:16
12' Deployment Craft	0	3	0	0	ICN	Monee	IL	06:16
13' Deployment Craft	0	1	0	0	ICN	Monee	IL	06:16
10' Deployment Craft	0	1	0	0	ICN	Monee	IL	06:16
16' Deployment Craft	0	2	0	0	ICN	Burlington	Canada	06:24
20' Response Boat	0	1	0	0	ICN	Ashland	KY	06:26
John Boat	0	2	0	0	ICN	Wheeling	IL	06:29
Work Flat	0	13	0	0	ICN	South Point	OH	06:32
22' Deployment Craft	0	4	0	0	ICN	South Point	OH	06:32
18' Deployment Craft	0	2	0	0	ICN	South Point	OH	06:32
16' Deployment Craft	0	4	0	0	ICN	Ashland	KY	06:32
18' Deployment Craft	0	1	0	0	ICN	Ashland	KY	06:32
18' Deployment Craft	0	1	0	0	ICN	New Lenox	IL	06:33
14' Deployment Craft	0	1	0	0	ICN	New Lenox	IL	06:33
14' Deployment Craft	0	1	0	0	ICN	Lemont	IL	06:34
14' Deployment Craft	0	1	0	0	ICN	Lemont	IL	06:34
24' Deployment Craft	0	2	0	0	ICN	Lemont	IL	06:34
24' Deployment Craft	0	1	0	0	ICN	Lemont	IL	06:34
22' Deployment Craft	0	1	0	0	ICN	Cross Lanes	WV	06:54
14' Deployment Craft	0	1	0	0	ICN	Cross Lanes	WV	06:54
11' Deployment Craft	0	1	0	0	ICN	Cross Lanes	WV	06:54
20' Response Boat	0	1	0	0	ICN	Shelbyville	KY	07:00
14' Deployment Craft	0	1	0	0	ICN	North Aurora	IL	07:06
14' Deployment Craft	0	1	0	0	ICN	Wauwatosa	WI	07:12
16' Deployment Craft	0	1	0	0	ICN	Menomonee Falls	WI	07:13
18.5' Deployment Craft	0	1	0	0	ICN	Menomonee Falls	WI	07:13
19' Deployment Craft	0	1	0	0	ICN	Germantown	WI	07:17
16' Deployment Craft	0	4	0	0	ICN	Germantown	WI	07:17
Small Boat w/ Trolling Motor	0	1	0	0	ICN	Louisville	KY	07:25
Response Boat	0	1	0	0	ICN	Louisville	KY	07:25
24' Deployment Craft	0	1	0	0	ICN	Louisville	KY	07:34
18' Deployment Craft	0	1	0	0	ICN	Louisville	KY	07:34
12' Deployment Craft	0	1	0	0	ICN	Louisville	KY	07:34
18' Deployment Craft	0	1	0	0	ICN	Louisville	KY	07:34
19' Deployment Craft	0	1	0	0	ICN	Louisville	KY	07:34
14' Deployment Craft	0	1	0	0	ICN	De Pere	WI	08:03
18' Deployment Craft	0	1	0	0	ICN	De Pere	WI	08:03
20' Deployment Craft	0	1	0	0	ICN	De Pere	WI	08:03
14' Rowboat	0	1	0	0	ICN	St. Ignace	MI	08:27

06 to 12 hours (* Does not include recall/mobilization time)

17' Deployment Craft	0	1	0	0	ICN	St. Ignace	MI	08:27
21' Deployment Craft	0	2	0	0	ICN	Neenah	WI	08:45
18' Deployment Craft	0	1	0	0	ICN	Newburgh	IN	09:19
14' Deployment Craft	0	1	0	0	ICN	Nitro	WV	09:25
20' Deployment Craft	0	1	0	0	ICN	Nitro	WV	09:25
20' Deployment Craft	0	1	0	0	ICN	Evansville	IN	09:27
12' Deployment Craft	0	4	0	0	ICN	Evansville	IN	09:27
14' Deployment Craft	0	2	0	0	ICN	Evansville	IN	09:27
18' Deployment Craft	0	1	0	0	ICN	Sunbury	PA	10:06
16' Deployment Craft	0	1	0	0	ICN	Blountville	TN	10:15
14' Deployment Craft	0	1	0	0	ICN	Wausau	WI	11:01
16' Deployment Craft	0	1	0	0	ICN	Knoxville	TN	11:04
19' Deployment Craft	0	1	0	0	ICN	Knoxville	TN	11:04
18' Deployment Craft	0	1	0	0	ICN	Lorton	VA	11:09
20' Deployment Craft	0	1	0	0	ICN	Lorton	VA	11:09
10' Deployment Craft	0	1	0	0	ICN	Lorton	VA	11:09
18' Deployment Craft	0	1	0	0	ICN	Syracuse	NY	11:10
14' Deployment Craft	0	1	0	0	ICN	Syracuse	NY	11:10
13' Deployment Craft	0	2	0	0	ICN	Stafford	VA	11:12
19' Deployment Craft	0	1	0	0	ICN	Fredericksburg	VA	11:13
16' Deployment Craft	0	1	0	0	ICN	Fredericksburg	VA	11:13
24' Deployment Craft	0	1	0	0	ICN	Laurel	MD	11:15
15' Deployment Craft	0	2	0	0	ICN	Laurel	MD	11:15
20' Deployment Craft	0	5	0	0	ICN	Binghamton	NY	11:17
24' Deployment Craft	0	1	0	0	ICN	Wood River	IL	11:19
16' Deployment Craft	0	1	0	0	ICN	Wood River	IL	11:19
14' Deployment Craft	0	1	0	0	ICN	Baltimore	MD	11:25
16' Deployment Craft	0	1	0	0	ICN	Baltimore	MD	11:25
20' Deployment Craft	0	2	0	0	ICN	Baltimore	MD	11:26
13' Deployment Craft	0	2	0	0	ICN	Baltimore	MD	11:27
12' Deployment Craft	0	15	0	0	ICN	Baltimore	MD	11:27
22' Deployment Craft	0	1	0	0	ICN	Baltimore	MD	11:27
14' Deployment Craft	0	5	0	0	ICN	Baltimore	MD	11:27
15' Deployment Craft	0	9	0	0	ICN	Baltimore	MD	11:27
16' Deployment Craft	0	6	0	0	ICN	Baltimore	MD	11:27
16' Deployment Craft	0	12	0	0	ICN	Baltimore	MD	11:27
14' Deployment Craft	0	4	0	0	ICN	Baltimore	MD	11:27
21' Deployment Craft	0	8	0	0	ICN	Baltimore	MD	11:27
24' Deployment Craft	0	1	0	0	ICN	Baltimore	MD	11:27
18' Deployment Craft	0	1	0	0	ICN	Baltimore	MD	11:27
19' Deployment Craft	0	1	0	0	ICN	Baltimore	MD	11:27
14' Deployment Craft	0	1	0	0	ICN	Baltimore	MD	11:27
24' Response Boat	0	1	0	0	ICN	Kingston	TN	11:30
16' Deployment Craft	0	1	0	0	ICN	Kingston	TN	11:30
24' Response Boat	0	1	0	0	ICN	Goodlettsville	TN	11:40
24' Response Boat	0	2	0	0	ICN	Goodlettsville	TN	11:40
20' Deployment Craft	0	1	0	0	ICN	Calvert City	KY	11:40
John Boat	0	2	0	0	ICN	St. Louis	MO	11:52
16' Deployment Craft	0	1	0	0	ICN	Nashville	TN	11:52
19' Deployment Craft	0	1	0	0	ICN	Nashville	TN	11:52
12' Deployment Craft	0	1	0	0	ICN	Nashville	TN	11:52
18' Deployment Craft	0	1	0	0	ICN	St. Louis	MO	11:56
Sub Total Deployment Craft (< 25 foot):		**220**	**0**	**0**				

Deployment Craft (> 25 foot)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
26' Deployment Craft	0	1	0	0	ICN	South Holland	IL	06:03
28' Deployment Craft	0	1	0	0	ICN	Monee	IL	06:16
30' Deployment Craft	0	1	0	0	ICN	Monee	IL	06:16
28' Spill Response Vessel	0	3	0	0	ICN	South Point	OH	06:32
26' Rescue Boat	0	1	0	0	ICN	Shelbyville	KY	07:00

06 to 12 hours (* Does not include recall/mobilization time)

27' Response Boat	0	1	0	0	ICN	Shelbyville	KY	07:00
26' Command Boat	0	1	0	0	ICN	St. Ignace	MI	08:27
29' Deployment Craft	0	1	0	0	ICN	Blountville	TN	10:15
29' Deployment Craft	0	1	0	0	ICN	Knoxville	TN	11:04
27' Deployment Craft	0	1	0	0	ICN	Lorton	VA	11:09
29' Deployment Craft	0	1	0	0	ICN	Fredericksburg	VA	11:13
26' Deployment Craft	0	1	0	0	ICN	Baltimore	MD	11:25
59' Deployment Craft	0	1	0	0	ICN	Nashville	TN	11:52
28' Deployment Craft	0	1	0	0	ICN	Nashville	TN	11:54
26' Deployment Craft	0	1	0	0	ICN	Paducah	KY	11:57
Sub Total Deployment Craft (> 25 foot):		**17**	**0**	**0**				

WorkBoat

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Response Boat	0	1	0	0	ICN	Newburgh	IN	09:19
Tracker	0	1	0	0	ICN	Syracuse	NY	11:10
Pontoon Boat	0	1	0	0	ICN	Syracuse	NY	11:10
Sub Total WorkBoat:		**3**	**0**	**0**				
Total Vessel:		**242**	**0**	**0**				
Total 06 to 12 hours:			**206256**	**86210**				
Running Total from 0 to unknown:			**309869**	**130529**				

NATIONAL RESPONSE CORPORATION

National Response Corporation
Group V Oil Response

Behavior:

A spill of Group V fuel oil can have complex behavioral patterns, depending on the API gravity of the oil, the homogeneity of the mixture, the density and salinity of the receiving water, and the physical setting of the spill site. Denser-than-water oil is expected to mix in the water column as oil drops rather than large, cohesive mats. Oil can accumulate on the bottom under calm currents, so releases of very heavy oil in harbors with dredged channels and berths could readily sink and form pools of oil on the bottom. Releases in areas subject to tidal and river flow are likely to be kept in suspension in the water column by currents. If the oil is poorly mixed, the spill could separate into components that can float, suspend and sink simultaneously. The loss of the light components through evaporation is not thought to be an important mechanism through which floating oils eventually sink; however the accumulation of sand within the floating particles is a major factor.

Spills of Group V fuel oils that sink or become neutrally buoyant are more than likely going to be difficult to locate and assess. The best options for locating submerged oil include aerial observations, sonar equipment, and underwater video and diver surveys. All methods have certain advantages and disadvantages and rely mostly in part to the visibility, depth and sea conditions of the water.

Location:

Once located, sunken oil has historically not been contained but instead tended to accumulate in natural collection areas. Any oil that is mobilized by currents is not contained. Although bottom booms have been proposed, they will likely not be effective in any kind of a bottom current, or even properly deployed on the bottom in an effective location. Realistically, the only likely containment of sinking oil will occur naturally as the oil accumulates in low areas on the bottom of the spill site.

Containment:

The containment of oil that is suspended or mixed into the water column is feasible only where the currents are very weak. Options include silt curtains or fine mesh nets coupled with a surface boom to contain the floating or re-floating fraction of the oil. The effective use of silt curtains would require contractors experienced in the proper deployment and

NATIONAL RESPONSE CORPORATION

maintenance of the curtain, in addition to the use of the curtain in an area with little to no current.

Recovery:

The recovery of any sunken oil has proven to be just as difficult and expensive as locating and containing the oil. The primary methods used in the past have been manual removal by divers, dredging, removal by diver-directed pump and vacuum systems, and the use of robotic pumping systems. Again, each methodology contains its own inherent advantages and disadvantages. Manual removal involves the collection of the oil by divers into bags or containers. This method has some advantages including the recovery of little additional sediment, waste or water, divers are able to pick up relatively small pieces of product, and finally the recovered oil can be placed directly into suitable containers for disposal, negating the need for intermediate storage. The biggest disadvantage of manual removal is the slow rate of recovery, which creates the potential for the oil to spread to other areas before being recovered.

Recovery using a pump and/or vacuum system has historically been the most widely used removal method for sunken oil. They are more often than not diver directed and the suction head modified so that the diver can manually open and close the valve. Even with the diver controlled valve, large volumes of oily water are generated with this method. This necessitates the use of facilities for oil/water separation and the discharge of the separated water back into the ocean. This decanting procedure in and of itself can be very problematic if the majority of the Group V oil is heavier than water and only part of the oil tends to re-float.

Dredging is the fastest method for removing sunken oil from the bottom, but it is likely to generate very large volumes of oil water and sediment that must be handled, treated, and disposed of.

Finally, the recovery of oil that is suspended in the water column poses the most difficult challenge. Fish nets have not been very successful for recovery of firm tar balls; they are likely to be even less effective with liquid oil droplets. In any case, the net mesh size would have to be matched to the oil droplet size. Heavy accumulations would clog the nets making them very heavy, and traces of liquid oil would drain from the nets as they were lifted from the water. In addition, the nets could be used only once.

In conclusion, the locating, containment and recovery of submerged Group V oil will be an extremely laborious, time consuming and expensive undertaking in which we can only hope that the natural setting of the spill can facilitate a quick and cost effective response.

NATIONAL RESPONSE CORPORATION

Please find below NRC's oil spill independent contractors that have divers on staff and can respond and have experience to a Group V oil spill response and the dedicated NRC response equipment that would be used in a Group V response.

NRC Dedicated Group V Response Recovery Equipment

- 36 - Vacuum Transfer Units
- 9 - Desmi DOP-250 Screw Pumps
- 44 - Portable Barge Sets; approx. 10,000 gal. storage capacity each.

Response Contractors (both in and out of network)

- Millers Launch (Staten Island, NY)
- Eason Diving (Charleston, SC)
- AMPOL (New Iberia, LA)
- Randive Inc. (New Jersey)
- Walker Diving (New Jersey)
- Miller Environmental Group (Calverton, NY)
- Ken's Marine (Bayonne, NJ)
- Cliff Berry Inc. (Port Everglades, Fl)
- Pit Hog (Somerset, WI)
- Gulf Atlantic Pump and Dredge Company (Lake City, FL)
- Atlantic Diving (Wilmington, NC)
- Bordeaux Salvage and Construction (Wilmington, NC)
- Fore River Dock Dredge (Portland, ME)
- Bull Dredging (Neptune Beach, FL)
- NRCES Environmental (Seattle, WA)
- Devine Diving and Salvage (Portland, OR)
- Muldoon Marine (LA/LB, CA)
- Global Diving & Salvage (Seattle, WA)
- Resolve Marine & Salvage (Ft Lauderdale, FL)
- Crofton Diving (Portsmouth, VA)
- Marion Hill Associates (New Brighton, PA)
- Weeks Marine (Cranford, NJ)
- Great Lakes Diving Co. (Stevensville, MI)
- Marine Pollution Control (Detroit, MI)
- Sea Brex Marine, Inc. (Stevensville, MI)
- Black Dog Divers (Portsmouth, NH)
- Hulcher Services, Inc. (Denton, TX)

3

NRC
NATIONAL RESPONSE
CORPORATION

Response Contractors (both in and out of network)

- Northwest Underwater Construction LLC (Vancouver, WA)
- Ballard Diving & Salvage Inc. (Seattle, WA)
- Canders Dive (Bangor, ME)
- Cal Dive International (Houston, TX)

A Partial List of Dredging Equipment

- 2 - Ellicott Dredge Model MC915, 23' depth, 8" discharge (Bull Dredging: Jacksonville, Fl)
- 1 - Ellicott Dredge, 19 " discharge (Subcontracted to Bull Dredging: Jacksonville, Fl)
- 1 - Innovative Material Systems Dredge Model IMS 4010, 10 " discharge (Subcontracted to Bull Dredging, Jacksonville Fl.)
- 4 - Open Cavity Submersible Dredge Pumps. (Cliff Berry Inc: Port Everglades, Fl)
- 2 - Pit Hog Electric remote control lagoon pump - Model ERCLP60, 600-1000 gpm and 15 ft. depth, extendable to 50ft. (Pit Hog: Somerset, WI)
- 1 - "Little Monster" dredge by H&H Pump and dredge w/ 20 ft. depth. (Gulf Atlantic Pump and Dredge Company)
- Large Duckbill Dredge System (Ft Lauderdale, FL)
- 1 - Weeks 551 Bucket 25 cu yd 2,100 hp
- 1 - Weeks 549 Bucket 18 cu yd 1,399 hp
- 1 – R & N Weeks Hopper Barge 4,000 cy
- 1 - BTD – 51 Hydraulic 24" 3,860 hp
- 1 - Weeks 550 Bucket 25 cu yd 2,100 hp

Detection & Tracking

- 3 - Side Scan Sonar Systems: (Ocean Systems, St. Petersburg FL, North Star Marine, Cape May, NJ and Northwest Underwater Construction LLC, Vancouver, WA)
- 1 - Underwater Surveillance Cameras (Miller, Staten Island, NY)
- 1 - Side Scan Sonar system (Marion Hill Associates, New Brighton, PA)
- 1 - Roxanne Submerged Oil Detection System. (Ocean Systems: St. Petersburg Fl.)
- 1 - 2-man submarine (Fore River Dock Dredge, ME)
- 1 – Edge Tech Model 272 analog sonar (Ft Lauderdale, FL)

4

NATIONAL RESPONSE CORPORATION

Silt Curtain

- 1,000 ft – Medium Weight, 8 ft depth silt curtain (Long Island, NY)

VSORS

- Vessel submerged oil recovery system (VSORS) – A VSORS is a pipe or heavy chains with absorbents attached, suspended within the water column.
- Bottom Snare samplers to determine if oil is traveling along bottom to protect intakes.

Miscellaneous Recovery Equipment

Personnel, support boats, recovery skimmers, pumps, cranes, deck & spud barges, clamshell buckets, commercial diving and salvage gear, containment boom, and detection sonar.

5

APPENDIX I

EVACUATION PLAN

Evacuation Plan I-2

Evacuation Diagram I-5

EVACUATION PLAN

(b) (7)(F), (b) (3)

[redacted]

EVACUATION PLAN (Cont'd)

(b) (7)(F), (b) (3)

[redacted]

EVACUATION PLAN (Cont'd)

(b) (7)(F), (b) (3)

[redacted]

EVACUATION DIAGRAM

Evacuation
muster point
for roll call.

(b) (7)(F), (b) (3)

SPILL RESPONSE CONTRACT CERTIFICATION

National Response Corporation (NRC) certifies that has **PBF Holding Co., LLC and Toledo Refining Company LLC** "ensured, by contract or other approved means, the availability of private personnel and equipment necessary to respond, to the maximum extent practicable, to a worst case or medium case discharge" for the below named Facilities. NRC agrees that the Client has the right to name NRC and its resources, including those within its Independent Contractor Network (ICN) for Oil Pollution Act of 1990 (OPA) coverage for the below named Facilities. NRC has filed its Spill Response Plan Appendix with the U.S. Coast Guard, and that the Client is authorized to reference this Appendix in their Facility Response Plan. This Appendix presently covers all ports in the U.S. East, West and Gulf Coasts, Great Lakes and the U.S. Caribbean. NRC reserves the right to rescind this authorization in the event of termination of its contractual arrangements with the Facilities.

Entered Facilities:

Toledo Refining Company LLC Refinery Operations
Toledo Refining Company LLC Terminal Operations
Toledo Refining Company LLC Dock Operations
Toledo Refining Company LLC Pipeline Operations

Acknowledged by: Date: **April 25, 2014**

National Response Corporation

_____
President

February, 2014
PREP Credit Report

Dear Client:

Please find attached the - ***NRC 2013 Annual Preparedness for Response Exercise Program (PREP) Equipment Deployment Summary Report*** (Attachment A) for review and retention with an accompanying Letter of Attestation (Attachment B). This report documents OSRO equipment deployment exercise information in compliance with the National Preparedness for Response Exercise Program (PREP) Guidelines for reportable and evaluated on-water equipment deployments during exercises, training and actual spill responses. It provides information necessary for your OSRO equipment deployment credit for the 2013 calendar year.

This report documents deployment of the various types of skimming systems and boom that NRC owns or controls for classification purposes. It includes equipment aboard our Oil Spill Response Vessels and at Independent Contractor Network (ICN) facilities dispersed throughout the various Captain of the Port zones. The information categories include:

COTP ZONE - The COTP Zone in which the response equipment was deployed
LOCATION - The geographical location (city/state) in which the equipment was deployed.
SKIMMING EQUIPMENT - Each type of skimmer in the NRC owned or controlled equipment Inventory. A numeric figure in the columns for each type of skimmer indicates the number of times that personnel at a particular facility or Vessel have activated and deployed this type of skimming system in the water.
BOOM EQUIPMENT - The type and amount of boom deployed by personnel assigned to a particular facility and vessel.

Each Independent Contractor Network (ICN) Participant facility, of which there are over one hundred, has an active file that feeds data to the Summary Report.

NRC's dispersant program includes access to 6 spray aircraft throughout the US, such as DC-4's and a DC-6. NRC conducts dispersant aircraft training through internal exercises on a routine basis.

ICN facility equipment deployment records are held at each facility and at NRC Headquarters in Great River, NY. These internal historical records identify each equipment deployment occurrence by:

- NRC Control No.
- Date of deployment
- Event description - actual spill incident, equipment training or exercise
- Type of environment - sheltered , protected or unsheltered
- Type of skimming system deployed
- Type and quantity of boom deployed

If you have any questions regarding this report, contact Christopher Eilers at 631.328.2517. Please ensure individuals responsible for the PREP program in your organization receive this report. If you would like additional copies they are located on our Web site, which is www.nrcc.com under the client access portion. Widest dissemination of this document is encouraged.

Sincerely,

Steven A. Candito
President

Regional Breakdown

Northeast Region
Regional Manager: John Hielscher
3500 Sunrise Highway, Great River, NY 11739
(631)328-2524 Office
(b) (6) Mobile
States Covered:
Indiana, Michigan, Ohio, New York, Pennsylvania, Maryland, Delaware, New Jersey, Connecticut, Vermont, Massachusetts, Rhode Island, New Hampshire, Maine, West Virginia, Virginia

South Region
Regional Manager: John Robinson
17350 State Highway 249 – Suite 355, Houston, TX 77064
(713)965-4165 Office
(b) (6) Mobile
States Covered:
Texas, Louisiana, Arkansas, Oklahoma, Kansas, Nebraska, Colorado, New Mexico, Mississippi, Alabama

Southeast Region
Regional Manager: Jason DeSantis
104 River Lane, Ormond Beach, FL 32176
(386)441-7719 Office
(b) (6) Mobile
States Covered:
Kentucky, Tennessee, North Carolina, South Carolina, Georgia, Florida, Missouri, Illinois, Iowa, Minnesota, Wisconsin

Pacific Northwest Region
Regional Manager: Bart Dodson
9520 10th AVE, Seattle, WA 98108
(206)607-3010 Office
(b) (6) Mobile
States Covered: Washington, Oregon, Idaho, Montana, Wyoming, Hawaii, North Dakota, South Dakota

West Region
VP/General Manager: Todd Roloff
1805 Ferry Point Road, Alameda, CA 94501
(510)749-4121 Office
(b) (6) Mobile
States Covered: California, Nevada, Utah, Arizona

Caribbean Region
Regional Manager: David Aviles
P.O. Box 9022750, San Juan, PR 00902
(787)789-2000 Office
(b) (6) Mobile
Islands Covered: Puerto Rico, St. Thomas, St. Croix, St. Lucia

Aruba
Regional Manager: James Haeghaert
Bungalow 251, First Ave., Seroe Colorado, San Nicholas, Aruba
Islands Covered: Aruba

2013 ANNUAL PREP EQUIPMENT DEPLOYMENT SUMMARY

NRC USCG OSRO # 0016

Attachment A

Date	COTP Zone	Contractor Name	Location	Boom 6"-18"	Boom 19"-42"	Skimmer Drum, Brush,	Skimmer Floating Suction	Skimmer Belt	Skimmer Rope	Region
1/1/2013	Pittsburgh	McCutcheon Enterprise	Apollo, PA	2400'						Northeast
1/6/2013	Baltimore	Miller Environmental Group	Baltimore, MD	400'		1				Northeast
1/11/2013	Delaware Bay	Miller Environmental Group	Philadelphia, PA	400'		1				Northeast
1/14/2013	New York	Miller Environmental Group	Staten Island, NY	13600'		8				Northeast
1/27/2013	New York	Miller Environmental Group	Astoria, NY	1000'						Northeast
2/4/2013	Delaware Bay	Miller Environmental Group	Milford, DE	400'			2			Northeast
2/11/2013	New York	Miller Environmental Group	Newburgh, NY	1800'						Northeast
2/26/2013	Delaware Bay	Miller Environmental Group	Marcus Hook, PA	1500'		1				Northeast
2/28/2013	Long Island Sound	Miller Environmental Group	Long Island, NY	2000'	2000'					Northeast
3/16/2013	New York	Miller Environmental Group	Astoria, NY	1000'						Northeast
3/18/2013	Boston	National Response Corporation	Boston, MA	1000'		1				Northeast
3/20/2013	Baltimore	Miller Environmental Group	Baltimore, MD	1000'		1				Northeast
3/20/2013	Boston	Boston Line Service	Revere, MA	1500'						Northeast
3/21/2013	Southeastern New England	Moran Environmental Recovery	Buzzards Bay, MA	1300'		1				Northeast
4/4/2013	New York	Miller Environmental Group	Lawrence, NY	1000'						Northeast
4/10/2013	Boston	Boston Line Service	Boston, MA	1000'						Northeast
4/10/2013	Ohio Valley	National Response Corporation	Cincinnati, OH			1				Northeast
4/19/2013	Long Island Sound	Miller Environmental Group	Port Jefferson, NY	100'						Northeast
4/25/2013	Southeastern New England	Coast Line Service	Providence, RI	1500'						Northeast
5/4/2013	Baltimore	Miller Environmental Group	Baltimore, MD	1000'		1				Northeast
5/9/2013	New York	Miller Environmental Group	Gowanus, NY	200'						Northeast
5/10/2013	Southeastern New England	Moran Environmental Recovery	Woodshole, MA	1100'		1				Northeast
5/15/2013	Pittsburgh	National Response Corporation	Apollo, PA	100'		1				Northeast
5/25/2013	Delaware Bay	Moran Environmental Recovery	Delaware, DE	900'			1			Northeast
6/3/2013	New York	Moran Environmental Recovery	New York, NY	1000'			1			Northeast
6/5/2013	Buffalo	National Response Corporation	Buffalo, NY	1000'		1				Northeast
6/12/2013	Boston	Boston Line Service	East Boston, MA	1000'						Northeast
6/12/2013	Southeastern New England	Coast Line Service	Providence, RI	1000'						Northeast
6/19/2013	Boston	Boston Line Service	East Boston, MA	1000'						Northeast
6/20/2013	Northern New England	National Response Corporation	Bangor, ME	1000'		1				Northeast
6/20/2013	Southeastern New England	Coast Line Service	Providence, RI	1600'						Northeast
6/22/2013	Boston	Boston Line Service	Deer Island, MA	1000'						Northeast
6/26/2013	Ohio Valley	Evergreen Environmental	Ohio River	400'						Northeast
7/8/2013	Hampton Roads	Moran Environmental Recovery	Chesapeake Bay, VA	1800'		1				Northeast
7/11/2013	Ohio Valley	Evergreen Environmental	Ohio River Kramers Lane	900'						Northeast
7/11/2013	Sault Ste. Marie	National Response Corporation	Rogers City, MI	2000'		2				Northeast
7/16/2013	Hampton Roads	Moran Environmental Recovery	Portsmouth, VA	200						Northeast
7/17/2013	Delaware Bay	Miller Environmental Group	Pennsauken, NJ	2000'			1			Northeast

Date	COTP Zone	Contractor Name	Location	Boom 6"-18"	Boom 19"-42"	Skimmer Drum, Brush,	Skimmer Floating Suction	Skimmer Belt	Skimmer Rope	Region
8/3/2013	Upper Mississippi Rive	Evergreen Environmental	Evansville, IN	400'						Northeast
8/5/2013	New York	National Response Corporation	Staten Island, NY					1		Northeast
8/8/2013	Baltimore	Miller Environmental Group	Baltimore, MD	1000'		1				Northeast
8/8/2013	Delaware Bay	Miller Environmental Group	Paulsboro, NJ	1500'		1				Northeast
8/8/2013	New York	Moran Environmental Recovery	New York, NY	1000'		1				Northeast
8/13/2013	Upper Mississippi Rive	National Response Corporation	Beulah, ND	500'		1				Northeast
8/28/2013	Delaware Bay	Miller Environmental Group	Delaware City, DE	1200'		2	2			Northeast
9/2/2013	Delaware Bay	Miller Environmental Group	Delaware City, DE	600'		2	2			Northeast
9/4/2013	New York	Miller Environmental Group	Staten Island, NY	500'						Northeast
9/7/2013	Hampton Roads	National Response Corporation	Norfolk, VA	1000'		1				Northeast
9/11/2013	Boston	Boston Line Service	Everett, MA	1000'						Northeast
9/12/2013	Boston	Boston Line Service	Chelsea, MA	1000'						Northeast
9/13/2013	New York	Miller Environmental Group	Staten Island, NY	2000'						Northeast
9/13/2013	Upper Mississippi Rive	Summit Environmental	Evansville, IN	600'	500'	2				Northeast
9/15/2013	New York	Miller Environmental Group	Staten Island, NY	3600'		1				Northeast
9/16/2013	New York	National Response Corporation	New York, NY		200'			1	1	Northeast
9/24/2013	Delaware Bay	Miller Environmental Group	Marcus Hook, PA	1500'		1				Northeast
9/25/2013	Ohio Valley	Evergreen Environmental	Ohio River Greenwood Boat Ramp	500'		1				Northeast
9/26/2013	Southeastern New England	Coast Line Service	Providence, RI	1500'						Northeast
9/29/2013	Upper Mississippi Rive	Summit Environmental	Evansville, IN	1000'		2				Northeast
10/2/2013	New York	Miller Environmental Group	Newburgh, NY	1800'						Northeast
10/7/2013	Baltimore	Miller Environmental Group	Salisbury, MD	1000'						Northeast
10/8/2013	Upper Mississippi Rive	Summit Environmental	Evansville, IN	1000'		1				Northeast
10/9/2013	Baltimore	Miller Environmental Group	Baltimore, MD	200'						Northeast
10/9/2013	New York	Miller Environmental Group	Haverstraw, NY	1300'						Northeast
10/17/2013	Long Island Sound	Miller Environmental Group	Riverhead, NY	1000'						Northeast
10/22/2013	Upper Mississippi Rive	Summit Environmental	Evansville, IN	1000'		1				Northeast
10/23/2013	Delaware Bay	Miller Environmental Group	Philadelphia, PA	1000'			1			Northeast
10/24/2013	Delaware Bay	Miller Environmental Group	Wilmington, DE	600'						Northeast
10/29/2013	Delaware Bay	Miller Environmental Group	Wilmington, DE	200'						Northeast
10/29/2013	Delaware Bay	Moran Environmental Recovery	Philadelphia, PA	1100'			1			Northeast
11/11/2013	Southeastern New England	Coast Line Service	Providence, RI	1000'						Northeast
11/12/2013	Boston	Boston Line Service	Everett, MA	1500'						Northeast
11/12/2013	New York	Miller Environmental Group	Newburgh, NY	2000'						Northeast
11/25/2013	Southeastern New England	Coast Line Service	Providence, RI	1000'						Northeast
11/26/2013	Southeastern New England	Coast Line Service	Providence, RI	1200'						Northeast
12/13/2013	Boston	Boston Line Service	Quincy, MA	1000'						Northeast
12/18/2013	Boston	Boston Line Service	East Boston, MA	1000'						Northeast
12/31/2013	New York	National Response Corporation	Staten Island, NY						1	Northeast
2/28/2013	Puget Sound	National Response Corporation	Nea Bay, WA			1				Northwest
4/11/2013	Portland	National Response Corporation	Columbia River, WA				1			Northwest
5/11/2013	Puget Sound	National Response Corporation	San Juans, WA	1000'						Northwest
6/5/2013	Puget Sound	National Response Corporation	Woodinville, WA				1			Northwest

Date	COTP Zone	Contractor Name	Location	Boom 6"-18"	Boom 19"-42"	Skimmer Drum, Brush,	Skimmer Floating Suction	Skimmer Belt	Skimmer Rope	Region
8/23/2013	Puget Sound	Moran Environmental Recovery	Renton, WA	300'		1				Northwest
8/31/2013	Puget Sound	National Response Corporation	Ferndale, WA			1				Northwest
9/17/2013	Puget Sound	National Response Corporation	Seattle, WA			1				Northwest
9/30/2013	Puget Sound	National Response Corporation	Seattle, WA	400'		1				Northwest
10/2/2013	Puget Sound	Moran Environmental Recovery	Eagle Harbor, WA	1100'		1				Northwest
11/8/2013	Puget Sound	National Response Corporation	Port Townsend, WA	200'						Northwest
12/2/2013	Puget Sound	National Response Corporation	Imperium, WA					1		Northwest
1/22/2013	San Juan	National Response Corporation	Guayanilla Bay			1		1		PR/ USVI
1/31/2013	San Juan	Caribbean Enviromarine Services	Pier 1, San Juan		2000'		1			PR/ USVI
5/20/2013	San Juan	National Response Corporation	Cul de Sac Bay St. Lucia				3			PR/ USVI
11/18/2013	San Juan	National Response Corporation	St. Thomas, USVI	3000'		3	3	1	1	PR/ USVI
11/18/2013	San Juan	National Response Corporation	St. Thomas		1000'	1				PR/ USVI
11/18/2013	San Juan	National Response Corporation	VIWAPA Facility St. Croix		1000'	1				PR/ USVI
11/19/2013	San Juan	National Response Corporation	Yabacoa Bay		1000'	1	1		1	PR/ USVI
11/20/2013	San Juan	Caribbean Enviromarine Services	Yabucoa Marine Terminal	1000'					1	PR/ USVI
1/4/2013	New Orleans	OMI Environmental Solutions	Venice, LA	400'						South
1/5/2013	New Orleans	OMI Environmental Solutions	Gretna, LA	400'						South
1/7/2013	Morgan City	OMI Environmental Solutions	Weeks Island, LA	300'						South
1/19/2013	Morgan City	OMI Environmental Solutions	Concordia, LA	600'						South
1/27/2013	Lower Mississippi River	USES	Vicksburg, MS	5000'		4				South
2/27/2013	Mobile	SWS	Decatur, AL	800'						South
3/8/2013	Mobile	Oil Recovery Company	Mobile, AL	1500'						South
3/16/2013	Morgan City	National Response Corporation	Grand Isle, LA		2000'	1				South
4/7/2013	Corpus Christi	Miller Environmental Services	Ingleside, TX	900'						South
4/27/2013	Corpus Christi	Miller Environmental Services	Ingleside, TX	900'						South
5/1/2013	Corpus Christi	Miller Environmental Services	Ingleside, TX	500'						South
5/1/2013	Corpus Christi	Miller Environmental Services	Ingleside, TX	500'						South
5/2/2013	Port Arthur	OMI Environmental Solutions	Port Arthur, TX	400						South
5/11/2013	Port Arthur	OMI Environmental Solutions	Beaumont, TX	400'						South
5/15/2013	Corpus Christi	Miller Environmental Services	Corpus Christi, TX	1800'			1			South
5/15/2013	Corpus Christi	Miller Environmental Services	Corpus Christi, TX	1800'						South
5/17/2013	Mobile	Oil Recovery Company	Mobile, AL	900'						South
6/5/2013	Houston Galveston	National Response Corporation	Galveston, TX	100'				1	1	South
6/5/2013	Houston Galveston	National Response Corporation	Galveston, TX		1100'			1	1	South

Date	COTP Zone	Contractor Name	Location	Boom 6"-18"	Boom 19"-42"	Skimmer Drum, Brush,	Skimmer Floating Suction	Skimmer Belt	Skimmer Rope	Region
6/10/2013	Mobile	Oil Recovery Company	Mobile, AL	1200'						South
6/18/2013	Morgan City	National Response Corporation	Grand Isle, LA		200'	1				South
6/26/2013	Corpus Christi	National Response Corporation	Corpus Christi, TX			1			2	South
6/26/2013	Houston Galveston	National Response Corporation	Galveston, TX	1100'				1	1	South
6/26/2013	Houston Galveston	National Response Corporation	Galveston, TX		1100'			1	1	South
7/28/2013	Morgan City	National Response Corporation	Grand Isle, LA			1				South
7/30/2013	Corpus Christi	National Response Corporation	Corpus Christi, TX		1200'			1		South
8/1/2013	Corpus Christi	Miller Environmental Services	Aransas Pass, TX	200'						South
8/5/2013	Houston Galveston	OMI Environmental Solutions	LaPorte, TX	1600'						South
8/23/2013	Morgan City	National Response Corporation	Grand Isle, LA		2100'	1				South
8/28/2013	Corpus Christi	National Response Corporation	Corpus Christi, TX		100'					South
8/28/2013	Morgan City	National Response Corporation	Grand Isle, LA	300'		1				South
9/9/2013	Corpus Christi	Miller Environmental Services	Ingleside, TX	1500'						South
9/9/2013	Corpus Christi	Miller Environmental Services	Ingleside, TX	1500'						South
9/11/2013	Houston Galveston	National Response Corporation	Galveston, TX		400'			1	1	South
9/11/2013	New Orleans	OMI Environmental Solutions	Plaquemine, LA	500'			1			South
9/23/2013	Port Arthur	OMI Environmental Solutions	Lake Arthur, LA	100'						South
9/27/2013	Corpus Christi	National Response Corporation	Corpus Christi, TX						2	South
10/15/2013	Corpus Christi	National Response Corporation	Cotulla, TX	1000'		1				South
11/16/2013	Morgan City	OMI Environmental Solutions	Patterson, LA	500'		1				South
11/21/2013	Port Arthur	OMI Environmental Solutions	Cameron, LA	500'						South
11/27/2013	Morgan City	OMI Environmental Solutions	Intracoastal, LA	200'						South
12/4/2013	St. Petersburg	National Response Corporation	Tampa, FL			1				South
12/16/2013	Morgan City	OMI Environmental Solutions	Fourchon, LA	660'						South
12/18/2013	Corpus Christi	National Response Corporation	Corpus Christi, TX			1			2	South
1/5/2013	Mobile	Oil Recovery Company	Mobile, AL	1000'						South
1/30/2013	Corpus Christi	National Response Corporation	Corpus Christi, TX			1		1	2	South
2/8/2013	Port Arthur	Clean Harbors	Port Arthur, TX	1000'						South
3/19/2013	Mobile	National Response Corporation	Mobile, AL				1	1		South
4/23/2013	Morgan City	National Response Corporation	Grand Isle, LA			1				South
8/1/2013	Corpus Christi	Miller Environmental Services	Aransas Pass, TX	200'						South
8/9/2013	Corpus Christi	National Response Corporation	Aransas Pass, TX		1400'					South
8/26/2013	Mobile	SWS	Mobile, AL	1000'						South
12/16/2013	Port Arthur	Clean Harbors	Port Arthur, TX	1000'						South
1/29/2013	St. Petersburg	SWS	St. Petersburg, FL	1200'						Southeast
2/10/2013	St. Petersburg	SWS	St. Petersburg, FL	1200'						Southeast
2/14/2013	St. Petersburg	Moran Environmental Recovery	St. Johns River, FL	1000'		1	1			Southeast
2/16/2013	Miami	CBI	Ft. Lauderdale, FL	1800'						Southeast
2/20/2013	Charleston	National Response Corporation	North Charleston, SC	4000'		1	1			Southeast
2/20/2013	Charleston	National Response Corporation	North Charleston, SC		100'	2				Southeast
2/21/2013	St. Petersburg	Diversified Environmental Services	Tampa, FL	600'						Southeast
2/23/2013	St. Petersburg	SWS	St. Petersburg, FL	1200'						Southeast
2/26/2013	Savannah	National Response Corporation	Savannah, GA			1				Southeast

Date	COTP Zone	Contractor Name	Location	Boom 6"-18"	Boom 19"-42"	Skimmer Drum, Brush,	Skimmer Floating Suction	Skimmer Belt	Skimmer Rope	Region
2/26/2013	Savannah	National Response Corporation	Savannah River, GA	4100'			1			Southeast
3/20/2013	Miami	CBI	Ft. Lauderdale, FL	1000'						Southeast
3/20/2013	Miami	National Response Corporation	Miami, FL				1	1		Southeast
3/20/2013	Miami	National Response Corporation	Miami, FL		100'	1				Southeast
4/9/2013	St. Petersburg	SWS	St. Petersburg, FL		3000'					Southeast
4/23/2013	Miami	SWS	Ft. Lauderdale, FL	1000'						Southeast
4/24/2013	Key west	National Response Corporation	Key west, FL	3000'		1				Southeast
5/1/2013	Ohio Valley	First Environmental	Macon, GA	400'						Southeast
5/8/2013	Charleston	Moran Environmental Recovery	Hawthorne, SC	1100'		1	1			Southeast
5/16/2013	Ohio Valley	SWS	Nashville, TN	300'						Southeast
5/21/2013	Charleston	Moran Environmental Recovery	Charleston, SC	700'			1			Southeast
6/10/2013	Ohio Valley	Evergreen Environmental	Louisville, KY	500'						Southeast
6/13/2013	Ohio Valley	SWS	Nashville, TN	3000'						Southeast
6/13/2013	St. Petersburg	SWS	Tampa, FL	1000'						Southeast
6/27/2013	Miami	CBI	Ft. Lauderdale, FL	400'						Southeast
6/27/2013	Miami	SWS	Ft. Lauderdale, FL	1000'						Southeast
6/28/2013	Miami	National Response Corporation	Miami, FL		2200'	1				Southeast
7/8/2013	Savannah	SWS	Savannah, GA	1200'						Southeast
7/9/2013	St. Petersburg	Diversified Environmental Services	Tampa, FL	700'						Southeast
7/24/2013	Ohio Valley	Evergreen Environmental	Central City, KY	400'						Southeast
7/25/2013	St. Petersburg	SWS	Tampa, FL	100'						Southeast
7/26/2013	Ohio Valley	SWS	Nashville, TN		1					Southeast
7/28/2013	Miami	National Response Corporation	Miami, FL	100'		2	2	1	1	Southeast
7/29/2013	Mobile	SWS	Pensacola, FL	360'						Southeast
7/29/2013	Ohio Valley	SWS	Nashville, TN	300'		1				Southeast
8/7/2013	Jacksonville	National Response Corporation	Jacksonville, FL	500'		3	4			Southeast
8/12/2013	Miami	CBI	Ft. Lauderdale, FL	120'						Southeast
8/15/2013	Delaware Bay	National Response Corporation	Delaware Bay	1000'		1				Southeast
8/23/2013	St. Petersburg	Moran Environmental Recovery	St. Johns River, FL	1300'		1	1			Southeast
8/30/2013	St. Petersburg	SWS	Tampa, FL	1200'						Southeast
9/18/2013	Savannah	Moran Environmental Recovery	Savannah River, GA	1000'		1				Southeast
9/25/2013	Jacksonville	Jacksonville Pollution Control	Jacksonville, FL	2600'		1				Southeast
9/25/2013	Jacksonville	National Response Corporation	Port Canaveral, FL			1				Southeast
10/9/2013	Jacksonville	SWS	Jacksonville, FL	1000'						Southeast
10/9/2013	Ohio Valley	Evergreen Environmental	Central City, KY	400'						Southeast
10/12/2013	Charleston	Moran Environmental Recovery	Mount Pleasant, SC	800'			1			Southeast
10/17/2013	Long Island Sound	National Response Corporation	Long Island, NY	1000'		1				Southeast
10/24/2013	Upper Mississippi River	National Response Corporation	Paducah, KY	2200'			1			Southeast
10/25/2013	Ohio Valley	SWS	Louisville, KY	1000'						Southeast
10/25/2013	St. Petersburg	Diversified Environmental Services	Tampa, FL	500'						Southeast
11/1/2013	Savannah	First Environmental	Waycross, GA	200'						Southeast
11/5/2013	Miami	National Response Corporation	Miami, FL	1000'		1				Southeast
11/19/2013	St. Petersburg	SWS	Tampa, FL	1000'		1				Southeast

Date	COTP Zone	Contractor Name	Location	Boom 6"-18"	Boom 19"-42"	Skimmer Drum, Brush,	Skimmer Floating Suction	Skimmer Belt	Skimmer Rope	Region
11/20/2013	St. Petersburg	Diversified Environmental Services	Tampa, FL	400'						Southeast
11/20/2013	St. Petersburg	SWS	Tampa, FL	500'						Southeast
11/23/2013	St. Petersburg	National Response Corporation	Tampa, FL		4000'	3	1			Southeast
11/30/2013	Miami	National Response Corporation	Miami, FL		2200'	1				Southeast
12/11/2013	St. Petersburg	SWS	Tampa, FL	500'						Southeast
12/12/2013	St. Petersburg	SWS	Tampa, FL			1				Southeast
1/9/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
1/9/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 164		1400'					West
1/9/2013	San Francisco	National Response Corporation	Alameda Point, CA		5000'					West
1/11/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
1/11/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 165		1400'					West
1/17/2013	San Francisco	National Response Corporation	Folsom Lake, CA	1080'						West
1/18/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
1/18/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
1/18/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 166		1400'					West
1/18/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 167		1400'					West
1/22/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
1/22/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 168		1400'					West
1/25/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
1/25/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 169		1400'					West
1/25/2013	San Francisco	National Response Corporation	Feather River, Pluma County	800'	1200'					West
2/12/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
2/12/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 170		1400'					West
2/13/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
2/13/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 171		1400'					West
2/14/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
2/14/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 172		1400'					West
2/27/13	San Diego	National Response Corporation	San Diego County, CA	500'						West
3/8/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
3/8/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 173		1400'					West
3/11/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
3/18/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
3/21/2013	San Francisco	National Response Corporation	Lake Herman Benicia, CA	300'						West
3/26/2013	San Francisco	National Response Corporation	Humboldt Bay	3500'						West
3/26/13	San Francisco	National Response Corporation	Humboldt Bay		3500					West
3/28/13	Portland	National Response Corporation	Contra Costa Water District		100'					West
4/2/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
4/2/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 174		1400'					West
4/3/13	San Francisco	National Response Corporation	Blue Lake, CA		800'					West
4/4/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
4/4/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1100'					West
4/4/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 175		1400'					West
4/8/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West

Date	COTP Zone	Contractor Name	Location	Boom 6"-18"	Boom 19"-42"	Skimmer Drum, Brush,	Skimmer Floating Suction	Skimmer Belt	Skimmer Rope	Region
4/8/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 176		1400'					West
4/9/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
4/9/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 177		1400'					West
4/9/2013	San Francisco	National Response Corporation	Bay Farm Eel Graas, CA		2000'					West
4/12/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
4/12/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 178		1400'					West
4/25/13	San Francisco	National Response Corporation	Nustar, Crockett CA.		600'					West
4/26/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
4/26/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 179		1400'					West
4/26/13	San Francisco	National Response Corporation	Pier 3 Alameda Point		300'					West
4/29/13	San Francisco	National Response Corporation	Pier 3 Alameda Point		300'					West
5/3/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
5/3/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 180		1400'					West
5/7/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
5/7/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 181		1400'					West
5/9/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1000'	2	2			West
5/9/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1100'					West
5/9/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 182		1400'					West
5/9/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth T-15		1000'	3	1			West
5/13/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
5/13/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 183		1400'					West
5/16/2013	San Francisco	National Response Corporation	Berth 32 Port of Oakland, CA	600'				1		West
5/23/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
5/23/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 184		1400'					West
5/23/13	San Francisco	National Response Corporation	Pier 92 Port of San Francisco		600'		1			West
5/24/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
5/24/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 185		1400'					West
5/29/13	San Francisco	National Response Corporation	Santa FE Channel Richmond CA.		2000'					West
5/31/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
5/31/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 186		1400'					West
6/4/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
6/4/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 187		1400'					West
6/12/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
6/12/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 188		1400'					West
6/17/13	San Francisco	National Response Corporation	Pier 50 Port of San Francisco		1800'					West
6/18/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
6/18/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 189		1400'					West
6/19/13	San Diego	National Response Corporation	San Diego County, CA	500'						West
6/19/13	San Francisco	National Response Corporation	BP/ARCO Richmond CA.		600'					West
6/25/13	San Francisco	National Response Corporation	Golden Gate Ferry San Francisco		500'					West
6/26/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
6/26/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 190		1400'					West
6/27/13	San Francisco	National Response Corporation	BP/ARCO Richmond CA.		1000'					West

Date	COTP Zone	Contractor Name	Location	Boom 6"-18"	Boom 19"-42"	Skimmer Drum, Brush,	Skimmer Floating Suction	Skimmer Belt	Skimmer Rope	Region
7/1/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
7/1/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 191		1400'					West
7/3/13	San Francisco	National Response Corporation	Berth 2 Port of Stockton		1400'					West
7/4/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
7/4/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 192		1400'					West
7/5/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1100'					West
7/5/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 193		1400'					West
7/11/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
7/11/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 194		1400'					West
7/15/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
7/15/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 195		1400'					West
7/17/13	San Francisco	National Response Corporation	150 Metcalf road, San Jose CA.		300'					West
7/18/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
7/18/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 196		1400'					West
7/26/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
7/26/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 197		1400'					West
8/1/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
8/1/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 198		1400'					West
8/7/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
8/7/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 199		1400'					West
8/11/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
8/11/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 200		1400'					West
8/13/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
8/13/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 201		1400'					West
8/14/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
8/14/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 202		1400'					West
8/21/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
8/21/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 203		1400'					West
8/23/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
8/23/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 204		1400'					West
9/3/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
9/3/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 205		1400'					West
9/10/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
9/10/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 206		1400'					West
9/17/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
9/17/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 207		1400'					West
9/18/2013	San Diego	National Response Corporation	San Diego County, CA	500'						West
9/25/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
9/25/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 208		1400'					West
10/1/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
10/1/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 209		1400'					West
10/3/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
10/3/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 210		1400'					West

Date	COTP Zone	Contractor Name	Location	Boom 6"-18"	Boom 19"-42"	Skimmer Drum, Brush,	Skimmer Floating Suction	Skimmer Belt	Skimmer Rope	Region
10/8/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400					West
10/8/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 211		1400'					West
10/12/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400					West
10/12/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1100'					West
10/12/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 101		1100'					West
10/12/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 212		1400'					West
10/16/13	San Francisco	National Response Corporation	Cogswell Marsh, Hayward CA		1000'					West
10/16/13	San Francisco	National Response Corporation	Steinberger Slough, Redwood city CA		1000'					West
10/17/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
10/17/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 213		1400'					West
10/25/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
10/25/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 214		1400'					West
11/2/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
11/6/2013	San Diego	National Response Corporation	San Diego County, CA	800'						West
11/9/2013	San Diego	National Response Corporation	San Diego County, CA	1000'						West
11/12/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 215		1400'					West
11/14/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1100'					West
11/14/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 101		1100'					West
11/15/13	San Francisco	National Response Corporation	Martinez Marina, Marina CA.		2000'			1		West
11/18/13	San Francisco	National Response Corporation	BP/ARCO Richmond CA.		600'					West
11/19/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
11/19/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 216		1400'					West
11/20/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
11/20/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 217		1400'					West
11/23/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
11/23/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 218		1400'					West
12/10/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
12/10/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 219		1400'					West
12/18/2013	San Francisco	National Response Corporation	Humboldt Bay	200'						West
12/18/13	San Francisco	National Response Corporation	Humboldt Bay		200					West
12/19/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
12/19/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 220		1400'					West
12/29/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
12/29/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 221		1400'					West

ATTESTATION

I, Steven A. Candito, President of National Response Corporation (NRC), an Oil Spill Removal Organization (OSRO) with full OSRO classifications in all Captain of the Port Zones, for all operating environments within our Area of Service do hereby attest, based upon the information provided to me by the members of the NRC Independent Contractor Network, each of whom are responsible for similar attestations to their own clients under the National Preparedness for Response Exercise Program and based on my own personal knowledge, that boom and skimming systems, more than adequate to satisfy the OSRO field equipment deployment drill requirements of OPA '90 have been deployed on your behalf in the United States East Coast, Gulf Coast, West Coast, Inland River and Caribbean Regions within the most recent calendar year. Further that NRC-owned equipment is inspected and maintained under a formal preventive maintenance program. Personnel training requirements are met through a formal equipment deployment-training program. The personnel who deployed the equipment demonstrated their ability to successfully deploy and operate the equipment and the equipment was in good working order. Further, records of these deployments are maintained at our headquarters in Great River, New York, USA.

Date: 13 February 2014

Steven A. Candito
President
National Response Corporation

Attachment B

National Response Corporation
Resource Availability By Type

Equipment Types: **Boom/Portable Storage/Skimmer/Support Equipment/Transfer Pump/Vacuum System/Vessel**

Zone: Toledo, OH

Toledo - Case# DM14-0175
April 25, 2014

00 to 06 hours (* Does not include recall/mobilization time)

Boom

>=6 and <18 inch

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
12" Boom	0	2000	0	0	ICN	Rudolph	OH	00:45
12" Boom	0	1000	0	0	ICN	Rudolph	OH	00:45
12" Boom	0	300	0	0	ICN	Mcdonald	PA	05:33
10" Boom	0	1300	0	0	ICN	Mcdonald	PA	05:33
12" Boom	0	125	0	0	ICN	Merrillville	IN	05:34
8" Boom	0	2450	0	0	ICN	New Matamoras	OH	05:35
12" Boom	0	450	0	0	ICN	Indianapolis	IN	05:36
10" Boom	0	1252	0	0	ICN	Pittsburgh	PA	05:41
8" Boom	0	350	0	0	ICN	Mooresville	IN	05:52
Sub Total >=6 and <18 inch:		**9227**	**0**	**0**				

>18 and <42 inch

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
24" Boom	0	1000	0	0	ICN	Cleveland	OH	02:45
24" Boom	0	1000	0	0	ICN	Middletown	OH	04:26
24" Boom	0	1000	0	0	ICN	East Liverpool	OH	04:49
30" Boom	0	100	0	0	ICN	Erie	PA	05:07
24" Boom	0	6050	0	0	ICN	Mcdonald	PA	05:33
24" Boom	0	4250	0	0	ICN	New Matamoras	OH	05:35
Sub Total >18 and <42 inch:		**13400**	**0**	**0**				

>42 inch

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
60" Boom	0	50	0	0	ICN	Mcdonald	PA	05:33
44" Boom	0	1100	0	0	ICN	East Chicago	IN	05:49
Sub Total >42 inch:		**1150**	**0**	**0**				

18"

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
18" Boom	0	1000	0	0	ICN	Toledo	OH	00:07
18" Boom	0	4000	0	0	ICN	Rudolph	OH	00:45
18" Boom	0	4000	0	0	ICN	Ypsilanti	MI	01:06
18" Boom	0	500	0	0	ICN	Findlay	OH	01:07
18" Boom	0	11400	0	0	ICN	Detroit	MI	01:23
18" Boom	0	2100	0	0	ICN	Sterling Heights	MI	01:54
18" Boom	0	1500	0	0	ICN	Sterling Heights	MI	02:01
18" Boom	0	1200	0	0	ICN	Middleburg Heights	OH	02:34
18" Boom	0	3000	0	0	ICN	Cleveland	OH	02:45
18" Boom	0	100	0	0	ICN	North Canton	OH	03:27
18" Boom	0	100	0	0	ICN	Elkhart	IN	03:36
18" Boom	0	2200	0	0	ICN	Huber Heights	OH	03:37
18" Boom	0	500	0	0	ICN	Cincinnati	OH	04:47
18" Boom	0	2000	0	0	ICN	East Liverpool	OH	04:51
18" Boom	0	5500	0	0	ICN	Cincinnati	OH	05:07
18" Boom	0	1200	0	0	ICN	Batavia	OH	05:10
18" Boom	0	200	0	0	ICN	Indianapolis	IN	05:33
18" Boom	0	1500	0	0	ICN	Indianapolis	IN	05:36
18" Boom	0	100	0	0	ICN	Cuddy	PA	05:37
18" Boom	0	100	0	0	ICN	Schererville	IN	05:48
18" Boom	0	1000	0	0	ICN	Whiting	IN	05:49
18" Boom	0	13000	0	0	ICN	East Chicago	IN	05:49
18" Boom	0	3000	0	0	ICN	Mooresville	IN	05:52

00 to 06 hours (* Does not include recall/mobilization time)

Sub Total 18":	**59200**	**0**	**0**
Total Boom:	**82977**	**0**	**0**

Portable Storage

Frac Tank

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Frac Tank	0	4	0	1036	ICN	Toledo	OH	00:07
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	2	0	1000	ICN	North Canton	OH	03:27
Frac Tank	0	6	0	2568	ICN	Huber Heights	OH	03:37
Frac Tank	0	10	0	4770	ICN	East Liverpool	OH	04:49
Frac Tank	0	1	0	523	ICN	Cincinnati	OH	05:07
Frac Tank	0	2	0	856	ICN	Miamitown	OH	05:07
Frac Tank	0	1	0	500	ICN	Cuddy	PA	05:37
Frac Tank	0	16	0	960	ICN	East Chicago	IN	05:49
Sub Total Frac Tank:		**60**	**0**	**21213**				

Portable Tank

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Portable Tank	0	4	0	116	ICN	Toledo	OH	00:07
Tank Truck	0	1	0	162	ICN	Detroit	MI	01:23
Tank Truck	0	1	0	166	ICN	Detroit	MI	01:23
Tank Trailer	0	1	0	119	ICN	Cleveland	OH	02:45
Poly Tote	0	2	0	12	ICN	North Canton	OH	03:27
Poly Tank	0	1	0	7	ICN	North Canton	OH	03:27
Poly Tank	0	1	0	35	ICN	North Canton	OH	03:27
Poly Tote	0	2	0	12	ICN	Elkhart	IN	03:36
Poly Tank	0	1	0	7	ICN	Elkhart	IN	03:36
Poly Tank	0	1	0	35	ICN	Elkhart	IN	03:36
Poly Tank	0	2	0	24	ICN	Merrillville	IN	05:34
Poly Tank	0	1	0	7	ICN	Cuddy	PA	05:37
Poly Tank	0	1	0	35	ICN	Cuddy	PA	05:37
Poly Tote	0	2	0	12	ICN	Cuddy	PA	05:37
Tank Truck	0	18	0	3006	ICN	Carnegie	PA	05:39
Tank Truck	0	3	0	465	ICN	Carnegie	PA	05:39
Poly Tote	0	2	0	12	ICN	Schererville	IN	05:48
Poly Tank	0	1	0	7	ICN	Schererville	IN	05:48
Poly Tank	0	1	0	35	ICN	Schererville	IN	05:48
Tank Truck	0	5	0	655	ICN	East Chicago	IN	05:49
Tank Truck	0	6	0	540	ICN	East Chicago	IN	05:49
Poly Storage Tank	0	4	0	188	ICN	Mooresville	IN	05:52
Sub Total Portable Tank:		**61**	**0**	**5657**				

Tank Truck

00 to 06 hours (* Does not include recall/mobilization time)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Static Trailer	0	1	0	128	ICN	Ypsilanti	MI	01:06
Jumbo Tanker	0	1	0	285	ICN	Ypsilanti	MI	01:06
Tank Truck	0	4	0	304	ICN	East Chicago	IN	05:49
Tank Truck	0	2	0	104	ICN	East Chicago	IN	05:49
Sub Total Tank Truck:		**8**	**0**	**821**				
Total Portable Storage:		**129**	**0**	**27691**				

Skimmer

Drum

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Elastec TDS136 Skimmer	0	1	480	0	ICN	Toledo	OH	00:07
Elastec Magnum 100	0	1	686	0	ICN	Rudolph	OH	00:45
Elastec Magnum 100	0	1	686	0	ICN	Rudolph	OH	00:45
Elastec Magnum 200	0	1	1371	0	ICN	Rudolph	OH	00:45
Elastec Mini Max Skimmer	0	1	137	0	ICN	Rudolph	OH	00:45
Elastec TDS136 Skimmer	0	1	480	0	ICN	Rudolph	OH	00:45
Elastec TDS136 Skimmer	0	1	480	0	ICN	Rudolph	OH	00:45
Elastec TDS136 Skimmer	0	1	480	0	ICN	Rudolph	OH	00:45
Elastec Magnum 100	0	1	686	0	ICN	Rudolph	OH	00:45
Elastec Magnum 100	0	1	686	0	ICN	Rudolph	OH	00:45
Elastec Magnum 100	0	1	686	0	ICN	Rudolph	OH	00:45
Elastec Magnum 100	0	1	686	0	ICN	Rudolph	OH	00:45
Elastec Magnum 100	0	1	686	0	ICN	Rudolph	OH	00:45
Elastec Magnum 200	0	1	1371	0	ICN	Rudolph	OH	00:45
Elastec Mini Max Skimmer	0	1	137	0	ICN	Rudolph	OH	00:45
Elastec Mini Max Skimmer	0	1	137	0	ICN	Rudolph	OH	00:45
Medium Drum Skimmer	0	2	480	0	ICN	Detroit	MI	01:23
Crucial 1D18P24 Skimmer	0	1	171	0	ICN	Detroit	MI	01:23
Crucial 1D18P36 Skimmer	0	2	480	0	ICN	Sterling Heights	MI	01:54
Small Drum Skimmer	0	3	513	0	ICN	Sterling Heights	MI	01:54
Elastec TDS118 Skimmer	0	1	240	0	ICN	Huber Heights	OH	03:37
Small Drum Skimmer	0	1	171	0	ICN	Carroll	OH	03:56
Small Drum Skimmer	0	1	171	0	ICN	East Liverpool	OH	04:51
Small Drum Skimmer	0	2	342	0	ICN	Indianapolis	IN	05:33
Elastec TDS136 Skimmer	0	1	480	0	ICN	Indianapolis	IN	05:36
Small Drum Skimmer	0	3	513	0	ICN	Carnegie	PA	05:39
Elastec Mini-Max Skimmer	0	2	274	0	ICN	East Chicago	IN	05:49
Elastec TDS136 Skimmer	0	6	2880	0	ICN	East Chicago	IN	05:49
Elastec Mini-Max Skimmer	0	2	274	0	ICN	East Chicago	IN	05:49
Medium Drum Skimmer	0	1	240	0	ICN	Mooresville	IN	05:52
Sub Total Drum:		**44**	**17104**	**0**				

Floating Suction

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Manta Ray Skimmer	0	1	315	0	ICN	Detroit	MI	01:23
Manta Ray Skimmer	0	1	315	0	ICN	Huber Heights	OH	03:37
Douglas 4300 SkimPac	0	1	480	0	ICN	Huber Heights	OH	03:37
Manta Ray Skimmer	0	1	315	0	ICN	Miamitown	OH	05:07
Floating Suction Skimmer	0	1	274	0	ICN	East Chicago	IN	05:49
Sub Total Floating Suction:		**5**	**1699**	**0**				

Oleophilic Disk

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
NRC Weir Disk Skimmer	WD-107	1	1371	24	NRC	Cincinnati	OH	05:07
Vikoma Komara 12K Skimmer	0	1	480	0	ICN	East Chicago	IN	05:49
Sub Total Oleophilic Disk:		**2**	**1851**	**24**				

Oleophilic Rope Mop

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Rope Mop Skimmer	0	1	75	0	ICN	Detroit	MI	01:23
Sub Total Oleophilic Rope Mop:		**1**	**75**	**0**				

00 to 06 hours (* Does not include recall/mobilization time)

Total Skimmer:	**52**	**20729**	**24**	

Support Equipment

Ancillary Gear

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
20 yd. Soil Boxes	0	4	0	0	ICN	Middletown	OH	04:26
Sub Total Ancillary Gear:		**4**	**0**	**0**				

ATV

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
ATV	0	1	0	0	ICN	Findlay	OH	01:07
ATV	0	2	0	0	ICN	Detroit	MI	01:23
ATV	0	2	0	0	ICN	North Canton	OH	03 27
ATV	0	2	0	0	ICN	Elkhart	IN	03:36
ATV	0	1	0	0	ICN	Indianapolis	IN	05:16
ATV	0	2	0	0	ICN	Schererville	IN	05:48
ATV	0	4	0	0	ICN	East Chicago	IN	05:49
Sub Total ATV:		**14**	**0**	**0**				

Blower

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Boom Inflator	0	2	0	0	ICN	Cincinnati	OH	05:07
Sub Total Blower:		**2**	**0**	**0**				

Compressor

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Compressor	0	2	0	0	ICN	Toledo	OH	00:07
Compressor	0	1	0	0	ICN	Findlay	OH	01:07
Air Compressor	0	1	0	0	ICN	Sterling Heights	MI	01:54
Air Compressor	0	1	0	0	ICN	Cleveland	OH	02:45
Compressor	0	1	0	0	ICN	North Canton	OH	03:27
Compressor	0	1	0	0	ICN	Elkhart	IN	03:36
Compressor	0	2	0	0	ICN	Cincinnati	OH	05:07
Compressor	0	1	0	0	ICN	Batavia	OH	05:10
Air Compressor	0	1	0	0	ICN	Indianapolis	IN	05:33
Compressor	0	2	0	0	ICN	Indianapolis	IN	05:36
Compressor	0	1	0	0	ICN	Cuddy	PA	05:37
Air Compressors	0	4	0	0	ICN	Carnegie	PA	05:39
Compressor	0	3	0	0	ICN	Pittsburgh	PA	05:41
Compressor	0	1	0	0	ICN	Schererville	IN	05:48
Compressor	0	2	0	0	ICN	Mooresville	IN	05:52
Sub Total Compressor:		**24**	**0**	**0**				

Crane Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Sidebooms/Padded	0	4	0	0	ICN	Walbridge	OH	00:07
Grapple Truck	0	1	0	0	ICN	Washington	PA	05:38
Sidebooms/Padded	0	2	0	0	ICN	Washington	PA	05:38
Crane	0	1	0	0	ICN	Hammond	IN	05:50
Grapple Truck	0	1	0	0	ICN	Hammond	IN	05:50
Sidebooms/Padded	0	2	0	0	ICN	Columbus	IN	05:58
Sub Total Crane Truck:		**11**	**0**	**0**				

Dump Truck/Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Dump Truck	0	2	0	0	ICN	North Canton	OH	03:27
Dump Truck	0	1	0	0	ICN	Groveport	OH	03 38
Dump Truck	0	2	0	0	ICN	Carroll	OH	03:56
Dump Truck	0	1	0	0	ICN	Indianapolis	IN	05:16
Dump Truck	0	1	0	0	ICN	Merrillville	IN	05:34
Dump Truck	0	2	0	0	ICN	Cuddy	PA	05:37
Dump Trailer	0	4	0	0	ICN	Carnegie	PA	05 39
Dump Truck	0	8	0	0	ICN	Carnegie	PA	05:39

00 to 06 hours (* Does not include recall/mobilization time)

Ton Dump	0	2	0	0	ICN	Carnegie	PA	05:39
Sub Total Dump Truck/Trailer:		**23**	**0**	**0**				

Earth Moving Equipment

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
977 Track Loader	0	1	0	0	ICN	Walbridge	OH	00:07
325 Excavator	0	1	0	0	ICN	Walbridge	OH	00:07
Backhoe	0	2	0	0	ICN	Toledo	OH	00:07
Skid Loader	0	1	0	0	ICN	Findlay	OH	01:07
Bobcat	0	1	0	0	ICN	Detroit	MI	01:23
Skid Steer	0	2	0	0	ICN	Marshall	MI	02:28
Excavator	0	1	0	0	ICN	North Canton	OH	03:27
Skid Steer	0	1	0	0	ICN	North Canton	OH	03:27
Excavator	0	1	0	0	ICN	Elkhart	IN	03:36
Skid Steer	0	1	0	0	ICN	Elkhart	IN	03:36
Skid Steer	0	2	0	0	ICN	Groveport	OH	03:38
Excavator	0	3	0	0	ICN	Groveport	OH	03:38
Backhoe	0	1	0	0	ICN	Groveport	OH	03:38
Multi Terrain Loader	0	1	0	0	ICN	Groveport	OH	03:38
Gator	0	1	0	0	ICN	Groveport	OH	03:38
Excavator	0	2	0	0	ICN	Carroll	OH	03:56
Skid Steer	0	1	0	0	ICN	Carroll	OH	03:56
Skidsteer	0	1	0	0	ICN	Cincinnati	OH	04:47
Skidloader	0	4	0	0	ICN	East Liverpool	OH	04:49
Track Loader	0	1	0	0	ICN	Batavia	OH	05:10
Trackhoe	0	1	0	0	ICN	Batavia	OH	05:10
Backhoe	0	1	0	0	ICN	Indianapolis	IN	05:33
Skid Steer	0	1	0	0	ICN	Indianapolis	IN	05:33
Backhoe	0	1	0	0	ICN	Merrillville	IN	05:34
Skid Steer	0	1	0	0	ICN	Merrillville	IN	05:34
Backhoe	0	1	0	0	ICN	Indianapolis	IN	05:36
977 Track Loader	0	1	0	0	ICN	Washington	PA	05:38
Trac Skid Loader	0	4	0	0	ICN	Carnegie	PA	05:39
Bulldozer	0	2	0	0	ICN	Carnegie	PA	05:39
Bobcat	0	1	0	0	ICN	Pittsburgh	PA	05:41
Excavator	0	1	0	0	ICN	Schererville	IN	05:48
Skid Steer	0	1	0	0	ICN	Schererville	IN	05:48
Track Excavator	0	1	0	0	ICN	East Chicago	IN	05:49
Skid Steer Loader	0	4	0	0	ICN	East Chicago	IN	05:49
Track Excavator	0	1	0	0	ICN	East Chicago	IN	05:49
Track Loader	0	1	0	0	ICN	East Chicago	IN	05:49
Hydro-Excavator Truck	0	5	0	0	ICN	East Chicago	IN	05:49
Hydro-Jetter Truck	0	12	0	0	ICN	East Chicago	IN	05:49
Backhoe	0	1	0	0	ICN	East Chicago	IN	05:49
Loader- Front End	0	1	0	0	ICN	East Chicago	IN	05:49
Track Loader	0	1	0	0	ICN	Hammond	IN	05:50
Dozer	0	1	0	0	ICN	Hammond	IN	05:50
Skid Steer	0	3	0	0	ICN	Mooresville	IN	05:52
977 Track Loader	0	1	0	0	ICN	Columbus	IN	05:58
Sub Total Earth Moving Equipment:		**77**	**0**	**0**				

Flatbed Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Drop Deck Trailer	0	5	0	0	ICN	Detroit	MI	01:23
Flatbed Trailer	0	2	0	0	ICN	Detroit	MI	01:23
Stakebed	0	1	0	0	ICN	Sterling Heights	MI	02:01
Stakebed	0	1	0	0	ICN	Middleburg Heights	OH	02:34
Low Boy Trailer	0	1	0	0	ICN	Groveport	OH	03:38
Flatbed Trailer	212	1	0	0	NRC	Cincinnati	OH	05:07
Flatbed Trailer	0	1	0	0	ICN	Dayton	KY	05:12
Deck Trailer	0	1	0	0	ICN	Merrillville	IN	05:34
Flatbed Trailer	0	2	0	0	ICN	Carnegie	PA	05:39

00 to 06 hours (* Does not include recall/mobilization time)

Lowboy Trailer	0	3	0	0	ICN	Carnegie	PA	05:39
Flatbed Trailer	0	2	0	0	ICN	Carnegie	PA	05:39
Drop Deck Trailer	0	2	0	0	ICN	East Chicago	IN	05:49
Low Boy Trailer	0	1	0	0	ICN	Mooresville	IN	05:52
Sub Total Flatbed Trailer:		**23**	**0**	**0**				

Fork Lift

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Forklift	0	1	0	0	ICN	Findlay	OH	01:07
Fork Lift	0	1	0	0	ICN	Cleveland	OH	02:34
Fork Lift	0	1	0	0	ICN	Groveport	OH	03:38
Fork Lift	0	1	0	0	ICN	Carroll	OH	03:56
Forklift	0	1	0	0	ICN	Merrillville	IN	05:34
Fork Lift	0	3	0	0	ICN	Carnegie	PA	05:39
Sub Total Fork Lift:		**8**	**0**	**0**				

Generator

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Generator	0	3	0	0	ICN	Toledo	OH	00:07
Generator	0	1	0	0	ICN	Sterling Heights	MI	02:01
Generator	0	1	0	0	ICN	Marshall	MI	02:28
Generator	0	1	0	0	ICN	Middleburg Heights	OH	02:34
Generator	0	2	0	0	ICN	North Canton	OH	03:27
Generator	0	2	0	0	ICN	Elkhart	IN	03:36
Generator	0	1	0	0	ICN	Carroll	OH	03:56
Generator	0	3	0	0	ICN	Cincinnati	OH	05:07
Generator	0	2	0	0	ICN	Batavia	OH	05:10
Generator	0	1	0	0	ICN	Indianapolis	IN	05:16
Generator	0	2	0	0	ICN	Indianapolis	IN	05:33
Generator	0	2	0	0	ICN	Indianapolis	IN	05:36
Generator	0	2	0	0	ICN	Cuddy	PA	05:37
Generator	0	3	0	0	ICN	Pittsburgh	PA	05:41
Generator	0	2	0	0	ICN	Schererville	IN	05:48
Sub Total Generator:		**28**	**0**	**0**				

Light Plant

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Light Tower	0	2	0	0	ICN	Marshall	MI	02 28
Light Stand	0	6	0	0	ICN	Pittsburgh	PA	05:41
Sub Total Light Plant:		**8**	**0**	**0**				

Pick-Up Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Pick-Up Truck	0	5	0	0	ICN	Toledo	OH	00:07
Operational Vehicle	0	20	0	0	ICN	Detroit	MI	01:23
Pick-Up Truck	0	3	0	0	ICN	Sterling Heights	MI	01:54
Pick-Up Truck	0	3	0	0	ICN	Sterling Heights	MI	02:01
Pick-Up Truck	0	27	0	0	ICN	Marshall	MI	02:28
Pick-Up Truck	0	1	0	0	ICN	Cleveland	OH	02:34
Pick-Up Truck	0	2	0	0	ICN	Middleburg Heights	OH	02:34
Pick-Up Truck	0	7	0	0	ICN	Cleveland	OH	02:45
Pick-Up Truck	0	32	0	0	ICN	Huber Heights	OH	03:37
Pick-Up Truck	0	2	0	0	ICN	Groveport	OH	03:38
Pick-Up Truck	0	2	0	0	ICN	Carroll	OH	03:56
Pick-Up Truck	0	1	0	0	ICN	Steubenville	OH	05:01
Pick-Up Truck	0	7	0	0	ICN	Cincinnati	OH	05:07
Pick-Up Truck	0	15	0	0	ICN	Miamitown	OH	05:07
Pick-Up Truck	0	2	0	0	ICN	Dayton	KY	05:12
Trailblazer	0	2	0	0	ICN	Indianapolis	IN	05:16
Pick-Up Truck	0	1	0	0	ICN	Indianapolis	IN	05:16
Pick-Up Truck	0	3	0	0	ICN	Merrillville	IN	05:34
Pick-Up Truck	0	20	0	0	ICN	Carnegie	PA	05:39
Pick-Up Truck	0	4	0	0	ICN	Pittsburgh	PA	05:41

00 to 06 hours (* Does not include recall/mobilization time)

Rack Body	0	4	0	0	ICN	East Chicago	IN	05:49
Service Truck	0	3	0	0	ICN	East Chicago	IN	05:49
Sub Total Pick-Up Truck:		**166**	**0**	**0**				

Power Pack

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Power Pack	DPP-10-107	1	0	0	NRC	Cincinnati	OH	05:07
Sub Total Power Pack:		**1**	**0**	**0**				

Pressure Washer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Pressure Washer	0	2	0	0	ICN	Toledo	OH	00:07
Power Washer	0	2	0	0	ICN	Rudolph	OH	00:45
Water Blaster	0	1	0	0	ICN	Ypsilanti	MI	01:06
Power Washer	0	10	0	0	ICN	Ypsilanti	MI	01:06
Water Blaster	0	5	0	0	ICN	Ypsilanti	MI	01:06
Pressure Washer	0	2	0	0	ICN	Findlay	OH	01:07
Pressure Washer	0	3	0	0	ICN	Sterling Heights	MI	01:54
Hot Pressure Washer	0	1	0	0	ICN	Sterling Heights	MI	02:01
Pressure Washer Trailer	0	2	0	0	ICN	Marshall	MI	02:28
Pressure Washer	0	3	0	0	ICN	Middleburg Heights	OH	02:34
Pressure Washer- Hot	0	4	0	0	ICN	Cleveland	OH	02:45
Water Blaster	0	35	0	0	ICN	Huber Heights	OH	03:37
Water Blaster Trailer	0	3	0	0	ICN	Groveport	OH	03:38
Hot Pressure Washer	0	1	0	0	ICN	Groveport	OH	03:38
Pressure Washer-Hot	0	1	0	0	ICN	Carroll	OH	03:56
Pressure Washer-Hot/Cold	0	2	0	0	ICN	Steubenville	OH	05:01
Pressure Washer-Hot	0	3	0	0	ICN	Cincinnati	OH	05:07
Pressure Washer-Cold	0	3	0	0	ICN	Cincinnati	OH	05:07
Water Blaster	0	15	0	0	ICN	Miamitown	OH	05:07
Hot Water Pressure Washer	0	4	0	0	ICN	Batavia	OH	05:10
Hot Water Pressure Washer	0	4	0	0	ICN	Indianapolis	IN	05:16
Pressure Washer- Hot	0	2	0	0	ICN	Merrillville	IN	05:34
Pressure Washer	0	4	0	0	ICN	Indianapolis	IN	05:36
Pressure Water Blaster	0	10	0	0	ICN	Carnegie	PA	05:39
Pressure Cleaner	0	2	0	0	ICN	Pittsburgh	PA	05:41
Pressure Washer	0	2	0	0	ICN	Whiting	IN	05:49
Pressure Washer Trailer	0	1	0	0	ICN	Mooresville	IN	05:52
Sub Total Pressure Washer:		**127**	**0**	**0**				

Roll Off Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Roll Off Trailer	0	1	0	0	ICN	Groveport	OH	03 38
Roll Off Trailer	0	1	0	0	ICN	Carroll	OH	03:56
Roll Off Trailer	0	5	0	0	ICN	Carnegie	PA	05:39
Sub Total Roll Off Trailer:		**7**	**0**	**0**				

Roll-Off Boom Container

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Roll-off Boxes	0	5	0	0	ICN	Mooresville	IN	05:52
Sub Total Roll-Off Boom Container:		**5**	**0**	**0**				

Roll Off Container

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Roll-Off Container	0	143	0	0	ICN	Toledo	OH	00:07
Roll-Off Boxes	0	14	0	0	ICN	Detroit	MI	01:23
Roll-Off Boxes	0	8	0	0	ICN	Marshall	MI	02:28
Roll-OffContainer	0	2	0	0	ICN	North Canton	OH	03:27
Roll-Off Container	0	2	0	0	ICN	North Canton	OH	03:27
Roll-Off Boxes	0	30	0	0	ICN	Huber Heights	OH	03:37
Roll-Off Container	0	5	0	0	ICN	Groveport	OH	03:38
Roll-Off Container	0	2	0	0	ICN	Groveport	OH	03:38
Roll-Off Container	0	25	0	0	ICN	New Philadelphia	OH	03:49

00 to 06 hours (* Does not include recall/mobilization time)

Roll-Off Container	0	2	0	0	ICN	Carroll	OH	03:56
Roll-Off Container	0	50	0	0	ICN	East Liverpool	OH	04:49
Roll--Off Container	0	5	0	0	ICN	Miamitown	OH	05:07
Roll-Off Box	0	4	0	0	ICN	Merrillville	IN	05:34
Roll-Off Container	0	2	0	0	ICN	Cuddy	PA	05:37
Roll-Off Container	0	2	0	0	ICN	Cuddy	PA	05:37
Roll-Off Container	0	150	0	0	ICN	Carnegie	PA	05:39
Sub Total Roll-Off Container:		**446**	**0**	**0**				

Roll-off Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Roll-Off Truck	0	1	0	0	ICN	Sterling Heights	MI	01:54
Roll-off Truck	0	1	0	0	ICN	Marshall	MI	02:28
Roll-Off Truck	0	3	0	0	ICN	Huber Heights	OH	03:37
Roll-off Truck	0	4	0	0	ICN	Carroll	OH	03:56
Roll-off Truck	0	8	0	0	ICN	Carnegie	PA	05:39
Roll-off Truck	0	1	0	0	ICN	Mooresville	IN	05:52
Sub Total Roll-off Truck:		**18**	**0**	**0**				

SCBA

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
SCBA	0	2	0	0	ICN	Sterling Heights	MI	01:54
SCBA	0	3	0	0	ICN	Sterling Heights	MI	02:01
SCBA	0	2	0	0	ICN	Marshall	MI	02:28
SCBA	0	10	0	0	ICN	Cincinnati	OH	05:07
SCBA	0	3	0	0	ICN	Batavia	OH	05:10
SCBA	0	4	0	0	ICN	Indianapolis	IN	05:33
SCBA	0	4	0	0	ICN	Mooresville	IN	05:52
Sub Total SCBA:		**28**	**0**	**0**				

Side Boom

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
ide Boom Padded	0	3	0	0	ICN	Hammond	IN	05 50
Sub Total Side Boom		**3**	**0**	**0**				

Support Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Box Truck	0	1	0	0	ICN	Cincinnati	OH	05:07
Sub Total Support Truck:		**1**	**0**	**0**				

Truck - Semi

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Tractors	0	3	0	0	ICN	Detroit	MI	01:23
Roll-Off Frame w/Tractor	0	1	0	0	ICN	Cleveland	OH	02:45
Tractor	0	12	0	0	ICN	Huber Heights	OH	03:37
Tractor	0	1	0	0	ICN	Groveport	OH	03:38
Tractor	0	1	0	0	ICN	Carroll	OH	03:56
Truck- Semi	0	2	0	0	ICN	Cincinnati	OH	05:07
Tractor Trailer Trucks	0	3	0	0	ICN	Merrillville	IN	05:34
Utility Truck	0	5	0	0	ICN	Indianapolis	IN	05:36
Roll-Off Truck	0	1	0	0	ICN	East Chicago	IN	05:49
Box Truck	0	1	0	0	ICN	Mooresville	IN	05:52
Sub Total Truck - Semi:		**30**	**0**	**0**				

Utility Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Utility Trailer	0	1	0	0	ICN	Toledo	OH	00:07
Utility Trailer	0	3	0	0	ICN	Toledo	OH	00:12
Boom Trailer	0	2	0	0	ICN	Sterling Heights	MI	01:54
Cargo Trailer	0	2	0	0	ICN	Sterling Heights	MI	02:01
Job Trailer	0	2	0	0	ICN	Marshall	MI	02:28
Utility Trailer	0	1	0	0	ICN	Cleveland	OH	02:34
Cargo Trailer	0	2	0	0	ICN	Middleburg Heights	OH	02:34
Boom Trailer	0	1	0	0	ICN	Middleburg Heights	OH	02:34

00 to 06 hours (* Does not include recall/mobilization time)

Utility Trailer	0	1	0	0	ICN	Cleveland	OH	02:45
Hot Water Pressure Washer Trailer	0	1	0	0	ICN	North Canton	OH	03:27
Confined Space Entry Trailer	0	1	0	0	ICN	North Canton	OH	03:27
Hot Water Pressure Washer Trailer	0	1	0	0	ICN	Elkhart	IN	03:36
Confined Space Entry Trailer	0	1	0	0	ICN	Elkhart	IN	03:36
Utility Trailer	0	14	0	0	ICN	Groveport	OH	03:38
Utility Trailer	0	4	0	0	ICN	Carroll	OH	03:56
Emergency Response Trailer	0	1	0	0	ICN	Middletown	OH	04:26
Utility Trailer	0	2	0	0	ICN	Steubenville	OH	05:01
Boom Trailer	0	4	0	0	ICN	Cincinnati	OH	05:07
Boom Trailer	0	1	0	0	ICN	Batavia	OH	05:10
Cargo Trailer	0	1	0	0	ICN	Batavia	OH	05:10
Utility Trailer	0	2	0	0	ICN	Dayton	KY	05:12
Utility Trailer	0	3	0	0	ICN	Indianapolis	IN	05:16
Response Trailer	0	1	0	0	ICN	Indianapolis	IN	05:36
Drum Truck	0	2	0	0	ICN	Indianapolis	IN	05:36
Hot Water Pressure Washer Trailer	0	1	0	0	ICN	Cuddy	PA	05:37
Confined Space Entry Trailer	0	1	0	0	ICN	Cuddy	PA	05:37
Utility Trailers	0	8	0	0	ICN	Carnegie	PA	05:39
Utility Trailers	0	4	0	0	ICN	Carnegie	PA	05:39
Decontamination Trailer	0	2	0	0	ICN	Carnegie	PA	05:39
Response Trailer	0	2	0	0	ICN	Carnegie	PA	05:39
Hot Water Pressure Washer Trailer	0	1	0	0	ICN	Schererville	IN	05:48
Confined Space Entry Trailer	0	1	0	0	ICN	Schererville	IN	05:48
Job Trailer	0	4	0	0	ICN	Mooresville	IN	05:52
Sub Total Utility Trailer:		**78**	**0**	**0**				

Utility Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Stakebed	0	3	0	0	ICN	Detroit	MI	01:23
Stake Truck	0	1	0	0	ICN	Sterling Heights	MI	01:54
Utility Truck	0	6	0	0	ICN	North Canton	OH	03:27
Utility Truck	0	4	0	0	ICN	Elkhart	IN	03:36
Emergency Response Truck	0	1	0	0	ICN	Huber Heights	OH	03:37
Box Truck	0	1	0	0	ICN	Groveport	OH	03:38
Club Car	0	1	0	0	ICN	Groveport	OH	03:38
Utility Truck	0	1	0	0	ICN	Carroll	OH	03:56
Box Truck	0	1	0	0	ICN	Indianapolis	IN	05:16
Box Truck	0	1	0	0	ICN	Merrillville	IN	05:34
Response Truck	0	1	0	0	ICN	Merrillville	IN	05:34
Utility Trucks	0	6	0	0	ICN	Cuddy	PA	05:37
Utility Truck	0	1	0	0	ICN	Carnegie	PA	05:39
Stake Bed Truck	0	5	0	0	ICN	Carnegie	PA	05:39
Utility Truck	0	4	0	0	ICN	Schererville	IN	05:48
Sub Total Utility Truck:		**37**	**0**	**0**				

Van Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Spill Response Trailer	0	1	0	0	ICN	Rudolph	OH	00:45
Spill Response Trailer	0	1	0	0	ICN	Rudolph	OH	00:45
Response Trailer	0	3	0	0	ICN	Detroit	MI	01:23
48' Van Trailer	0	1	0	0	ICN	Detroit	MI	01:23
Response Trailer	0	2	0	0	ICN	Sterling Heights	MI	01:54
Spill Response Trailer	0	3	0	0	ICN	Cleveland	OH	02:45
Boom Trailer	0	3	0	0	ICN	Cleveland	OH	02:45
Response Trailer	0	2	0	0	ICN	North Canton	OH	03:27
Response Trailer	0	2	0	0	ICN	Elkhart	IN	03:36
Emergency Response Trailer	0	1	0	0	ICN	Huber Heights	OH	03:37
ER Trailer	0	1	0	0	ICN	Cincinnati	OH	04:47
Roll-Off Trailer	0	1	0	0	ICN	Cincinnati	OH	05:07
Van Trailer	0	2	0	0	ICN	Cincinnati	OH	05:07
Response Trailer	0	4	0	0	ICN	Cincinnati	OH	05:07

00 to 06 hours (* Does not include recall/mobilization time)

Emergency Response/Job Trailer	0	5	0	0	ICN	Indianapolis	IN	05:33
Response Trailer	0	1	0	0	ICN	Merrillville	IN	05:34
Van Trailer	0	2	0	0	ICN	Merrillville	IN	05:34
Response Trailer	0	3	0	0	ICN	Cuddy	PA	05:37
Box Van Trailer	0	1	0	0	ICN	Carnegie	PA	05:39
Box Trailer	0	1	0	0	ICN	Carnegie	PA	05:39
Boom Trailer	0	3	0	0	ICN	Carnegie	PA	05:39
Box Vans	0	5	0	0	ICN	Carnegie	PA	05:39
Response Trailer	0	3	0	0	ICN	Pittsburgh	PA	05:41
Response Trailer	0	2	0	0	ICN	Schererville	IN	05:48
Boom Trailer	0	7	0	0	ICN	East Chicago	IN	05:49
Equipment Trailer	0	3	0	0	ICN	East Chicago	IN	05:49
Equipment Trailer	0	4	0	0	ICN	East Chicago	IN	05:49
Sub Total Van Trailer:		**67**	**0**	**0**				
Total Support Equipment:		**1236**	**0**	**0**				

Transfer Pump

Centrifugal

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Transfer Pump	0	9	0	0	ICN	Toledo	OH	00:07
Trash Pump	0	6	0	0	ICN	Rudolph	OH	00 45
Trash Pump	0	1	0	0	ICN	Rudolph	OH	00:45
Submersible Pump	0	6	0	0	ICN	Detroit	MI	01:23
Transfer Pump	0	3	0	0	ICN	Sterling Heights	MI	01:54
Centrifugal Pump	0	20	0	0	ICN	Marshall	MI	02:28
Drum Vacuum Pump	0	5	0	0	ICN	Cleveland	OH	02:45
2" Double Diaphragm	0	2	0	0	ICN	Middletown	OH	04:26
Transfer Pump	0	1	0	0	ICN	Cincinnati	OH	05:07
Transfer Pump	0	11	0	0	ICN	Indianapolis	IN	05:36
Fire Pump	0	18	0	0	ICN	Carnegie	PA	05:39
Vane Pump	0	1	0	0	ICN	Carnegie	PA	05:39
Sub Total Centrifugal:		**83**	**0**	**0**				

Diaphragm

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Transfer Pump	0	4	0	0	ICN	Sterling Heights	MI	01:54
Diaphragm Pump	0	1	0	0	ICN	Sterling Heights	MI	02:01
Poly Pump	0	1	0	0	ICN	Sterling Heights	MI	02:01
Diaphhragm Pump	0	1	0	0	ICN	Middleburg Heights	OH	02:34
Trash Pump	0	1	0	0	ICN	Cleveland	OH	02:45
Double Diaphragm Pump	0	5	0	0	ICN	Cleveland	OH	02:45
Double Diaphragm Chemical Pump	0	2	0	0	ICN	North Canton	OH	03:27
Double Diaphragm Non-Chem Pump	0	2	0	0	ICN	North Canton	OH	03:27
Double Diaphragm Chem Pump	0	2	0	0	ICN	Elkhart	IN	03:36
Double Diaphragm Non-Chem Pump	0	2	0	0	ICN	Elkhart	IN	03:36
Diaphragm Acid Pump	0	1	0	0	ICN	Groveport	OH	03:38
Transfer Pump	0	1	0	0	ICN	Cincinnati	OH	04:47
Diaphragm Acid Pump	0	1	0	0	ICN	Steubenville	OH	05:01
Transfer Pump	0	8	0	0	ICN	Cincinnati	OH	05:07
Transfer Pump	0	1	0	0	ICN	Cincinnati	OH	05:07
Diaphragm Pump	0	1	0	0	ICN	Batavia	OH	05:10
Poly Diaphragm Pump	0	2	0	0	ICN	Batavia	OH	05:10
Diaphragm Pump	0	2	0	0	ICN	Indianapolis	IN	05:33
Diaphragm Acid Pump	0	1	0	0	ICN	Indianapolis	IN	05:33
Double Diaphragm Chemical Pump	0	2	0	0	ICN	Cuddy	PA	05:37
Double Diaphragm Non-Chem Pump	0	2	0	0	ICN	Cuddy	PA	05:37
Transfer Pump	0	1	0	0	ICN	Carnegie	PA	05:39
Diaphragm Pump	0	30	0	0	ICN	Carnegie	PA	05:39
Diaphragm Pump	0	2	0	0	ICN	Pittsburgh	PA	05:41
Diaphragm Pump	0	1	0	0	ICN	Pittsburgh	PA	05:41
Double Diaphragm Chem Pump	0	2	0	0	ICN	Schererville	IN	05:48

00 to 06 hours (* Does not include recall/mobilization time)

Double Diaphragm Non-Chem Pump	0	2	0	0	ICN	Schererville	IN	05:48
Diaphragm Pump	0	2	0	0	ICN	Mooresville	IN	05:52
Sub Total Diaphragm:		**83**	**0**	**0**				

Pneumatic

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Pneumatic Pump	0	2	0	0	ICN	Cincinnati	OH	05:07
Sub Total Pneumatic:		**2**	**0**	**0**				

Trash Pump

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Trash Pump	0	6	0	0	ICN	Batavia	OH	05:10
Trash Pump	0	2	0	0	ICN	Indianapolis	IN	05:33
Trash Pump	0	18	0	0	ICN	Carnegie	PA	05:39
Trash Pump	0	2	0	0	ICN	Pittsburgh	PA	05:41
Sub Total Trash Pump:		**28**	**0**	**0**				
Total Transfer Pump:		**196**	**0**	**0**				

Vacuum System

Loader

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Skid Mount Vac	0	1	891	65	ICN	Rudolph	OH	00:45
Vacuum Drum Loader	0	2	686	0	ICN	Cincinnati	OH	05:07
Sub Total Loader:		**3**	**1577**	**65**				

Vacuum Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Vacuum Trailer	0	1	343	120	ICN	Cincinnati	OH	05:07
Sub Total Vacuum Trailer:		**1**	**343**	**120**				

Vacuum Transfer Unit

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Vacuum Transfer Unit	0	1	343	12	ICN	Cleveland	OH	02:45
Guzzler	0	1	343	71	ICN	Cleveland	OH	02:45
Vacuum Unit	0	1	343	78	ICN	East Liverpool	OH	04:49
Skid Mount Vac	0	1	343	24	ICN	Cincinnati	OH	05:07
Skid Mount Vac	0	1	343	12	ICN	Cincinnati	OH	05:07
Vacuum Variety	0	15	5145	0	ICN	Mooresville	IN	05:52
Sub Total Vacuum Transfer Unit:		**20**	**6860**	**197**				

Vacuum Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Vacuum Truck	0	4	1372	80	ICN	Toledo	OH	00:07
Vacuum Truck	0	1	343	70	ICN	Rudolph	OH	00:45
Vacuum Truck	0	1	343	70	ICN	Ypsilanti	MI	01:06
Vacuum Truck	0	1	343	70	ICN	Ypsilanti	MI	01:06
Vacuum Truck	0	1	343	70	ICN	Ypsilanti	MI	01:06
Vacuum Truck	0	1	343	70	ICN	Ypsilanti	MI	01:06
Vacuum Truck	0	1	343	70	ICN	Ypsilanti	MI	01:06
Vacuum Truck	0	1	343	70	ICN	Ypsilanti	MI	01:06
Vacuum Truck	0	1	343	107	ICN	Detroit	MI	01:23
Vacuum Truck	0	1	343	131	ICN	Detroit	MI	01:23
Vacuum Truck	0	1	343	119	ICN	Detroit	MI	01:23
Vacuum Truck	0	1	343	143	ICN	Detroit	MI	01:23
Vacuum Truck	0	4	1372	192	ICN	Detroit	MI	01:23
Vacuum Truck	0	2	686	166	ICN	Detroit	MI	01:23
Vacuum Truck	0	3	1029	213	ICN	Detroit	MI	01:23
Vacuum Truck	0	1	343	71	ICN	Cleveland	OH	02:34
Vacuum Trailer	0	1	343	120	ICN	Cleveland	OH	02:45
Vacuum Truck	0	2	686	142	ICN	Cleveland	OH	02:45
Vacuum Truck	0	4	1372	284	ICN	North Canton	OH	03:27
Vacuum Truck	0	4	1372	284	ICN	Elkhart	IN	03:36
Vacuum Truck	0	25	8575	1775	ICN	Huber Heights	OH	03:37

00 to 06 hours (* Does not include recall/mobilization time)

Vacuum Truck	0	2	686	120	ICN	Huber Heights	OH	03:37
Vacuum Truck	0	2	686	142	ICN	New Philadelphia	OH	03:49
Vacuum Truck	0	5	1715	355	ICN	Carroll	OH	03:56
Vacuum Truck	0	1	343	71	ICN	Middletown	OH	04:26
Vacuum Truck	0	1	343	83	ICN	Middletown	OH	04:26
Vacuum Truck	0	1	343	70	ICN	Cincinnati	OH	04:47
Vacuum Truck	0	1	343	74	ICN	East Liverpool	OH	04:49
Vacuum Truck	0	1	343	71	ICN	Steubenville	OH	05:01
Vacuum Truck	0	3	1029	213	ICN	Cincinnati	OH	05:07
Vacuum Truck	0	11	3773	1045	ICN	Miamitown	OH	05:07
Vacuum Truck	0	1	343	71	ICN	Indianapolis	IN	05:33
Vacuum Truck	0	2	686	142	ICN	Merrillville	IN	05:34
Pump Truck	0	1	651	71	ICN	Merrillville	IN	05:34
Vacuum Truck	0	35	12005	4200	ICN	Indianapolis	IN	05:36
Vacuum Truck	0	4	1372	284	ICN	Cuddy	PA	05:37
Vacuum Truck	0	2	686	142	ICN	Washington	PA	05:38
Vacuum Truck	0	1	343	24	ICN	Carnegie	PA	05:39
Vacuum Truck	0	1	343	71	ICN	Carnegie	PA	05:39
Vacuum Truck	0	1	343	67	ICN	Carnegie	PA	05:39
Vacuum Truck	0	4	1372	284	ICN	Carnegie	PA	05:39
Vacuum Truck	0	4	1372	316	ICN	Carnegie	PA	05:39
Vacuum Truck	0	4	1372	284	ICN	Schererville	IN	05:48
Vacuum Truck	0	11	3773	1573	ICN	Whiting	IN	05:49
Vacuum Truck	0	12	4116	852	ICN	East Chicago	IN	05:49
Vacuum Truck	0	15	5145	1065	ICN	East Chicago	IN	05:49
Vacuum Truck	0	1	343	120	ICN	Hammond	IN	05:50
Vacuum Truck	0	1	343	71	ICN	Mooresville	IN	05:52
Sub Total Vacuum Truck:		**189**	**65135**	**16198**				
Total Vacuum System:		**213**	**73915**	**16580**				

Vessel

Deployment Craft (< 25 foot)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
24' Deployment Craft	0	1	0	0	ICN	Toledo	OH	00:07
14' Deployment Craft	0	1	0	0	ICN	Toledo	OH	00:07
18' Deployment Craft	0	1	0	0	ICN	Toledo	OH	00:12
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
18' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
18' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
12' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
24' Deployment Craft	0	1	0	0	ICN	Detroit	MI	01:23
20' Deployment Craft	0	1	0	0	ICN	Detroit	MI	01:23
20' Deployment Craft	0	2	0	0	ICN	Detroit	MI	01:23
17' Deployment Craft	0	1	0	0	ICN	Detroit	MI	01:23
13' Deployment Craft	0	1	0	0	ICN	Detroit	MI	01:23
14' Deployment Craft	0	4	0	0	ICN	Sterling Heights	MI	01:54
18' Deployment Craft	0	1	0	0	ICN	Sterling Heights	MI	01:54
12' Deployment Craft	0	1	0	0	ICN	Sterling Heights	MI	01:54
16' Deployment Craft	0	1	0	0	ICN	Sterling Heights	MI	01:54
John Boat	0	13	0	0	ICN	Marshall	MI	02:28
20' Deployment Craft	0	2	0	0	ICN	Middleburg Heights	OH	02:34
16' Deployment Craft	0	1	0	0	ICN	Middleburg Heights	OH	02:34
21' Deployment Craft	0	1	0	0	ICN	Cleveland	OH	02:45

00 to 06 hours (* Does not include recall/mobilization time)

14' Deployment Craft	0	1	0	0	ICN	Cleveland	OH	02:45
12' Deployment Craft	0	1	0	0	ICN	Cleveland	OH	02:45
14' Deployment Craft	0	1	0	0	ICN	North Canton	OH	03:27
14' Deployment Craft	0	1	0	0	ICN	Elkhart	IN	03:36
16' Deployment Craft	0	1	0	0	ICN	Huber Heights	OH	03:37
16' Jon Boat	0	2	0	0	ICN	Middletown	OH	04:26
Response Boat	0	1	0	0	ICN	Cincinnati	OH	04:47
21' Deployment Craft	0	1	0	0	ICN	East Liverpool	OH	04:49
24' Deployment Craft	0	2	0	0	ICN	East Liverpool	OH	04:49
14' Deployment Craft	0	1	0	0	ICN	East Liverpool	OH	04:51
22' Deployment Craft	0	1	0	0	ICN	East Liverpool	OH	04:51
16' Deployment Craft	0	1	0	0	ICN	Steubenville	OH	05:01
24' Deployment Craft	0	1	0	0	ICN	Cincinnati	OH	05:07
14' Deployment Craft	0	2	0	0	ICN	Cincinnati	OH	05:07
22' Deployment Craft	0	1	0	0	ICN	Cincinnati	OH	05:07
23' Deployment Craft	0	1	0	0	ICN	Erie	PA	05:07
21' Deployment Craft	0	1	0	0	ICN	Erie	PA	05:07
20' Deployment Craft	0	1	0	0	ICN	Batavia	OH	05:10
16' Deployment Craft	0	1	0	0	ICN	Batavia	OH	05:10
15' Deployment Craft	0	1	0	0	ICN	Dayton	KY	05:12
18' Deployment Craft	0	1	0	0	ICN	Dayton	KY	05:12
20' Deployment Craft	0	1	0	0	ICN	Indianapolis	IN	05:16
14' Deployment Craft	0	2	0	0	ICN	Indianapolis	IN	05:33
12' Deployment Craft	0	4	0	0	ICN	Indianapolis	IN	05:33
14' Deployment Craft	0	2	0	0	ICN	Merrillville	IN	05:34
12' Deployment Craft	0	1	0	0	ICN	Indianapolis	IN	05:36
14' Deployment Craft	0	1	0	0	ICN	Cuddy	PA	05:37
20' Deployment Craft	0	1	0	0	ICN	Cuddy	PA	05:37
15' Deployment Craft	0	1	0	0	ICN	Carnegie	PA	05:39
14' Deployment Craft	0	10	0	0	ICN	Carnegie	PA	05:39
12' Deployment Craft	0	1	0	0	ICN	Carnegie	PA	05:39
24' Deployment Craft	0	1	0	0	ICN	Carnegie	PA	05:39
23' Deployment Craft	0	1	0	0	ICN	Carnegie	PA	05:39
16' Deployment Craft	0	2	0	0	ICN	Pittsburgh	PA	05:41
14' Deployment Craft	0	1	0	0	ICN	Schererville	IN	05:48
14' Deployment Craft	0	1	0	0	ICN	Whiting	IN	05:49
14' Deployment Craft	0	4	0	0	ICN	East Chicago	IN	05:49
24' Deployment Craft	0	3	0	0	ICN	East Chicago	IN	05:49
18' Deployment Craft	0	1	0	0	ICN	East Chicago	IN	05:49
20' Deployment Craft	0	2	0	0	ICN	East Chicago	IN	05:49
17' Deployment Craft	0	2	0	0	ICN	East Chicago	IN	05:49
15' Deployment Craft	0	1	0	0	ICN	East Chicago	IN	05:49
John Boat	0	3	0	0	ICN	Mooresville	IN	05:52
Sub Total Deployment Craft (< 25 foot):		**114**	**0**	**0**				

Deployment Craft (> 25 foot)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
27' Deployment Craft	0	1	0	0	ICN	Detroit	MI	01:23
28' Deployment Craft	0	1	0	0	ICN	Sterling Heights	MI	02:01
25' Skiff	0	1	0	0	ICN	Middletown	OH	04:26
28' Deployment Craft	0	1	0	0	ICN	Cincinnati	OH	05:07
26' Deployment Craft	0	1	0	0	ICN	Erie	PA	05:07
28' Deployment Craft	0	2	0	0	ICN	Carnegie	PA	05:39
Sub Total Deployment Craft (> 25 foot):		**7**	**0**	**0**				
Total Vessel:		**121**	**0**	**0**				
Total 00 to 06 hours:			**94644**	**44295**				
Running Total from 0 to unknown:			**94644**	**44295**				

06 to 12 hours (* Does not include recall/mobilization time)

Boom

>=6 and <18 inch

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
12" Boom	0	3150	0	0	ICN	Apollo	PA	06:11
6" Boom	0	1050	0	0	ICN	Apollo	PA	06:11
10" Boom	0	400	0	0	ICN	Wheeling	IL	06:29
12" Boom	0	1500	0	0	ICN	Ashland	KY	06:32
10" Boom	0	300	0	0	ICN	Charleston	WV	07:12
8" Boom	0	2300	0	0	ICN	Charleston	WV	07:12
12" Boom	0	400	0	0	ICN	Wauwatosa	WI	07:12
12" Hard Boom	0	420	0	0	ICN	Louisville	KY	07:25
12" Boom	0	1500	0	0	ICN	Lock Haven	PA	09:10
8" Boom	0	2000	0	0	ICN	Nitro	WV	09:25
10" Boom	0	1000	0	0	ICN	Wood River	IL	11:19
10" Boom	0	400	0	0	ICN	St. Louis	MO	11:52
12" Boom	0	900	0	0	ICN	Paducah	KY	11:57
Sub Total >=6 and <18 inch:		**15320**	**0**	**0**				

>18 and <42 inch

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
20" Boom	0	1400	0	0	ICN	Apollo	PA	06:11
36" Boom	0	2000	0	0	ICN	Apollo	PA	06:11
19" Boom	0	1000	0	0	ICN	Burlington	Canada	06:24
24" Boom	0	1500	0	0	ICN	Ashland	KY	06:32
24" Boom	0	200	0	0	ICN	Lemont	IL	06:34
24" Boom	0	2000	0	0	ICN	Cross Lanes	WV	06:54
24" Boom	0	3000	0	0	ICN	Charleston	WV	07:12
36" Boom	0	1000	0	0	ICN	Germantown	WI	07:17
19" Boom	0	200	0	0	ICN	St. Ignace	MI	08:27
Snare Boom (Pom-Pom)	0	4	0	0	ICN	St. Ignace	MI	08:27
24" Boom	0	1500	0	0	ICN	Lock Haven	PA	09:10
24" Boom	0	2000	0	0	ICN	Baltimore	MD	11:27
10" Boom	0	400	0	0	ICN	Nashville	TN	11:54
Sub Total >18 and <42 inch:		**16204**	**0**	**0**				

>42 inch

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
48' Boom Trailer	0	5000	0	0	ICN	Goodlettsville	TN	11:40
Sub Total >42 inch:		**5000**	**0**	**0**				

18"

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
18" Boom	BM21-723	1000	0	0	NRC	South Holland	IL	06:03
18" Boom	0	4700	0	0	ICN	South Holland	IL	06:03
18" Boom	0	22500	0	0	ICN	Glenwood	IL	06:03
18" Boom	BM18-430	6800	0	0	NRC	Apollo	PA	06:11
18" Boom	BM18-739	1600	0	0	NRC	Apollo	PA	06:11
18" Boom	0	3225	0	0	ICN	Apollo	PA	06:11
18" Boom	0	7000	0	0	ICN	Monee	IL	06:16
Containment Boom	0	11200	0	0	ICN	Monee	IL	06:16
Containment Boom	0	11500	0	0	ICN	Monee	IL	06:16
18" Boom	0	500	0	0	ICN	Ashland	KY	06:26
18"Boom	0	11500	0	0	ICN	Wheeling	IL	06:29
18" Boom	0	3750	0	0	ICN	South Point	OH	06:32
18" Boom	0	2200	0	0	ICN	New Lenox	IL	06:33
18" Boom	0	3200	0	0	ICN	Lemont	IL	06:34
18" Boom	0	1200	0	0	ICN	Lemont	IL	06:34
18" Boom	BM18-736	3000	0	0	NRC	Shelbyville	KY	07:00
18" Boom	0	2600	0	0	ICN	Shelbyville	KY	07:00
18" Boom	0	100	0	0	ICN	North Aurora	IL	07:06
18" Boom	0	500	0	0	ICN	Crestwood	KY	07:08

06 to 12 hours (* Does not include recall/mobilization time)

18" Boom	0	1500	0	0	ICN	Menomonee Falls	WI	07:13
18" Boom	0	15400	0	0	ICN	Germantown	WI	07:17
18" Boom	0	100	0	0	ICN	Sheboygan	WI	07:21
18" Boom	BM18-433	7000	0	0	NRC	Rogers City	MI	07:25
18" Boom	BM21-719	1000	0	0	NRC	Rogers City	MI	07:25
18" Boom	BM18-727	1000	0	0	NRC	Rogers City	MI	07:25
18" Boom	BM18-735	3000	0	0	NRC	Nicholasville	KY	07:28
18" Boom	0	4900	0	0	ICN	Louisville	KY	07:34
18" Boom	0	2200	0	0	ICN	De Pere	WI	08:03
18" Boom	0	550	0	0	ICN	St. Ignace	MI	08:27
18" Boom	BM18-432	7000	0	0	NRC	Green Bay	WI	08:34
18" Boom	0	1000	0	0	ICN	Peoria	IL	09:15
18" Boom	0	2000	0	0	ICN	Newburgh	IN	09:19
18" Boom	0	1000	0	0	ICN	Evansville	IN	09:27
18" Boom	0	300	0	0	ICN	Elmira	NY	09:53
18" Boom	0	2000	0	0	ICN	Sunbury	PA	10:06
18" Boom	0	1000	0	0	ICN	Blountville	TN	10:15
18" Boom	BM18-364	100	0	0	NRC	Oswego	NY	10:46
18" Boom	BM21-720	1000	0	0	NRC	Oswego	NY	10:46
18" Boom	0	2600	0	0	ICN	Knoxville	TN	11:04
18" Boom	0	1100	0	0	ICN	Lorton	VA	11:09
18" Boom	0	500	0	0	ICN	East Syracuse	NY	11:12
Harbor Boom	0	100	0	0	ICN	East Syracuse	NY	11:12
18" Boom	0	2000	0	0	ICN	Fredericksburg	VA	11:13
18" Boom	0	1000	0	0	ICN	Laurel	MD	11:15
18" Boom	0	1000	0	0	ICN	Laurel	MD	11:15
18" Boom	0	9000	0	0	ICN	Laurel	MD	11:15
18" Boom	BM21-416	4000	0	0	NRC	Wood River	IL	11:19
18" Boom	0	2000	0	0	ICN	Wood River	IL	11:19
18" Boom	0	3000	0	0	ICN	Baltimore	MD	11:26
18" Boom	0	10000	0	0	ICN	Baltimore	MD	11:27
18" Boom	0	1800	0	0	ICN	Baltimore	MD	11:27
18" Boom	0	300	0	0	ICN	Baltimore	MD	11:27
18" Boom	BM18-737	3000	0	0	NRC	St. Louis	MO	11:40
18" Boom	0	2000	0	0	ICN	Calvert City	KY	11:40
18" Boom	0	1700	0	0	ICN	St. Louis	MO	11:52
18" Boom	0	2300	0	0	ICN	Nashville	TN	11:52
18" Boom	0	2000	0	0	ICN	Nashville	TN	11:54
18" Boom	0	1000	0	0	ICN	St. Louis	MO	11:56
18" Boom	BM18-353	100	0	0	NRC	Paducah	KY	11:57
18" Boom	0	2800	0	0	ICN	Paducah	KY	11:57
Sub Total 18":		**203425**	**0**	**0**				
Total Boom:		**239949**	**0**	**0**				

Portable Storage

Barge - Portable

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Portable Barge Set	101-102	1	0	238	NRC	Oswego	NY	10:46
Portable Barge Set	600-601	1	0	238	NRC	Paducah	KY	11:57
Sub Total Barge - Portable:		**2**	**0**	**476**				

Dracone/Bladder

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Canflex FCB-43E Bladder	BC-53	1	0	100	NRC	Rogers City	MI	07:25
Sub Total Dracone/Bladder:		**1**	**0**	**100**				

Frac Tank

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Frac Tank	0	30	0	14280	ICN	Apollo	PA	06:11
Frac Tank	0	3	0	714	ICN	Apollo	PA	06:11
Frac Tank	0	1	0	357	ICN	Newburgh	IN	09:19

06 to 12 hours (* Does not include recall/mobilization time)

Frac Tank	0	1	0	357	ICN	Newburgh	IN	09:19
Frac Tank	0	1	0	429	ICN	Norway	MI	10:16
Frac Tank	0	3	0	1500	ICN	Stafford	VA	11:12
Frac Tank	0	2	0	952	ICN	Laurel	MD	11:15
Frac Tank	0	3	0	1500	ICN	Baltimore	MD	11:27
Frac Tank	0	1	0	500	ICN	Goodlettsville	TN	11:40
Sub Total Frac Tank:		**45**	**0**	**20589**				

Portable Tank

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Pillow Tank	ELS-44	1	0	24	NRC	South Holland	IL	06:03
Pillow Tank	ELS-09	1	0	24	NRC	South Holland	IL	06:03
Pillow Tank	ELS-10	1	0	24	NRC	South Holland	IL	06:03
Pillow Tank	ELS-11	1	0	24	NRC	South Holland	IL	06:03
Portable Tank	0	3	0	321	ICN	Glenwood	IL	06:03
Tank Trailer	0	1	0	143	ICN	Monee	IL	06:16
Cement Tank	0	1	0	190	ICN	Burlington	Canada	06:24
Poly Tank	0	1	0	12	ICN	Burlington	Canada	06:24
Portable Tank	0	4	0	648	ICN	Wheeling	IL	06:29
Portable Tank	0	70	0	33320	ICN	Wheeling	IL	06:29
Portable Tank	0	40	0	4280	ICN	Wheeling	IL	06:29
Portable Tank	0	2	0	286	ICN	Shelbyville	KY	07:00
Vacuum Tanker Trailer	0	1	0	130	ICN	Shelbyville	KY	07:00
Poly Tote	0	2	0	12	ICN	North Aurora	IL	07:06
Poly Tank	0	1	0	7	ICN	North Aurora	IL	07:06
Poly Tank	0	1	0	35	ICN	North Aurora	IL	07:06
Portable Tank	0	2	0	0	ICN	Wauwatosa	WI	07:12
Pillow Tank	ELS-30	1	0	24	NRC	Rogers City	MI	07:25
Pillow Tank	ELS-31	1	0	24	NRC	Rogers City	MI	07:25
Pillow Tank	ELS-62	1	0	24	NRC	Rogers City	MI	07:25
Pillow Tank	ELS-63	1	0	24	NRC	Rogers City	MI	07:25
Tank Truck	0	1	0	167	ICN	Louisville	KY	07:34
Portable Tank	0	5	0	180	ICN	Louisville	KY	07:34
Poly Tank	0	1	0	6	ICN	St. Ignace	MI	08:27
Poly Tank	0	1	0	5	ICN	St. Ignace	MI	08:27
Portable Tank	0	3	0	285	ICN	Peoria	IL	09:15
Portable Tank	0	4	0	572	ICN	Peoria	IL	09:15
Tanker Truck	0	4	0	476	ICN	Nitro	WV	09:25
Portable Tank	0	1	0	357	ICN	Evansville	IN	09:27
Poly Tank	0	1	0	47	ICN	Blountville	TN	10:15
Poly/Steel Tank	0	1	0	12	ICN	Blountville	TN	10:15
Poly Tank	0	1	0	8	ICN	Blountville	TN	10:15
Pillow Tank	PT-01	1	0	24	NRC	Oswego	NY	10:46
Pillow Tank	PT-02	1	0	24	NRC	Oswego	NY	10:46
Pillow Tank	PT-03	1	0	24	NRC	Oswego	NY	10:46
Pillow Tank	PT-04	1	0	24	NRC	Oswego	NY	10:46
Portable Tank	0	3	0	144	ICN	Knoxville	TN	11:04
Poly Tank	0	4	0	32	ICN	Knoxville	TN	11:04
Poly Tank	0	2	0	24	ICN	East Syracuse	NY	11:12
Portable Tank	0	5	0	60	ICN	Fredericksburg	VA	11:13
Poly Tank	0	5	0	40	ICN	Baltimore	MD	11:26
Storage Container	0	1	0	59	ICN	Baltimore	MD	11:27
Portable Tank	0	1	0	476	ICN	St. Louis	MO	11:52
Portable Tank	0	1	0	47	ICN	St. Louis	MO	11:52
Portable Tank	0	5	0	180	ICN	St. Louis	MO	11:52
Portable Tank	0	2	0	18	ICN	St. Louis	MO	11:52
Portable Tank	0	2	0	12	ICN	St. Louis	MO	11:52
Portable Tank	0	1	0	12	ICN	Nashville	TN	11:52
Poly Tank	0	5	0	40	ICN	Nashville	TN	11:52
Poly Tank	0	2	0	48	ICN	Nashville	TN	11:52
Sub Total Portable Tank:		**203**	**0**	**42979**				

06 to 12 hours (* Does not include recall/mobilization time)

Tank Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Storage Trailers	0	18	0	0	ICN	Apollo	PA	06:11
Tanks Trucks	0	1	0	0	ICN	Louisville	KY	07:25
Tank Trailer	0	1	0	0	ICN	Syracuse	NY	11:10
Sub Total Tank Truck:		**20**	**0**	**0**				
Total Portable Storage:		**271**	**0**	**64144**				

Skimmer

Drum

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Crucial Double Drum 18H-36 Skimmer	CD-002	1	480	0	NRC	South Holland	IL	06:03
Elastec TDS118 Skimmer	0	4	960	0	ICN	South Holland	IL	06:03
Elastec TDS118 Skimmer	0	1	240	0	ICN	Apollo	PA	06:11
Double Drum Skimmer	0	6	4116	0	ICN	Monee	IL	06:16
Double Drum Skimmer	0	8	10968	0	ICN	Monee	IL	06:16
Elastec TDS118 Skimmer	0	1	240	0	ICN	Ashland	KY	06:26
Medium Drum Skimmer	0	1	240	0	ICN	Wheeling	IL	06:29
Elastec TDS136 Skimmer	0	1	480	0	ICN	New Lenox	IL	06:33
Small Drum Skimmer	0	1	171	0	ICN	Lemont	IL	06:34
Elastec TDS136 Skimmer	0	1	480	0	ICN	Lemont	IL	06:34
Crucial 1D18P36 Skimmer	0	1	240	0	ICN	Cross Lanes	WV	06:54
Elastec TDS118 Skimmer	0	1	240	0	ICN	Shelbyville	KY	07:00
Elastec TDS118 Skimmer	0	1	240	0	ICN	Menomonee Falls	WI	07:13
Elastec TDS136 Skimmer	0	1	480	0	ICN	Germantown	WI	07:17
Small Drum Skimmer	0	1	171	0	ICN	Louisville	KY	07:34
Small Drum Skimmer	0	3	513	0	ICN	Evansville	IN	09:27
Large Drum Skimmer	0	1	480	0	ICN	Blountville	TN	10:15
Medium Drum Skimmer	0	1	240	0	ICN	Knoxville	TN	11:04
Elastec TDS118 Skimmer	0	2	480	0	ICN	Stafford	VA	11:12
Elastec TDS118 Skimmer	0	2	480	0	ICN	Laurel	MD	11:15
Small Drum Skimmer	0	1	171	0	ICN	Wood River	IL	11:19
Elastec TDS136 Skimmer	0	1	480	0	ICN	Wood River	IL	11:19
Medium Drum Skimmer	0	1	240	0	ICN	Baltimore	MD	11:26
Elastec TDS136 Skimmer	0	1	480	0	ICN	Baltimore	MD	11:27
Elastec TDS118 Skimmer	0	2	480	0	ICN	Baltimore	MD	11:27
Elastec Mini Max Skimmer	0	1	137	0	ICN	Baltimore	MD	11:27
Elastec TDS118 Skimmer	0	1	240	0	ICN	Baltimore	MD	11:27
Medium Drum Skimmer	0	1	240	0	ICN	Goodlettsville	TN	11:40
Small Drum Skimmer	0	2	342	0	ICN	Calvert City	KY	11:40
Large Drum Skimmer	0	1	480	0	ICN	Nashville	TN	11:52
Small Drum Skimmer	0	1	171	0	ICN	Nashville	TN	11:54
Elastec TDS118 Skimmer	0	1	240	0	ICN	St. Louis	MO	11:56
Small Drum Skimmer	0	1	171	0	ICN	Paducah	KY	11:57
Sub Total Drum:		**54**	**25811**	**0**				

Floating Suction

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Vikoma Fasflo Skimmer	FFP-013	1	2112	0	NRC	Apollo	PA	06:11
Acme Weir Head Skimmer	WH-107	1	0	0	NRC	Apollo	PA	06:11
Vikoma Fasflo Skimmer	FFP-015	1	2112	0	NRC	Apollo	PA	06:11
Manta Ray Skimmer	0	1	315	0	ICN	Apollo	PA	06:11
Acme 39T Skimmer	0	1	1371	0	ICN	Apollo	PA	06:11
Megator Vacuum Skimmer	0	1	377	0	ICN	Apollo	PA	06:11
Duck Bill Skimmer	0	1	549	0	ICN	Monee	IL	06:16
Vikoma Fasflo Skimmer	FFP-011	1	2112	0	NRC	South Point	OH	06:32
Douglas 4300 SkimPac	0	2	960	0	ICN	Germantown	WI	07:17
Douglas 4300 Skimpac	0	2	960	0	ICN	De Pere	WI	08:03
Douglas 2300 SkimPac	0	1	274	0	ICN	St. Ignace	MI	08:27
Douglas 4300 SkimPac	0	2	960	0	ICN	Neenah	WI	08:45

06 to 12 hours (* Does not include recall/mobilization time)

Manta Ray Skimmer	0	1	315	0	ICN	Knoxville	TN	11:04
Manta Ray Skimmer	0	1	315	0	ICN	Fredericksburg	VA	11:13
Vikoma Fasflo Skimmer	FFP-003	1	2112	0	NRC	Wood River	IL	11:19
Vikoma Fasflo Skimmer	FFP-017	1	2112	0	NRC	Baltimore	MD	11:27
Acme Weir Head Skimmer	WH-220	1	0	0	NRC	Baltimore	MD	11:27
Skim Pak Skimmer	0	1	233	0	ICN	Baltimore	MD	11:27
Weir Skimmer	0	2	2058	0	ICN	Baltimore	MD	11:27
Vikoma Fasflo Skimmer	FFP-018	1	2112	0	NRC	Paducah	KY	11:57
Sub Total Floating Suction:		**24**	**21359**	**0**				

Multi Skimmer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Action 24 Skimmer	AP-115	1	823	0	NRC	Rogers City	MI	07:25
Action 18 Skimmer	AP-18-727	1	446	0	NRC	Rogers City	MI	07:25
Action 24 Skimmer	AP-116	1	823	0	NRC	Oswego	NY	10:46
Sub Total Multi Skimmer:		**3**	**2092**	**0**				

Oleophilic Disk

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
NRC Weir Disk Skimmer	WD-105	1	1371	24	NRC	Apollo	PA	06:11
Sub Total Oleophilic Disk:		**1**	**1371**	**24**				

Oleophilic Rope Mop

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Rope Mop	0	1	1200	0	ICN	Baltimore	MD	11:27
Sub Total Oleophilic Rope Mop:		**1**	**1200**	**0**				

Weir

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Alpha Weir Skimmer	0	1	1360	0	ICN	South Holland	IL	06:03
Weir Skimmer	0	2	274	0	ICN	Glenwood	IL	06:03
Sub Total Weir:		**3**	**1634**	**0**				
Total Skimmer:		**86**	**53467**	**24**				

Support Equipment

Ancillary Gear

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Power Pack	0	1	0	0	ICN	Wausau	WI	11:01
Sub Total Ancillary Gear:		**1**	**0**	**0**				

ATV

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
ATV	0	2	0	0	ICN	Apollo	PA	06:11
ATV	0	1	0	0	ICN	Monee	IL	06:16
ATV	0	2	0	0	ICN	North Aurora	IL	07:06
Four-Wheeler	0	1	0	0	ICN	St. Ignace	MI	08:27
ATV	0	1	0	0	ICN	Knoxville	TN	11:04
ATV	0	1	0	0	ICN	Nashville	TN	11:52
Sub Total ATV:		**8**	**0**	**0**				

Blower

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Boom Inflator	0	2	0	0	ICN	Glenwood	IL	06:03
Boom Inflator	0	1	0	0	ICN	Wheeling	IL	06:29
Boom Inflator	0	1	0	0	ICN	Cross Lanes	WV	06:54
Blower	0	3	0	0	ICN	Sunbury	PA	10:06
Blower	0	8	0	0	ICN	Knoxville	TN	11:04
Blower	0	2	0	0	ICN	Fredericksburg	VA	11:13
Blower	0	3	0	0	ICN	Baltimore	MD	11:26
Blower	0	4	0	0	ICN	St. Louis	MO	11:52
Blower	0	3	0	0	ICN	Nashville	TN	11:52
Sub Total Blower:		**27**	**0**	**0**				

Communications

06 to 12 hours (* Does not include recall/mobilization time)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Command Trailer	0	1	0	0	ICN	Monee	IL	06:16
Mobile Command Center	0	1	0	0	ICN	Louisville	KY	07:25
Sub Total Communications:		**2**	**0**	**0**				

Compressor

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Compressor	0	2	0	0	ICN	Glenwood	IL	06:03
Compressor	0	4	0	0	ICN	Apollo	PA	06:11
Compressor	0	3	0	0	ICN	Monee	IL	06:16
Compressor	0	2	0	0	ICN	Burlington	Canada	06:24
Air Compressor	0	1	0	0	ICN	Wheeling	IL	06:29
Compressor	0	6	0	0	ICN	Lemont	IL	06:34
Air Compressor	0	1	0	0	ICN	Cross Lanes	WV	06:54
Compressor	0	1	0	0	ICN	North Aurora	IL	07:06
Compressor	0	1	0	0	ICN	Wauwatosa	WI	07:12
Compressor	0	1	0	0	ICN	Menomonee Falls	WI	07:13
Air Compressor	0	2	0	0	ICN	Amherst	NY	07:23
Air Compressor	0	1	0	0	ICN	Louisville	KY	07:25
Compressor	0	4	0	0	ICN	Louisville	KY	07:34
Compressor	0	2	0	0	ICN	St. Ignace	MI	08:27
Compressor	0	2	0	0	ICN	Rochester	NY	09:00
Air Compressors	0	3	0	0	ICN	Evansville	IN	09:27
Compressor	0	1	0	0	ICN	Sunbury	PA	10:06
Compressor	0	1	0	0	ICN	Blountville	TN	10:15
Air Compressor	0	1	0	0	ICN	Waverly	NY	10:18
Compressor	0	2	0	0	ICN	Knoxville	TN	11:04
Compresssor	0	2	0	0	ICN	Syracuse	NY	11:10
Air Compressor	0	2	0	0	ICN	East Syracuse	NY	11:12
Compressor	0	3	0	0	ICN	Fredericksburg	VA	11:13
Compressor	0	1	0	0	ICN	Laurel	MD	11:15
Compressor	0	3	0	0	ICN	Wood River	IL	11:19
Compressor	0	1	0	0	ICN	Harriman	TN	11:26
Compressor	0	2	0	0	ICN	Baltimore	MD	11:26
Air Compressor 175 cfm	0	1	0	0	ICN	Baltimore	MD	11:27
Air Compressor 185 cfm	0	1	0	0	ICN	Baltimore	MD	11:27
Air Compressor	0	2	0	0	ICN	Calvert City	KY	11:40
Air Compressor	0	5	0	0	ICN	St. Louis	MO	11:52
Compressor	0	4	0	0	ICN	Nashville	TN	11:52
Sub Total Compressor:		**68**	**0**	**0**				

Crane Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Crane Truck	0	2	0	0	ICN	Apollo	PA	06:11
Crane	0	2	0	0	ICN	Chicago	IL	06:14
Sidebooms/Padded	0	2	0	0	ICN	New Oxford	PA	10:11
100T Crane	0	1	0	0	ICN	auget	IL	11 39
Sidebooms/Padded	0	2	0	0	ICN	Sauget	IL	11:39
Sub Total Crane Truck:		**9**	**0**	**0**				

Dump Truck/Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Dump Truck	0	5	0	0	ICN	Apollo	PA	06:11
Dump Trailer	0	8	0	0	ICN	Apollo	PA	06:11
Dump Truck	0	2	0	0	ICN	Ashland	KY	06:32
ER Trailer	0	2	0	0	ICN	Louisville	KY	07:25
Dump Truck	0	1	0	0	ICN	Rochester	NY	09:00
Dump Trailer	0	1	0	0	ICN	Evansville	IN	09:27
Dump Truck	0	1	0	0	ICN	Waverly	NY	10:18
Dump Truck	0	1	0	0	ICN	Fredericksburg	VA	11:13
Dump Trailer	0	2	0	0	ICN	n	VA	11:19
Dump Truck W/ Lift Gate	0	1	0	0	ICN	Goodlettsville	TN	11:40

06 to 12 hours (* Does not include recall/mobilization time)

Dump Truck	0	3	0	0	ICN	Goodlettsville	TN	11:40
Guzzler	0	3	0	0	ICN	Goodlettsville	TN	11:40
Dump Truck	0	1	0	0	ICN	St. Louis	MO	11:52
Dump Truck	0	1	0	0	ICN	Paducah	KY	11:57
Dump Truck	0	1	0	0	ICN	Paducah	KY	11:57
Dump Truck	0	1	0	0	ICN	Paducah	KY	11:57
Sub Total Dump Truck/Trailer:		**34**	**0**	**0**				

Earth Moving Equipment

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Skid Steer	0	2	0	0	ICN	South Holland	IL	06:03
Skid Steer	0	1	0	0	ICN	Glenwood	IL	06:03
Backhoe	0	1	0	0	ICN	Apollo	PA	06:11
Excavator	0	1	0	0	ICN	Apollo	PA	06:11
Backhoe	0	1	0	0	ICN	Apollo	PA	06:11
Bulldozer	0	1	0	0	ICN	Apollo	PA	06:11
Backhoe	0	1	0	0	ICN	Apollo	PA	06:11
Skid Steer Loader	0	4	0	0	ICN	Apollo	PA	06:11
325 Excavator	0	1	0	0	ICN	Chicago	IL	06:14
966 Wheel Loader	0	1	0	0	ICN	Chicago	IL	06:14
Backhoe	0	1	0	0	ICN	Monee	IL	06:16
Skid Steer	0	1	0	0	ICN	Burlington	Canada	06:24
Trackhoes	0	2	0	0	ICN	Hunker	PA	06:28
Skid Steer	0	2	0	0	ICN	Wheeling	IL	06:29
Skid Loader	0	4	0	0	ICN	Ashland	KY	06:32
Backhoe	0	2	0	0	ICN	Lemont	IL	06:34
Loader	0	1	0	0	ICN	Lemont	IL	06:34
Skid Steer	0	1	0	0	ICN	Shelbyville	KY	07:00
Earth Moving Equipment	0	6	0	0	ICN	Shelbyville	KY	07:00
Excavator	0	1	0	0	ICN	North Aurora	IL	07:06
Skid Steer	0	1	0	0	ICN	North Aurora	IL	07:06
Skid Steer	0	1	0	0	ICN	Louisville	KY	07:25
Backhoe	0	1	0	0	ICN	Louisville	KY	07:34
Loader	0	1	0	0	ICN	Louisville	KY	07:34
Backhoe Loader	0	1	0	0	ICN	Rochester	NY	09:00
Skid Steer	0	1	0	0	ICN	Newburgh	IN	09:19
Backhoe	0	8	0	0	ICN	Evansville	IN	09:27
Dozer	0	5	0	0	ICN	Evansville	IN	09:27
Skid Steer	0	4	0	0	ICN	Evansville	IN	09:27
Grader	0	2	0	0	ICN	Evansville	IN	09:27
Compactors	0	6	0	0	ICN	Evansville	IN	09:27
Excavators	0	4	0	0	ICN	Evansville	IN	09:27
Telehandlers	0	2	0	0	ICN	Evansville	IN	09:27
Wheel Loader	0	1	0	0	ICN	Evansville	IN	09:27
977 Track Loader	0	1	0	0	ICN	New Oxford	PA	10:11
325 Excavator	0	1	0	0	ICN	New Oxford	PA	10:11
Skid Steer	0	1	0	0	ICN	New Oxford	PA	10:11
Track Loader	0	1	0	0	ICN	Galesburg	IL	10:16
Excavator	0	1	0	0	ICN	Galesburg	IL	10:16
Backhoe Loader	0	1	0	0	ICN	Waverly	NY	10:18
Excavator	0	1	0	0	ICN	Waverly	NY	10:18
Backhoe	0	1	0	0	ICN	Knoxville	TN	11:04
Backhoe	0	1	0	0	ICN	Syracuse	NY	11:10
Skid Steer	0	1	0	0	ICN	Fredericksburg	VA	11:13
Backhoe	0	1	0	0	ICN	Fredericksburg	VA	11:13
Backhoe	0	1	0	0	ICN	Wood River	IL	11:19
Loader	0	1	0	0	ICN	Wood River	IL	11:19
Backhoe	0	1	0	0	ICN	Baltimore	MD	11:27
Bobcat w/ Attachment	0	1	0	0	ICN	Kingston	TN	11:30
325 Excavator	0	1	0	0	ICN	Sauget	IL	11:39
D5G Dozer	0	1	0	0	ICN	Sauget	IL	11:39

06 to 12 hours (* Does not include recall/mobilization time)

Track Loader	0	1	0	0	ICN	Sauget	IL	11:39
Bobcat W/ Attachment	0	4	0	0	ICN	Goodlettsville	TN	11:40
Excavator	0	2	0	0	ICN	Goodlettsville	TN	11:40
Backhoes	0	2	0	0	ICN	Goodlettsville	TN	11:40
Dozer 58 E	0	1	0	0	ICN	Goodlettsville	TN	11:40
Loader	0	1	0	0	ICN	Goodlettsville	TN	11:40
Skid Steer	0	1	0	0	ICN	Calvert City	KY	11:40
Backhoes	0	2	0	0	ICN	Calvert City	KY	11:40
Skid Steer	0	2	0	0	ICN	St. Louis	MO	11:52
Excavator-Mini	0	2	0	0	ICN	St. Louis	MO	11:52
Bobcat	0	1	0	0	ICN	Nashville	TN	11:52
Tractor	0	4	0	0	ICN	Paducah	KY	11:57
Backhoe	0	1	0	0	ICN	Paducah	KY	11:57
Loader	0	1	0	0	ICN	Paducah	KY	11:57
Sub Total Earth Moving Equipment:		**115**	**0**	**0**				

Flatbed Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Flatbed Trailer	0	1	0	0	ICN	South Holland	IL	06:03
Stakebed	0	3	0	0	ICN	South Holland	IL	06:03
Flatbed Trailer	360	1	0	0	NRC	Apollo	PA	06:11
Flatbed Trailer	704	1	0	0	NRC	Apollo	PA	06:11
Lowboy Trailer	0	3	0	0	ICN	Apollo	PA	06:11
Drop Deck Trailer	0	3	0	0	ICN	Apollo	PA	06:11
Lowboy Trailer	0	1	0	0	ICN	Wheeling	IL	06:29
Flatbed Trailer	0	3	0	0	ICN	Shelbyville	KY	07:00
Lowboy Trailer	0	1	0	0	ICN	Louisville	KY	07:34
Flatbed Trailer	0	1	0	0	ICN	Rochester	NY	09:00
LowboyTrailer	0	2	0	0	ICN	Evansville	IN	09:27
Flatbed Trailer	0	3	0	0	ICN	Blountville	TN	10:15
Flatbed Trailer	0	1	0	0	ICN	Waverly	NY	10:18
Flatbed Trailer	364	1	0	0	NRC	Oswego	NY	10:46
Flatbed Trailer	0	1	0	0	ICN	Knoxville	TN	11:04
Flatbed Trailer	0	4	0	0	ICN	Knoxville	TN	11:04
Flatbed Trailer	0	1	0	0	ICN	Syracuse	NY	11:10
Flatbed Trailer	0	3	0	0	ICN	Syracuse	NY	11:10
Flatbed Trailer	0	4	0	0	ICN	Fredericksburg	VA	11:13
Flatbed Trailer	0	1	0	0	ICN	Fredericksburg	VA	11:13
Car Carrier	0	1	0	0	ICN	n	VA	11:19
Lowboy Flatbed Trailer	0	1	0	0	ICN	Wood River	IL	11:19
Flatbed Trailer	0	1	0	0	ICN	Baltimore	MD	11:26
Flatbed Trailer	0	1	0	0	ICN	Baltimore	MD	11:26
Flatbed Trailer	317	1	0	0	NRC	Baltimore	MD	11:27
Flatbed Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
20' Response Trailer	0	8	0	0	ICN	Goodlettsville	TN	11:40
Flatbed Trailer	0	1	0	0	ICN	Nashville	TN	11:52
Flatbed Trailer	0	6	0	0	ICN	Nashville	TN	11:52
Flatbed Trailer	353	1	0	0	NRC	Paducah	KY	11:57
Flatbed Trailer	701	1	0	0	NRC	Paducah	KY	11:57
Sub Total Flatbed Trailer:		**62**	**0**	**0**				

Fork Lift

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Fork Lift	0	1	0	0	ICN	Glenwood	IL	06:03
Forklift	0	1	0	0	ICN	Apollo	PA	06:11
Fork Lift	0	1	0	0	ICN	Wheeling	IL	06:29
Forklift	0	1	0	0	ICN	Wauwatosa	WI	07:12
Fork Lift	0	1	0	0	ICN	Amherst	NY	07:23
Forklift	0	1	0	0	ICN	Kaukauna	WI	08:36
Fork Lift	0	1	0	0	ICN	Waverly	NY	10:18
Forklift	0	1	0	0	ICN	St. Louis	MO	11:52
Sub Total Fork Lift:		**8**	**0**	**0**				

06 to 12 hours (* Does not include recall/mobilization time)

Generator

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Generator	0	2	0	0	ICN	South Holland	IL	06:03
Generator	0	8	0	0	ICN	Glenwood	IL	06 03
Generator	0	15	0	0	ICN	Apollo	PA	06:11
Generator	0	2	0	0	ICN	Monee	IL	06:16
Generator	0	1	0	0	ICN	Burlington	Canada	06:24
Generator	0	10	0	0	ICN	Wheeling	IL	06:29
Generator	0	2	0	0	ICN	Lemont	IL	06 34
Generator	0	1	0	0	ICN	Cross Lanes	WV	06:54
Generators	0	2	0	0	ICN	North Aurora	IL	07:06
Generator	0	2	0	0	ICN	Wauwatosa	WI	07:12
Generator	0	2	0	0	ICN	Menomonee Falls	WI	07:13
Generator	0	1	0	0	ICN	Louisville	KY	07:25
Generator	0	2	0	0	ICN	Louisville	KY	07:34
Generator	0	2	0	0	ICN	St. Ignace	MI	08:27
Generator	0	1	0	0	ICN	Kaukauna	WI	08:36
Generator	0	2	0	0	ICN	Rochester	NY	09:00
Generator	0	4	0	0	ICN	Evansville	IN	09:27
Generator	0	3	0	0	ICN	Sunbury	PA	10:06
Generator	0	3	0	0	ICN	Blountville	TN	10:15
Generator	0	1	0	0	ICN	Waverly	NY	10:18
Generator	0	4	0	0	ICN	Knoxville	TN	11:04
Generator	0	5	0	0	ICN	Syracuse	NY	11:10
Generator	0	2	0	0	ICN	East Syracuse	NY	11:12
3500w Generator	0	2	0	0	ICN	Stafford	VA	11:12
Generator	0	3	0	0	ICN	Fredericksburg	VA	11:13
Generator	0	2	0	0	ICN	Laurel	MD	11:15
Generator	0	1	0	0	ICN	Binghamton	NY	11:17
Generator	0	2	0	0	ICN	Wood River	IL	11:19
Generator	0	1	0	0	ICN	Baltimore	MD	11:26
1000w Generator	0	7	0	0	ICN	Baltimore	MD	11:27
3500w Generator	0	1	0	0	ICN	Baltimore	MD	11:27
Generator	0	1	0	0	ICN	Calvert City	KY	11:40
Generator	0	5	0	0	ICN	St. Louis	MO	11:52
Generator	0	4	0	0	ICN	Nashville	TN	11:52
Sub Total Generator:		**106**	**0**	**0**				

Light Plant

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Light Plants	0	3	0	0	ICN	Apollo	PA	06:11
Light Tower	0	1	0	0	ICN	Monee	IL	06:16
Light Stand	0	1	0	0	ICN	Sunbury	PA	10:06
Light Plant	0	4	0	0	ICN	Knoxville	TN	11:04
Light Plant	0	1	0	0	ICN	Fredericksburg	VA	11:13
Light Plant	0	3	0	0	ICN	Baltimore	MD	11:26
Light Plant	0	2	0	0	ICN	Nashville	TN	11:52
Sub Total Light Plant:		**15**	**0**	**0**				

Pick-Up Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Pick-Up Truck	0	4	0	0	ICN	South Holland	IL	06:03
Pick-Up Truck	0	10	0	0	ICN	Glenwood	IL	06:03
Pick-Up Truck	0	27	0	0	ICN	Apollo	PA	06:11
Pick-Up Truck	0	6	0	0	ICN	Monee	IL	06:16
Pick-Up Truck	0	5	0	0	ICN	Burlington	Canada	06:24
Pick-Up Truck	0	16	0	0	ICN	Wheeling	IL	06:29
Pick-Up Truck	0	6	0	0	ICN	South Point	OH	06:32
Pick-Up Truck	0	6	0	0	ICN	New Lenox	IL	06:33
Pick-Up Truck	0	3	0	0	ICN	Cross Lanes	WV	06:54
Pick-Up Truck	0	4	0	0	ICN	Wauwatosa	WI	07:12

06 to 12 hours (* Does not include recall/mobilization time)

Pick-Up Truck	0	2	0	0	ICN	Menomonee Falls	WI	07:13
Pick-Up Truck	0	10	0	0	ICN	Germantown	WI	07:17
Pick-Up Truck	0	5	0	0	ICN	Sheboygan	WI	07:21
Pick-Up Truck	0	8	0	0	ICN	Amherst	NY	07:23
Crew Vehicle	0	1	0	0	ICN	Louisville	KY	07:25
Pick-Up Truck	0	1	0	0	ICN	Nicholasville	KY	07:28
Pick-Up Truck	0	2	0	0	ICN	De Pere	WI	08:03
Pick-Up Truck	0	1	0	0	ICN	Kaukauna	WI	08:36
Pick-Up Truck	0	2	0	0	ICN	Neenah	WI	08:45
Pick-Up Truck	0	4	0	0	ICN	Rochester	NY	09:00
Pick-Up Truck	0	2	0	0	ICN	Newburgh	IN	09:19
Pick-Up Truck	0	12	0	0	ICN	Nitro	WV	09:25
Pick-Up Truck	0	48	0	0	ICN	Evansville	IN	09:27
Pick-Up Truck	0	3	0	0	ICN	Sunbury	PA	10:06
Pick-Up Truck	0	1	0	0	ICN	Blountville	TN	10:15
Pick-Up Truck	0	1	0	0	ICN	Blountville	TN	10:15
Pick-Up Truck	0	3	0	0	ICN	Waverly	NY	10:18
Pick-up truck	0	2	0	0	ICN	Wausau	WI	11:01
Pick-Up Truck	0	2	0	0	ICN	Knoxville	TN	11:04
Pick-Up Truck	0	16	0	0	ICN	Syracuse	NY	11:10
Pick-Up Truck	0	3	0	0	ICN	East Syracuse	NY	11:12
Pick-Up Truck	0	4	0	0	ICN	East Syracuse	NY	11:12
Pick-Up Truck	0	1	0	0	ICN	Stafford	VA	11:12
Pick-Up Truck	0	1	0	0	ICN	Stafford	VA	11:12
Pick-Up Truck	0	1	0	0	ICN	Stafford	VA	11:12
Pick-Up Truck	0	5	0	0	ICN	Fredericksburg	VA	11:13
Pick-Up Truck	0	8	0	0	ICN	Laurel	MD	11:15
Pick-Up Truck	0	2	0	0	ICN	Binghamton	NY	11:17
Pick-Up Truck	0	6	0	0	ICN	Wood River	IL	11:19
Pick-Up Truck	0	1	0	0	ICN	Baltimore	MD	11:26
Pick-Up Truck	0	4	0	0	ICN	Baltimore	MD	11:26
Pick-Up Truck	0	1	0	0	ICN	Baltimore	MD	11:26
Pick-Up Truck	0	1	0	0	ICN	Baltimore	MD	11:27
Pick-Up Truck	0	1	0	0	ICN	Baltimore	MD	11:27
Pick-Up Truck	0	1	0	0	ICN	Baltimore	MD	11:27
Pick-Up Truck	0	1	0	0	ICN	Baltimore	MD	11:27
Pick-Up Truck	0	1	0	0	ICN	Baltimore	MD	11:27
Pick-Up Truck	0	1	0	0	ICN	Baltimore	MD	11:27
Pick-Up Truck	0	1	0	0	ICN	Baltimore	MD	11:27
Pick-Up Truck	0	2	0	0	ICN	Calvert City	KY	11:40
Pick-Up Truck	0	8	0	0	ICN	St. Louis	MO	11:52
Pick-Up Truck	0	7	0	0	ICN	Nashville	TN	11:52
Pick-Up Truck	0	17	0	0	ICN	St. Louis	MO	11:56
Pick-Up Truck	0	2	0	0	ICN	Paducah	KY	11:57
Pick-Up Truck	0	1	0	0	ICN	Paducah	KY	11:57
Pick-Up Truck	0	1	0	0	ICN	Paducah	KY	11:57
Sub Total Pick-Up Truck:	**294**	**0**	**0**					

Power Pack

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Power Pack	DPPC-118	1	0	0	NRC	South Holland	IL	06:03
Power Pack	DPP-20-102	1	0	0	NRC	Apollo	PA	06:11
Power Pack	DPP-10-105	1	0	0	NRC	Apollo	PA	06:11
Power Pack	DPP-20-112	1	0	0	NRC	South Point	OH	06:32
Power Pack	DPP-AP-115	1	0	0	NRC	Rogers City	MI	07:25
Power Pack	DPP-18-727	1	0	0	NRC	Rogers City	MI	07:25
Hydraulic Power Pack	0	1	0	0	ICN	De Pere	WI	08:03
Power Pack	0	2	0	0	ICN	Neenah	WI	08:45
Power Pack	DPP-AP-116	1	0	0	NRC	Oswego	NY	10:46
Power Pack	DPP-20-113	1	0	0	NRC	Wood River	IL	11:19
Power Pack	DPP-20-103	1	0	0	NRC	Paducah	KY	11:57
Sub Total Power Pack:	**12**	**0**	**0**					

06 to 12 hours (* Does not include recall/mobilization time)

Pressure Washer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Pressure Washer	0	3	0	0	ICN	South Holland	IL	06:03
Pressure Washe Trailer	0	1	0	0	ICN	South Holland	IL	06:03
Pressure Washer	0	1	0	0	ICN	Glenwood	IL	06:03
Pressure Washer	0	3	0	0	ICN	Glenwood	IL	06:03
Pressure Washer Trailer	0	3	0	0	ICN	Glenwood	IL	06:03
Pressure Washer- Hot	0	6	0	0	ICN	Apollo	PA	06:11
Pressure Washer- Hot	0	1	0	0	ICN	Monee	IL	06:16
Pressure Washer-Cold	0	2	0	0	ICN	Monee	IL	06:16
Blaster	0	2	0	0	ICN	Burlington	Canada	06:24
Pressure Washer	0	2	0	0	ICN	Wheeling	IL	06:29
Pressure Washer Trailer	0	2	0	0	ICN	Wheeling	IL	06:29
Pressure Washer	0	5	0	0	ICN	Lemont	IL	06:34
Pressure Washer-Cold	0	1	0	0	ICN	Cross Lanes	WV	06:54
Pressure Washer-Hot	0	2	0	0	ICN	Cross Lanes	WV	06:54
Pressure Washer	0	2	0	0	ICN	Wauwatosa	WI	07:12
Pressure Washer	0	1	0	0	ICN	Menomonee Falls	WI	07:13
Pressure Washer	0	2	0	0	ICN	Amherst	NY	07:23
Pressure Washer	0	1	0	0	ICN	Louisville	KY	07:25
Pressure Washer	0	6	0	0	ICN	Louisville	KY	07:34
Water Blaster	0	15	0	0	ICN	Louisville	KY	07:38
Pressure Washer	0	1	0	0	ICN	Kaukauna	WI	08:36
Presssure Washer	0	2	0	0	ICN	Rochester	NY	09:00
Pressure Wash- Hot	0	1	0	0	ICN	Newburgh	IN	09:19
Pressure Washer	0	3	0	0	ICN	Sunbury	PA	10:06
Pressure Cleaner	0	1	0	0	ICN	Blountville	TN	10:15
Pressure Washer- Hot	0	1	0	0	ICN	Blountville	TN	10:15
Pressure Washer	0	1	0	0	ICN	Waverly	NY	10:18
Pressure Cleaner	0	1	0	0	ICN	Knoxville	TN	11:04
Pressure Washer-Hot	0	1	0	0	ICN	Knoxville	TN	11:04
Pressure Washer	0	1	0	0	ICN	Syracuse	NY	11:10
3000 psi Pressure Washer	0	1	0	0	ICN	Stafford	VA	11:12
Pressure Washer-Hot	0	2	0	0	ICN	Fredericksburg	VA	11:13
Pressure Cleaner	0	2	0	0	ICN	Fredericksburg	VA	11:13
Pressure Washer	0	3	0	0	ICN	Laurel	MD	11:15
Pressure Washer- Hot	0	4	0	0	ICN	Laurel	MD	11:15
Pressure Waher & Trailer	0	1	0	0	ICN	Binghamton	NY	11:17
Pressure Washer	0	4	0	0	ICN	Wood River	IL	11:19
Pressure Washer-Hot	0	1	0	0	ICN	Baltimore	MD	11:26
3000 psi Pressure Washer	0	1	0	0	ICN	Baltimore	MD	11:27
3000 psi Pressure Washer	0	1	0	0	ICN	Baltimore	MD	11:27
3000 psi Pressure Washer	0	1	0	0	ICN	Baltimore	MD	11:27
3000 psi Pressure Washer	0	1	0	0	ICN	Baltimore	MD	11:27
Pressure Washer	0	4	0	0	ICN	St. Louis	MO	11:52
Pressure Washer Trailer	0	2	0	0	ICN	St. Louis	MO	11:52
Pressure Washer- Hot	0	2	0	0	ICN	Nashville	TN	11:52
Pressure Cleaner	0	2	0	0	ICN	Nashville	TN	11:52
High Pressure Washer	0	2	0	0	ICN	Nashville	TN	11:52
Hydro-Blaster	0	8	0	0	ICN	St. Louis	MO	11:56
Pressure Washer	0	2	0	0	ICN	St. Louis	MO	11:56
Sub Total Pressure Washer:		**118**	**0**	**0**				

Response Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Response Truck	0	1	0	0	ICN	Ashland	KY	06:26
Sub Total Response Truck:		**1**	**0**	**0**				

Roll Off Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Roll-Off Trailer	0	6	0	0	ICN	Monee	IL	06:16

06 to 12 hours (* Does not include recall/mobilization time)

Roll Off Trailer	0	1	0	0	ICN	Sunbury	PA	10:06
Sub Total Roll Off Trailer:		**7**	**0**	**0**				

Roll-Off Container

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Roll-Off Container	0	210	0	0	ICN	Apollo	PA	06:11
Emergency Response Container	0	2	0	0	ICN	Apollo	PA	06:11
Roll-Off Container	0	25	0	0	ICN	Monee	IL	06:16
Roll-Off Container	0	100	0	0	ICN	Hunker	PA	06:28
Roll-Off Box	0	58	0	0	ICN	Wheeling	IL	06:29
Vacuum Boxes	0	2	0	0	ICN	Wheeling	IL	06:29
Roll-Off Container	0	25	0	0	ICN	Ashland	KY	06:32
Roll-Off Boxes	0	4	0	0	ICN	New Lenox	IL	06:33
Roll-Off Container	0	5	0	0	ICN	Cross Lanes	WV	06:54
Roll-Off Box	0	4	0	0	ICN	Shelbyville	KY	07:00
Roll-Off Boxes	0	30	0	0	ICN	Germantown	WI	07:17
Roll-Off Container	0	25	0	0	ICN	Nitro	WV	09:25
Roll-Off Container	0	10	0	0	ICN	Sunbury	PA	10:06
Roll-Off Container	0	4	0	0	ICN	Norway	MI	10:16
Roll-Off Container	0	3	0	0	ICN	Waverly	NY	10:18
Roll-Off Container	0	10	0	0	ICN	Laurel	MD	11:15
30 Yard Roll Off Container	0	12	0	0	ICN	Goodlettsville	TN	11:40
20 Yard Roll Off Container	0	4	0	0	ICN	Goodlettsville	TN	11:40
40 Yard Roll Off Container	0	5	0	0	ICN	Goodlettsville	TN	11:40
Roll-Off Box	0	2	0	0	ICN	St. Louis	MO	11:52
Roll-Off Container	0	31	0	0	ICN	Paducah	KY	11:57
Sub Total Roll-Off Container:		**571**	**0**	**0**				

Roll-off Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Roll-Off Truck	0	1	0	0	ICN	New Lenox	IL	06:33
Roll-Off Truck	0	3	0	0	ICN	Germantown	WI	07:17
Roll-Off Truck	0	2	0	0	ICN	Nitro	WV	09:25
Roll-Off Truck	0	1	0	0	ICN	Norway	MI	10:16
Sub Total Roll-off Truck:		**7**	**0**	**0**				

SCBA

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
SCBA	0	4	0	0	ICN	South Holland	IL	06:03
SCBA	0	6	0	0	ICN	Monee	IL	06:16
SCBA	0	6	0	0	ICN	Wheeling	IL	06:29
SCBA	0	3	0	0	ICN	Cross Lanes	WV	06:54
SCBA	0	2	0	0	ICN	Menomonee Falls	WI	07:13
SCBA	0	2	0	0	ICN	Amherst	NY	07:23
SCBA	0	8	0	0	ICN	Evansville	IN	09:27
SCBA	0	3	0	0	ICN	Sunbury	PA	10:06
SCBA	0	6	0	0	ICN	Blountville	TN	10:15
SCBA	0	12	0	0	ICN	Knoxville	TN	11:04
SCBA	0	2	0	0	ICN	East Syracuse	NY	11:12
SCBA	0	5	0	0	ICN	Fredericksburg	VA	11:13
SCBA	0	4	0	0	ICN	Laurel	MD	11:15
SCBA	0	4	0	0	ICN	Binghamton	NY	11:17
SCBA	0	4	0	0	ICN	Baltimore	MD	11:26
SCBA	0	2	0	0	ICN	Kingston	TN	11:30
SCBA	0	4	0	0	ICN	Goodlettsville	TN	11:40
SCBA	0	2	0	0	ICN	Calvert City	KY	11:40
SCBA	0	4	0	0	ICN	Nashville	TN	11:52
Sub Total SCBA:		**83**	**0**	**0**				

Side Boom

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Sideboom-Padded	0	2	0	0	ICN	Chicago	IL	06:14
Sideboom-Padded	0	2	0	0	ICN	Galesburg	IL	10:16

06 to 12 hours (* Does not include recall/mobilization time)

Sub Total Side Boom:	**4**	**0**	**0**

Spares Van Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Semi Trailer	0	1	0	0	ICN	Peoria	IL	09:15
Sub Total Spares Van Trailer:		**1**	**0**	**0**				

Steam Cleaner

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Steam Cleaner	0	1	0	0	ICN	St. Ignace	MI	08:27
Sub Total Steam Cleaner:		**1**	**0**	**0**				

Truck - Semi

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Cube Van	0	1	0	0	ICN	Glenwood	IL	06:03
Roll-Off Truck	0	11	0	0	ICN	Apollo	PA	06:11
Tractor	0	18	0	0	ICN	Apollo	PA	06:11
Tractor	0	16	0	0	ICN	Monee	IL	06:16
Tractor	0	2	0	0	ICN	Burlington	Canada	06:24
Cube Truck	0	2	0	0	ICN	Burlington	Canada	06:24
Box Truck	0	3	0	0	ICN	Wheeling	IL	06:29
Utility Truck	0	12	0	0	ICN	Lemont	IL	06:34
Tilt Truck	0	1	0	0	ICN	Newburgh	IN	09:19
Tractors	0	4	0	0	ICN	Evansville	IN	09:27
Semi Tractors	0	2	0	0	ICN	Evansville	IN	09:27
Tractor	0	1	0	0	ICN	Sunbury	PA	10:06
Tractor	0	1	0	0	ICN	Waverly	NY	10:18
Tractor	0	1	0	0	ICN	Syracuse	NY	11:10
Frame Truck	0	1	0	0	ICN	Fredericksburg	VA	11:13
Tanker	0	3	0	0	ICN	Fredericksburg	VA	11:13
Road Tractor	0	1	0	0	ICN	Fredericksburg	VA	11:13
Tractor	0	1	0	0	ICN	Laurel	MD	11:15
Box Truck	0	3	0	0	ICN	St. Louis	MO	11:52
Roll-Off Truck	0	1	0	0	ICN	St. Louis	MO	11:52
Sub Total Truck - Semi:		**85**	**0**	**0**				

Utility Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Fast Response Trailer	723	1	0	0	NRC	South Holland	IL	06:03
Utility Trailer	0	6	0	0	ICN	South Holland	IL	06:03
Emergency Response/Job Trailer	0	10	0	0	ICN	Glenwood	IL	06:03
Fast Response Trailer	754	1	0	0	NRC	Apollo	PA	06:11
Pressure Washer Trailer	0	1	0	0	ICN	Monee	IL	06:16
Utility Trailer	0	4	0	0	ICN	Monee	IL	06:16
Cargo Trailer	0	1	0	0	ICN	Ashland	KY	06:26
Job Trailer	0	10	0	0	ICN	Wheeling	IL	06:29
High Hazard Trailer	0	1	0	0	ICN	Wheeling	IL	06:29
Response Trailer	0	1	0	0	ICN	Ashland	KY	06:32
Utility Trailer	0	2	0	0	ICN	Lemont	IL	06:34
Response Trailer	0	1	0	0	ICN	Lemont	IL	06:34
Drum Truck	0	4	0	0	ICN	Lemont	IL	06:34
Boom Trailer	0	1	0	0	ICN	Cross Lanes	WV	06:54
Fast Response Trailer	736	1	0	0	NRC	Shelbyville	KY	07:00
Utility Trailer	0	1	0	0	ICN	Shelbyville	KY	07:00
Utility Trailer	0	7	0	0	ICN	Shelbyville	KY	07:00
Response Trailer	0	3	0	0	ICN	Shelbyville	KY	07:00
Hot Water Pressure Washer Trailer	0	1	0	0	ICN	North Aurora	IL	07:06
Confined Space Entry Trailer	0	1	0	0	ICN	North Aurora	IL	07:06
Utility Trailer	0	1	0	0	ICN	Menomonee Falls	WI	07:13
Boom Trailer	0	4	0	0	ICN	Germantown	WI	07:17
Water Treatment Trailer	0	1	0	0	ICN	Germantown	WI	07:17
Utility Trailer	0	2	0	0	ICN	Amherst	NY	07:23
Spill Trailer	0	2	0	0	ICN	Amherst	NY	07:23

06 to 12 hours (* Does not include recall/mobilization time)

Decon Trailer	0	1	0	0	ICN	Amherst	NY	07:23
Fast Response Trailer	719	1	0	0	NRC	Rogers City	MI	07:25
Fast Response Trailer	727	1	0	0	NRC	Rogers City	MI	07:25
Fast Response Trailer	735	1	0	0	NRC	Nicholasville	KY	07:28
ER Trailer	0	1	0	0	ICN	Nicholasville	KY	07:28
Utility Trailer	0	1	0	0	ICN	Louisville	KY	07:34
Utility Truck	0	5	0	0	ICN	Louisville	KY	07:34
Boom Trailer	0	1	0	0	ICN	De Pere	WI	08:03
Utility Trailer	0	2	0	0	ICN	Rochester	NY	09:00
Water Treatment Trailer	0	1	0	0	ICN	Evansville	IN	09:27
Spill Trailer	0	1	0	0	ICN	Sunbury	PA	10:06
Utility Trailer	0	1	0	0	ICN	Blountville	TN	10:15
Spill Trailer	0	1	0	0	ICN	Waverly	NY	10:18
Utility Trailer	0	1	0	0	ICN	Waverly	NY	10:18
Fast Response Trailer	720	1	0	0	NRC	Oswego	NY	10:46
Boom Trailer	0	1	0	0	ICN	Knoxville	TN	11:04
Chemical Transfer Trailer	0	1	0	0	ICN	Knoxville	TN	11:04
Utility Trailer	0	2	0	0	ICN	Knoxville	TN	11:04
Utility Trailer	0	3	0	0	ICN	Syracuse	NY	11:10
Cargo Trailer	0	1	0	0	ICN	Syracuse	NY	11:10
Storage Trailer	0	1	0	0	ICN	Syracuse	NY	11:10
Decon Trailer	0	3	0	0	ICN	Syracuse	NY	11:10
Equipment Trailer	0	1	0	0	ICN	Stafford	VA	11:12
Boom Trailer	0	1	0	0	ICN	Fredericksburg	VA	11:13
Utility Trailer	0	1	0	0	ICN	Fredericksburg	VA	11:13
Boom Trailer	0	2	0	0	ICN	Laurel	MD	11:15
Utility Trailer	0	4	0	0	ICN	Binghamton	NY	11:17
Response Trailer	0	1	0	0	ICN	Wood River	IL	11:19
Utility Trailer	0	4	0	0	ICN	Baltimore	MD	11:26
Equipment Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Equipment Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Equipment Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Equipment Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Fast Response Trailer	737	1	0	0	NRC	St. Louis	MO	11:40
Job Trailer	0	6	0	0	ICN	St. Louis	MO	11:52
Boom Trailer	0	1	0	0	ICN	Nashville	TN	11:52
Utility Trailer	0	5	0	0	ICN	Nashville	TN	11:52
Sub Total Utility Trailer:		**131**	**0**	**0**				

Utility Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Box Truck	0	1	0	0	ICN	Glenwood	IL	06:03
Emergency Response Truck	0	3	0	0	ICN	Apollo	PA	06:11
Service Vehicles	0	10	0	0	ICN	Apollo	PA	06:11
Van	0	3	0	0	ICN	Apollo	PA	06:11
Gator	0	1	0	0	ICN	Apollo	PA	06:11
Stake Body	0	1	0	0	ICN	Monee	IL	06:16
Box Truck	0	1	0	0	ICN	Cross Lanes	WV	06:54
Utility Truck	0	4	0	0	ICN	North Aurora	IL	07:06
Box Truck	0	1	0	0	ICN	Wauwatosa	WI	07:12
Response Truck	0	2	0	0	ICN	Wauwatosa	WI	07:12
Stake Truck	0	2	0	0	ICN	De Pere	WI	08:03
Response Truck	0	1	0	0	ICN	Kaukauna	WI	08:36
Box Truck	0	1	0	0	ICN	Kaukauna	WI	08:36
Stake Truck	0	3	0	0	ICN	Neenah	WI	08:45
Box Van	0	1	0	0	ICN	Rochester	NY	09:00
SUV	0	1	0	0	ICN	Rochester	NY	09:00
Service Trucks	0	3	0	0	ICN	Peoria	IL	09:15
Stake Body	0	1	0	0	ICN	Sunbury	PA	10:06
Sport Utility Vehicle	0	1	0	0	ICN	Blountville	TN	10:15
Box Van	0	2	0	0	ICN	Waverly	NY	10:18

06 to 12 hours (* Does not include recall/mobilization time)

Box Truck	0	1	0	0	ICN	Knoxville	TN	11:04
Frame Truck	0	1	0	0	ICN	Knoxville	TN	11:04
Sport Utility Vehicle	0	1	0	0	ICN	Knoxville	TN	11:04
Box Van	0	5	0	0	ICN	Syracuse	NY	11:10
SUV	0	4	0	0	ICN	East Syracuse	NY	11:12
Stake Body	0	1	0	0	ICN	Laurel	MD	11:15
Box Truck	0	1	0	0	ICN	Binghamton	NY	11:17
Utility Truck	0	1	0	0	ICN	Baltimore	MD	11:27
Utility Truck	0	1	0	0	ICN	Baltimore	MD	11:27
Utility Truck	0	1	0	0	ICN	Baltimore	MD	11:27
Utility Truck	0	1	0	0	ICN	Baltimore	MD	11:27
Utility Truck	0	1	0	0	ICN	Baltimore	MD	11:27
Sport Utility Vehicle	0	2	0	0	ICN	Nashville	TN	11:52
Sub Total Utility Truck:		**64**	**0**	**0**				

Van Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Roll-Off Trailer	0	2	0	0	ICN	Glenwood	IL	06:03
Van Trailer	430	1	0	0	NRC	Apollo	PA	06:11
Van Trailer	0	8	0	0	ICN	Apollo	PA	06:11
Roll-Off Trailer	0	7	0	0	ICN	Apollo	PA	06:11
Hypalon Lined Trailers	0	5	0	0	ICN	Apollo	PA	06:11
Emergency Response Trailer	0	3	0	0	ICN	Apollo	PA	06:11
Van Truck	0	4	0	0	ICN	Monee	IL	06:16
Van Trailer	0	11	0	0	ICN	Monee	IL	06:16
Response Trailer	0	2	0	0	ICN	Monee	IL	06:16
Boom Trailer	0	2	0	0	ICN	Burlington	Canada	06:24
SpillTrailer	0	3	0	0	ICN	Burlington	Canada	06:24
Roll-Off Trailer	0	4	0	0	ICN	Wheeling	IL	06:29
Van Trailer	0	14	0	0	ICN	Wheeling	IL	06:29
Response Trailer	0	1	0	0	ICN	South Point	OH	06:32
Emergency Response	0	2	0	0	ICN	New Lenox	IL	06:33
Response Trailer	0	1	0	0	ICN	Cross Lanes	WV	06:54
Boom Trailer	0	1	0	0	ICN	Shelbyville	KY	07:00
Response Trailer	0	2	0	0	ICN	North Aurora	IL	07:06
Van Trailer	0	1	0	0	ICN	Wauwatosa	WI	07:12
Response Trailer	0	1	0	0	ICN	Wauwatosa	WI	07:12
Response Trailer	0	1	0	0	ICN	Germantown	WI	07:17
Response Van	0	1	0	0	ICN	Sheboygan	WI	07:21
Box Van	0	2	0	0	ICN	Amherst	NY	07:23
Van Trailer	433	1	0	0	NRC	Rogers City	MI	07:25
Emergency Response Trailer	0	1	0	0	ICN	Louisville	KY	07:25
Response Trailer	0	1	0	0	ICN	Louisville	KY	07:38
Emergency Response Trailer	0	1	0	0	ICN	De Pere	WI	08:03
Boom Trailer	0	1	0	0	ICN	St. Ignace	MI	08:27
Cargo Trailer	0	1	0	0	ICN	St. Ignace	MI	08:27
Van Trailer	432	1	0	0	NRC	Green Bay	WI	08:34
Response Trailer	0	1	0	0	ICN	Neenah	WI	08:45
Spill Trailer	0	2	0	0	ICN	Rochester	NY	09:00
Spill Response Trailer	0	1	0	0	ICN	Peoria	IL	09:15
Boom Trailer	0	1	0	0	ICN	Newburgh	IN	09:19
Response Trailer	0	1	0	0	ICN	Newburgh	IN	09:19
Truck Trailer	0	1	0	0	ICN	Newburgh	IN	09:19
Emergency Response Traile	0	1	0	0	ICN	Nitro	WV	09:25
Emergency Response/Job Trailer	0	20	0	0	ICN	Evansville	IN	09:27
Response Trailer	0	1	0	0	ICN	Blountville	TN	10:15
Response Trailer	0	1	0	0	ICN	Blountville	TN	10:15
Boom Trailer	0	2	0	0	ICN	Blountville	TN	10:15
Response Trailer	0	1	0	0	ICN	Norway	MI	10:16
Emergency Response Traile	0	1	0	0	ICN	Wausau	WI	11:01
Response Trailer	0	1	0	0	ICN	Knoxville	TN	11:04

06 to 12 hours (* Does not include recall/mobilization time)

Response Trailer	0	1	0	0	ICN	Knoxville	TN	11:04
Boom Trailer	0	1	0	0	ICN	Syracuse	NY	11:10
Spill Trailer	0	1	0	0	ICN	Syracuse	NY	11:10
Response Trailer	0	1	0	0	ICN	Fredericksburg	VA	11:13
Response Trailer	0	1	0	0	ICN	Fredericksburg	VA	11:13
Response Trailer	0	2	0	0	ICN	Laurel	MD	11:15
Cube Van	0	1	0	0	ICN	Laurel	MD	11:15
Van Trailer	416	1	0	0	NRC	Wood River	IL	11:19
EmergencyResponse Trailer	0	1	0	0	ICN	Baltimore	MD	11:26
Emergency Response Trailer	0	1	0	0	ICN	Baltimore	MD	11:26
Cargo Box Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Cargo Box Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Cargo Box Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Cargo Box Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Cargo Box Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Sorbent Boom Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
20' Response Trailer	0	1	0	0	ICN	Kingston	TN	11:30
48' Sorbent Boom Trailer	0	1	0	0	ICN	Goodlettsville	TN	11:40
Emergency Response/Job Trailer	0	1	0	0	ICN	Calvert City	KY	11:40
Response Trailer	0	1	0	0	ICN	Nashville	TN	11:52
Response Trailer	0	3	0	0	ICN	Nashville	TN	11:52
Emergency Response	0	2	0	0	ICN	St. Louis	MO	11:56
Response Van	0	1	0	0	ICN	Paducah	KY	11:57
Sub Total Van Trailer:		**148**	**0**	**0**				

Weir-Disk Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Weir-Disk Trailer	WDT-105	1	0	0	NRC	Apollo	PA	06:11
Sub Total Weir-Disk Trailer:		**1**	**0**	**0**				

Workboat Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Workboat Trailer	0	1	0	0	ICN	Rochester	NY	09:00
Boat Trailer	0	2	0	0	ICN	Newburgh	IN	09:19
Boat Trailer	0	4	0	0	ICN	Syracuse	NY	11:10
Work Boat Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Work Boat Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Work Boat Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Work Boat Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Work Boat Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Sub Total Workboat Trailer:		**13**	**0**	**0**				
Total Support Equipment:		**1996**	**0**	**0**				

Transfer Pump

Bladeless

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Transfer Pump	0	2	0	0	ICN	Neenah	WI	08:45
Sub Total Bladeless:		**2**	**0**	**0**				

Centrifugal

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Centrifugal Pump	0	1	0	0	ICN	Glenwood	IL	06:03
Transfer Pump	0	6	0	0	ICN	Monee	IL	06:16
Centrifugal Pump	0	1	0	0	ICN	Wheeling	IL	06:29
Hydraulic Pump	0	1	0	0	ICN	Shelbyville	KY	07:00
Transfer Pump	0	1	0	0	ICN	St. Ignace	MI	08:27
Hydraulic Pump	0	1	0	0	ICN	Newburgh	IN	09:19
Portable Pump	0	1	0	0	ICN	Lorton	VA	11:09
Stainless Steel Pump	0	1	0	0	ICN	Fredericksburg	VA	11:13
Submersible Pump	0	2	0	0	ICN	Fredericksburg	VA	11:13
Submersible Pump	0	2	0	0	ICN	Laurel	MD	11:15

06 to 12 hours (* Does not include recall/mobilization time)

Transfer Pump	0	26	0	0	ICN	Wood River	IL	11:19
Centrifugall Pump	0	2	0	0	ICN	St. Louis	MO	11:52
Centrifugal Pump	0	2	0	0	ICN	St. Louis	MO	11:52
Electrical Pump	0	1	0	0	ICN	Nashville	TN	11:52
Polypropylene Pump	0	1	0	0	ICN	Nashville	TN	11:52
Stainless Steel Pump	0	1	0	0	ICN	Nashville	TN	11:52
Transfer Pump	0	1	0	0	ICN	Paducah	KY	11:57
Sub Total Centrifugal:		**51**	**0**	**0**				

Diaphragm

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Diaphragm Pump	0	2	0	0	ICN	South Holland	IL	06:03
Trash Pump	0	5	0	0	ICN	South Holland	IL	06:03
Diaphragm Pump	0	7	0	0	ICN	Glenwood	IL	06:03
Transfer Pump	0	10	0	0	ICN	Monee	IL	06:16
Transfer Pump	0	2	0	0	ICN	Burlington	Canada	06:24
Diaphragm Pump	0	6	0	0	ICN	Wheeling	IL	06:29
Manual Daphragm Pump	0	1	0	0	ICN	Cross Lanes	WV	06:54
Double Diaphragm Pump	0	2	0	0	ICN	Cross Lanes	WV	06:54
2" Diaphragm	0	1	0	0	ICN	Shelbyville	KY	07:00
1 1/2" Diaphragm	0	1	0	0	ICN	Shelbyville	KY	07:00
Double Diaphragm Chem Pump	0	2	0	0	ICN	North Aurora	IL	07:06
Double Diaphragm Non-Chem Pump	0	2	0	0	ICN	North Aurora	IL	07:06
Diaphragm Pump	0	2	0	0	ICN	Wauwatosa	WI	07:12
Transfer Pump	0	2	0	0	ICN	Menomonee Falls	WI	07:13
Diaphragm Pump	0	1	0	0	ICN	Amherst	NY	07:23
2" Diaphragm	0	1	0	0	ICN	Newburgh	IN	09:19
Diaphragm Pump	0	4	0	0	ICN	Evansville	IN	09:27
Diaphragm Acid Pump	0	2	0	0	ICN	Evansville	IN	09:27
Diaphragm Pump	0	3	0	0	ICN	Blountville	TN	10:15
Trash Pump	0	7	0	0	ICN	Knoxville	TN	11:04
Diaphragm Pump	0	3	0	0	ICN	Knoxville	TN	11:04
Diaphragm Pump	0	1	0	0	ICN	Knoxville	TN	11:04
Transfer Pump	0	2	0	0	ICN	East Syracuse	NY	11:12
Diaphragm Pump	0	6	0	0	ICN	Fredericksburg	VA	11:13
Diaphragm Pump	0	1	0	0	ICN	Fredericksburg	VA	11:13
Transfer Pump	0	8	0	0	ICN	Laurel	MD	11:15
Diaphragm Pump	0	2	0	0	ICN	Binghamton	NY	11:17
Diaphragm Pump	0	2	0	0	ICN	Baltimore	MD	11:26
2" Diaphragm Pump	0	3	0	0	ICN	Kingston	TN	11:30
2" Wash Pump	0	2	0	0	ICN	Goodlettsville	TN	11:40
2" Air Diaphragm Pump	0	3	0	0	ICN	Goodlettsville	TN	11:40
2" Poly Diaphragm Pump	0	2	0	0	ICN	Goodlettsville	TN	11:40
2" Gas Diaphragm Pump	0	1	0	0	ICN	Goodlettsville	TN	11:40
3" Air Diaphragm Pump	0	1	0	0	ICN	Goodlettsville	TN	11:40
3" Gas Diaphragm Pump	0	1	0	0	ICN	Goodlettsville	TN	11:40
Diaphragm Acid Pump	0	2	0	0	ICN	Calvert City	KY	11:40
Diaphragm Pump	0	5	0	0	ICN	St. Louis	MO	11:52
Diaphragm Pump	0	2	0	0	ICN	Nashville	TN	11:52
Trash Pump	0	1	0	0	ICN	Nashville	TN	11:52
Diaphragm Pump	0	1	0	0	ICN	Nashville	TN	11:52
Wash Pump	0	12	0	0	ICN	Paducah	KY	11:57
Sub Total Diaphragm:		**124**	**0**	**0**				

Pneumatic

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Pneumatic Pump	0	2	0	0	ICN	Monee	IL	06:16
Transfer Pump	0	1	0	0	ICN	St. Ignace	MI	08:27
Transfer Pump	0	1	0	0	ICN	St. Ignace	MI	08:27
Sub Total Pneumatic:		**4**	**0**	**0**				

Trash Pump

06 to 12 hours (* Does not include recall/mobilization time)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Trash Pump	0	4	0	0	ICN	Cross Lanes	WV	06:54
Trash Pump	0	2	0	0	ICN	Rochester	NY	09:00
Trash Pump	0	3	0	0	ICN	Evansville	IN	09:27
Trash Pump	0	1	0	0	ICN	Blountville	TN	10:15
Trash Pump	0	2	0	0	ICN	Lorton	VA	11:09
Trash Pump	0	1	0	0	ICN	Syracuse	NY	11:10
Trash Pump	0	2	0	0	ICN	Fredericksburg	VA	11:13
Trash Pump	0	2	0	0	ICN	Laurel	MD	11:15
Trash Pump	0	1	0	0	ICN	Baltimore	MD	11:26
Trash Pump	0	2	0	0	ICN	Baltimore	MD	11:27
Trash Pump	0	1	0	0	ICN	Calvert City	KY	11:40
Sub Total Trash Pump:		**21**	**0**	**0**				
Total Transfer Pump:		**202**	**0**	**0**				

Vacuum System

Loader

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Skid Mounted Vac	0	1	206	71	ICN	Apollo	PA	06:11
Vacuum Loader	0	3	1029	213	ICN	Burlington	Canada	06:24
Vacuum Drum Loader	0	1	343	0	ICN	Cross Lanes	WV	06:54
Sub Total Loader:		**5**	**1578**	**284**				

Vacuum Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Vacuum Trailer	0	1	1621	124	ICN	Apollo	PA	06:11
Vacuum Trailer	0	1	1651	155	ICN	Apollo	PA	06:11
Vacuum Trailer	0	2	686	262	ICN	Apollo	PA	06:11
Vacuum Trailer	0	1	343	131	ICN	Apollo	PA	06:11
Vacuum Trailer	0	2	3260	260	ICN	Apollo	PA	06:11
Vacuum Trailer	0	2	3306	310	ICN	Apollo	PA	06:11
Vacuum Trailer	0	1	343	95	ICN	Burlington	Canada	06:24
Vacuum Trailer	0	1	343	178	ICN	Burlington	Canada	06:24
Vacuum Trailer	0	4	1372	568	ICN	Ashland	KY	06:32
Vacuum Tanker Trailer	0	1	343	52	ICN	Shelbyville	KY	07:00
Vacuum Trailer	0	1	343	71	ICN	Sunbury	PA	10:06
Vacuum Trailer	0	1	343	125	ICN	Lorton	VA	11:09
Vacuum Trailer	0	1	343	119	ICN	Syracuse	NY	11:10
Vacuum Trailer	0	1	343	142	ICN	Laurel	MD	11:15
Vacuum Tank Trailer	0	1	2057	119	ICN	Baltimore	MD	11:27
Sub Total Vacuum Trailer:		**21**	**16697**	**2711**				

Vacuum Transfer Unit

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Vacuum Transfer Unit	107	1	6857	24	NRC	Apollo	PA	06:11
Vacuum Unit	0	1	686	24	ICN	Monee	IL	06:16
Vacuum Unit	0	1	686	12	ICN	Monee	IL	06:16
Skid Mount Vac	0	1	343	24	ICN	Cross Lanes	WV	06:54
Vacuum Transfer Unit	220	1	6857	24	NRC	Baltimore	MD	11:27
Super Sucker Vacuum	0	1	343	120	ICN	St. Louis	MO	11:52
Sub Total Vacuum Transfer Unit:		**6**	**15772**	**228**				

Vacuum Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Vacuum Truck	0	1	754	71	ICN	Glenwood	IL	06:03
Vacuum Truck	0	1	343	166	ICN	Glenwood	IL	06:03
Vacuum Truck	0	1	1600	86	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	1463	76	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	343	79	ICN	Apollo	PA	06 11
Vacuum Trailer	0	1	1444	76	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	1475	102	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	1575	55	ICN	Apollo	PA	06:11

06 to 12 hours (* Does not include recall/mobilization time)

Vacuum Truck	0	1	1600	86	ICN	Apollo	PA	06:11
Vacuum Trailer	0	1	1273	67	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	1805	95	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	1273	67	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	718	52	ICN	Apollo	PA	06:11
Vacuum Truck	0	2	686	158	ICN	Apollo	PA	06 11
Vacuum Truck	0	1	1803	95	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	1447	76	ICN	Apollo	PA	06:11
Vacuum Truck	0	3	1029	300	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	343	79	ICN	Apollo	PA	06:11
Vacuum Truck	0	4	1372	476	ICN	Monee	IL	06:16
Vacuum Truck	0	1	343	143	ICN	Monee	IL	06:16
Vacuum Truck	0	1	343	71	ICN	Monee	IL	06:16
Vacuum Truck	0	9	3087	1179	ICN	Monee	IL	06:16
Vacuum Truck	0	1	343	90	ICN	Monee	IL	06:16
Vacuum Truck	0	1	343	57	ICN	Ashland	KY	06:26
Vacuum Truck	0	2	1508	142	ICN	Wheeling	IL	06:29
Vacuum Truck	0	5	1715	830	ICN	Wheeling	IL	06:29
Vacuum Truck	0	2	686	48	ICN	Ashland	KY	06:32
Vacuum Truck	0	7	2401	497	ICN	Ashland	KY	06:32
Vacuum Truck	0	4	1372	284	ICN	New Lenox	IL	06:33
Vacuum Truck	0	6	2058	426	ICN	Lemont	IL	06:34
Vacuum Truck	0	1	343	71	ICN	Cross Lanes	WV	06:54
Vacuum Truck	0	2	686	166	ICN	Cross Lanes	WV	06:54
Vacuum Truck	0	1	343	70	ICN	Shelbyville	KY	07:00
Vacuum Truck	0	1	343	70	ICN	Shelbyville	KY	07:00
Vacuum Truck	0	1	343	52	ICN	Shelbyville	KY	07:00
Vacuum Truck	0	2	686	152	ICN	Shelbyville	KY	07:00
Vacuum Truck	0	1	343	71	ICN	Shelbyville	KY	07:00
Vacuum Truck	0	2	686	142	ICN	Shelbyville	KY	07:00
Vacuum Truck	0	4	1372	284	ICN	North Aurora	IL	07:06
Vacuum Truck	0	2	686	142	ICN	Wauwatosa	WI	07:12
Pump Truck	0	3	1953	213	ICN	Wauwatosa	WI	07:12
Vacuum Truck	0	11	3773	660	ICN	Germantown	WI	07:17
Vacuum Truck	0	10	3430	1200	ICN	Sheboygan	WI	07:21
Vacuum Truck	0	1	343	76	ICN	Amherst	NY	07:23
Vacuum Truck	0	1	343	71	ICN	Louisville	KY	07:25
Vacuum Truck	0	3	1029	213	ICN	Louisville	KY	07:34
Vacuum Truck	0	5	1715	600	ICN	Louisville	KY	07:38
Vacuum Truck	0	5	1715	655	ICN	Fort Atkinson	WI	08:09
Vacuum Truck	0	1	343	71	ICN	Kaukauna	WI	08:36
Pump Truck	0	2	1302	142	ICN	Kaukauna	WI	08:36
Vacuum Truck	0	1	343	71	ICN	Rochester	NY	09:00
Liquid Vac Truck	0	1	3086	71	ICN	Peoria	IL	09:15
Vacuum Truck	0	1	343	71	ICN	Newburgh	IN	09:19
Vacuum Truck	0	6	2058	720	ICN	Nitro	WV	09:25
Vacuum Truck	0	2	686	142	ICN	Evansville	IN	09:27
Vacuum Truck	0	1	343	78	ICN	Evansville	IN	09:27
Vacuum Truck	0	4	1372	284	ICN	Sunbury	PA	10:06
Vacuum Truck	0	1	343	71	ICN	Blountville	TN	10:15
Vacuum Truck	0	1	343	71	ICN	Norway	MI	10:16
Vacuum Truck	0	1	343	71	ICN	Waverly	NY	10:18
Vacuum Truck	0	2	686	96	ICN	Wausau	WI	11:01
Vacuum Truck	0	1	343	50	ICN	Knoxville	TN	11:04
Vacuum Truck	0	1	343	75	ICN	Lorton	VA	11:09
Vacuum Truck	0	1	343	71	ICN	Syracuse	NY	11:10
Vacuum Truck	0	1	343	71	ICN	Syracuse	NY	11:10
Vacuum Truck	0	1	343	48	ICN	Syracuse	NY	11:10
Vacuum Truck	0	1	343	71	ICN	Syracuse	NY	11:10
Vacuum Truck	0	1	343	77	ICN	Syracuse	NY	11:10
Vacuum Tractor	0	1	343	71	ICN	East Syracuse	NY	11:12

06 to 12 hours (* Does not include recall/mobilization time)

Vacuum Truck	0	2	686	142	ICN	East Syracuse	NY	11:12
Vacuum Tank Truck	0	1	2057	83	ICN	Stafford	VA	11:12
Vacuum Tank Truck	0	1	2057	76	ICN	Stafford	VA	11:12
Vacuum Tank Truck	0	1	2057	76	ICN	tafford	VA	11 12
Vacuum Truck	0	2	686	166	ICN	Fredericksburg	VA	11:13
Vacuum Truck	0	1	343	71	ICN	Fredericksburg	VA	11:13
Vacuum Truck	0	2	686	142	ICN	Laurel	MD	11:15
Vacuum Truck	0	1	343	59	ICN	Laurel	MD	11:15
Vacuum Truck	0	9	3087	639	ICN	Wood River	IL	11:19
Vacuum Truck	0	1	343	120	ICN	Baltimore	MD	11:26
Vacuum Tanker	0	1	343	71	ICN	Baltimore	MD	11:26
Vacuum Truck	0	1	343	83	ICN	Baltimore	MD	11:26
Vacuum Tank Truck	0	1	2057	95	ICN	Baltimore	MD	11:27
Vacuum Tank Truck	0	1	2057	71	ICN	Baltimore	MD	11:27
Vacuum Tank Truck	0	1	2057	71	ICN	Baltimore	MD	11:27
Vacuum Tank Truck	0	1	2057	83	ICN	Baltimore	MD	11:27
Vacuum Tank Truck	0	1	2057	76	ICN	Baltimore	MD	11:27
Vacuum Tank Truck	0	1	2057	83	ICN	Baltimore	MD	11:27
Vacuum Tank Truck	0	1	2057	71	ICN	Baltimore	MD	11:27
Vacuum Tank Truck	0	1	2057	76	ICN	Baltimore	MD	11:27
Vacuum Truck	0	1	343	130	ICN	Baltimore	MD	11:27
Vacuum Truck	0	1	343	75	ICN	Baltimore	MD	11:27
Vacuum Truck	0	1	343	76	ICN	Baltimore	MD	11:27
Vacuum Truck	0	1	343	70	ICN	Goodlettsville	TN	11:40
Vacuum Truck	0	1	343	70	ICN	Goodlettsville	TN	11:40
Vac Truck	0	1	343	130	ICN	Goodlettsville	TN	11:40
Vacuum Truck	0	1	343	71	ICN	Calvert City	KY	11:40
Vacuum Truck	0	1	754	71	ICN	St. Louis	MO	11:52
Vacuum Truck	0	1	343	83	ICN	Nashville	TN	11:52
Vacuum Truck	0	1	343	71	ICN	Nashville	TN	11:52
Vacuum Truck	0	1	343	71	ICN	Nashville	TN	11:52
Vacuum Truck	0	2	3428	158	ICN	Nashville	TN	11:54
Vacuum Truck	0	17	5831	1207	ICN	St. Louis	MO	11:56
Vacuum Truck	0	4	1372	480	ICN	St. Louis	MO	11:56
Vacuum Truck	0	1	1714	79	ICN	Paducah	KY	11:57
Sub Total Vacuum Truck:		**218**	**117028**	**18626**				
Total Vacuum System:		**250**	**151075**	**21849**				

Vessel

Deck Barge

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
BUDA I Work Barge	0	1	0	0	ICN	Detroit	MI	08:26
BUDA II Vacuum Barge	0	1	0	0	ICN	Detroit	MI	08:26
Sub Total Deck Barge:		**2**	**0**	**0**				

Deployment Craft (< 25 foot)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
18' Deployment Craft	0	1	0	0	ICN	South Holland	IL	06:03
20' Deployment Craft	0	1	0	0	ICN	South Holland	IL	06:03
14' Deployment Craft	0	1	0	0	ICN	South Holland	IL	06:03
John Boat	0	16	0	0	ICN	Glenwood	IL	06 03
22' Deployment Craft	0	1	0	0	ICN	Apollo	PA	06:11
20' Deployment Craft	0	1	0	0	ICN	Apollo	PA	06:11
13' Deployment Craft	0	1	0	0	ICN	Apollo	PA	06:11
18' Deployment Craft	0	1	0	0	ICN	Apollo	PA	06:11
20' Deployment Craft	0	1	0	0	ICN	Apollo	PA	06 11
24' Deployment Craft	0	1	0	0	ICN	Apollo	PA	06:11
16' Deployment Craft	0	1	0	0	ICN	Apollo	PA	06:11
12' Deployment Craft	0	2	0	0	ICN	Apollo	PA	06:11
16' Deployment Craft	0	5	0	0	ICN	Apollo	PA	06:11

06 to 12 hours (* Does not include recall/mobilization time)

18' Deployment Craft	0	1	0	0	ICN	Monee	IL	06:16
14" Deployment Craft	0	1	0	0	ICN	Monee	IL	06:16
24' Deployment Craft	0	1	0	0	ICN	Monee	IL	06:16
12' Deployment Craft	0	3	0	0	ICN	Monee	IL	06:16
13' Deployment Craft	0	1	0	0	ICN	Monee	IL	06:16
10' Deployment Craft	0	1	0	0	ICN	Monee	IL	06:16
16' Deployment Craft	0	2	0	0	ICN	Burlington	Canada	06:24
20' Response Boat	0	1	0	0	ICN	Ashland	KY	06:26
John Boat	0	2	0	0	ICN	Wheeling	IL	06:29
Work Flat	0	13	0	0	ICN	South Point	OH	06:32
18' Deployment Craft	0	2	0	0	ICN	South Point	OH	06:32
22' Deployment Craft	0	4	0	0	ICN	South Point	OH	06:32
16' Deployment Craft	0	4	0	0	ICN	Ashland	KY	06:32
18' Deployment Craft	0	1	0	0	ICN	Ashland	KY	06:32
18' Deployment Craft	0	1	0	0	ICN	New Lenox	IL	06:33
14' Deployment Craft	0	1	0	0	ICN	New Lenox	IL	06:33
14' Deployment Craft	0	1	0	0	ICN	Lemont	IL	06:34
14' Deployment Craft	0	1	0	0	ICN	Lemont	IL	06:34
24' Deployment Craft	0	2	0	0	ICN	Lemont	IL	06:34
24' Deployment Craft	0	1	0	0	ICN	Lemont	IL	06:34
22' Deployment Craft	0	1	0	0	ICN	Cross Lanes	WV	06:54
14' Deployment Craft	0	1	0	0	ICN	Cross Lanes	WV	06:54
11' Deployment Craft	0	1	0	0	ICN	Cross Lanes	WV	06:54
20' Response Boat	0	1	0	0	ICN	Shelbyville	KY	07:00
14' Deployment Craft	0	1	0	0	ICN	North Aurora	IL	07:06
14' Deployment Craft	0	1	0	0	ICN	Wauwatosa	WI	07:12
16' Deployment Craft	0	1	0	0	ICN	Menomonee Falls	WI	07:13
18.5' Deployment Craft	0	1	0	0	ICN	Menomonee Falls	WI	07:13
19' Deployment Craft	0	1	0	0	ICN	Germantown	WI	07:17
16' Deployment Craft	0	4	0	0	ICN	Germantown	WI	07:17
Small Boat w/ Trolling Motor	0	1	0	0	ICN	Louisville	KY	07:25
Response Boat	0	1	0	0	ICN	Louisville	KY	07:25
12' Deployment Craft	0	1	0	0	ICN	Louisville	KY	07:34
24' Deployment Craft	0	1	0	0	ICN	Louisville	KY	07:34
18' Deployment Craft	0	1	0	0	ICN	Louisville	KY	07:34
18' Deployment Craft	0	1	0	0	ICN	Louisville	KY	07:34
19' Deployment Craft	0	1	0	0	ICN	Louisville	KY	07:34
14' Deployment Craft	0	1	0	0	ICN	De Pere	WI	08:03
18' Deployment Craft	0	1	0	0	ICN	De Pere	WI	08:03
20' Deployment Craft	0	1	0	0	ICN	De Pere	WI	08:03
14' Rowboat	0	1	0	0	ICN	St. Ignace	MI	08:27
17' Deployment Craft	0	1	0	0	ICN	St. Ignace	MI	08:27
21' Deployment Craft	0	2	0	0	ICN	Neenah	WI	08:45
18' Deployment Craft	0	1	0	0	ICN	Newburgh	IN	09:19
14' Deployment Craft	0	1	0	0	ICN	Nitro	WV	09:25
20' Deployment Craft	0	1	0	0	ICN	Nitro	WV	09:25
20' Deployment Craft	0	1	0	0	ICN	Evansville	IN	09:27
12' Deployment Craft	0	4	0	0	ICN	Evansville	IN	09:27
14' Deployment Craft	0	2	0	0	ICN	Evansville	IN	09:27
18' Deployment Craft	0	1	0	0	ICN	Sunbury	PA	10:06
16' Deployment Craft	0	1	0	0	ICN	Blountville	TN	10:15
14' Deployment Craft	0	1	0	0	ICN	Wausau	WI	11:01
16' Deployment Craft	0	1	0	0	ICN	Knoxville	TN	11:04
19' Deployment Craft	0	1	0	0	ICN	Knoxville	TN	11:04
18' Deployment Craft	0	1	0	0	ICN	Lorton	VA	11:09
20' Deployment Craft	0	1	0	0	ICN	Lorton	VA	11:09
10' Deployment Craft	0	1	0	0	ICN	Lorton	VA	11:09
18' Deployment Craft	0	1	0	0	ICN	Syracuse	NY	11:10
14' Deployment Craft	0	1	0	0	ICN	Syracuse	NY	11:10
13' Deployment Craft	0	2	0	0	ICN	Stafford	VA	11:12
19' Deployment Craft	0	1	0	0	ICN	Fredericksburg	VA	11:13

06 to 12 hours (* Does not include recall/mobilization time)

16' Deployment Craft	0	1	0	0	ICN	Fredericksburg	VA	11:13
24' Deployment Craft	0	1	0	0	ICN	Laurel	MD	11:15
15' Deployment Craft	0	2	0	0	ICN	Laurel	MD	11:15
20' Deployment Craft	0	5	0	0	ICN	Binghamton	NY	11:17
24' Deployment Craft	0	1	0	0	ICN	Wood River	IL	11:19
16' Deployment Craft	0	1	0	0	ICN	Wood River	IL	11:19
20' Deployment Craft	0	2	0	0	ICN	Baltimore	MD	11:26
13' Deployment Craft	0	2	0	0	ICN	Baltimore	MD	11:27
12' Deployment Craft	0	15	0	0	ICN	Baltimore	MD	11:27
14' Deployment Craft	0	5	0	0	ICN	Baltimore	MD	11:27
15' Deployment Craft	0	9	0	0	ICN	Baltimore	MD	11:27
16' Deployment Craft	0	6	0	0	ICN	Baltimore	MD	11:27
16' Deployment Craft	0	12	0	0	ICN	Baltimore	MD	11:27
14' Deployment Craft	0	4	0	0	ICN	Baltimore	MD	11:27
21' Deployment Craft	0	8	0	0	ICN	Baltimore	MD	11:27
22' Deployment Craft	0	1	0	0	ICN	Baltimore	MD	11:27
24' Deployment Craft	0	1	0	0	ICN	Baltimore	MD	11:27
18' Deployment Craft	0	1	0	0	ICN	Baltimore	MD	11:27
19' Deployment Craft	0	1	0	0	ICN	Baltimore	MD	11:27
14' Deployment Craft	0	1	0	0	ICN	Baltimore	MD	11:27
24' Response Boat	0	1	0	0	ICN	Kingston	TN	11:30
16' Deployment Craft	0	1	0	0	ICN	Kingston	TN	11:30
24' Response Boat	0	1	0	0	ICN	Goodlettsville	TN	11:40
24' Response Boat	0	2	0	0	ICN	Goodlettsville	TN	11:40
20' Deployment Craft	0	1	0	0	ICN	Calvert City	KY	11:40
John Boat	0	2	0	0	ICN	St. Louis	MO	11:52
16' Deployment Craft	0	1	0	0	ICN	Nashville	TN	11:52
19' Deployment Craft	0	1	0	0	ICN	Nashville	TN	11:52
12' Deployment Craft	0	1	0	0	ICN	Nashville	TN	11:52
18' Deployment Craft	0	1	0	0	ICN	St. Louis	MO	11:56
Sub Total Deployment Craft (< 25 foot):		**218**	**0**	**0**				

Deployment Craft (> 25 foot)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
26' Deployment Craft	0	1	0	0	ICN	South Holland	IL	06:03
28' Deployment Craft	0	1	0	0	ICN	Monee	IL	06:16
30' Deployment Craft	0	1	0	0	ICN	Monee	IL	06:16
28' Spill Response Vessel	0	3	0	0	ICN	South Point	OH	06:32
26' Rescue Boat	0	1	0	0	ICN	Shelbyville	KY	07:00
27' Response Boat	0	1	0	0	ICN	Shelbyville	KY	07:00
26' Command Boat	0	1	0	0	ICN	St. Ignace	MI	08:27
29' Deployment Craft	0	1	0	0	ICN	Blountville	TN	10:15
29' Deployment Craft	0	1	0	0	ICN	Knoxville	TN	11:04
27' Deployment Craft	0	1	0	0	ICN	Lorton	VA	11:09
29' Deployment Craft	0	1	0	0	ICN	Fredericksburg	VA	11:13
59' Deployment Craft	0	1	0	0	ICN	Nashville	TN	11:52
28' Deployment Craft	0	1	0	0	ICN	Nashville	TN	11:54
26' Deployment Craft	0	1	0	0	ICN	Paducah	KY	11:57
Sub Total Deployment Craft (> 25 foot):		**16**	**0**	**0**				

WorkBoat

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Response Boat	0	1	0	0	ICN	Newburgh	IN	09:19
Tracker	0	1	0	0	ICN	Syracuse	NY	11:10
Pontoon Boat	0	1	0	0	ICN	Syracuse	NY	11:10
Sub Total WorkBoat:		**3**	**0**	**0**				
Total Vessel:		**239**	**0**	**0**				
Total 06 to 12 hours:			**204542**	**86017**				
Running Total from 0 to unknown:			**299186**	**130312**				

POTENTIAL SPILL SOURCES AND CONTAINER IDENTIFICATION
(*Any container that stores oil*)

Container I.D.	Substance Stored *(Oil & Haz. Substance)*	Maximum Capacity *(Bbls)*	Container Type *(i.e. floating roof, fixed roof, etc.)*	Year Built	Potential Failure	Rate of Flow	Failure / Cause *(Record cause and date of any Tank failure which has resulted in a loss of tank contents)*	Direction of Flow	Secondary Containment Capacity
TANK FARM #2									
405	Crude Oil	(b) (7)(F), (b) (3)	Floating Roof	1936	Leak/ Rupture	----	Section 9-4 contains loss history for previous 3 years.	Drainage escaping from the containment area would travel to the OBS.	(b) (7)(F), (b) (3)
408	Crude Oil		Cone-int fltr	1972	Leak/ Rupture	----	“”		
409	Crude Oil		Cone-int fltr	1972	Leak/ Rupture	----	“”		
410	Crude Oil		Cone-int fltr	1970	Leak/ Rupture	----	“”		
412	Crude Oil		Cone-int fltr	1939	Leak/ Rupture	----	“”		
413	Crude Oil		Floating Roof	1939	Leak/ Rupture	----	“”		
414	LGO		Cone-int fltr	1939	Leak/ Rupture	----	“”		
415	Gasoline		Floating Roof	1949	Leak/ Rupture	----	“”		
416	Gasoline		Floating Roof	1949	Leak/ Rupture	----	“”		
417	Gasoline		Floating Roof	1949	Leak/ Rupture	----	“”		
418	Gasoline		Floating Roof	1950	Leak/ Rupture	----	“”		
419	Gasoline		Floating Roof	1950	Leak/ Rupture	----	“”		
420	Gasoline		Cone-int fltr	1950	Leak/ Rupture	----	“”		
421	LSD		Floating Roof	1952	Leak/ Rupture	----	“”		
422	Gasoline		Cone-int fltr	1953	Leak/ Rupture	----	“”		
423	Gasoline		Cone-int fltr	1950	Leak/ Rupture	----	“”		
424	Gasoline		Floating Roof	1953	Leak/ Rupture	----	“”		
425	Gasoline		Floating Roof	1955	Leak/ Rupture	----	“”		
426	Gasoline		Floating Roof	1955	Leak/ Rupture	----	“”		
427	Gasoline		Floating Roof	1953	Leak/ Rupture	----	“”		
428	Jet-A		Cone Roof	1942	Leak/ Rupture	----	“”		
429	Jet-A		Cone Roof	1942	Leak/ Rupture	----	“”		
430	Distillate Comp.		Cone Roof	1942	Leak/ Rupture	----	“”		
431	Jet-A		Cone Roof	1942	Leak/ Rupture	----	“”		
432	Distillate Comp.		Cone Roof	1942	Leak/ Rupture	----	“”		

POTENTIAL SPILL SOURCES AND CONTAINER IDENTIFICATION
(*Any container that stores oil*)

Container I.D.	Substance Stored *(Oil & Haz. Substance)*	Maximum Capacity *(Bbls)*	Container Type *(i.e. floating roof, fixed roof, etc.)*	Year Built	Potential Failure	Rate of Flow	Failure / Cause *(Record cause and date of any Tank failure which has resulted in a loss of tank contents)*	Direction of Flow	Secondary Containment Capacity
TANK FARM #2 (Cont'd)									
435	Gasoline	(b) (7)(F), (b) (3)	Floating Roof	1957	Leak/ Rupture	----	""	Primary drainage is to OBS	(b) (7)(F), (b) (3)
435	Gasoline		Floating Roof	1957	Leak/ Rupture	----	""		
436	LSD		Floating Roof	1959	Leak/ Rupture	----	""		
437	LSD		Cone-int fltr	1966	Leak/ Rupture	----	""		
1708	Gas Additive		Horizontal	1957	Leak/ Rupture	----	""		
1709	Gas Additive		Horizontal		Leak/Rupture	----	""		
1710	Gas Additive		Horizontal	1964	Leak/ Rupture	----	""		
1712	Gas Additive		Horizontal	1968	Leak/ Rupture	----	""		
1713	Gas Additive		Horizontal	1968	Leak/ Rupture	----	""		
1716	Gas Additive		Horizontal	1968	Leak/ Rupture	----	""		

POTENTIAL SPILL SOURCES AND CONTAINER IDENTIFICATION
(Any container that stores oil)

Equipment I.D.	(Location) Service & Size	Substance Stored *(Oil & Haz. Substance)*	Average Quantity Stored *(Gallons)*	VOLTAGE	Equipment Type *(i.e. transformer, oil-filled equipment, etc.)*	Year Built	Potential Failure	Rate of Flow	Failure / Cause *(Record cause and date of any Tank failure which has resulted in a loss of tank contents)*	Direction of Flow	Secondary Containment Capacity
#2 Tank Farm (T&S)											
TF-1	North of 410 Tank 150 KVA	Transformer Oil	(b) (7)(F), (b) (3)	2400 V / 600 V	Transformer	Unknown	Leak/Rupture	-----	“”	Primary drainage is to OBS	(b) (7)(F), (b) (3)
TF-5	East of 410 Tank 500 KVA	Transformer Oil		2400 V / 575 V	Transformer	Unknown	Leak/Rupture	-----	“”		
TF-6	Butane (#2TF) 500 kva	Transformer Oil		2400 V / 600 V	Transformer	Unknown	Leak/Rupture	-----	“”		
TF-8	Butane (#2TF) 500 kva	Transformer Oil		2400 V / 600 V	Transformer	Unknown	Leak/Rupture	-----	“”		
TF-9	410 Tank (West) 300 kva	Transformer Oil		2400 V / 600 V	Transformer	Unknown	Leak/Rupture	-----	“”		
SW-TF-9	Switch for TF-9 144	Transformer Oil		2400 V	Switch	Unknown	Leak/Rupture	-----	“”		
TF-10	Tank Farm Control Room 300 KVA	Transformer Oil		2400 V / 480 V	Transformer	Unknown	Leak/Rupture	-----			
SW-TF-10	Switch For TF-10 5 KVA	Transformer Oil		2400 V	Switch	Unknown	Leak/Rupture	-----			
TF-11	Tank Farm Control Room 500 KVA	Transformer Oil		2400 V / 575 V	Transformer	Unknown	Leak/Rupture	-----			
SW-TF-11	Switch for TF11 5 KVA	Transformer Oil		2400 V	Switch	Unknown	Leak/Rupture	-----			

POTENTIAL SPILL SOURCES AND CONTAINER IDENTIFICATION
(Any container that stores oil)

Equipment I.D.	(Location) Service & Size	Substance Stored *(Oil & Haz. Substance)*	Average Quantity Stored *(Gallons)*	VOLTAGE	Equipment Type *(i.e. transformer, oil-filled equipment, etc.)*	Year Built	Potential Failure	Rate of Flow	Failure / Cause *(Record cause and date of any Tank failure which has resulted in a loss of tank contents)*	Direction of Flow	Secondary Containment Capacity
OPERATIONAL EQUIPMENT - TOLEDO REFINERY (Cont'd)											
#2 Tank Farm (T&S) Continued											
TF-12	#40 Pumphouse 150 KVA	Transformer Oil	(b) (7)(F), (b) (3)	2400 V / 575 V	Transformer	Unknown	Leak/Rupture	-----	Section 9-4 contains loss history for previous 3 years.	Primary drainage is to OBS	(b) (7)(F), (b) (3)
SW-TF-12	Switch for TF-12 121	Transformer Oil		2400 V	Switch	Unknown	Leak/Rupture	-----	""		
TF-4	#8 Sub (East) 5000 KVA	Transformer Oil		12.4 KV / 2400 V	Transformer	Unknown	Leak/Rupture	-----	""		
TF-13	#8 Sub (West) 3750 KVA	Transformer Oil		12.4 KV / 2400 V	Transformer	Unknown	Leak/Rupture	-----	""		
TF-18	Booster Pumps 225 KVA	Transformer Oil		2400 V / 575 V	Transformer	Unknown	Leak/Rupture	-----	""		
SW-TF-18	Switch for TF-18 5 KVA	Transformer Oil		2400 V	Switch	Unknown	Leak/Rupture	-----	""		
TF-15	Transfer for Switchrack 300 KVA	Transformer Oil		2400 V / 575 V	Transformer	Unknown	Leak/Rupture	-----			
SW-TF-15	Switch For TF-15 5 KVA	Transformer Oil		2400 V	Switch	Unknown	Leak/Rupture	-----	""		

POTENTIAL SPILL SOURCES AND CONTAINER IDENTIFICATION
(Any container that stores oil)

Equipment I.D.	(Location) Service & Size	Substance Stored *(Oil & Haz. Substance)*	Average Quantity Stored *(Gallons)*	VOLTAGE	Equipment Type *(i.e. transformer, oil-filled equipment, etc.)*	Year Built	Potential Failure	Rate of Flow	Failure / Cause *(Record cause and date of any Tank failure which has resulted in a loss of tank contents)*	Direction of Flow	Secondary Containment Capacity
#12 Substation – (Have built-in containment area)											
G-33	600 V #1 Section 1500 KVA	Transformer Oil	(b) (7)(F), (b) (3)	12.4 KV / 600 V	Transformer	Unknown	Leak/Rupture	-----	Section 9-4 contains loss history for previous 3 years.	Built-in containment area	(b) (7)(F), (b) (3)
G-32	600 V #2 Section 1500 KVA	Transformer Oil		12.4 KV / 600 V	Transformer	Unknown	Leak/Rupture	-----	“”		
G-31	600 V #3 Section 1500 KVA	Transformer Oil		12.4 KV / 600 V	Transformer	Unknown	Leak/Rupture	-----	“”		
G-30	600 V #2 Section 1500 KVA	Transformer Oil		12.4 KV / 600 V	Transformer	Unknown	Leak/Rupture	-----	“”		
G-29	2400 V #1 Section 5000 KVA	Transformer Oil		12.4 KV / 2400 V	Transformer	Unknown	Leak/Rupture	-----	“”		
G-28	2400 V #2 Section 5000 KVA	Transformer Oil		12.4 KV / 2400 V	Transformer	Unknown	Leak/Rupture	-----	“”		

APPENDIX L

DISCHARGE DETECTION SYSTEMS AND FACILITY SELF INSPECTIONS

Page

Discharge Detection L-2

General
Detection by Personnel
Automated Detection Systems

Security L-4

Discharge Detection

The Facility has a discharge detection program which consists of both manual (personnel) and automated detection systems. The Facility maintains the following documents which are related to Discharge Detection:

- Spill Prevention, Control, and Countermeasures (SPCC) Plan
- Emergency Procedures

General

(b) (7)(F), (b) (3)

[redacted]

The following is a summary of the instructions and procedures as detailed in the above listed documents.

Detection by Personnel

- Daily Visual Inspections (including tanks, secondary containment, aboveground piping, etc.) during operating personnel rounds. Refer to Appendix G for sample Tank Inspection and Secondary Containment Inspection Checklists.
- Monthly inspection of tank gauges and cathodic protection readings.

Discharge Detection (Cont'd)

Detection by Personnel (Cont'd)

- The entire facility is adequately illuminated to provide security and safe operations at night.
- In the event of a spill at this Facility, refer to the notification information in Section 2.0 and the response information in Section 3.0 of this Plan.

Automated Detection Systems

- The tanks are equipped with high level alarms.

Aerial Observations

- Visual observation for distressed vegetation indicating discharge is conducted every two weeks by over-flying the pipeline.

Public Awareness and Reporting

- Newsletters are distributed to residents of property surrounding the pipeline. The residents are asked to report any odors or evidence of discharge, and provided with contact telephone numbers.

Security

(b) (7)(F), (b) (3)

[redacted]

APPENDIX M

NATIONAL RESPONSE SYSTEM

Page

National Contingency Plan (NCP) M-2

National Response Team (NRT) M-2

National Response Center (NRC) M-5

Regional Response Team (RRT) M-5

On-Scene Coordinators (OSC) M-6

National Strike Force (NSF) M-7

LIST OF FIGURES

Figure M-1.1 National Response System Organization M-3

Figure M-1.2 Federal Representation on National Response Team M-4

Figure M-1.3 U.S. Environmental Protection Agency (EPA) Regional Offices M-8

Figure M-1.4 U.S. Coast Guard (USCG) Districts M-9

NATIONAL RESPONSE SYSTEM

National Contingency Plan

In 1968, the National Oil and Hazardous Substance Pollution Contingency Plan (NCP) was established to coordinate Federal activities for preventing oil spills and mitigating environmental damages when spills occur. During June 1970, this plan was incorporated as part of the Code of Federal Regulations and applied to all navigable waters and adjoining shorelines of the United States. The plan was recently modified (September 1994) to implement changes made to the Clean Water Act by the Oil Pollution Act of 1990.

To ensure adequate preplanning and provisions for responding to oil spills, the National Contingency Plan established the National Response Center, the National Response Team, the Regional Response Center, Regional Response Teams and the On-Scene Coordinator (Figure M1.1).

National Response Team (NRT)

National planning and coordination for oil spill response is the responsibility of the National Response Team (NRT). The NRT is responsible for evaluating methods for responding to oil spills and hazardous substances spills, and recommending changes to the National Contingency Plan. The NRT also develops procedures to coordinate activities for federal, state and local governments, and private response organizations.

The NRT consists of representatives from each of the agencies shown in Figure J1.2. Normally, the NRT is chaired by the EPA representative while the USCG representative serves as the vice-chairman. If it is activated for spills within the coastal zone of the United States, the USCG representative will hold the chair.

The NRT can be activated when an oil spill exceeds the capability of the Regional Response Team in which it occurs, crosses national boundaries, or presents a significant threat to a population, national policy, property, or national resources; or when requested by any NRT member.

Once activated, the NRT may:

1. Monitor the spill, evaluate reports from the On-Scene Coordinator (OSC), and recommend appropriate actions for abating the spill.

2. Request oil spill response resources from federal, state, and local governments or private agencies.

3. Coordinate the supply of equipment, personnel, or technical advice to the affected region from other regions or districts.

FIGURE M-1.1

NATIONAL RESPONSE SYSTEM ORGANIZATION

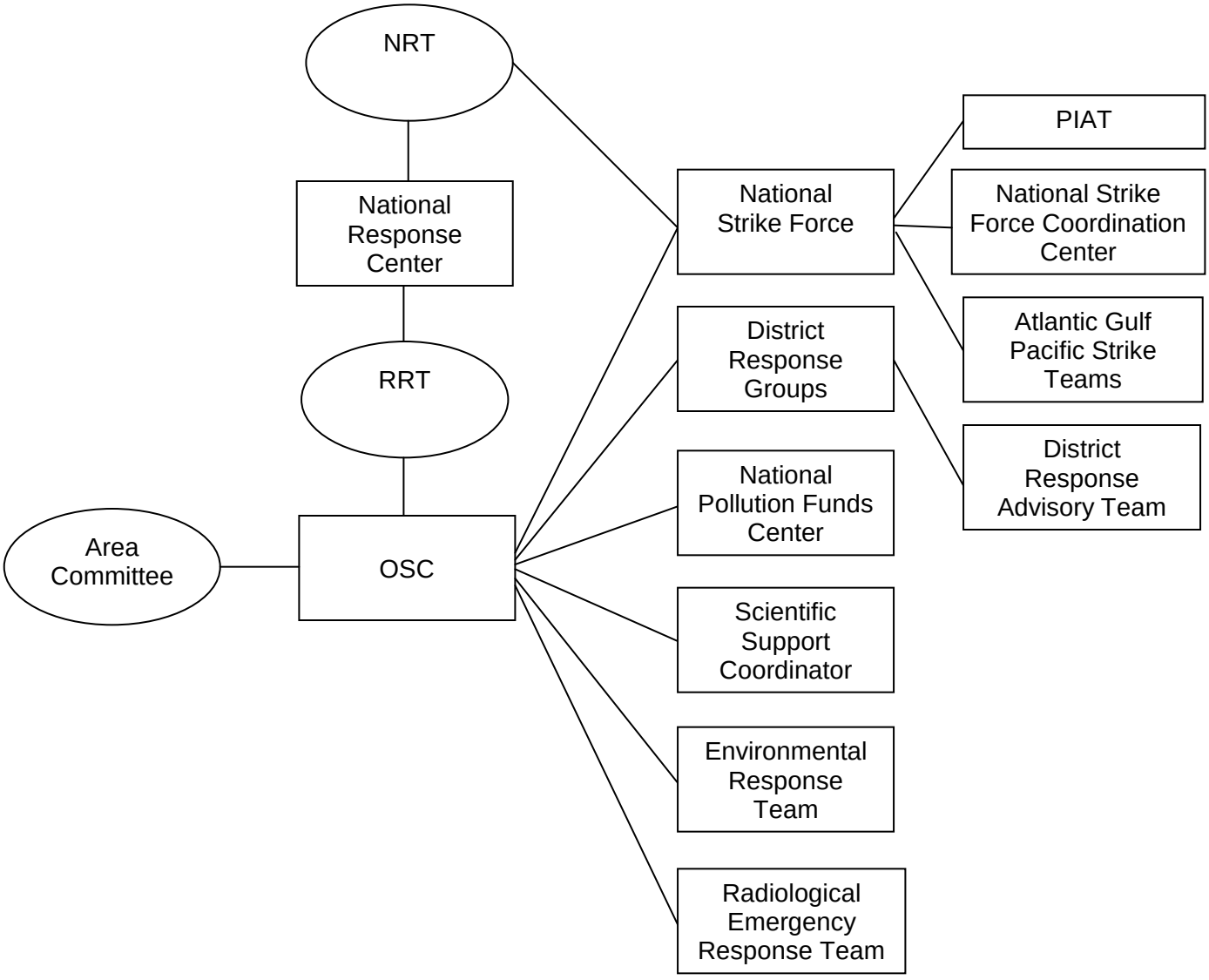
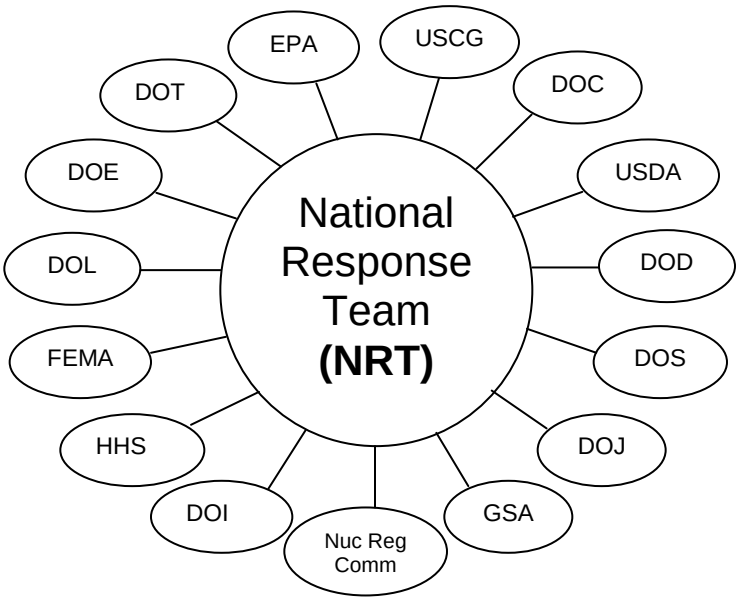


FIGURE M-1.2

FEDERAL REPRESENTATION ON NATIONAL RESPONSE TEAM



DOC	Department of Commerce Scientific expertise from NOAA for marine mammals & oil spill response	DOT	Department of Transportation Expertise on all modes of transporting oil & hazardous substances
DOD	Department of Defense Oil spill response equipment, ship salvage, and boarding & diving	EPA	Environmental Protection Agency Information on environmental impact of spills & provide scientific support coordination
DOE	Department of Energy Removal & disposal of radioactive contamination	FEMA	Federal Emergency Management Agency Coordinate civil emergency planning & mitigation efforts
DOH	Department of Health Assess health hazards associated with response operation & recommend steps for worker & public safety	GSA	General Services Administration Provides logistical and telecommunications support to federal agencies
DOI	Department of Interior Expertise on fish & wildlife	HHS	Department of Health and Human Services Assists with the assessment, preservation, and protection of human health and helps ensure the availability of essential human services
DOJ	Department of Justice Answer legal questions on spills & response actions	USCG	United States Coast Guard Establishes spill contingency planning requirements for vessels and facilities, and OSC responsibilities for wasteful zone
DOL	Department of Labor Expertise needed to minimize exposure to hazardous material during response operation	USDA	United States Department of Agriculture Input on the effect of soil contamination by hazardous and oil spills

National Response Center (NRC)

The National Response Center (NRC) receives and distributes reports regarding oil and hazardous substances spills. It is located at the USCG Headquarters in Washington, D.C., and can be contacted by dialing the phone number listed in Figure 2.5.

All oil spills must be reported to the National Response Center. If a direct report to the National Response Center is not practical, reports may be made to the USCG or EPA predesignated OSC for the geographic area where the spill occurs. If it is not possible to immediately notify the National Response Center or the predesignated OSC, reports may be made immediately to the nearest USCG unit provided that the spiller notifies the NRC as soon as possible. Once the NRC receives notification of a spill, it will promptly notify the appropriate OSC and authorize him to proceed with the appropriate response actions as outlined in the National Contingency Plan.

Regional Response Team (RRT)

The Regional Response Team (RRT) develops oil spill response contingency plans for specific regions of the United States. This team is staffed by representatives from the agencies shown in Figure M1.2 and may include representatives of local governments as agreed upon by the specific State in which the RRT is operative.

The RRT is jointly chaired by the EPA and USCG representatives. See Figures M1.3 and M1.4 for the EPA Regions and the USCG Districts respectively. When activated for inland spills, the EPA representative will be the chairperson. If activated for offshore spills, the USCG representative shall be the chairperson.

The RRT includes two (2) components: a standing team and an incident-specific team. The standing team:

1. reviews regional and local responses to various spills, recommends revisions to the National Contingency Plan, encourages state and local communities to improve their preparedness for oil spill response activities, and reviews actions performed by the On-Scene Coordinator.

2. performs advanced planning for dispersants, surface collection agents, burning agents, biological additives, or other chemical agents that are authorized by the National Contingency Plan.

The incident-specific response team can be activated if an oil spill exceeds the response capability available to the On-Scene Coordinator, if the spill crosses regional boundaries, or if a spill presents a substantial threat to human health and welfare, the environment, or significant amounts of property. It can be activated during a pollution emergency when requested by the Federal On-Scene Coordinator.

The incident-specific response team may:

1. monitor and evaluate reports from the On-Scene Coordinator and recommend specific actions for improving the response operation.

Regional Response Team (Cont'd)

2. request federal, state or local governments, or private organizations to provide resources for responding to the spill.

3. help the On-Scene Coordinator prepare information releases for the public.

4. recommend that a different OSC be designated for the response operation.

5. provide information that will assist the OSC to make timely and appropriate decisions for the response operations.

On-Scene Coordinators

On-Scene Coordinators (OSC) are predesignated by the U.S. Coast Guard or Environmental Protection Agency. The OSC collects pertinent facts about the spill, its source and cause, and the parties responsible for the spill. The OSC also determines the potential impact the spill could have on human health and welfare, and whether it presents a significant threat to the environment. In addition, the OSC establishes priorities for minimizing the impact of oil spills.

If the spiller assumes responsibility for the spill, the OSC will monitor the clean-up activity. Otherwise, the OSC will initiate the response operation and hire commercial contractors as required to clean up the spill as quickly as possible. If commercial resources are not available, the OSC will deploy federal resources. Reimbursement of any federal will be sought from the spiller expenditures after the response. Federal personnel and equipment can be obtained from the National Strike Force and the U.S. Navy.

When a spill report is received, the OSC will:

1. notify the Regional Response Team and National Response Center.

2. investigate the report to determine pertinent information such as the threat posed to public health and welfare, or the environment.

3 officially classify the size of the discharge and determine the course of action to be followed.

4. determine whether the spiller is properly carrying out the clean-up operation.

5. determine whether the State or local government has the capability to carry out response actions and if a contract or cooperative agreement has been established with the appropriate Fund Administrator for this purpose.

6. notify the Regional Response Team and the trustees of the affected natural resources in accordance with the applicable regional plan.

Within 60 days after a major oil spill, the OSC shall submit to the RRT a complete report on the response operation and the actions taken. A copy of this report will be submitted to the National Response Team. The format for this report is provided in the National Contingency Plan.

On-Scene Coordinators (Cont'd)

Each OSC is responsible for developing and updating Area Contingency Plans. Each plan should be a multi-agency effort involving all agencies that would have a role in the local response effort.

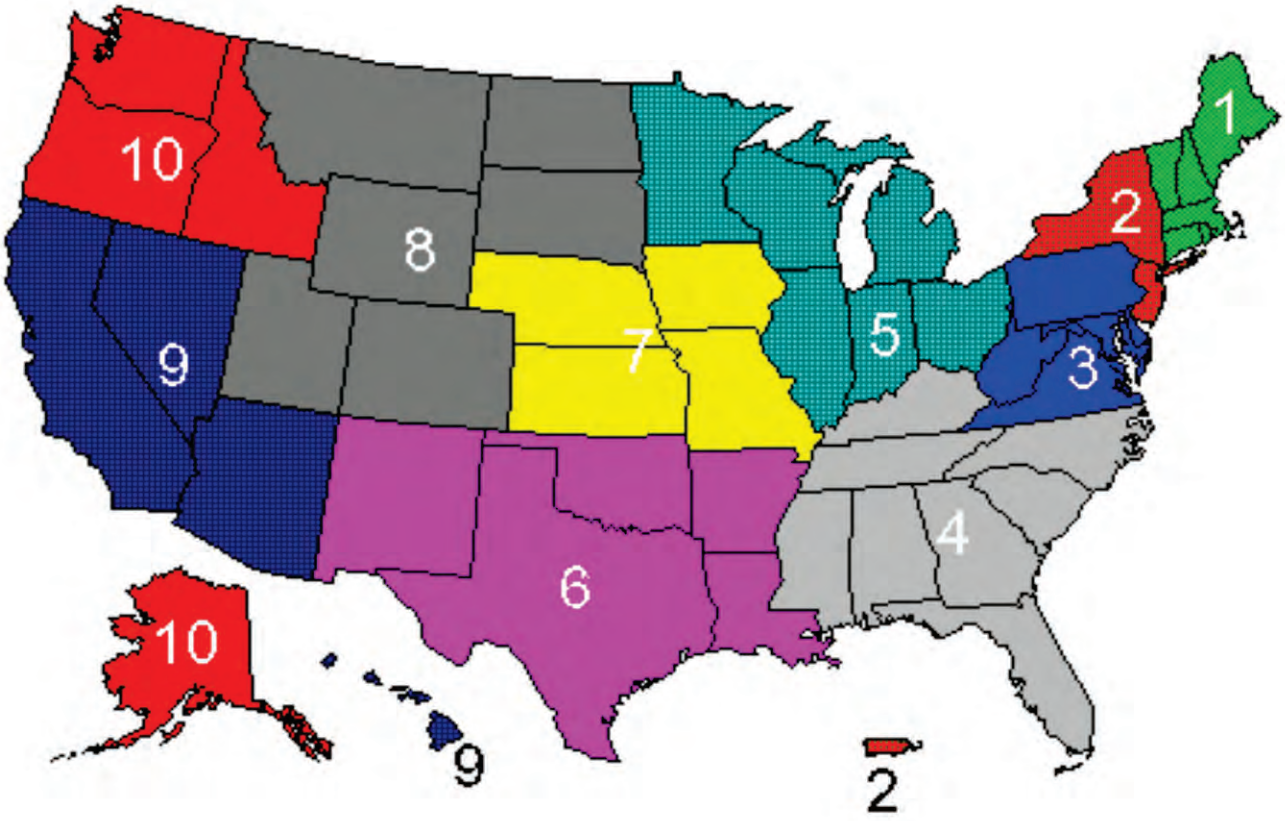
National Strike Force (NSF)

The National Strike Force (NSF) was formed in 1973 after the U.S. Coast Guard was charged with oversight and responsibilities for offshore oil spills under the Federal Water Pollution Control Act. The NSF consists of the Pacific, Gulf and the Atlantic Area Strike Teams. These teams provide experienced personnel and equipment necessary for assisting the OSC in responding to spills in U.S. waters.

The NSF is always on call and maintains a stock of specialized equipment for deployment anywhere in the nation and, in some cases, overseas. This equipment includes open water oil containment and recovery systems, high capacity pumps for transferring oil and chemicals, and protective clothing for working with hazardous materials. Most of this equipment is designed to fit into Coast Guard C-130 cargo planes or load onto flatbed trucks for fast response.

FIGURE M-1.3

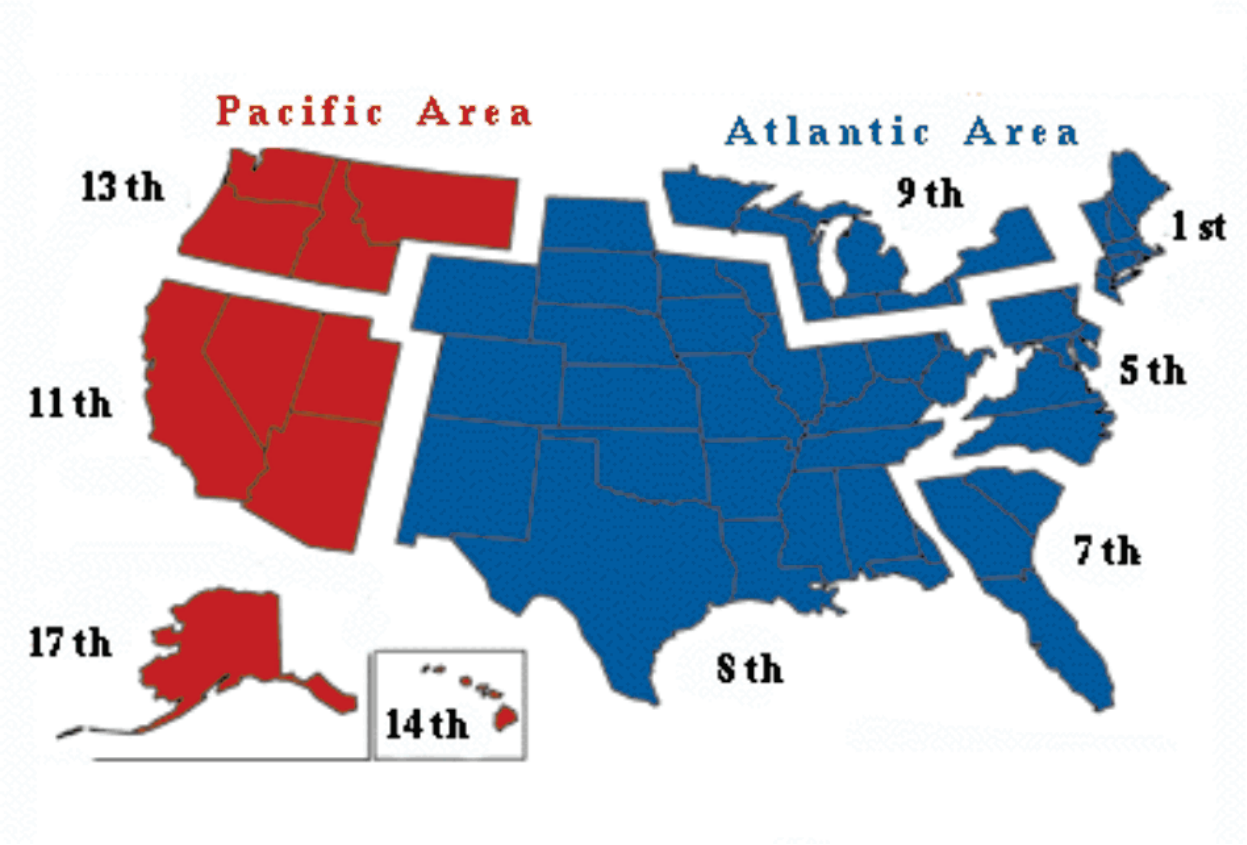
U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) REGIONAL OFFICES



EPA Region 1, Office John F. Kennedy Federal Bldg. Boston, MA 02203	EPA Region 2 Office 26 Federal Plaza New York, NY 10278	EPA Region 3 Office 1650 Arch Street Philadelphia, PA 19103-2029
EPA Region 4 Office 61 Forsythe, 11th Floor Atlanta, GA 30303	EPA Region 5 Office 77 West Jackson Blvd. Chicago, IL 60604	EPA Region 6 Office 1445 Ross Avenue Dallas, TX 75202
EPA Region 7 Office 726 Minnesota Avenue Kansas City, KS 66101	EPA Region 8 Office 999 18th Street Denver, CO 80202	EPA Region 9 Office Public Information Center 215 Fremont Street San Francisco, CA 94105
EPA Region 10 Office 1200 6th Avenue Seattle, WA 98101	U.S. EPA Office of Solid Waste 401 M Street SW Washington, DC 20460-5101	RCRA / Superfund Hotline (800) 424-9346 (in Washington, DC, (202) 879-2693)

FIGURE M-1.4

U.S. COAST GUARD (USCG) DISTRICTS



1st Coast Guard District Battery Park Building, Room 212 1st S. Street New York, NY 10004-5099 (212) 668-7114	11th Coast Guard District Coast Guard Island Building 51-1 Alameda, CA 94501-5100 (510) 437-3700
5th Coast Guard District Federal Building 431 Crawford Street Portsmouth, VA 23704-5004 (757) 398-6272	13th Coast Guard District 915 2nd Avenue, Suite #3352 Seattle, WA 98174-1067 (206) 220-7237
7th Coast Guard District Federal Building 909 S.E. 1st Ave., Room #954 Miami, FL 33131-3050 (305) 415-6683	14th Coast Guard District PJKK Federal Building 300 Ala Moana Blvd. Honolulu, HI 96850-4982 (808) 541-2121
8th Coast Guard District Hale Boggs Federal Building 501 Magazine Street New Orleans, LA 70130-3396 (504) 589-6198	17th Coast Guard District P.O. Box 25517 Juneau, AK 99802 (907) 463-2025
9th Coast Guard District 1240 E. 9th Street Cleveland, OH 44199-2060 (216) 902-6020	

* Note: These addresses may differ from those listed on the Distribution List.

APPENDIX N

GLOSSARY OF TERMS/ACRONYMS

PAGE

Glossary of Terms.....N-2

Acronyms N-11

GLOSSARY OF TERMS & ACRONYMS
GLOSSARY OF TERMS

This glossary contains definitions of terms that will be used frequently during the course of response operations.

Activate: The process of mobilizing personnel and/or equipment within the response organization to engage in response operations.

Activator: An individual in the response organization whose responsibilities include notifying other individuals or groups within the organization to mobilize personnel and/or equipment.

Adverse Weather: The weather conditions that will be considered when identifying response systems and equipment in a response plan for the applicable operating environment. Factors to consider include significant wave height, ice, temperature, weather - related visibility, and currents within the Captain of the Port (COTP) zone in which the systems or equipment are intended to function.

Agency Representative: Individual assigned to an incident from an agency who has been delegated full authority to make decisions on all matters affecting that agency's participation in response operations.

Area Committee: As defined by Sections 311(a)(18) and (j)(4) of CWA, as amended by OPA, means the entity appointed by the President consisting of members from Federal, State, and local agencies with responsibilities that include preparing an Area Contingency Plan for the area designated by the President. The Area Committee may include ex-officio (i.e., non-voting) members (e.g., industry and local interest groups).

Area Contingency Plan: As defined by Sections 311(a)(19) and (j)(4) of CWA, as amended by OPA, means the plan prepared by an Area Committee, that in conjunction with the NCP, shall address the removal of a discharge including a worst-case discharge and the mitigation or prevention of a substantial threat of such a discharge from a vessel, offshore facility, or onshore facility operating in or near an area designated by the President.

Average Most Probable Discharge: A discharge of the lesser of 50 barrels or 1% of the volume of the worst case discharge.

AWAY Team: A predesignated team from various departments in Houston, is responsible for arriving at the scene of an oil spill incident as soon as possible to provide both immediate and longer-term management of the field activities.

Barrel (bbl): Measure of space occupied by 42 U.S. gallons at 60 degrees Fahrenheit.

Bioremediation Agents: Means microbiological cultures, enzyme additives, or nutrient additives that are deliberately introduced into an oil discharge and that will significantly increase the rate of biodegradation to mitigate the effects of the discharge.

Boom: A piece of equipment or a strategy used to either contain free floating oil to a confined area or protect an uncontaminated area from intrusion by oil.

Booming Strategies: Strategic techniques which identify the location and quantity of boom required to protect certain areas. These techniques are generated by identifying a potential spill source and assuming certain conditions which would affect spill movement on water.

Bulk: Material that is stored or transported in a loose, unpackaged liquid, powder, or granular form capable of being conveyed by a pipe, bucket, chute, or belt system.

Captain of the Port Zone (COTP): Means a zone specified in 33 CFR and the seaward extension of that zone to the outer boundary of the exclusive economic zone (EEZ).

Chemical Agents: Means those elements, compounds, or mixtures that coagulate, disperse, dissolve, emulsify, foam, neutralize, precipitate, reduce, solubilize, oxidize, concentrate, congeal, entrap, fix, make the pollutant mass more rigid or viscous, or otherwise facilitate the mitigation of deleterious effects or the removal of the oil pollutant from the water. Chemical agents include biological additives, dispersants, sinking agents, miscellaneous oil spill control agents, and burning agents, but do not include solvents.

Clean-up Contractor: Persons contracted to undertake a response action to clean up a spill.

Cleanup: For the purposes of this document, cleanup refers to the removal and/or treatment of oil, hazardous substances, and/or the waste or contaminated materials generated by the incident. Cleanup includes restoration of the site and its natural resources.

Coastal Waters: For the purpose of classifying the size of discharges, means the waters of the coastal zone except for the Great Lakes and specified ports and harbors on inland rivers.

Coastal Zone: As defined for the purpose of the NCP, means all United States waters subject to the

GLOSSARY OF TERMS & ACRONYMS
GLOSSARY OF TERMS (Cont'd)

tide, United States waters of the Great Lakes, specified ports and harbors on inland rivers, waters of the contiguous zone, other waters of the high seas subject to the NCP, and the land surface or land substrata, ground waters, and ambient air proximal to those waters. The term coastal zone delineates an area of federal responsibility for response action. Precise boundaries are determined by EPA/USCG agreements and identified in federal regional contingency plans.

Coast Guard District Response Ground (DRG): As provided for by CWA sections 311(a)(20) and (j)(3), means the entity established by the Secretary of the department in which the USCG is operating within each USCG district and shall consist of: the combined USCG personnel and equipment, including firefighting equipment, of each port within the district; additional prepositioned response equipment; and a district response advisory team.

Command: The act of controlling manpower and equipment resources by virtue of explicit or delegated authority.

Command Post: A site located at a safe distance form the spill site where response decisions are made, equipment and manpower deployed, and communications handled. The Incident Commander and the On-Scene Coordinators may direct the on-scene response from this location.

Communications Equipment: Equipment that will be utilized during response operations to maintain communication between the Company employees, contractors, Federal/State/Local agencies. (Radio/ telephone equipment and links)

Containment Boom: A flotation/freeboard device, made with a skirt/curtain, longitudinal strength member, and ballast unit/weight designed to entrap and contain the product for recovery.

Contingency Plan: A document used by (1) federal, state, and local agencies to guide their planning and response procedures regarding spills of oil, hazardous substances, or other emergencies; (2) a document used by industry as a response plan to spills of oil, hazardous substances, or other emergencies occurring upon their vessels or at their facilities.

Contract or Other Approved Means: For OPA 90, a written contract with a response contractor; certification by the facility owner or operator that personnel and equipment are owned, operated, or under the direct control of the facility, and available within the stipulated times; active membership in a local or regional oil spill removal organization; and/or the facility's own equipment.

Critical Areas to Monitor: Areas which if impacted by spilled oil may result in threats to public safety or health.

Cultural Resources: Current, historic, prehistoric and archaeological resources which include deposits, structures, ruins, sites, buildings, graves, artifacts, fossils, or other objects of antiquity which provide information pertaining to the historical or prehistorical culture of people in the state as well as to the natural history of the state.

Damage Assessment: The process of determining and measuring damages and injury to the human environment and natural resources, including cultural resources. Damages include differences between the conditions and use of natural resources and the human environment that would have occurred without the incident, and the conditions and use that ensued following the incident. Damage assessment includes planning for restoration and determining the costs of restoration.

Decontamination: The removal of hazardous substances from personnel and their equipment necessary to prevent adverse health effects.

Discharge: Any spilling, leaking, pumping, pouring, emitting, emptying, or dumping.

Dispersants: Means those chemical agents that emulsify, disperse, or solubilize oil into the water column or promote the surface spreading of oil slicks to facilitate dispersal of the oil into the water column.

Diversion Boom: A floatation/freeboard device, made with a skirt/curtain, longitudinal strength member, and ballast unit/weight designed to deflect or divert the product towards a pick up point, or away from certain areas.

Drinking Water Supply: As defined by Section 101(7) of CERCLA, means any raw or finished water source that is or may be used by a public water system (as defined in the Safe Drinking Water Act) or as drinking water by one or more individuals.

Economically Sensitive Areas: Those areas of explicit economic importance to the public that due to their proximity to potential spill sources may require special protection and include, but are not limited to: potable and industrial water intakes; locks and dams; and public and private marinas.

Emergency Service: Those activities provided by state and local government to prepare for and carry out any activity to prevent, minimize, respond to, or recover from an emergency.

Environmentally Sensitive Areas: Streams and water bodies, aquifer recharge zones, springs, wetlands, agricultural areas, bird rookeries, endangered or threatened species (flora and fauna) habitat, wildlife preserves or conservation areas,

GLOSSARY OF TERMS & ACRONYMS
GLOSSARY OF TERMS (Cont'd)

parks, beaches, dunes, or any other area protected or managed for its natural resource value.

Exclusive Economic Zone (EEZ): means the zone contiguous to the territorial sea of the United States extending to a distance up to 200 nautical miles from the baseline from which the breadth of the territorial sea is measured.

Facility: Either an onshore facility or an offshore facility and includes, but is not limited to structures, equipment, and appurtenances thereto, used or capable of being used to transfer oil to or from a vessel or a public vessel. A facility includes federal, state, municipal, and private facilities.

Facility Operator: The person who owns, operates, or is responsible for the operation of the facility.

Federal Fund: The spill liability trust fund established under OPA.

Federal Regional Response Team: The federal response organization (consisting of representatives from selected federal and state agencies) which acts as a regional body responsible for planning and preparedness before an oil spill occurs and providing advice to the FOSC in the event of a major or substantial spill.

Federal Response Plan (FRP): Means the agreement signed by 25 federal departments and agencies in April 1987 and developed under the authorities of the Earthquake Hazards Reduction Act of 1977 and the Disaster Relief Act of 1974, as amended by the Stafford Disaster Relief Act of 1988.

First Responders, First Response Agency: A public health or safety agency (e.g., fire service or police department) charged with responding to a spill during the emergency phase and alleviating immediate danger to human life, health, safety, or property.

Handle: To transfer, transport, pump, treat, process, store, dispose of, drill for, or produce.

Harmful Quantity Of Oil: The presence of oil from an unauthorized discharge in a quantity sufficient either to create a visible film or sheen upon or discoloration of the surface of the water or a shoreline, tidal flat, beach, or marsh, or to cause a sludge or emulsion to be deposited beneath the surface of the water or on a shoreline, tidal flat, beach, or marsh.

Hazardous Material: Any nonradioactive solid, liquid, or gaseous substance which, when uncontrolled, may be harmful to humans, animals, or the environment. Including but not limited to substances otherwise defined as hazardous wastes, dangerous wastes, extremely hazardous wastes, oil, or pollutants.

Hazardous Substance: Any substance designed as such by the Administrator of the EPA pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act; regulated pursuant to Section 311 of the Federal Water Pollution Control Act, or discharged by the SERC.

Hazardous Waste: Any solid waste identified or listed as a hazardous waste by the Administrator of the EPA pursuant to the federal Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA), 42 U.S.C., Section 6901, et seq as amended. The EPA Administrator has identified the characteristics of hazardous wastes and listed certain wastes as hazardous in Title 40 of the Code of Federal Regulations, Part 261, Subparts C and D respectively.

HAZMAT: Hazardous materials or hazardous substances, exposure to which may result in adverse effects on health or safety of employees.

HAZWOPER: Hazardous Waste Operations and Emergency Response Regulations published by OSHA to cover worker safety and health aspects of response operations.

Heat Stress: Dangerous physical condition caused by over exposure to extremely high temperatures.

Hypothermia: Dangerous physical condition caused by over exposure to freezing temperatures.

Incident: Any event that results in a spill or release of oil or hazardous materials. Action by emergency service personnel may be required to prevent or minimize loss of life or damage to property and/or natural resources.

Incident Briefing Meeting: Held to develop a comprehensive, accurate, and up-to-date understanding of the incident, nature of status of control operations, and nature and status of response operations; ensure the adequacy of control and response operations; begin to organize control and response operations; and prepare for interactions with outside world.

Incident Command Post (ICP): That location at which all primary command functions are executed.

Incident Command System (ICS): The combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure, with responsibility for the management of assigned resources at an incident.

GLOSSARY OF TERMS & ACRONYMS
GLOSSARY OF TERMS (Cont'd)

Incident Commander (IC): The one individual in charge at any given time of an incident. The Incident Commander will be responsible for establishing a unified command with all on-scene coordinators.

Indian Tribe: As defined in OPA section 1001, means any Indian tribe, band, nation, or other organized group or community, but not including any Alaska Native regional or village corporation, which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians and has governmental authority over lands belonging to or controlled by the Tribe.

Initial Cleanup: Remedial action at a site to eliminate acute hazards associated with a spill. An initial clean-up action is implemented at a site when a spill of material is an actual or potentially imminent threat to public health or the environment, or difficulty of cleanup increases significantly without timely remedial action. All sites must be evaluated to determine whether initial cleanup is total cleanup, however, this will not be possible in all cases due to site conditions (i.e., a site where overland transport or flooding may occur).

Initial Notification: The process of notifying necessary the Company personnel and Federal/ State/Local agencies that a spill has occurred, including all pertinent available information surrounding the incident.

Initial Response Actions: The immediate actions that are to be taken by the spill observer after detection of a spill.

Inland Area means the area shoreward of the boundary lines defined in 46 CFR part 7, except that in the Gulf of Mexico, it means the area shoreward of the lines of demarcation (COLREG lines) as defined in §80.740 through 80.850 of this chapter. The inland area does not include the Great Lakes.

Inland Waters: State waters not considered coastal waters; lakes, rivers, ponds, streams, underground water, et. al.

Inland Zone: Means the environment inland of the coastal zone excluding the Great Lakes, and specified ports and harbors on inland rivers. The term inland zone delineates an area of federal responsibility for response action. Precise boundaries are determined by EPA/USCG agreements and identified in federal regional contingency plans.

Interim Storage Site: A site used to temporarily store recovered oil or oily waste until the recovered oil or oily waste is disposed of at a permanent disposal site. Interim storage sites include trucks, barges, and other vehicles, used to store waste until the transport begins.

Lead Agency: The government agency that assumes the lead for directing response activities.

Lead Federal Agency: The agency which coordinates the federal response to incident on navigable waters. The lead federal agencies are:

- **U.S. Coast Guard:** Oil and chemically hazardous materials incidents on navigable waters.
- **Environmental Protection Agency:** Oil and chemically hazardous materials incidents on inland waters.

Lead State Agency: The agency which coordinates state support to federal and/or local governments or assumes the lead in the absence of federal response.

Loading: Transfer from Facility to vehicle.

Local Emergency Planning Committee (LEPC): A group of local representatives appointed by the State Emergency Response Commission (SERC) to prepare a comprehensive emergency plan for the local emergency planning district, as required by the Emergency Planning and Community Right-to-know Act (EPCRA).

Local Response Team: Designated Facility individuals who will fulfill the roles determined in the oil spill response plan in the event of an oil or hazardous substance spill. They will supervise and control all response and clean-up operations.

Lower Explosive Limit: Air measurement utilized to determine the lowest concentration of vapors that support combustion. This measurement must be made prior to entry into a spill area.

Marinas: Small harbors with docks, services, etc. for pleasure craft.

Marine Transportation Related Facility (MTR Facility): means an on-shore facility, including piping and any structure used to transfer oil to or from a vessel, subject to regulation under 33 CFR Part 154 and any deepwater port subject to regulation under 33 CFR Part 150.

Maximum Extent Practicable: means the planning values derived from the planning criteria used to evaluate the response resources described in the Response Plan to provide on-water recovery capability and the shoreline protection and cleanup capability to conduct response activities for a worst case discharge from a facility in adverse weather.

Maximum Most Probable Discharge: means a discharge of lesser of 1,200 barrels or 10 percent of the volume of worst case discharge.

GLOSSARY OF TERMS & ACRONYMS
GLOSSARY OF TERMS (Cont'd)

Medium Discharge: Means a discharge greater than 2,100 gallons (50 Bbls) and less than or equal to 36,000 gallons (85+ Bbls) or 10% of the capacity of the largest tank, whichever is less and not to exceed the WCD.

National Contingency Plan: The plan prepared under the Federal Water Pollution Control Act (33 United State Code §1321 et seq) and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 United State Code § 9601 et seq), as revised from time to time.

National Pollution Funds Center (NPFC): Means the entity established by the Secretary of Transportation whose function is the administration of the Oil Spill Liability Trust Fund (OSLTF). Among the NPFC's duties are: providing appropriate access to the OSLTF for federal agencies and states for removal actions and for federal trustees to initiate the assessment of natural resource damages; providing appropriate access to the OSLTF for claims; and coordinating cost recovery efforts.

National Response System (NRS): Is the mechanism for coordinating response actions by all levels of government in support of the OSC. The NRS is composed of the NRT, RRTs, OSC, Area Committees, and Special Teams and related support entities.

National Strike Force (NSF): Is a special team established by the USCG, including the three USCG Strike Teams, the Public Information Assist Team (PIAT), and the National Strike Force Coordination Center. The NSF is available to assist OSCs in their preparedness and response duties.

National Strike Force Coordination Center (NSFCC): Authorized as the National Response Unit by CWA section 311(a)(23) and (j)(2), means the entity established by the Secretary of the department in which the USCG is operating at Elizabeth City, North Carolina, with responsibilities that include administration of the USCG Strike Teams, maintenance of response equipment inventories and logistic networks, and conducting a national exercise program.

Natural Resource: Land, fish, wildlife, biota, air, water, ground water, drinking water supplies, and other such resources belonging to, managed by, held in trust by, appertaining to or otherwise controlled by the state, federal government, private parties, or a municipality.

Navigable Waters: As defined by 40 CFR 110.1 means the waters of the United States, including the territorial seas. The term includes:

All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide;

Interstate waters, including interstate wetlands;

All other waters such as interstate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, and wetlands, the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters;

That are or could be used by interstate or foreign travelers for recreational or other purposes;

From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; and

That are used or could be used for industrial purposes by industries in interstate commerce.

All impoundments of waters otherwise defined as navigable waters under this section;

Tributaries of waters identified in paragraphs (a) through (d) of this definition, including adjacent wetlands; and

Wetlands adjacent to waters identified in paragraphs (a) through (e) of this definition: Provided, that waste treatment systems (other than cooling ponds meeting the criteria of this paragraph) are not waters of the United States.

Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act jurisdiction remains with EPA.

Nearshore Area: For OPA 90, the area extending seaward 12 miles from the boundary lines defined in 46 CFR Part 7, except in the Gulf of Mexico. In the Gulf of Mexico, it means the area extending seaward 12 miles from the line of demarcation defined in §80.740 - 80.850 of title 33 of the CFR.

Non-persistent or Group I Oil: A petroleum-based oil that, at the time of shipment, consists of hydrocarbon fractions:

1. At lease 50% of which by volume, distill at a temperature of 340 degrees C (645 degrees F);
2. At least 95% of which volume, distill at a temperature of 370 degrees C (700 degrees F).

Ocean: The open ocean, offshore area, and nearshore area as defined in this subpart.

Offshore area: The area up to 38 nautical miles

GLOSSARY OF TERMS & ACRONYMS
GLOSSARY OF TERMS (Cont'd)

seaward of the outer boundary of the nearshore area.

Oil or Oils: Naturally occurring liquid hydrocarbons at atmospheric temperature and pressure coming from the earth, including condensate and natural gasoline, and any fractionation thereof, including, but not limited to, crude oil, petroleum gasoline, fuel oil, diesel oil, oil sludge, oil refuse, and oil mixed with wastes other than dredged spoil. Oil does not include any substance listed in Table 302.4 of 40 CFR Part 302 adopted August 14, 1989, under Section 101(14) of the federal comprehensive environmental response, compensation, and liability act of 1980, as amended by P. L. 99-499.

Oil Spill Liability Trust Fund: Means the fund established under section 9509 of the Internal Revenue Code of 1986 (26 U.S.C. 9509).

Oil Spill Removal Organization: means an entity that provides response resources.

Oily Waste: Product contaminated waste resulting from a spill or spill response operations.

On-Scene Coordinator (OSC): Means the federal official predesignated by the EPA or the USCG to coordinate and direct response under subpart D.

On-site: Means the areal extent of contamination and all suitable areas in very close proximity to the contamination necessary for implementation of a response action.

Open Ocean: means the area from 38 nautical miles seaward of the outer boundary of the nearshore area, to the seaward boundary of the exclusive economic zone.

Owner or Operator: Any person, individual, partnership, corporation, association, governmental unit, or public or private organization of any character.

Persistent Oil: A petroleum-based oil that does not meet the distillation criteria for a non-persistent oil. For the purposes of this Appendix, persistent oils are further classified based on specific gravity as follows:

1. Group II specific gravity less than .85
2. Group III specific gravity between .85 and less than .95
3. Group IV specific gravity .95 and including 1.0
4. Group V specific gravity greater than 1.0

Plan Holder: The plan holder is the industry transportation related facility for which a response plan is required by federal regulation to be submitted by a vessel or facility's owner or operator.

Post Emergency Response: The portion of a response performed after the immediate threat of a release has been stabilized or eliminated and cleanup of the sites has begun.

Post Emergency: The phase of response operations conducted after the immediate threat of the release has been stabilized, and cleanup operations have begun.

Primary Response Contractors or Contractors: An individual, company, or cooperative that has contracted directly with the plan holder to provide equipment and/or personnel for the containment or cleanup of spilled oil.

Qualified Individual (QI): That person or entity who has authority to activate a spill cleanup contractors, act as liaison with the "On-Scene Coordinator" and obligate funds required to effectuate response activities.

Recreation Areas: Publicly accessible locations where social/sporting events take place.

Regional Response Team (RRT): The Federal response organization (consisting of representatives from selected Federal and State agencies) which acts as a regional body responsible for overall planning and preparedness for oil and hazardous materials releases and for providing advice to the OSC in the event of a major or substantial spill.

Remove or Removal: As defined by section 311(a)(8) of the CWA, refers to containment and removal of oil or hazardous substances from the water and shorelines or the taking of such other actions as may be necessary to minimize or mitigate damage to the public health or welfare (including, but not limited to, fish, shellfish, wildlife, public and private property, and shorelines and beaches) or to the environment. For the purpose of the NCP, the term also includes monitoring of action to remove discharge.

Response Activities: The containment and removal of oil from the water and shorelines, the temporary storage and disposal of recovered oil, or the taking of other actions as necessary to minimize or mitigate damage to public health or welfare, or the environment.

Response Contractors: Persons/companies contracted to undertake a response action to contain and/or clean up a spill.

Response Guidelines: Guidelines for initial response that are based on the type of product involved in the spill, these guidelines are utilized to determine clean-up methods and equipment.

Response Plan: A practical manual used by industry for responding to a spill. Its features include: (1) identifying the notifications sequence, responsibilities, response techniques, etc. in a easy to use format; (2) using decision trees, flowcharts, and checklists to insure the proper response for

GLOSSARY OF TERMS & ACRONYMS
GLOSSARY OF TERMS (Cont'd)

spills with varying characteristics; and (3) segregating information needed during the response from data required by regulatory agencies to prevent confusion during a spill incident.

Response Resources: All personnel and major items of equipment available, or potentially available, for assignment to incident tasks on which status is maintained.

Responsible Party: Any person, owner/operator, or facility that has control over an oil or hazardous substance immediately before entry of the oil or hazardous substance into the atmosphere or in or upon the water, surface, or subsurface land of the state.

Response Priorities: Mechanism used to maximize the effective use of manpower and equipment resources based upon their availability during an operational period.

Response Resources: All personnel and major items of equipment available, or potentially available, for assignment to incident tasks on which status is maintained.

Restoration: The actions involved in returning a site to its former condition.

Rivers and Canals: A body of water confined within the inland area that has a project depth of 12 feet or less, including the Intracoastal Waterway and other waterways artificially created for navigation.

Securing the Source: Steps that must be taken to stop discharge of oil at the source of the spill.

Sinking Agents: Means those additives applied to oil discharges to sink floating pollutants below the water surface.

Site Characterization: An evaluation of a cleanup site to determine the appropriate safety and health procedures needed to protect employees from identified hazards.

Site Conditions: Details of the area surrounding the facility, including shoreline descriptions, typical weather conditions, socioeconomic breakdowns, etc.

Site Safety and Health Plan: A site specific plan developed at the time of an incident that addresses:

- Safety and health hazard analysis for each operation.
- Personal protective equipment to be used.
- Training requirements for site workers.
- Medical surveillance requirements.
- Air monitoring requirements.
- Site control measures.
- Decontamination procedures.
- Emergency response procedures.
- Confined space entry procedures.

Site Security and Control: Steps that must be taken to provide safeguards needed to protect personnel and property, as well as the general public, to ensure an efficient clean-up operation.

Skimmers: Mechanical devices used to skim the surface of the water and recover floating oil. Skimmers fall into four basic categories (suction heads, floating weirs, oleophilic surface units, and hydrodynamic devices) which vary in efficiency depending on the type of oil and size of spill.

Snare Boom: Oil will adhere to the material of which this boom is made of and thus collect it.

Sorbents: Materials ranging from natural products to synthetic polymeric foams placed in confined areas to soak up small quantities of oil. Sorbents are very effective in protecting walkways, boat decks, working areas, and previously uncontaminated or cleaned areas.

Spill: An unauthorized discharge of oil or hazardous substance into the waters of the state.

Spill Observer: The first Facility individual who discovers a spill. This individual must function as the first responder and person-in-charge until relieved by an authorized supervisor.

Spill of National Significance (SONS): Means a spill which due to its severity, size, location, actual or potential impact on the public health and welfare or the environment, or the necessary response effort, is so complex that it requires extraordinary coordination of federal, state, local, and responsible party resources to contain and cleanup the discharge.

Spill Management Team: The personnel identified to staff the organizational structure identified in a response plan to manage response plan implementation.

Spill Response: All actions taken in responding to spills of oil and hazardous materials, e.g.: receiving and making notifications; information gathering and technical advisory phone calls; preparation for and travel to and from spill sites; direction of clean-up activities; damage assessments; report writing, enforcement investigations and actions; cost recovery; and program development.

Spill Response Personnel: Federal, state, local agency, and industry personnel responsible for participating in or otherwise involved in spill

GLOSSARY OF TERMS & ACRONYMS
GLOSSARY OF TERMS (Cont'd)

response. All spill response personnel will be pre-approved on a list maintained in each region.

Staging Areas: Designated areas near the spill site accessible for gathering and deploying equipment and/or personnel.

State Emergency Response Commission (SERC): A group of officials appointed by the Governor to implement the provisions of Title III of the Federal Superfund Amendments and Re-authorization Act of 1986 (SARA). The SERC approves the State Oil and Hazardous Substance Discharge Prevention and Contingency Plan and Local Emergency Response Plans.

Surface Collecting Agents: Means those chemical agents that form a surface film to control the layer thickness of oil.

Surface Washing Agent: Is any product that removes oil from solid surfaces, such as beaches and rocks, through a detergency mechanism and does not involve dispersing or solubilizing the oil into the water column.

Tanker: A self-propelled tank vessel constructed or adapted primarily to carry or hazardous material in bulk in the cargo spaces.

Tidal Current Tables: Tables which contain the predicted times and heights of the high and low waters for each day of the year for designated areas.

Trajectory Analysis: Estimates made concerning spill size, location, and movement through aerial surveillance or computer models.

Transfer: Any movement of oil to, from, or within a vessel by means of pumping, gravitation, or displacement.

Trustee: Means an official of a federal natural resources management agency designated in subpart G of the NCP or a designated state official or Indian tribe or, in the case of discharges covered by the OPA, a foreign government official, who may pursue claims for damages under section 1006 of the OPA.

Underwriter: An insurer, a surety company, a guarantor, or any other person, other than an owner or operator of a vessel or facility, that undertakes to pay all or part of the liability of an owner or operator.

Unified Command: The method by which local, state, and federal agencies and the responsible party will work with the Incident Commander to:

- Determine their roles and responsibilities for a given incident.
- Determine their overall objectives for management of an incident.
- Select a strategy to achieve agreed-upon objectives.
- Deploy resources to achieve agreed-upon objectives.

Unified or Coordinated Command Meeting: Held to obtain agreement on strategic objectives and response priorities; review tactical strategies; engage in joint planning, integrate response operations; maximize use of resources; and minimize resolve conflicts.

Volunteers: An individual who donates their services or time without receiving monetary compensation.

Waste: Oil or contaminated soil, debris, and other substances removed from coastal waters and adjacent waters, shorelines, estuaries, tidal flats, beaches, or marshes in response to an unauthorized discharge. Waste means any solid, liquid, or other material intended to be disposed of or discarded and generated as a result of an unauthorized discharge of oil. Waste does not include substances intended to be recycled if they are in fact recycled within 90 days of their generation or if they are brought to a recycling facility within that time.

Waters of the U.S. - See Navigable Waters, page G-11.

GLOSSARY OF TERMS & ACRONYMS
GLOSSARY OF TERMS (Cont'd)

Wetlands: Those areas that are inundated or saturated by surface or groundwater at a frequency or duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include playa lakes, swamps, marshes, bogs, and similar areas such as sloughs, prairie potholes, wet meadows, prairie river overflows, mudflats, and natural ponds (40 CFR 112.2(y)).

Wildlife Rescue: Efforts made in conjunction with Federal and State agencies to retrieve, clean, and rehabilitate birds and wildlife affected by an oil spill.

Worst Case Discharge: The largest foreseeable discharge under adverse weather conditions. For facilities located above the high water line of coastal waters, a worst case discharge includes those weather conditions most likely to cause oil discharged from the facility to enter coastal waters.

GLOSSARY OF TERMS & ACRONYMS

ACRONYMS

AC - Area Committee
AOR - Area of Review
AQI - Alternate Qualified Individual
BIA - Bureau of Indian Affairs
BLM - Bureau of Land Management
BPD - Barrels Per Day
BOD - Biological Oxygen Demand
BOM - Bureau of Mines
CERCLA - Comprehensive Environmental Response, Compensation and Liability Act
CFR - Code of Federal Regulations
CHEMTREC - Chemical Transportation Emergency Center
COE - U. S. Army Corps of Engineers
CPI - Corrugated Plate Interceptor
CRZ - Contamination Reduction Zone
CWA - Clean Water Act (Federal - Public Law 100-4)
CWS - Community Water System
CZM - Coastal Zone Management
DECON - Decontamination
DOC - Department of Commerce
DOD - Department of Defense
DOE - Department of Energy
DOI - Department of Interior
DOJ - Department of Justice
DOL - Department of Labor
DOS - Department of State
DOT - Department of Transportation
DRAT - District Response Advisory Team
DRG - District Response Group
EBS - Emergency Broadcast System
EHS - Extremely Hazardous Substance
EMA - Emergency Management Agency
EMS - Emergency Medical Service
EOC - Emergency Operations Center
EPA - U. S. Environmental Protection Agency
EPCRA - The Emergency Planning and Right-to-Know Act of 1986 (Title III of SARA)
EQ - Environmental Quality
ERT - Environmental Response Team
ESA - Endangered Species Act
ETA - Estimated Time of Arrival
FAA - Federal Aviation Administration
FAX - Facsimile Machine
FCC - Federal Communications Commission
FEMA - Federal Emergency Management Agency
FOSC - Federal On-Scene Coordinator
FR - Federal Register
FRDA - Freshwater Resource Damage Assessment
FRF - Federal Revolving Fund
GIS - Geographic Information System
GSA - General Services Administration
HAZWOPER - Hazardous Waste Operations and Emergency Response
HHS - Department of Health and Human Services
IBRRC - International Bird Rescue Research Center
IOCC - Interstate Oil Compact Commission
LEPC - Local Emergency Planning Committee
LFL - Lower Flammable Limit
LOSC - Local On-Scene Coordinator
LRT - Local Response Team
MBL - Mobile
MMS - Minerals Management Service
MOU - Memorandum of Understanding
MSDS - Material Safety Data Sheet
MSO - Marine Safety Office
NCP - National Contingency Plan
NCWS - Non-Community Water System
NEPA - National Environmental Policy Act
NIOSH - National Institute for Occupational Safety and Health
NMFS - National Marine Fisheries Service
NOAA - National Oceanic and Atmospheric Administration (Department of Commerce)
NPDES - National Pollution Discharge Elimination System
NPFC - National Pollution Funds Center

GLOSSARY OF TERMS & ACRONYMS

ACRONYMS (Cont'd)

NPS - National Park Service
NRC - National Response Center
NRDA - Natural Resource Damage Assessment
NRS - National Response System
NRT - National Response Team
NSF - National Strike Force
NSFCC - National Strike Force Coordination Center
NTNCWS - Non -Transient Non-Community Water System
OPA - Oil Pollution Act
OPS - Office of Pipeline Safety (DOT)
OSC - On-Scene Coordinator
OSHA - Occupational Safety and Health Administration (USDL)
OSLTF - Oil Spill Liability Trust Fund
OSPRA - Oil Spill Prevention and Response Act
OSRO - Oil Spill Response Organization
PCB - Polychlorinated Biphenyls
PFD - Personal Flotation Device
PGR - Pager
PHMSA - Pipeline & Hazardous Materials Safety Association (DOT - OPS)
PIAT - Public Information Assist Team
POLREP - Pollution Report
PPE - Personal Protective Equipment
PPM - Parts Per Million
PSD - Prevention of Significant Deterioration
QI - Qualified Individual
RACT - Reasonably Achievable Control Technology
RCP - Regional Contingency Plan
RCRA - Resource Conservation and Recovery Act
RECON - Reconnaissance
REP - Radiological Emergency Preparedness
RERT - Radiological Emergency Response Team
RQ - Reportable Quantity
RRT - Regional Response Team
SARA - Superfund Amendments and Reauthorization Act
SCBA - Self Contained Breathing Apparatus
SDWA - Safe Drinking Water Act
SERC - State Emergency Response Commission
SIC - State Implementation Plan
SMT - Spill Management Team
SONS - Spill of National Significance
SOP - Standard Operating Procedure
SPCC - Spill Prevention Control and Countermeasures
SSC - Scientific Support Coordinator (NOAA)
STEL - Short Term Exposure Limits
SUPSALV - United States Navy Supervisor of Salvage
SWD - Salt Water Disposal
TSCA - Toxic Substances Control Act
TSDF - Treatment, Storage or Disposal Facility
UCS - Unified Command System
USACOE - U.S. Army Corps of Engineers
USCG - U.S. Coast Guard
USDA - U.S. Department of Agriculture
USDL - U.S. Department of Labor
USDOD - U.S. Department of Defense
USDOE - U.S. Department of Energy
USDW - Underground Source of Drinking Water
USFWS - U. S. Fish and Wildlife Services
USGS - U. S. Geological Survey
WCD - Worst Case Discharge

Facility Response Plan

Toledo Refining Company, LLC

Hocking Valley Dock &
Marine Terminal
Volume 3

Copy No. 9

Facility Response Plan

Toledo Refining Company, LLC

Marine Terminal
And
Hocking Valley Dock

Physical Address:
1900-2100 Front Street
Toledo, OH 43605

Mailing Address:
1819 Woodville Rd.
Oregon, OH 43616

TABLE OF CONTENTS

Section Heading	Description	Page
Blue Section	EMERGENCY RESPONSE ACTION PLAN	ERAP1-44
Table of Contents	Table of Contents	TOC-1
	Cross Reference for EPA	TOC-4
	Cross Reference for Coast Guard	TOC-9
	Cross Reference for DOT/PHMSA	TOC-19
Foreword	Acknowledgment and Plan Approval	i
	Certification of QI and Alt. QI	ii
	Certification of Response Preparedness	iii
	Revision Record	iv
	Revision Record Signature Page	v
	Distribution List	vi
1.0 Introduction and Plan Content	1.1 Plan Purpose/Objectives	1-1
	1.2 Scope of Plan	1-1
	1.3 Plan Distribution Procedures	1-2
	1.4 Plan Review and Update Procedures	1-3
	1.5 Regulatory Compliance	1-5
	1.6 Discharge Classification	1-6
	a. Figure 1.1 Area Map/Site Location Map	1-9
	b. Figure 1.2 Facility Diagrams	1-12
	c. Figure 1.3 Facility Information	1-13
	d. Figure 1.4 Qualified Individuals	1-16
2.0 Notification Procedures	2.1 Internal Notification	2-1
	2.2 External Notification	2-2
	a. Figure 2.1 Internal Notification Sequence	2-5
	b. Figure 2.2 External Notification of Spill	2-6
	c. Figure 2.3 Discharge Form	2-7
	d. Figure 2.4 Internal Notification References	2-8
	e. Figure 2.5 External Notification References	2-9
3.0 Response Actions	3.1 Initial Response Actions	3-1
	a. Figure 3.1 – Specific incident response checklist	3-3
	b. Figure 3.2 – Product Specific Response – Crude	3-8
	c. Figure 3.3 – Product Specific Response –Gasoline	3-9
	3.2 Documentation of Initial Response Actions	3-11
	3.3 Oil Containment, Recovery and Disposal	3-11
	3.4 Storage/Disposal	3-12
	3.5 Sampling and Waste Analysis Procedures	3-12
	3.6 Safety Awareness	3-12
4.0 Response Teams	4.1 Introduction	4-1
	4.2 Qualified Individual	4-1
	4.3 Emergency Response Team	4-3
	4.4 Emergency Command Team	4-3
	4.5 Response Team Training	4-3
	4.6 Response Team Exercises	4-5
	4.7 Site Safety and Health Plan(s) Development	4-9

	Figure 4.1 Emergency Response Team	4-10
	Figure 4.2 Emergency Command Team	4-11
5.0 Response Equipment Resources	5.1 Toledo Refining Company, LLC Facility Response Equipment	5-1 5-1
	5.2 Contract Resources	5-1
	5.3 Cooperative Mutual Aid Resources	5-2
	5.4 Experts and Consultants	5-2
	5.5 Volunteers	5-2
	5.6 Communications	5-4
	Figure 5.1 – External Response Resources	5-5
	Figure 5.2 – Facility Response Equipment	
6.0 Spill Impact Considerations	6.1 Critical Areas to Protect	6-1
	6.2 Environmental/Socio-Economic Sensitivities	6-1
	6.3 Wildlife Protection and Rehabilitation	6-3
	6.4 Staging Areas	6-5
	6.5 Spill Volume Estimates	6-5
	6.6 Trajectory Analysis	6-5
	6.7 Containment and recovery of Spilled Product	6-6
	6.8 Use of Chemical Dispersants and In-Situ Burning	6-15
	Figure 6.1 – Wildlife Listing	6-16
	Figure 6.2 – Sensitive Areas Maps and Data Planning Distance Calculations	6-17
	Figure 6.3 – Oil Slick Estimator	6-19
	Figure 6.4 – Contingency Protocol For Wildlife	6-20
	Figure 6.5 – Cleanup Methods	6-21
	Figure 6.6 - Cleanup Methods by Habitat	6-22
7.0 Worse Case Discharge Analysis and Scenarios	7.1 Introduction	7-1
	7.2 Small/Average Most Probable Discharge	7-5
	7.3 Medium/Maximum Most Probable Discharge	7-8
	7.4 Worst Case Discharge	7-10
	7.5 Response Planning Volume Calculations	7-14
	7.6 U.S.DOT/PHMSA Discharge Calculations	7-15
	7.7 USCG Worst Case Discharge Calculations	7-16
8.0 Hazard Evaluations	8.1 Hazard Identification	8-1
	8.2 Vulnerability Analysis	8-3
	8.3 Analysis of the Potential for a Spill	8-7
	8.4 Reportable Oil Spill History	8-8
	Figure 8.1 – Site Drainage Plan – Marine Terminal	8-10
	Figure 8.2 – Site Drainage Plan – Hocking Valley Dock	8-11

Appendices	Appendix A – Principles of Health, Environmental and Safety	
	Appendix B – Response Plan Cover Sheet	
	Appendix C - Discharge Response Times	
	Appendix D – Disposal Plan	
	Appendix E – Discharge information Form	
	Appendix F – Spill Management Team Roles	
	Appendix G – Sample Exercise documentation forms	
	Appendix H – Group V oil Spill Response	
	Appendix I – Evacuation Plan	
	Appendix J – OSRO Contracts	
	Appendix K – Storage Tank Listing	
	Appendix L – Discharge detection systems and facility self inspections	
	Appendix M – National Response System	
	Appendix N – Glossary and Acronyms	

U.S. EPA - OPA 90
40 CFR Part 112.20(h) Final Rule - July 17, 2002
CROSS REFERENCE

§ 112.20 (h)	BRIEF DESCRIPTION	LOCATION in PLAN
(1)	***Emergency Response Action Plan***	-----
(1)(i)	The identity and telephone number of a qualified individual	ERAP - QI Info
(1)(ii)	The identity of individuals or organizations to be contacted in the event of a discharge	ERAP - Notifications
(1)(iii)	A description of information to pass to response personnel in the event of a reportable discharge	ERAP - Notifications
(1)(iv)	A description of the facility's response equipment and its location	ERAP - Facility Response Equip.
(1)(v)	A description of response personnel capabilities	ERAP - Local Response Team
(1)(vi)	Plans for evacuation of the Facility and a reference to community evacuation plans, as appropriate	ERAP - Evacuation Diagram
(1)(vii)	Plan Implementation - a description of immediate measures to secure the source of the discharge, and to provide adequate containment and drainage of spilled oil	ERAP - Initial Response Actions
(1)(viii)	A diagram of the facility	ERAP - Facility Diagram
(2)	***Facility information***	-----
	location and type of the facility	Fig 1.3
	the identity and tenure of the present owner and operator	Fig 1.3
	the identity of the qualified individual	Fig 1.3, 2.4
(3)	***Information about emergency response.***	-----
(3)(i)	The identity of private personnel and equipment	Fig 5.1
(3)(ii)	Evidence of contracts or other approved means for ensuring the availability of such personnel and equipment	App J
(3)(iii)	The identity and the telephone number of individuals or organizations to be contacted in the event of a discharge	Fig. 2.4, 2.5
(3)(iv)	A description of information to pass to response personnel	Fig 2.3
(3)(v)	A description of response personnel capabilities, including:	-----
	● duties of persons at the Facility during a response action	Fig 4.3, 4.4, App F
	● response times and qualifications...	§ 4.5, Fig 2.4
(3)(vi)	A description of the facility's response equipment including:	-----
	● location of the equipment	§ 5.2, App J, (Facility does maintain response equipment)
	● equipment testing	App G, (Facility does maintain response equipment)
(3)(vii)	Plans for evacuation of the Facility and a reference to community evacuation plans, as appropriate	App I
(3)(viii)	A diagram of evacuation routes	App I

U.S. EPA - OPA 90
40 CFR Part 112.20(h) Final Rule - July 17, 2002
CROSS REFERENCE

§ 112.20 (h)	BRIEF DESCRIPTION	LOCATION in PLAN
(3)(ix)	A description of the duties of the qualified individual that include	-----
(3)(ix)(A)	Activate internal alarms and hazard communications systems	§ 4.2
(3)(ix)(B)	Notify all response personnel, as needed	§ 4.2
(3)(ix)(C)	Identify the character, exact source, amount, and extent of release	§ 4.2
(3)(ix)(D)	Notify and provide necessary information to the appropriate Federal, State, and local authorities	§ 4.2
(3)(ix)(E)	Assess the interaction of the spilled substance with water and/or other substances stored at the Facility	§ 4.2
(3)(ix)(F)	Assess the possible hazards to human health and environment	§ 4.2
(3)(ix)(G)	Assess and implement prompt removal actions	§ 4.2
(3)(ix)(H)	Coordinate rescue and response actions	§ 4.2
(3)(ix)(I)	Use authority to immediately access company funding	§ 4.2
(3)(ix)(J)	Direct cleanup activities until properly relieved	§ 4.2
(4)	***Hazard evaluation***	-----
	Shall discuss the facility's known or reasonably identifiable history of discharges reportable under 40 CFR 110 for the entire life of the facility.	8.4
	identify areas within the facility where discharges could occur	§ 8
	what the potential effects would be on the affected environment	§ 8
(5)	***Response planning levels***	-----
(5)(i)	A worst case discharge, as calculated using the appropriate worksheet in appendix D	§ 1.2, § 7
(5)(ii)	(b) (7)(F), (b) (3) [redacted]	§ 1.2, § 7
(5)(iii)	[redacted]	§ 1.2, § 7
(6)	***Discharge detection systems*** ... Describe the procedures and equipment used to detect discharges	App L
(7)	***Plan implementation***	------
(7)(i)	Response actions to be carried out by facility personnel or contracted personnel	§ 3.1, Fig 3.1, 3.2, 3.3
(7)(ii)	A description of the equipment to be used for each scenario	App J, § 7
(7)(iii)	Plans to dispose of contaminated cleanup materials	Section 3.4, App D
(7)(iv)	Measures to provide adequate containment and drainage of spilled oil	§ 3.1, Fig 3.1, 3.3
(8)	***Self-inspection, drills/exercises and response training***	-----
(8)(i)	A checklist and record of inspection for:	-----
	● tanks	App G
	● secondary containment	App G
	● response equipment	Fig 5.2, (Facility does

U.S. EPA - OPA 90
40 CFR Part 112.20(h) Final Rule - July 17, 2002
CROSS REFERENCE

§ 112.20 (h)	BRIEF DESCRIPTION	LOCATION in PLAN
(8)(ii)	A description of the drill/exercise program to be carried out under the response plan as described in § 112.21	§ 4.6
(8)(iii)	A description of the training program to be carried out under the response plan as described in § 112.21	§ 4.5
(8((iv)	Logs of:	-----
	● discharge prevention meetings	App G
	● training sessions	App G
	● drills/exercises	App G
(9)	***Diagrams***	-----
	● site plan	Fig 1.2
	● drainage plan	Section 8
(10)	***Security systems.*** The review plan shall include a description of facility security systems.	App L
(11)	***Response plan cover sheet***	App B

§ 112.21	BRIEF DESCRIPTION	LOCATION in PLAN
(a)	Develop and implement a facility response training program and a drill/exercise program.	-----
(b)	Develop a facility response training program to train personnel involved in response activities.	§ 4.5
(b)(1)	Proper instruction of facility personnel in the procedures to respond to discharges of oil and in applicable oil spill response laws, rules, and regulations`	§ 4.5
(b)(2)	Training shall be functional in nature according to job tasks for both supervisory and non-supervisory operational personnel	§ 4.5
(b)(3)	Trainers shall develop specific lesson plans on subject areas relevant to facility personnel involved in oil spill response and cleanup	§ 4.5
(c)	Develop a program of facility response drills/exercises, including evaluation procedures. Can follow PREP.	§ 4.6

U.S. EPA - OPA 90
40 CFR Part 112.20(h) Final Rule - July 17, 2002
CROSS REFERENCE

Appendix F to Part 112	BRIEF DESCRIPTION	LOCATION in PLAN
1.0	***Model Facility-Specific Response Plan***	-----
1.1	***Emergency Response Action Plan***	-----
	1. Qualified Individual Information	ERAP - QI Info
	2. Emergency Notification Phone List	ERAP - Notifications
	3. Spill Response Notification Form	ERAP - Notifications
	4. Response Equipment List and Location	ERAP - Facility Response Equipment
	5. Response Equipment Testing and Deployment	ERAP - Facility Response Equipment
	6. Facility Response Team	ERAP - Local Response Team
	7. Evacuation Plan	ERAP - Evacuation Diagram
	8. Plan Implementation - Immediate Actions	ERAP - Initial Response Actions
	9. Facility Diagram	ERAP - Facility Diagram
1.2	***Facility Information***	-----
1.2.1	Facility name and location	Fig 1.3
1.2.2	Latitude and Longitude	Fig 1.3
1.2.3	Wellhead Protection Area	Fig 1.3
1.2.4	Owner/operator	Fig 1.3
1.2.5	Qualified Individual	Fig 1.3, 2.4
1.2.6	Date of Oil Storage Start-up	Fig 1.3
1.2.7	Current Operation	Fig 1.3, § 8
1.2.8	Dates and Types of Substantial Expansion	Fig 1.3
1.3	***Emergency Response Information***	-----
1.3.1	Notification	§ 2.0 (all)
1.3.2	Response Equipment List and Location of Equipment	Fig 5.1, App J
1.3.3	Response Equipment Testing/Deployment Drills	5.2 and App G, (Facility does maintain response equipment)
1.3.4	Facility Response Personnel	§ 4.3, 4.4 Fig 2.4, 2.5
1.3.5	Evacuation Plans	App I
1.3.6	Qualified Individual's Duties	§ 4.2
1.4	***Hazard Evaluation***	-----
1.4.1	Hazard Identification	§ 8
1.4.2	Vulnerability Analysis	§ 8
1.4.3	Analysis of the Potential for an Oil Spill	§ 8

U.S. EPA - OPA 90
40 CFR Part 112.20(h) Final Rule - July 17, 2002
CROSS REFERENCE

Appendix F to Part 112	BRIEF DESCRIPTION	LOCATION in PLAN
1.4.4	Facility Reportable Oil Spill History	§ 8
1.5	***Discharge Scenarios***	-----
1.5.1	Small and Medium Discharges	§ 7
1.5.2	Worst Case Discharge	§ 7
1.6	***Discharge Detection Systems***	-----
1.6.1	Discharge Detection by Personnel	App L
1.6.2	Automated Discharge Detection	App L
1.7	***Plan Implementation***	-----
1.7.1	Response Resources for Small, Medium, and Worst Case Spills	Fig 5.1, App J, § 7
1.7.2	Disposal Plans	Section 3.4, App D
1.7.3	Containment and Drainage Planning	§ 3.1, Fig 3.1, § 8
1.8	***Self-Inspection, Drills/Exercises, and Response Training***	-----
1.8.1	Facility Self-Inspection	App G
1.8.1.1	Tank Inspection	App G
1.8.1.2	Response Equipment Inspection	Fig 5.2 (Facility does maintain response equipment)
1.8.1.3	Secondary Containment Inspection	
1.8.2	Facility Drills/Exercises	§ 4.6
1.8.2.1	Qualified Individual Notification Drill Log	App G
1.8.2.2	Spill Management Team Tabletop Exercise Log	App G
1.8.3	Response Training	§ 4.5
1.8.3.1	Personnel Response Training Log	App G
1.8.3.2	Discharge Prevention Meeting Log	AppG
1.9	***Diagrams***	-----
	(1) Site Plan Diagram	Fig 1.2
	(2) Site Drainage Plan Diagram	§ 8
	(3) Site Evacuation Plan Diagram	App I
1.10	***Security***	App L
2.0	***Response Plan Cover Sheet***	App B
3.0	***Acronyms***	App N

U.S. COAST GUARD - OPA 90
33 CFR 154 Final Rule – June 25, 2001
CROSS REFERENCE

§ 154.1030	DESCRIPTION OF GUIDELINE ITEM	SECTION
General response plan contents.		
(a)	The plan must be written in English.	Entire Plan
(b)	A response plan must be divided into sections	-----
(b)(1)	Introduction and plan contents.	§ 1.1
(b)(2)	Emergency response action plan:	-----
(b)(2)(i)	Notification procedures.	ERAP, § 2.1, 2.2
(b)(2)(ii)	Facility's spill mitigation procedures.	ERAP, § 2.0, 3.0, 4.0
(b)(2)(iii)	Facility's response activities.	ERAP, § 3.1, Fig 3.1, 3.2
(b)(2)(iv)	Fish and wildlife and sensitive environments.	ERAP, § 6.0
(b)(2)(v)	Disposal plan.	App D
(b)(3)	Training and Exercises:	-----
(b)(3)(i)	Training procedures.	§ 4.5
(b)(3)(ii)	Exercise procedures.	§ 4.6
(b)(4)	Plan review and update procedures.	§ 1.3, 1.4
(b)(5)	Appendices.	-----
(b)(5)(i)	Facility-specific information.	§ 1, Fig 1.1, 1.2, 1.3
(b)(5)(ii)	List of contacts.	§ 2.1, 2.2, Fig 2.4, 2.5
(b)(5)(iii)	Equipment lists and records.	§ 5.1, 5.2, App J
(b)(5)(iv)	Communications plan	§ 5.6
(b)(5)(v)	Site-specific safety and health plan.	§ 4.7
(b)(5)(vi)	List of acronyms and definitions.	App N
(b)(5)(vii)	A geographic-specific appendix ... mobile facility operates.	-----
(c)	... contained in § 154.1035, 154.1040, and 154.1041, as appropriate.	-----
(d)	...information required in § 154.1035, 154.1040, and 154.1041...	-----
(e)	... cross-reference ...	TOC
(f)	... be consistent with the NCP and ACP ...	Entire Plan, Acknowledgement Page

U.S. COAST GUARD - OPA 90
33 CFR 154 Final Rule – June 25, 2001
CROSS REFERENCE

§ 154.1035	DESCRIPTION OF GUIDELINE ITEM	SECTION(S)
Specific requirements for facilities that could reasonable be expected to cause significant and substantial harm to the environment.		
(a)	*Introduction and plan content.*	§ 1.0
(a)(1)	The facility's name, street address, city, county, state, ZIP code, facility telephone number, and tele-facsimile number, if so equipped...	Fig 1.3
(a)(2)	The facility's location ...	Fig 1.1, 1.2, 1.3
(a)(3)	... name, address, and procedures ... owner or operator ... 24-hour basis.	Fig 1.3
(a)(4)	A table of contents.	Foreword
(a)(5)	... cross index	TOC
(a)(6)	A record of change(s) to record information and plan updates.	Foreword
(b)	*Emergency Response Action Plan*...	-----
(b)(1)	Notification procedures.	ERAP, § 2.1, 2.2
(b)(1)(i)	... a prioritized list identifying the person(s) ... to be notified of a discharge or substantial threat of a discharge of oil ...	§ 2.1, 2.2, Fig 2.1, 2.2, 2.3, 2.4,2.5 '4.2, 4.3, Fig 4.1
(b)(1)(i)(A)	Facility response personnel, and Spill Management Team, oil spill removal organizations, and the qualified individual(s) ...	§ 2.1, 2.2,Fig 2.4,2.5 Section 4.2, 4.3, 4.4, 5.1, 5.2, 5.3
(b)(1)(i)(B)	Federal, State, or local agencies, as required.	§ 2.2, Fig 2.5
(b)(1)(ii)	... a form, ... which contains information to be provided in the initial and follow-up notifications to Federal, State, and local agencies ...	Fig 2.3, App E
(b)(2)	Facility's spill mitigation procedures.	§ 3.1, Fig 3.1, 3.2,3.3
(b)(2)(i)	..describe the volume(s) and oil groups..	§ 1.2, 6.5, § 7, § 8,
(b)(2)(i)(A)...(D)	...discharges from the MTR facility ... non-transportation related...	§ 1.2, § 7
(b)(2)(ii)	... must contain prioritized procedures for facility personnel to mitigate or prevent any discharge or substantial threat of a discharge of oil ...	§ 1.2, 2.1, 2.2, Fig 2.1, 2.2 § 3.0, Fig 3.1, 3.2, § 7
(b)(2)(ii)(A)...(G)	... Typical scenarios....	§ 1.2, 3.0, Fig 3.1, 3.2, § 7
(b)(2)(iii)	... a listing of equipment and the responsibilities of facility personnel to mitigate an average most probable discharge.	§ 3.0, Fig 3.1, § 5.1, 5.2, 5.3, 5.4, Fig 5.1, App J, § 7

U.S. COAST GUARD - OPA 90
33 CFR 154 Final Rule – June 25, 2001
CROSS REFERENCE

(b)(3)	Facility's response activities.	-----
(b)(3)(i)	... a description of the facility personnel's responsibilities ... pending the arrival of the qualified individual.	§ 3.1, Fig 3.1, 4.2, 4.3, 5.1
(b)(3)(ii)	... a description of the responsibilities and authority of the qualified individual and alternate as required in § 154.1026.	§ 4.2
(b)(3)(iii)	... describe the corporate organizational structure that will be used to manage the response actions, including ...	§ 4.3 fig. 4.1, 4.2
(b)(3)(iii)(A)..(H)	Command and control...Public Information...Safety... Liaison...Operations...Planning...Logistics...Finance.	§ 4.3, 4.4, Fig 4.1, 4.2, App F
(b)(3)(iv)	... identify the oil spill removal organization(s) and the Spill Management Team ...	§ 4.0, 5.0, App F
(b)(3)(iv)(A)	Be capable of providing the following response resources:	-----
(b)(3)(iv)(A)(1)	Equipment and supplies to meet..§154.1045, § 154.1047 or...	§ 5.1, 5.2, 5.3, 5.4, Fig 5.1, App J,
(b)(3)(iv)(A)(2)	Trained personnel necessary to continue operation...first 7 days of the response.	Fig 2.4, 2.5, § 4.3, 4.4, 5.0, Fig 5.1
(b)(3)(iv)(B)	...job descriptions for each Spill Management Team member...	App F
(b)(3)(v)	For mobile facilities ... the oil spill removal organization and the Spill Management Team in the applicable geographic-specific appendix...	N/A
(b)(4)	Fish and wildlife and sensitive environments.	-----
(b)(4)(i)	...identify areas of economic importance and environmental sensitivity..	§ 6.0, Fig 6.1, 6.2, § 8
(b)(4)(ii)	For a worst case discharge...this section must...	-----
(b)(4)(ii)(A)	List all fish and wildlife and sensitive environments identified in the ACP... ...	§ 6.3, Fig 6.1, 6.2, § 8
(b)(4)(ii)(B)	Describe all the response actions ... to protect these fish and wildlife and sensitive environments...	§ 3.1, 6.0, Fig 3.1, 3.2,3.3
(b)(4)(ii)(C)	Contain a map or chart showing the location of those fish and wildlife and sensitive environments ...	Fig 6.2

U.S. COAST GUARD - OPA 90
33 CFR 154 Final Rule – June 25, 2001
CROSS REFERENCE

§ 154.1035	DESCRIPTION OF GUIDELINE ITEM	SECTION(S)
(b)(4)(iii)	For a worst case discharge, ... identify appropriate equipment and required personnel to protect these areas...	§ 3.1, 4.2, 4.4, 5.0, 6.0, App J
(b)(4)(iii)(A)	Identify the appropriate equipment and required personnel to protect all fish and wildlife and sensitive environments ...	§ 2.0, 3.0, 4.0, 5.0, 6.0
(b)(4)(iii)(B)	Calculate the distances required by...by selecting one method described...	-----
(b)(4)(iii)(B)(1)	Distances calculated...	§ 7
(b)(4)(iii)(B)(2)	A spill trajectory or model may be substituted for distances...	-----
(b)(4)(iii)(B)(3)	The procedures contained in the Environmental Protection Agency's regulations...may be substituted for distances...	-----
(b)(4)(iii)(C)	Based on historical...COTP may require the additional fish and wildlife and sensitive environments	-----
(b)(5)	Disposal plan ...describe any actions to be taken or procedures to be used to ensure that all recovered oil and oil contaminated debris ...	App D
(c)	*Training and exercises.* To be divided into the following subsections:	-----
(c)(1)	Training procedures. ..must describe the training procedures ..	§ 4.5
(c)(2)	Exercise procedures. ... must describe the exercise program ...	§ 4.6
(d)	*Plan review and update procedures.* ... address the procedures ...	§ 1.3, 1.4
(e)	*Appendices.* ...must include appendices described...	-----
(e)(1)	Facility-specific information.. ... principal characteristics ...	-----
(e)(1)(i)	There must be a physical description of the facility...	Fig 1.2, 1.3, § 8
(e)(1)(ii)	...must identify the sizes, types, and number of vessels...	Fig 1.3, § 8
(e)(1)(iii)	...must identify the first valve(s) ...inside the secondary containment...	Fig 1.2, 1.3, Section 8

U.S. COAST GUARD - OPA 90
33 CFR 154 Final Rule – June 25, 2001
CROSS REFERENCE

§ 154.1035	DESCRIPTION OF GUIDELINE ITEM	SECTION(S)
(e)(1)(iv)	...must contain information on the oil(s) and hazardous material...	Fig 1.3 § 3.1, Fig 3.1, 3.2, MSDS at Facility
(e)(1)(iv)(A)	The generic or chemical name	Fig 1.3, § 3.1, Fig 3.1, 3.2, Section 8 MSDS at Facility
(e)(1)(iv)(B)	A description of the appearance and odor	Fig 1.3 § 3.1, Fig 3.1, 3.2, MSDS at Facility
(e)(1)(iv)(C)	The physical and chemical characteristics	Fig 1.3 § 3.1, Fig 3.1, 3.2, MSDS at Facility
(e)(1)(iv)(D)	The hazards involved in handling the oil(s) and hazardous...	Fig 1.3 § 3.1, Fig 3.1, 3.2, MSDS at Facility
(e)(1)(iv)(E)	A list of firefighting procedures and extinguishing agents effective with fires involving the oil(s) and hazardous materials	Fig 1.3 § 3.1, Fig 3.1, 3.2, MSDS at Facility
(e)(1)(v)	The appendix may contain any other information which the facility owner or operator determines to be pertinent...	-----
(e)(2)	List of contacts...	-----
(e)(2)(i)	The primary and alternate qualified individual(s) for the facility;	Fig 1.3, 2.4
(e)(2)(ii)	The contact(s) ... for activation of the response resources; and	Fig 1.3, 2.2, 2.5
(e)(2)(iii)	Appropriate Federal, State, and local officials.	Fig 2.5
(e)(3)	Equipment list and records. ... must include ...	-----
(e)(3)(i)	...list of equipment ... average most probable	§ 5.1, 5.2, App J
(e)(3)(ii)	...detailed listing of all the major equipment identified in the plan as belonging to an oil spill removal organization(s)...	§ 5.0, Fig 5.1, App J
(e)(3)(iii)	It is not necessary to list response equipment from oil spill removal organization(s) ... classified by the Coast Guard ... When it is necessary ... the list must include for each piece of equipment -	-----

U.S. COAST GUARD - OPA 90
33 CFR 154 Final Rule – June 25, 2001
CROSS REFERENCE

§ 154.1035	DESCRIPTION OF GUIDELINE ITEM	SECTION(S)
(e)(3)(iii)(A)	The type, make, model, and year of manufacture ... of the equipment;	N/A
(e)(3)(iii)(B)	For oil recovery devices, the effective daily recovery rate ...	N/A
(e)(3)(iii)(C)	For containment boom, ...height and type of end connectors;	N/A
(e)(3)(iii)(D)	The spill scenario in which the equipment will be used ...	N/A
(e)(3)(iii)(E)	The total daily capacity for storage and disposal of recovered oil;	N/A
(e)(3)(iii)(F)	For communication equipment, the type and amount of equipment ...	N/A
(e)(3)(iii)(G)	Location of the equipment; and	N/A
(e)(3)(iii)(H)	The date of the last inspection by the oil spill removal organization(s).	N/A
(e)(4)	*Communications plan* ...	§ 2.0, 4.0, 5.6
(e)(5)	*Site-specific safety and health plan* ...	§ 4.7
(e)(6)	*List of acronyms and definitions* ...	App N

U.S. COAST GUARD - OPA 90
33 CFR 154 Final Rule – June 25, 2001
CROSS REFERENCE

§ 154.1045	DESCRIPTION OF GUIDELINE ITEM	SECTION
Response plan development and evaluation criteria for facilities that handle, store, or transport Group I through Group IV petroleum oils.		
(a)	...facility that handles...Group I through Group IV petroleum oils..	-----
(a)(1)	..criteria in Table 1 ...identification of appropriate equipment..	-----
(a)(2)	...resources must be evaluated...including, but not limited to -	-----
(a)(2)(i)...(v)	Ice conditions; Debris; ... other appropriate....	-----
(a)(3(i)..(ii)	The COTP may reclassify a specific body of water or location ...	-----
(b)(1)...(3)	Response equipment must ---	App J, Section 7
(c)	...identify response resources...average most probable discharge...	§ 5.0, Fig 5.1, App J, Section 7
(c)(1)	1,000 feet of containment boom or two times the length of the largest vessel ... and the means of deploying and anchoring the boom ... within 1 hour of the detection of a spill;	§ 5.0, Fig 5.1, App J, Section 7
(c)(2)	...recovery devices and oil storage capacity ... within 2 hours ...	§ 5.0, Fig 5.1, App J, Section 7
(d)	... identify response resources ... maximum most probable discharge...	§ 5.0, Fig 5.1, App J, Section 7
(d)(1)	... include sufficient containment boom, oil recovery devices, and storage capacity for any recovery of up to the maximum most probable discharge planning volume...	App J, Section 7
(d)(2)	... resources must be appropriate for each group of oil ...	§ 5.0, App J, Section 7
(d)(3)	... must be positioned ... arrive ... scene of a discharge ...	-----
(d)(3)(i)	... within the specified times ...	Fig 5.1, App J
(d)(3)(ii)	In higher volume port areas ... within 6 hours ...	N/A
(d)(3)(iii)	In all other locations, ... within 12 hours ...	Fig 5.1, App J
(d)(4)	... COTP may impose additional operational restrictions ...	-----
(e)	... identify the response resources ... worst case discharge ...	§ 5.0, Fig 5.1, App J, Section 7
(e)(1)	The location must be suitable to meet the response times identified..	§ 5.0, App J, Section 7
(e)(2)	The response resources must be appropriate for ---	-----
(e)(2)(i)	The volume of the facility's worst case discharge;	App J, Section 7
(e)(2)(ii)	Group(s) of oil...handled, stored or transported by the facility; and	App J, Section 7

U.S. COAST GUARD - OPA 90
33 CFR 154 Final Rule – June 25, 2001
CROSS REFERENCE

§ 154.1045	DESCRIPTION OF GUIDELINE ITEM	SECTION
(e)(2)(iii)	The geographic area(s) in which the facility operates.	App J, § 7
(e)(3)	... sufficient boom, oil recovery devices, and storage capacity to recover the worst case discharge planning volumes.	§ 5.0, App J, § 7
(e)(4)	... quantity of response resources ... to respond ... to the worst case discharge to the maximum extent practicable.	§ 5.0, App J, §7
(e)(5)	... The following percentages of the response equipment ... must be capable of operating in waters of 6 feet or less depth.	-----
(e)(5)(i)	Offshore - 10 percent.	N/A
(e)(5)(ii)	Nearshore/inland/Great Lakes/rivers and canals - 20 percent.	§ 5.0, § 7
(e)(6)	... COTP may impose additional operational restrictions ...	-----
(f)	Response equipment ... must be capable of arriving on scene within the times specified in this paragraph ...	§ 5.0, App J, § 7
(g)	... response equipment identified for Level 1 plan credit must be capable of being mobilized and en route to the scene of a discharge within 2 hours of notification ...	§ 5.0, App J, § 7
(g)(1)	Either directly or through the qualified individual; and	§ 4.2, App J, § 7
(g)(2)	Within 30 minutes of a discovery ...	App J, Section 7
(h)	Response resources identified for Level 2 and Level 3 plan credit must be capable of arriving on scene within the time specified ...	App J, Section 7
(i)	... a facility that is located in any environment with year-round preapproval for use of dispersants, ... Group II or III persistent petroleum oils, may request a credit for up to 25 percent ...	N/A
(j)	... identify response resources with firefighting capability ...	Fig 1.2, 2.4, 2.5, Sect. 5.0
(k)	... identify equipment and required personnel ... to protect fish and wildlife and sensitive environments.	§ 5.0, App J
(k)(1)	... the identified response resources must include the quantities of boom sufficient to protect	§ 5.0, App J
(k)(2)	... resources and response methods ... must be consistent with the ... ACP in effect 6 months prior to initial plan submission or the annual plan review ...	§ 1.5, 3.1, 6.0, App J
(l)	The response plan for a facility that handles, stores, or transports Groups I through IV petroleum oils must identify an oil spill removal organization(s) with response resources that are available...	§ 5.0, Fig 5.1, App J

U.S. COAST GUARD - OPA 90
33 CFR 154 Final Rule – June 25, 2001
CROSS REFERENCE

§ 154.1045	DESCRIPTION OF GUIDELINE ITEM	SECTION
(l)(1)	Except as required in paragraph (l)(2) ... shoreline clean-up response resources required must be determined as described in Appendix C of this part.	§ 5.0, App J, Section 7
(l)(2)	... resources and response methods ... must be consistent with the ... ACP in effect 6 months prior to initial plan submission or the annual plan review ...	§ 1.5, 3.1, 6.0, App J
(m)	Appendix C ... quantity of response resources ... for the maximum most probable discharge volume, and for each worst case discharge response level.	App J, § 7
(m)(1)	Included in Appendix C of this part is a cap that recognizes the practical and technical limits of response capabilities ...	§ 7
(m)(2)	... Appendix C of this part lists the caps that will apply in ... February 18, 1998. ...facility whose estimated recovery capacity exceeds ... caps ... shall identify sources of additional equipment equal to twice the cap ... or the amount necessary to reach the calculated planning volume, whichever is lower.	§ 7
(n)(1)...(2)	The Coast Guard will initiate a review of cap increases and other requirements contained within this subpart ...	------

U.S. COAST GUARD - OPA 90
33 CFR 154 Final Rule – June 25, 2001
CROSS REFERENCE

§ 154.1047	BRIEF DESCRIPTION	SECTION
Response plan development and evaluation criteria for facilities that handle, store or transport Group V petroleum oils.		
(a)	…facility that handles…Group V petroleum oils	-----
(a)(1)	Procedures and strategies for responding to a worst case discharge…to the maximum extent practicable	Appendix H
(a)(2)	Sources of equipment and supplies necessary to locate, recover, and mitigate such a discharge	Appendix H
(b)	…ensure that any equipment identified…iscapable of operating in the conditions expected I the geographic area…	Appendix H
(b)(1)…(4)	Ice conditions-Debris-Temperature-Visibility	-----
(c)	…equipment must include…	-----
(c)(1)	Sonar sampling equipment, or other methods for locating the petroleum oil on the bottom or suspended in the water column	Appendix J
(c)(2)	Containment boom, sorbent boom, silt curtains, or other methods for containing the petroleum oil that may remain floating on the surface or to reduce spreading on the bottom	Appendix J
(c)(3)	Dredges, pumps, or other equipment necessary to recover petroleum oil from the bottom and shoreline	Appendix J
(c)(4)	Equipment necessary to assess the impact of such discharge; and	Appendix J
(c)(5)	Other equipment necessary to respond to a discharge involving the type of petroleum oil handled, stored or transported.	Appendix J
(d)	Response resources… (for) Group V…oil…must be capable of being at the spill site within 24 hours…	Appendix J
(e)	…must identify response resources with firefighting capability…must identify and ensure …the availability of adequate firefighting resources…just also identify an individual located at the facility to work with the fire department…	Fig 1.2, 2.5, Sect. 5.0

DOT/PHMSA 49 CFR Part 194
Interim Final Rule – February 23, 2005
CROSS REFERENCE

§ 194.105	BRIEF DESCRIPTION	LOCATION in PLAN
(a)	... determine the worst case discharge ... provide methodology, including calculations, used to arrive at the volume.	§ 1.2, Fig 1.3, § 7, § 8
(b)	The worst case discharge is the largest volume, in barrels, of the following:	-----
(b)(1)	... maximum release time in hours, plus the maximum shutdown response time in hours, multiplied by the maximum flow rate expressed in barrels per hour, plus the largest line drainage volume after shutdown of the line section(s) ...	Fig 1.3, § 7, § 8
(b)(2)	The largest foreseeable discharge for the line section(s) within a response zone, expressed in barrels, based on the maximum historic discharge, if one exists, adjusted for any subsequent corrective or preventative action taken.	Fig 1.3, § 7, § 8
(b)(3)	If the response zone contains one or more breakout tanks, the capacity of the single largest tank or battery of tanks within a single secondary containment system, adjusted for the capacity or size of the secondary containment system, expressed in barrels.	N/A

DOT/PHMSA 49 CFR Part 194
Interim Final Rule – February 23, 2005
CROSS REFERENCE

§ 194.107	BRIEF DESCRIPTION	LOCATION in PLAN
(a)	Each response plan must plan for resources for responding, to the maximum extent practicable, to a worst case discharge, and to a substantial threat of such a discharge.	§5.0, Fig 5.1, App J, Section 7
(b)	Each response plan must be consistent with the NCP and each applicable ACP. An operator must certify that it has reviewed the NCP and each applicable ACP and that the response plan is consistent with the existing NCP and each existing applicable ACP.	Ack & Plan Approval, § 1.5
(b)(1)	As a minimum to be consistent with the NCP a facility response plan must:	---
(b)(1)(i)	Demonstrate…clear understanding of the function of the Federal response structure, including procedures to notify the National response Center reflecting the relationship between the operator's response organization's role and the Federal on scene Coordinator's role in pollution response;	Fig. 2.3, 2.4 Sect. 4.3, App M
(b)(1)(ii)	Establish provisions to ensure the protection of safety at the response site; and	Sect. 3.1, 3.6, 4.8
(b)(1)(iii)	Identify the procedures to obtain any required Federal and State permissions for using alternative response strategies such as in-situ burning and dispersants as provided for in the applicable ACPs; and	Section 3.5, 6.8
(b)(2)	As a minimum, to be consistent with the applicable ACP the plan must	---
(b)(2)(i)	Address the removal of a worst case discharge and the mitigation or prevention of a substantial threat of a worst case discharge	Sect 6.0 Section 8
(b)(2)(ii)	Identify environmentally and economically sensitive areas;	Sect. 6.0, Fig 6.2
(b)(2)(iii)	Describe the responsibilities of the operator and of Federal, State, and local agencies in removing a discharge and in mitigating or preventing a substantial threat of a discharge; and	Section 1.1, 8, App F, J, M
(b)(2)(iv)	Establish the procedures for obtaining an expedited decision on use of dispersant or other chemicals	Sect 6.8, App M
(c)	Each response plan must include:	-----
(c)(1)	A core plan consisting of --	-----
(c)(1)(I)	An information summary as required in ' 194.113.	Fig 1.3
(c)(1)(ii)	Immediate notification procedures.	§ 2.0
(c)(1)(iii)	Spill detection and mitigation procedures.	§ 3.0, App L
(c)(1)(iv)	The name, address, and telephone number of the oil spill response organization, if appropriate.	Fig 2.5, Fig 5.1, App J
(c)(1)(v)	Response activities and response resources.	§ 3.0, 5.0, Fig 5.1, App J
(c)(1)(vi)	Names and telephone numbers of Federal, state, and local agencies which the operator expects to have pollution control responsibilities or support.	§ 2.2, Fig. 2.5
(c)(1)(vii)	Training procedures.	§ 4.5
(c)(1)(viii)	Equipment testing.	§ 5.1, App J
(c)(1)(ix)	Drill program…by following PREP guidelines (or) a program that is equivalent to PREP. The operator must describe the drill program in the response plan…	§ 4.6
(c)(1)(x)	Plan review and update procedures.	§ 1.4
(c)(2)	An appendix for each response zone. Each response zone appendix must include the information required in paragraph (d)(1) (I) to (ix) of this section that is specific to the response zone and the worst case discharge calculations.	Fig 1.3

DOT/PHMSA 49 CFR Part 194
Interim Final Rule – February 23, 2005
CROSS REFERENCE

§ 194.113	BRIEF DESCRIPTION	LOCATION in PLAN
(a)	The information summary for the core plan, required by ' 194.107, must include:	-----
(a)(1)	The name and address of the operator.	Fig 1.3
(a)(2)	For each response zone which contains one or more line sections that meet the criteria for determining significant and substantial harm as described in ' 194.103, a listing and description of the response zones, including county(s) and state(s).	Fig 1.3, § 7
(b)	The information summary for the response zone appendix, required in ' 194.107, must include:	-----
(b)(1)	The information summary for the core plan.	Fig 1.3
(b)(2)	The name and telephone number of the qualified individual available on a 24-hour basis.	Fig 1.3
(b)(3)	The description of the response zone, including county(s) and state(s), for those zones in which a worst case discharge could cause substantial harm to the environment.	Fig 1.3
(b)(4)	A list of line sections for each pipeline contained in the response zone, identified by milepost or survey station number, or other operator designation.	Fig 1.3
(b)(5)	The basis for the operator's determination of significant and substantial harm.	Fig 1.3
(b)(6)	The type of oil and volume of the worst case discharge.	Fig 1.3

§ 194.115	BRIEF DESCRIPTION	LOCATION in PLAN
(a)	Each operator shall identify and ensure, by contract or other approved means, the resources necessary to remove, to the maximum extent practicable, a worst case discharge and to mitigate or prevent a substantial threat of a worst case discharge.	§ 5.0, Fig 5.1, App J, § 7
(b)	An operator shall identify in the response plan the response resources which are available to respond within the time specified, after discovery of a worst case discharge, or to mitigate the substantial threat of such a discharge.	§ 5.0, Fig 5.1, App J, § 7

§ 194.117	BRIEF DESCRIPTION	LOCATION in PLAN
(a)	Each operator shall conduct training to ensure that:	-----
(a)(1)	All personnel know --	-----
(a)(1)(I)	Their responsibilities under the response plan	§ 4.5
(a)(1)(ii)	The name and address of, and the procedure for contacting, the operator on a 24-hour basis	Fig 1.3 § 2.0, Fig 2.4
(a)(1)(iii)	The name of, and procedures for contacting, the qualified individual on a 24-hour basis	§ 2.0, Fig 1.3, Fig. 2.4
(a)(2)	Reporting personnel know --	-----
(a)(2)(I)	The content of the information summary of the response plan.	Fig 1.3
(a)(2)(ii)	The toll-free telephone number of the National Response Center	Fig. 2.5
(a)(2)(iii)	The notification process	§ 2.0

DOT/PHMSA 49 CFR Part 194
Interim Final Rule – February 23, 2005
CROSS REFERENCE

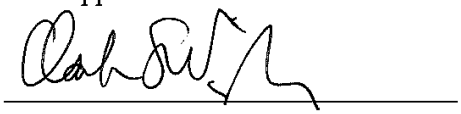
§ 194.117	BRIEF DESCRIPTION	LOCATION in PLAN
(a)(3)	Personnel engaged in response activities know --	-----
(a)(3)(I)	The characteristics and hazards of the oil discharged	Fig 3.2, Toledo Refining Company, LLC Online MSDS System (CHIPS), yearly CBT training modules, and Section 8
(a)(3)(ii)	The conditions that are likely to worsen emergencies, including the consequences of facility malfunctions or failures, and the appropriate corrective actions.	§ 3.0, Section 8
(a)(3)(iii)	The steps necessary to control any accidental discharge of oil and to minimize the potential for fire, explosion, toxicity, or environmental damage	§ 3.0
(a)(3)(iv)	The proper firefighting procedures and use of equipment, fire suits, and breathing apparatus	§ 1.2, 2.0, 3.0
(b)	Each operator shall maintain a training record for each individual that has been trained as required by this section. Theses records must be maintained in the following manner as long as the individual is assigned duties under the response plan	-----
(b)(1)	Records for operator personnel must be maintained at the operator's headquarters	§ 4.5
(b)(2)	Records for personnel engaged in response, other than operator personnel, shall be maintained as determined by the operator.	§ 4.5
(b)(3)	Nothing in this section relieves an operator from the responsibility to ensure that all response personnel are trained to meet the OSHA standards for emergency response operations in 29 CFR 1910.120 ...	§ 4.5

FACILITY RESPONSE PLAN

ACKNOWLEDGMENT AND PLAN APPROVAL

The information and procedures in this Plan must be treated as guidelines only. The user should determine to what extent it is practical and advisable to follow them. This decision may involve considerations not discussed in this Plan.

The information and procedures contained herein are considered to be accurate as of this date and are consistent with the National Contingency Plan (NCP) and applicable Area Contingency Plans (ACP).

Plan Approved: 

Date: April 28, 2014

Clark Wrigley
Refinery Manager
Toledo Refining Company, LLC

FACILITY RESPONSE PLAN

CERTIFICATION OF QUALIFIED INDIVIDUAL AND ALTERNATE QUALIFIED INDIVIDUAL

Toledo Refining Company, LLC hereby certifies to the Coast Guard, Environmental Protection Agency and the Department of Transportation that the individuals identified as Qualified Individual and Alternate Qualified Individual in this plan have the full authority in accordance with the applicable federal regulations and this plan to:

1. Activated and engage in contacting the oil spill removal organizations;
2. Act as liaison with the pre-designated Federal On-Scene Coordinator (FOSC), and;
3. Obligate funds required to carry out response activities.

April 28, 2014
Date

Clark Wrigley, Refinery Manager

STATE OF OHIO

COUTY OF LUCAS

This Certification of Qualified Individual and Alternate Qualified Individual was acknowledged before me on April 28, 2014 by CLARK WRIGLEY, Refinery Manager of Toledo Refining Company, LLC on behalf of said corporation

My Commission expires JAMES M. SCIARINI
Attorney at Law
Notary Public, State of Ohio
My Commission Has No Expiration Date.

FACILITY RESPONSE PLAN

CERTIFICATION OF RESPONSE PREPAREDNESS

Toledo Refining Company, LLC hereby certifies to the Pipeline and Hazardous Materials Safety Administration of the Department of Transportation that it had identified, and ensured by contract, or other means approved by the Pipeline and Hazardous Materials Safety Administration, the availability of private personnel and equipment to response, to the maximum extent practicable, to a worst case discharge or a substantial threat of such a discharge.

May 12, 2014
Date

Clark Wrigley, Refinery Manager

STATE OF OHIO

COUTY OF LUCAS

This Certification of Response Preparedness was acknowledged before me on,

May 12, 2014 by CLARK WRIGLEY,

Refinery Manager of Toledo Refining Company, LLC on behalf of said corporation

My Commission expires

[illegible] M. SCIARINI
Attorney at Law
Notary Public, State of Ohio
My Commission Has No Expiration Date.

FACILITY RESPONSE PLAN

REVISION RECORD

Note: It is the responsibility of the holder of this plan to insure that all changes and updates are made. The holder shall:

- Remove and Discard obsolete pages
- Replace obsolete pages with the updated pages.
- Record each revision on this form

Change Date	***Affected Page Numbers (s)***	***Description of Changes (s)***	***Name***
April, 2014	All manuals	Initial Version*	Elmer Dunberger

* Initial Version for Toledo Refining Company LLC with a Facility Response for each facility (Marine Terminal/Hocking Valley Dock, Tank Farm No. 2, and Main Refinery) within the Toledo Refining Company, LLC.

FACILITY RESPONSE PLAN

REVISION RECORD SIGNATURE PAGE

The following acknowledge they have reviewed the revisions, as noted on the revision record page.

_____	_____
Health, Safety & Security Lead	Date
_____	_____
Environmental Lead	Date
_____	_____
Emergency Response/Security Lead	Date
_____	_____
OPA 90 Responsible Person	Date

FACILITY RESPONSE PLAN

Distribution List

NOTE: The Distribution of this Plan is controlled by the Copy Number located on the front cover and title page. Plan Distribution Procedures are provided in Section 1.3 and the Plan Review and Update Procedures are provided in Section 1.4 and should be followed when making any and all changes.

COPY NUMBER	***PLAN HOLDER***	***LOCATION***
1. Volume 1, 2 and 3	Toledo Refining Company, LLC HR Conference Room 1819 Woodville Rd Oregon, OH 43616	Oregon, OH
2. Volume 1, 2 and 3	Toledo Refining Company, LLC Security Dispactch – Gate 1 1819 Woodville Rd Oregon, OH 43616	Oregon, OH
3. Volume 2	Toledo Refining Company, LLC Operator's office – Tank Farm #2 2200 Pickle Rd Oregon, OH 43616	Oregon, OH
4. Volume 3	Toledo Refining Company, LLC Operator's office – Marine Terminal 1900-2100 Front Street Toledo, OH 43605.	Oregon, OH
5. Volume 1,2 and 3	Toledo Refining Company, LLC Environmental Department 1819 Woodville Rd Oregon, OH 43616	Oregon, OH
6. Volume 1, 2 and 3	Toledo Refining Company, LLC FSS Office 1819 Woodville Rd Oregon, OH 43616	Oregon, OH
7. Volume 1, 2 and 3	Toledo Refining Company, LLC Laboratory Conference Room 1819 Woodville Rd Oregon, OH 43616	Oregon, OH
8. Volume 1, 2 and 3	FRP Coordinator U. S. EPA – Region 5 77 W. Jackson Boulevard, SE-5J Chicago, Illinois 60604	Chicago, IL
9. Volume 1, 2 and 3	Pipeline Response Plans Officer Pipeline and Hazardous Material Safety Administration 1200 New Jersey Avenue, SE.,. Washington, D.C. 20590-0001	Washington, D.C.
10. Volume 1, 2 and 3	U.S. Coast Guard Marine Safety Office 420 Madison - Suite 700 Toledo, OH 43604	Toledo, OH

Emergency Response Action Plan (ERAP)

Qualified Individual Information

(Section 1.2)

Figure 1.4

Qualified Individual and Alternates						
NAME	**RESPONSE TIME**	**ROLE**	**TRAINING LEVEL**	**OFFICE**	**HOME**	**OTHER**
Elmer Dunberger – Supervisor of Security & Emergency Response	10 minutes	Qualified Individual	40 Hrs. HAZWOPR 8 Hrs. Annual	419-698-6669	(b) (6)	
Keith A Dempsey- Emergency Response and Security Shift Supervisor	10 minutes	Alt. Qualified Individual	Annual	419-698-6663		
Ed Donnelly- Emergency Response and Security Shift Supervisor	10 minutes	Alt. Qualified Individual	Annual	419-698-6663		
Phil Wojcinski- Emergency Response and Security Shift Supervisor	10 minutes	Alt. Qualified Individual	Annual	419-698-6663		
Ken Adams- Emergency Response and Security Shift Supervisor	10 minutes	Alt. Qualified Individual	Annual	419-698-6663		
Kevin Kennedy-Emergency Response and Security Shift Supervisor	10 minutes	Alt. Qualified Individual	Annual	419-698-6663		

Emergency Notification List

(Section 1.3.1)

EXTERNAL NOTIFICATION REFERENCES - FIGURE 2.5

EXTERNAL NOTIFICATIONS			
AGENCY	**LOCATION**	**OFFICE**	**ALTERNATE**
National Response Center (NRC)	Washington, D.C.	(800) 424-8802	(202) 267-2675
Ohio EPA Office of Emergency Response (SERC)	Columbus, OH	(800) 282-9378 (In state)	(614) 224-0946
Lucas County (LEPC)	Toledo, OH	(419) 936-3550 (24 Hrs.)	
Ohio State Fire Marshall	Reynoldsburg, OH	(888) 252-0803	(614) 752-8200
OSHA (For Reportable Injury or Death)	Washington, D.C.	(800) 321-6742	
U.S. Environmental Protection Agency (EPA) Region V	Chicago, IL	(312) 353-2318 (24 Hrs.)	(312) 353-2000
U.S. Coast Guard, MSO	Toledo, OH	(419) 418-6050	313-568-9560
U. S. Fish and Wildlife Service (USFWS) Region III	Twin Cities, MN	(978) 281-9328 ext. 6506	
National Marine Fisheries Service, N.E. Region	Gloucester, MA	(978) 281-9300	
Toledo Division of Environmental Services	Toledo, OH	(419) 936-3015	(419) 245-1000
State Highway Patrol	Hamilton, OH	(513) 863-4606	
Ohio State Police	Toledo, OH	(419) 865-5544	
National Weather Service (Recorded Forecasts)	Toledo, OH	(216) 265-2370	
Toledo Water Treatment Plant	Toledo, OH	(419) 936-3021	
TV - Channel 13	Toledo, OH	(419) 531-1313	
TV - Channel 24	Toledo, OH	(419) 535-0024	
TV - Channel 11	Toledo, OH	(419) 248-1111	
TV - Channel 36	Toledo, OH	(419) 244-3600	
Radio - WSPD/WLQR	Toledo, OH	(419) 244-8321	
Radio - K-100	Toledo, OH	(419) 385-6397	
Radio - WGTE FM 91	Toledo, OH	(419) 380-4600	
Radio - WRQN	Toledo, OH	(419) 240-1935	
BP Toledo Refinery (main gate)	Toledo, OH	(419) 698-6451	(419) 698-6400 (Switchboard)
Toledo Public Utilities Dept. (water intakes)	Toledo, OH	(419) 936-3021	(419) 936-3067

EXTERNAL NOTIFICATION REFERENCES - FIGURE 2.5 Cont'd

LOCAL EMERGENCY SERVICES (DIAL 911 for All Police, Fire, and Ambulance Emergencies)			
SERVICE	**LOCATION**	**OFFICE**	**ALTERNATE**
Local Emergency Planning Committee	Toledo, OH	(419) 936-3550 (24 Hrs.)	
Oregon Fire Department	Oregon, OH	(419) 691-5787 (24 Hrs.)	
Toledo Fire / Rescue	Toledo, OH	(419) 245-1180 (24 Hrs.)	
St. Charles Hospital	Toledo, OH	(419) 696-7200	(419) 696-7300 ER
Local Water Supply System	Oregon, OH	(419) 698-7039	(419) 698-7064
	Toledo, OH	(419) 936-3021	(419) 936-3067
Bay Park Community Hospital	Toledo, OH	(419) 690-7900	(419) 690-7911 ER
St. Vincent Mercy Medical Center	Toledo, OH	(419) 251-4200	(419) 251-4354 ER

USCG CLASSIFIED OIL SPILL REMOVAL ORGANIZATIONS (OSRO) *				
COMPANY	**RESPONSE TIME**	**LOCATION**	**OFFICE**	**ALTERNATE**
Heritage Environmental Services	1 to 2 hours	Toledo, OH	419-729-1321 (24 Hrs)	
NRC-National Response Corporation	1 to 2 hours	Great River, NY	(800) 899-4672 (24 Hrs)	(631) 224-9141

ADDITIONAL RESPONSE RESOURCES				
COMPANY	**RESPONSE TIME**	**LOCATION**	**OFFICE**	**ALTERNATE**
Nature's Nursery	1 hour	Whitehouse, OH	419 877-0060	
C&W Tank Cleaning Company	1 hour	Oregon, OH	(419) 691-1995 (24 Hrs.)	(419) 466-5493
EQ	2 to 3 hours	Ypsilanti, MI	(800) 839-3975 (24Hrs)	(419)-346-0795
International Bird Rescue Center	24 hours to 48 hours	Berkeley, CA	(707) 207-0380	
Tri-State Bird Rescue	24 hours to 48 hours	Newark, DE	(302) 737-7241	(800) 710-0695 PGR (800) 710-0696 PGR

*** Note: Toledo Refining Co is also a member of the Northwest Ohio and Michigan Mutual Assistance District (419) 245-1180**

Spill Response Notification Form

(Section 1.3.1)

Information on Discharge*
Facility: _____

(A) Reporting Party	(B) Suspected Responsible Party
Name:	Name:
Phone:	Phone:
Job Position:	
Company:	Company:
Address:	Organization Type: ☐ Private Citizen ☐ Private Enterprise ☐ Public Utility ☐ Local Government ☐ State Government ☐ Federal Government
City:	City:
State:	State:
Zip:	Zip:
Were materials discharged: ☐ Yes ☐ No	
Calling for Responsible Party: ☐ Yes ☐ No	
Date and Time of report call:	
Other Notifications : ☐ USCG ☐ EPA ☐ State ☐ Other:	

- It is not necessary to wait for all information before calling the National Response Center (NRC) 1-800 424-8802 or direct telephone: 202-267-2675

Incident Description			
Source and /or Cause of incident:			
Date of Incident:	Time of Incident:		
Incident Address/Location Nearest City/Distance from City/Township Range Borough:			
Storage Tank Container: Above Ground: ☐ Below ground: ☐ Other: ☐			
Container capacity (bbls):			
Facility Capacity			
Tank Capacity (bbls):	Latitude:	Longitude:	River Mile:

Information on Discharge*
Facility: _____

Materials	
Material Discharged:	
Quantity in water: (include units)	
Response Action	
Actions Taken to Correct or Mitigate Incident:	
Impact	
Number of Injuries:	Number of Fatalities:
Evacuations required: ☐ Yes ☐ No ☐ Unknown	If Yes: Number Evacuated:
Any Damage: ☐ Yes ☐ No ☐ Unknown	If Yes: Damage in Dollars:
Additional Information	

Response Equipment List and Location

(Section 1.3.2)

FIGURE 5.2

FACILITY RESPONSE EQUIPMENT *

ITEM	LOCATION	QTY	WRHS CODE	INSPECTOR	DATE	COMMENTS
American Boom & Barrier Containment Boom	Refinery Fire Dept.	Sections totaling 700’	N/A			
Sea Arc 18’, 1994 with 100 HP evinrude and accessories: rope, life jackets, tow bridals, anchors (Boat 492)	Refinery Fire Dept.	1 each	N/A			
Sea Arc 26’, 1991 with (2) 100 HP evinrude and accessories: rope, life jackets, tow bridals, anchors, (400’) containment boom (Boat 491)	Refinery FD/Harrison Marina	1 each	N/A			
Containment Boom	HVD	900’	26-086-061			
Absorbent Boom	Refinery #2 Storehouse Area 217	10 bags; 4 - 10’ sections each	26-086-066			
Absorbent Pads	Refinery #1 Storehouse Area 12161	8 packs	26-086-063			
Creek Boom Trailer	Refinery FD	500’ Creek Boom	N/A			
Spill Control Trailer *	Refinery Fire Dept.	Inventory Attached	N/A			
River Boom Trailer	Refinery FD	500’ River boom	N/A			
Snow Boom Trailer	Refinery FD	1000’ Creek Boom	N/A			
Skimmers	Refinery	2 each	N/A			
Communications Equipment - mounted in Unit 5 - mounted in boat - hand held	Refinery Fire Dept.	 1 VHF; 1 marine 1 VHF; 1 marine 6 VHF; 6 marine	N/A			
(Unit 11) 1989 White/GMC 1500 GPM pumper with 54’ articulating boom	Refinery Fire Dept.	1 each	N/A			
(Unit 10) 1981 Pierce 1500 GPM pumper with 55’ aerial ladder	Refinery Fire Dept.	1 each	N/A			
(Unit 1) 2002 E-ONE pumper 3,500 GPM	Refinery Fire Dept.	1 each	N/A			
(Unit 12) 1975 Ford Flat Bed (Used as foam hauler)	Refinery Fire Dept.	1 each	N/A			
(Unit 9) 1995 Ford F-350 Super Duty Mini Pumper	Refinery FD	1 each	N/A			
(Unit 6) 2007 Ford F-350	Refinery Fire Dept.	1 each	N/A			
(Unit 5) 1980 GMC, Hazardous Materials Truck	Refinery Fire Dept.	1 each	N/A			

FIGURE 5.2

FACILITY RESPONSE EQUIPMENT (Cont'd)

* SPILL CONTROL TRAILER EQUIPMENT
(Staged at the Toledo Refining Company, LLC Fire Dept.)

Side	Qty	Description	Inspector	Date
Back Left Door	1	Wooden Handle Pitchfork		
	2	Wooden Handle Spade Shovel		
Left Rear Side	2	Expandable Gaff Hooks		
	1	8lb. Sledge Hammer (Fiberglass)		
	1	20lb ABC Fire Extinguisher		
	10	24" Metal Stakes		
1A (Top)	6	3M Half Masks		
	6pr	3M Cartridges		
	3	Suspenders		
	2	Nomex Coveralls (46R, 50R)		
	1 cs	Tyvek-Poly Coated (3XL)		
1B (Middle)	3	Rainsuits (4XL)		
	3	Rainsuits (5XL)		
	2	Duct Tape		
	4	Bee Bopper		
	10	Leather Gloves (XL)		
	1	Nitrile Glove (M)		
	1	Nitrile Glove (L)		
	4	Googles		
1C (Bottom)	2	Boots Size 12		
	3	Boots Size 13		
	1	Hip Waders - Neoprene (13)		
	1	Hip Waders - Rubber (13)		
2A (Top)	1	Scrubs in a Bucket		
	2	Box of Wyp-All		
	4	Inflatable Kiddie Pools		
	1	Box of Garbage Bags		
	1	Drain Cover		
	1	Wooden Plug Kit		
2B (Middle)	1	Chain Saw		
	1	Gal Bar Oil		
	1	40:1 Fuel Can (Chainsaw)		
	1	Barrel Pump w/ slide fitting		
	1	25 ft Air Hose w/threads		

2C (Bottom)	4	Sandbags (filled)		
	1	Box of Sandbags		
	1	Sandbag Scoop		
	2	Bags of Sand		
3A/B/C	2	Wheelbarrows		
	2	Wood Handle Scoop Shovels		
	1	Wood Handle Flat Shovel		
	1	Fiberglass Handle Flat Shovel		
	1	Fiberglass Spade Shovel		
	1	Broom		
	15	Ground Posts		
4A (Top)	4	Spill Attack Kits		
	2	Box Cobra Coil Sausages		
	2	Box Peat Sorb Pads		
	1	Box Sorbant Industrial Rug (36"x50')		
4B (Middle)	8	8"x10' Absorbent Boom		
4C (Bottom)	8	8"x10' Absorbent Boom		
5/6/7 A (Top)	12	4"x10' PVC Pipe		
	3	2"x4"x8'		
5B (Middle)	1	Roll Snow Fence		
	6	Rolls of Chicken Wire (1"x36"x25')		
5C (Bottom)	3	Bags of Pom Pom's		
	1	Bag of Collapsable LED Cones		
6B (Middle)	2	Rolls of Plastic Sheeting (20'x100')		
	1	Rolls of Plastic Sheeting (12x100')		
6C (Bottom)	2	Bags of Oil Dry		
	4	Sandbags (filled)		
7B (Middle)	7	Safety Vests		
	16	24" Metal Stakes		
	12	24" Wood Stakes		
	1	Box of Flashlights		
		*(3) C Cell Flashlight		
		*(3) 6 volt Flashlight		
		*Spare Batteries		
	1	Tool Box		
		*Small Sledge		
		*Utility Knife		
		*Crescent Wrench		
		*Screw Drivers (various)		
		*Twine		

7C (Bottom)	3	200' Dockline Rope Bags		
	2	Wheel Chocks		
	1	Rope Box		
		*(1)Large 50' Braided Rope		
		*(1) 50' Hemp Rope		
		*(10) 50' sections of Cord		
		*(3) 100' Red Anchor Rope		
		*(1) 50' Dockline		
		*(2) 25' Red Anchor Rope		
Right Rear Side	2	Expandable Gaff Hooks		
	1	Windsock		
	1	10 lb Sledgehammer		
	1	Hand Saw		
	1	20lb ABC Fire Extinguisher		
	10	24" Metal Stakes		
Right Rear Door	2	Push Broom		
	2	Fiberglass Handle Flat Shovel		

* Note: The equipment listed in Figure 5.2 is inspected on a routine basis and is deployed as stated in Section 4.0.

Response Equipment Testing and Deployment

(Section 1.3.4)

4.3 EMERGENCY RESPONSE TEAM (ERT) – See Figure F.1

The first Toledo Refining Company, LLC person on scene, typically the on-duty Emergency Response Shift Supervisor or the on-duty Fire Marshal, will function as the On-Scene Commander until the arrival of the Emergency Response Chief or the Emergency Response and Security Shift Supervisor. Transfer of command may take place as more senior management respond to the incident.

The number of local Emergency Response Team Personnel required to handle an incident controlled by the On-Scene Commander and will depend on the size and complexity of the incident. The On-Scene Commander is always responsible for directing the response activities and will assume the duties of all the primary positions until the duties can be delegated to other qualified personnel.

Refer to Appendix F of this plan for job descriptions of the primary response team positions.

4.4 EMERGENCY COMMAND TEAM (ECT) – See Figure 4.2

The Emergency Command Team is a group of personnel trained to manage incidents. This team is activated as necessary, dependent upon the magnitude of the incident.

The size of, and positions on, the Emergency Command Team are incident-dependent. Dialogue with the activating facility will determine which positions will be activated.

A fully-staffed Emergency Command Team is designed to cover all aspects of a comprehensive and prolonged incident response (Level III incident). During a prolonged response, additional personnel may be cascaded to the incident location, and more than one level within the Team may be involved to sustain 24-hour operations.

4.5 RESPONSE TEAM TRAINING

The Spill Management Team is staffed by specially trained personnel from various Toledo Refining Company, LLC departments, and/or by consultants. Toledo Refining Company, LLC requires that all response personnel, including contractors and casual labor, have the appropriate training necessary to serve on a response team during an emergency. Team members will receive training in the following:

Response Plan Review

All Spill Management Team members should review their Facility Response Plan at least annually, or whenever their job position or responsibilities change under the Plan. A copy of this Plan will be available at all times to the team members at the facility.

HAZWOPER (29 CFR 1910.120)

Federal and state regulations require that response team members maintain up-to-date HAZWOPER training necessary to function in their assigned positions. At a minimum, Toledo Refining Company, LLC employees will receive “First Responder Awareness Level” training. All “Non-Toledo Refining Company, LLC” personnel responding to an incident must satisfy the applicable HAZWOPER training requirements of 29 CFR 1910.120.

4.5 RESPONSE TEAM TRAINING (Cont'd)

OSHA HAZWOPER TRAINING REQUIREMENTS		
Responder Classification	**Required Training Hours**	**Refresher**
29 CFR 1910.120(q) Emergency Response		
First Responder - Awareness Level	2-4 hrs demonstration of competency	same
First Responder - Operations Level	8 hrs	8 hrs
Hazardous Materials Technician	24 hrs plus competency	8 hrs
Hazardous Materials Specialist	24 hrs plus competency in specialized areas	8 hrs
On-Scene Commander	24 hrs plus competency	8 hrs
29 CFR 1910.120(e) Clean Up Sites		
General Site Workers	40 hrs / 3 days on the job training	8 hrs
Occasional Workers (Limited Tasks)	24 hrs / 1 day on the job training	8 hrs
General Site Workers (Low Hazard)	24 hrs / 1 day on the job training	8 hrs
Supervisors	8 hrs supervisor training	8 hrs
29 CFR 1910.120(p)(7)(8) RCRA TSD Sites		
New Employees	24 hrs	8 hrs
Current Employees*	24 hrs	8 hrs

* Previous work experience and/or training certified as equivalent by employer.

Unified Command System

Response team members will receive UCS training, and may also receive supplemental training in other, related general topics.

4.5.1 Volunteers

Toledo Refining Company, LLC will not use non-employee volunteers for emergency incident response, and no Toledo Refining Company, LLC provisions exist to train them. Volunteers may be used by government response entities, as allowed by applicable policies/procedures.

4.5.2 Training Records

Training records for local team members will be maintained at the facility according to Federal, state, and local government requirements (three years for the U.S. Coast Guard and RSPA and five years for the U.S. Environmental Protection Agency). Training records will be maintained indefinitely for emergency response personnel as long as they maintain an active role, with assigned duties, on the response team.

4.6 RESPONSE TEAM EXERCISES

Spill Management Team members, government agencies, contractors, and other resources must participate in response exercises required by Federal, state, or local regulations. The drill program and elements covered will be completed as detailed in the "National Preparedness for Response Exercise Program (PREP) Guidelines." Toledo Refining Company, LLC will conduct announced and unannounced drills to maintain compliance, and each plan-holder must conduct at least one exercise annually. The following table lists the triennial exercise cycle for facilities (see PREP Guidelines for full details).

Triennial Cycle		
Total Number	**Frequency**	**Exercise Type/Description**
12	Quarterly	QI Notification Exercise
6	Semi-Annual	Equipment Deployment Exercise *(Facility-owned equipment)*
3	Annual	Spill Management Team Tabletop Exercise
3	Annual	Equipment Deployment Exercise *(facilities with OSRO-owned equipment)*
3	Annual	Unannounced Exercise *(not a separate exercise)* Actual response can be considered as an unannounced exercise.
NOTE: All response plan components must be exercised at least once in the cycle. Exercise records will be maintained at the Facility as follows: EPA – 5 years; USCG and RSPA – 3 years.		

Quarterly QI Notification Exercise

- **Scope:** Exercise communication between facility personnel and the QI(s) and/or designated alternate(s). At least once each year, one of the notification exercises should be conducted during non-business hours.

- **Objective:** Contact must be made with a QI or designated alternate, as identified in the Plan.

- **General:** All personnel receiving notification shall respond to the notification and verify their receipt of the notification. Personnel who do not respond should be contacted to determine whether or not they received the notification.

4.6 RESPONSE TEAM EXERCISES (cont'd)

Annual and Semi-Annual Equipment Deployment Exercise (for facilities with equipment)

- **Scope:** Deploy and operate facility response equipment identified in the response plan. The equipment to be deployed must include the following, at a minimum:

  - 1,000 feet of representative type of boom;
  - one of each type of skimming system; or
  - the equipment necessary to respond to the facility's Small/Average Most Probable Discharge (AMPD), whichever is less.

- **Objective:** Demonstrate personnel's ability to deploy and operate response equipment. Ensure that the response equipment is in proper working order.

- **General:** The facility may take credit for actual equipment deployment to a spill, or for training sessions, as long as the activities are properly documented.

***Annual Equipment Deployment Exercise* (OSRO-owned equipment)**

- **Review:** The facility should determine that the OSRO(s) has completed the equipment deployment exercise requirements and has maintained the necessary documentation. The OSRO may deploy equipment at any location, so long as it occurs within an operating environment similar to the facility's.

- **Scope:** OSRO must deploy and operate response equipment identified in the response plan. The equipment to be deployed must include the following, at a minimum:

  - 1,000 feet of representative type of boom, and
  - One of each type of skimming system.

- **Objective:** OSRO personnel must demonstrate their ability to deploy and operate OSRO response equipment, and must ensure that its response equipment is in proper working order.

Annual Response Team Tabletop Exercise

- **Scope:** Exercise the response team's organization, communication, and decision- making in managing a spill response. Each team identified within the plan must conduct an annual Response Team Tabletop Exercise.

- **Objective:** Exercise the response team in a review of the following:

  - Knowledge of the Plan.
  - Proper notifications.
  - Communications system.
  - Ability to access an OSRO.
  - Coordination of internal spill response personnel.
  - Transition from a local team to a regional team.

- Ability to effectively coordinate response activity with the National Response System (NRS) infrastructure.
- Ability to access information in the Area Contingency Plan.

- **General:** A minimum of one Response Team Tabletop Exercise in a triennial cycle will involve a Worst-Case Discharge scenario.

Government-Initiated Unannounced Exercise

- **Scope:** Upon request, the Facility is required to participate in only one unannounced exercise every 36 months from the date of the last government-initiated unannounced exercise.

Exercises are limited to approximately four hours in duration.

Exercises would involve response to a Small/Average Most Probable Discharge scenario.

Exercise would involve equipment deployment to respond to a spill scenario.

- **Objective:** Conduct proper notifications to respond to unannounced scenario of a Small/Average Most Probable Discharge.

  Demonstrate that the response is timely, conducted with an adequate amount of equipment for the scenario, and properly conducted.

- **General:** This exercise is only applicable to those facilities that are randomly chosen.

Area Exercises

- **Objective:** The purpose of the area exercise is to exercise the entire response community in a particular area. An area is defined as "that geographic area for which a separate and distinct Area Contingency Plan has been prepared, as described in OPA 90." The response community includes the federal, state, and local government and industry. The area exercises are designed to exercise the government and industry interface for spill response.

- **General:** The goal is to ensure that all areas of the country are exercised triennially. All of the area exercises will be developed by an exercise design team. The exercise design team is comprised of representatives from the federal, state, and local government and industry. A lead plan holder would lead each area exercise. The lead plan holder is the organization (government or industry) that holds the primary plan that is exercised in the area exercise. The lead plan holder would have the final word on designing the scope and scenario of the exercise.

Exercise Documentation

- All exercises should be documented and maintained at the facility; documentation should specify the:

  - Type of exercise;
  - Date and time of the exercise;
  - Description of the exercise;
  - Objectives met in the exercise;
  - Components of the response plan exercised; and
  - Lessons learned.

- Sample exercise forms are included in Appendix G. However, slight variations of the forms are acceptable and may be utilized at specific facilities.

- Exercise documentation should be kept on file for the required length of time depending on the regulating agency (three years for the U.S. Coast Guard and five years for the U.S. Environmental Protection Agency).

Exercise Planning and Design

- Designing and planning a spill response simulation exercise involves the determination of the appropriate spilled product discharge scenario and establishment of the framework for preparing, managing, and evaluating the exercise. It is the responsibility of the Emergency Response Manager to plan, carry out, and monitor drills and exercises.

Facility Response Team List

(Section 1.3.4)

FIGURE 2.4

INTERNAL NOTIFICATION REFERENCES

EMERGENCY RESPONSE TEAM						
NAME	**RESPONSE TIME**	**RESPONSIBILITY DURING RESPONSE ACTION**	**TRAINING LEVEL**	**OFFICE**	**HOME**	**OTHER**
Elmer Dunberger	10 Minutes (maximum)	Security Lead / Qualified Individual /Alternate QI	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6669	(b) (6)	
Ken Adams	15 minutes (*maximum*)	Emergency Response Shift Supervisor / QI / Alternate QI	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6663		
Keith Dempsey	15 minutes (maximum)	Emergency Response Shift Supervisor / QI / Alternate QI	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6663		
Ed Donnelly	10 minutes (*maximum*)	Emergency Response Shift Supervisor / QI / Alternate QI	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6663		
Kevin Kennedy	15 minutes (maximum)	Emergency Response Shift Supervisor / QI / Alternate QI	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6663		
Phil Wojcinski	10 minutes (*maximum*)	Emergency Response Shift Supervisor / QI / Alternate QI	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6663		
Cory Clark	15 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6628		
Chris Conley	20 minutes *(maximum)*	Emergency Response		419-697-2491		
Douglas Church	60 Minutes (maximum)	Emergency Response		419-698-6600		
Richard Cutcher	15 Minutes (maximum)	Emergency Response		419-698-6600		

EMERGENCY RESPONSE TEAM

NAME	RESPONSE TIME	RESPONSIBILITY DURING RESPONSE ACTION	TRAINING LEVEL	OFFICE	HOME	OTHER
Sandy Daniel	20 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6692	(b) (6)	
Justin Donley	15 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		
Jessie Duke	20 minutes (maximum)	Emergency Response		419-698-6600		
Fred Espinoza	15 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6608		
Craig Felbinger	20 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		
Daniel Flores	20 minutes (*maximum)*	Emergency Response		419-698-6600		
Dennis Flory	45 minutes *(maximum)*	Emergency Response		419-698-6600		
Dan Gresh	30 minutes	Emergency Response		419 698 6600		
Mike Jones	20 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6659		
Marty Koch	15 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6608		
John Kowalski	20 minutes (maximum)	Emergency Response		419-698-6600		
Mark Lambert	15 minutes *(maximum)*	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6974		

EMERGENCY RESPONSE TEAM

NAME	RESPONSE TIME	RESPONSIBILITY DURING RESPONSE ACTION	TRAINING LEVEL	OFFICE	HOME	OTHER
Terry Mack	15 minutes (maximum)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600	(b) (6)	
Mike Mahr	20 minutes (maximum)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6772		
Tim Marshall	30 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		
Jason McVey	45 minutes (maximum)	Emergency Response		419-698-6600		
Rusty Miller	15 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		
Tim Musolf	20 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		
Kevin Rank	10 minutes (*maximum*)	Emergency Response		419-698-6600		
Thomas Saunders	10 minutes (maximum)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6608		
Nick Schnell	20 minutes (*maximum*)	Emergency Response		419-698-6600		
Rick Schroeder	20 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		
Clark Timmons	15 minutes (maximum)	Emergency Response		419-698-6600		
Lloyd Wright	20 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		

EMERGENCY RESPONSE TEAM						
NAME	**RESPONSE TIME**	**RESPONSIBILITY DURING RESPONSE ACTION**	**TRAINING LEVEL**	**OFFICE**	**HOME**	**OTHER**
Dave Yap	15 minutes (*maximum*)	Emergency Response		419-698-6600	(b) (6)	
Brian Yost	20 minutes (*maximum*)	Emergency Response		419-698-6600		

FIGURE 2.4

INTERNAL NOTIFICATION REFERENCES (Cont'd)

EMERGENCY COMMAND TEAM						
NAME	**RESPONSE TIME**	**RESPONSIBILITY DURING RESPONSE ACTION**	**TRAINING LEVEL**	**OFFICE**	**HOME**	**OTHER**
Clark Wrigley	15 minutes (*maximum*)	Incident Commander	Annually	419-698-6622	(b) (6)	
Neal Sahni	20 minutes (*maximum*)	Deputy Incident Commander	Annually	419-698-6766		
James Sciarini	20 minutes (*maximum*)	Administration Officer	Annually	419-698-6709		
Olivia Summons	15 minutes (*maximum*)	Information Officer	Annually	419-698-6910		
Joe Niedecken	15 minutes (*maximum*)	Refinery Operations Officer	Annually	419-698-6760		
Eric Fannin	15 minutes (*maximum*)	Safety Officer	Annually	419-698-6868		
Chris McCormick	35 minutes (*maximum*)	Planning Section Chief	Annually	419-697-6547		
Daniel Ingram	20 minutes (*maximum*)	Logistics Section Chief	Annually	419-698-6717		
Nancy Perham	35 minutes (*maximum*)	Finance Officer	Annually	419-697-6549		
Elaine Moore	15 minutes (*maximum*)	Liaison Officer	Annually	419-698-6847		
Vickie Witty Davis	35 minutes (*maximum*)	Oil Flow Officer	Annually	419-698-6794		

EMERGENCY COMMAND TEAM						
NAME	**RESPONSE TIME**	**RESPONSIBILITY DURING RESPONSE ACTION**	**TRAINING LEVEL**	**OFFICE**	**HOME**	**OTHER**
Christine Shultz	15 minutes (*maximum*)	Documentation Unit Leader	Annually	419-698-6810	(b) (6)	
Richard Beans	30 minutes (maximum)	Communications Unit Leader	Annually	419-698-6637		

Evacuation Plan

(Section 1.3.5)

EVACUATION PLAN

(b) (7)(F), (b) (3)

[redacted]

EVACUATION PLAN (Cont'd)

(b) (7)(F), (b) (3)

[redacted]

EVACUATION PLAN (Cont'd)

(b) (7)(F), (b) (3)

[redacted]

Immediate Action

(Section 1.7.1)

3.1 INITIAL RESPONSE ACTIONS (Cont'd)

FIRST TOLEDO REFINING COMPANY, LLC PERSON NOTIFIED/ON-SCENE

- _____ Follow the appropriate ***"Specific Incident Response Checklist"*** in Figure 3.1 and ***"Product Specific Response Considerations"*** in Figure 3.2.
- _____ Notify **Facility Shift Superintendent** of the incident.
- _____ Utilize local emergency services as necessary (police, fire, medical).
- _____ Notify the Pipeline Controllers, as appropriate.

On-Scene Commander (G-1 responding to scene)

- _____ **Evaluate the Severity**, Potential Impact, Safety Concerns, and Response Requirements based on the initial data provided by the first person on scene.
- _____ Assume the role of **Incident Commander**.
- _____ **Confirm safety** aspects at site, including need for personal protective equipment, sources of ignition, and potential need for evacuation.
- _____ Activate the **Emergency Response Team and Emergency Command Team**, as the situation demands.
- _____ Coordinate/perform **activation of additional spill response contractors,** as the situation demands (telephone reference is provided in Figure 2.5).
- _____ Coordinate/perform required notifications are completed.
- _____ Coordinate/perform **regulatory agency notification,** as the situation demands.
- _____ Proceed to spill site and **coordinate response and clean-up operations.**
- _____ Direct containment, dispersion, and/or clean-up operations in accordance with the Product Specific Response Considerations provided in Figures 3.2 and 3.3.

LOCAL RESPONSE TEAM

- _____ Assigned personnel will immediately respond to a discharge from the Facility, as the situation demands.
- _____ Perform response/clean-up operations as directed or coordinated by the Incident Commander.
- _____ Assist as directed at the spill site.

FIGURE 3.1

SPECIFIC INCIDENT RESPONSE CHECKLIST

Remember, Without Exception, Personnel Safety Is First Priority. Excessive Exposure To The Vapor And Liquid Stages Of The Spilled Product Should Be Avoided.

INITIAL RESPONSE

- _____ Take appropriate personal protective measures.
- _____ Call for medical assistance if an injury has occurred.
- _____ Check wind direction before investigating incidents where vapor cloud is a possibility.
- _____ Utilize LEL meter when you conduct an initial investigation to determine what has been released and the source.
- _____ Do not investigate on your own, take a buddy.
- _____ When you evacuate the Facility because of toxic or explosive vapors, make sure that you take the FRP, response checklists, cell phones, radios, etc. with you to the muster point.
- _____ At the evacuation muster point, take a head count to determine if anyone is missing.
- _____ If possible, block access to the hot zone and/or entire Facility (use vehicles, caution tape, traffic cones, etc.).
- _____ Restrict access to the spill site and adjacent area as the situation demands. Take any other steps necessary to minimize any threat to health and safety.
- _____ Verify the type of product and quantity released (Material Safety Data Sheets are retained separately at the Facility).
- _____ Advise personnel in the area of any potential threat and/or initiate evacuation procedures.
- _____ Use testing and sampling equipment to determine potential safety hazards, as the situation demands.
- _____ Identify/Isolate the source and minimize the loss of product, from a safe distance.
- _____ Take necessary fire response actions.
- _____ Eliminate possible sources of ignition in the near vicinity of the spill.
- _____ Notify Facility Management of the incident.

FIGURE 3.1

SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

LINE BREAK OR LEAK, SPECIFIC RESPONSE

- _____ Shut down pumping equipment.
- _____ Close upstream and downstream block valves.
- _____ Utilize Combustible Gas Indicator, O_2 meter, proper colormetric indicator and other air sampling measurements to assure that areas are safe to enter for continued response operations.
- _____ Mitigate spreading of the product, as the situation demands. Potential containment strategies include:
  - Earthen dike/berm
  - Ditching
  - Spreading sorbent material over the spill
- _____ Prevent the spill from entering the waterways, sewer, etc. to the greatest extent possible, from a safe distance.
- _____ If located within containment area, ensure that drainage valve(s) is "closed".
- _____ Drain the line section, as the situation demands.
- _____ Make all necessary repairs.
- _____ Return the line to service when repairs are complete.
- _____ Clean up spilled product to eliminate any possible environmental problems. Be alert for underground cables.
- _____ Inform local operators such as utilities, telephone company, railway.
- _____ If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in Section 6.0. Determine which of these may be threatened by the spill and direct the response operation to these locations. Initiate protection and recovery actions.
- _____ Complete follow-up and written reporting, as the situation demands.

FIGURE 3.1

SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

STORAGE TANK LEAK, SPECIFIC RESPONSE

- _____ Shut down all tank battery product movement operations and isolate the tank.
- _____ Initiate Confined Space Entry procedures, as applicable.
- _____ Ensure that the containment area drainage valve(s) is "closed".
- _____ If near tank bottom, consider filling tank with water and maintain water bottom to suspend the discharge.
- _____ Utilize Combustible Gas Indicator, O_2 meter, proper colormetric indicator and other air sampling measurements to assure that areas are safe to enter for continued response operations.
- _____ Block drainage of spilled material from traveling offsite.
- _____ Stop all traffic in hazardous area (inside and outside of property boundaries), as the situation demands.
- _____ Remove product from containment area (at a sump or in a low area) with an explosion proof pump, oil skimmer, and/or vacuum truck w/ skimmer attachments.
- _____ If applicable, process remaining product through the separator system.
- _____ Empty tank as soon as possible.
- _____ Make all necessary repairs. Return the line/tank to service when repairs are complete and tested.
- _____ Clean up product spill to eliminate any possible environmental problems. Be alert for underground cables.
- _____ Inform local operators such as utilities, telephone company, railway.
- _____ If necessary, call one (1) of the approved waste removal companies to remove the remaining sludge and residue from the containment area.
- _____ If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in Section 6.0 and ACP. Determine which of these may be threatened by the spill and direct the response to these locations. Initiate protection and recovery actions.
- _____ Complete follow-up and written reporting, as the situation demands.

FIGURE 3.1

SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

EXPLOSIONS AND/OR FIRE, SPECIFIC RESPONSE

- _____ Evacuate area.
- _____ Notify Fire Department.
- _____ Keep unnecessary people away.
- _____ Isolate hazard area and deny entry.
- _____ Stay upwind.
- _____ Keep out of low areas.
- _____ Attempt to control the fire until the fire department arrives. Do not risk injury.
- _____ Close all open valves.
- _____ Turn off all electrical power in the fire area or, if necessary, the entire Facility.
- _____ Employees are **NOT** to attempt to fight a large, fast spreading fire. Attempt to control small fires, to extinguish or prevent spreading, using whatever means are available (i.e. fire extinguisher, water, etc.).
- _____ If fire is located at a point where the incoming pipeline stream creates additional hazards, the Facility Personnel will hit the emergency shutdown button to close out the headgates, and notify the pipeline controllers of the problem.

All personnel are reminded that outsiders other than emergency services will not be allowed in the Facility during the time of an emergency, and that no statements will be issued to the media or other interested parties except by designated Facility Management. Be courteous with media representatives and direct them to the designated spokesman.

Fire hydrants, located in the vicinity of this Facility, operate at a pressure of 120-150 psi.

FIGURE 3.1

SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

VAPOR CLOUD (from a massive spill, line rupture, etc.), SPECIFIC RESPONSE

- _____ The person who discovers the vapor cloud will sound the alarm and notify the supervisor on duty and vacate the area.
- _____ **Remember: the only proper action in the presence of a vapor cloud is to get away from it. Do not shut off electrical equipment.**
- _____ All personnel will report to the evacuation muster point for roll call and further instructions.
- _____ After all personnel have been accounted for, the Facility Manager will initiate the following actions as deemed necessary:

    1. Shut down pipeline.
    2. Evacuation of adjacent property.
    3. Only the fire department will be permitted to enter the Facility.

- _____ Contact the appropriate agencies and potentially affected neighbors

FIGURE 3.2

PRODUCT SPECIFIC RESPONSE CONSIDERATIONS for CRUDE OIL SPILLS

Flash Point Range: Above 100°F

Remember, Without Exception, Personnel Safety Is First Priority. Excessive Exposure To The Vapor And Liquid Stages Of The Spilled Product Should Be Avoided.

Suggested physical response actions for these products are detailed below. It is important to note however, that each situation is unique and must be individually responded to. These procedures are considerations only. Actual circumstances may dictate that the procedures followed may differ somewhat from those listed below. ***The following are intended for guideline purposes only.***

These materials are not extremely flammable and the preferred response is containment and mechanical recovery.

___ Identify source and stop discharge if possible.

___ Obtain explosimeter and other air sampling measurements to assure that areas are safe to enter for continued response operations.

___ If spill occurs at the Refinery, every effort must be made to block any drainage to ditches to prevent product from escaping the containment area. Commence containment efforts for any product which has escaped.

___ Deploy spill response equipment and personnel in an attempt to contain and recover as much product as possible.

___ Advise people in the area of any potential threat and/or initiate evacuation. Inform local operators such as utilities, telephone company, railway, and tunnels as the situation demands.

___ Recover the product and affected soil. Be alert for underground cables and water bearing formations. Remember that product may penetrate deeper if impermeable natural layers are disturbed.

___ Determine the direction and expected duration of spill movement. Refer to the maps provided in Figure 6.1 for an overview of the area.

___ Request local authorities to establish traffic control in the area, as the situation demands.

___ If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in Section 6.0. Determine which of these may be threatened by the spill and direct the response operation to these locations. Initiate protection and recovery actions.

FIGURE 3.3

PRODUCT SPECIFIC RESPONSE CONSIDERATIONS
for
GASOLINE SPILLS

Flash Point Range: Below 100°F

Remember, Without Exception, Personnel Safety Is First Priority. Excessive Exposure To The Vapor And Liquid Stages Of The Spilled Product Should Be Avoided.

Suggested physical response actions for these products are detailed below. It is important to note however, that each situation is unique and must be individually responded to. These procedures are considerations only. Actual circumstances may dictate that procedures followed may differ somewhat from those listed below. ***The following are intended for guideline purposes only.***

These materials float on water and are extremely flammable. Containment of these materials may allow explosive concentrations to accumulate. The preferred response is to minimize impact to water and protect shorelines (storm sewers, creeks, rivers, etc.) from contamination, allow evaporation to occur, and contain/clean-up remaining product.

___ Identify source and stop discharge if possible.

___ Make appropriate notifications to regulatory agencies and internal Toledo Refining Company, LLC Management. (Refer to Figures 2.2 and 2.5 for notifications.)

___ Obtain explosimeter and other air sampling measurements to assure that areas are safe to enter for continued response operations.

___ Eliminate sources of vapor ignition.

___ Stay upwind and evacuate nonessential personnel.

___ Advise people in the area of any potential threat and/or initiate evacuation. Inform local operators such as utilities, telephone company, railway, and tunnels as the situation demands.

___ Minimize area of surface soil impacted by free product (e.g. damming). Contact with surface runoff or standing water should be prevented whenever possible.

___ Recover pooled hydrocarbon as soon as possible.

___ Free hydrocarbons may be floated with water to aid recovery if increased vapors and agitation can be avoided. The water will act as a barrier to reduce further infiltration of pure hydrocarbon into the soil. (NOTE: This water will later have to be removed and probably treated.)

___ If free hydrocarbon **IS NOT** present, do not add water to the impacted area.

FIGURE 3.3 (Cont'd)

PRODUCT SPECIFIC RESPONSE CONSIDERATIONS for

GASOLINE SPILLS

___ Remove heavily impacted soil (saturated with hydrocarbons, or very strong hydrocarbon smell) as soon as possible after product/water removal.

___ Place in a bin/rolloff or a waste pile lined on the bottom and covered on the top with plastic sheeting to prevent contact with rainwater and contamination of other areas.

___ Drums may be used for very small spill cleanups.

___ If removal of heavily-impacted soil is delayed or contaminated soil is left in place pending final disposition, the following action should be taken if the possibility of rain exists to minimize contact with rainfall:

- ___ Cover area with plastic sheeting, overlap seams, weigh down with sandbags;
- ___ Use shallow ditches to divert rainwater around contaminated site; and
- ___ Promptly remove any rainwater that does accumulate on the site.

___ The following steps should be taken together with the Toledo Refining Company, LLC Environmental Department to minimize long term risk from the site:

- ___ Sample contaminated soil still in place;
- ___ Characterize and dispose of removed soil;
- ___ Estimate proper cleanup target;
- ___ Remove and dispose of more soil, if necessary;
- ___ Install groundwater monitoring wells or monitor existing wells, if necessary; and
- ___ Provide follow-up communication with regulatory agencies, if necessary.

___ Recover the product and affected soil. Be alert for underground cables and water bearing formations. Remember that product may penetrate deeper if impermeable natural layers are disturbed.

___ Due to the low flash point of these products: (1) Use non-sparking systems, (2) Have fire trucks or firefighting equipment nearby, (3) Warn all involved of the product's flammability, and (4) Allow product to evaporate to the greatest extent possible.

___ Determine the direction and expected duration of spill movement. Refer to the maps provided in Figure 6.1 for an overview of the area.

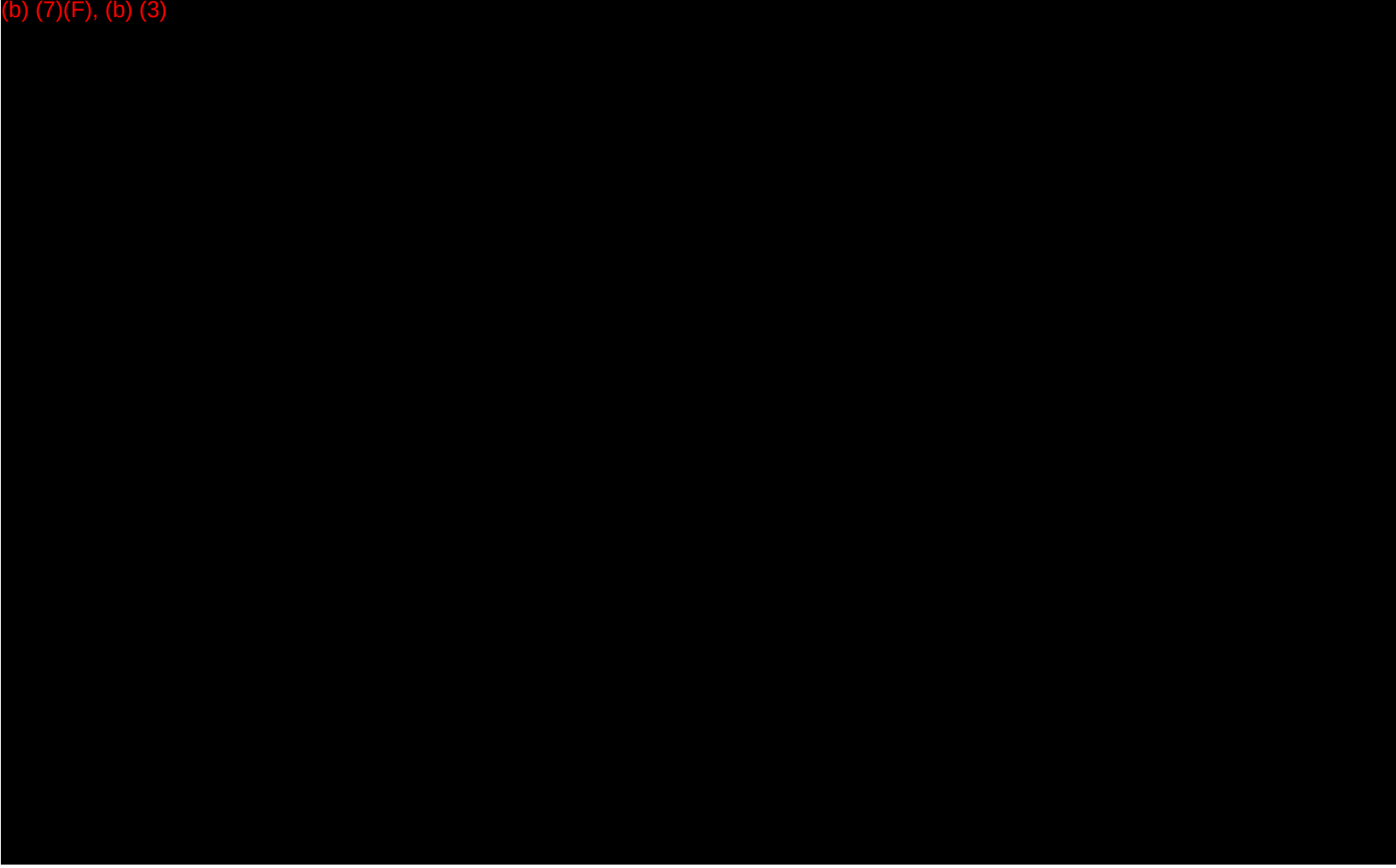
___ Request local authorities to establish traffic control in the area and to post a - "High Flammability" advisory, as the situation demands.

___ If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in Section 6.0. Determine which of these may be threatened by the spill and direct the response operation to these locations. Initiate protection and recovery actions.

Facility Diagram

(Section 1.9)

(b) (7)(F), (b) (3)



SITE LOCATION MAP
HOCKINGVALLEYDOCK/MARINE TERMINAL
(HVD/MT)

1.0 INTRODUCTION AND PLAN CONTENT

1.1 PLAN PURPOSE/OBJECTIVES

The purpose of this Facility Response Plan (hereinafter referred to as "Plan") is to assist the Toledo Refining Company, LLC, - Hocking Valley Dock/Marine Terminal personnel prepare for and respond quickly and safely to a discharge originating from the Facility. The Plan provides techniques and guidelines for achieving an efficient, coordinated, and effective response to a discharge incident which may occur at the Facility.

The specific objectives of the Plan are to:

- Establish an Emergency Response Team, assign individuals to fill the positions on the team, and define the roles and responsibilities of team members.
- Define notification, activation, and mobilization procedures to be followed when a discharge occurs.
- Define organizational lines of responsibility to be adhered to during a response operation.
- Document equipment, manpower, and other resources available to assist with the response.
- Ensure compliance with Toledo Refining Company, LLC's Principles of Health, Environment and Safety (Appendix A).
- Ensure compliance with the federal, state, and local oil pollution regulations.
- Ensure consistency with the National Contingency Plan and Area Contingency Plan(s) for the area of operation.

1.2 SCOPE OF PLAN

This Plan contains prioritized procedures for personnel to mitigate or prevent any discharge resulting from operations. A description of the operations conducted at the Facility has been detailed in Figure 1.3 with additional information provided in the "Hazard Evaluation" in Section 8. Facility spill mitigation procedures and response guidelines are provided in Section 3.0 for discharges that could result from any of the following scenarios:

- Tank overfill/failure
- Piping rupture/leak
- Explosion and/or fire
- Equipment failure (e.g. pumping system failure, relief valve failure, etc.)

1.2 SCOPE OF PLAN (Cont'd)

These scenarios could result in the following discharge volumes (as defined in EPA Final Rule 40 CFR Part 112, 33 CFR 154, and 49 CFR 194):

Discharge Scenario	Potential Oil Group	Planning Volumes			
		DOT/ PHMSA	EPA	USCG	
				Facility	Vessel
Small/Average Most Probable	3/4	---	50 Bbls	50 Bbls	50 Bbls
Medium/Maximum Most Probable	3/4	---	857 Bbls	1,200 Bbls	2,500 Bbls
Worst Case	(b) (7)(F), (b) (3) [redacted]				

These worst case discharge volumes are utilized in calculating the planning volume for response resources. The planning volume is used to determine the necessary on-water recovery capacity to respond within the three tiered response times. The identified oil spill recovery devices should be capable of arriving at the scene of a discharge within the time specified in Appendix C. Appendix C of this Plan demonstrates a series of calculations and planning volume determinations based on the applicable regulations. The inclusion of these calculations (Appendix C) is for demonstration of the response planning volumes and response capability necessary for on-water and on-shore recovery requirements as the result of the discharge scenarios outlined in the table above.

The Hocking Valley Dock/Marine Terminal Facility handles, stores and/or Transports Group 5 oils in excess of 10 percent of total facility storage capacity. Per 40 CFR 112 Appendix E Table 1, no separate calculations are required for Group 5 oils; however, response resource considerations are required as outlined in 40 CFR 112 Appendix E Section 7.6. Response considerations fro containment and recovery of submerged oils are presented in Section 5.

1.3 PLAN DISTRIBUTION PROCEDURES

The HSS Manager shall have the responsibility for distribution of the Plan. Distribution will be handled in the following manner:

- Distribution of the Plan is controlled by the number on the cover page. A distribution list is included in the Foreword to facilitate control.
- Company personnel who may be called upon to provide assistance during discharge response activities will have access to a copy of the plan for their use and training.
- It is the responsibility of any person holding a copy of the Plan to ensure that the copy is transferred to their replacement in the event of reassignment or change in responsibility.
- Various regulatory agencies will also be distributed a copy of the Plan. The list of

agencies is detailed in the Distribution List located in the Foreword.

1.4 PLAN REVIEW AND UPDATE PROCEDURES

Annual Review/Update

The HSS Manager will coordinate with Facility Management to support the following plan review and update procedures, as follows:

- At least once each year review and make appropriate revisions as required by operational or organizational changes.
- At least once each year review and make appropriate revisions as required by changes in the names and telephone numbers detailed in Section 2.0.
- The HSS Manager will coordinate the word processing, publication, and distribution efforts of completing the revisions and maintaining the Plan.
- Plan review opportunities may occur during response team tabletop exercises or actual emergency responses.

Incorporation of Plan Revisions

The **plan holder**, immediately upon receipt of any revisions, shall

- Review and insert the revised pages into the Plan.
- Discard the obsolete pages.
- Record this action on the "Revision Record" page in the Foreword.

Agency Revision Requirements

- EPA - The Facility shall revise and resubmit revised portions of the Plan to the EPA Regional Administrator within 60 days of each facility change that may materially affect the response to a Worst Case Discharge.
- DOT/PHMSA - The Facility shall revise and resubmit changes to the Pipeline Response Plans Officer within 30 days. In addition, the entire plan shall be reviewed and resubmitted to PHMSA to obtain approval every five (5) years from the last plan submission date in accordance with 49 CFR 194.121(a)(1).
- USCG - Requires changes to be submitted in duplicated to the marine Safety Office in a timely manner (in duplicate). Plan review must occur within one (1) month of the anniversary date of the USCG approval letter. If no Changes are required, the Facilities shall submit a letter to the USCG stating “No Changes Required”.

1.4 PLAN REVIEW AND UPDATE PROCEDURES (Cont'd)

CONDITIONS REQUIRING CHANGES	EPA	DOT/PHMSA	USCG
Change in ownership of Facility and/or Pipeline.	✓	✓	✓
Relocation or replacement of portions of the Facility (including the pipeline) which in any way substantially affect the information included in this Plan, such as a change in the Worst Case Discharge volume.	✓	✓	✓
Emergency response procedures.		✓	✓
A change in the Qualified Individual.		✓	✓
A change in the NCP or an ACP that has significant impact on the equipment appropriate for response activities.		✓	✓
A change in the listings of economically important or environmentally sensitive areas identified in the applicable ACP in effect six (6) months prior to the plan review.	✓	✓	✓
Change in the Facility's configuration that materially alters the information included in the Plan (i.e. new construction).	✓	✓	✓
Change in the type of oil handled, stored, or transferred that materially alters the required response resources.	✓	✓	✓
A change in the name of the Oil Spill Removal Organization (OSRO).		✓	✓
Material change in capabilities of the Oil Spill Removal Organization(s) (OSROs) that provide equipment and personnel.	✓	✓	✓
Material change in the Facility's spill prevention and response procedures.	✓		
Any other changes that materially affect the implementation of the Plan.	✓	✓	✓
As a result of post incident or drill evaluations.		✓	✓

NOTE: Any agency may require revisions to this Plan at any time if deficiencies are found under their applicable regulations or during an actual response.

Submission of Revisions

Except as provided above, amendments to the following do not require approval by the Regional Administrator (RA):

- Personnel and telephone number lists included in the Plan.
- OSRO(s) change which does not result in a material change in support capabilities.

The RA shall be provided with a copy of such revisions. Facility shall submit the EPA issued Facility Identification Number with the changes.

1.5 REGULATORY COMPLIANCE

The development, maintenance, and utilization of this Plan implements company policy and addresses the following regulatory requirements and guidelines:

- Federal Spill Prevention, Control and Countermeasure Regulation: U. S. EPA Final Rule for Oil Pollution Prevention; Non-Transportation Related On-shore and Offshore Facilities (40 CFR Part 112 – as published on July 17, 2002).

A detailed cross-reference between the format of this Plan and that of the regulation is provided in Table of Contents section of the FRP.

- U.S. EPA Spill Prevention, Control, and Countermeasure (SPCC) regulations as published in 40 CFR Part 112.5.

- U.S. Department of Transportation (PHMSA) regulations as published in 49 CFR 194.

The applicable Area Contingency Plans for the Facility are:

- USCG Western Lake Erie Area Contingency Plan.

- U.S. Environmental Protection Agency - Region V, Chicago, IL.

The applicable National Contingency Plan for the Facility is:

- U.S. Environmental Protection Agency; National Oil and Hazardous Substances Pollution Contingency Plan; Final Rule.

General Applicability

This requirement applies to owners or operators of non-transportation related onshore and offshore facilities engages in drilling, producing, gathering, storing, processing, refining, transferring, distributing, using, or consuming oil and oil products, and that meet the each of the following criteria;

- Due to their location, could reasonably be expected to discharge oil in harmful quantities into or upon the navigable waters of the United States or Adjoining shorelines; and

- Has an aggregate aboveground storage capacity in excess of 1,320 gallons excluding containers less than 55 gallons; or

- Completely buried storage capacity in excess of 42,000 gallons, excluding any tanks, connected underground piping, underground ancillary equipment, and containment systems subject to the technical requirements of 40 CFR Part 280 or 281.

1.5 REGULATORY COMPLIANCE (cont'd.)

Submission of Spill Documentation

The Facility shall submit the documentation required by 40 CFR Part 112.4 to the EPA Regional Administrator within sixty (60) days whenever the Facility has a discharge event(s) that meets one of the following conditions:

- Discharges more than 1,000 gallons of oil (or oil products) into or upon the navigable waters of the United States or adjoining shorelines in a single spill event; or

- Discharges more than 42 gallons of oil (or oil products into the navigable waters of the United States in two (2) spill events within any 12 –month period.

A form detailing the documentation requirements to be included with this submission is provided in Appendix E.

1.6 DISCHARGE CLASSIFICATION

The severity of a discharge will have a bearing on the level of management involvement necessary and the extent of resource mobilization. The following definitions provide guidance in the early classification of discharges.

LEVEL I EVENT
Incident Command will normally be assumed by Facility Management. Spill Management Team support will be utilized on an as needed basis.
Exposure
The potential Public and Environmental exposure is moderate. The type and quantity of material released, while considering the overall nature of the incident (e.g. fire, proximity to private dwellings, etc.), will have moderate impact on the public and/or the environment.
Degree of Control
The incident can be controlled in a short period of time through implementation of the local resources available to the Facility (including contract resources).
Governmental Involvement
Government involvement will be moderate and generally restricted to State and Local levels.
Media Involvement
Media interest will be moderate and generally restricted to State and Local levels.

1.6 DISCHARGE CLASSIFICATION (cont'd.)

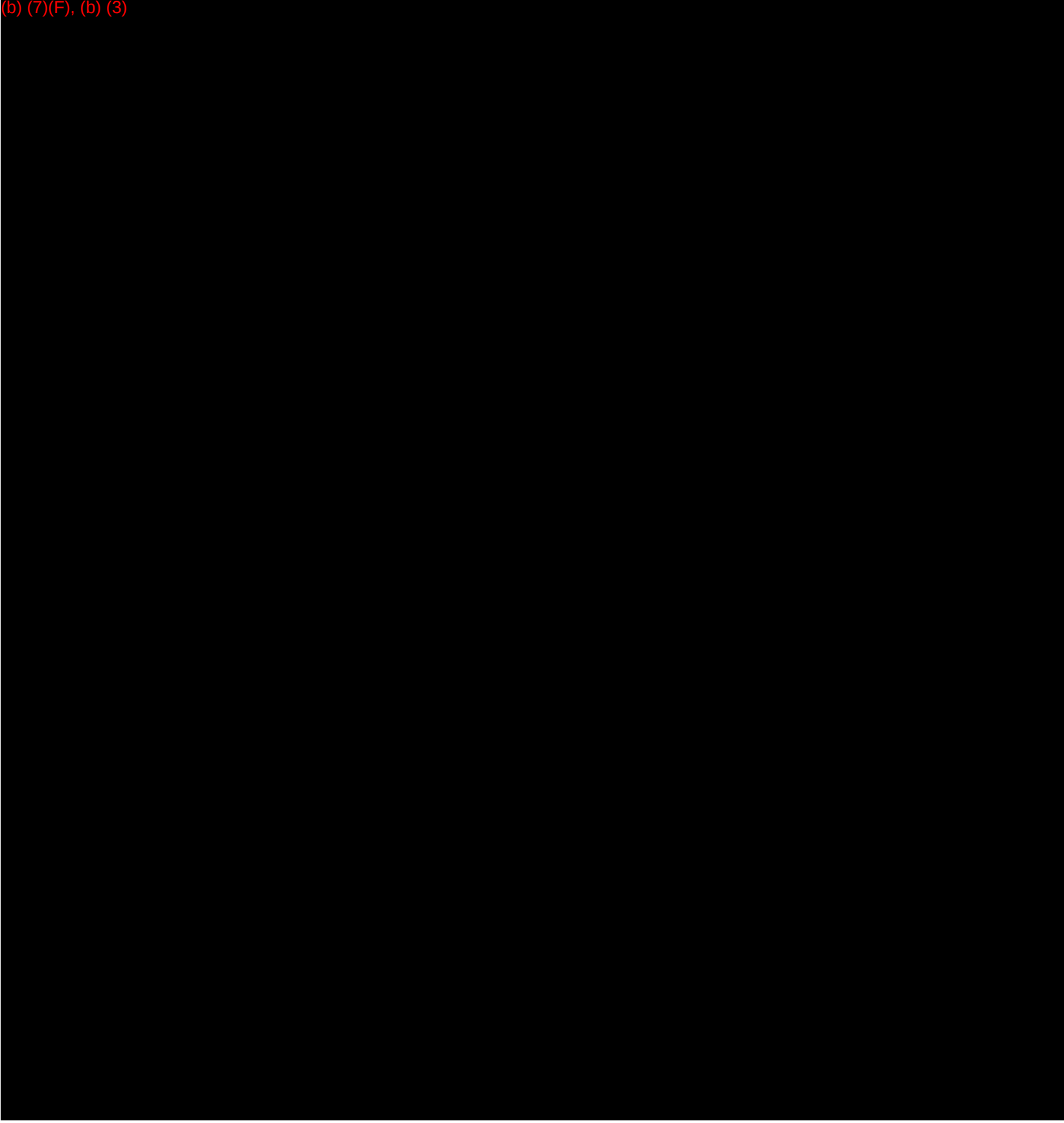
LEVEL II EVENT
Local Toledo Refining Company, LLC resources may have to be supplemented with Spill Management Team resources to manage the spill incident.
Exposure
The potential Public and Environmental exposure is moderately high. The type and quantity of material released, while considering the overall nature of the incident (e.g. fire, proximity to private dwellings, etc.), will have moderately high impact on the public and/or the environment.
Degree of Control
The incident can be brought under control in a moderate period of time through implementation of local resources available to the Facility (including contract resources) with possible implementation of regional resources.
Governmental Involvement
Government involvement will be moderately high and generally restricted to Regional levels.
Media Involvement
Media interest will be moderately high and generally restricted to Regional levels.

LEVEL III EVENT
Maximum Toledo Refining Company, LLC and external resources must be implemented to respond to the spill incident. Activation of the Toledo Refining Company, LLC Spill Management Team would be anticipated during a Level III incident.
Exposure
The potential Public and Environmental exposure is significant. The type and quantity of material released, while considering the overall nature of the incident (e.g. fire, proximity to private dwellings, etc.), will have significant impact on the public and/or the environment.
Degree of Control
Maximum Toledo Refining Company, LLC and third party resources must be implemented in order to gain control of the incident.
Governmental Involvement
Government involvement will be intense.
Media Involvement
Media interest will be high and may include national coverage.

FIGURE 1.1(a)

AREA MAP

(b) (7)(F), (b) (3)

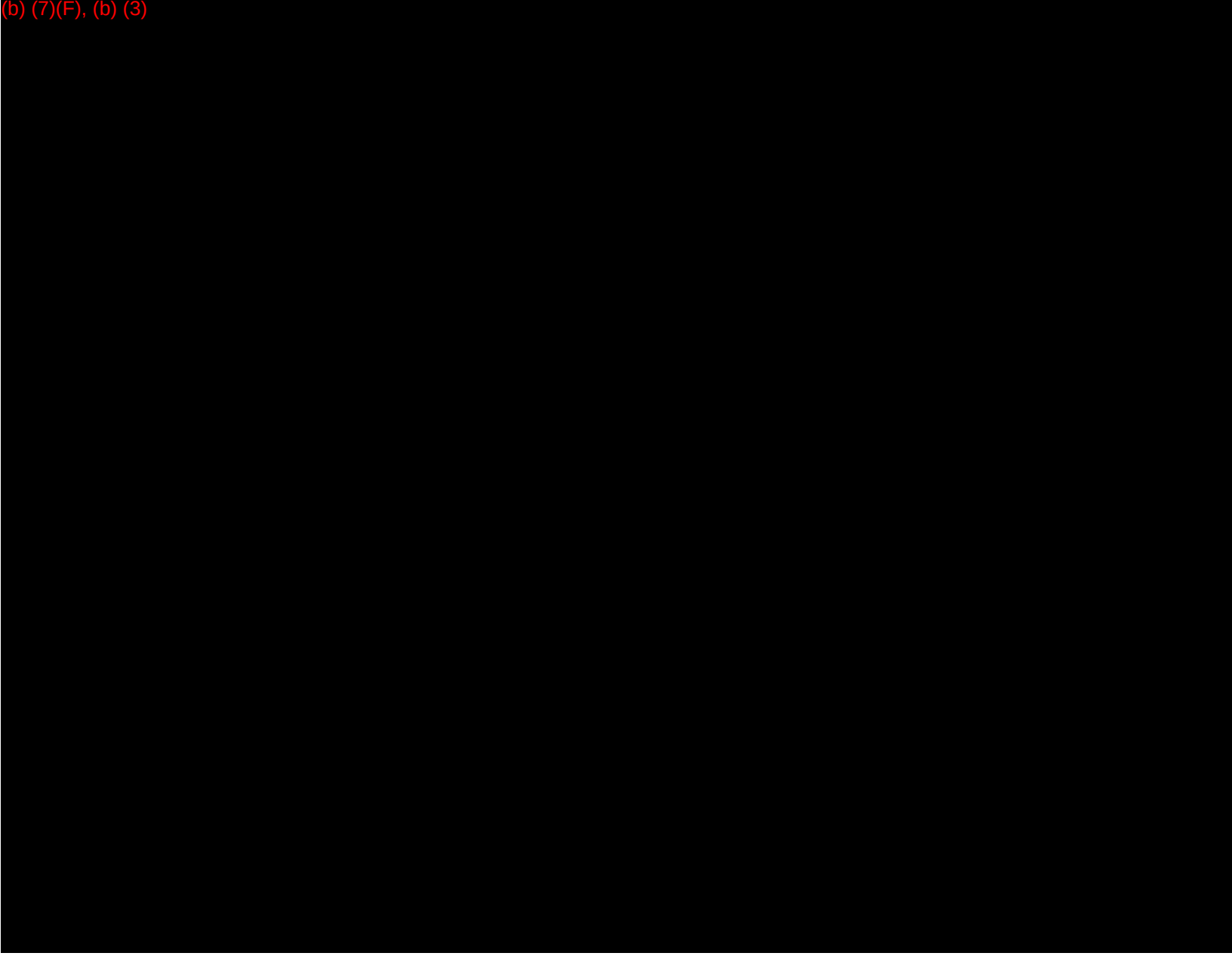


Area Map
Hocking Valley Dock / Marine Terminal
Figure 1-1 (a)

FIGURE 1.1(b)

SITE LOCATION MAP

(b) (7)(F), (b) (3)



Site Locaton Map
Hocking Valley Dock / Marine Terminal
Figure 1-1 (b)

FIGURE 1.2

FACILITY DIAGRAM

FIGURE 1.3
FACILITY INFORMATION

GENERAL INFORMATION	
Facility Name:	Toledo Refining Company, LLC 1900-2100 Front Street Toledo, OH 43605 (419) 698-6600 (Dispatcher) (419) 697-6423 FAX
EPA FRP ID#:	FRP 05A0539
Owner Name:	Toledo Refining Company, LLC 1819 Woodville Road Oregon, OH 43616
Telephone/FAX:	Additional telephone references, including 24 hour numbers, for the Facility, Owner, and QI/AQI are provided in Figure 2.2.
Primary SIC Code:	2911
Primary NAICS Code	493190
Date of Initial Oil Storage:	1951
FACILITY LOCATION	
County	Lucas County, Ohio
Facility Latitude	(b) (7)(F), (b) (3) [redacted]
Facility Longitude:	
Area Map:	Provided in Figure 1.1
Facility Diagram	Provided in Figure 1.2
Wellhead Protection Area:	No Impact
Landside Directions:	Both the Toledo MT and HVD are accessed from Consaul Street, off Front Street, near Interstate 280
Waterside Directions:	HVD is located on the east (right descending bank of the Maumee River immediately down river of the Interstate 280 bridge. The Toledo MT is located down river from the HVD, also on the east bank of the Maumee River.

FIGURE 1.3
FACILITY INFORMATION (Cont'd)

PHYSICAL DESCRIPTION - GENERAL

Description of Operation:

- Product is received by pipeline from the Toledo Refinery, and occasionally received by vessel.
- Product is shipped via vessel across the HVD

Products Handled:

- Carbon Black Oil (AKA –HARF)
- Residues (Petro) Atmospheric (AKA – Gas Oil)
- Light Cycle Oil (AKA – LCO)
- Distillates (Petro.) Full RMG STR Middle
- ULSD #1 15 MV-SP

Note: Safety Data Sheets (SDS) are maintained separately at the Facility and can be accessed through the Toledo Refining Company, LLC intranet in the 3E Online Application.

Barge unloading and loading operations occur at the HVD. Approximately one to two vessels transfer per week. Minimal loading occurs from December through February when the river traffic is iced-in during the winter.

Pipeline Response Zone Information Summary:

General:

- Six (6) inch diameter line that is approximately two (2) miles long starting at #15 Pump house at the Refinery going directly to HVD. When #2 Tank Farm wants to ship to the vessel, it sends its material via a six (6) inch line to Pump house #15, which then sends it to the vessel direct or to the MT. If the material is sent from the Refinery or #2 Tank Farm to the MT for storage, once ready to ship, the MT has a direct six (6) inch line to HVD.
- Eight (8) inch diameter line that is approximately two (2) miles long starting at #15 Pump house at the Refinery going directly to HVD. When #2 Tank Farm wants to ship to the vessel, it sends its material via a six (6) inch line to Pump house #15, which then sends it to the vessel direct or to the MT. If the material is sent from the Refinery or #2 Tank Farm to the MT for storage , once ready to ship, the MT has a direct eight (8) inch line to HVD.

Up to date pipeline drawings are located at the Toledo Refining Company, LLC Engineering records vault.

FIGURE 1.3
FACILITY INFORMATION (Cont'd)

DATES AND TYPES OF SUBSTANTIAL EXPANSIONS
• In 2009, pollution control equipment was installed at the FCC unit and a new SRU unit was build. No additional oil storage capacity was added, process vessels, piping and towers only. • In 2005, a new Unit was installed at Plant 9 (LSG unit). No additional oil storage capacity was added, process vessels, piping and towers only. • In 1999, one (1) new aboveground storage tank was installed: Tank 197 has a maximum capacity of 3,374,809 gallons and is currently used as storage of Heavy Aromatic Residual Fuel. • Other historical expansions records are available in the refinery engineering files.
OTHER FACILITY DATA
• Additional facility data (including storage information) is provided in Appendix K and discharge detection and inspection information is provided in Appendix L.

Figure 1.4
Qualified Individuals and Alternates

NAME	RESPONSE TIME	ROLE	TRAINING LEVEL	OFFICE	HOME	OTHER
Elmer Dunberger – Supervisor of Security & Emergency Response	10 minutes	Qualified Individual	40 Hrs. HAZWOPR 8 Hrs. Annual	419-698-6669	(b) (6)	
Keith A Dempsey- Emergency Response and Security Shift Supervisor	10 minutes	Alt. Qualified Individual	Annual	419-698-6663		
Ed Donnelly- Emergency Response and Security Shift Supervisor	10 minutes	Alt. Qualified Individual	Annual	419-698-6663		
Phil Wojcinski- Emergency Response and Security Shift Supervisor	10 minutes	Alt. Qualified Individual	Annual	419-698-6663		
Ken Adams- Emergency Response and Security Shift Supervisor	10 minutes	Alt. Qualified Individual	Annual	419-698-6663		
Kevin Kennedy-Emergency Response and Security Shift Supervisor	10 minutes	Alt. Qualified Individual	Annual	419-698-6663		

2.0 NOTIFICATION PROCEDURES

This section is a guide for notification procedures that should be implemented immediately after discovering a discharge incident and securing the source (if at all possible). Internal and external notifications are described separately for clarification purposes only. All notifications are of extreme importance and must be completed in a timely manner.

2.1 INTERNAL NOTIFICATION

The following internal notifications should be made for each emergency incident to the extent that the incident demands. An internal notification sequence is provided in Figure 2.1. In no event shall notification be delayed because the immediate supervisor is inaccessible. **Authorization is given to bypass management levels if necessary to provide immediate notification to upper management.** The Facility Spill Management Team will consist of members of the Emergency Response Team and the Emergency Command Team Teams, as well as contract personnel as the situation demands. The typical internal notification responsibilities for each person potentially involved in the initial response are as follows:

First Toledo Refining Company, LLC Person Notified/On-Scene

- ☐ Immediately notify **Facility Shift Superintendent.**

Facility Shift Superintendent

- ☐ Notify security dispatch. Coordinate with Environmental Department to notify all regulatory/governmental agencies and other emergency response organizations as defined in Section 2.2 as the situation demands.

Security Dispatch

- ☐ Notify **Qualified Individual (QI)** for first assessment
- ☐ **Coordinate** activation of additional response as directed by QI (including activation / mobilization of the Toledo Refining Company, LLC Emergency Command Team and Emergency Response team). Figure 2.4 provides contact information for the appropriate teams.

2.2 EXTERNAL NOTIFICATION

The following external notifications should be made in accordance with federal, state, and local regulations for all reportable discharges The Facility Superintendent shall ensure that the following required verbal notifications are made as the situation demands.

The Environmental Department shall ensure that an “Information on Discharge” form is completed for all required reportable FRP related discharges and written notifications are made as designated below.

Figure 2.5 provides a listing of potential external organization contact information.

Required Notifications

☐ **National Response Center (NRC)**
Verbal
Immediately for all spills that impact or threaten navigable water.

Written
In accordance with the applicable SPCC regulations, within 60 days to the U.S. Environmental Protection Agency for a spill in excess of 1,000 gallons (24 Bbls.) in a single event or two spill events within a twelve month period into or upon navigable waters of the United States or adjoining shorelines.

U.S. Environmental Protection Agency - Region V
77 West Jackson Blvd., 5th Floor
Chicago, IL 60604

☐ **Ohio EPA Office of Emergency Response (SERC)**
Verbal
Immediately for all spills that impact state air, land or waters.

Written
As requested by the agency. (Within 30 days)

Division of Emergency and Remedial Response
P. O. Box 1049
Columbus, OH 43216-1049

☐ **Local Emergency Planning Committee (LEPC)**
Verbal
For all spills which escape the boundary of the Facility.

Lucas County (LEPC)

Written
As the agency may request, depending on circumstances.

2.2 EXTERNAL NOTIFICATION (Cont'd)

Required Notifications (Cont'd)

☐ **Ohio State Fire Marshall**
Verbal
If the spill is in any way underground storage tank related, the Ohio State Fire Marshall must be notified if a (UST) containing flammable or combustible liquids have any release or suspected release to the local Fire Official and the State Fire Marshall within 24 hours.

Written
As requested by the agency.

Ohio State Fire Marshall
8895 East Main
Reynoldsberg, OH 43068

Other notification required will be made by the Emergency Command team, depending on the incident situation.

Other Notifications

☐ **Occupational Safety and Health Administration (OSHA)**
Immediately for incidents involving three (3) or more hospitalizations or one (1) or more deaths.

☐ **U.S. Environmental Protection Agency (EPA)**

- *Immediately for all spills that impact or threaten navigable water or adjoining shoreline. Notification to the EPA is typically accomplished by the call to the NRC.*

- *As per RCRA regulations, a written report on the incident must be submitted to the Regional Administrator within 15 days from the date of the incident.*

- *The report must include:*

1. *Name, address, and telephone number of the owner or operator;*
2. *Name, address, and telephone number of the Facility;*
3. *Date, time, and type of incident (e.g., fire, explosion);*
4. *Name and quantity of material(s) involved;*
5. *The extent of injuries, if any;*
6. *An assessment of actual or potential hazards to human health or the environment, where this is applicable; and*
7. *Estimated quantity and disposition of recovered material that resulted from the incident.*

2.2 EXTERNAL NOTIFICATION (Cont'd)

Other Notifications (Cont'd)

☐ **U.S. Coast Guard - MSO (USCG)**
Immediately for all spills that impact or threaten navigable water or adjoining shoreline. Notification to the USCG is typically accomplished by the call to the NRC.

☐ **U.S. Fish and Wildlife Service (USFWS)**
Immediately for Wildlife Protection/Rehabilitation

☐ **Local Emergency Services**
Immediately for all Police, Fire, and Medical Emergencies

Dial 911

Police Department (Note for HVD/MT events Security Dispatch calls Toledo Fire non-emergency number)

Fire Department (Note for HVD/MT events Security Dispatch calls Toledo Fire non-emergency number)

Ambulance Service

☐ **Wildlife Rehabilitation Resources**

International Bird Rescue Center (Berkeley, CA)

Tri-State Bird Rescue Center

☐ **Neighbors**
Directly or with assistance from local police and fire agencies, inform all adjacent businesses and private citizens that might be immediately impacted.

SPILL REPORTING GUIDELINES

- Never include information which has **not been verified.**
- **Never speculate** as to the cause of an incident or make any acknowledgment of liability.
- **DOCUMENT:**
  - ☐ Agency notified
  - ☐ Time agency notified
  - ☐ Person notified
  - ☐ Content of message given
- **DO NOT DELAY** reporting due to incomplete information.

FIGURE 2.1

INTERNAL NOTIFICATION SEQUENCE

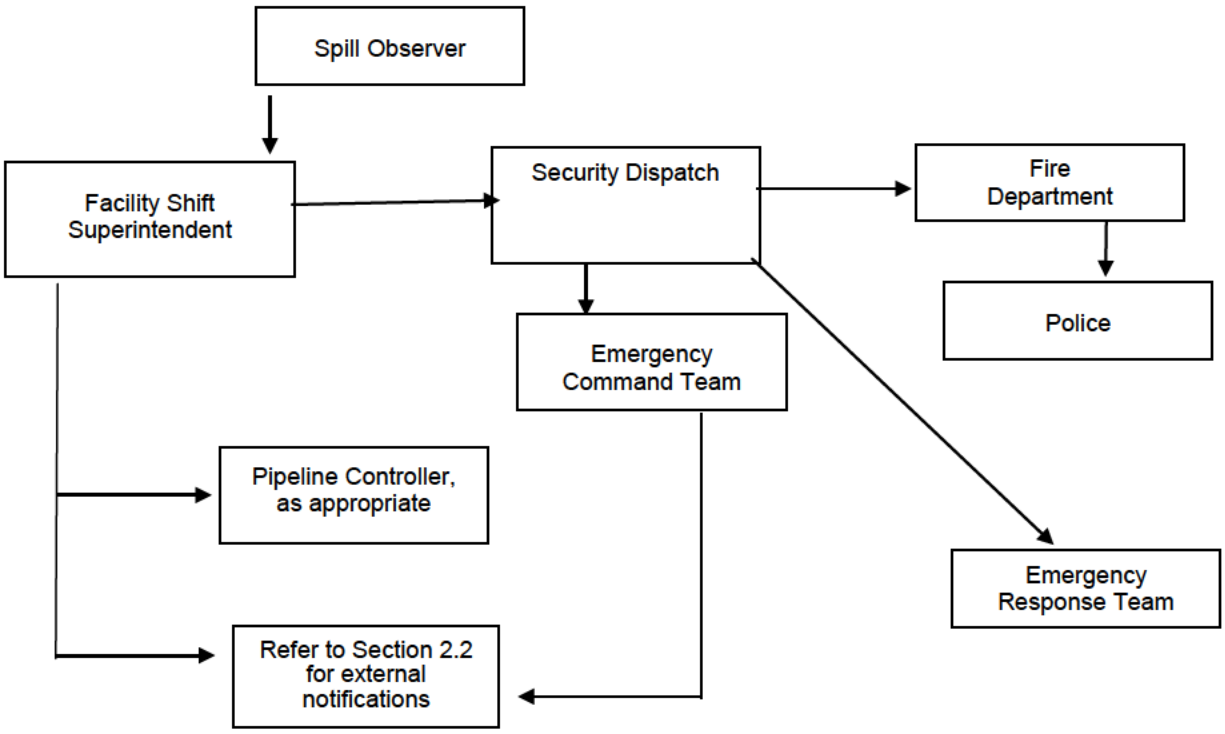
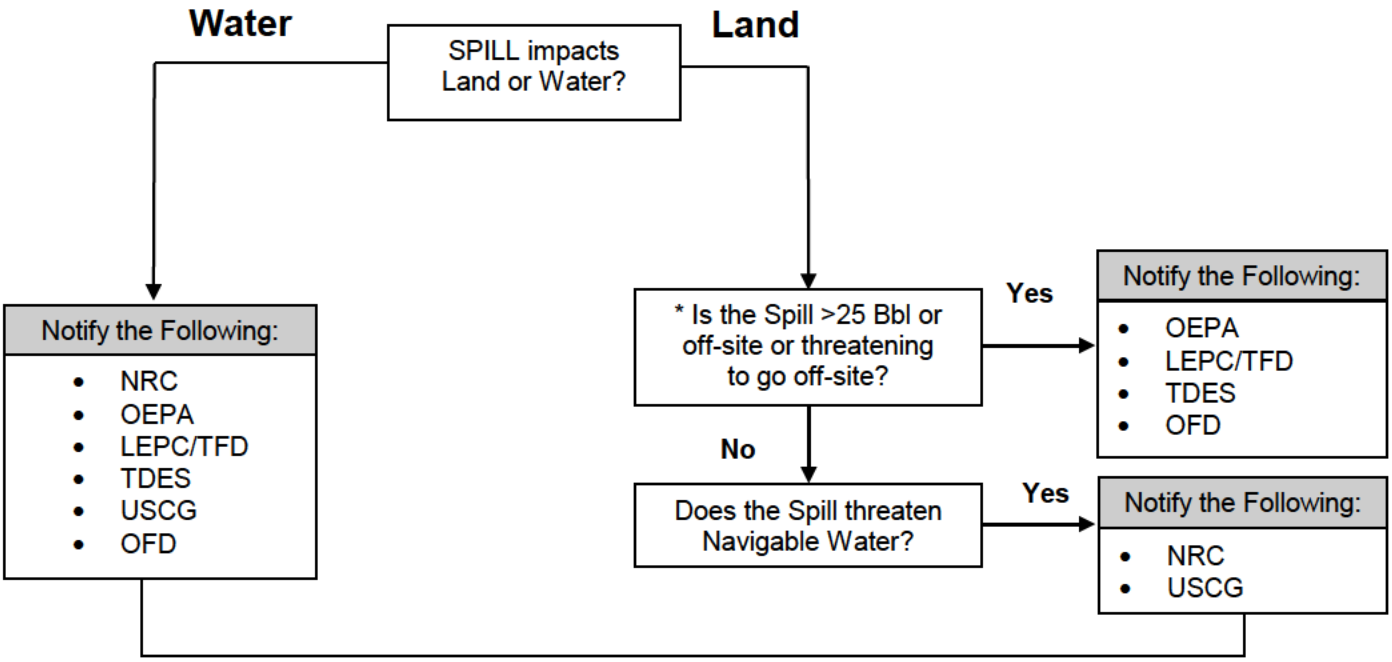


FIGURE 2.2

EXTERNAL NOTIFICATION OF SPILL



Acronyms:
• NRC = National Response Center • OEPA = Ohio Environmental Protection Agency • TFD = Toledo Fire Department • LEPC = Local Emergency Planning Committee • USCG = U.S. Coast Guard • OFD = Oregon Fire Department • TDES = Toledo Division of Environmental Services

* Ohio EPA requires that all spills that cause 25 gallons or more to be released offsite be reported

FIGURE 2.3

Information on Discharge form

Information on Discharge*

Facility: _____

(A) Reporting Party	(B) Suspected Responsible Party
Name:	Name:
Phone:	Phone:
Job Position:	
Company:	Company:
Address:	Organization Type: ☐ Private Citizen ☐ Private Enterprise ☐ Public Utility ☐ Local Government ☐ State Government ☐ Federal Government
City:	City:
State:	State:
Zip:	Zip:
Were materials discharged: ☐ Yes ☐ No	
Calling for Responsible Party: ☐ Yes ☐ No	
Date and Time of report call:	
Other Notifications : ☐ USCG ☐ EPA ☐ State ☐ Other:	

- It is not necessary to wait for all information before calling the National Response Center (NRC) 1-800 424-8802 or direct telephone: 202-267-2675

Incident Description			
Source and /or Cause of incident:			
Date of Incident:	Time of Incident:		
Incident Address/Location Nearest City/Distance from City/Township Range Borough:			
Storage Tank Container: Above Ground: ☐ Below ground: ☐ Other: ☐			
Container capacity (bbls):			
Facility Capacity			
Tank Capacity (bbls):	Latitude:	Longitude:	River Mile:

Information on Discharge*

Facility: _____

Materials	
Material Discharged:	
Quantity in water: (include units)	
Response Action	
Actions Taken to Correct or Mitigate Incident:	
Impact	
Number of Injuries:	Number of Fatalities:
Evacuations required: ☐ Yes ☐ No ☐ Unknown	If Yes: Number Evacuated:
Any Damage: ☐ Yes ☐ No ☐ Unknown	If Yes: Damage in Dollars:
Additional Information	

FIGURE 2.4

Internal Notification Contact Information

EMERGENCY RESPONSE TEAM						
NAME	**RESPONSE TIME**	**RESPONSIBILITY DURING RESPONSE ACTION**	**TRAINING LEVEL**	**OFFICE**	**HOME**	**OTHER**
Elmer Dunberger	10 Minutes (maximum)	Security Lead / Qualified Individual /Alternate QI	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6669	(b) (6)	
Ken Adams	15 minutes (*maximum*)	Emergency Response Shift Supervisor / QI / Alternate QI	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6663		
Keith Dempsey	15 minutes (maximum)	Emergency Response Shift Supervisor / QI / Alternate QI	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6663		
Ed Donnelly	10 minutes (*maximum*)	Emergency Response Shift Supervisor / QI / Alternate QI	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6663		
Kevin Kennedy	15 minutes (maximum)	Emergency Response Shift Supervisor / QI / Alternate QI	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6663		
Phil Wojcinski	10 minutes (*maximum*)	Emergency Response Shift Supervisor / QI / Alternate QI	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6663		
Cory Clark	15 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6628		
Chris Conley	20 minutes *(maximum)*	Emergency Response		419-697-2491		
Douglas Church	60 Minutes (maximum)	Emergency Response		419-698-6600		
Richard Cutcher	15 Minutes (maximum)	Emergency Response		419-698-6600		
Sandy Daniel	20 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6692		

EMERGENCY RESPONSE TEAM

NAME	RESPONSE TIME	RESPONSIBILITY DURING RESPONSE ACTION	TRAINING LEVEL	OFFICE	HOME	OTHER
Justin Donley	15 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600	(b) (6)	
Jessie Duke	20 minutes (maximum)	Emergency Response		419-698-6600		
Fred Espinoza	15 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6608		
Craig Felbinger	20 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		
Daniel Flores	20 minutes (*maximum)*	Emergency Response		419-698-6600		
Dennis Flory	45 minutes *(maximum)*	Emergency Response		419-698-6600		
Dan Gresh	30 minutes	Emergency Response		419 698 6600		
Mike Jones	20 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6659		
Marty Koch	15 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6608		
John Kowalski	20 minutes (maximum)	Emergency Response		419-698-6600		
Mark Lambert	15 minutes *(maximum)*	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6974		
Terry Mack	15 minutes (maximum)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		

EMERGENCY RESPONSE TEAM

NAME	RESPONSE TIME	RESPONSIBILITY DURING RESPONSE ACTION	TRAINING LEVEL	OFFICE	HOME	OTHER
Mike Mahr	20 minutes (maximum)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6772	(b) (6)	
Tim Marshall	30 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		
Jason McVey	45 minutes (maximum)	Emergency Response		419-698-6600		
Rusty Miller	15 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		
Tim Musolf	20 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		
Kevin Rank	10 minutes (*maximum*)	Emergency Response		419-698-6600		
Thomas Saunders	10 minutes (maximum)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6608		
Nick Schnell	20 minutes (*maximum*)	Emergency Response		419-698-6600		
Rick Schroeder	20 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		
Clark Timmons	15 minutes (maximum)	Emergency Response		419-698-6600		
Lloyd Wright	20 minutes (*maximum*)	Emergency Response	40 Hrs. HAZWOPER 8 Hrs. Annually	419-698-6600		
Dave Yap	15 minutes (*maximum*)	Emergency Response		419-698-6600		

EMERGENCY RESPONSE TEAM						
NAME	**RESPONSE TIME**	**RESPONSIBILITY DURING RESPONSE ACTION**	**TRAINING LEVEL**	**OFFICE**	**HOME**	**OTHER**
Brian Yost	20 minutes (*maximum*)	Emergency Response		419-698-6600	(b) (6)	

EMERGENCY COMMAND TEAM						
NAME	**RESPONSE TIME**	**RESPONSIBILITY DURING RESPONSE ACTION**	**TRAINING LEVEL**	**OFFICE**	**HOME**	**OTHER**
Clark Wrigley	15 minutes (*maximum*)	Incident Commander	Annually	419-698-6622	(b) (6)	
Neal Sahni	20 minutes (*maximum*)	Deputy Incident Commander	Annually	419-698-6766		
James Sciarini	20 minutes (*maximum*)	Administration Officer	Annually	419-698-6709		
Olivia Summons	15 minutes (*maximum*)	Information Officer	Annually	419-698-6910		
Joe Niedecken	15 minutes (*maximum*)	Refinery Operations Officer	Annually	419-698-6760		
Eric Fannin	15 minutes (*maximum*)	Safety Officer	Annually	419-698-6868		
Chris McCormick	35 minutes (*maximum*)	Planning Section Chief	Annually	419-697-6547		
Daniel Ingram	20 minutes (*maximum*)	Logistics Section Chief	Annually	419-698-6717		
Nancy Perham	35 minutes (*maximum*)	Finance Officer	Annually	419-697-6549		
Elaine Moore	15 minutes (*maximum*)	Liaison Officer	Annually	419-698-6847		
Vickie Witty Davis	35 minutes (*maximum*)	Oil Flow Officer	Annually	419-698-6794		
Christine Shultz	15 minutes (*maximum*)	Documentation Unit Leader	Annually	419-698-6810		

EMERGENCY COMMAND TEAM						
NAME	**RESPONSE TIME**	**RESPONSIBILITY DURING RESPONSE ACTION**	**TRAINING LEVEL**	**OFFICE**	**HOME**	**OTHER**
Richard Beans	30 minutes (maximum)	Communications Unit Leader	Annually	419-698-6637	(b) (6)	

FIGURE 2.5

External Notification Contact Information

EXTERNAL NOTIFICATIONS			
AGENCY	**LOCATION**	**OFFICE**	**ALTERNATE**
National Response Center (NRC)	Washington, D.C.	(800) 424-8802	(202) 267-2675
Ohio EPA Office of Emergency Response (SERC)	Columbus, OH	(800) 282-9378 (In state)	(614) 224-0946
Lucas County (LEPC)	Toledo, OH	(419) 936-3550 (24 Hrs.)	
Ohio State Fire Marshall	Reynoldsburg, OH	(888) 252-0803	(614) 752-8200
OSHA (For Reportable Injury or Death)	Washington, D.C.	(800) 321-6742	
U.S. Environmental Protection Agency (EPA) Region V	Chicago, IL	(312) 353-2318 (24 Hrs.)	(312) 353-2000
U.S. Coast Guard, MSO	Toledo, OH	(419) 418-6050	313-568-9560
U. S. Fish and Wildlife Service (USFWS) Region III	Twin Cities, MN	(978) 281-9328 ext. 6506	
National Marine Fisheries Service, N.E. Region	Gloucester, MA	(978) 281-9300	
Toledo Division of Environmental Services	Toledo, OH	(419) 936-3015	(419) 245-1000
State Highway Patrol	Hamilton, OH	(513) 863-4606	
Ohio State Police	Toledo, OH	(419) 865-5544	
National Weather Service (Recorded Forecasts)	Toledo, OH	(216) 265-2370	
Toledo Water Treatment Plant	Toledo, OH	(419) 936-3021	
TV - Channel 13	Toledo, OH	(419) 531-1313	
TV - Channel 24	Toledo, OH	(419) 535-0024	
TV - Channel 11	Toledo, OH	(419) 248-1111	
TV - Channel 36	Toledo, OH	(419) 244-3600	
Radio - WSPD/WLQR	Toledo, OH	(419) 244-8321	
Radio - K-100	Toledo, OH	(419) 385-6397	
Radio - WGTE FM 91	Toledo, OH	(419) 380-4600	
Radio - WRQN	Toledo, OH	(419) 240-1935	
BP Toledo Refinery (main gate)	Toledo, OH	(419) 698-6451	(419) 698-6400 (Switchboard)
Toledo Public Utilities Dept. (water intakes)	Toledo, OH	(419) 936-3021	(419) 936-3067

LOCAL EMERGENCY SERVICES (DIAL 911 for All Police, Fire, and Ambulance Emergencies)			
SERVICE	**LOCATION**	**OFFICE**	**ALTERNATE**
Local Emergency Planning Committee	Toledo, OH	(419) 936-3550 (24 Hrs.)	
Oregon Fire Department	Oregon, OH	(419) 691-5787 (24 Hrs.)	
Toledo Fire / Rescue	Toledo, OH	(419) 245-1180 (24 Hrs.)	
St. Charles Hospital	Toledo, OH	(419) 696-7200	(419) 696-7300 ER
Local Water Supply System	Oregon, OH	(419) 698-7039	(419) 698-7064
	Toledo, OH	(419) 936-3021	(419) 936-3067
Bay Park Community Hospital	Toledo, OH	(419) 690-7900	(419) 690-7911 ER
St. Vincent Mercy Medical Center	Toledo, OH	(419) 251-4200	(419) 251-4354 ER

USCG CLASSIFIED OIL SPILL REMOVAL ORGANIZATIONS (OSRO) *				
COMPANY	**RESPONSE TIME**	**LOCATION**	**OFFICE**	**ALTERNATE**
Heritage Environmental Services	1 to 2 hours	Toledo, OH	419-729-1321 (24 Hrs)	
NRC-National Response Corporation	1 to 2 hours	Great River, NY	(800) 899-4672 (24 Hrs)	(631) 224-9141

ADDITIONAL RESPONSE RESOURCES				
COMPANY	**RESPONSE TIME**	**LOCATION**	**OFFICE**	**ALTERNATE**
Nature's Nursery	1 hour	Whitehouse, OH	419 877-0060	
C&W Tank Cleaning Company	1 hour	Oregon, OH	(419) 691-1995 (24 Hrs.)	(419) 466-5493
EQ	2 to 3 hours	Ypsilanti, MI	(800) 839-3975 (24Hrs)	(419)-346-0795
International Bird Rescue Center	24 hours to 48 hours	Berkeley, CA	(707) 207-0380	
Tri-State Bird Rescue	24 hours to 48 hours	Newark, DE	(302) 737-7241	(800) 710-0695 PGR (800) 710-0696 PGR

*** Note: Toledo Refining Co is also a member of the Northwest Ohio and Michigan Mutual Assistance District (419) 245-1180**

3.0 RESPONSE ACTIONS

3.1 INITIAL RESPONSE ACTIONS

Initial response actions are those taken by local personnel immediately upon becoming aware of a discharge or emergency incident, before the Emergency Response Team (described in Section 4.0) is formed and functioning. Timely implementation of these initial steps is of the utmost importance because they can greatly affect the overall response operation.

It is important to note that **these actions are intended only as guidelines**. The appropriate response to a particular incident may vary depending on the nature and severity of the incident and on other factors that are not readily addressed. Note that, **without exception, personnel and public safety is first priority**.

The first Toledo Refining Company LLC person on scene will function as the person-in-charge until relieved by an authorized G-1 or Fire Marshal who will assume the position of On-scene Commander. Transfer of command will take place as more senior management respond to the incident.

The person functioning as **On-Scene Commander** during the initial response period **has the authority to take the steps necessary to control the situation and must not be constrained by these general guidelines**.

INITIAL RESPONSE ACTIONS - SUMMARY

- Personnel and Public Safety is first priority
- Eliminate sources of ignition
- If possible, Isolate the source of the discharge, minimize further flow
- Make internal notifications
- Activate the Local Response Team as necessary
- Activate response contractors and other external resources as necessary
- Monitor and control the containment and clean-up effort

3.1 INITIAL RESPONSE ACTIONS (Cont'd)

FIRST TOLEDO REFINING COMPANY LLC PERSON NOTIFIED/ON-SCENE

- _____ Follow the appropriate ***"Specific Incident Response Checklist"*** in Figure 3.1 and ***"Product Specific Response Considerations"*** in Figure 3.2.
- _____ Notify **Facility Shift Superintendent** of the incident.
- _____ Utilize local emergency services as necessary (police, fire, medical).
- _____ Notify the Pipeline Controllers, as appropriate.

On-Scene Commander (G-1 responding to scene)

- _____ **Evaluate the Severity**, Potential Impact, Safety Concerns, and Response Requirements based on the initial data provided by the first person on scene.
- _____ Assume the role of **Incident Commander**.
- _____ **Confirm safety** aspects at site, including need for personal protective equipment, sources of ignition, and potential need for evacuation.
- _____ Activate the **Emergency Response Team and Emergency Command Team**, as the situation demands.
- _____ Coordinate/perform **activation of additional spill response contractors,** as the situation demands (telephone reference is provided in Figure 2.5).
- _____ Coordinate/perform required notifications are completed.
- _____ Coordinate/perform **regulatory agency notification,** as the situation demands.
- _____ Proceed to spill site and **coordinate response and clean-up operations.**
- _____ Direct containment, dispersion, and/or clean-up operations in accordance with the Product Specific Response Considerations provided in Figures 3.2 and 3.3.

LOCAL RESPONSE TEAM

- _____ Assigned personnel will immediately respond to a discharge from the Facility, as the situation demands.
- _____ Perform response/clean-up operations as directed or coordinated by the Incident Commander.
- _____ Assist as directed at the spill site.

FIGURE 3.1

SPECIFIC INCIDENT RESPONSE CHECKLIST

Remember, Without Exception, Personnel Safety Is First Priority. Excessive Exposure To The Vapor And Liquid Stages Of The Spilled Product Should Be Avoided.

INITIAL RESPONSE

- _____ Take appropriate personal protective measures.
- _____ Call for medical assistance if an injury has occurred.
- _____ Check wind direction before investigating incidents where vapor cloud is a possibility.
- _____ Utilize LEL meter when you conduct an initial investigation to determine what has been released and the source.
- _____ Do not investigate on your own, take a buddy.
- _____ When you evacuate the Facility because of toxic or explosive vapors, make sure that you take the FRP, response checklists, cell phones, radios, etc. with you to the muster point.
- _____ At the evacuation muster point, take a head count to determine if anyone is missing.
- _____ If possible, block access to the hot zone and/or entire Facility (use vehicles, caution tape, traffic cones, etc.).
- _____ Restrict access to the spill site and adjacent area as the situation demands. Take any other steps necessary to minimize any threat to health and safety.
- _____ Verify the type of product and quantity released (Material Safety Data Sheets are retained separately at the Facility).
- _____ Advise personnel in the area of any potential threat and/or initiate evacuation procedures.
- _____ Use testing and sampling equipment to determine potential safety hazards, as the situation demands.
- _____ Identify/Isolate the source and minimize the loss of product, from a safe distance.
- _____ Take necessary fire response actions.
- _____ Eliminate possible sources of ignition in the near vicinity of the spill.
- _____ Notify Facility Management of the incident.

FIGURE 3.1

SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

LINE BREAK OR LEAK, SPECIFIC RESPONSE

- _____ Shut down pumping equipment.
- _____ Close upstream and downstream block valves.
- _____ Utilize Combustible Gas Indicator, O_2 meter, proper colormetric indicator and other air sampling measurements to assure that areas are safe to enter for continued response operations.
- _____ Mitigate spreading of the product, as the situation demands. Potential containment strategies include:
    - Earthen dike/berm
    - Ditching
    - Spreading sorbent material over the spill
- _____ Prevent the spill from entering the waterways, sewer, etc. to the greatest extent possible, from a safe distance.
- _____ If located within containment area, ensure that drainage valve(s) is "closed".
- _____ Drain the line section, as the situation demands.
- _____ Make all necessary repairs.
- _____ Return the line to service when repairs are complete.
- _____ Clean up spilled product to eliminate any possible environmental problems. Be alert for underground cables.
- _____ Inform local operators such as utilities, telephone company, railway.
- _____ If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in Section 6.0. Determine which of these may be threatened by the spill and direct the response operation to these locations. Initiate protection and recovery actions.
- _____ Complete follow-up and written reporting, as the situation demands.

FIGURE 3.1

SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

STORAGE TANK LEAK, SPECIFIC RESPONSE

- _____ Shut down all tank battery product movement operations and isolate the tank.
- _____ Initiate Confined Space Entry procedures, as applicable.
- _____ Ensure that the containment area drainage valve(s) is "closed".
- _____ If near tank bottom, consider filling tank with water and maintain water bottom to suspend the discharge.
- _____ Utilize Combustible Gas Indicator, O_2 meter, proper colormetric indicator and other air sampling measurements to assure that areas are safe to enter for continued response operations.
- _____ Block drainage of spilled material from traveling offsite.
- _____ Stop all traffic in hazardous area (inside and outside of property boundaries), as the situation demands.
- _____ Remove product from containment area (at a sump or in a low area) with an explosion proof pump, oil skimmer, and/or vacuum truck w/ skimmer attachments.
- _____ If applicable, process remaining product through the separator system.
- _____ Empty tank as soon as possible.
- _____ Make all necessary repairs. Return the line/tank to service when repairs are complete and tested.
- _____ Clean up product spill to eliminate any possible environmental problems. Be alert for underground cables.
- _____ Inform local operators such as utilities, telephone company, railway.
- _____ If necessary, call one (1) of the approved waste removal companies to remove the remaining sludge and residue from the containment area.
- _____ If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in Section 6.0 and ACP. Determine which of these may be threatened by the spill and direct the response to these locations. Initiate protection and recovery actions.
- _____ Complete follow-up and written reporting, as the situation demands.

FIGURE 3.1

SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

EXPLOSIONS AND/OR FIRE, SPECIFIC RESPONSE

- _____ Evacuate area.
- _____ Notify Fire Department.
- _____ Keep unnecessary people away.
- _____ Isolate hazard area and deny entry.
- _____ Stay upwind.
- _____ Keep out of low areas.
- _____ Attempt to control the fire until the fire department arrives. Do not risk injury.
- _____ Close all open valves.
- _____ Turn off all electrical power in the fire area or, if necessary, the entire Facility.
- _____ Employees are **NOT** to attempt to fight a large, fast spreading fire. Attempt to control small fires, to extinguish or prevent spreading, using whatever means are available (i.e. fire extinguisher, water, etc.).
- _____ If fire is located at a point where the incoming pipeline stream creates additional hazards, the Facility Personnel will hit the emergency shutdown button to close out the headgates, and notify the pipeline controllers of the problem.

All personnel are reminded that outsiders other than emergency services will not be allowed in the Facility during the time of an emergency, and that no statements will be issued to the media or other interested parties except by designated Facility Management. Be courteous with media representatives and direct them to the designated spokesman.

Fire hydrants, located in the vicinity of this Facility, operate at a pressure of 120-150 psi.

FIGURE 3.1

SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

VAPOR CLOUD (from a massive spill, line rupture, etc.), SPECIFIC RESPONSE

- _____ The person who discovers the vapor cloud will sound the alarm and notify the supervisor on duty and vacate the area.
- _____ **Remember: the only proper action in the presence of a vapor cloud is to get away from it. Do not shut off electrical equipment.**
- _____ All personnel will report to the evacuation muster point for roll call and further instructions.
- _____ After all personnel have been accounted for, the Facility Manager will initiate the following actions as deemed necessary:

    1. Shut down pipeline.
    2. Evacuation of adjacent property.
    3. Only the fire department will be permitted to enter the Facility.

- _____ Contact the appropriate agencies and potentially affected neighbors

FIGURE 3.2

PRODUCT SPECIFIC RESPONSE CONSIDERATIONS for CRUDE OIL SPILLS

Flash Point Range: Above 100°F

Remember, Without Exception, Personnel Safety Is First Priority. Excessive Exposure To The Vapor And Liquid Stages Of The Spilled Product Should Be Avoided.

Suggested physical response actions for these products are detailed below. It is important to note however, that each situation is unique and must be individually responded to. These procedures are considerations only. Actual circumstances may dictate that the procedures followed may differ somewhat from those listed below. ***The following are intended for guideline purposes only.***

These materials are not extremely flammable and the preferred response is containment and mechanical recovery.

___ Identify source and stop discharge if possible.

___ Obtain explosimeter and other air sampling measurements to assure that areas are safe to enter for continued response operations.

___ If spill occurs at the Refinery, every effort must be made to block any drainage to ditches to prevent product from escaping the containment area. Commence containment efforts for any product which has escaped.

___ Deploy spill response equipment and personnel in an attempt to contain and recover as much product as possible.

___ Advise people in the area of any potential threat and/or initiate evacuation. Inform local operators such as utilities, telephone company, railway, and tunnels as the situation demands.

___ Recover the product and affected soil. Be alert for underground cables and water bearing formations. Remember that product may penetrate deeper if impermeable natural layers are disturbed.

___ Determine the direction and expected duration of spill movement. Refer to the maps provided in Figure 6.1 for an overview of the area.

___ Request local authorities to establish traffic control in the area, as the situation demands.

___ If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in Section 6.0. Determine which of these may be threatened by the spill and direct the response operation to these locations. Initiate protection and recovery actions.

FIGURE 3.3

PRODUCT SPECIFIC RESPONSE CONSIDERATIONS for GASOLINE SPILLS

Flash Point Range: Below 100°F

Remember, Without Exception, Personnel Safety Is First Priority. Excessive Exposure To The Vapor And Liquid Stages Of The Spilled Product Should Be Avoided.

Suggested physical response actions for these products are detailed below. It is important to note however, that each situation is unique and must be individually responded to. These procedures are considerations only. Actual circumstances may dictate that procedures followed may differ somewhat from those listed below. ***The following are intended for guideline purposes only.***

These materials float on water and are extremely flammable. Containment of these materials may allow explosive concentrations to accumulate. The preferred response is to minimize impact to water and protect shorelines (storm sewers, creeks, rivers, etc.) from contamination, allow evaporation to occur, and contain/clean-up remaining product.

___ Identify source and stop discharge if possible.

___ Make appropriate notifications to regulatory agencies and internal Toledo Refining Company LLC Management. (Refer to Figures 2.2 and 2.5 for notifications.)

___ Obtain explosimeter and other air sampling measurements to assure that areas are safe to enter for continued response operations.

___ Eliminate sources of vapor ignition.

___ Stay upwind and evacuate nonessential personnel.

___ Advise people in the area of any potential threat and/or initiate evacuation. Inform local operators such as utilities, telephone company, railway, and tunnels as the situation demands.

___ Minimize area of surface soil impacted by free product (e.g. damming). Contact with surface runoff or standing water should be prevented whenever possible.

___ Recover pooled hydrocarbon as soon as possible.

___ Free hydrocarbons may be floated with water to aid recovery if increased vapors and agitation can be avoided. The water will act as a barrier to reduce further infiltration of pure hydrocarbon into the soil. (NOTE: This water will later have to be removed and probably treated.)

___ If free hydrocarbon **IS NOT** present, do not add water to the impacted area.

FIGURE 3.3 (Cont'd)

PRODUCT SPECIFIC RESPONSE CONSIDERATIONS for GASOLINE SPILLS

___ Remove heavily impacted soil (saturated with hydrocarbons, or very strong hydrocarbon smell) as soon as possible after product/water removal.

___ Place in a bin/rolloff or a waste pile lined on the bottom and covered on the top with plastic sheeting to prevent contact with rainwater and contamination of other areas.

___ Drums may be used for very small spill cleanups.

___ If removal of heavily-impacted soil is delayed or contaminated soil is left in place pending final disposition, the following action should be taken if the possibility of rain exists to minimize contact with rainfall:

- ___ Cover area with plastic sheeting, overlap seams, weigh down with sandbags;
- ___ Use shallow ditches to divert rainwater around contaminated site; and
- ___ Promptly remove any rainwater that does accumulate on the site.

___ The following steps should be taken together with the Toledo Refining Company LLC Environmental Department to minimize long term risk from the site:

- ___ Sample contaminated soil still in place;
- ___ Characterize and dispose of removed soil;
- ___ Estimate proper cleanup target;
- ___ Remove and dispose of more soil, if necessary;
- ___ Install groundwater monitoring wells or monitor existing wells, if necessary; and
- ___ Provide follow-up communication with regulatory agencies, if necessary.

___ Recover the product and affected soil. Be alert for underground cables and water bearing formations. Remember that product may penetrate deeper if impermeable natural layers are disturbed.

___ Due to the low flash point of these products: (1) Use non-sparking systems, (2) Have fire trucks or firefighting equipment nearby, (3) Warn all involved of the product's flammability, and (4) Allow product to evaporate to the greatest extent possible.

___ Determine the direction and expected duration of spill movement. Refer to the maps provided in Figure 6.1 for an overview of the area.

___ Request local authorities to establish traffic control in the area and to post a - "High Flammability" advisory, as the situation demands.

___ If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in Section 6.0. Determine which of these may be threatened by the spill and direct the response operation to these locations. Initiate protection and recovery actions.

3.2 DOCUMENTATION OF INITIAL RESPONSE ACTIONS

It is difficult, particularly during the first few minutes of an initial response operation to think about the importance of documentation. A log should be maintained which documents the history of the events and communications that occur during the response. When recording this information, it is important to remember that the log may become instrumental in legal proceedings, therefore:

- Record only facts, do not speculate.
- Do not criticize the efforts and/or methods of other people/operations.
- Do not speculate on the cause of the spill.
- Do not skip lines between entries or make erasures. If an error is made, draw a line through it, add the correct entry above or below it, and initial the change.
- Record the recommendations, instructions, and actions taken by government/ regulatory officials.
- Document conversations (telephone or in person) with government/regulatory officials.
- **Request that government/regulatory officials document and sign their recommendations or orders (especially if company personnel do not agree with the suggestions, instructions, or actions).**

3.3 OIL CONTAINMENT, RECOVERY AND DISPOSAL

After initial response has been taken to stop further spillage and notifications made to the required agencies, Toledo Refining Company LLC will begin spill containment, recovery, and disposal operations.

The Incident Commander will assess the size and hazards of the spill. The type of product, the location of the spill, and the predicted movement of the spill will be considered.

Based on this assessment, additional clean-up personnel and equipment will be dispatched to the site and deployed to control and contain the spill. Boom may be deployed in waterways to contain the spill and to protect socio-economic and environmentally sensitive areas. Booms may also be used in waterways to deflect or guide the spill to locations where it can more effectively be cleaned up using skimmers, vacuum trucks, or sorbent material. Clean-up equipment and material will be used in the manner most effective for rapid and complete clean-up of all spilled product.

Response and cleanup will continue until all recoverable product is removed, the environment is returned to its pre-spill state, and the unified command of Toledo Refining Company LLC's Incident Commander and the On-Scene Coordinators determine that further response and cleanup is no longer necessary.

3.4 STORAGE/DISPOSAL

Strict rules designed to ensure safe and secure handling of waste materials govern Toledo Refining Company LLC's waste disposal activities. To ensure proper disposal of recovered oil and associated debris, the following guidelines should be considered:

- In the event of a product spill, the Facility has limited capacity to store recovered product and water. Separated product is pumped to trucks to be carried to the Facility for processing.
- Oily debris will be segregated on site and containerized for temporary storage prior to disposal in accordance with RCRA/CERCLA regulations.
- Transportation of waste material will be performed in accordance with all applicable federal and state guidelines.
- Waste associated with the spill will be disposed of at Toledo Refining Company LLC pre-approved sites which have the necessary permits to accept the type of waste to be discharged.

Toledo Refining Company LLC's Disposal Specialist will coordinate activities and secure the necessary permits to ensure proper disposal or recycling of recovered product and debris. Refer to Appendix D for more disposal information.

3.5 SAMPLING AND WASTE ANALYSIS PROCEDURES

Toledo Refining Company LLC's sampling and waste analysis practices are governed by the regulations for the applicable state and the United States Environmental Protection Agency (EPA). These regulations outline methods and procedures for determining the chemical and physical characteristics of wastes generated by the Facility, including waste associated with spills, so that they may be properly stored, treated, or disposed of.

3.6 SAFETY AWARENESS

It is the corporate policy of Toledo Refining Company LLC to provide a safe workplace for all workers. All employees and contractors are responsible for maintaining the safety and health of all workers at the Facility and the response operations.

Prior to engaging in **any** spill response activity:

- All employees/contractors must have received orientation from Toledo Refining Company LLC's Safety Plan.
- All contractor response personnel must be in compliance with OSHA training requirements.
- All other personnel will have completed appropriate training for their position as outlined in Section 4.0.
- No employee/contractor shall engage in activities which place them at risk without the appropriate protective equipment and training.

All company and contract personnel are expected to comply with the Site Safety and Health Plan for each spill incident.

4.0 RESPONSE TEAMS

4.1 INTRODUCTION

This section describes organizational features and duties of the Toledo Refining Company, LLC Spill Management team. Toledo Refinery has a two tier response spill management team (SMT). There are two components that are based upon the Unified Command System (UCS) and are modular, the Emergency Response Team (ERT) and the Emergency Command Team (ECT)

- Level I Incident typically only creates impact in the local area and can be handled by the ERT.
- Level II Incident has regional impact and the ERT usually requires some additional assistance from members of the ECT.
- Level III Incident has impact nationally and usually requires the complete Spill Management Team to respond.

The key to an effective emergency response is a rapid, coordinated, tiered response by the affected unit/facility. Activation of the components of the Spill Management Team is determined by the magnitude of the incident.

The Emergency Response Team will provide first response to an incident at a facility. Additional Emergency Command Team support will respond, as requested and to the degree necessary, to incidents that exceed local capability. If additional response resources are needed, the On-Scene Commander can activate the full Spill Management Team (SMT).

The Toledo Refining Company, LLC response teams use the Unified Command System (UCS) to manage emergency response activities. Because UCS is a management tool that is readily adaptable to incidents of varying magnitude, it should be used for all emergency incidents. Staffing levels will be adjusted to meet specific response team needs, based on incident size, severity, and type of emergency.

An explanation of UCS and the roles and responsibilities for primary members of a response team is provided in Appendix F.

4.2 QUALIFIED INDIVIDUAL

Qualified Individuals (QI) have been identified. Arrangements have been made to ensure that a QI is available on a 24-hour basis. Additional qualified personnel are able to arrive at the facility in a reasonable time for an extended incident.

The Qualified Individual (QI) is responsible for coordinating with the Federal On-Scene Coordinator (FOSC), State On-Scene Coordinator (SOSC) and Local On-Scene Coordinator throughout the response.

A QI is required to:

- Be available on a 24-hour basis;
- Speak fluent English;
- Be located in the United States;
- Be familiar with the implementation of the response plan;
- Be trained in the responsibilities of the QI under the response plan;

4.2 QUALIFIED INDIVIDUAL (Cont'd)

- Be provided a document by the owner/operator designating them as a qualified individual and specifying their full authority to-

  (1) Activate and engage in contracting with oil spill removal organization(s) and other response related resources identified in the plan;
  (2) Act as a liaison with the predesignated Federal On-Scene Coordinator (OSC); and
  (3) Obligate funds required to carry out response activities.

- Activation of internal alarms and hazard communication systems to notify all facility personnel.

- Activation of response contractors and cooperatives in a timely manner.

- Notification of all response team personnel, as needed.

- Identification of the character, source, amount, and extent of the release, as well as other needed response items.

- Provision of necessary information to the appropriate Federal, state, and local authorities with designated response roles, including the National Response Center (NRC), State Emergency Response Commission (SERC), and local response agencies, as specified in the Facility Response Plan. Ensure Notification has been completed by Emergency Command Team.

- Assessment of the interaction of the spilled substance with water and/or other substances stored at the facility and notification of response personnel at the scene of that assessment.

- Assessment of the possible hazards to human health and the environment due to the release. This assessment must consider both the direct and indirect effects of the release (i.e., the effects of any toxic, irritating, or asphyxiating gases that may be generated or the effects of any hazardous surface water runoffs from water or chemical agents used to control fire and/or heat-induced explosion).

- Assessment and implementation of prompt removal actions to contain and remove the substance released, as appropriate.

- Coordination of rescue and response actions, as previously arranged with all response personnel.

- Ensurement that all provisions of the FRP have been properly addressed/ implemented.

- The accessing of company funding to initiate cleanup activities.

- Direction of cleanup activities until properly relieved of this responsibility.

4.3 EMERGENCY RESPONSE TEAM (ERT) – See Figure F.1

The first Toledo Refining Company, LLC person on scene, typically the on-duty Emergency Response Shift Supervisor or the on-duty Fire Marshal, will function as the On-Scene Commander until the arrival of the Emergency Response Chief or the Emergency Response and Security Shift Supervisor. Transfer of command may take place as more senior management respond to the incident.

The number of local Emergency Response Team Personnel required to handle an incident controlled by the On-Scene Commander and will depend on the size and complexity of the incident. The On-Scene Commander is always responsible for directing the response activities and will assume the duties of all the primary positions until the duties can be delegated to other qualified personnel.

Refer to Appendix F of this plan for job descriptions of the primary response team positions.

4.4 EMERGENCY COMMAND TEAM (ECT) – See Figure 4.2

The Emergency Command Team is a group of personnel trained to manage incidents. This team is activated as necessary, dependent upon the magnitude of the incident.

The size of, and positions on, the Emergency Command Team are incident-dependent. Dialogue with the activating facility will determine which positions will be activated.

A fully-staffed Emergency Command Team is designed to cover all aspects of a comprehensive and prolonged incident response (Level III incident). During a prolonged response, additional personnel may be cascaded to the incident location, and more than one level within the Team may be involved to sustain 24-hour operations.

4.5 RESPONSE TEAM TRAINING

The Spill Management Team is staffed by specially trained personnel from various Toledo Refining Company, LLC departments, and/or by consultants. Toledo Refining Company, LLC requires that all response personnel, including contractors and casual labor, have the appropriate training necessary to serve on a response team during an emergency. Team members will receive training in the following:

Response Plan Review

All Spill Management Team members should review their Facility Response Plan at least annually, or whenever their job position or responsibilities change under the Plan. A copy of this Plan will be available at all times to the team members at the facility.

HAZWOPER (29 CFR 1910.120)

Federal and state regulations require that response team members maintain up-to-date HAZWOPER training necessary to function in their assigned positions. At a minimum, Toledo Refining Company, LLC employees will receive “First Responder Awareness Level” training. All “Non-Toledo Refining Company, LLC” personnel responding to an incident must satisfy the applicable HAZWOPER training requirements of 29 CFR 1910.120.

OSHA HAZWOPER TRAINING REQUIREMENTS		
Responder Classification	**Required Training Hours**	**Refresher**
29 CFR 1910.120(q) Emergency Response		
First Responder - Awareness Level	2-4 hrs demonstration of competency	same
First Responder - Operations Level	8 hrs	8 hrs
Hazardous Materials Technician	24 hrs plus competency	8 hrs
Hazardous Materials Specialist	24 hrs plus competency in specialized areas	8 hrs
On-Scene Commander	24 hrs plus competency	8 hrs
29 CFR 1910.120(e) Clean Up Sites		
General Site Workers	40 hrs / 3 days on the job training	8 hrs
Occasional Workers (Limited Tasks)	24 hrs / 1 day on the job training	8 hrs
General Site Workers (Low Hazard)	24 hrs / 1 day on the job training	8 hrs
Supervisors	8 hrs supervisor training	8 hrs
29 CFR 1910.120(p)(7)(8) RCRA TSD Sites		
New Employees	24 hrs	8 hrs
Current Employees*	24 hrs	8 hrs

* Previous work experience and/or training certified as equivalent by employer.

4.5 RESPONSE TEAM TRAINING (Cont'd)

Unified Command System

Response team members will receive UCS training, and may also receive supplemental training in other, related general topics.

4.5.1 Volunteers

Toledo Refining Company, LLC will not use non-employee volunteers for emergency incident response, and no Toledo Refining Company, LLC provisions exist to train them. Volunteers may be used by government response entities, as allowed by applicable policies/procedures.

4.5.2 Training Records

Training records for local team members will be maintained at the facility according to Federal, state, and local government requirements (three years for the U.S. Coast Guard and PHMSA and five years for the U.S. Environmental Protection Agency). Training records will be maintained indefinitely for emergency response personnel as long as they maintain an active role, with assigned duties, on the response team.

4.6 RESPONSE TEAM EXERCISES

Spill Management Team members, government agencies, contractors, and other resources must participate in response exercises required by Federal, state, or local regulations. The drill program and elements covered will be completed as detailed in the "National Preparedness for Response Exercise Program (PREP) Guidelines." Toledo Refining Company, LLC will conduct announced and unannounced drills to maintain compliance, and each plan-holder must conduct at least one exercise annually. The following table lists the triennial exercise cycle for facilities (see PREP Guidelines for full details).

Triennial Cycle		
Total Number	**Frequency**	**Exercise Type/Description**
12	Quarterly	QI Notification Exercise
6	Semi-Annual	Equipment Deployment Exercise *(Facility-owned equipment)*
3	Annual	Spill Management Team Tabletop Exercise
3	Annual	Equipment Deployment Exercise *(facilities with OSRO-owned equipment)*
3	Annual	Unannounced Exercise *(not a separate exercise)* Actual response can be considered as an unannounced exercise.
NOTE: All response plan components must be exercised at least once in the cycle. Exercise records will be maintained at the Facility as follows: EPA – 5 years; USCG and PHMSA – 3 years.		

Quarterly QI Notification Exercise

- **Scope:** Exercise communication between facility personnel and the QI(s) and/or designated alternate(s). At least once each year, one of the notification exercises should be conducted during non-business hours.

- **Objective:** Contact must be made with a QI or designated alternate, as identified in the Plan.

- **General:** All personnel receiving notification shall respond to the notification and verify their receipt of the notification. Personnel who do not respond should be contacted to determine whether or not they received the notification.

Annual and Semi-Annual Equipment Deployment Exercise (for facilities with equipment)

- **Scope:** Deploy and operate facility response equipment identified in the response plan. The equipment to be deployed must include the following, at a minimum:

  - 1,000 feet of representative type of boom;
  - one of each type of skimming system; or
  - the equipment necessary to respond to the facility's Small/Average Most Probable Discharge (AMPD), whichever is less.

- **Objective:** Demonstrate personnel's ability to deploy and operate response equipment. Ensure that the response equipment is in proper working order.

- **General:** The facility may take credit for actual equipment deployment to a spill, or for training sessions, as long as the activities are properly documented.

***Annual Equipment Deployment Exercise* (OSRO-owned equipment)**

- **Review:** The facility should determine that the OSRO(s) has completed the equipment deployment exercise requirements and has maintained the necessary documentation. The OSRO may deploy equipment at any location, so long as it occurs within an operating environment similar to the facility's.

- **Scope:** OSRO must deploy and operate response equipment identified in the response plan. The equipment to be deployed must include the following, at a minimum:

  - 1,000 feet of representative type of boom, and
  - One of each type of skimming system.

- **Objective:** OSRO personnel must demonstrate their ability to deploy and operate OSRO response equipment, and must ensure that its response equipment is in proper working order.

Annual Response Team Tabletop Exercise

- **Scope:** Exercise the response team's organization, communication, and decision- making in managing a spill response. Each team identified within the plan must conduct an annual Response Team Tabletop Exercise.

- **Objective:** Exercise the response team in a review of the following:

  - Knowledge of the Plan.
  - Proper notifications.
  - Communications system.
  - Ability to access an OSRO.
  - Coordination of internal spill response personnel.
  - Transition from a local team to a regional team.
  - Ability to effectively coordinate response activity with the National Response System (NRS) infrastructure.
  - Ability to access information in the Area Contingency Plan.

- **General:** A minimum of one Response Team Tabletop Exercise in a triennial cycle will involve a Worst-Case Discharge scenario.

Government-Initiated Unannounced Exercise

- **Scope:** Upon request, the Facility is required to participate in only one unannounced exercise every 36 months from the date of the last government-initiated unannounced exercise.

Exercises are limited to approximately four hours in duration.

Exercises would involve response to a Small/Average Most Probable Discharge scenario.

Exercise would involve equipment deployment to respond to a spill scenario.

- **Objective:** Conduct proper notifications to respond to unannounced scenario of a Small/Average Most Probable Discharge.

  Demonstrate that the response is timely, conducted with an adequate amount of equipment for the scenario, and properly conducted.

- **General:** This exercise is only applicable to those facilities that are randomly chosen.

Area Exercises

- **Objective:** The purpose of the area exercise is to exercise the entire response community in a particular area. An area is defined as "that geographic area for which a separate and distinct Area Contingency Plan has been prepared, as described in OPA 90." The response community includes the federal, state, and local government and industry. The area exercises are designed to exercise the government and industry interface for spill response.

- **General:** The goal is to ensure that all areas of the country are exercised triennially. All of the area exercises will be developed by an exercise design team. The exercise design team is comprised of representatives from the federal, state, and local government and industry. A lead plan holder would lead each area exercise. The lead plan holder is the organization (government or industry) that holds the primary plan that is exercised in the area exercise. The lead plan holder would have the final word on designing the scope and scenario of the exercise.

Exercise Documentation

- All exercises should be documented and maintained at the facility; documentation should specify the:

  - Type of exercise;
  - Date and time of the exercise;
  - Description of the exercise;
  - Objectives met in the exercise;
  - Components of the response plan exercised; and
  - Lessons learned.

- Sample exercise forms are included in Appendix G. However, slight variations of the forms are acceptable and may be utilized at specific facilities.

- Exercise documentation should be kept on file for the required length of time depending on the regulating agency (three years for the U.S. Coast Guard and five years for the U.S. Environmental Protection Agency).

Exercise Planning and Design

- Designing and planning a spill response simulation exercise involves the determination of the appropriate spilled product discharge scenario and establishment of the framework for preparing, managing, and evaluating the exercise. It is the responsibility of the Emergency Response Manager to plan, carry out, and monitor drills and exercises.

4.7 SITE SAFETY AND HEALTH PLAN(S) DEVELOPMENT

The Incident Commander or Safety Representative is responsible for preparing a Site Safety and Health Plan that establishes site-specific policies, practices, and procedures to protect workers and the public from contacting potential chemical and/or physical hazards. A Site Safety and Health Plan will:

- Describe who is responsible for monitoring site safety.
- Characterize the risks associated with each operation that will be conducted in the area covered by the plan.
- Describe known chemical and physical hazards, and the measures that have been instituted to eliminate the hazards or reduce them to acceptable levels.
- Define the level of HAZWOPER training required for workers commensurate with their job responsibilities.
- Describe site control measures, and will include a site map.
- Describe decontamination procedures for personnel and equipment.

FIGURE 4.1

Emergency Response Team Structure

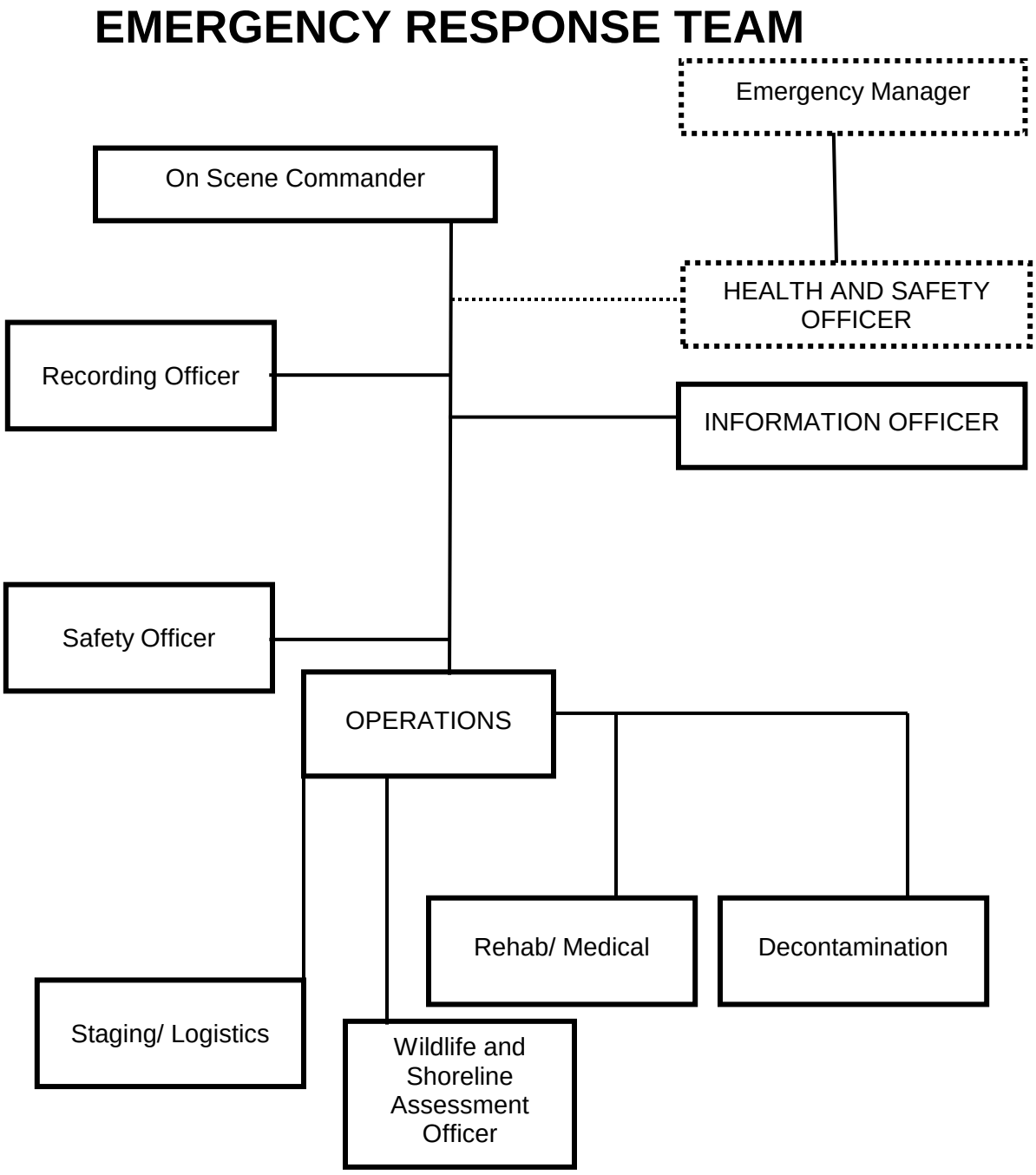
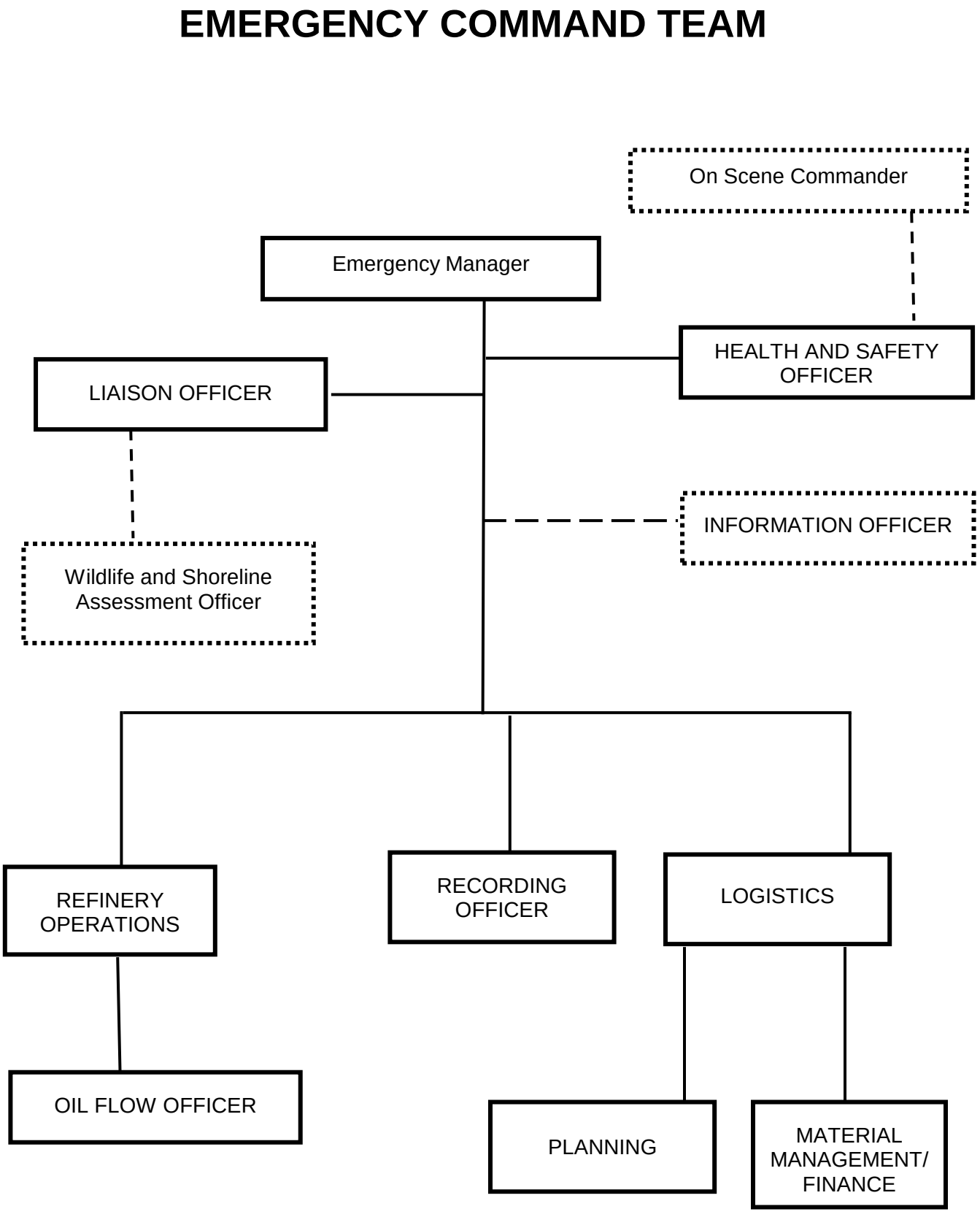


FIGURE 4.2

Emergency Command Team Structure



5.0 RESPONSE EQUIPMENT/RESOURCES

The following sections outline the various response equipment/resources available from the Toledo Refining Company LLC facility, Oil Spill Removal Organizations, and other outside resources.

5.1 FACILITY RESPONSE EQUIPMENT

The Facility is equipped with spill response equipment. This equipment is listed in Figure 5.2. The equipment listed in Figure 5.2 is inspected on a routine basis and is deployed as stated in Section 4.0. The Facility equipment is kept and maintained on site. This equipment is capable of initially containing the identified average most probable discharge of 50 barrels. The Facility also has contracts in place with Oil Spill Removal Organizations and other clean-up contractors for response to a discharge.

Toledo Refining Company LLC maintains firefighting resources to response to a fire at the Refinery and # 2 Tank Farm Facilities. The Oregon City Fire Department is available to provide additional resources as necessary. For the Marine Terminal and Hocking Valley Dock, the City of Toledo Fire Department is the primary responder, with secondary resources provided by Toledo Refining Company LLC. Fire response equipment is listed in Figure 5.2.

The Qualified Individual has the authority to activate Toledo Refining Company LLC resources or that of private contractors and other experts and consultants as the situation demands.

5.2 CONTRACT RESOURCES

In the event of a discharge which is beyond the initial response capabilities of the Emergency Response Team, contract manpower and equipment resources can be obtained through Oil Spill Removal Organization(s) (OSRO). These OSRO's can provide manpower and containment/clean-up equipment for the response operation on land, water, or adjacent shorelines. The resources will be secured from a Toledo Refining Company LLC approved contractor. Notification/implementation of these resources will typically be handled by the Refinery Management (QI). Figure 5.1 provides a quick reference to the Oil Spill Removal Organizations and details their response capability and estimated response times. Additional OSRO data, including equipment inventories and/or USCG certification data, is provided in Appendix J. **Telephone reference is provided in Figure 2.5.** *(Note: Toledo Refining Company LLC has a program in place to insure that each OSRO has a comprehensive maintenance program and applicable training / drills programs in place. Each OSRO is responsible for maintaining and inspecting their own equipment. The Facility is provided updated equipment deployment documentation on an annual basis and records are maintained for a five (5) year period.*

5.3 COOPERATIVE/MUTUAL AID RESOURCES

Toledo Refining Company LLC is a member of the Northwest Ohio – Michigan Mutual Assistance District (NOMMAD).

5.4 EXPERTS AND CONSULTANTS

Toledo Refining Company LLC maintains a relationship with various environmental and technical consultants that can provide support in the event of an emergency incident. These consultants can provide expertise and support in the areas of emergency response management, environmental services, site assessment, permitting, waste treatment, recycling, dewatering, hazardous waste disposal, and remediation. Implementation of these services should be coordinated through the Emergency Command Team.

5.5 VOLUNTEERS

Volunteers will not be utilized by Toledo Refining Company LLC for responding to spills originating from the Facility. All volunteers will be referred to the State or Federal On-Scene Coordinator (EPA).

5.6 COMMUNICATIONS

Effective and efficient communications systems are essential for emergency response at every level. The communications system will be utilized to gather information and current status reports as well as to provide coordination and direction to widely separated work groups involved in search, containment/ diversion, repair, traffic control, public control or evacuation, and restoration.

Lines of communication between the On-Scene Commander (OSC), Emergency Response Team, and the Emergency Command Team (ECT) members are demonstrated in the organization charts shown in Section 4.0. Communication of the overall spill response operation between the Facility and the responsible government agencies in the Federal Regional Response Team (RRT) will occur between the OSC and the Federal On-Scene Coordinator. Appendix J provides additional detail on the Federal Response Organization.

5.6.1 Central Communications System

Prearranged communication channels are of the utmost importance in dealing with Facility emergencies. The notification procedures and telephone contacts documented in Section 2.0 will be reviewed in accordance with the earlier documented updating procedures. The predetermined communications channels include the following:

- A list of emergency telephone numbers for internal management and emergency response personnel (Figure 2.4).
- A list of emergency telephone numbers for various external resources such as the fire and police department, medical, and regulatory agencies (Figure 2.5).
- A list of emergency telephone numbers for contract response resources (Figure 2.5).

5.6 COMMUNICATIONS (Cont'd)

5.6.2 Communications Equipment

Field communications during a spill response to a small or medium discharge will be handled via the existing Facility communications network. This network will utilize existing radios, telephones, beepers, FAX machines, and computers and will be maintained by Facility personnel. In the event of a Worst Case Discharge, field communications will be enhanced with other Toledo Refining Company LLC and contract resources as the situation demands.

5.6.3 Communication Types

Radios - Handheld and vehicle mounted radio sets are the most effective means of communication for the field response operation. The units are battery operated, multi-channeled, and have a typical range that will cover the area of the response operation. Additional radio sets and battery packs/charges will be necessary in the event of a prolonged response operation.

Telephone (Conventional) - Conventional land line telephones are the most effective means of communication for regulatory and advisory notifications during a spill response operation. Additional telephone lines can be installed in the event of a prolonged response operation.

Telephone (Cellular) - Cellular telephones allow for added mobility and response effectiveness. Cellular phones are commonly maintained by certain Facility personnel. Additional cellular phones can be secured in the event of a prolonged response operation.

Pagers - Pagers are used for rapid notification to field personnel when radio and telephone resources are limited. Most response team members carry a pager.

FAX Machines - FAX machines allow for a rapid transfer of information/documentation such as status reports/updates, written notifications, and purchase orders.

Computers - Computers are commonly used in networks which allow access to various other locations and company personnel. Computers also speed the consolidation of information and preparation of written reports.

FIGURE 5.1

EXTERNAL RESPONSE RESOURCES *

Toledo Captain of the Port (COTP) Zone							
USCG Classified Oil Spill Removal Organization (OSRO)							
OSRO Name	Contract Number	Environment Type	Facility Classification Level**				Shoreline Cleanup
			M	W1	W2	W3	
National Response Corporation		Great Lakes	X	X	X	X	Yes
		Inland/Nearshore	X	X	X	X	
		Rivers/Canals	X	X	X	X	
Heritage Environmental Services	4600000202	Great Lakes			X	X	
		Inland/Nearshore	X		X	X	
		Rivers/Canals	X	X	X	X	

Additional Response Resources		
Contractor Name	Contract Number	Response/Mobilization Time
EQ Industrial Service	4600000261	1 - 2 hours

*** Note**: Toledo Refining Company LLC is also a member of the NOMMAD

** Facility Classification Explanation can be found in Appendix C detailing Resource Quantities, Facility Response Times and Vessel Response times.

Toledo Refining Company LLC certifies that the Average Most Probable Discharge (AMPD) is covered by the facility or one or more of the Oil Spill Removal Organizations as indicated by the table above.

. FIGURE 5.2
FACILITY RESPONSE EQUIPMENT *

ITEM	LOCATION	QTY	WRHS CODE	INSPECTOR	DATE	COMMENTS
American Boom & Barrier Containment Boom	Refinery Fire Dept.	Sections totaling 700’	N/A			
Sea Arc 18’, 1994 with 100 HP evinrude and accessories: rope, life jackets, tow bridals, anchors (Boat 492)	Refinery Fire Dept.	1 each	N/A			
Sea Arc 26’, 1991 with (2) 100 HP evinrude and accessories: rope, life jackets, tow bridals, anchors, (400’) containment boom (Boat 491)	Refinery FD/Harrison Marina	1 each	N/A			
Containment Boom	HVD	900’	26-086-061			
Absorbent Boom	Refinery #2 Storehouse Area 217	10 bags; 4 - 10’ sections each	26-086-066			
Absorbent Pads	Refinery #1 Storehouse Area 12161	8 packs	26-086-063			
Creek Boom Trailer	Refinery FD	500’ Creek Boom	N/A			
Spill Control Trailer *	Refinery Fire Dept.	Inventory Attached	N/A			
River Boom Trailer	Refinery FD	500’ River boom	N/A			
Snow Boom Trailer	Refinery FD	1000’ Creek Boom	N/A			
Skimmers	Refinery	2 each	N/A			
Communications Equipment - mounted in Unit 5 - mounted in boat - hand held	Refinery Fire Dept.	 1 VHF; 1 marine 1 VHF; 1 marine 6 VHF; 6 marine	N/A			
(Unit 11) 1989 White/GMC 1500 GPM pumper with 54’ articulating boom	Refinery Fire Dept.	1 each	N/A			
(Unit 10) 1981 Pierce 1500 GPM pumper with 55’ aerial ladder	Refinery Fire Dept.	1 each	N/A			
(Unit 1) 2002 E-ONE pumper 3,500 GPM	Refinery Fire Dept.	1 each	N/A			
(Unit 12) 1975 Ford Flat Bed (Used as foam hauler)	Refinery Fire Dept.	1 each	N/A			
(Unit 9) 1995 Ford F-350 Super Duty Mini Pumper	Refinery FD	1 each	N/A			
(Unit 6) 2007 Ford F-350	Refinery Fire Dept.	1 each	N/A			
(Unit 5) 1980 GMC, Hazardous Materials Truck	Refinery Fire Dept.	1 each	N/A			

FIGURE 5.2
FACILITY RESPONSE EQUIPMENT (Cont'd)
* SPILL CONTROL TRAILER EQUIPMENT
(Staged at the Toledo Refining Company LLC Fire Dept.)

Side	Qty	Description	Inspector	Date
Back Left Door	1	Wooden Handle Pitchfork		
	2	Wooden Handle Spade Shovel		
Left Rear Side	2	Expandable Gaff Hooks		
	1	8lb. Sledge Hammer (Fiberglass)		
	1	20lb ABC Fire Extinguisher		
	10	24" Metal Stakes		
1A (Top)	6	3M Half Masks		
	6pr	3M Cartridges		
	3	Suspenders		
	2	Nomex Coveralls (46R, 50R)		
	1 cs	Tyvek-Poly Coated (3XL)		
1B (Middle)	3	Rainsuits (4XL)		
	3	Rainsuits (5XL)		
	2	Duct Tape		
	4	Bee Bopper		
	10	Leather Gloves (XL)		
	1	Nitrile Glove (M)		
	1	Nitrile Glove (L)		
	4	Googles		
1C (Bottom)	2	Boots Size 12		
	3	Boots Size 13		
	1	Hip Waders - Neoprene (13)		
	1	Hip Waders - Rubber (13)		
2A (Top)	1	Scrubs in a Bucket		
	2	Box of Wyp-All		
	4	Inflatable Kiddie Pools		
	1	Box of Garbage Bags		
	1	Drain Cover		
	1	Wooden Plug Kit		
2B (Middle)	1	Chain Saw		
	1	Gal Bar Oil		
	1	40:1 Fuel Can (Chainsaw)		
	1	Barrel Pump w/ slide fitting		
	1	25 ft Air Hose w/threads		

2C (Bottom)	4	Sandbags (filled)		
	1	Box of Sandbags		
	1	Sandbag Scoop		
	2	Bags of Sand		
3A/B/C	2	Wheelbarrows		
	2	Wood Handle Scoop Shovels		
	1	Wood Handle Flat Shovel		
	1	Fiberglass Handle Flat Shovel		
	1	Fiberglass Spade Shovel		
	1	Broom		
	15	Ground Posts		
4A (Top)	4	Spill Attack Kits		
	2	Box Cobra Coil Sausages		
	2	Box Peat Sorb Pads		
	1	Box Sorbant Industrial Rug (36"x50')		
4B (Middle)	8	8"x10' Absorbent Boom		
4C (Bottom)	8	8"x10' Absorbent Boom		
5/6/7 A (Top)	12	4"x10' PVC Pipe		
	3	2"x4"x8'		
5B (Middle)	1	Roll Snow Fence		
	6	Rolls of Chicken Wire (1"x36"x25')		
5C (Bottom)	3	Bags of Pom Pom's		
	1	Bag of Collapsable LED Cones		
6B (Middle)	2	Rolls of Plastic Sheeting (20'x100')		
	1	Rolls of Plastic Sheeting (12x100')		
6C (Bottom)	2	Bags of Oil Dry		
	4	Sandbags (filled)		
7B (Middle)	7	Safety Vests		
	16	24" Metal Stakes		
	12	24" Wood Stakes		
	1	Box of Flashlights		
		*(3) C Cell Flashlight		
		*(3) 6 volt Flashlight		
		*Spare Batteries		
	1	Tool Box		
		*Small Sledge		
		*Utility Knife		
		*Crescent Wrench		
		*Screw Drivers (various)		
		*Twine		

7C (Bottom)	3	200' Dockline Rope Bags		
	2	Wheel Chocks		
	1	Rope Box		
		*(1)Large 50' Braided Rope		
		*(1) 50' Hemp Rope		
		*(10) 50' sections of Cord		
		*(3) 100' Red Anchor Rope		
		*(1) 50' Dockline		
		*(2) 25' Red Anchor Rope		
Right Rear Side	2	Expandable Gaff Hooks		
	1	Windsock		
	1	10 lb Sledgehammer		
	1	Hand Saw		
	1	20lb ABC Fire Extinguisher		
	10	24" Metal Stakes		
Right Rear Door	2	Push Broom		
	2	Fiberglass Handle Flat Shovel		

* Note: The equipment listed in Figure 5.2 is inspected on a routine basis and is deployed as stated in Section 4.0.

6.0 SPILL IMPACT CONSIDERATIONS

6.1 CRITICAL AREAS TO PROTECT

The critical areas to protect are classified as high, moderate, and low sensitivity to oil. The Federal, State, and local authorities will further clarify these categories at the time of the response. The categories are defined as follows:

HIGH SENSITIVITY
● Areas which are high in productivity, abundant in many species, extremely sensitive, difficult to rehabilitate, or inhabited by threatened/endangered species. ● Areas which consist of forested areas, brush/grassy areas, wooded lake areas, freshwater marshes, wildlife sanctuaries/refuges, and vegetated river/stream banks.

MODERATE SENSITIVITY
● Areas of moderate productivity, somewhat resistant to the effects of oiling. ● Areas which consist of degraded marsh habitat, clay/silt banks with vegetated margins, and gravel/cobble beaches.

LOW SENSITIVITY
● Areas of low productivity, man-made structures, and/or high energy. ● Areas which consist of gravel, sand, or clay material, barren/ rocky riverbanks and lake edges, man-made structures, and concrete/compacted earthen drainage ditches.

6.2 ENVIRONMENTAL/SOCIO-ECONOMIC SENSITIVITIES

Environmental/Socio-economic Sensitivities are of extreme importance when planning a response effort. The health and safety of the public and the environment, as well as the protection of the various socio-economic sensitivities, must be promptly addressed in order to mitigate the extent of damage and minimize the cost of the clean-up effort.

All environmental/socio-economic sensitivities are worthy of protection, but must be prioritized during a response effort. When making decisions on which areas to designate as collection areas and which to protect, the following sources may be consulted:

- U.S. Fish and Wildlife Service and related state agencies
- Applicable Area Contingency Plans
- Other industry and private experts

6.2 ENVIRONMENTAL/SOCIO-ECONOMIC SENSITIVITIES (Cont'd)

The environmental and socio-economic sensitivities in the vicinity of the Facility can be divided into a number of categories. The following environmental/socio-economic sensitivity summary describes these categories which may be impacted by a discharge and should be addressed in the response:

Environmental:

- Environmentally sensitive areas are prevalent throughout any marine and/or terrestrial environment and may be affected by any potential discharge incident.

- Environmentally sensitive areas subjected to stress and sudden change may be severely damaged. All means of exclusion/diversion should be utilized during a response effort to minimize the impact on these areas.

Historical Areas:

- Properties listed in the National Register of Historic Places and Natural Landmarks are included in this category.

- These areas may need to be boomed off or otherwise protected to minimize impact.

Major Recreational Areas:

- A discharge affecting these areas may pose a public safety/health risk during a response effort.

- Shoreline access for personnel and equipment deployment (boats, boom, etc.) is typically available in these areas.

Marinas:

- These areas have a high degree of public exposure (personal and property) and should be boomed for protection.

- Boats and other water deployed equipment can often be deployed and/or obtained in these areas.

Residential Areas:

- These are areas with high public impact and may warrant evacuation in extreme cases.

- Cleanup must be performed with extreme caution due to extensive public exposure.

- Suburban Animal Hospital will be contacted to handle contaminated domestic animals.

6.2 ENVIRONMENTAL/SOCIO-ECONOMIC SENSITIVITIES (Cont'd)

Commercial Farming/Ranching Areas:

- Commercial Farming/Ranching Areas have the potential of human and livestock impact, as well as socio-economic impact in the potential loss of crops or loss of property use.

Water Intake Points:

- Commercial, industrial, municipal, and private water intakes are subject to impact.
- These areas may need to be boomed off or otherwise protected to minimize impact.

Wildlife Management Areas and Refuges:

- These areas have a high degree of exposure to threatened/endangered species and many other types of wildlife. Figure 6.1 contains a listing of the threatened/endangered species.
- Protection booming and clean-up efforts are high priority in these areas.

Figure 6.2 contains listings and tiles showing the locations of areas of Environmental/Socio-Economic Sensitivities. The information was obtained from the U.S. EPA Inland Sensitivity Atlases for Northwest Ohio and South East Michigan.

6.3 WILDLIFE PROTECTION AND REHABILITATION

Toledo Refining Company, LLC will work with Federal, State, and local agency personnel to provide labor and transportation to retrieve, clean, and rehabilitate birds and wildlife affected by an oil spill, as necessary. Figure 6.4 contains a contingency protocol for oiled wildlife which has been prepared for Toledo Refining Company, LLC by Tri-State Bird Rescue & Research Inc. Oversight of Toledo Refining Company, LLC's wildlife preservation activities and coordination with Federal, State, and local agencies during an oil spill is the responsibility of the Shoreline Assessment and Wildlife Officer under the direction of the On-scene Commander.

Special consideration should be given to the protection and rehabilitation of endangered species and other wildlife and their habitat in the event of an oil spill and subsequent response. Jurisdictional authorities should be notified and worked with closely on all response/clean-up actions related to wildlife protection and rehabilitation. Laws with significant penalties are in place to ensure appropriate protection of these species.

6.3.1 Endangered/Threatened Species

The U.S. Fish and Wildlife Service (USFWS) and related state agencies classify the status of various wildlife species in the potentially effected states. A summary of critical birds, reptiles, mammals, and rare plant species status for the state of Ohio are presented in Figure 6.1. The lists were printed directly from the Ohio Department of Natural Resources website. Potential locations of the species being identified in Figure 6.1 are shown in Figure 6.2.

6.3 WILDLIFE PROTECTION AND REHABILITATION (Cont'd)

6.3.2 Wildlife Rescue

Toledo Refining Company, LLC will work with Federal, State, and local agency personnel to provide labor and transportation to retrieve, clean, and rehabilitate wildlife affected by an oil spill, as the situation demands.

The following are items which should be considered for wildlife rescue and rehabilitation during a spill response:

- Bird relocation can be accomplished using a variety of deterrents, encouraging birds to avoid areas of spilled oil. Bird relocation can be accomplished by utilizing deterrent methods including:
  - Use of visual stimuli, such as inflatable bodies, owls, stationary figures, or helium balloons, etc.
  - Use of auditory stimuli, such as propane cannons, recorded sounds, or shell crackers.
  - Use of herding with aircraft, boats, vehicles, or people (as appropriate).
  - Use of capture and relocation.

6.3.3 Search and Rescue - Points to Consider

- **Toledo Refining Company, LLC's involvement should be limited to offering assistance as needed or requested by the agencies.**
- Prior to initiating any organized search and rescue plan, **authorization must be obtained from the appropriate federal/state agency.**
- **Initial search and rescue efforts, if needed, should be left up to the appropriate agencies.** They have the personnel, equipment, and training to immediately begin capturing contaminated wildlife.
- With or without authorization it must be anticipated that volunteer citizens will aid distressed/contaminated wildlife of their own. It is important to communicate that it may be illegal to handle wildlife without express authority from appropriate agencies. Provisions should be made to support an appropriate rehabilitator, however, **no support should be given to any unauthorized volunteer rescue efforts.**
- The regulatory agencies and response personnel should be provided the name and location of a qualified rehabilitator in the event contaminated wildlife is captured.

6.3 WILDLIFE PROTECTION AND REHABILITATION (Cont'd)

- Resources and contacts that can assist with wildlife rescue and rehabilitation are provided in Section 2.0. This list includes:
  - Outside rehabilitation organizations
  - Local regulatory agencies
  - Other resources

6.4 STAGING AREAS

When establishing personnel and equipment staging areas for a response to a Facility discharge, the following criteria should be evaluated:

- Access to waterborne equipment launching facilities and/or land equipment.
- Access to open space for staging/deployment of heavy equipment and personnel.
- Access to public services utilities (electricity, potable water, public phone, restroom and washroom facilities, etc.)
- Access to the environmental and socio-economically sensitive areas which are projected for impact.

6.5 SPILL VOLUME ESTIMATES

Quality spill volume estimates are required in order to evaluate the equipment and manpower requirements necessary to handle the response. The primary and most accurate method of estimating the spill volume is from tank gauging and/or pump rate estimates (depending on the type of incident which caused the spill). In the event that tank or pump estimates are not available, the secondary method of visual estimation can be performed by analyzing the color and size of the slick and converting that data with the information provided in Figure 6.3.

6.6 TRAJECTORY ANALYSIS

Oil spilled on water will react primarily to the effects of wind and current. The oil will tend to spread to a thin layer under the influence of gravity (primary) and chemical (secondary) forces. The following describes the behavior of oil on water:

- Oil will move in the direction and at the rate of the current under negligible wind conditions.
- Oil will move in the direction and at approximately 3.4 % of the velocity of the wind under negligible current conditions.
- The combined effects of wind and current on the oil should be carefully analyzed. A method of vector analysis can be performed to determine the net direction of movement (wind forces can work in addition to, against, or in many other combinations with the current).

6.6 TRAJECTORY ANALYSIS (cont'd)

- The primary method of surveillance for the Facility will be visual. Visual surveillance is not effective however in rain, fog, darkness, or heavy cloud cover. It is difficult to observe a slick on the water from a boat, dock or land due to the angle of observation. Aerial surveillance is the preferred method of visual surveillance because of the elevated view and the ability to cover a large area in a short period.

6.7 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT

General descriptions of various specific response techniques that may be applied during a response effort are discussed below. Company responders are free to use all or any combination of these methods as incident conditions require, provided they meet the appropriate safety standards and other requirements relative to the situation encountered. Data was obtained from reports, manuals and pamphlets prepared by the American Petroleum Institute, Environmental Protection Agency and the United States Coast Guard. The most effective cleanup of a product spill will result from an integrated combination of clean-up methods. Each operation should complement and assist related operations and not merely transfer spillage problems to areas where they could be more difficult to handle.

The spill should be assessed as soon as possible to determine the source, extent and location of travel. Terrain and other physical conditions down gradient of the spill site will determine the methods of control at a point in advance of the moving product. Often, the bulk of a spill can be contained at a single location or a few key locations in the immediate vicinity of the source point. When possible the executions of this type of initial containment strategy helps confine a spill to a relatively limited area. A listing of methods with precautions/recommendations is available in Figure 2.5. Figure 2.6 provides recommendations that match the methods with the type of the habitat impacted.

6.7.1 Spill on Land (Soil Surfaces)

- **Confinement Methods**

  Product can be trapped in ditches and gullies by earth dams. Where excavating machinery is available, dams can be bulldozed to contain lakes of product. Dams, small and large, should be effectively employed to protect priority areas such as inlets to drains, sewers, ducts and watercourses. These can be constructed of earth, sandbags, absorbents, planks or any other effective method. If time does not permit a large dam, many small ones can be made, each one holding a portion of the spill as it advances. The terrain will dictate the placement of the dams. If the spill is minor, natural dams or earth absorption will usually stop the product before it advances a significant distance. Cleanup is the main concern in such situations.

  In situations where vapors from a spill present a clear and present danger to property or life (possible ignition because of passing automobiles, nearby houses, or work vehicles approaching the area), spraying the surface of the spill with dispersant will greatly reduce the release of additional vapors from the product. This method is especially adapted to gasoline spills on soil surfaces.

6.7 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

6.7.1 Spill on Land (Soil Surfaces) (Cont'd)

- **Removal Methods**

  The recovery and removal of free product from soil surfaces is a difficult job. The best approaches at present seem to be:

  - Removal with suction equipment to tank truck if concentrated in volumes large enough to be picked up. Channels can be formed to drain pools of product into storage pits. The suction equipment can then be used.

  - Small pockets may have to be dipped up by hand.

  - If practicable after removal of the bulk of the spill, controlled burning presents the possibility of a fast, simple, and inexpensive method of destruction of the remainder of the product. If all other options have been executed and the site is still unsafe for further activity because explosive vapors persist, the vapors may need to be intentionally ignited to prevent an accumulation sufficient to become an explosive mixture, provided the other requirements of these guidelines for controlled burning are met.

Intentional ignition to remove released product should be utilized only if all of the following conditions are met:

- Other steps and procedures have been executed and a determination has been made that this is the safest remaining method of control.

- Intentional burning will not unduly damage the pipeline, adjacent property, or the environment.

- Controlled burning is permitted by government authorities. Local government authorities to be contacted may include city council, county board of commissioners, city or county fire chiefs, the county forestry commission or fire tower, and the local environmental protection agency. In seeking permission from these authorities, be prepared to convince them that adequate safety precautions have been and will be taken during the operation.

- Controlled burning is conducted with the consent of local landowners.

- Safety must always be a prime consideration when considering controlled burning of product. Sparks and heat radiation from large fires can start secondary fires and strong winds make fire control difficult. There must be no danger of the fire spreading beyond control limits. All persons must be at a safe distance from the edge of the inflammable area. Remember that all burning must be controlled burning.

6.7 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

6.7.2 Spill on Lake or Pond (calm or slow-moving water)

- **Confinement Methods**

  A lake or pond offers the best conditions for removal of product from water. Although the removal is no easy task, the lake or pond presents the favorable conditions of low or no current and low or no waves.

  The movement of product on a lake or pond is influenced mainly by wind. The product will tend to concentrate on one shore, bank or inlet. Booms should be set up immediately to hold the product in the confined area in the event of a change in wind direction.

  If the spill does not concentrate itself on or near a shore (no wind effect), then a sweeping action using boats and floating booms will be necessary. The essential requirement for this operation is that it be done very slowly. The booms should be moved at not more than 40 feet per minute. Once the slick is moved to a more convenient location (near shore), the normal operations of removal should begin.

  If the slick is small and thin (rainbow effect) and not near the shoreline, an absorbent boom instead of a regular boom should be used to sweep the area very slowly and absorb the slick. The product may not have to be moved to the shoreline.

- **Removal Methods**

  If the confined slick is thick enough, regular suction equipment may be used first; however, in most instances, a floating skimmer should be removed. If judged appropriate or useful, a surface collecting agent should be applied once the slick is isolated to facilitate the removal. The surface collecting agent will concentrate the product into a smaller area and make the floating skimmer work more efficiently. If the floating skimmer starts picking up excess water (slick becomes thin), do not stop using it if it is not removing any appreciable amount of product.

  Additions of more surface collecting agent from time to time may improve the skimming efficiency of the skimmer. It will continue to concentrate the slick into a smaller area, thus making the film thickness greater. Drawing the boom closer to the bank as product is removed will also keep film of product thicker. However, when the slick becomes too thin, the skimmer should be stopped and an absorbent applied (with a boat if necessary) to remove the final amounts.

  The floating skimmer (if speed is a must) or hand skimmers (if water is shallow enough) or both can be used to pick up the product-soaked absorbent. Before pumping the product-soaked absorbent with a floating skimmer, insure that the absorbent in question can be pumped and will not harm the pump. Several types are nonabrasive to pump internals. If the floating skimmer is used first, the product-soaked absorbent/water mixture should be pumped into a tank truck.

6.7 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

A better method of retrieving the product-soaked absorbent is to draw it in as close to the shore as possible with the booms used to confine the product initially. The absorbent can then be hand skimmed from the water surface and placed in drums, on plastic sheets or in lined roll-off boxes. It should then be disposed of by acceptable means.

The final rainbow on the surface can be removed with additions of more absorbent.

6.7.3 Spill on Small to Medium Size Streams (relatively fast-flowing creeks)

- **Confinement Methods**

The techniques used for product containment on fast-flowing shallow streams are quite different from the ones used on lakes, ponds, or other still bodies of water. The containment and removal processes require a calm stretch of water to allow the product to separate onto the surface of the water. If a calm stretch of water does not exist naturally, a deep slow-moving area should be created by damming. The dam can be constructed by using sandbags, planks or earth. If a dam is required, it should be situated at an accessible point where the stream has high enough banks. The dam should be constructed soundly and reinforced to support the product and water pressure.

- Underflow dam - The underflow dam is one method that can be used, especially on small creeks. The water is released at the bottom, of the dam using a pipe or pipes which are laid during construction of the dam. The flow rate through the pipe must be sufficient to keep the dam from overflowing. One method is to lay the pipe at an angle through the dam (while dam is being constructed) so that the height of the downstream end of the pipe will determine the height the water will rise behind the dam.

- Overflow dam – Another method of containment is the overflow type dam. The dam is constructed so that water flows over the dam, but a deep pool is created which slows the surface velocity of the water. Therefore, the condition of a calm stretch of water is met. The overflow dam may be used where larger flow rates (medium size creeks) of water are involved. With this type dam, a separate barrier (floating or stationary boom) must be placed across the pool created by the dam. The separate barrier arrests the surface layer of product.

  At the same time, the water is flowing under the barrier and over the top of the dam. The barrier should be placed at an angle of 45 % across the pool to decrease the effective water velocity beneath it. Also, it helps to concentrate the product at the bank and not all along the barrier. A second barrier should be placed approximately 10 to 15 feet downstream of the first one as a secondary back-up.

  The stationary boom type barrier should be made of wood planks or other suitable material. The stationary boom should be soundly constructed and sealed against the bank. The ends of the planks can be buried in the banks of the stream and timber stakes driven into the stream bed for support as needed. The necessary length of the boom will be approximately 1-1/2 times the width of the waterway. The plank boom

6.7 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

6.7.3 Spill on Small to Medium Size Streams (relatively fast-flowing creeks) (Cont'd)

should extend six to eight inches deep into the water and about two inches or higher above the water level. If the increase in velocity under the stationary boom is causing release of trapped product, it should be moved upward slightly. At no time should barrier be immersed more than 20% of the depth of the pool at the barrier location; that is, if the pool created by damming is three feet deep, do not exceed an immersion depth of seven inches with the barrier at the position the barrier is installed.

Another method used with the underflow dam is having the pipe or pipes sized to carry only a portion of the flow needed. The pipe would be placed at the bottom of the dam and level with the creek bed. The remaining flow of the creek could be siphoned or preferably pumped around the dam from a point away from the dam and from the deepest portion of the pool. The pumping or siphoning can be controlled to maintain the desired water level at the dam. The key is the removal of water through or around the dam at the lowest point in the basin. This prevents the oil from escaping with the released water.

A floating boom can be used in place of the stationary type if the created pool's size (bank to bank) and depth will permit. Since changing the depth and/or length of a standard floating boom in a small stream is difficult, the use of the separation of product and water. The advantages of using a floating boom are the speed of deployment and the fact that there is not need for additional support as with the stationary boom.

Multiple Impoundments – Since emergency built dams (either underflow or overflow) are seldom perfect, a series of dams is usually required. The first one or two will trap the bulk and the ones that are downstream will trap the last traces of product. Precautions should be taken to ensure that the foundations of emergency dams are not washed away by the released water. If earth is used to construct an overflow dam, a layer of earth-filled bags should be placed on top of the dam so erosion will not take place.

6.7.4 Spill on Small River and Streams

- **Removal Methods**

Once the containment dams are constructed, the problem or removal of the product from the water surface should be the prime consideration. The removal must be continuous or else build-up of product behind the dams or booms might lead to product escaping the traps.

The type of removal procedures used depends largely on the amount of product being trapped in a given span of time, if the amount of product moving down the stream is of sufficient quantity, the first dam or fixed boom would quite possibly trap enough for the floating skimmer to work efficiently. The skimmer will pump the product and possibly some water to a tank truck or other holding tank. Separated water may be released from the bottom of the tank truck if it becomes necessary. The absorbents (straw, ground corncobs, or other stocked absorbent) could then be used at downstream dams or booms. It is inadvisable to place an absorbent in the stream prior to or at the first dam in anticipation of the arriving

6.7 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

6.7.4 Spill on Small River and Streams(Cont'd)

product. Let the product accumulate at the first dam and use the floating skimmer to recover the product.

Disposal of gross amount of product-soaked absorbent would not then be a problem. Follow directions on use of each absorbent. Some are designed to be placed on water before product arrives (straw and other new types); others are intended only to be placed on the product after it accumulates on the water (ground corncobs and others). Plastic sheets should be used to place the product-soaked absorbent on as it is hand skimmed from the water. Alternatively, the material may be placed in drums or lined roll-off boxes.

If the amount of product in the stream is minor, a straw-bale may be constructed to filter out the product. The slowing of the water would not be necessary, but several dams might be necessary to ensure complete removal. The downstream dams would also offer protection when the upstream bales are removed, releasing traces of product. Straw-bale dams can also be used downstream from underflow and overflow dams for added protection.

Thus, the containment and removal of spilled product on small to medium fast-flowing streams might require a combination of underflow or overflow dams, fixed booms, skimmers, absorbents, and straw-bale dams to ensure a complete cleanup.

6.7.5 Spill on Large Streams and Rivers

- **Confinement Methods**

  The containment techniques differ considerably on large streams and rivers versus small streams. First, the smooth calm area of water necessary for product-water separation must be found along the stream or river rather than making one as with small streams. Floating booms (rather than fixed booms or dams) must be used to trap the surfaced product.

  Local conditions of current and wind must be considered when selecting the site for the boom. A point with a low water velocity near the bank, sufficient depth to operate the product removal equipment, and good access are required. The fact that wind may tend to concentrate the product against one bank must be considered. A smooth, undisturbed area of water is required immediately upstream of the boom to ensure that the product has opportunity to separate out onto the surface. The boom should be positioned where the current is at a minimum. It is more effective to boom at a wide, slow position than on a narrow, fast stretch of water.

  If the boom are positioned straight across a river or stream, at right angles to the flow, surface water tends to dive beneath the barrier (boom) when current velocities exceed about ½ knot (0.8 ft./sec.). However, if the current of the entire river is ½ knot or less, then a boom can be positioned straight across the river or large stream, but angled slightly in relation of the banks. By placing the boom at an angle to the banks, product on the surface is diverted along the boom to the side of the river.

6.7 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

6.7.5 Spill on Large Streams and Rivers (Cont'd)

The current velocity is usually much slower near the river bank than in the center and the product will move along the boom toward the bank for removal. A water-tight seal between the bank and the boom is essential. A secondary boom should be set up immediately downstream of the first one to capture the amounts that escape the upstream boom. A boom can be employed parallel to the river flow at the bank to form the seal with the booms used to trap the product.

Where the current velocity of the chosen site exceeds ½ knot, the boom should be positioned in two smooth curves from a point of maximum velocity (usually the center of the river) to both banks. However, this double-boom required product to be removed from both sides of the river. To determine the appropriate angle of boom placement and support (mooring) needed to hold the booms in position, the current velocity should be measured by timing a floating object which is 80% submerged over a distance of 100 feet. A time of 60 seconds over this distance indicates a water current of approximately 1 knot. For currents from 1 to 2.5 knots (1.7 to 4.2 ft./sec.), the more the boom will have to be angled acute to the bank. The length of the boom will have to be such to reach the center of the river. For currents between ½ and 1 knot (0.8 and 1.7 ft./sec.), the angle of employment can be enlarged.

The major load on the boom is taken by the terminal moorings, particularly the one in the center of the river. However, intermediate moorings are also required both to maintain the smooth curve of the boom to prevent breaking of the boom and to assist with preventing skirt deflection. The intermediate moorings are preferably positioned every 25 feet and must be adjusted to avoid the formation of indentations in the boom profile. These trap product in pockets, prevent its deflection to the bank, and also encourage diving currents. The moorings' ropes should be five times the water depth.

In certain situations, it might be advantageous to position booms to deflect the approaching spilled product to a slower moving area. Naturally, additional booms would have to be positioned around this slower moving area prior to deflecting the product to the area. This approach has been used along river which has lagoons, etc., with a very low current action. The recovery would take place in the lagoons and not along the river bank.

- **Removal Methods**

The product collected upstream of the floating booms in a large stream or river should be removed from the water surface as it accumulates. Regular suction equipment, a floating skimmer, and/or absorbents (including absorbent booms) should be used to remove the product as appropriate to the quantity being trapped in a given span of time. If the amount moving down the stream is of sufficient quantity, the primary floating boom would possibly trap enough for the floating skimmer to work efficiently. The skimmer will pump the product and some water to a tank truck or other holing tank.

6.7 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

6.7.5 Spill on Large Streams and Rivers (Cont'd)

The absorbents (type that can be placed on water before product arrival straw is an example) would then be used upstream of the secondary boom to absorb the underflow from the primary boom. An absorbent boom (Sea-Serpent) or other stocked absorbent boom can also be placed between the primary and secondary booms to help the other absorbents control the underflow from the primary boom. If the underflow from the primary boom is significant, then the type absorbent which can be placed on the water only after product is collected may be used. An example of this type of absorbent is ground corncobs. It is best to hand skim the saturated absorbents and place on plastic sheets. However, if the absorbent used can be pumped after product absorption and speed of removal is a necessity, the floating skimmer can be used to remove the product-soaked absorbent.

The disadvantage of pumping the product-soaked absorbent to a truck is the volume that will accumulate (skimmer will pump excess water) and the disposal problems associated with the large water/product-soaked absorbent mixture.

If the volume of product moving toward the boomed area is expected to be small, an absorbent (straw) should be placed in the river upstream of the primary and secondary booms. If regular booms are not necessary, a screen filter could be stretched across the river to contain the straw, or an absorbent boom could be constructed by tightly fastening hay bales together, forming a chain. Boats (either rented or furnished by contractors) would be necessary to retrieve the product-soaked absorbents.

6.7.6 Spill on Stream which Flows into Lake of Pond

There are certain locations along the pipeline where streams (small and large ones) flow into lakes or ponds at relatively short distances from the pipeline. It is conceivable that a spill that reached the streams in question could reach or almost reach the lakes before containment and recovery operations could be set up. If time permits for containment operations to be set up on the stream in question, it then would be handled as described above depending upon the stream size involved.

However, if product in the stream is near the lake site or if product is flowing into the lake with a significant amount yet to arrive, a different containment should be employed.

6.7 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

6.7.6 Spill on Stream which Flows into Lake of Pond (Cont'd)

- Confinement Methods

  Product on a stream flowing into a lake should be boomed as close to the entrance as possible. The boom should be positioned on the lake at an angle to the residential stream current so as to direct the surface water to a slower moving area. The area where the product is being deflected should be enclosed by booms to contain it. An additional boom for sweeping the product to the bank will be required. This area of containment should not have a current velocity of more than 1/2 knot (0.8 ft./sec.), preferably less.

- Removal Methods

  The removal of product from the lake or pond's surface would be handled as described earlier.

  For sizable releases, collected product will usually be pumped into tank trucks and transported to a storage facility. Tank trucks are available at several locations throughout.

6.7.7 Spill in a Mud or tidal Flat Area

- Confinement Methods

  Shoreline boom lined with absorbent boom should be placed at the surf line to prevent oil from washing up onto the flat area. If oiling has already occurred, the boom is used to prevent further oiling, and keep oil that has impacted the flat from spreading.

- Removal Methods

  Natural Recovery, Flooding, and Sorbents are the three preferred methods. Any invasive type of recovery method poses a risk of driving the oil into the substrate of the flat and endangering the biological organisms that live there. Invasive methods should only be used in order to protect more sensitive areas.

6.7.8 Spill in a Marsh or Wetland

- Confinement Method

  Shallow water booms should be placed around the perimeter of the area to prevent impact or contain oil to prevent spreading. Booming may be difficult due to a large number of trees and/or debris.

- Removal Methods

  Natural Recovery, Flooding, Sorbents, and Low-Pressure Cold-Water Flushing are the preferred methods. As with mud and tidal flats, invasive methods may do more harm than good. In-situ burning is also an option so long as there is enough water to protect the roots of the vegetation.

6.7.8 Spills of Group V Oils

Due to the unique characteristics of Group V oils when released into a waterway, a contracted OSRO has provided methods of containment and removal for this oil group. Please see Appendix H

6.7.9 Spills in Urban Areas

Oil spills in urban areas can greatly impact recreational use, human health, wildlife habitat(s) and potential beach or park closures. Manmade structures along waterways require unique protection strategies. Manmade structures could include vertical shore protection structures such as seawalls, piers, and bulkheads, as well as riprap revetments and groins, breakwaters and jetties. Vertical structures can be constructed of concrete, wood and corrugated metal. They usually extend below the water surface, although seawalls can have beaches or riprap in front of them. These structures are very common along developed shores, particularly in harbors, marinas, and residential areas. The range in degree of exposure to waves and currents varies widely from very low in dead-end canals, to very high on offshore breakwaters. Boat wakes can generate wave energy in otherwise sheltered areas.

Maintaining shipping or other kinds of vessel traffic through navigation channels or waterways during a spill response is a difficult consideration because there is usually economic and political pressure to re-establish normal operations as soon as possible. This consideration extends to vehicular traffic through urban areas. Deploying booms and skimmers or constructing recovery sites can conflict with such traffic for several days. Also, passage of deep-draft vessels through the waterway can suddenly change water level and flow or create wakes causing booms to fail. For these reasons, recovery efforts must be coordinated through the Unified Command to ensure the cooperation of all parties involved.

6.8 Use of Chemical Dispersants and In-Situ Burning

Toledo Refining Company, LLC will consider alternate means of oil recovery such as chemical dispersants and in-situ burning under the guidance and direction of the Region 5 and Ohio EPA, USCG, contracted OSROs, and Toledo Refining Company, LLC OSC.

Procedures for permissions and expedited decisions on the use of these alternate methods of oil recovery can be found in the Region 5 Oil and Hazardous Substances Integrated Contingency Plan, sections:

- 2.10.2 OSC Notification Responsibilities
- 3.3.2 Use of Chemical Agents
- 3.3.2.1 Application steps for Use of Chemical Spill Control Agent
- 3.3.3.2 Chemical Use Checklist
- 3.3.3 Use of In Situ Burning in U. S. EPA Region 5
- Appendix VII: Chemical Use Checklist
- Appendix VII: In Situ Burning of Oil as A Response Tool In Region 5

The complete Region 5 Oil and Hazardous Substances Integrated Contingency Plan may be found online at: http://Great-lakes.net/partners/epa/acp-rc

Figure 6.1

Endangered, Threatened, Species of Concern, Special Interest, Extirpated, or Extinct listing from Division of Wildlife

Ohio Department of Natural Resources
DIVISION OF WILDLIFE

Publication 5356
(R1012)

WILDLIFE THAT ARE CONSIDERED TO BE ENDANGERED, THREATENED, SPECIES OF CONCERN, SPECIAL INTEREST, EXTIRPATED, OR EXTINCT IN OHIO

October 2012

The Division of Wildlife's mission is to conserve and improve the fish and wildlife resources and their habitats, and promote their use and appreciation by the public so that these resources continue to enhance the quality of life for all Ohioans. The Division has legal authority over Ohio's fish and wildlife, which includes about 56 species of mammals, 200 species of breeding birds, 84 species and subspecies of amphibians and reptiles, 170 species of fish, 100 species of mollusks, and 20 species of crustaceans. In addition, there are thousands of species of insects and other invertebrates which fall under the Division's jurisdiction. Furthermore, Ohio law grants authority to the chief of the Division to adopt rules restricting the taking or possession of native wildlife threatened with statewide extirpation and to develop and periodically update a list of endangered species (Ohio Revised Code 1531.25).

The status of native wildlife species is very important to the Division. While the listing process identifies individual wildlife species needing protection, it also serves as a powerful tool in the Division's planning process. It provides direction for the allocation of personnel time and funds in Division programs and projects.

The first list of Ohio's endangered wildlife was adopted in 1974 and included 71 species. An extensive examination of the list is conducted every five years. The Division seeks input from our staff along with other noted professional and amateur wildlife experts across Ohio. In 2001, as part of our comprehensive management plan, the Division initiated a reevaluation of the endangered species list. During this process, the need for an additional state-list category was recognized and has been designated as "Special Interest." The name of the previous special interest category has been changed to "Species of Concern," but retains its original definition.

Therefore, in addition to endangered the Division uses five other categories: threatened, species of concern, special interest, extirpated, and extinct, to further define the status of selected wildlife. These categories and the species contained within them are dynamic and will be revised as our knowledge of the status of Ohio's wildlife evolves.

Definitions of these categories, a summary of the numbers of species and subspecies in each category, and the list of species and subspecies in each category follow:

ENDANGERED - A native species or subspecies threatened with extirpation from the state. The danger may result from one or more causes, such as habitat loss, pollution, predation, interspecific competition, or disease.

THREATENED - A species or subspecies whose survival in Ohio is not in immediate jeopardy, but to which a threat exists. Continued or increased stress will result in its becoming endangered.

SPECIES OF CONCERN - A species or subspecies which might become threatened in Ohio under continued or increased stress. Also, a species or subspecies for which there is some concern but for which information is insufficient to permit an adequate status evaluation. This category may contain species designated as a furbearer or game species but whose statewide population is dependent on the quality and/or quantity of habitat and is not adversely impacted by regulated harvest.

SPECIAL INTEREST - A species that occurs periodically and is capable of breeding in Ohio. It is at the edge of a larger, contiguous range with viable population(s) within the core of its range. These species have no federal endangered or threatened status, are at low breeding densities in the state, and have not been recently released to enhance Ohio's wildlife diversity. With the exception of efforts to conserve occupied areas, minimal management efforts will be directed for these species because it is unlikely to result in significant increases in their populations within the state.

EXTIRPATED - A species or subspecies that occurred in Ohio at the time of European settlement and that has since disappeared from the state.

EXTINCT - A species or subspecies that occurred in Ohio at the time of European settlement and that has since disappeared from its entire range.

Number of Species in Major Taxa Classified as Endangered, Threatened, Species of Concern, Special Interest, Extirpated, or Extinct in Ohio, October 2012.

Taxon	Endangered	Threatened	Species of Concern	Special Interest	Extirpated	Extinct
Mammals	4	2	19	1	10	0
Birds	14	5	14	33	5	2
Reptiles	4	4	11	0	0	0
Amphibians	5	1	2	0	0	0
Fishes	20	13	9	0	8	2
Mollusks	24	4	8	0	11	6
Crayfishes	0	2	3	0	0	0
Isopods	2	1	0	0	0	0
Pseudoscorpions	1	0	0	0	0	0
Dragonflies	13	3	1	0	0	0
Damselflies	3	3	0	0	0	0
Caddisflies	3	6	3	0	0	0
Mayflies	2	0	1	0	0	0
Midges	1	3	1	0	0	0
Crickets	0	0	1	0	0	0
Butterflies	8	1	2	1	1	0
Moths	14	4	22	11	0	0
Beetles	2	2	6	0	0	1
Total	120	54	103	46	35	11

OHIO's ENDANGERED SPECIES

(updated September 2013)

NOTE: *E & *T denote federal (U.S. Fish and Wildlife Service) listed endangered and threatened species respectively.

MAMMALS

Indiana myotis *E	*Myotis sodalis*
Allegheny woodrat	*Neotoma magister*
Black bear	*Ursus americanus*
Snowshoe hare	*Lepus americanus*

BIRDS

American bittern	*Botaurus lentiginosus*
Northern harrier	*Circus cyaneus*
King rail	*Rallus elegans*
Sandhill crane	*Grus canadensis*
Piping plover *E	*Charadrius melodus*
Common tern	*Sterna hirundo*
Black tern	*Chlidonias niger*
Bewick's wren	*Thryomanes bewickii*
Loggerhead shrike	*Lanius ludovicianus*
Kirtland's warbler *E	*Dendroica kirtlandii*
Lark sparrow	*Chondestes grammacus*
Snowy egret	*Egretta thula*
Cattle egret	*Bubulcus ibis*
Upland sandpiper	*Bartramia longicauda*

REPTILES

Copperbelly watersnake *T	*Nerodia erythrogaster neglecta*
Plains gartersnake	*Thamnophis radix*
Timber rattlesnake	*Crotalus horridus*
Eastern massasauga	*Sistrurus catenatus*

AMPHIBIANS

Eastern hellbender	*Cryptobranchus alleganiensis alleganiensis*
Blue-spotted salamander	*Ambystoma laterale*
Green salamander	*Aneides aeneus*
Cave salamander	*Eurycea lucifuga*
Eastern spadefoot	*Scaphiopus holbrookii*

FISHES

Ohio lamprey	*Ichthyomyzon bdellium*
Northern brook lamprey	*Ichthyomyzon fossor*
Mountain brook lamprey	*Ichthyomyzon greeleyi*
Lake sturgeon	*Acipenser fulvescens*
Shovelnose sturgeon	*Scaphirhynchus platorynchus*
Spotted gar	*Lepisosteus oculatus*
Shortnose gar	*Lepisosteus platostomus*
Cisco (or Lake herring)	*Coregonus artedi*
Goldeye	*Hiodon alosoides*
Shoal chub	*Macrhybopsis hyostoma*
Pugnose minnow	*Opsopoeodus emiliae*
Popeye shiner	*Notropis ariommus*
Longnose sucker	*Catostomus catostomus*
Northern madtom	*Noturus stigmosus*
Scioto madtom *E	*Noturus trautmani*
Pirate perch	*Aphredoderus sayanus*
Western banded killifish	*Fundulus diaphanus menona*
Spotted darter	*Etheostoma maculatum*
Iowa darter	*Etheostoma exile*
Gilt darter	*Percina evides*

MOLLUSKS

Snuffbox	*Epioblasma triquetra*
Ebonyshell	*Fusconaia ebenas*
Fanshell *E	*Cyprogenia stegaria*
Butterfly	*Ellipsaria lineolata*
Elephant-ear	*Elliptio crassidens crassidens*
Purple catspaw *E	*Epioblasma obliquata obliquata*
White catspaw *E	*Epioblasma obliquata perobliqua*
Northern rifffleshell *E	*Epioblasma torulosa rangiana*
Long-solid	*Fusconaia maculata maculata*
Pink mucket *E	*Lampsilis orbiculata*
Sharp-ridged pocketbook	*Lampsilis ovata*
Yellow sandshell	*Lampsilis teres*
Eastern pondmussel	*Ligumia nasuta*
Washboard	*Megalonaias nervosa*
Sheepnose	*Plethobasus cyphyus*

MOLLUSKS (CONT.)

Clubshell *E	*Pleurobema clava*
Ohio pigtoe	*Pleurobema cordatum*
Pyramid pigtoe	*Pleurobema rubrum*
Rabbitsfoot *T	*Quadrula cylindrica cylindrica*
Monkeyface	*Quadrula metanevra*
Wartyback	*Quadrula nodulata*
Purple lilliput	*Toxolasma lividus*
Rayed bean	*Villosa fabalis*
Little spectaclecase	*Villosa lienosa*

DRAGONFLIES

Hine's emerald *E	*Somatochlora hineana*
Mottled darner	*Aeshna clepsydra*
Plains clubtail	*Gomphus externus*
American emerald	*Cordulia shurtleffi*
Uhler's sundragon	*Helocordulia uhleri*
Frosted whiteface	*Leucorrhinia frigida*
Elfin skimmer	*Nannothemis bella*
Canada darner	*Aeshna canadensis*
Racket-tailed emerald	*Dorocordulia libera*
Brush-tipped emerald	*Somatochlora walshii*
Blue corporal	*Ladona deplanata*
Chalk-fronted corporal	*Ladona julia*
Yellow-sided skimmer	*Libellula flavida*

DAMSELFLIES

Lilypad forktail	*Ischnura kellicotti*
Seepage dancer	*Argia bipunctulata*
River jewelwing	*Calopteryx aequabilis*

CADDISFLIES

	Chimarra socia
	Oecetis eddlestoni
	Brachycentrus numerosus

MAYFLIES

	Rhithrogena pellucida
	Litobrancha recurvata

MIDGES

	Rheopelopia acra

BUTTERFLIES

Persius dusky wing	*Erynnis persius*
Frosted elfin	*Callophrys irus*
Karner blue *E	*Lycaeides melissa samuelis*
Purplish copper	*Lycaena helloides*
Swamp metalmark	*Calephelis muticum*
Regal fritillary	*Speyeria idalia*
Mitchell's satyr *E	*Neonympha mitchellii*
Grizzled skipper	*Pyrgus centaureae wyandot*

MOTHS

Unexpected cycnia	*Cycnia inopinatus*
Graceful underwing	*Catocala gracilis*
	Spartiniphaga inops
	Hypocoena enervata
	Papaipema silphii
	Papaipema beeriana
	Lithophane semiusta
	Trichoclea artesta
	Tricholita notata
	Melanchra assimilis
Pointed sallow	*Epiglaea apiata*
	Ufeus plicatus
	Ufeus satyricus
Hebard's noctuid moth	*Erythroecia hebardi*

BEETLES

Ohio cave beetle	*Pseudanophthalmus ohioensis*
American burying beetle *E	*Nicrophorus americanus*

ISOPODS

Fern cave isopod	*Caecidotea filicispeluncae*
Unnamed cave isopod	*Caecidotea sp. nov.*

PSEUDOSCORPIONS

Buckskin cave pseudoscorpion	*Apochthonius hobbsi*

OHIO's THREATENED SPECIES

(updated October 2012)

NOTE: *E & *T denote federal (U.S. Fish and Wildlife Service) listed endangered and threatened species respectively.

MAMMALS

Bobcat	*Lynx rufus*
Eastern harvest mouse	*Reithrodontomys humulis*

BIRDS

Black-crowned night-heron	*Nycticorax nycticorax*
Barn owl	*Tyto alba*
Least bittern	*Ixobrychus exilis*
Peregrine falcon	*Falco peregrinus*
Trumpeter swan	*Cygnus buccinator*

REPTILES

Kirtland's snake	*Clonophis kirtlandii*
Spotted turtle	*Clemmys guttata*
Blanding's turtle	*Emydoidea blandingii*
Lake Erie watersnake	*Nerodia sipedon insularum*

AMPHIBIANS

Mud salamander	*Pseudotriton montanus*

FISHES

Brook trout	*Salvelinus fontinalis*
Bigeye shiner	*Notropis boops*
Tonguetied minnow	*Exoglossum laurae*
Greater redhorse	*Moxostoma valenciennesi*
Channel darter	*Percina copelandi*
American eel	*Anguilla rostrata*
Paddlefish *M	*Polyodon spathula*
Bigmouth shiner	*Notropis dorsalis*
Lake chubsucker	*Erimyzon sucetta*
River darter	*Percina shumardi*
Tippecanoe darter	*Etheostoma tippecanoe*
Blue sucker	*Cycleptus elongatus*
Mountain madtom	*Noturus eleutherus*

MOLLUSKS

Black sandshell	*Ligumia recta*
Threehorn wartyback	*Obliquaria reflexa*
Fawnsfoot	*Truncilla donaciformis*
Pondhorn	*Uniomerus tetralasmus*

CRAYFISHES

Sloan's crayfish	*Orconectes sloanii*
Cavespring crayfish	*Cambarus tenebrosus*

DRAGONFLIES

Riffle snaketail	*Ophiogomphus carolus*
Harlequin darner	*Gomphaeschna furcillata*
Green-faced clubtail	*Gomphus viridifrons*

DAMSELFLIES

Boreal bluet	*Enallagma boreale*
Northern bluet	*Enallagma cyathigerum*
Marsh bluet	*Enallagma ebrium*

CADDISFLIES

	Psilotreta indecisa
	Hydroptila albicornis
	Hydroptila artesa
	Hydroptila koryaki
	Hydroptila talledaga
	Hydroptila valhalla

MIDGES

	Bethbilbeckia floridensis
	Apsectrotanypus johnsoni
	Radotanypus florens

BUTTERFLIES

Silver-bordered fritillary	*Boloria selene*

MOTHS

Wayward nymph	*Catocala antinympha*
	Spartiniphaga paviatela
	Fagitana littera
The pink-streak	*Faronta rubripennis*

BEETLES

	Cicindela hirticollis
Cobblestone tiger beetle	*Cicindela marginipennis*

ISOPODS

Frost cave isopod	*Caecidotea rotunda*

OHIO's SPECIES of CONCERN

(updated October 2012)

NOTE: *E & *T denote federal (U.S. Fish and Wildlife Service) listed endangered and threatened species respectively.

MAMMALS

Pygmy shrew	*Sorex hoyi*
Star-nosed mole	*Condylura cristata*
Eastern small-footed bat	*Myotis leibii*
Rafinesque's big-eared bat	*Corynorhinus rafinesquii*
Little brown bat	*Myotis lucifugus*
Big brown bat	*Eptesicus fuscus*
Tri-colored bat	*Perimyotis subflavus*
Northern long-eared bat	*Myotis septentrionalis*
Woodland jumping mouse	*Napaeozapus insignis*
Badger	*Taxidea taxus*
Ermine	*Mustela erminea*
Smoky shrew	*Sorex fumeus*
Deer mouse	*Peromyscus maniculatus*
Prairie vole	*Microtus ochrogaster*
Woodland vole	*Microtus pinetorum*
Southern bog lemming	*Synamptomys cooperi*
Silver-haired bat	*Lasionycteris noctivagans*
Red bat	*Lasiurus borealis*
Hoary bat	*Lasiurus cinereus*

BIRDS

Sharp-shinned hawk	*Accipiter striatus*
Sedge wren	*Cistothorus platensis*
Marsh wren	*Cistothorus palustris*
Henslow's sparrow	*Ammodramus henslowii*
Cerulean warbler	*Dendroica cerulea*
Prothonotary warbler	*Protonotaria citrea*
Black vulture	*Coragyps atratus*
Bobolink	*Dolichonyx oryzivorus*
Northern bobwhite	*Colinus virginianus*
Common moorhen	*Gallinula chloropus*
Great egret	*Ardea alba*
Sora rail	*Porzana carolina*
Virginia rail	*Rallus limicola*
Yellow-bellied sapsucker	*Sphyrapicus varius*

MOLLUSKS

Purple wartyback	*Cyclonaias tuberculata*
Wavy-rayed lampmussel	*Lampsilis fasciola*
Round pig-toe	*Pleurobema sintoxia*
Salamander mussel	*Simpsonaias ambigua*
Deertoe	*Truncilla truncata*
Elktoe	*Alasmidonta marginata*
Kidneyshell	*Ptychobranchus fasciolaris*
Creek heelsplitter	*Lasmigona compressa*

REPTILES

Eastern box turtle	*Terrapene carolina carolina*
Ouachita map turtle	*Graptemys ouachitensis*
Black kingsnake	*Lampropeltis getula nigra*
Eastern gartersnake (melanistic)	*Thamnophis sirtalis sirtalis*
Northern rough green-snake	*Opheodrys aestivus*
Eastern foxsnake	*Pantherophis gloydi*
Queensnake	*Regina septemvittata*
Little brown skink	*Scincella lateralis*
Smooth earthsnake	*Virginia valeriae*
Smooth greensnake	*Opheodrys vernalis*
Short-headed gartersnake	*Thamnophis brachystoma*

AMPHIBIANS

Four-toed salamander	*Hemidactylium scutatum*
Eastern cricket frog	*Acris crepitans crepitans*

FISHES	
Lake trout	*Salvelinus namaycush*
Lake whitefish	*Coregonus clupeaformis*
Burbot	*Lota lota*
Muskellunge	*Esox masquinongy*
River redhorse	*Moxostoma carinatum*
Eastern sand darter	*Ammocrypta pellucida*
Least darter	*Etheostoma microperca*
Blue catfish	*Ictalurus furcatus*
Longnose dace	*Rhinichthys cataractae*
CRAYFISHES	
Great Lakes crayfish	*Orconectes propinquus*
Northern crayfish	*Orconectes virilis*
Allegheny crayfish	*Orconectes obscurus*
DRAGONFLIES	
Tiger spiketail	*Cordulegaster erronea*
MAYFLIES	
	Maccaffertium ithica
MIDGES	
	Cantopelopia gesta
CADDISFLIES	
	Hydroptila chattanooga
	Asynarchus montanus
	Nemotaulius hostilis
BUTTERFLIES	
Two-spotted skipper	*Euphyes bimacula*
Dusted skipper	*Atrytonopsis hianna*
MOTHS	
Milnei's looper moth	*Euchlaena milnei*
Buck moth	*Hemileuca maia*
One-eyed sphinx	*Smerinthus cerisyi*
Precious underwing	*Catocala pretiosa*
	Macrochilo bivittata
	Phalaenostola hanhami
	Paectes abrostolella
	Capis curvata
	Tarachidia binocula
	Apamea mixta
	Agroperina lutosa
Columbine borer	*Papaipema leucostigma*
Bracken borer moth	*Papaipema pterisii*
Osmunda borer moth	*Papaipema speciosissima*
	Chytonix sensilis
	Amolita roseola
Goat sallow	*Homoglaea hircina*
	Brachylomia algens
Purple arches	*Polia purpurissata*
Scurfy quaker	*Homorthodes furfurata*
	Trichosilia manifesta
	Agonopterix pteleae
BEETLES	
Six-banded longhorn beetle	*Dryobius sexnotatus*
	Cicindela splendida
	Cicindela ancocisconensis
	Cicindela cursitans
	Cicindela cuprascens
	Cicindela macra
CRICKETS	
Laricis tree cricket	*Oecanthus laricis*

OHIO's SPECIES of INTEREST

(updated October 2012)

NOTE: *E & *T denote federal (U.S. Fish and Wildlife Service) listed endangered and threatened species respectively.

MAMMALS

Evening bat	*Nycticeius humeralis*

BIRDS

Canada warbler	*Wilsonia canadensis*
Magnolia warbler	*Dendroica magnolia*
Northern waterthrush	*Seiurus noveboracensis*
Winter wren	*Troglodytes troglodytes*
Black-throated blue warbler	*Dendroica caerulescens*
Brown creeper	*Certhia americana*
Chuck-will's-widow	*Caprimulgus carolinensis*
Bell's vireo	*Vireo bellii*
Long-eared owl	*Asio otus*
Mourning warbler	*Oporornis philadelphia*
Northern saw-whet owl	*Aegolius acadicus*
Pine siskin	*Carduelis pinus*
Purple finch	*Carpodacus purpureus*
Red-breasted nuthatch	*Sitta canadensis*
Short-eared owl	*Asio flammeus*
Western meadowlark	*Sturnella neglecta*
Golden-crowned kinglet	*Regulus satrapa*
Blackburnian warbler	*Dendroica fusca*
Wilson's snipe	*Gallinago delicata*
Gadwall	*Anas strepera*
Green-winged teal	*Anas crecca*
Northern pintail	*Anas acuta*
Northern shoveler	*Anas clypeata*
Redhead	*Aythya americana*
Ruddy duck	*Oxyura jamaicensis*
American black duck	*Anas rubripes*
Wilson's phalarope	*Phalaropus tricolor*
Yellow-headed blackbird	*Xanthocephalus xanthocephalus*
Common raven	*Corvus corax*
Dark-eyed junco	*Junco hyemalis*
Yellow-crowned night-heron	*Nyctanassa violacea*
Hermit thrush	*Catharus guttatus*
Least flycatcher	*Empidonax minimus*

BUTTERFLIES

Olympia marble	*Euchloe olympia*

MOTHS

Slender clearwing	*Hemaris gracilis*
	Sphinx lucitiosa
	Tathorhynchus exsiccatus
	Catocala marmorata
	Catocala maestosa
Subflava sedge borer moth	*Archanara subflava*
	Caradrina meralis
	Calophasia lunula
	Leucania insueta
	Protorthodes incincta
Variegated orange moth	*Epelis truncataria*

OHIO's EXTIRPATED SPECIES

(updated October 2012)

NOTE: *E & *T denote federal (U.S. Fish and Wildlife Service) listed endangered and threatened species respectively.

MAMMALS

Rice rat	*Oryzomys palustris*
Porcupine	*Erethizon dorsatum*
Timber wolf	*Canis lupus*
Marten	*Martes americanus*
Fisher	*Martes pennanti*
Mountain lion	*Puma concolor*
Lynx	*Lynx canadensis*
Wapiti (Elk)	*Cervus elaphus*
Bison	*Bison bison*
Southern red-backed vole	*Clethrionomys gapperi*

BIRDS

Swallow-tailed kite	*Elanoides forficatus*
Greater prairie-chicken	*Tympanuchus cupido*
Ivory-billed woodpecker	*Campephilus principalis*
Bachman's sparrow	*Aimophila aestivalis*
Golden-winged warbler	*Vermivora chrysoptera*

FISHES

Alligator gar	*Lepisosteus spatula*
Pugnose shiner	*Notropis anogenus*
Longhead darter	*Percina macrocephala*
Diamond darter	*Crystallaria circotti*
Spoonhead sculpin	*Cottus ricei*
Blackchin shiner	*Notropis heterodon*
Blacknose shiner	*Notropis heterolepis*
Mississippi silvery minnow	*Hybognathus nuchalis*

MOLLUSKS

Orange-footed pearly mussel *E	*Plethobasus cooperianus*
Rough pigtoe *E	*Pleurobema plenum*
Fat pocketbook *E	*Potamilus capax*
Winged mapleleaf *E	*Quadrula fragosa*
Mucket	*Actinonaias l. ligamentina*
Spectaclecase	*Cumberlandia monodonta*
Cracking pearly mussel *E	*Hemistena lata*
White wartyback	*Plethobasus cicatricosus*
Hickorynut	*Obovaria olivaria*
Ring pink	*Obovaria retusa*
Scale shell	*Leptodea leptodon*

BUTTERFLIES

Mustard white	*Pieris napi*

OHIO's EXTINCT SPECIES

(updated October 2012)

NOTE: *E & *T denote federal (U.S. Fish and Wildlife Service) listed endangered and threatened species respectively.

BIRDS

Passenger pigeon	*Ectopistes migratorius*
Carolina parakeet	*Conuropsis carolinensis*

FISHES

Harelip sucker	*Lagochila lacera*
Blue pike	*Sander vitreus glaucus*

MOLLUSKS

Leafshell	*Epioblasma flexuosa*
Forkshell	*Epioblasma lewisi*
Round snuffbox	*Epioblasma personata*
Cincinnati riffleshell	*Epioblasma phillipsi*
Scioto pigtoe	*Pleurobema bournianum*
Tubercled blossom	*Epioblasma torulosa torulosa*

BEETLES

Kramer's cave beetle	*Pseudanophthalmus krameri*

FIGURE 6.2

ENVIRONMENTAL SENSITIVITY MAPS AND PLANNING DISTANCE CALCULATIONS

Environmental Sensitivity Maps

The following Environmental Sensitivity Maps have been prepared utilizing U.S. Geological Survey 7.5 Minute Quadrangle Maps as the base. The maps include a key to the reference symbols located on each map.

Remember these maps are to be utilized as guidelines only. During a real response effort Federal, State, and Local agencies should be contacted to provide further assistance in the proper identification and protection of the various environmental and socio-economic sensitive areas.

Planning Distance Calculations

In order to calculate a planning distance from which to base the vulnerability analysis, we assumed that the area from the Refinery location along Otter Creek to the mouth of the Maumee River would be impacted, and possibly the area between Toledo Refining Company, LLC's dock and the mouth of the Maumee River. Given this assumption, we calculated a 27 hour planning distance, from the mouth of the Maumee River, based upon the formula for oil transport on a standing body of water as provided in Appendix F, Part 112 of Title 40, Section 3.0. The transport formula is based upon the theoretical condition that the oil will spread from the shoreline (mouth of the Maumee River) into a semi-circle (not accounting for wave or wind action). The formula solves for the area of a circle, divides this area by 2 to account for the semi-circular shape, and then calculates the radius of this circle in feet. After calculating the radius of this circle, the radius is extended by assuming that, under a 20 knot wind under storm conditions, the oil slick will move at 3 percent of the wind's speed. These calculations follow:

Given:

Constant conversion factor = 0.1643 (Appendix F, Part 112 of Title 40, Section 3.0).

Following through the equations we calculate:

Surface area covered by the worst case spill = A(1) = $2.75 \times 10^8 ft^2$
Area of circle divided by 2 to account for a semi-circular shape = A(2) = $(\pi r^2)/2$

Solving for the radius, r, using the relationship [A(1) = A(2)] we get:
$[2.75 \times 10^8 = (\pi r^2)/2]$

Therefore, r = 13,241 ft = 2.5 miles.

Assuming the following conditions: a 20 knot wind under storm conditions, that the slick travels at 3 percent of the wind's speed, and a response time of 27 hours, we calculate:

[1 knot = 1.15 miles/hour]
20 knots x 1.15 miles/hour/knot = 23 miles/hour
23 miles/hour x 0.03 = 0.69 miles/hour
27 hours x 0.69 miles/hour = 18.6 miles

FIGURE 6.2

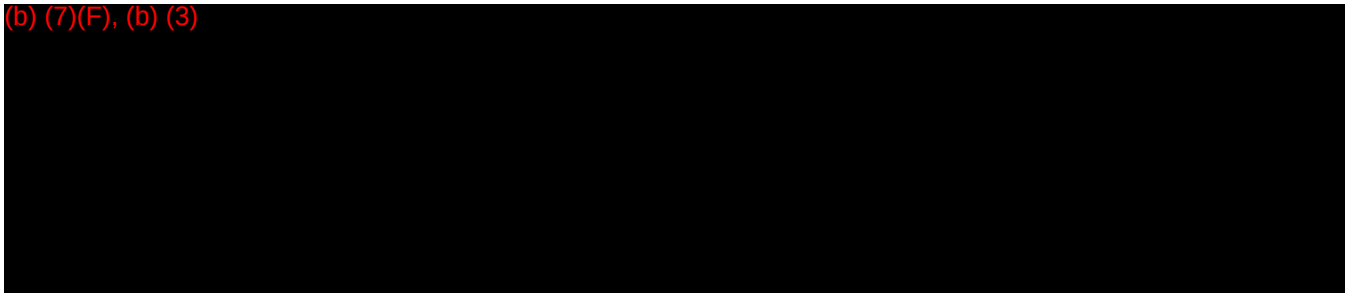
ENVIRONMENTAL SENSITIVITY MAPS AND PLANNING DISTANCE CALCULATIONS (Cont'd)

The total distance (d) that the oil will travel from the mouth of the Maumee River is calculated as follows:

[Planning Distance = d = 18.6 miles + 2.5 miles = 21.1miles].

Based upon these calculations, our planning distance included:

(b) (7)(F), (b) (3)



In reviewing potentially impacted resources, our analysis considered all shoreline areas (including a distance of approximately ¼ mile inland) within the 27 hour planning area. Maps depicting potentially impacted resources within the 27 hour planning area have been developed and are presented in this figure.

(b) (7)(F), (b) (3)

MAP LEGEND

SENSITIVE SPECIES

Aquatic/Riparian Zone

- Vascular Plants
- Birds
- Amphibians and Reptiles
- Mammals
- Invertebrates
- Fish
- Natural Communities
- Icons Indicating Threatened or Endangered Status

Terrestrial Zone

- Vascular Plants
- Birds
- Amphibians and Reptiles
- Mammals
- Invertebrates
- Natural Communities
- Multiple Species Groupings

NATURAL RESOURCE AREAS

- F — Federal Managed Areas
- S — State Managed Areas
- R — Regional Managed Areas
- P — Private Managed Areas
- O — Other Environmentally Sensitive Aquatic Areas
- O — Other Environmentally Sensitive Terrestrial Areas

- F — Federal Designated Areas
- S — State Designated Areas
- R — Regional Designated Areas
- P — Private Designated Areas

- T — Tribal Land

OTHER SENSITIVE RESOURCES

- Marina
- Navigational Lock and Dam
- Water Intake (nonpotable)
- Water Intake (potable)

SHORELINE SENSITIVITY

- Low Sensitivity
- Low-Medium Sensitivity
- Medium-High Sensitivity
- High Sensitivity

POTENTIAL SPILL SOURCES

- Fixed Oil Storage Facility
- Marine Transfer Facility and/or Facility with more than 1 million gallons
- Pipeline

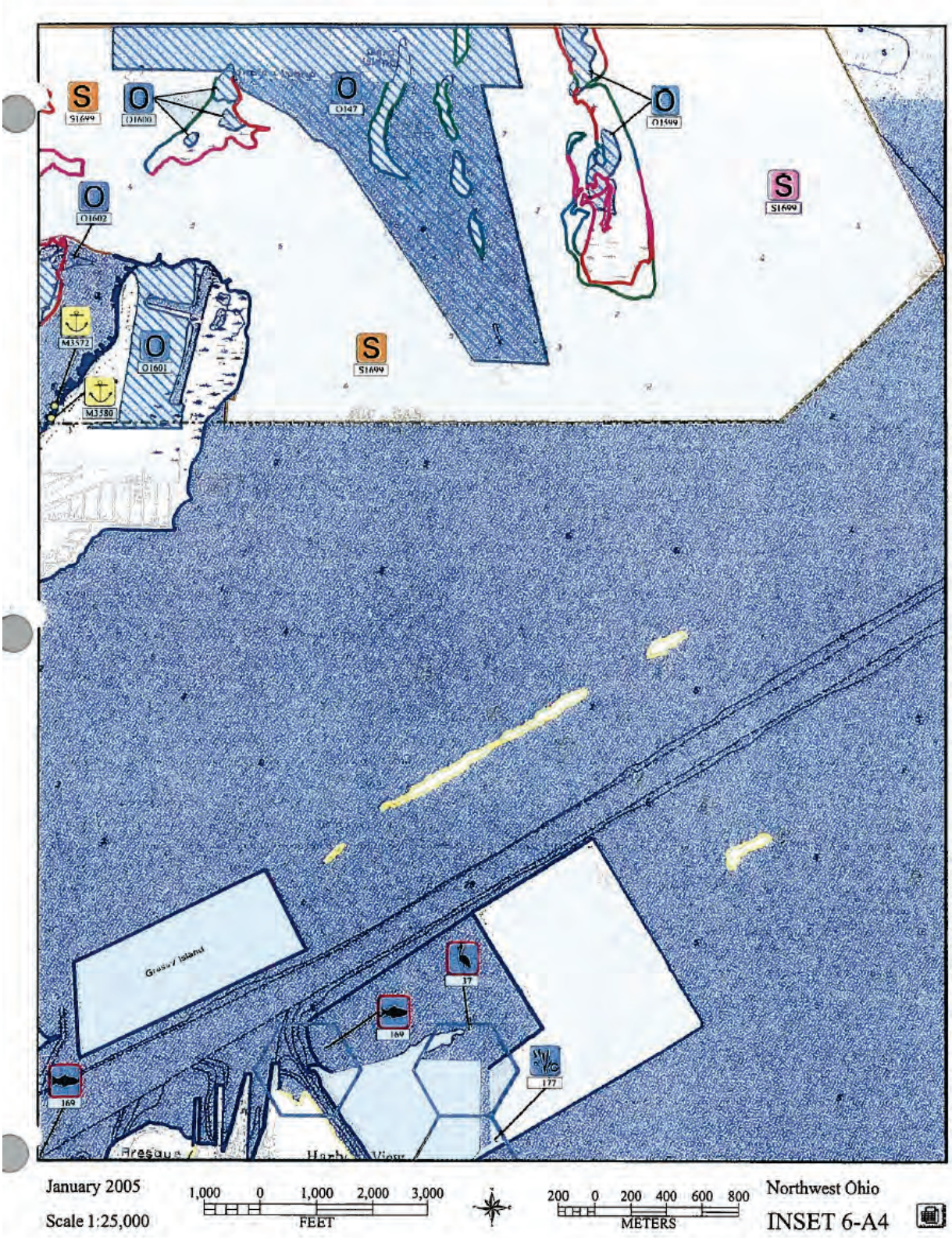
RESPONSE CONSIDERATIONS

- Ⓐ Boat Access
- Ⓓ Non-navigational Dam

BOUNDARY DESIGNATIONS

- County Boundary
- Pipeline Inset Boundary

(b) (7)(F), (b) (3)


S
S1699
O
O1600
O
O147
O
O1599
S
S1699
O
O1602
O
O1601
S
S1699
M3572
M3580
Grassy Island
17
169
169
177
Presque
Harbor View
January 2005
Scale 1:25,000
1,000 0 1,000 2,000 3,000
FEET
200 0 200 400 600 800
METERS
Northwest Ohio
INSET 6-A4

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

Sensitive Species[a]

Listing	Contact Name	Emergency Phone	Contact Phone
Federal (Ohio) Elements	U.S. Fish and Wildlife Service	800-800-5923 to page 612-660-9062 (Stan Smith, Regional Spill Response Coordinator)	309-793-5800, ext. 515 or 524
State (Ohio) plants, communities	Ohio DNR: Division of Natural Areas and Preserves	614-265-6472	614-265-6453
State (Ohio) animals, fish, invertebrates	Ohio DNR: Division of Wildlife	614-265-6300	614-265-6329 Terrestrial, 614-265-6344 Aquatics
State	Indiana DNR Division of Fish and Wildlife Michigan Natural Features Inventory	None None	317-232-4080 517-373-9418

Managed Areas

Icon Number	Name	Category	Managing Agency	Waterbody	Emergency Phone	Contact Phone	Comments
R465	**Pearson Metropark**	Regional Park	Toledo Metropolitan Park District	Wolf Ditch	419-243-5111	419-691-3997	Remnant of Old Black Swamp. Half of park developed for recreation.
R470	**Cullen Park**	City Park	City of Toledo	Maumee Bay	419-243-5111	419-936-2874	
R471	**Detwiler Park**	City Park	City of Toledo	Detwiler Ditch, Maumee Bay	419-243-5111	419-936-2874	
R473	**Navarre Park**	City Park	City of Toledo	Maumee River	419-243-5111	419-936-2874	
R474	**Joe E. Brown Park**	City Park	City of Toledo	Ottawa River	419-243-5111	419-936-2874	
R475	**Sterling Park**	City Park	City of Toledo	Swan Creek	419-243-5111	419-936-2874	
R476	**Walbridge Park**	City Park	City of Toledo	Maumee River	419-243-5111	419-936-2874	
R478	**Highland Park**	City Park	City of Toledo	Swan Creek	419-243-5111	419-936-2874	
R483	**Swan Creek Metropark**	Regional Park	Toledo Metropolitan Park District	Swan Creek	419-243-5111	419-382-4664	Several very nice small oxbow lakes adjacent to Swan Creek. Very diverse plant and animal community.
R552	**Audubon Islands**	State Nature Preserve	Toledo Metropolitan Park District	Maumee River	419-243-5111	419-535-3050	Designated State Nature Preserve. Nesting and wildlife habitat with meadows and tallgrass prairie, mature floodplain woodland.
R553	**Bay View Park**	City Park	City of Toledo	Maumee River, Maumee Bay	419-243-5111	419-936-2874	Numerous marinas located in inlet. Along ship channel and next to water treatment plant.
R554	**Ravine Park**	City Park	City of Toledo	Duck Creek, Maumee Bay	419-243-5111	419-936-2874	

[a] 2003 Ohio Natural Heritage Data provided by the Ohio Department of Natural Resources, Division of Natural Areas and Preserves and Division of Wildlife
[a] 2003 Indiana Natural Heritage Data provided by the Indiana Department of Natural Resources, Division of Fish and Wildlife
[a] 2003 Michigan Natural Heritage Data provided by the Michigan Department of Natural Resources and the Michigan Natural Features Inventory

Contingency Protocol for Oiled Wildlife – The Toledo Refining Company LLC
November, 2005
PHMSA 00012512

Northwest Ohio Atlas – Tile 6 (Continued)

Managed Areas - Continued

Icon Number	Name	Category	Managing Agency	Waterbody	Emergency Phone	Contact Phone	Comments
R555	**Ottawa Park**	City Park	City of Toledo	Ottawa River	**419-243-5111**	419-936-2874	The Ottawa River bisects the property from southwest to the northeast.
R556	**Jermain Park**	City Park	City of Toledo	Ottawa River	**419-243-5111**	419-936-2874	The Ottawa River bisects the property from southwest to northeast.
R557	**Willys Park**	City Park	City of Toledo	Willys Creek, Ottawa River	**419-243-5111**	419-936-2874	
R5226	**Orleans Park**	City Park	Perrysburg City Parks and Recreation	Maumee River	**419-243-3441**	419-872-7966	Plenty of parking, fishing, grills, picnic tables and a nature walk along the river. 32 acres.
R5227	**Bicentennial Park**	City Park	Perrysburg City Parks and Recreation	rivercrest	**419-243-3441**	419-872-7966	Twinbrook Drive to Mark Lane. 19 acres with play equipment, soccer fields and a walking trail.
R5228	**Municipal Park**	City Park	Perrysburg City Parks and Recreation	Grassy Creek	**419-243-3441**	419-872-7966	18 acres. The park is currently undergoing renovation to include a walking trail between the ball fields.
R5229	**Three Meadows Park**	City Park	Perrysburg City Parks and Recreation	Grassy Creek	**419-243-3441**	419-872-7966	20 acres with 2 ponds for swimming, boating and fishing.
R5230	**Woodlands Park**	City Park	Perrysburg City Parks and Recreation	Grassy Creek	**419-243-3441**	419-872-7966	43 acres with community built play-grounds, a nature preserve and many beautiful gardens.
R5232	**W.W. Knight Nature Preserve**	County Park	Wood County Park District	Maumee River, Grassy Creek	**419-243-3441**	419-353-1897; 800-321-1897	Features distinct natural areas including woodlands, a native prairie, a pond, a constructed wetland and grassy meadows.
R5233	**Cedar Creek Preserve**	County Park	Wood County Park District	Cedar Creek	**419-243-3441**	419-353-1897; 800-321-1897	17 acre example of the former Black Swamp that once covered a large portion of northwest OH.
S529	**Wildlife Habitat Restoration Area**	Restoration Area	OH DNR Division of Wildlife	Henry Creek	**614-224-0946**	419-424-5000	Primarily upland habitats supporting warm and cool season grasses.
S1699	**Erie State Game Area**	State Game Area	Michigan Department of Natural Resources	North Maumee Bay, Lake Erie	**800-292-4706**	517-373-1263	

Other Environmentally Sensitive Areas

Icon Number	Additional Resource Area Name	Contact Agency	Waterbody	Emergency Phone	Contact Phone	Comments
O147	**Erie Marsh Reserve**	The Nature Conservancy	North Maumee Bay, Lake Erie	517-373-7660	312-759-8017	Total of 2168 acres. Migratory and nesting shorebirds, waterfowl, and avian species. Raptors during migration. Swamp mallow grows here.
O1594	**Otter Creek Wetland**	Great Lakes Wetland Consortium	Otter Creek, Maumee River, Maumee Bay	419-345-4917	734-971-9135	railroad; wetland is contiguous and contains some upland; point represents portion of wetland not recognized by OWI; industrial development exists
O1599	**Woodtick Peninsula Wetland**	Great Lakes Wetland Consortium	North Maumee Bay	734-240-7400	734-971-9135	wetland is contiguous and contains small ponds; part of large wetland complex including Herdendorf wetlands; industrial development exists
O1600	**Indian Island Wetland**	Great Lakes Wetland Consortium	North Maumee Bay	734-240-7400	734-971-9135	wetland is contiguous
O1601	**Carland Beach Wetland**	Great Lakes Wetland Consortium	North Maumee Bay	734-240-7400	734-971-9135	Remnant of much larger wetland; residential development exists.
O1602	**Ottawa River Mouth Wetland**	Great Lakes Wetland Consortium	North Maumee Bay	734-240-7400	734-971-9135	residential development exists
O1603	**Halfway Creek Wetland**	Great Lakes Wetland Consortium	North Maumee Bay	734-240-7400	734-971-9135	wetland is contiguous; residential development exists

Marinas

Icon Number	Name	Street Address	Waterbody	Slips	Fuel Available	Emergency Phone	Contact Phone
M2600	**American Marine**	2929 E. Sterns Road, Erie	Hoopers Run Creek, Lake Erie	80	No	734-243-7070	734-848-8501
M2603	**Andrews Boat Dock**	2937 E. Sterns Road, Erie	Maumee Bay, Lake Erie Access	146	No	734-243-7497, 734-243-7070	800-649-3777 734-848-3337
M2609	**Bay View Yacht Club**	Bay View Park, Toledo	Maumee Bay, Lake Erie	168	Yes	419-243-5111	419-729-0371
M2611	**Bi-State Marina**	2969 E Sterns, Erie	Hoopers Run Creek, Lake Erie		No	734-243-7070	734-848-4749
M2615	**Brenner Marine**	1 Main Street, Toledo	Maumee River	40	No	419-243-5111	419-691-4663
M2618	**Bush Marine**	5235 N Summit Street, Toledo	Ottawa River	250	No	419-243-5111	419-726-0794
M2639	**Erie Bay Harbor Marina**	7120 Summit Street, Erie	Halfway Creek, Lake Erie	250	Yes	888-423-0372	734-848-4550
M2658	**Jocketts Marina Dockage**	6213 Edgewater Drive, Toledo	Ottawa River, Maumee Bay	90	No	419-243-5111	419-726-9443
M2686	**New Harrison Marina**	3840 N Summit Street, Toledo	Maumee River, Maumee Bay	300	Yes	419-382-8225	419-729-1676
M2691	**Ottawa River Yacht Club**	5844 Edgewater Drive, Toledo	Ottawa River, Maumee Bay	182	Yes	419-243-5111	419-726-4101
M2696	**River Run Marina**	5813 Edgewater Drive, Toledo	Ottawa River, Maumee Bay			419-243-5111	419-727-1171
M2697	**River View Yacht Club**	5844 Edgewater Drive, Toledo	Ottawa River, Maumee Bay	220	Yes	419-243-5111	419-729-9421

Contingency Protocol for Oiled Wildlife – The Toledo Refining Company LLC November, 2005

PHMSA 00012512

Marinas - Continued

Icon Number	Name	Street Address	Waterbody	Slips	Fuel Available	Emergency Phone	Contact Phone
M2711	State Line Marina	7370 Perch Street, Erie	Hoopers Run Creek, N. Maumee Bay, Lake Erie Access	143	Yes	734-243-7497, 734-243-7070	734-848-8137
M2716	Toledo Yacht Club	Bay View Park, Toledo	Maumee Bay, Lake Erie	108	No	419-243-5111	419-726-3485
M2736	Cullen Park Ramp	Summit Street, Toledo	Maumee Bay		No	419-936-3076	419-936-2871 419-936-3085
M2740	Pier 75 Marina	299 Edwin Drive, Toledo	Maumee River		Yes	419-243-5111	419-242-7575
M2741	Harbor View Yacht Club	2180 Autokee, Oregon	Maumee Bay	130	No	419-243-5111	419-698-8128
M2742	Maumee River Yacht Club	2735 Broadway, Toledo	Maumee River	125	No	419-243-5111	419-382-3625
M2743	Toledo Sailing Club	2700 Broadway, Walbridge Park, Toledo	Maumee River	60	No	419-243-5111	419-382-5841
M3563	Burlens Dock	6316 Willow Place, Erie	Ottawa River, Maumee Bay Access	35	Yes	313-243-7070	N/A
M3568	Jo Jo's Marina	7371 Bass, Erie	Maumee Bay, Lake Erie			313-243-7070	734-848-2158
M3569	John Fisher's Marina	2961 Stems Road, Erie	Maumee Bay, Lake Erie			313-243-7070	734-848-8331
M3572	Lost Peninsula Marina	6300 Edgewater Drive, Erie	Maumee Bay, Lake Erie Access	700	Yes	734-723-7466, 734-723-7410	734-723-7466
M3580	River Cafe & Marina	6215 Edgewater Drive, Erie	Ottawa River, Lake Erie Access	6	No	313-243-7070	734-723-7405
M3582	Rodger Dodgers Lands End Marina	2941 E. Sterns Road, Erie	Hoopers Run Creek, Lake Erie Access	32	Yes	313-243-7070	734-828-4249
M3584	Shelter Cove Marina	2929 E. Sterns Road, Erie	Hoopers Run Creek, Lake Erie Access	80	No	734-243-7497	734-848-8501
M5132	Rossford Marina	100 Hannum Ave, Rossford	Maumee River	250	No	419-666-7390	419-661-4299
M5136	Perrysburg Boat Club	111 Water Street, Perrysburg	Maumee River	60	No	419-354-9137	419-874-6538

Surface Water Intakes

Icon Number	Name	Street Address	Waterbody	Water Use	Reserve Capacity	Intake Information	Comments	Emergency Phone	Contact Phone
[redacted]							(b) (7)(F), (b) (3)		

Contingency Protocol for Oiled Wildlife – The Toledo Refining Company LLC
November, 2005

PHMSA 00012513O

Northwest Ohio Atlas – Tile 6 (Continued)

Oil Storage Facilities

Icon Number	Name	Operator	Street Address	Waterbody	Facility Response Plan	Marine Transfer Facility	Products Handled	Emergency Phone	Contact Phone
#1050	**Westway Terminal Company, Inc.**	Westway Terminal Company, Inc.	431 John Carey Dr., Toledo	Maumee River, Duck Creek	Yes	Yes	Vegetable Oils	**419-698-8031**	419-698-8031
#1051	**Oregon Facility**	Asphalt Materials, Inc.	940 N Wynn Rd, Oregon	Wynn Rd. Drainage Swale, Lake Erie	Yes	N/A	Asphalt-cutback,emul,multi, #1 & 2 Oils, Tall Oil	**419-693-0626/317-875-4670**	419-693-0626
#1052	**Toledo Facility**	Delta Fuels of Ohio	1820 Front Street, Toledo	Maumee River, Maumee Bay	Yes	Yes	Gasoline, Diesel, Ethanol	**419-620-8222 (p)/419-620-8282 (p)**	419-693-0983
#1053	**Toledo Edison Acme Station**	Centerior Energy Corporation	1401 Front Street, Toledo	Maumee River	Yes	N/A		**419-249-5700**	419-691-3581
#1054	**Toledo Emulsion Plant**	Bituminous Products, Inc.	352 George Hardy Dr, Toledo	Maumee River	Yes	N/A		**419-243-5111**	419-693-3933
#1055	**Toledo Refinery**	BP Exploration and Oil Company	4001 Cedar Point Rd, Oregon	Otter Creek, Driftmeyer Ditch	Yes	Yes	Gasoline, Aviation Fuel, Diesel, Asphalt, Kerosene	**419-698-6200**	419-698-6200
#1056	**Toledo Refinery**	Sun Company, Inc.	1819 Woodville Road, Oregon	Otter Creek, Amslosch Ditch	Yes	N/A	Gasoline	**419-698-6610**	419-698-6610
#1057	**Citgo Toledo Terminal**	Citgo Petroleum Corporation	1840 Otter Creek Road, Oregon	Otter Creek, Driftmeyer Ditch, Maumee Bay	Yes	Yes	Gasoline, LS & HS Diesel, Kerosene, Racing Fuel	**419-698-8055/419-440-6778 (p)**	419-698-8055
#1058	**Toledo Terminal**	Clark Refining and Marketing	2844 N. Summit, Toledo	Maumee River, Maumee Bay	Yes	Yes	Gasoline, Fuel Oil, Ethanol	**419-726-9741**	419-726-9741
#1059	**Toledo #2 Tank Farm**	Sun Refining/Marketing	1601 Woodville Rd, Toledo	Maumee River	Yes	N/A	Refined Oil	**419-698-6610**	419-698-6610
#1060	**Toledo Terminal**	BP Exploration and Oil Company	2450 Hill Avenue, Toledo	Williams Ditch, Swan Creek	Yes	No	Gasoline, Diesel, Jet-A, Aviation Gas, Kerosene	**800-842-6561**	419-537-9540
#1063	**Walbridge Facility**	Consolidated Rail Corp.	28531 E Broadway, Walbridge	Cedar Creek	Yes	No		**419-354-9001**	419-661-4885
#1066	**BP Oil Company**	BP Oil and Exploration Company	4128 Monroe, Toledo	Peterson Ditch	No	No	Gasoline	**800-842-6561**	419-537-9540
#4966	**Walbridge Facility CSXT**	CSZ Transportation Corp.	28531 E Broadway, Walbridge	Cedar Creek	No	No	Diesel Fuel	**419-661-4691**	419-661-4858 419-661-4691

Northwest Ohio Atlas – Tile 6 (Continued)

Pipelines

Icon Number	Company Name	Route Name	Number of Pipes in Route	Diameters	Products	Emergency Phone	Contact Phone	Active
PL1	**Buckeye Pipeline Company**	DS316BD001	1	16"	Product	800-331-4115	800-523-9420	Yes
PL7	**Buckeye Pipeline Company**	Sun Junction Idle	2	8"	Product	800-331-4115	800-523-9420	No
PL13	**Buckeye Pipeline Company**	DE150TO007	1	8.63"	Product	800-331-4115	800-523-9420	Yes
PL14	**Buckeye Pipeline Company**	DE150TO008	1	8.63"	Product	800-331-4115	800-523-9420	Yes
PL15	**Buckeye Pipeline Company**	DE150TO010	1	8.63"	Product	800-331-4115	800-523-9420	Yes
PL16	**Buckeye Pipeline Company**	DE150TO011	1	8.63"	Product	800-331-4115	800-523-9420	Yes
PL20	**Buckeye Pipeline Company**	DE150TO012	1	8.63"	Product	800-331-4115	800-523-9420	Yes
PL21	**Buckeye Pipeline Company**	DE150TO013	1	8.63"	Product	800-331-4115	800-523-9420	Yes
PL22	**Buckeye Pipeline Company**	DE150TO014	1	8.63"	Product	800-331-4115	800-523-9420	Yes
PL23	**Sunoco Inc.**	16" Crude	1	16"	Crude	800-786-7440 419-691-4554	313-292-8850 800-279-4602	Yes
PL31	**BP Oil Pipeline Company**	West Toledo 6"	1	6"	Product	800-842-6561	419-435-3789	Yes
PL32	**BP Oil Pipeline Company**	TR 6"	1	6"	Product	800-842-6561	419-435-3789	Yes
PL33	**Citgo Petroleum Corporation**	Inland Pipe	1	10"	Product	419-698-8055	419-698-8055	Yes
PL34	**Citgo Petroleum Corporation**	Dock Pipe	1	10"	Product	419-698-8055	419-698-8055	Yes
PL35	**Sunoco Inc.**	5 Crude Toledo Pump Station to York St.	1	16"	Crude	800-786-7440 419-691-4554	313-292-8850 800-279-4602	Yes
PL36	**Sunoco Inc.**	Toledo to Sarnia	2	8"	Product	800-786-7440 419-691-4554	313-292-8850 800-279-4602	Yes
PL37	**Sunoco Inc.**	Toledo Inkster 8"	2	8"	Product	800-786-7440 419-691-4554	313-292-8850 800-279-4602	Yes
PL38	**Sunoco Inc.**	37 Toledo Pump Station to Cedar Point Junction	1	12"	Product	800-786-7440 419-691-4554	313-292-8850 800-279-4602	Yes
PL39	**Sunoco Inc.**	Toledo Inkster 6"	2	6"	Product	800-786-7440 419-691-4554	313-292-8850 800-279-4602	Yes
PL41	**Sunoco Inc.**	13013 South Line	2	8"	Product	800-786-7440 419-691-4554	313-292-8850	Yes
PL43	**Clark Oil Company**	Toledo 6"	1	6"	Product	219-931-2739	419-726-9741	Yes
PL44	**Marathon Ashland Pipe Line LLC**	Tank Farm to Buckeye	1	8"	Product	800-537-6644	419-421-2121	Yes
PL45	**Buckeye Pipeline Company**	DE150TO015	1	8.63"	Product	800-331-4115	800-523-9420	Yes
PL46	**Buckeye Pipeline Company**	DE150TO016	1	8.63"	Product	800-331-4115	800-523-9420	Yes

PHMSA 00012513

Northwest Ohio Atlas – Tile 6 (Continued)

Pipelines - Continued

Icon Number	Company Name	Route Name	Number of Pipes in Route	Diameters	Products	Emergency Phone	Contact Phone	Active
PL47	Buckeye Pipeline Company	DE150TO017	1	8.63"	Product	800-331-4115	800-523-9420	Yes
PL48	Buckeye Pipeline Company	DE150TO018	1	8.63"	Product	800-331-4115	800-523-9420	Yes
PL49	Buckeye Pipeline Company	DE150TO009	1	8.63"	Product	800-331-4115	800-523-9420	Yes
PL50	Buckeye Pipeline Company	Sun Junction to Cedar Point	1	10"	Product	800-331-4115	800-523-9420	No
PL58	Buckeye Pipeline Company	CT999TO001	1	8"	Product	800-331-4115	800-523-9420	Yes
PL60	Marathon Ashland Pipe Line LLC	196	1	6"	Product	800-537-6644	419-422-2121	Yes
PL61	Sunoco Inc.	MV22 Main Line	2	22"	Crude	800-753-5531	600-371-4469	Yes
PL63	Buckeye Pipeline Company	Sun Junction to Cedar Point	2	10"	Product	800-331-4115	800-523-9420	No
PL64	BP Oil Pipeline Company	TR 10"	1	10"	Product	800-842-6561	419-435-3789	Yes
PL66	Sunoco Inc.	Toledo Pump Station to B.P. Oil Refiner	1	8"	Product	800-786-7440 419-691-4554	313-292-8850 /800-279-4602	Yes
PL195	Wolverine Pipe Line Company	Freedom Jct. to Toledo 16"	1	16"	Crude	888-337-5004 219-844-9510	616-323-2491	Yes
PL217	Sunoco Inc.	Toledo Inkster 6"	2	6"	Product	800-786-7440 419-691-4554	313-292-8850 800-279-4602	Yes
PL649	Buckeye Pipeline Company	CG301DC002	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL653	Buckeye Pipeline Company	CG302DS003	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL654	Buckeye Pipeline Company	CG302DS004	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL655	Buckeye Pipeline Company	CG302DS005	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL656	Buckeye Pipeline Company	CG302DS006	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL657	Buckeye Pipeline Company	CG302DS007	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL658	Buckeye Pipeline Company	CG302DS008	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL666	Buckeye Pipeline Company	CG414DL002	4	10.75"	Product	800-331-4115	800-523-9420	Yes
PL668	Buckeye Pipeline Company	CG414DL003	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL669	Buckeye Pipeline Company	CG414DL004	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL670	Buckeye Pipeline Company	CG414DL005	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL673	Buckeye Pipeline Company	CG416DS001	1	16"	Product	800-331-4115	800-523-9420	Yes
PL677	Buckeye Pipeline Company	DC301DL001	1	12.75"	Product	800-331-4115	800-523-9420	Yes

PHMSA 00125133

Northwest Ohio Atlas – Tile 6 (Continued)

Pipelines - Continued

Icon Number	Company Name	Route Name	Number of Pipes in Route	Diameters	Products	Emergency Phone	Contact Phone	Active
PL678	Buckeye Pipeline Company	DC301DL002	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL679	Buckeye Pipeline Company	DL301DS001	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL682	Buckeye Pipeline Company	DL414DS001	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL743	Buckeye Pipeline Company	DS304WS002	3	12.75"	Product	800-331-4115	800-523-9420	Yes
PL778	Buckeye Pipeline Company	CG416DS002	4	16"	Product	800-331-4115	800-523-9420	Yes
PL798	Sunoco Inc.	Toledo – Brown Jct. Transfer Line	1	8"	Product	800-786-7440 419-691-4554	313-292-8850 800-279-4602	
PL1500	Buckeye Pipeline Company	DS211WW001	3	12.75"	Product	800-331-4115	800-523-9420	Yes
PL1501	Buckeye Pipeline Company	SM999DS001	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL1502	Buckeye Pipeline Company	CG302DS010	4	10.75"	Product	800-331-4115	800-523-9420	Yes
PL1503	Buckeye Pipeline Company	DL301DS002	4	10.75", 12.75"	Product	800-331-4115	800-523-9420	Yes
PL1504	Buckeye Pipeline Company	CG302DS011	4	10.75"	Product	800-331-4115	800-523-9420	Yes
PL1505	Buckeye Pipeline Company	DL301DS003	4	10.75", 12.75"	Product	800-331-4115	800-523-9420	Yes
PL1506	Buckeye Pipeline Company	PC999DS001	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL1507	Buckeye Pipeline Company	CG302DS012	4	10.75"	Product	800-331-4115	800-523-9420	Yes
PL1508	Buckeye Pipeline Company	CG302DS009	4	10.75"	Product	800-331-4115	800-523-9420	Yes
PL1509	Buckeye Pipeline Company	DL301DS004	4	10.75", 12.75"	Product	800-331-4115	800-523-9420	Yes
PL1510	Buckeye Pipeline Company	DS303WW001	3	12.75"	Product	800-331-4115	800-523-9420	Yes
PL1511	Buckeye Pipeline Company	CG302DS013	4	10.75"	Product	800-331-4115	800-523-9420	Yes
PL1512	Buckeye Pipeline Company	DL414DS002	4	10.75", 12.75"	Product	800-331-4115	800-523-9420	Yes
PL1513	Buckeye Pipeline Company	DS303WW002	3	12.75"	Product	800-331-4115	800-523-9420	Yes
PL1514	Buckeye Pipeline Company	DL414DS003	4	10.75", 12.75"	Product	800-331-4115	800-523-9420	Yes
PL1515	Buckeye Pipeline Company	DL414DS004	4	10.75", 12.75"	Product	800-331-4115	800-523-9420	Yes
PL1516	Buckeye Pipeline Company	DS304WS001	3	12.75"	Product	800-331-4115	800-523-9420	Yes
PL1518	Buckeye Pipeline Company	DS999AS001	1	8.63"	Product	800-331-4115	800-523-9420	Yes
PL1519	Buckeye Pipeline Company	DS999TA001	1	16"	Product	800-331-4115	800-523-9420	Yes
PL1520	Buckeye Pipeline Company	DS999TZ001	1	16"	Product	800-331-4115	800-523-9420	Yes
PL1521	Buckeye Pipeline Company	DS999TT001	1	16"	Product	800-331-4115	800-523-9420	Yes
PL1522	Buckeye Pipeline Company	DS999TR001	1	10"	Product	800-331-4115	800-523-9420	Yes

PHMSA 00012513

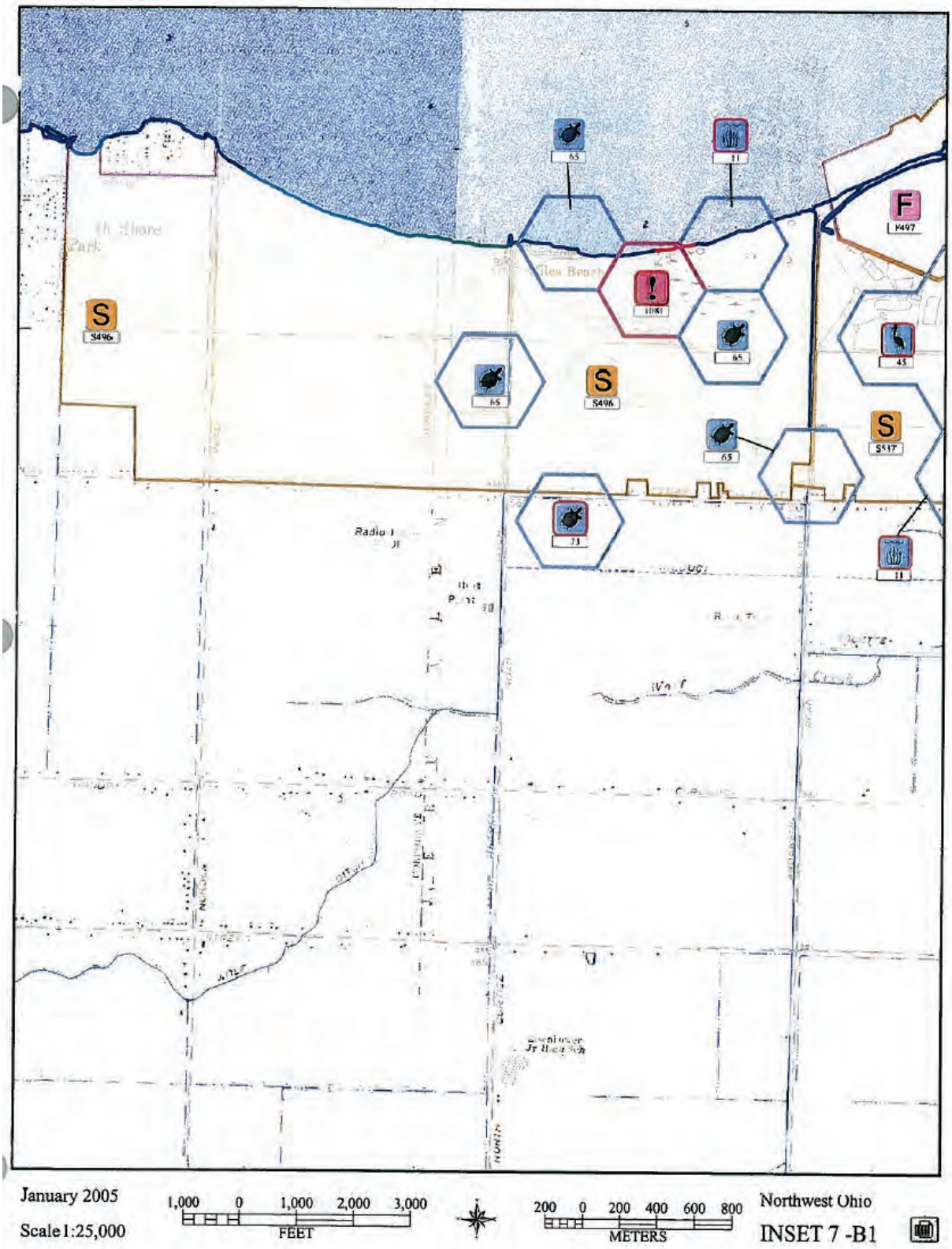
Northwest Ohio Atlas – Tile 6 (Continued)

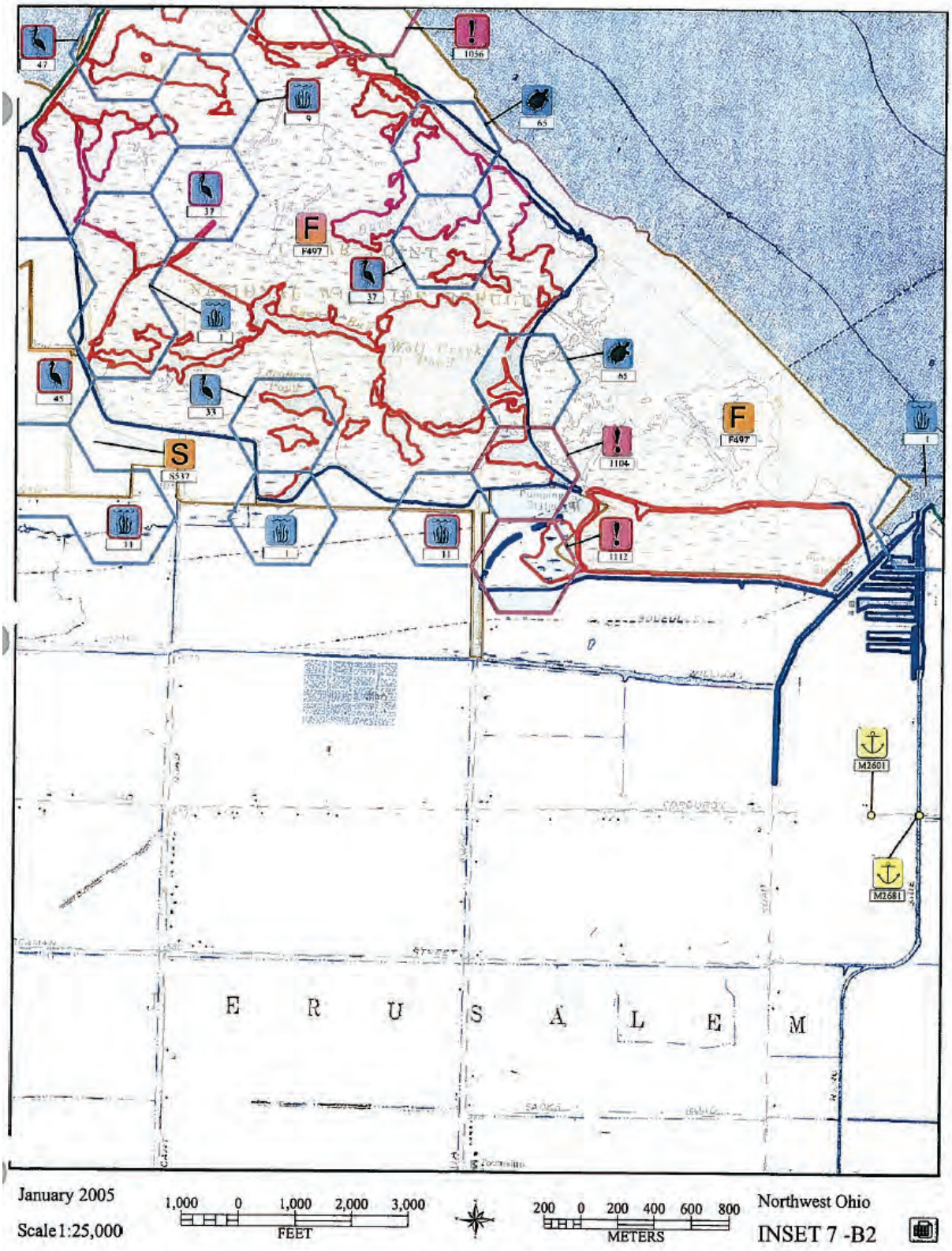
Pipelines - Continued

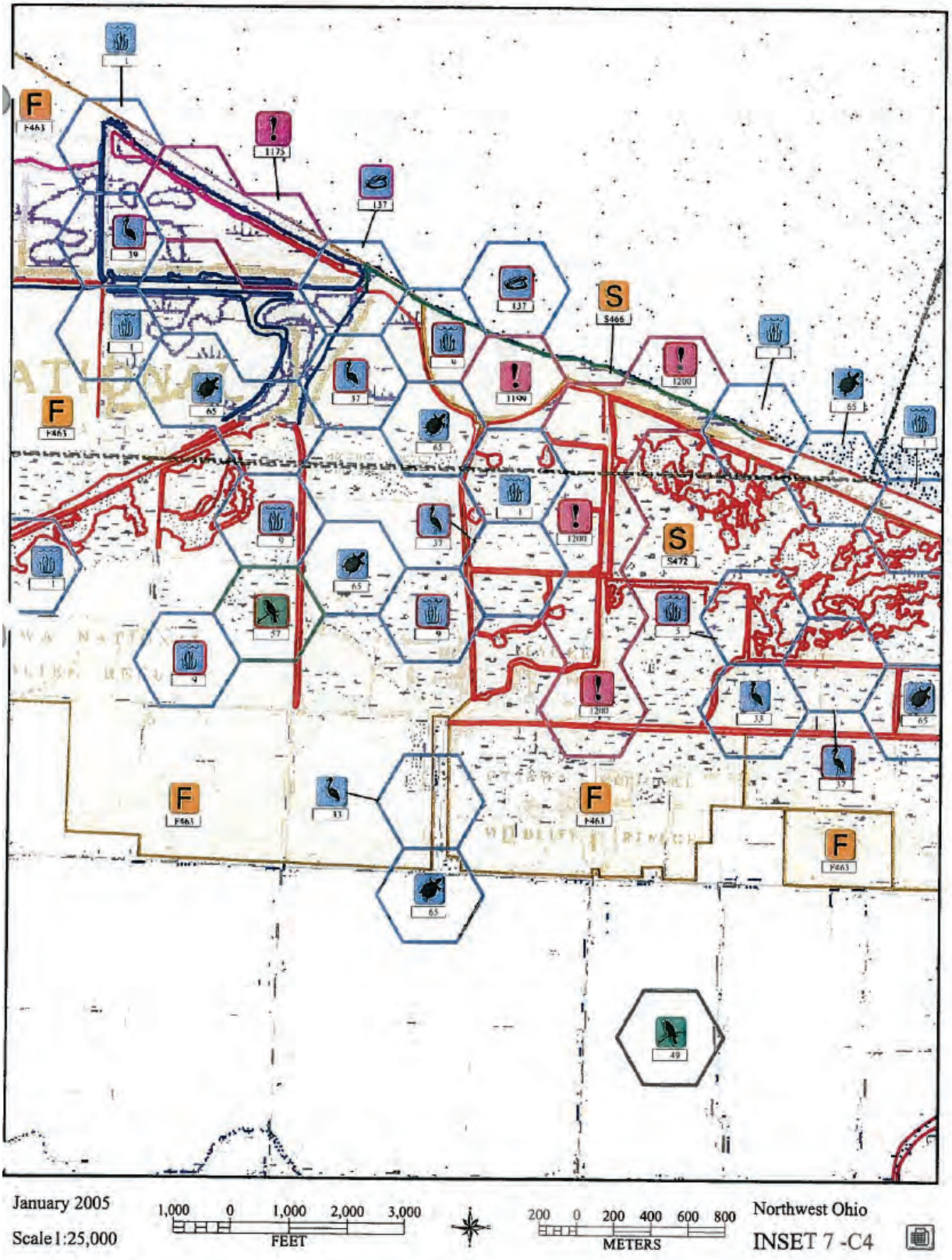
Icon Number	Company Name	Route Name	Number of Pipes in Route	Diameters	Products	Emergency Phone	Contact Phone	Active
PL1523	Buckeye Pipeline Company	DS999ST001	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL1524	Buckeye Pipeline Company	DS999PC001	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL1525	Buckeye Pipeline Company	DS999IC001	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL1526	Buckeye Pipeline Company	DS999CE001	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL1527	Buckeye Pipeline Company	DS999BK001	1	10.75"	Product	800-331-4115	800-523-9420	Yes
PL1528	Buckeye Pipeline Company	DL999SU001	1	8.63"	Product	800-331-4115	800-523-9420	Yes
PL1529	Buckeye Pipeline Company	DL999SU002	1	8.63"	Product	800-331-4115	800-523-9420	Yes
PL1532	Buckeye Pipeline Company	CT999TO002	1	8"	Product	800-331-4115	800-523-9420	Yes
PL1533	Buckeye Pipeline Company	CT999TO003	1	8"	Product	800-331-4115	800-523-9420	Yes
PL1534	Buckeye Pipeline Company	CT999TO004	1	8"	Product	800-331-4115	800-523-9420	Yes

PHMSA 00012513S

(b) (7)(F), (b) (3)


S
S496
S
S496
S
S497
F
H497
!
Radio
January 2005
Scale 1:25,000
1,000 0 1,000 2,000 3,000
FEET
200 0 200 400 600 800
METERS
Northwest Ohio
INSET 7 -B1


F
F497
S
S517
F
F497
M2601
M2681
E R U S A L E M
January 2005
Scale 1:25,000
1,000 0 1,000 2,000 3,000
FEET
200 0 200 400 600 800
METERS
Northwest Ohio
INSET 7 -B2


F
F463
S
S466
S472
1175
1200
1199
137
39
65
37
57
33
49
January 2005
Scale 1:25,000
1,000 0 1,000 2,000 3,000
FEET
200 0 200 400 600 800
METERS
Northwest Ohio
INSET 7 -C4

Sensitive Species[a]

Listing	Contact Name	Emergency Phone	Contact Phone
Federal (Ohio) Elements	U.S. Fish and Wildlife Service	800-800-5923 to page 612-660-9062 (Stan Smith, Regional Spill Response Coordinator)	309-793-5800, ext. 515 or 524
State (Ohio) plants, communities	Ohio DNR: Division of Natural Areas and Preserves	614-265-6472	614-265-6453
State (Ohio) animals, fish, invertebrates	Ohio DNR: Division of Wildlife	614-265-6300	614-265-6329 Terrestrial, 614-265-6344 Aquatics
State	Indiana DNR Division of Fish and Wildlife Michigan Natural Features Inventory	None None	317-232-4080 517-373-9418

Managed Areas

Icon Number	Name	Category	Managing Agency	Waterbody	Emergency Phone	Contact Phone	Comments
F463	**Ottawa National Wildlife Refuge**	National Wildlife Refuge	U. S. Fish and Wildlife Service	Lake Erie, Toussaint River	**800-759-8352**	419-898-0014	Contains 500+ acres of habitat managed for bald eagles, waterfowl, and other migratory birds. The refuge is protected by a dike.
F497	**Cedar Point National Wildlife Refuge**	National Wildlife Refuge	U.S. Fish and Wildlife Service	Lake Erie	**800-759-8352**	419-898-0014	2,500 acres of wetland habitat for bald eagles, waterfowl and other migratory birds. The refuge is protected by a dike except for the eagle nest area and Potters Marsh.
S466	**Crane Creek State Park**	State Park	OH DNR Division of Parks and Recreation	Crane Creek, Lake Erie	**614-224-0946**	419-836-7758	
S467	**Metzger Marsh State Wildlife Area**	State Wildlife Area	OH DNR Division of Wildlife	Lake Erie	**614-224-0946**	419-424-5000	
S469	**Toussaint State Wildlife Area**	State Wildlife Area	OH DNR Division of Wildlife	Toussaint Creek	**614-224-0946**	419-424-5000	
S472	**Magee Marsh State Wildlife Area**	Wildlife Area	OH DNR Division of Wildlife	Lake Erie	**614-224-0946**	419-898-0960	2,600 acre marshland located at crossing point of Mississippi and Atlantic Flyways, Two major migratory paths. Abundant waterfowl.
S496	**Maumee Bay State Park**	State Park	OH DNR Division of Parks and Recreation	Lake Erie (Maumee Bay)	**614-224-0946**	419-836-7758	Year-round facilities, including recreational and natural.
S537	**Mallard Club Marsh Wildlife Area**	Wildlife Area	OH DNR Division of Wildlife	Wolf Creek Pond, Lake Erie	**614-224-0946**	419-424-5000	

[a] 2003 Ohio Natural Heritage Data provided by the Ohio Department of Natural Resources, Division of Natural Areas and Preserves and Division of Wildlife
[a] 2003 Indiana Natural Heritage Data provided by the Indiana Department of Natural Resources, Division of Fish and Wildlife
[a] 2003 Michigan Natural Heritage Data provided by the Michigan Department of Natural Resources and the Michigan Natural Features Inventory

Contingency Protocol for Oiled Wildlife –The Toledo Refining Company LLC
November, 2005
PHMSA 00012514O

Northwest Ohio Atlas – Tile 7 (Continued)

Marinas

Icon Number	Name	Street Address	Waterbody	Slips	Fuel Available	Emergency Phone	Contact Phone
M2601	**Anchor Pointe Boat-A-Minimum**	10905 Corduroy Road, Curtice	Lake Erie	587	No	**419-734-4404**	419-836-2455
M2680	**Meinke Marina East**	12805 Bono Road, Curtice	Wards Canal, Lake Erie			**419-734-4404**	419-898-1416
M2681	**Meinke Marina West**	10955 Corduroy Road, Curtice	Reno Side Cut Ditch, Lake Erie			**419-734-4404**	419-836-7774

Surface Water Intakes

Icon Number	Name	Street Address	Waterbody	Water Use	Reserve	Intake	Comments	Emergency	Contact
[redacted]							(b) (7)(F), (b) (3)		

Pipelines

Icon Number	Company Name	Route Name	Number of Pipes in Route	Diameters	Products	Emergency Phone	Contact Phone	Active
PL1	**Buckeye Pipeline Company**	DS316BD001	1	16"	Product	**800-331-4115**	800-523-9420	Yes

PHMSA 00012514

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

Sensitive Species[a]

Listing	Contact Name	Emergency Phone	Contact Phone
Federal (Ohio) Elements	U.S. Fish and Wildlife Service	800-800-5923 to page 612-660-9062 (Stan Smith, Regional Spill Response Coordinator)	309-793-5800, ext. 515 or 524
State (Ohio) plants, communities	Ohio DNR: Division of Natural Areas and Preserves	614-265-6472	614-265-6453
State (Ohio) animals, fish, invertebrates	Ohio DNR: Division of Wildlife	614-265-6300	614-265-6329 Terrestrial, 614-265-6344 Aquatics
State	Indiana DNR Division of Fish and Wildlife Michigan Natural Features Inventory	None None	317-232-4080 517-373-9418

Managed Areas

Icon Number	Name	Category	Managing Agency	Waterbody	Emergency Phone	Contact Phone	Comments
F500	West Sister Island National Wildlife Refuge	National Wildlife Refuge	U.S. Fish and Wildlife Service	Lake Erie	800-759-8352	419-898-0014	80 acres of woodlands and brush managed as a National Wilderness Area for colonial nesting birds. Great blue heron, great egret, and cormorant nests.
F572	Rusha Creek Marsh (Private)	Private Wetland	U.S. Fish and Wildlife Service	Rusha Creek, Toussaint River	800-759-8352	614-469-6923	Coastal Wetlands.
F5253	Ottawa National Wildlife Refuge, Navarre unit	National Wildlife Refuge	U. S. Fish and Wildlife Service	Lake Erie, Toussaint River	800-759-8352	419-898-0014	Coastal Wetland.
F5254	Ottawa National Wildlife Refuge, Darby unit	National Wildlife Refuge	U. S. Fish and Wildlife Service	Lake Erie, Toussaint River	800-759-8352	419-898-0014	Coastal Wetland.
S466	Crane Creek State Park	State Park	Ohio DNR	Crane Creek, Lake Erie	614-224-0946	419-836-7758	
S469	Toussaint State Wildlife Area	State Wildlife Area	OH DNR Division of Wildlife	Toussaint Creek	614-224-0946	419-424-5000	
S472	Magee Marsh State Wildlife Area	Wildlife Area	OH DNR Division of Wildlife	Lake Erie	614-224-0946	419-898-0960	2,600 acre marshland located at crossing point of Mississippi and Atlantic Flyways, Two major migratory paths. Abundant waterfowl.

[a] 2003 Ohio Natural Heritage Data provided by the Ohio Department of Natural Resources, Division of Natural Areas and Preserves and Division of Wildlife
[a] 2003 Indiana Natural Heritage Data provided by the Indiana Department of Natural Resources, Division of Fish and Wildlife
[a] 2003 Michigan Natural Heritage Data provided by the Michigan Department of Natural Resources and the Michigan Natural Features Inventory

Contingency Protocol for Oiled Wildlife –The Toledo Refining Company LLC November, 2005

PHMSA 00012514

Marinas

Icon Number	Name	Street Address	Waterbody	Slips	Fuel Available	Emergency Phone	Contact Phone
M2610	**Beef Creek Marina**	4385 Rider Road, Oak Harbor	Toussaint Creek, Lake Erie			419-734-4404	419-898-1829
M2617	**Brown's Marina**	4305 N Rider Road, Oak Harbor	Lake Erie			419-734-4404	419-898-1820
M2638	**East Side Marina**	10221 Locust Point Road, Oak Harbor	Lake Erie	388	No	419-734-4404	419-285-2204
M2640	**Fenwick Marina**	10261 W State Route 2, Oak Harbor	Turtle Creek Bay, Lake Erie			419-734-4404	419-898-7009
M2642	**Floro's Marina**	6627 Thompson Road, Oak Harbor	Toussaint River, Lake Erie			419-734-4404	419-898-1572
M2655	**Inland Marina**	10644 W State Route 2, Oak Harbor	Turtle Creek Bay, Lake Erie			419-734-4404	419-898-5071
M2722	**Turtle Creek Access**	State Route 2 at Turtle Creek, Oak Harbor	Turtle Creek			419-734-4404	419-898-0960
M2723	**Turtle Point Marina**	10275 W Locust Point, Oak Harbor	Lake Erie	80	Yes	419-734-4404	419-898-2003
M2732	**Wild Wings Marina & RV Park**	6395 N Russell Road, Oak Harbor	Lake Erie			419-734-4404	419-898-1416

Surface Water Intakes

Icon Number	Name	Street Address	Waterbody	Water Use	Reserve Capacity	Intake Information	Comments	Emergency Phone	Contact Phone
[redacted]							(b) (7)(F), (b) (3)		

Contingency Protocol for Oiled Wildlife – The Toledo Refining Company LLC
November, 2005

PHMSA 00012514

Appendix B. Sensitive Species and Natural Communities

Icon	Species Group Name	State Threatened	State Endangered	Federal Threatened	Federal Endangered
1	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
5	Aquatic/Riparian Zone Vascular Plants	-	X	-	-
9	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
17	Upland Zone Vascular Plants	-	-	-	-
21	Upland Zone Vascular Plants	-	X	-	-
25	Upland Zone Vascular Plants	X	-	-	-
29	Upland Zone Vascular Plants	X	X	-	-
33	Aquatic/Riparian Zone Birds	-	-	-	-
37	Aquatic/Riparian Zone Birds	-	X	-	-
39	Aquatic/Riparian Zone Birds	-	X	X	-
41	Aquatic/Riparian Zone Birds	X	-	-	-
49	Terrestrial Zone Birds	-	-	-	-
53	Terrestrial Zone Birds	-	X	-	-
57	Terrestrial Zone Birds	X	-	-	-
65	Aquatic/Riparian Zone Amphibians and Reptiles	-	-	-	-
69	Aquatic/Riparian Zone Amphibians and Reptiles	-	X	-	-
71	Aquatic/Riparian Zone Amphibians and Reptiles	-	X	X	-
73	Aquatic/Riparian Zone Amphibians and Reptiles	X	-	-	-
102	Aquatic/Riparian Zone Mammals	-	X	-	X
113	Terrestrial Zone Mammals	-	-	-	-
129	Aquatic/Riparian Zone Invertebrates	-	-	-	-
133	Aquatic/Riparian Zone Invertebrates	-	X	-	-
134	Aquatic/Riparian Zone Invertebrates	-	X	-	X
137	Aquatic/Riparian Zone Invertebrates	X	-	-	-
142	Aquatic/Riparian Zone Invertebrates	X	X	-	X
161	Fish	-	-	-	-
165	Fish	-	X	-	-
169	Fish	X	-	-	-
177	Aquatic Natural Communities	-	-	-	-
193	Terrestrial Zone Natural Communities	-	-	-	-
1006	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Invertebrates	X	-	-	-
1013	Aquatic/Riparian Zone Vascular Plants	-	X	-	-
	Fish	-	X	-	-
1020	Aquatic/Riparian Zone Amphibians and Reptiles	-	X	X	-
	Aquatic/Riparian Zone Vascular Plants	-	X	-	-
	Upland Zone Vascular Plants	-	X	-	-
1021	Aquatic/Riparian Zone Vascular Plants	-	X	-	-
	Fish	-	X	-	-
1029	Aquatic/Riparian Zone Invertebrates	-	X	-	-
	Fish	-	-	-	-
1030	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Invertebrates	-	-	-	-

Sensitive Species and Natural Communities, continued

Icon	Species Group Name	State Threatened	State Endangered	Federal Threatened	Federal Endangered
1031	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Amphibians and Reptiles	X	X	X	-
	Aquatic/Riparian Zone Invertebrates	-	X	-	-
	Aquatic/Riparian Zone Vascular Plants	X	X	-	-
	Fish	X	-	-	-
	Terrestrial Zone Invertebrates	-	X	-	-
	Upland Zone Vascular Plants	X	-	-	-
1049	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1050	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1055	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	X	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1059	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1064	Aquatic/Riparian Zone Vascular Plants	-	X	-	-
	Upland Zone Vascular Plants	X	X	-	-
1069	Aquatic/Riparian Zone Invertebrates	X	-	-	-
	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
1076	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1080	Aquatic/Riparian Zone Invertebrates	X	-	-	-
	Fish	-	-	-	-
1081	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Invertebrates	-	X	-	X
1085	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1086	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	X	X	-	-
1089	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1092	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Amphibians and Reptiles	X	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	X	-	-
	Upland Zone Vascular Plants	X	-	-	-
1094	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Amphibians and Reptiles	-	-	-	-
1101	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1129	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Amphibians and Reptiles	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	-	X	-	-
1137	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1140	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	X	-	-	-

Sensitive Species and Natural Communities, continued

Icon	Species Group Name	State Threatened	State Endangered	Federal Threatened	Federal Endangered
1184	Aquatic/Riparian Zone Invertebrates	-	X	-	-
	Upland Zone Vascular Plants	-	X	-	-
1200	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1222	Aquatic/Riparian Zone Amphibians and Reptiles	X	-	-	-
	Aquatic/Riparian Zone Birds	X	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	X	-	-
1224	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1227	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
1246	Aquatic/Riparian Zone Amphibians and Reptiles	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1259	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	-	X	-	-
1301	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	-	X	-	-
	Upland Zone Vascular Plants	-	-	-	-
1302	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1303	Aquatic Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1306	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Fish	-	-	-	-
1309	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1311	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1318	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
1324	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Amphibians and Reptiles	X	-	-	-
	Aquatic/Riparian Zone Birds	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1332	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1334	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	X	-	-
	Upland Zone Vascular Plants	-	-	-	-
1341	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1342	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1345	Aquatic/Riparian Zone Amphibians and Reptiles	-	X	-	-
	Upland Zone Vascular Plants	-	-	-	-

Sensitive Species and Natural Communities, continued

Icon	Species Group Name	State Threatened	State Endangered	Federal Threatened	Federal Endangered
1350	Aquatic/Riparian Zone Amphibians and Reptiles	-	X	-	-
	Terrestrial Zone Invertebrates	-	X	-	-
1360	Aquatic/Riparian Zone Vascular Plants	X	X	-	-
	Upland Zone Vascular Plants	-	-	-	-
1380	Aquatic/Riparian Zone Birds	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
1384	Aquatic Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1398	Terrestrial Zone Birds	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1403	Aquatic/Riparian Zone Vascular Plants	-	X	-	-
	Upland Zone Vascular Plants	-	-	-	-
1406	Terrestrial Zone Birds	X	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
1408	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Invertebrates	-	X	-	-
1413	Terrestrial Zone Birds	X	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1427	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1428	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Invertebrates	-	-	-	-
1446	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Amphibians and Reptiles	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
1451	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1455	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1458	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
1462	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Birds	-	X	X	-
1464	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Invertebrates	-	X	-	-
1465	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
1470	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
1473	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1480	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1482	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Invertebrates	-	X	-	-

(b) (7)(F), (b) (3)

MAP LEGEND

SENSITIVE SPECIES

Aquatic/Riparian Zone	Terrestrial Zone
Vascular Plants	Vascular Plants
Birds	Birds
Amphibians and Reptiles	Amphibians and Reptiles
Mammals	Mammals
Invertebrates	Invertebrates
Fish	Natural Communities
Natural Communities	Multiple Species Groupings

Icons Indicating Threatened or Endangered Status

NATURAL RESOURCE AREAS

Federal Managed Areas	Federal Designated Areas
State Managed Areas	State Designated Areas
Regional Managed Areas	Regional Designated Areas
Private Managed Areas	Private Designated Areas

Other Environmentally Sensitive Aquatic Areas

Other Environmentally Sensitive Terrestrial Areas

Tribal Land

OTHER SENSITIVE RESOURCES

- Marina
- Navigational Lock and Dam
- Water Intake (nonpotable)
- Water Intake (potable)

POTENTIAL SPILL SOURCES

- Fixed Oil Storage Facility
- Marine Transfer Facility and/or Facility with more than 1 million gallons
- Pipeline

RESPONSE CONSIDERATIONS

- Ⓐ Boat Access
- Ⓓ Non- navigational Dam

BOUNDARY DESIGNATIONS

- County Boundary
- EPA/Coast Guard Jurisdictional Boundary
- Pipeline Inset Boundary

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

Southeast Michigan Atlas – Tile 109

Sensitive Species Contact Data[a]

Listing	Contact Name	Emergency Phone	Contact Phone
Federal (Michigan)	U.S. Fish and Wildlife Service	none	517-351-2555
State (Michigan)	Michigan Natural Features Inventory	none	517-373-9418

Managed Areas

Icon Number	Name	Category	Managing Agency	Waterbody	Emergency Phone	Contact Phone	Comments
P1399	Monroe County Fairgrounds	Fairgrounds	Monroe County Fair Association	River Raisin, Lake Erie	313-243-7070	734-241-5775	
R1400	White Park	County Park	Monroe County	Indian Creek	313-243-7070	734-243-7011	
R1401	Parmelee Park	County Park	Monroe County	Springbrook Creek	313-243-7070	734-243-7011	
R1487	County Park	County Park	Monroe County	River Raisin	313-243-7070	734-243-7011	
S1699	Erie State Game Area	State Game Area	Michigan Department of Natural Resources	North Maumee Bay, Lake Erie	800-292-4706	517-373-1263	

Other Environmentally Sensitive Areas

Icon Number	Additional Resource Area Name	Contact Agency	Waterbody	Emergency Phone	Contact Phone	Comments
O144	Otter Creek Estuary (Private)	U.S. Fish and Wildlife Service	Otter Creek, Lake Erie	800-759-8352	614-469-6923	Site includes migratory waterfowl. Coastal Wetland.
O145	Muddy Creek Estuary (Private)	U.S. Fish and Wildlife Service	Muddy Creek, Allens Cove	800-759-8352	614-469-6923	Coastal Wetlands.
O146	Erie Marsh (Private)	U.S. Fish and Wildlife Service	North Maumee Bay	800-759-8352	614-469-6923	Coastal Wetlands connected to those of Erie State Game Area.
O147	Erie Marsh Reserve	The Nature Conservancy	North Maumee Bay, Lake Erie	517-373-7660	517-332-1741	Total of 2168 acres. Migratory and nesting shorebirds, waterfowl, and avian species. Raptors during migration. Swamp mallow grows here.

Marinas

Icon Number	Name	Address	Waterbody	River Mile	Slips	Fuel Available	Emergency Phone	Contact Phone
M2668	Lighthouse Marina	5800 S. Otter Creek Road, La Salle	Otter Creek, Lake Erie	N/A	170	Y	313-884-9324	734-242-0111
M2670	Luna Pier Harbour Club	10420 S. Harold Street, Luna Pier	Lapoint Drain, Lake Erie Access	N/A	393	Y	734-848-8777, 734-848-4310	734-848-8777
M2687	North Cape Yacht Club	11850 Toledo Beach Road, La Salle	Lake Erie	N/A			734-243-7070	734-242-5081
M2717	Toledo Beach Marina	11840 Toledo Beach Road, La Salle	Lake Erie	N/A	600	Y	419-262-8195	734-243-3800
M3577	North Cape Yacht Club	11850 Toledo Beach Road, La Salle	Lake Erie	N/A	150	N	734-241-2121	734-242-5081

[a] 2000 Michigan Natural Heritage Data provided by the Michigan Department of Natural Resources and the Michigan Natural Features Inventory

Southeast Michigan Atlas – Tile 109 (Continued)

Surface Water Intakes

Icon Number	Name	Address	Waterbody	River Mile	Water Use	Reserve Capacity	Intake Information	Comments	Emergency Phone	Contact Phone
[redacted]								(b) (7)(F), (b) (3)		

Oil Storage Facilities

Icon Number	Name	Operator	Address	Waterbody	River Mile	Facility Response Plan	Marine Transfer Facility	Products Handled	Emergency Phone	Contact Phone
#3214	C. Barron & Sons, Inc.	C. Barron & Sons, Inc.	612 S. Roessler Street, Monroe	Raisin River	N/A	N	N	Gasoline, No. 2 H/S Fuel, No.1 L/S Fuel, Kerosene	734-241-8633	734-241-8633
#3216	Hachman Farm Supply, Inc.	Hachman Farm Supply, Inc.	627 W. Temperance Road, Temperance	Unknown	N/A	N	N	Gasoline, Kerosene, No. 2 Fuel Oil, Diesel	313-243-7070	734-847-3235
#3217	James L. Barron Oil Company	James L. Barron Oil Company	2466 Lewis Avenue, Ida	Pitts Drain	N/A				313-243-7070	313-269-9595
#3219	Monroe Oil Company	Monroe Oil Company	1125 W. Front Street, Monroe	River Raisin, Lake Erie Access	N/A				313-243-7070	734-241-8822
#3220	Store 284	Pilot Corporation	1200 Meadow Road, Monroe	River Raisin, Lake Erie Access	N/A				313-243-7070	313-457-3500

Pipelines

Icon Number	Company Name	Route Name	Number of Pipes in Route	Diameters	Products Carried in Line	Emergency Phone	Contact Phone
PL173	Buckeye Pipe Line Company	304	1	12"	PRD	800-331-4115	800-523-9420
PL174	Buckeye Pipe Line Company	303	1	12"	PRD	800-331-4115	800-523-9420
PL181	Buckeye Pipe Line Company	211	1	12"	PRD	800-331-4115	800-523-9420
PL195	Wolverine Pipe Line Company	Freedom Jct. to Toledo 16"	1	16"	CRD, PRD	888-337-5004/219-844-9510	616-323-2491
PL207	Buckeye Pipe Line Company	Sylvania Station to Samaria Station	1	8"	PRD	800-331-4115	800-523-9420
PL208	Buckeye Pipe Line Company	Cygnet to Ann Arbor Road	3	6"	PRD	800-331-4115	800-523-9420
PL209	Buckeye Pipe Line Company	Hasel Junction to Samaria Junction	2	8"	PRD	800-331-4115	800-523-9420
PL210	Sun Pipe Line Company	Toledo Inkster 8"	2	8"	PRD	800-786-7440/419-691-4554	313-292-8850/800-279-4602
PL211	Sun Pipe Line Company	Toledo Dearborn 6"	1	6"	PRD	800-786-7440/419-691-4554	313-292-8850/800-279-4602
PL212	Buckeye Pipe Line Company	Cygnet Station to Ann Arbor Road	3	6"	PRD	800-331-4115	800-523-9420
PL213	Mid-Valley Pipe Line Company	MV22	1	22"	CRD	800-265-7887	606-371-4469

Southeast Michigan Atlas – Tile 109 (Continued)

Pipelines (Continued)

Icon Number	Company Name	Route Name	Number of Pipes in Route	Diameters	Products Carried in Line	Emergency Phone	Contact Phone
PL215	Sun Pipe Line Company	16"	1	16"	CRD	800-786-7440/419-691-4554	313-292-8850/800-279-4602
PL216	Sun Pipe Line Company	Toledo to Sarnia	2	8"	PRD, LPG	800-786-7440/419-691-4554	313-292-8850/800-279-4602
PL217	Sun Pipe Line Company	Toledo Inkster 6"	2	6"	PRD, LPG	800-786-7440/419-691-4554	313-292-8850/800-279-4602
PL214	Marathon Ashland Pipe Line L.L.C.	Mosherville to Samaria 8"	1	8"	PRD	800-537-6644	419-421-2121
PL205	Marathon Ashland Pipe Line L.L.C.	Samaria to Detroit 16" Crude	1	16"	CRD	800-537-6644	419-421-2121

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

Southeast Michigan Atlas – Tile 110

Sensitive Species Contact Data[a]

Listing	Contact Name	Emergency Phone	Contact Phone
Federal (Michigan)	U.S. Fish and Wildlife Service	none	517-351-2555
State (Michigan)	Michigan Natural Features Inventory	none	517-373-9418

Managed Areas

Icon Number	Name	Category	Managing Agency	Waterbody	Emergency Phone	Contact Phone	Comments
R1398	Township Park	Township Park	Frenchtown Township	Stony Creek, Lake Erie	313-243-7070	313-289-1009	
S1691	Sterling State Park	State Park	Michigan Department of Natural Resources	Lake Erie, Brest Bay, River Raisin	800-292-4706	517-373-9990	

Other Environmentally Sensitive Areas

Icon Number	Additional Resource Area Name	Contact Agency	Waterbody	Emergency Phone	Contact Phone	Comments
O142	Swan Creek Estuary (Private)	U.S. Fish and Wildlife Service	Swan Creek, Lake Erie	800-759-8352	614-469-6923	Site includes American Lotus beds. Coastal Wetland.
O143	Plum Creek Estuary (Private)	U.S. Fish and Wildlife Service	Plum Creek, Lake Erie	800-759-8352	614-469-6923	Site includes Shorebirds and migratory waterfowl a American Lotus beds in Coastal Wetland.
O144	Otter Creek Estuary (Private)	U.S. Fish and Wildlife Service	Otter Creek, Lake Erie	800-759-8352	614-469-6923	Site includes migratory waterfowl. Coastal Wetland.

Marinas

Icon Number	Name	Address	Waterbody	River Mile	Slips	Fuel Available	Emergency Phone	Contact Phone
M2616	Brest Bay Marina	4088 Brest Road, Newport	Stony Creek	N/A	420	Y	734-243-7070	734-289-1234
M2626	Charlies Boat & Bait	13468 La Plaisance Road, Monroe	Woodchuck Creek	N/A	50	Y	734-243-4404	734-241-1545
M2634	Detroit Beach Boat Club	3028 Harbor View Drive, Monroe	Sandy Creek, Brest Bay	N/A	90	Y	734-243-7070	734-289-3222
M2647	Harbor Marine	13950 Bridge Drive, Monroe	La Plaisance Creek, La Plaisance Bay	N/A	24	Y	734-243-7070	734-241-2833
M2684	Monroe Marina	6647 N La Plaisance Creek Road, Monroe	La Plaisance Creek, La Plaisance Bay	N/A	46	N	734-243-7070	734-241-4624
M2692	Otter Creek Marina, Inc.	6305 Lakeview Avenue, La Salle	Otter Creek, Lake Erie	N/A	72	Y	734-241-0313	734-241-0313
M2695	Rivertfront Marina	1560 E. Elm Avenue, Monroe	River Raisin, Lake Erie	N/A	84	Y	734-243-7070	734-242-0737
M2703	Roes Riverside Bait & Tackle	1509 E. Front Street, Monroe	River Raisin	N/A			734-243-7070	734-457-0188
M2713	Swan Boat Club	6332 Brancheau Road, Newport	Swan Creek, Lake St. Clair	N/A	129	Y	734-243-7070	734-586-2002
M2720	Trout's Yacht Basin	7970 Harbor Road, Monroe	La Plaisance Creek, La Plaisance Bay	N/A	100	Y	734-243-7070	734-242-5545
M3566	Erie Party Shoppe & Docks	6838 La Plaisance Road, Monroe	La Plaisance Creek, Lake Erie Access	N/A			313-243-7070	734-457-0006

[a] 2000 Michigan Natural Heritage Data provided by the Michigan Department of Natural Resources and the Michigan Natural Features Inventory

Southeast Michigan Atlas – Tile 110 (Continued)

Marinas (Continued)

Icon Number	Name	Address	Waterbody	River Mile	Slips	Fuel Available	Emergency Phone	Contact Phone
M3567	Flying Eagle Marina	13975 Lake Drive, Monroe	Lake Erie	N/A			313-243-7070	734-241-8776
M3570	La Plaisance Creek Marina	13931 Bridge Drive, Monroe	La Plaisance Creek, Lake Erie Access	N/A	61	N	734-457-9714	734-241-4460
M3574	Miller Boat Livery	6838 La Plaisance Road, Monroe	La Plaisance Creek, Lake Erie Access	N/A			313-243-7070	734-242-7734
M3575	Monroe Boat Club	7932 Harbor, Monroe	La Plaisance Creek, Lake Erie Access	N/A	125	N	313-243-7070	734-243-8935
M3578	O.P.M. Club	8000 Harbor Road, Monroe	La Plaisance Creek, Lake Erie Access	N/A	28	N	734-241-4637	

Surface Water Intakes

Icon	Name	Address	Waterbody	River Mile	Water Use	Receptor	Intake	Comments	Emergency Phone	Contact Phone

[redacted]

(b) (7)(F), (b) (3)

Icon Number	Name	Operator	Address	Waterbody	River Mile	Facility Response Plan	Marine Transfer Facility	Products Handled	Emergency Phone	Contact Phone
#3215	Fermi 2 Power Plant	Detroit Edison Company	6400 N. Dixie Highway, Newport	Lake Erie	N/A	Y	N	Refined Oil	734-586-5235	734-586-4970
#3218	Maybee Gas & Oil Company	Maybee Gas & Oil Company	3500 N. Monroe Street, Monroe	Roadside Ditch	N/A				313-243-7070	734-241-4808
#3221	Liquid Asphalt Production Plant	Thompson-McCully Oil Company	3125 E. Front Street, Monroe	River Raisin, Lake Erie Access	N/A	Y	Y	Liquid Asphalt	734-243-7070	734-241-1910

PHMSA 00012516

Southeast Michigan Atlas – Tile 110 (Continued)

Pipelines

Icon Number	Company Name	Route Name	Number of Pipes in Route	Diameters	Products Carried in Line	Emergency Phone	Contact Phone
PL210	Sun Pipe Line Company	Toledo Inkster 8"	2	8"	PRD	800-786-7440/419-691-4554	313-292-8850/800-279-4602
PL211	Sun Pipe Line Company	Toledo Dearborn 6"	1	6"	PRD	800-786-7440/419-691-4554	313-292-8850/800-279-4602
PL216	Sun Pipe Line Company	Toledo to Sarnia	2	8"	PRD, LPG	800-786-7440/419-691-4554	313-292-8850/800-279-4602
PL217	Sun Pipe Line Company	Toledo Inkster 6"	2	6"	PRD, LPG	800-786-7440/419-691-4554	313-292-8850/800-279-4602

Appendix B. Sensitive Species and Natural Communities

Icon	Species Group Name	State Threatened	State Endangered	Federal Threatened	Federal Endangered
1	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
5	Aquatic/Riparian Zone Vascular Plants	-	X	-	-
7	Aquatic/Riparian Zone Vascular Plants	-	X	X	-
9	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
11	Aquatic/Riparian Zone Vascular Plants	X	-	X	-
13	Aquatic/Riparian Zone Vascular Plants	X	X	-	-
15	Aquatic/Riparian Zone Vascular Plants	X	X	X	-
17	Upland Zone Vascular Plants	-	-	-	-
21	Upland Zone Vascular Plants	-	X	-	-
25	Upland Zone Vascular Plants	X	-	-	-
29	Upland Zone Vascular Plants	X	X	-	-
33	Aquatic/Riparian Zone Birds	-	-	-	-
37	Aquatic/Riparian Zone Birds	-	X	-	-
41	Aquatic/Riparian Zone Birds	X	-	-	-
49	Terrestrial Zone Birds	-	-	-	-
53	Terrestrial Zone Birds	-	X	-	-
54	Terrestrial Zone Birds	-	X	-	X
57	Terrestrial Zone Birds	X	-	-	-
65	Aquatic/Riparian Zone Amphibians and Reptiles	-	-	-	-
69	Aquatic/Riparian Zone Amphibians and Reptiles	-	X	-	-
73	Aquatic/Riparian Zone Amphibians and Reptiles	X	-	-	-
81	Terrestrial Zone Amphibians and Reptiles	-	-	-	-
102	Aquatic/Riparian Zone Mammals	-	X	-	X
105	Aquatic/Riparian Zone Mammals	X	-	-	-
117	Terrestrial Zone Mammals	-	X	-	-
129	Aquatic/Riparian Zone Invertebrates	-	-	-	-
133	Aquatic/Riparian Zone Invertebrates	-	X	-	-
134	Aquatic/Riparian Zone Invertebrates	-	X	-	X
137	Aquatic/Riparian Zone Invertebrates	X	-	-	-
142	Aquatic/Riparian Zone Invertebrates	X	X	-	X
145	Terrestrial Zone Invertebrates	-	-	-	-
150	Terrestrial Zone Invertebrates	-	X	-	X
153	Terrestrial Zone Invertebrates	X	-	-	-
161	Fish	-	-	-	-
165	Fish	-	X	-	-
169	Fish	X	-	-	-
177	Aquatic Natural Communities	-	-	-	-
193	Terrestrial Zone Natural Communities	-	-	-	-
1004	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Amphibians and Reptiles	-	-	-	-
1096	Aquatic Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1116	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1118	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Birds	X	-	-	-
1250	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1262	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
1267	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
1271	Aquatic Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-

Sensitive Species and Natural Communities, continued

Icon	Species Group Name	State Threatened	State Endangered	Federal Threatened	Federal Endangered
1277	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
1279	Aquatic Natural Communities	-	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
1290	Aquatic/Riparian Zone Invertebrates	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1291	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Amphibians and Reptiles	-	-	-	-
1302	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Terrestrial Zone Invertebrates	-	-	-	-
1309	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1315	Aquatic Natural Communities	-	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1320	Aquatic Natural Communities	-	-	-	-
	Terrestrial Zone Invertebrates	-	-	-	-
1332	Aquatic Natural Communities	-	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1344	Aquatic/Riparian Zone Birds	-	-	-	-
	Terrestrial Zone Birds	-	-	-	-
1355	Aquatic Natural Communities	-	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
1363	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
1365	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
1367	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
1369	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
1378	Terrestrial Zone Invertebrates	-	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
1419	Aquatic/Riparian Zone Amphibians and Reptiles	-	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1422	Terrestrial Zone Invertebrates	-	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1429	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1439	Terrestrial Zone Invertebrates	X	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1443	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1444	Terrestrial Zone Invertebrates	X	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1448	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1470	Aquatic/Riparian Zone Amphibians and Reptiles	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1478	Aquatic/Riparian Zone Birds	-	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-

Sensitive Species and Natural Communities, continued

Icon	Species Group Name	State Threatened	State Endangered	Federal Threatened	Federal Endangered
1511	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1512	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1522	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1537	Aquatic Natural Communities	-	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1545	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1546	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1547	Aquatic/Riparian Zone Amphibians and Reptiles	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1565	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1567	Aquatic/Riparian Zone Invertebrates	-	-	-	-
	Fish	-	-	-	-
1568	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1570	Aquatic/Riparian Zone Invertebrates	X	X	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
1573	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1574	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1575	Aquatic Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1589	Aquatic/Riparian Zone Birds	X	-	X	-
	Aquatic/Riparian Zone Invertebrates	X	-	-	-
	Fish	-	X	-	-
	Upland Zone Vascular Plants	X	-	-	-
1592	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	X	-	-
1595	Aquatic Natural Communities	-	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-
1597	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1612	Aquatic/Riparian Zone Vascular Plants	X	-	-	-
	Terrestrial Zone Invertebrates	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1619	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1644	Aquatic/Riparian Zone Amphibians and Reptiles	-	-	-	-
	Aquatic/Riparian Zone Invertebrates	-	-	-	-
	Terrestrial Zone Invertebrates	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1646	Aquatic/Riparian Zone Amphibians and Reptiles	X	-	-	-
	Terrestrial Zone Invertebrates	-	-	-	-

Sensitive Species and Natural Communities, continued

Icon	Species Group Name	State Threatened	State Endangered	Federal Threatened	Federal Endangered
1648	Aquatic Natural Communities	-	-	-	-
	Aquatic/Riparian Zone Amphibians and Reptiles	X	-	-	-
1692	Aquatic/Riparian Zone Invertebrates	-	-	-	-
	Terrestrial Zone Invertebrates	-	-	-	-
1711	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1724	Aquatic/Riparian Zone Vascular Plants	-	-	-	-
	Upland Zone Vascular Plants	-	-	-	-
1739	Aquatic/Riparian Zone Amphibians and Reptiles	-	-	-	-
	Aquatic/Riparian Zone Invertebrates	-	X	-	X
1751	Aquatic/Riparian Zone Amphibians and Reptiles	-	X	-	-
	Aquatic/Riparian Zone Invertebrates	-	X	-	X
1753	Terrestrial Zone Natural Communities	-	-	-	-
	Upland Zone Vascular Plants	X	-	-	-
1758	Aquatic/Riparian Zone Amphibians and Reptiles	-	X	-	-
	Aquatic/Riparian Zone Invertebrates	-	X	-	X
1771	Aquatic Natural Communities	-	-	-	-
	Terrestrial Zone Natural Communities	-	-	-	-

FIGURE 6.3

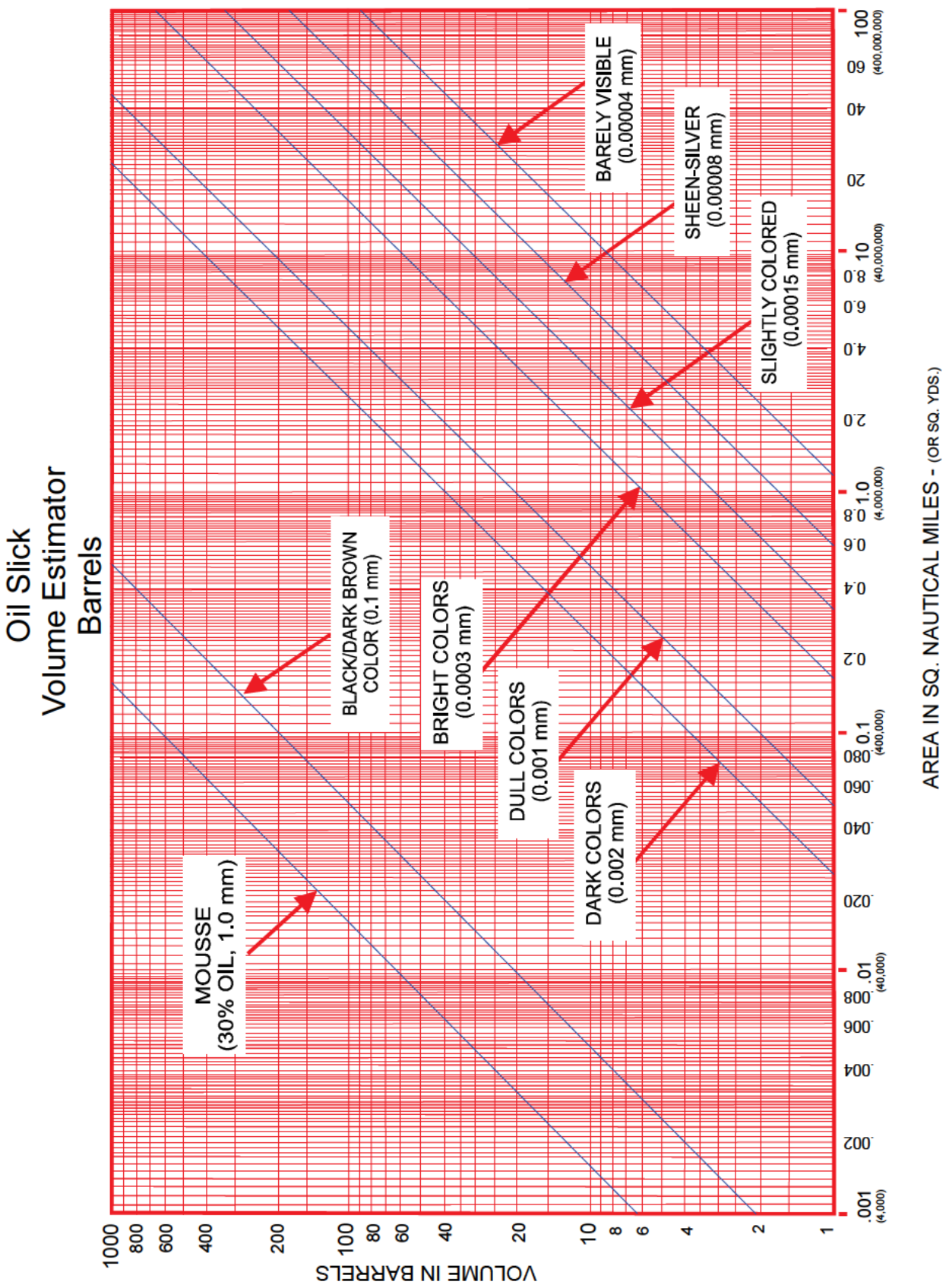

Oil Slick
Volume Estimator
Barrels
VOLUME IN BARRELS
1000
800
600
400
200
100
80
60
40
20
10
8
6
4
2
1
AREA IN SQ. NAUTICAL MILES - (OR SQ. YDS.)
.001 (4,000)
.002
.004
.006
.008
.01 (40,000)
.020
.040
.060
.080
0.1 (400,000)
0.2
0.4
0.6
0.8
1.0 (4,000,000)
2.0
4.0
6.0
8.0
10 (40,000,000)
20
40
60
100 (400,000,000)
MOUSSE (30% OIL, 1.0 mm)
BLACK/DARK BROWN COLOR (0.1 mm)
BRIGHT COLORS (0.0003 mm)
DULL COLORS (0.001 mm)
DARK COLORS (0.002 mm)
BARELY VISIBLE (0.00004 mm)
SHEEN-SILVER (0.00008 mm)
SLIGHTLY COLORED (0.00015 mm)

FIGURE 6.4

Contingency Protocol for Wildlife

Prepared for The Toledo Refining Company LLC.
Oregon, Ohio

Project Manager
Eileen Gilbert, B.S.

Project Team
Erica Miller, DVM
Heidi Stout, VMD
Kristine Evans
Katie Battaglia

Tri-State Bird Rescue & Research, Inc.
110 Possum Hollow Road
Newark, DE 19711

CONTINGENCY PROTOCOL FOR OILED WILDLIFE
For The Toledo Refining Company LLC. 2005

Initial Wildlife Response Protocol
Draft - Table of Contents

INTRODUCTION....3
GOALS OF THE WILDLIFE CONTINGENCY....3
OVERVIEW OF WILDLIFE RESPONSE
Strategies for Responding to an Oil Spill....4
Special Concerns in Oiled Wildlife Response....5-6
I. Federal Contacts....7
II. Ohio State Contacts....7
Checklist – Timely Response To Wildlife....8-9
WILDLIFE PERSONNEL RESPONSIBILITIES
Trustee Authorization and Oversight....10-11
Responsibilities on Initiation of the Wildlife Component of an Oil Spill Response....12
MIGRATORY BIRD PERMITS....12
PERSONNEL
Identifying Qualified Wildlife Responders....12
VOLUNTEER RESOURCES....13-14
OVERVIEW OF FACILITY AND EQUIPMENT NEEDS
Facility Needs and Setup....15
Site Safety....15
FACILITY REQUIREMENTS
Hot / Cold Water Capacity....16-17
Electric / Lighting....17
HVAC Systems....17-18
Communications....18
OCCUPATIONAL SAFETY AND HEALTH
Health & Safety Overview....18
Personnel Training9....18-19
Site Safety....19
Product Risks....19
Human Risk from Wildlife....20
Zoonoses....20-21
SITE SAFETY PLAN....22-24

INTRODUCTION

The Contingency Protocol for Oiled Wildlife for The Toledo Refining Company LLC (CPOW)

was developed to provide detailed information and guidance to assist refinery personnel, the wildlife resource trustees and local responders, during a major oil spill in which wildlife has been or could be affected.

The CPOW covers generic response protocols for addressing the immediate needs of wildlife threatened by or impacted by oil. It also provides the guidelines for disposing of the carcasses of wildlife that perish due to oil exposure or the complications of oil exposure, and wildlife that are euthanized.

RESPONSIBILITIES

The local wildlife agency, a Qualified Wildlife Responder and / or The Toledo Refining Company LLC. personnel should supervise implementation of this protocol. The priority for wildlife rehabilitation will be established based on current legislative restrictions and requirements and the prioritization of species at risk.

The level of response will be based on the potential for oiled animals.

GOALS OF THE WILDLIFE CONTINGENCY PLAN

A. To provide an operational template that assists The Toledo Refining Company LLC., the wildlife agencies, and supporting organizations in defining incident objectives pertaining to natural resources.

B. To provide an information base that enables the wildlife agencies and The Toledo Refining Company LLC. to: protect wildlife at risk of contamination by oil and oversee the wildlife response effort in a timely and effective manner.

OVERVIEW OF WILDLIFE RESPONSE

Wildlife response after oil spills is a complex challenge requiring a teamwork approach among wildlife management agencies, the responsible party, a contracted Qualified Wildlife Responder (outlined on page 13) and carefully trained volunteers. All wildlife actions must be coordinated with the wildlife agency or personnel beginning with the step of notification. The steps involved in notification and the general process of the wildlife component of an oil spill response (outlined on pages 7 - 9) are presented as a checklist.

Strategies for Responding to an Oil Spill

A. Keep Oil Away from Wildlife (Prevent/Reduce Impacts on Key Habitats)

The primary response strategy for wildlife protection emphasizes controlling the release and spread of spilled oil or hazardous substances at the source, in order to prevent or reduce contamination of wildlife and/or their habitats.

In general, spill control primary response strategies may include mechanical cleanup, protective booming, *in situ* burning and dispersant use. In addition, the primary response strategy includes the removal of contaminated debris, particularly contaminated food

sources (such as wildlife carcasses and oiled vegetation) both in water and on land.

In the event of an incident, The Toledo Refining Company LLC. should consult with local resource agencies regarding threats to wildlife to identify any specific actions that are appropriate for that incident. The Toledo Refining Company LLC. should also incur responsibility for implementation of the determined wildlife protection strategies.

B. Keep Un-oiled Wildlife Away from Oil (Field Assessment/Deterrents)

The secondary response strategy emphasizes keeping potentially affected wildlife away from impacted areas through the use of deterrent techniques.

Qualified and experienced observers must coordinate an immediate assessment of habitat and species at risk, followed by rapid implementation of wildlife deterrent efforts. Each hour and dollar spent preventing contamination before a wildlife impact can potentially save hundreds of hours and dollars during a response effort.

C. Respond to Oiled Wildlife

The tertiary response strategy, which is a last-resort strategy, addresses retrieval and treatment of oiled wildlife.

The key steps to effective retrieval of contaminated animals, both dead and alive, are:

- rapid selection and activation of a Qualified Wildlife Responder;
- rapid response by qualified field personnel;
- careful collection and documentation of contaminated animals and carcasses;
- timely and appropriate transportation of live animals to a wildlife response facility.

Special Concerns in Oiled Wildlife Response

Expertise in veterinary medicine, husbandry and biology is not a requirement for licensing to hold and treat wildlife; however, wildlife does benefit from professional care for traumatic injuries or diseases. More specifically, experienced professionals must be engaged to address the significant human safety and wildlife health issues inherent in dealing with wildlife contaminated in oil spills.

A. Human Health and Safety

Risks to staff and volunteers include:

- exposure to harmful components in the contaminant;
- traumatic injuries to humans caused by wild animals;
- exposure to zoonotic diseases -rabies, chlamydia, salmonella, cryptosporidia, endoparasites, etc.;
- job related injuries occurring on-site.

Prolonged hands-on contact with and/or general exposure to contaminated animals

requires more stringent protective measures than those specified for field clean-up workers. Large numbers of volunteers must be trained, scheduled and continually supervised with regard to both human and animal health and safety matters.

B. Wildlife Health Issues

For the rehabilitation effort to be successful, each oil-contaminated animal requires immediate and specialized care. When hundreds or even thousands of wild animals become oiled during a spill, the rescue effort becomes a strategically complicated, medically complex, crisis-oriented task.

To minimize mortality and maximize the rehabilitative effort, a rehabilitation facility must be identified, equipped and managed so as to function in a safe and effective manner.

C. Disease Outbreaks and Wildlife Health

Every effort must be made to prevent the transmission of disease from rehabilitated animals to free-roaming populations of wildlife. An epizootic disease is a disease that can affect large populations of animals over a short period of time. Epizootic diseases can be the result of bacterial, viral, fungal, parasitic or toxic agents and can cause widespread morbidity and mortality in wildlife populations. Wild animals contaminated by oil are exposed to stress factors in the wild and in captivity that can lower their resistance to diseases. Animals undergoing rehabilitation are confined in close quarters where spread of disease can be extremely rapid. In addition to causing sudden and high mortality within a rehabilitation facility, epizootic diseases can be introduced to geographic regions when an improperly "rehabilitated" animal is released and serves as a carrier to wild populations.

There is a risk that the release of diseased, rehabilitated animals can cause significant die-offs resulting in more damage to wildlife populations than the spill itself. This issue is addressed, in part, when trustees limit the responsibility of wildlife care to Qualified Wildlife Responders.

Natural Resource Trustee / Agency: Notification and Initiation of Response

When an oil spill impacts wildlife, or has a significant potential for impact, the Responsible Party and / or State or Federal On-Scene Coordinator (OSC) shall immediately contact the U.S. Fish and Wildlife Service (USFWS) and the Ohio Division of Fish and Wildlife. Primary and alternate contact points for each of the agencies are listed below; only one contact per agency is necessary because the person initially contacted will notify other personnel in his/her agency.

Date/Time	Person Contacted	By Whom
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

I. Federal Contacts:

National Response Center
(24 hour phone number for reporting any hazardous material spill)
1-800-424-8802

United States Coast Guard
Federal On-Scene Coordinator (FOSC)
USCG MSO Toledo
(24 hour phone number for reporting any hazardous material spill)
1-419-418-6050

United States Department of the Interior
Office of Environmental Policy
Office: (215) 597-5378 Cell: (b) (6)

United States Fish and Wildlife Service
Primary Contact, Stan Smith
Office: (612) 713-5335

II. Ohio State Contacts:

Ohio Division of Fish and Wildlife (OhioF&W)
Primary contact, Carolyn Caldwell
Office: (614)265-6329 24-hour: (614)799-9538

III. QUALIFIED WILDLIFE RESPONDER:
(The QWR will select and activate the most appropriate of the pre-identified response facilities for the specific incident.)

Tri-State Bird Rescue & Research, Inc.
110 Possum Hollow Road
Newark, DE 19711
Office: (302) 737-7241
Fax: (302) 737-9562

24 hour emergency pagers:
(800) 710-0695
(800) 710-0696

CHECKLIST - TIMELY RESPONSE TO WILDLIFE: (Applicable to both pre- and post-spill activities)

In the event of a release that has contaminated or threatens to contaminate wildlife, the following people or agencies should be notified. Notifications may either be made by The Toledo Refining Company LLC. personnel or by the Qualified Wildlife Responder (QWR) on behalf of Sunoco. Once contracted, notifications should be completed by the QWR; this agreement should be confirmed at the time of their notification.

Assigned By Whom	Date / Time	Completed By Whom	Date / Time	
_____	_____	_____	_____	**I. NOTIFY WILDLIFE AGENCIES (RP)**
				II. IDENTIFY WILDLIFE AT RISK (Planning)
_____	_____	_____	_____	A. Species of Concern
_____	_____	_____	_____	B. Geographic Distribution
_____	_____	_____	_____	C. Seasonal Distribution
_____	_____	_____	_____	**II. IDENTIFY IMMEDIATE SPILL CONTROL OPTIONS AND THEIR CONSEQUENCES TO WILDLIFE RESOURCES (Operations)**
_____	_____	_____	_____	A. Mechanical (skimming, booms, dikes, berms)
_____	_____	_____	_____	B. Chemical (dispersants, herding agents, solidifiers)
_____	_____	_____	_____	C. Other (*in situ* burning)
				IV. IDENTIFY WILDLIFE PROTECTION OPTIONS (Planning / Operations)
_____	_____	_____	_____	A. Field/Air Assessments for Wildlife at Risk
_____	_____	_____	_____	B. Dispersing Non-oiled Animals
_____	_____	_____	_____	C. Pre-emptive Capture and Relocation of Non-oiled Animals
_____	_____	_____	_____	D. Retrieving Oiled Animals
_____	_____	_____	_____	**V. IDENTIFY AND CONTACT QUALIFIED WILDLIFE RESPONDER (RP)**

Assigned By Whom	Date / Time	Completed By Whom	Date / Time

VI. DETERMINE RESPONSE TO OILED WILDLIFE (Operations - Wildlife Branch)

A. Search and Retrieval (dead and live oiled animals)
B. Field Care (stabilization)
C. Facility Setup
D. Training of Volunteers / Personnel
E. Medical and Rehabilitative Care
F. Records and Chain of Evidence
G. Pre-release Health Checks and Evaluations
H. Identification and Assessment of Release Sites
I. Release

©TSBR 1993, updated 2002

Wildlife Personnel Responsibilities

Trustee Authorization and Oversight

Trustees are authorized to act on behalf of the public's best interest in the protection of natural resources. Full authority regarding protection and oversight of the rescue and rehabilitation of wildlife and fish remains with the trustees, although care for contaminated wildlife can be contracted by the Responsible Party, the Federal On-Scene Coordinator (FOSC), or other federal and state agencies as authorized.

Migratory birds are the species most often affected in oil spills. In these cases, the United States Fish & Wildlife Service serves as the lead agency for trustee response, coordinating with other trustees and providing oversight for the Qualified Wildlife Responder (QWR).

Effective wildlife response to oil spills requires a team approach as specialists in government and the private sector lend their skills to the response efforts. Oversight of this team effort, however, rests with the trustees. Clear definition and thorough understanding of trustee authorization and responsibilities, with regard to wildlife efforts in particular, will allow for the most timely and effective preparation and response to oil spill incidents.

A. Trustee Authorization

Authority and guidance for wildlife response following oil spills are contained in two federal plans:

- The National Multi-agency Oil and Hazardous Materials Contingency Plan (NCP 1968) assigns certain emergency response tasks to agencies with particular missions and expertise.

-The Fish and Wildlife and Sensitive Environment Plan fulfills the OPA 90 mandate for "immediate and effective protection, rescue and rehabilitation of, and the minimization of risk of damage to, fish and wildlife resources and their habitat that are harmed or that may be jeopardized by a discharge".

Department of the Interior

The US Fish & Wildlife Service, under the jurisdiction of the Department of the Interior (DOI), has trustee responsibility for birds which are listed under the Migratory Bird Treaty Act (16 USC 703-711) of 1972 (revised 1978) and for most threatened and endangered species under the Endangered Species Act (16-USC-1531-1544) of 1973.

The DOI also has trustee responsibility for sea otters, dugong, walrus and manatee under the Marine Mammal Protection Act (16 USC 1361-1407) of 1972.
The DOI is also a trustee for lands it manages, including the National Wildlife Refuges (administered by the DOI's U.S. Fish and Wildlife Service) and the National Seashores and Parks (administered by the DOI's National Park Service).

Department of Commerce / Department of the Interior

The Department of Commerce and the Department of the Interior share trustee responsibility for anadromous fish under the Anadromous Fish Conservation Act (16-USC-757a-757f). These two agencies also share trusteeship of threatened and

endangered sea turtles.

National Marine Fisheries Service

Trustee responsibility for other marine mammals (whales and seals) and sea turtles resides with National Marine Fisheries Service (NMFS), an agency of the Department of Commerce.

State Agencies

State agencies have trustee responsibilities for other game and non-game species not listed above. (States also may possess co-trustee responsibility for above-mentioned species.)

B. Oversight

Adapted from material produced by the Minnesota Wildlife Assistance Cooperative, Sartell, Minnesota.

1. General Permit Requirements

Federal Regulation 50 CFR 21.11 (1972; revised 1989) prohibits the possession of any bird listed under the Migratory Bird Treaty Act for any purpose, unless special permits have been issued for activities that show benefit to the migratory bird resource.

Most native species fall under the "protected" designation, including: all birds (except the Rock dove [pigeon], European starling and English house sparrow); all mammals with a hunting or trapping season; some reptiles, amphibians, fish and insects; and all endangered or threatened species. It is illegal to possess any protected species without the proper permits.

Required general permits and oil spill response permits from federal and state agencies should be obtained prior to collection, transportation, rehabilitation, or release of protected species. In special circumstances, permits can be obtained by the QWR at the time of a spill.

a. Federal Permits

Federal permits are necessary if birds that fall under the Migratory Bird Treaty Act, or endangered or threatened species are handled. Because sea turtles are protected under the Endangered Species Act, persons not authorized under the Act need special permits from the USFWS to handle them. Permits are obtained from the permit section of the USFWS Headquarters.

b. State Permits

State permits are required to possess and rehabilitate any wild animal in the State of Ohio.

2. Oversight of Retrieval and Rehabilitation Care

Care for contaminated wildlife can be contracted for by the RP, the FOSC or other federal and state agencies, as authorized. Migratory birds are the species most often affected in oil spills.

Responsibilities on Initiation of the Wildlife Component of an Oil Spill Response

Following the initiation of an oil spill response, the following actions will be taken:

1) The USFWS, NMFS, and Ohio Division of Fish & Wildlife may consult available reference material to determine significance of the resources in the impacted area(s).
2) The USFWS, NMFS, and Ohio Division of Fish & Wildlife may decide jointly on further involvement of each agency based upon the severity of the spill and species impacted under each agency's respective responsibilities.
3) The USFWS, NMFS, and Ohio Division of Fish & Wildlife may dispatch the most appropriate individual to inspect the spill site. This could be unilateral or cooperative effort, involving one or more of the agencies, and determined at the time of the spill, depending on the particular resources at risk.

TITLE 50, CODE OF FEDERAL REGULATIONS, PART 21
MIGRATORY BIRD PERMITS

21.11 (1972; revised 1989) General permit requirements

No person shall take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase or barter, any migratory bird, or the parts, nests, or eggs of such bird except as may be permitted under the terms of a valid permit issued pursuant to the provisions of this Part and Part 13, or as permitted by regulations in this Part or Part 20 (the hunting regulations).

[39 CFR 1178, Jan. 4, 1974, as amended at 46 CFR 42680, Aug. 24, 1981; 54 CFR 38151, Sept. 14, 1989.]

PERSONNEL

Identifying Qualified Wildlife Responders

An effective wildlife response / rehabilitation effort for oil contaminated animals requires supervision by personnel with demonstrated field experience in oil spill response. A Qualified Wildlife Responder (QWR) should be identified by the trustees and utilized for an oil spill response.

Wildlife response requires immediate coordination of efforts of all personnel. That can best be accomplished by identifying a Qualified Wildlife Responder in advance of oil spill incidents. Identification and selection of a QWR will allow for immediate response in the event of a spill. Immediate response by experienced oiled wildlife responders will insure delivery of the highest quality of treatment to the contaminated animals.

Possession of general wildlife rehabilitation permits does not indicate capabilities for oil spill response.

VOLUNTEER RESOURCES

A wildlife response effort involves many workers on multiple shifts; it benefits the response effort to have as many volunteers as possible trained in advance of spills as part of the contingency program. This type of preparation will limit the time and energy necessary during the initiation of a spill response and establishment of the wildlife response.

A. Volunteers

Because of the large number of volunteers that typically are needed in a wildlife response,

it is imperative that all of these volunteers be trained and supervised under a Qualified Wildlife Responder. In major spills, there may be two or three shifts per day, with each shift utilizing over 50 volunteer workers. Volunteers must be thoroughly trained, precisely scheduled for suitable tasks, and must be supervised at all times.

Volunteers working within the facility should be at least 18 years old. Jobs for younger volunteers can be identified as minimal risk, out-of-facility tasks. There is a place for everyone in oiled wildlife response, but the safety of humans and the welfare of the animals must be the highest priorities, not the emotional needs of the people who want to help. Not every concerned person/group can be a lead organization in a spill response.

It is recommended that volunteer training occur before a spill incident, as part of a contingency planning program. In the event of a spill, a previously trained volunteer base can then be put on alert and prepared to participate as soon as they are needed. Management by experienced personnel will minimize problems and strengthen teamwork.

B. Colleagues

While most wildlife rehabilitators and veterinarians cannot make the commitment of time needed to develop the resources to respond to major oil spills, many rehabilitators, veterinarians, and staff and volunteers from nature organizations will be willing to serve in a limited capacity during spill response efforts. The QWR, as the lead wildlife response organization, should be willing to identify each person's or organization's strengths and incorporate them into the wildlife response. Teamwork is the solution to a successful oil spill response.

C. Liability and Volunteer Criteria

All volunteers must be at least 18 years of age, in good health and have a current tetanus toxoid inoculation. Pregnant women and immuno-compromised individuals should not work directly with any wildlife - oiled or non-oiled. The Qualified Wildlife Responder/Trainer should be prepared to accept liability for training and oversight of volunteers and should require that a General Release of
Liability Form be signed before volunteers are allowed to work on the response effort. Volunteers must be able to donate a minimum of three shifts, (5 - 6 hours long), within the first two weeks of the spill response.

D. Training

1) During an oil spill involving wildlife there is an immediate need for large numbers of trained volunteers to work with the QWR.

2) With regard to human health and safety, in accordance with the National Contingency Plan, 40 CFR 300, all persons involved in a response action must comply with the OSHA safety standards. These standards vary according to the potential exposure risk to the individual relative to their assigned duty.

3) Establishing Goals for Training: raining for personnel can:

- enhance the speed and quality of a response involving wildlife following an oil spill;

- clarify the duties and the responsibilities of the spiller, clean-up contractor, state and national agencies, volunteers and the general public;
- significantly improve the treatment and the release rates for affected animals;
- considerably reduce cost of wildlife response by focusing efforts in a cost-effective manner;
- help to insure the safety of all those working in a wildlife response.

4) Training Agenda

Volunteer training on the effects of oil on wildlife should meet the guidelines set in Best Practices.

OVERVIEW OF FACILITY AND EQUIPMENT NEEDS

A. Facility Needs and Setup

Facility needs usually focus on the majority of species affected by a petroleum discharge, which historically, are avian. Facility requirements can vary significantly, depending on overall size of response, species and age of wildlife contaminated, the type of contamination, the season/weather, the location of the spill, and the rehabilitation effort. The facility needed will vary according to the needs of the specific spill situation, and should be determined by a representative of a wildlife response group with major spill response experience (Qualified Wildlife Responder).

Because facility requirements can vary so significantly, a permanent facility is not always advisable, and may actually be an impediment in providing the appropriate facility design for the situation. A suitable facility must have a large open space on the ground floor that can easily be configured and reconfigured to accommodate the changing needs of this unique form of wildlife rehabilitation. All rehabilitation efforts should be accommodated under one roof. Experience has taught that multiple buildings or a tent situation are ineffective and unsuitable. A warehouse, township garage, armory, motor pool or convention hall that is accessible to a trained labor force, is within a reasonable distance from hotel accommodations, and has adequate parking and exterior grounds could meet this requirement. If a facility is situated in a secure site, *e.g.* military instillation or refinery, entry needs for a fluctuating volunteer work force will have to be addressed. The facility may be located away from the spill site, provided that on-scene stabilization is administered prior to transportation. An oil spill stabilization site can be located at the time of a spill.

It is recommended that a list be assembled of potential sites within the identified high risk areas, and the these sites be physically reviewed by a Qualified Wildlife Responder. Once actual facilities have been identified, all costs, availability, and contract information should be reviewed every six months. A list of specific facility requirements and site evaluation forms follows.

B. Site Safety

Immediately following the retrofitting of a facility, a site safety plan must be initiated, preferably as a part of the contingency plan and/or as a part of the site selection process. The safety plan must include checklists for measures to avoid physical, chemical and biological hazards, and should contain emergency procedures and contact numbers. Site safety issues are addressed in this document. In addition, there is a form to be utilized in developing a

site-safety plan.

Facility and equipment requirements can vary significantly, depending on the factors discussed in the introduction. The actual quantities of materials needed will vary according to the needs of the specific spill situation, and should be determined by a Qualified Wildlife Responder.

FACILITY REQUIREMENTS

This list represents minimum facility needs for rehabilitating 100-150 oiled animals.
Space requirements:

- Front desk / Admissions	250 sq. ft.
- Logistics Office	250 sq. ft.
- Kitchen / Food storage	200 sq. ft.
- Husbandry/ Area (large central room)	1200 sq. ft.
- Supplies / Storage	250 sq. ft.
- Wildlife Cleaning Area I	750 sq. ft.
- Medical Treatment / Exam	200 sq. ft.
- Pathology / Lab / Cold Storage	100 sq. ft.
- Isolation Ward	200 sq. ft.
- Volunteer / Worker Rest Room	150 sq. ft.
- Bathrooms, Decon, Changing	200 sq. ft.
- Outside Pool Areas @ one 10' x 15' x 2' pool per 15 birds, + access and maintenance space	3300 sq. ft.
- Non-hazardous and hazardous (medical and oil) waste	
Indoor	50 sq. ft.
Outside	400 sq. ft.
- Outside area for oily waste water	300 sq. ft.
- Loading Dock / Parking for 50 (opposite side of building from outside cages)	5000 sq. ft.
Total interior sq. ft.	**3800 sq. ft.**
Total exterior sq. ft.	**9000 sq. ft.**
Total sq. ft.	**12,800 sq. ft.**

Note: If an existing wildlife rehabilitation center were to be used, it would require the above space in addition to the space allocated for any existing caseload. Animals impacted by an oil spill must be cared for separately from the in-house population.

HOT / COLD WATER CAPACITY

When selecting a wildlife response facility it is important that the water supply will not be contaminated by the oil spill. For preplanning purposes, potential facility locations should be selected in areas of low spill probability. All oily waste water must be collected and disposed of in accordance with federal and municipal regulations. The large quantities of rinse water, pool and general use water generated during a spill response are permitted access to most municipal systems. It is therefore inadvisable to select a location that relies on a septic system to handle

waste, for this large volume of water can exceed the designed capacity of most septic systems. Ideally, there should be external access to cold water supplies (*e.g., hose faucets on exterior of building)* for filling outdoor pools.

Due to the nature of wildlife rehabilitation, large amounts of water are used in many locations throughout the facility. It is therefore advisable that the facility should have floors that can tolerate being wet, with drains at least in the areas designated for cleaning activities.

- Cold Water Volume (pools and general use)	23360 gallons per day
- Hot Water Volume (animal cleaning only)	450 gph @ 40 degrees C.
	6750 gallons per day @ 15 hrs.
- Water Pressure (animal cleaning only)	50 - 60 psi.
- Water Hardness (animal cleaning only)	0.042 - 0.060 ppm

True sea birds (diving and pelagic species) cannot be successfully rehabilitated unless the water is maintained at the proper water hardness.

N.B. A potential facility suitable in terms of size, availability and location should not be discarded due to hot water and hardness capacities. Provided there is an adequate cold water supply, mobile hot water and treatment systems can be retrofitted into existing equipment without much difficulty.

ELECTRIC / LIGHTING

The electrical needs of a wildlife response facility are very similar to conventional factory operations in so far as the need for general and task lighting, with separately circuited outlets throughout the space capable of providing 20 amp protection. Because of potential risk of electric shock in wet areas, the addition of a ground fault interrupter (GFI) circuit breaker in those areas is desirable.

In addition to lighting and heat, ventilation and air conditioning (HVAC) systems, electric power will be used for hot water heaters, freezers, refrigerators, heat lamps, pet dryers, office and medical equipment, pool pumps and filters, power tools, etc.

- 200 amp 120/240 volt 3-wire single phase service with minimum of ten (10) 20 amp circuits in addition to the lighting and HAVC needs, with the ability to expand.

HVAC Systems

The three main concerns regarding air quality are:

1) Eliminating thermal stress to debilitated animals by providing a stable, draft free inside air temperature between 21- 26 degrees C;
2) Minimizing human and animal exposure to petroleum volatiles; and,
3) Minimizing animal exposure to pathogenic organisms (bacterial and fungal).

- Air within a wildlife response facility should be exchanged 6 times per hour within office space, 10 times per hour within large open areas involving animal care, and 20 times an hour within critical care and surgical areas and still maintain ambient temperatures.

- Typical HVAC systems used in industrial space are often forced air or closed re-

circulating systems which by themselves will not meet the above requirements. These systems will need to be augmented with portable filtration High-Efficiency Particulate Air (HEPA) filters and air exchange units. The design of the systems should be determined by the wildlife response group once the facility has been selected and the particulars of the animal caseload is known.

- Air quality in systems that employ return air filters can be enhanced through the replacement of the existing filters with an electrostatic type. This will not, however, preclude the need for HEPA type filtration and regular air exchanges as outlined above.

COMMUNICATIONS

Minimum of three (3) telephone lines (public, private, fax/modem) with the ability to add as needed.

OCCUPATIONAL SAFETY AND HEALTH

Health and Safety Overview

Contact with oil and oiled wildlife must be minimized through the use of personal protective equipment (PPE), ventilation and human hygiene. Field safety issues must also be considered. The following recommendations are general guidelines for an oiled wildlife response safety plan. These guidelines were designed to meet *The Occupational Safety and Health Act* of 1970 *Safety Standards (USA).* The 1970 *Safety Standards* do not apply to volunteers - only to employees. (Anku, 1994) In addition, the standards vary according to the potential exposure risk to the individual relative to their assigned duty. (Jennings, 1996) Regional requirements should be reviewed in order to ensure compliance specific to the response location.

A. Personnel Training

All individuals, employees or volunteers, must receive minimum instruction in Health and Safety concerns, including:

- "Right to Know" issues (potential hazards of the spilled product),
- basic first aid and/or emergency notification instruction in case of exposure to the product,
- the use of PPE as advised for the spilled product, and
- potential hazards encountered when working with wildlife in general, and methods to prevent or minimize these hazards.

Health and safety concerns for field personnel and transporters are included in **section 9**.

All team leaders in the wildlife response facility should meet national, state and local requirements for safety training in order to anticipate and avoid safety problems, instruct other staff and volunteers of these potential hazards, and respond to any emergencies. All other staff and volunteers should receive a minimum of four hours equivalent of Health and Safety instruction to prepare them to recognize, avoid and/or respond to any potential

health or safety hazard in the area in which they work.

Access to and from any wildlife staging area or rehabilitation facility must be restricted to only those individuals who have received the above training.

Because of the potential for exposure to toxins and disease, any individual who is immuno-compromised (presently sick with an infectious disease, on chemotherapy, has a liver disease or any immuno-compromising disease, etc.), is pregnant, or is under the age of 18 years, should not be allowed to work with wildlife (either petroleum-contaminated or non-contaminated).

B. Site Safety

A site safety plan must be initiated as soon as the staging and/or wildlife rehabilitation area is established. The safety plan must include:

1. checklists for measures to avoid physical, chemical and biological hazards
2. locations of emergency equipment (first aid kits, eye wash stations, fire extinguishers, etc.,)
3. floor plan of the facility indicating emergency exits
4. emergency procedures and contact numbers

General site safety guidelines apply to wildlife rehabilitation operations. The form in this section can be used as a guideline for developing individual site-safety plans.

C. Product Risks

Petroleum products, in, on and around wildlife may present a hazard to human health and safety. Various components in petroleum products can damage skin and conjunctivae of eyes on contact, lungs if inhaled, and the gastrointestinal tract if inadvertently ingested. Chronic and/or prolonged exposure may cause damage to the central nervous system and/or the reproductive system, and some cancers including skin cancer and leukemia.

Protective measures must be taken to avoid and/or minimize exposure. Individual risk factors such as pregnancy or history of liver disease should be taken into consideration when allowing personnel access to contaminated areas. Personal hygiene must be stressed during the decontamination process.

D. Human Risk from Wildlife

Specific human health and safety concerns in handling wildlife will vary with the species of animals involved, but some general guidelines should be followed. All individuals who will be handling oiled wildlife must be trained in proper capture and restraint techniques:

1. The head (beak or teeth) and feet (talons or claws) of most animals can cause serious injuries if the handler has received improper or incomplete training or is inconsiderate of the animal's needs because of haste or carelessness, etc.

2. Protective eyewear should be worn when working with birds with long, pointed beaks, and towels or gloves should be used to restrain the feet of all birds

(note: towels allow the handler to control the entire body of the bird without damaging feathers).

3. Animals should be held at waist-height, away from human faces.

4. At least two people should be present for any prolonged handling (examinations, washing, etc.)

5. Aggressive mammals should be controlled with nets or snare poles, and should be sedated for any prolonged handling.

Anyone handling wildlife should have a current tetanus shot (booster every 10 years). Anyone handling mammals should have a current rabies vaccination (titer checked every two years, and boosters given as needed).

E. Zoonoses

Unique to the wildlife aspect of an oil spill response is the potential hazard of zoonotic diseases, *i.e.*, diseases which can be transmitted from animals to humans. Of specific concern are the following diseases:

Birds:

Aspergillosis--a fungal disease causing respiratory problem in humans.
Chlamydiosis--a bacterial disease causing flu-like symptoms in people. Potentially fatal.
Salmonellosis--a bacterial disease causing diarrhea in humans.
Avian Tuberculosis--a bacterial disease causing skin lesions and occasionally respiratory problems in humans.
Histoplasmosis--a fungal disease causing pneumonia in humans.

Mammals:

Rabies--a viral disease causing central system (CNS) nervous disorder in humans. *Fatal if untreated.*
Giardia--a protozoal disease causing diarrhea in humans.
Baylisascaris--a parasite causing central nervous disorder and death in humans.
Campylobacteriosis--a bacterial disease causing diarrhea in humans.
Cryptosporidiosis--a protozoal disease causing diarrhea in humans.
Toxoplasmosis--a protozoal disease which may cause CNS disorder in humans.
Leptospirosis--a bacterial disease which may cause hepatitis, nephritis and meningitis in humans.

Vector-transmitted diseases:

These zoonotic diseases may not necessarily affect wildlife, which act as diseases for the reservoirs, but they do affect humans. These diseases are transmitted from the carrier animals to humans via parasites such as ticks, fleas and mosquitoes.

Rocky Mountain spotted fever--a rickettsial (bacteria-like) disease transmitted by ticks, which may cause rashes, headaches, nephritis, anemia and meningitis in humans.

Bubonic plague--a bacterial disease transmitted by fleas, which may cause swollen lymph nodes, septicemia, hemorrhages and death in humans.

Wearing gloves while cleaning animal cages and food bowls, washing hands with a disinfectant soap, wearing gloves and surgical mask while performing necropsies (postmortem examinations), and providing for adequate room ventilation will help to avoid contracting these diseases.

SITE SAFETY PLAN

Site Description

Site:_____

Location:_____

Building / Structure (s):_____

Outdoor area:_____

_____

Surrounding area: ____ industrial ____ residential ____ rural _____ other

Potential Weather Hazards: ____ heat stress ____ hyperthermia ____ fog ___ storms
____ frostbite ____ hypothermia ____ice ___ other

Site Organization

Safety Officer_____

Organization_____

Headquarters_____

Address_____

Team Leaders: Spill Manager_____

Logistics_____

Field Retrieval_____

Medical_____

Cleaning_____

Husbandry_____

Site Control

___ Restricted areas designated with signs
___ Restrictions (PPE) posted at entry
___ Sign-in / Sign-out
___ Predator control for outdoor facility

Product / Hazard Evaluation

Product identification_____

Contains: A) **Benzene** (crude, gasoline, military JP4, commercial JET B, aviation gasoline, gas oils, and feed stocks).
B) **PolyAromatic Hydrocarbons** (PAHs) (kerosene, diesels, military JP5, commercial JET A).
C) **Hydrogen sulfide** (sulfur hydroxide) (sour crudes).

Action: A) May cause dermatitis, nausea & eye irritation. Hematologic toxin and carcinogen. Wear full PPE. Wash hands & change before exiting site.

B) May cause dermatitis, nausea & eye irritation. Wear full PPE. Wash hands and change before exiting site.
C) Irritating to eyes & mucous membranes; pulmonary edema; asphyxiation; headaches, diarrhea, fatigue; CNS depressant. Irrigate eyes & provide respiratory support if exposed.

General Site Safety & Health Procedures Checklist

___ Fire extinguishers: ___ Medical Area ___ Washing Area

___ Whistles at fire extinguishers: ___ Medical Area ___ Washing Area

___ Fire exits marked and routes posted

___ First Aid Kits: ___ Medical Area ___ Washing Area

___ Electrical Cords grounded

___ MSDS posted

___ Eye wash station or flush bottles available

Checklist For Field Retrieval

___ Heat Stress: ___ Fluids available in rest area

___ Cold Stress: ___ Heated / Sheltered rest area ___ Warm fluids available in rest area ___ Blankets

___ Personal Flotation Devices (for water retrieval)

___ Insect Repellent

___ Snake Bite Kits

Personal Protective Equipment (PPE)

___ Required gear posted at entry
___ Tyveks ___ Gloves
___Aprons ___ Glasses

Decontamination Procedures

___ Rags/Towels for wiping off equipment & PPE clothing
___ Bin for disposal of contaminated clothing, towels
___ Bin for disposal of contaminate papers & boxes
____Wash stations for staff/volunteers leaving site
___ Storage area for PPE to be reused

Emergency Procedures

___ Identify local emergency numbers and post by telephone

Police: _____

Fire: _____

Ambulance/EMT/Hospital: _____

24 hour toxicology/poison hot line: _____

____ Identify safety personnel to whom injuries/accidents/hazards shall be reported

©Tri-State Bird Rescue & Research, Inc. 1994 eam, revised 2002

Figure 6.5

Cleanup Methods

Figure 6.5

Clean Up Methods			
Method	***Cautions***	***Don't use on…***	***Recommended for…***
Barriers/Berms		Safety concerns limit use on gasoline spills	Deflecting spills away from sensitive resources
Booming	Safety Concerns limit containment of gasoline spills Fast currents, shallow water, steep banks limits effectiveness.		Deflecting spills away from sensitive resources Driving slickes toward collection points in low current areas
Chemical Shoreline Pretreatment	Insufficient information on impact and effectiveness (particularly on manmade structures)		
Debris Removal	Degree of oiling warrants debris removal and disposal.		
Dispersants	Inhibit evaporation of gasoline	Shallow water depths (May result in high aquatic toxicity)	
Emulsion-Treating Agents		Gasoline (does not form emulsions) Shallow freshwater (insufficient toxicity data to evaluate impact)	
Flooding		Heavy oils (Leave large amounts of residuals) Gasoline spills (may transport the gasoline to more sensitive habitats)	Fresh/fluid oils

PHMSA 00012519

Figure 6.5

Method	***Cautions***	***Don't use on…***	***Recommended for…***
Herding Agents		Not effective on heavy oils (oil must be fluid)	Calm Conditions
High Pressure – Cold Water Flushing	High pressure jets may fluidize sand/soil and wash oiled sediments into sensitive areas.	Gasoline spills (may transport the gasoline to more sensitive habitats) Heavy oils (Leave large amounts of residuals)	Fresh/fluid medium crude oils
High Pressure – Hot Water Flushing	Will kill any attached organisms High pressure jets may fluidize sand/soil and wash oiled sediments into sensitive areas.		Heavy oil (heat liquefaction)
In-Situ Burning	Generates air pollution, thermal impact on biota and residue. Public Safety concerns Less environmental in winter (Snow and ice, plants dormant, fewer animals)	Lighter oils – may penetrate sand/soil leaving insufficient concentration to burn	Heavy oil accumulations
Low Pressure – Cold Water Flushing	Optimize pressure to minimize amount of material washed down-slope.	Heavy oils (Leave large amounts of residuals) Gasoline spills (may transport the gasoline to more sensitive habitats)	Fresh fluid oils

Figure 6.5

Method	***Cautions***	***Don't use on…***	***Recommended for…***
Low Pressure – Hot Water Flushing	Negative impact on any organisms present. Optimize pressure to minimize amount of material washed down-slope.		Heavy crudes (heat makes oil more fluid)
Manual Oil Removal/Cleaning		Small Persistent pockets of oil exposed on surface	Heavy oils in patches or crevices
Mechanical Oil Removal	Tends to remove large amounts of clean soil/sand/gravel with contaminated material May require very intrusive recovery techniques		High use areas where rapid removal is necessary.
Natural Microbe Seedling	May require chemical shoreline pretreatment. Insufficient information on available products, effectiveness or impact		
Natural Recovery	Sheltered bedrock may need cleanup because of slow natural removal rates For smaller spills only, larger spills may persist.	Heavy oils (will persist on all but most exposed shores)	Lighter oils/More exposed settings

PHMSA 00012519

Figure 6.5

Method	***Cautions***	***Don't use on…***	***Recommended for…***
Nutrient Enrichment	Nutrient overloading in poorly flushed areas	Gasoline Spills (Gas evaporates too rapidly) Weathered thick oil residues	Lighter oils that leave thin residues.
Physical Herding	Potential to drive oil into the water column or sediment May be only water to remove oil trapped in vegetation or debris		
Sediment Reworking			Lightly oiled and stained sediments
Shoreline Cleaning Agents	Individual products vary in their toxicity and recoverability		Sticky Oils
Skimming	Land Based Operations need site specific restrictions to minimize physical destruction		
Solidifiers	Early use may prevent pooled oil from penetrating deeper.	Heavy oils (too viscous)	Heavy accumulations of pooled oil Control chronic Sheening (including gasoline)
Sorbents	Overuse generates excess waste	Heavy oils (will be slow) Not applicable to gasoline spills (evaporate too rapidly) Large rivers or open water (oil spread and drift to rapidly)	Along riprap structures to recover residual sheening
Steam Cleaning and Sand Blasting	Will kill any organism present		Persistent oil removal for aesthetic reasons
Vacuum	Early use of vacuum will prevent deeper penetration	Not applicable to gasoline spills because of safety concerns	Thick/heavy oils Pooled oil in crevices

PHMSA 00012519

Figure 6.5

Method	***Cautions***	***Don't use on…***	***Recommended for…***
Vegetation Removal	Helps prevent secondary oiling of wildlife		
Visco-Elastic Agents		Heavy oils (too viscous) Gasoline spills (inhibition of evaporation)	

PHMSA 00012519B

Figure 6.6

Clean up methods by Habitat Recommendations

Figure 6.6 – Clean Up Methods by Habitat Recommendations

Spill on Land (Habitat Response)					
Habitat Type	***Least Adverse Habitat Impact***	***Some Adverse Habitat Impact***	***Probable Adverse Habitat Impact***	***Most Adverse Habitat Impact***	***Insufficient Information***
Bedrock	Natural Recovery	Flooding/Low Pressure – Cold Water Flushing	Nutrient Enrichment	Steam Cleaning and Sand Blasting	Natural Microbe Seeding
	Debris Removal	High Pressure – Cold Water Flushing	High-Pressure, Hot – Water Flushing		
	Sorbents	Manual Oil Removal/Cleaning	Steam Cleaning and Sand Blasting		
		Vacuum			
		In-situ Burning			
		Shoreline Cleaning Agents			
		Solidifiers			
		Low Pressure – Hot Water Flushing			
Manmade Structures	Manual Oil Removal/Cleaning/ Debris Removal	Flooding	Nutrient Enrichment		Chemical Shoreline Pretreatment
	High Pressure – Cold Water Flushing	Low Pressure – Cold Water Flushing	Steam Cleaning and Sand Blasting		
	Sorbents	Low Pressure – Hot Water Flushing			
	Vacuum	High-Pressure, Hot –Water Flushing			
	Natural Recovery	Shoreline Cleaning Agents			
		Solidifiers			
		In-situ Burning			

Figure 6.6 – Clean Up Methods by Habitat Recommendations

Habitat Type	***Least Adverse Habitat Impact***	***Some Adverse Habitat Impact***	***Probable Adverse Habitat Impact***	***Most Adverse Habitat Impact***	***Insufficient Information***
Sand	Debris Removal		Low Pressure – Hot Water Flushing	High Pressure – Hot Water Flushing	Chemical Shoreline Pretreatment
	Natural Recovery	Mechanical Oil Removal		High Pressure – Cold Water Flushing	Natural Microbe Seeding
	Flooding	Low Pressure – Cold Water Flushing			
	Sorbents	Vacuum			
		Sediment Reworking			
		Nutrient Enrichment			
		Shoreline Cleaning Agents			
		Solidifiers			
		In-situ Burning			
Mixed Sand/Gravel	Debris Removal	Vacuum	High Pressure – Cold Water Flushing	High Pressure – Hot Water Flushing	Chemical Shoreline Pretreatment
	Natural Recovery	Manual Oil Removal/Cleaning	Low Pressure – Hot Water Flushing	Steam Cleaning	Natural Microbe Seeding
	Flooding	Sediment Reworking			
	Sorbents	Mechanical Oil Removal			
	Low Pressure – Cold Water Flushing	Shoreline Cleaning Agents			
		Nutrient Enrichment			
		In-situ Burning			
		Solidifiers			

Figure 6.6 – Clean Up Methods by Habitat Recommendations

Habitat Type	***Least Adverse Habitat Impact***	***Some Adverse Habitat Impact***	***Probable Adverse Habitat Impact***	***Most Adverse Habitat Impact***	***Insufficient Information***
Gravel	Debris Removal	Vacuum	Low Pressure – Hot Water Flushing	High Pressure – Hot Water Flushing	Chemical Shoreline Pretreatment
	Natural Recovery	High Pressure – Cold Water Flushing	Mechanical Oil Removal	Steam Cleaning	Natural Microbe Seeding
	Flooding	Nutrient Enrichment			
	Sorbents	Manual Oil Removal/Cleaning			
	Low Pressure – Cold Water Flushing	Sediment Reworking			
		Shoreline Cleaning Agents			
		In-situ Burning			
		Solidifiers			
Vegetated Shoreline	Natural Recovery	Sorbents	High Pressure – Cold Water Flushing	Low Pressure – Hot Water Flushing	Chemical Shoreline Pretreatment
	Flooding	Manual Oil Removal/Cleaning	Mechanical Oil Removal	High Pressure – Hot Water Flushing	Natural Microbe Seeding
	Low Pressure – Cold Water Flushing	Debris Removal		Sediment Reworking	Shoreline Cleaning Agents
		Vacuum		Solidifiers	
		Vegetation Removal			
		Nutrient Enrichment			
		In-Situ Burning			

Figure 6.6 – Clean Up Methods by Habitat Recommendations

Habitat Type	***Least Adverse Habitat Impact***	***Some Adverse Habitat Impact***	***Probable Adverse Habitat Impact***	***Most Adverse Habitat Impact***	***Insufficient Information***
Mud	Natural Recovery	Debris Removal	In-Situ Burning	Solidifiers	Chemical Shoreline Pretreatment
	Flooding	Vacuum	Low Pressure – Cold Water Flushing	Mechanical Oil Removal	Natural Microbe Seeding
	Sorbents		Manual Oil Removal/Cleaning	Sediment Reworking	
			Low Pressure – Hot Water Flushing	Shoreline Cleaning Agents	
				High Pressure – Cold Water Flushing	
				High Pressure – Hot Water Flushing	
Wetlands	Natural Recovery	In-Situ Burning	Vegetation Removal	High Pressure – Cold Water Flushing	Chemical Shoreline Pretreatment
	Sorbents	Vacuum	Manual Oil Removal/Cleaning	High Pressure – Hot Water Flushing	Natural Microbe Seeding
	Flooding	Debris Removal		Low Pressure – Hot Water Flushing	Nutrient Enrichment
	Low Pressure – Cold Water Flushing			Mechanical Oil Removal	Shoreline Cleaning Agents
				Sediment Reworking	
				Solidifiers	

Figure 6.6 – Clean Up Methods by Habitat Recommendations

Spill on Water (Habitat Response)					
Habitat Type	***Least Adverse Habitat Impact***	***Some Adverse Habitat Impact***	***Probable Adverse Habitat Impact***	***Most Adverse Habitat Impact***	***Insufficient Information***
Small Lake and Pond	Booming	Natural Recovery	Manual Oil Removal/Cleaning	Dispersants	Emulsion Treating Agents
	Skimming/Vacuum	In-situ Burning	Mechanical Oil Removal		Natural Microbe Seeding
	Sorbents	Herding Agents			
		Debris Removal			Nutrient Enrichment
		Vegetation Removal			
		Physical Herding			
		Visco-Elastic Agents/ Solidifiers			
Small River and Streams	Booming	Physical herding	Manual Oil Removal/Cleaning	Dispersants	Emulsion Treating Agents
	Skimming/Vacuum	Natural Recovery	Mechanical Oil Removal	Herding Agents	Natural Microbe Seeding
	Sorbents	Debris Removal			
	Barriers/Berms	Visco-Elastic Agents/ Solidifiers			
	Natural Recovery	Vegetation Removal			Nutrient Enrichment
		In-situ Burning			

Figure 6.6 – Clean Up Methods by Habitat Recommendations

Habitat Type	***Least Adverse Habitat Impact***	***Some Adverse Habitat Impact***	***Probable Adverse Habitat Impact***	***Most Adverse Habitat Impact***	***Insufficient Information***
Large River	Booming	Natural Recovery	Dispersants	Herding Agents	Nutrient Enrichment
	Skimming/Vacuum	Physical Herding		High Pressure – Cold Water Flushing	Natural Microbe Seeding
		Sorbents			
		In-situ Burning			
		Emulsion Treating Agents			
		Vegetation Removal			
		Debris Removal			
		Visco-Elastic Agent /Solidifiers			
		Manual Oil Removal/Cleaning			
		Mechanical Oil Removal			
Open Water	Booming	Physical Herding			Nutrient Enrichment
	Skimming/Vacuum	Sorbents			Natural Microbe Seeding
	In-situ Burning	Vegetation Removal			
	Natural Recovery	Emulsion Treating Agents			
	Low Pressure – Cold Water Flushing	Visco-Elastic Agent /Solidifiers			
		Dispersants			
		Herding Agents			
		Manual Oil Removal/Cleaning			
		Mechanical Oil Removal			

Figure 6.6 – Clean Up Methods by Habitat Recommendations

Habitat Type	***Least Adverse Habitat Impact***	***Some Adverse Habitat Impact***	***Probable Adverse Habitat Impact***	***Most Adverse Habitat Impact***	***Insufficient Information***
Sand	Debris Removal		Low Pressure – Hot Water Flushing	High Pressure – Hot Water Flushing	Chemical Shoreline Pretreatment
	Natural Recovery	Mechanical Oil Removal		High Pressure – Cold Water Flushing	Natural Microbe Seeding
	Flooding	Low Pressure – Cold Water Flushing			
	Sorbents	Vacuum			
		Sediment Reworking			
		Nutrient Enrichment			
		Shoreline Cleaning Agents			
		Solidifiers			
		In-situ Burning			
Mixed Sand/Gravel	Debris Removal	Vacuum	High Pressure – Cold Water Flushing	High Pressure – Hot Water Flushing	Chemical Shoreline Pretreatment
	Natural Recovery	Manual Oil Removal/Cleaning	Low Pressure – Hot Water Flushing	Steam Cleaning	Natural Microbe Seeding
	Flooding	Sediment Reworking			
	Sorbents	Mechanical Oil Removal			
	Low Pressure – Cold Water Flushing	Shoreline Cleaning Agents			
		Nutrient Enrichment			
		In-situ Burning			
		Solidifiers			

Section 7.1 - INTRODUCTION

The Marine Terminal/Hocking Valley Dock (MT/HVD) is classified as a "Complex" which operates in a Non-Higher Volume Port Area.

> **"Complex"** means a facility possessing a combination of transportation-related and non-transportation-related components that is subject to the jurisdiction of more than one Federal agency under section 311(j) of the Clean Water Act (CWA).

Complexes must perform discharge calculations for each jurisdictional agency and plan for the largest Worst Case Discharge Volume pursuant to the respective regulations. The USCG and EPA discharge volume calculations are described as follows:

EPA Discharge Volume Calculation

- **Worst Case Discharge**
(b) (7)(F), (b) (3) [redacted]

- **Medium Discharge**
Discharge greater than 2,100 gallons (50 Bbls) and less than or equal to 36,000 gallons (857 Bbls) or 10% of the capacity of the largest tank and all tanks with inadequate secondary containment, whichever is less and not to exceed the WCD

- **Small Discharge**
Discharge of less than or equal to 2,100 gallons (50 Bbls), not to exceed the WCD

USCG Discharge Volume Calculation

- **Worst Case Discharge (WCD)**
(b) (7)(F), (b) (3) [redacted]

(b) (7)(F), (b) (3) [redacted]

Section 7.1 – INTRODUCTION (cont'd)

DOT-PHMSA Discharge Volume Calculation

- **Worst Case Discharge (WCD)**
  The largest volume (Bbls) of the following:

  - *Pipeline's maximum release time (hrs), plus the maximum shutdown response time (hrs), multiplied by the maximum flow rate (Bbls/hr.), plus the largest line drainage volume after shutdown of the line section.*

    -- OR--

  - *Largest foreseeable discharge for the line section is based on the maximum historic discharge, if one exists, adjusted for any subsequent corrective action or preventive action taken*

    --OR--

  - *Capacity of the single largest breakout tank or battery of tanks within a single secondary containment system, adjusted for the capacity or size of the secondary containment system.*

The following planning volume calculations must be performed to determine the required response resources for a Worst Case Discharge:

Planning Volume for On-Shore Recovery (OSR)

OSR **=** WCD*%Oil On Shore

Planning Volume for On-Water Recovery (OWR)

OWR **=** WCD*%Recovered Floating Oil

Recovery Capacity (RC)

RC = OWR*Emulsification Factor* On-Water Recovery Resource Mobilization Factors

The recovery capacity determined by these equations is compared to the appropriate response capability caps from the EPA tables; the actual contracted response amount is the lesser of the two values. If the calculated capacity exceeds the capability caps, sufficient response resources should be available for twice the amount of the caps or up to the total planning volume, whichever is less.

This facility handles, stores, and/or transports Group 5 oils in excess of ten percent of total facility storage capacity. Response resources as identified in 40 CFR 112, Appendix E Section 7.6.1 should be available by contract or other approved means.

Section 7.1 – INTRODUCTION (cont'd)

Scenario Types

The occurrence of a Small/Average Most Probable, Medium/Maximum Most Probable, or Worst Case Discharge could be the result of any number of scenarios at the MT/HVD including:

- Tank overfill and/or failure.
- Piping rupture.
- Piping leak, under pressure and not under pressure.
- Explosion or fire.
- Equipment failure (e.g. pumping system failure, relief valve failure, or other general equipment relevant to operational activities associated with internal or external facility transfers).

Discharge Scenario	Potential Oil Group	Planning Volumes			
		DOT/ PHMSA	EPA	USCG	
				Facility	Vessel
Small/Average Most Probable	3/4	---	50 Bbls	50 Bbls	50 Bbls
Medium/Maximum Most Probable	3/4	---	857 Bbls	1,200 Bbls	2,500 Bbls
Worst Case	(b) (7)(F), (b) (3) [redacted]				

The response actions to each of these scenarios are outlined in Section 3.1 and Figures 3.1, 3.2, and 3.3. The response resources are identified in a quick reference format in Figure 5.1 with additional detail on equipment and manpower provided in Appendix J. Facility response personnel list/telephone numbers and other internal/external resources telephone numbers are detailed in Figures 2.4 and 2.5.

Section 7.1 – INTRODUCTION (cont'd)

EPA TABLES

FOR WORST CASE DISCHARGE RESPONSE RESOURCES DETERMINATION

AND REMOVAL CAPACITY PLANNING

Spill Location	(1) Rivers & Canals			(2) Nearshore/Inland/Great Lakes		
	3 Days			4 Days		
Sustainability of on-water oil recovery		D	E		D	E
Oil Group	% Natural Dissipation	% Recovered Floating Oil	% Oil On Shore	% Natural Dissipation	% Recovered Floating Oil	% Oil On Shore
I. Non-persistent oils II. Light crudes III. Medium crudes and fuels IV. Heavy crudes and fuels	(b) (7)(F), (b) (3)					

EMULSION FACTORS

F	
NON-PERSISTENT OIL	(b) (7) (F), (b) (3)
Group I	
PERSISTENT OIL	
Group II	
Group III	
Group IV	
Group V	

RESPONSE CAPABILITY CAPS (bbls/day)
(Maximum Required Recovery levels)

AREA	TIER 1	TIER 2	TIER 3
Rivers and Canals	(b) (7)(F), (b) (3)		
Great Lakes			
Inland/Nearshore			

ON-WATER OIL RECOVERY RESOURCE MOBILIZATION FACTORS

AREA	TIER 1	TIER 2	TIER 3
River	(b) (7)(F), (b) (3)		
Inland/Nearshore Great Lakes			

NOTE: These mobilization factors are for total resources mobilized, not incremental response resources.

RESPONSE TIME (hours)

AREA	TIER 1	TIER 2	TIER 3
Higher volume port area	(b) (7)(F), (b) (3)		
All Other			

Section 7.2 - RESPONSE CAPABILITY SCENARIOS

Small/Average Most Probable Discharge = 50 Bbls

A small/average most probable discharge at this Terminal is considered to be a discharge that does not exceed 50 barrels (2,100 gallons).

Description

This size discharge would most likely occur due to minor equipment failures or human error. Examples may include, but not limited to,

- Pump seal leak
- Valve leak
- Container rupture
- Storage spill

The most likely location for a discharge of this size would be leaking Facility piping and would be gas oil.

This size discharge would likely be noticed quickly and appropriate clean up measures taken since product transfers are monitored by Facility personnel. These types of small spills are typically contained on the grounds of the Facility (earthen material or concrete). Adverse weather conditions would not hinder response efforts during a small discharge.

Prevention

Several steps can be taken to limit the number of occurrences and the amount of discharges. In particular, employees receive training periodically on the proper procedures for the loading and unloading vessels. In addition, preventive maintenance of equipment is performed at regularly scheduled intervals to ensure that any weaknesses are discovered. Also, old or worn parts are replaced as needed. Annual product transfer and pipeline testing is the most important of these measures.

Additional Comments

While the Facility's OSRO or spill contractor would be notified and the best method for containment determined, such discharges that are contained at the Facility could be diverted to the product tanks that are not at maximum capacity. Spills that enter the Maumee River can be handled by response contract vacuum truck, absorbent pad and boom, or other equipment.

The closest body of navigable water is the Maumee River (see Figure 6.1). The storage tanks have adequate secondary containment so it is unlikely that a spill would reach the Maumee River or travel very far if it did. However, a spill at the dock could threaten the Maumee River (see Section 6). Finally, this type of spill is not one that is expected to result in a chain reaction of failures of other equipment.

Section 7.2 - RESPONSE CAPABILITY SCENARIOS (Cont'd)

Small/Average Most Probable Discharge = 50 Bbls (Cont'd)

Response Requirement

The Facility shall identify sufficient resources, by contract or other approved means, to respond to a small discharge. The response resources shall, as appropriate, include:

- 1,000' of containment boom and a means of deploying it within one (1) hour of the discovery of a spill.
- Oil recovery devices with an effective daily recovery capacity equal to the amount of oil discharged in a *Small Discharge* or greater which is available at the Facility within two (2) hours of the detection of an oil discharge.
- Oil storage capacity for recovered oily material equivalent to twice the effective daily recovery rate.

Facility Response Resources/Capability

The Facility will respond to a ***Small/Average Most Probable Discharge*** with the manpower detailed in Figures 2.4 and 5.1 as well as local contract resources as detailed in Figure 2.5, 5.2, and Appendix J.

- A 50 Bbl discharge at the Terminal typically will not escape the containment of the Facility.
- If a fifty (50) barrel discharge escaped the Facility it could flow to the Maumee River. However, due to the design of the containment area, spilled product would be directed to the oil/water separator. Any oil that reached the separator could be skimmed off and returned to the Toledo Refining Company, LLC via vacuum truck for reclamation. The oil-free water from the separator would be discharged to the Maumee River at the NPDES outfall (under the conditions of the NPDES permit).

Offsite Impact

- The Maumee River is located within the immediate vicinity of the terminal and dock. Therefore, the potential impact to wildlife and sensitive habitats does exist. The worst probable chain reaction to a spill of this type would be storm related. Severe weather could possible carry the product toward Lake Erie.
- Oil containment and recovery devices can be secured from contract resources (with a minimum effective daily recovery capacity of 50 Bbls) and can be implemented at the Facility, as the situation demands.

Section 7.2 - RESPONSE CAPABILITY SCENARIOS (Cont'd)

Small/Average Most Probable Discharge = 50 Bbls (Cont'd)

Offsite Impact (Cont'd)

- A minimum of 100 Bbls of oil storage capacity for recovered oily material can be secured from contractor resources or made available within the Facility's storage facilities, as the situation demands.
- Additional recovery and storage equipment may be secured from other Toledo Refining Company, LLC and contract resources, as the situation demands.

Notes:

- Equipment and manpower resources are detailed in Sections 4.0, 5.0, Figure 5.1, Figure 5.2 and Appendix J.
- Telephone references are provided in Figures 2.4 and 2.5.
- Response resources and actions for Group 5 oil spills are outlined in Appendix H.

Section 7.3 - RESPONSE CAPABILITY SCENARIOS

Medium/Maximum Most Probable Discharge = 2,500 Bbls

A medium discharge at this Facility is considered to be a discharge that does not exceed 2,500 barrels (105,000 gallons).

Description

This size discharge would most likely occur due to a major equipment failure or during product transfer. Examples may include, but not limited to,

- Line or flange rupture
- Valve rupture
- Tank failure
- Tank overfill or failure
- Pipeline manifold rupture.

Because of dikes and other containment located throughout the Facility, it is very unlikely that the discharge would leave the Facility (Terminal) property or reach a navigable waterway before spill containment could begin. However, the dock is situated adjacent to the Maumee River, so potential impact does exist from the pipeline and a vessel during loading activity. Adverse weather conditions would increase the chances of a discharge entering the Maumee River; however, the following response actions would minimize the impacts on sensitive areas.

Prevention

Several steps can be taken to limit the number of occurrences and the amount of discharges. In particular, employees receive training periodically on the proper procedures for transfers to and from tanks (e.g. proper tank gauging procedures). This training includes what to do in the event of an unusual occurrence such as equipment rupture (i.e. how to transfer spilled material to the miscellaneous tank or product tanks).

In addition, preventive maintenance of equipment is performed at regularly scheduled intervals to ensure that any weaknesses are discovered, such as tank inspections and hydrostatic testings. Old or worn parts are replaced as needed. Storage tank ages can be referenced in Appendix I.

Immediate Action

In the event of a medium size discharge, the OSRO or spill contractor would be notified. While waiting for the OSRO to arrive, qualified Facility personnel would complete internal and external notifications and begin initial deployment of facility owned equipment. Diked area containment of large spills can be handled with the use of contractor vacuum trucks. Medium discharges resulting from tank failure would more than likely be contained by the dike, unless the discharge occurred at the dock.

The MT/HVD is adjacent to the Maumee River (see Figure 6.1) so the potential exists for a spill to reach navigable water. Therefore, the potential impact to environmentally sensitive areas does exist. Finally, the most likely chain reaction of failure would be fires resulting from accidental spark or downed power lines.

Section 7.3 - RESPONSE CAPABILITY SCENARIOS (Cont'd)

Medium/Maximum Most Probable Discharge = 857 Bbls

Response Requirement

The Facility shall identify sufficient response resources, by contract or other approved means, to respond to a Medium/Maximum Most Probable Discharge. The response resources shall, as appropriate, include:

- Oil recovery devices with an effective daily recovery capacity equal to 50% of the *Medium/Maximum Most Probable Discharge* volume must be capable of arriving on scene within 12 hours.
- Sufficient quantity of containment boom must arrive within 12 hours for oil collection and containment and for protection of fish and wildlife and sensitive environments, as appropriate.
- Temporary storage capacity equal to twice the daily recovery capacity must be available.

Facility Response Resources/Capability

The Facility will initially respond to a ***Medium/Maximum Most Probable Discharge*** with a similar response to the Small/Average Most Probable Discharge with the manpower detailed in Figures 2.4 and 5.1 as well as local contract resources as detailed in Figure 2.5, 5.2, and Appendix J.

- All resources shall be capable of arriving at the Facility within the applicable response level requirements (Level 1 = 12 hours; Level 2 = 36 hours; Level 3 = 60 hours)
- Oil recovery devices with an effective daily recovery capacity of 1,250 Bbls (50% of the Medium/Maximum Most Probable Discharge volume) secured from the OSRO(s) will be on scene within 12 hours.
- 2,500 Bbls of oil storage capacity for recovered oily material will be secured from the OSRO(s) and/or made available within the Facility's storage facilities.
- Containment boom for oil collection and containment and for protection of fish and wildlife and sensitive areas will be secured from the OSRO(s) in the event that the spill escapes the boundaries of the Facility and impacts the Maumee River.
- Diked area containment of large spills can be handled with the use of contractor equipment.

Notes:

- Equipment and manpower resources are detailed in Sections 4.0, 5.0, Figure 5.1, Figure 5.2 and Appendix J.
- Telephone references are provided in Figures 2.4 and 2.5.
- Response resources and actions for Group 5 oil spills are outlined in Appendix H.

Section 7.4 - RESPONSE CAPABILITY SCENARIOS

Worst Case Discharge = (b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

Description

This size discharge would most likely occur due to a natural disaster or catastrophic event. Examples may include, but not be limited to,

- Tank fire
- Catastrophic tank shell failure
- Pipeline manifold rupture.
- Earthquake-induced spills
- Tornado-induced spills

Because of dikes and other containment located throughout the MT, it is very unlikely that a discharge from the tanks would leave the MT property or reach a navigable waterway before spill containment could begin. However, the HVD is situated adjacent to the Maumee River so potential does exist from the pipeline and a vessel during loading activity. Adverse weather conditions would increase the chances of a discharge entering the Maumee River; however, the following response actions would minimize the impacts on sensitive areas.

Prevention

For a worst case discharge caused by a natural disaster, preparedness is more appropriate than prevention. The Facility employees receive training periodically on the proper procedures to deal with a natural disaster. Employees are also trained in steps to follow if the Facility must be evacuated (due to a tank fire or other emergency). In addition, preventive maintenance of tanks is performed at regularly scheduled intervals to ensure that any weaknesses are discovered. Storage tank ages can be located in Appendix I.

Worst Case Discharge And Adverse Weather

Calculation of the planning volume for a worst-case discharge are provided in this appendix. It should be noted that it is not practical to consider all the variables associated with different weather scenarios so the planning distance could alter slightly. Severe rain events and associated flooding would also increase the chances of an oil spill from leaving the property.

Probable chain reactions of failures would be induced by the weather conditions. They would include, but not be limited to, fires, health hazards, and discharges of more than one product.

Worst Case Spill Pathway Scenario

In the event of tank rupture, the product may splash over the dike wall and flow toward the Maumee River.

For a spill that is confined to the land along the pathway, Facility personnel would have at least two (2) options by which to contain the spill:

- Dams
- Trenches

Section 7.4 - RESPONSE CAPABILITY SCENARIOS (cont'd)

Worst Case Discharge = (b) (7)(F), (b) (3) [redacted]

Protection Of Groundwater

The chances of groundwater impact due to a spill are minimal because the pathway between the Facility and the waterway is improved and/or impervious to a large extent. However, if a spill moved downward through the soil horizons and reached the groundwater table, then it would be necessary to contain and recover the product.

If the groundwater is near the surface, a possible solution might be a trench or an existing ditch. The back side of the trench or ditch could be lined with a polyethylene sheeting material which can serve to collect product for transfer to the oil/water separator. The groundwater would then be allowed to continue in its movement. If, however, the contaminated area is large and slow moving, an open trench may not be the answer. A deflecting barrier could be used as a structure which is more permanent than a trench or ditch and that moves the skimmed floating product to an upright recovery culvert with slits cut in the sides to allow the product to move inside and filter out the rocks.

Deep groundwater recovery could be accomplished by using a cone of depression type of pumping method. By placing a well suction beneath the floating product and producing a funnel type of effect, the product could be brought to a general area. This cone of depression forms a greater area of product. The second pump shaft could then be placed in this region.

Ditch Containment

A spill may also be contained in storm water ditches. Some practical containment methods are:

- A board skimming device
- Earth dam and weir
- Wire fence filter boom
- Culvert weir
- Under flow dam

These methods are simple to construct and effective for containment.

Spills That Reach The Waterway

The MT/HVD is adjacent to the Maumee River. The priority during larger spills is to prevent oil from reaching the waterway. Initial response actions and boom deployment will be conducted by the Facility ERT. Contracted OSROs will provide additional containment and recovery equipment, and manpower. A Damage Assessment by the state and federal trustees would more than likely follow the response.

Section 7.4 - RESPONSE CAPABILITY SCENARIOS (Cont'd)

Worst Case Discharge = (b) (7)(F), (b) (3)

Response Requirement

The Facility shall identify sufficient response resources, by contract or other approved means, to respond to a worst case discharge to the maximum extent practicable. The response resources shall, as appropriate, include:

- Sonar, sampling equipment, or other methods for locating the oil on the bottom or suspended in the water column.
- Containment boom, sorbent boom, silt curtains, or other methods for containing the oil that may remain floating on the surface or to reduce spreading on the bottom.
- Dredges, pumps, or other equipment necessary to recover oil from the bottom and shoreline.
- Equipment necessary to assess the impact of such discharges.
- Other appropriate equipment necessary to respond to a discharge involving the type of oil handled, stored, or transported.

Facility Response Resources/Capability

The Facility will respond to a Worst Case Discharge (WCD) initially with a similar response as identified for a Small/Average Most Probable or Medium/Maximum Most Probable Discharge. Facility Management will initiate "immediate response actions" located in Section 3.0 immediately upon discovering a spill. Additional OSRO(s) will be activated as the situation demands. The response resources will be capable of arriving within the required response levels and will include:

- Oil recovery devices with an effective daily recovery capacity equal to the lesser of 50% of the WCD or the response caps will be secured from the OSRO(s) and other Toledo Refining Company, LLC resources. Any amount in excess of the required caps will be contracted for and responded to as part of the same response effort.
- Temporary storage capacity equal to twice the daily recovery capacity will be secured from OSRO(s), other Toledo Refining Company, LLC resources, or made available within the Facility's storage facilities.
- At least 20% of the on-water response equipment secured from the OSRO(s) and other Toledo Refining Company, LLC resources will be capable of operating in water of 6 feet or less depth.
- Containment boom for oil collection and containment and for protection of fish and wildlife and sensitive environments and socio-economic sensitivities will be secured from the OSRO(s) and other Toledo Refining Company, LLC resources.

Section 7.4 - RESPONSE CAPABILITY SCENARIOS (Cont'd)

Worst Case Discharge = [redacted]

Facility Response Resources/Capability (Cont'd)

- Resources capable of responding to a shoreline clean-up operation involving the calculated volume of oil and emulsified oil that might impact the shoreline will be secured from the OSRO(s) and other Toledo Refining Company, LLC resources.
- Overall response operations will be conducted under the Incident Command System with adequate Facility and Contract Response personnel to continue operations for a minimum of seven (7) days.

Notes:

- Equipment and manpower resources are detailed in Sections 4.0, 5.0, Figure 5.1, Figure 5.2 and Appendix J.
- Telephone references are provided in Figures 2.4 and 2.5.
- Response resources and actions for Group 5 oil spills are outlined in Appendix H.

Section 7.5 - Toledo Refining Company, LLC Marine Terminal/Hocking Valley Dock Response Planning Volume Calculations

Location Data

Location Type	(b) (7)(F), (b) (3)
Port Type	
WCD Product Type	
Product Group	
Capacity of the Largest Single Tank (Bbls)	
Capacity of Largest Vessel (Bbls)	

Discharge Volumes/Calculations

Average Most Probable or Small Discharge (bbls)	(b) (7)(F), (b) (3)
Maximum Most Probable or Medium Discharge (bbls)	
Worst Case Discharge – Based on EPA criteria (bbls)	

Selected Calculation Factions (Based on EPA Tables)

Removal Capacity Planning Volume – Percent Natural Dissipation	(b) (7)(F), (b) (3)
Removal Capacity Planning Volume – Percent Recovered Floating Oil	
Removal Capacity Planning Volume – Percent Oil Onshore	
Emulsification Factor	
Tier 1 – On Water Oil Recovery Resource Mobilization Factor	
Tier 2 – On Water Oil Recovery Resource Mobilization Factor	
Tier 3 – On Water Oil Recovery Resource Mobilization Factor	

Response Planning Volume Calculations

On-Water Recovery Volume (bbls)	(b) (7)(F), (b) (3)
On-Shore Recovery Volume (bbls)	
Total Recovery Volume (bbls)	

	Tier 1	Tier 2	Tier 3
On-Water Recovery Capacity (bbls/day)	(b) (7)(F), (b) (3)		
Shallow Water Response Capacity (bbls/day)			
Storage Capacity (bbls/day)			
On-Water Response Caps (bbls/day)			
Additional Response Req'd (bbls/day)			
Response Time (Hrs)			

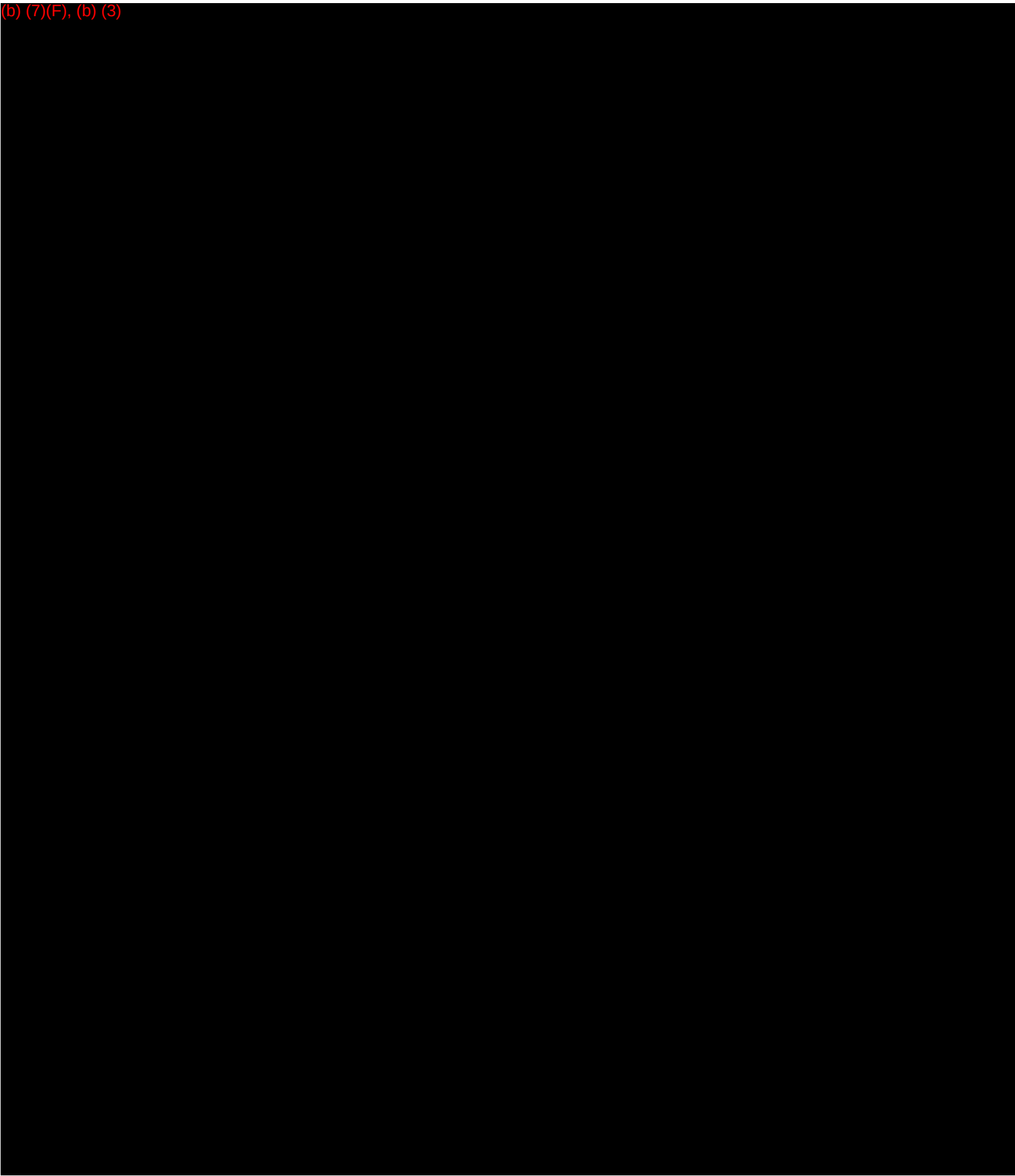
Section 7-6 Toledo Refining Company, LLC Marine Terminal and Dock U.S. DOT/PHMSA Worst Case Discharge Calculations

(b) (7)(F), (b) (3)

[redacted]

Section 7.7 Toledo Marine Terminal and Dock USCG Worst Case Discharge Calculations

(b) (7)(F), (b) (3)



Section 8.1 - Hazard Identification

Loading / Unloading of Transportation Vehicles

The Facility conducts marine transfer operations only (no rail or truck transfer operations). These operations are typically conducted as follows:

MARINE OPERATIONS	
Transfer Points:	One (1)
Discharging Rate:	500-4,000 Bbls/hr (*Vessel & pipeline dependent*)
Simultaneous Operations:	One (1) vessel (*maximum*)
*** Transfers per week:**	One (1) to Two (2) vessels per week
Products:	Residues-Petro Atmospheric (Gas Oil), Carbon Black Oil (HARF), Light Cycle Oil (LCO), Distillates (petro.) Full RMG STR MIDDDLE, ULSD #1 15MV-SP

PIPELINES FROM DOCK TO FACILITY
(b) (7)(F), (b) (3) [redacted]

Day-to-Day Operations

The day-to-day operations at the MT/HVD that may present a risk of discharging oil or releasing a hazardous substance are:

- Vessel loading operations
- Vessel unloading operations

Work such as piping replacement/repair is rare, and would only be done on portions of the system that are isolated from the active system.

Section 8.1 - Hazard Identification (Cont'd)

There are no drainage troughs or weirs at this Facility. The slip at HVD is protected by a pre-deployed boom except during ice conditions.

Day-to-Day Operations (Cont'd)

There are two (2) sump pumps located at this Facility: one (1) at the Dock and one (1) at the Marine Terminal.

Secondary Containment Volumes

Secondary containment is provided for the bulk storage tanks and/or transfer points at the MT/HVD. The MT/HVD has a strong spill response plan in place to address any spill.

Tanks:

Secondary Containment volumes for all bulk storage tanks are detailed on the "Potential Spill Sources and Container Identification" table located in the SPCC Plan.

The tanks at the Marine Terminal are surrounded by containment dikes constructed of compacted soil which provide secondary containment.

Dock Containment System:

The HVD has a welded containment lip around the outer edge of the entire dock to contain small leaks and spills. The dock is also equipped with water drain valves. The water drain valves are closed and capped during a transfer operation.

Drainage:

The containment dikes at the Marine Terminal have drainage valves that are normally closed. Stormwater that accumulates within the tank dikes at the Marine Terminal can be drained to a one-section API gravity oil-water separator if the accumulated stormwater has no sheen or other evidence of oil. The API separator is then monitored, and the oil-free water is discharged to the Maumee River at NPDES outfall 2IG00009 under the conditions of the NPDES permit. Any oil that would reach the separator can be skimmed off and returned to the refinery via a vacuum truck for reclamation. The tank dike drain valves are kept in the closed position unless the dikes are being drained.

Normal Daily Throughput

The Normal Daily Throughput for the Facility:

Normal Daily Throughput	Average Daily Storage	Total Storage
(b) (7)(F), (b) (3)		

The rate of flow from the vessel unloading/loading operation is essentially fixed and not a function of daily throughput. Thus changes in daily throughput would have no effect on potential discharge volumes.

The Facility has sufficient tank volume to handle any potential increase in MT/HVD receipts.

Section 8.2 - Vulnerability Analysis

Introduction

The vulnerability analysis addresses the potential effects (i.e., to human health, property, or the environment) of an oil spill originating from the Facility. Section 6.0 of this Plan provides general guidance to the responder for "Spill Impact Considerations", addressing response options for many of the specific sensitivities detailed below.

The area potentially affected by a spill originating from the Facility has a number of characteristics which require consideration in the event of a discharge.

- The Marine Terminal is located in close proximity to the Maumee River.
- The Hocking Valley Dock is situated directly adjacent to the Maumee River.

Water Intakes

(b) (7)(F), (b) (3)

[redacted]

Section 8.2 - Vulnerability Analysis (Cont'd)

(b) (7)(F), (b) (3)

[redacted]

Section 8.2 - Vulnerability Analysis (Cont'd)

Fish and Wildlife

As there are a wide range of species present in the Maumee River and the Western portion of Lake Erie, the species potentially impacted would be quite diverse. Potential impacts that could result from an oil spill would include acute impacts (e.g., mortality) and chronic impacts (e.g., reduced reproductive success, growth). The following categories of fish and wildlife (and other biota) could potentially be impacted:

1. Migratory Waterfowl
2. Shorebirds
3. Raptors
4. Fish
5. Mammals
6. Reptiles and Amphibians
7. Invertebrates

Habitat areas for these species are identified in Figure 6.2.

Lakes and Streams

With the exception of Lake Erie, no lakes were identified as being potentially impacted due to a release. However, several rivers and streams were identified as being potentially impacted by a discharge from the Facility, in particular, the Maumee River. Almost all of the rivers and streams would not receive any oiling except during a worst case discharge.

The lakes, streams, and rivers that may be potentially impacted by a discharge originating at the Facility are identified on the maps in Figure 6.2.

Endangered Flora and Fauna

Many State natural resource departments contain a natural heritage division that maintains a list of the threatened and endangered resources within the State. Most resource agencies are unwilling to provide specific details on the exact locations of threatened and endangered species. However, in the event of an oil spill, the resource agencies can be contacted to obtain information on endangered resources during the course of an emergency (i.e., spill).

The endangered flora and fauna that may be potentially impacted by a discharge originating at the Facility are detailed in Figure 6.1.

Recreational Areas

(b) (7)(F), (b) (3)

[redacted]

Section 8.2 - Vulnerability Analysis (Cont'd)

Transportation Routes (air, land, and water)

No airport services would be at risk in the event of an oil spill from the Toledo Refining Company, LLC Refinery. The Maumee River has been dredged to a depth of 25 feet to allow vessels and other water traffic to move freely through the river. In the event of oiling, the Maumee River would likely be closed to boat/shipping traffic. There are roads and highways that cross the Maumee River and run along Maumee Bay and Lake Erie; however, none of these transportation routes would be threatened in the event of oiling; however, road closures may occur. The Norfolk and Western, and the CSX railroad lines run through an area near the Toledo Refining Company, LLC Refinery and Otter Creek. In the event of oiling, the potential does exist for the closure of these rail lines. The following transportation routes may be impacted from a release from this Facility:

(b) (7)(F), (b) (3)

The local emergency assistance agencies (police department, fire department, etc.) and the U.S. Coast Guard (as applicable) would be contacted for traffic control in the area of the discharge.

Utilities

Three (3) power plants were identified as potentially impacted due to a Toledo Refining Company, LLC release. This impact would occur mainly because these power plants have water intakes in areas where oil could accumulate. These power plants are listed below:

(b) (7)(F), (b) (3)

Other Areas of Economic Importance

The Maumee River and Lake Erie are bordered by various dock facilities, other commercial facilities, and recreational/public use areas. These areas are identified on the maps in Figure 6.2.

Any evacuation efforts necessary for these areas will be coordinated with the local emergency assistance agencies (police department, fire department, etc.), State Police, U.S. Coast Guard, and other agencies as the situation demands. Telephone references are provided in Figure 2.5.

Section 8.3 - Analysis of the Potential for a Spill

The potential for a significant spill at the Facility is minimal due to the spill prevention measures that are in place and the operating procedures followed by facility personnel. The potential for a spill of sufficient magnitude to escape the Facility is very remote due to the spill mitigation measures inherent in the facility design.

Spill prevention measures include a number of discharge detection methods and various inspection procedures described further in the SPCC Plan.

Tank age, as well as other tank information, can be found in the Hazard Identification Tanks table located in the SPCC Plan.

MT/HVD operating procedures are defined in the Procedures Manual. All personnel responsible for Terminal operations are qualified. New personnel receive on-the-job training working with experienced operating personnel as well as training in the areas of safety, spill prevention, emergency response, and applicable pollution prevention laws, rules and regulations. They become qualified prior to assuming unsupervised operating responsibilities.

Spill mitigation measures include facility designs intended to direct releases to containment areas where they can be promptly controlled and cleaned up.

The horizontal range of a potential spill from this Facility is as follows: in the event that a spill does escape the Facility's boundaries, the spill could travel towards the Maumee River, and eventually Lake Erie. See Site plan and drainage drawings at the end of this section for both the Marine Terminal (Figure 8.1) and Hocking Valley Dock (Figure 8.2)

The Facility area is not typically subject to excessive damage from inclement weather such as hurricanes and floods. Although it is possible for tornadoes and floods to occur, there have been no spills at the Facility which were caused by natural disasters of this kind.

Other factors such as earthquake zones and karst topography should be considered when evaluating the potential for a spill. The Facility is susceptible to minor earthquakes, according to the U.S. Geological Survey, however, a discharge has never resulted from an earthquake. The Facility is situated on an underlying layer of carbonate bedrock which has the potential to develop karst. Though landslides are prevalent in a few areas of Ohio, the Facility is not in such an area where landslides are known to occur.

Section 8.4 - Reportable Oil Spill History

The Facility maintains a separate Oil Spill History file in the Facility office. The Facility's file contains the below listed information to the extent that such information is reasonably identifiable.

- Date of discharge.
- Location of discharge.
- Discharge cause(s).
- Material(s) discharged.
- Amount discharged.
- Amount of discharge that reached navigable waters.
- Amount recovered.
- Effectiveness and capacity of secondary containment.
- Clean-up actions taken.
- Steps taken to reduce possibility of recurrence.
- Total storage capacity of the tank(s) or impoundment(s) from which the material Discharged.
- Enforcement actions.
- Effectiveness of monitoring equipment.
- Description of how spill was detected.

Date of discharge	*Location of discharge*	*Discharge cause(s)*	*Material(s) discharged*	*Amount discharged*	*Amount of discharge that reached navigable waters.*	*Amount recovered*	*Effectiveness and capacity of secondary containment.*	*Clean-up actions taken.*	*Steps taken to reduce possibility of recurrence.*	*Enforcement actions.*	*Effectiveness of monitoring equipment.*	*Description of how spill was detected.*
2/25/2014	HVD/MT	Spill	Hydrocarbon	1 gal	unknown	unknown	unknown	Absorbent booms in water & Vacuum Truck Recovery	Available onsite	unknown	unknown	Employee report
11/09/10	HVD/MT	Spill	Diesel	125 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
05/27/10	HVD/MT	Spill	Gas Oil	25 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
11/05/09	HVD/MT	Spill	Gas Oil	37 gal	unknown	unknown	unknown	Removal of contaminated soil	Available onsite	unknown	unknown	Employee report
12/27/04	HVD/MT	Spill	HARF/CSO	1 cup	1 cup	~1 cup	N/A	Absorbent booms in water	Available onsite	unknown	unknown	Employee report
12/17/02	HVD/MT	Spill	HARF/CSO	1/4 gal	1/4 gal	~1/4 gal	N/A	Absorbent booms in water	Available onsite	unknown	unknown	Employee report
05/14/02	HVD/MT	Spill	Diesel	60 gal	none	unknown	secondary wall damaged	Vacuum Truck and recovery wells	Available onsite	unknown	unknown	Employee report
01/22/02	HVD/MT	Spill	Diesel	6 gal	6 gal	unknown	N/A	Absorbent booms in water	Available onsite	unknown	unknown	Employee report
10/21/01	HVD/MT	Spill	Diesel	15 gal	15 gal	unknown	N/A	Absorbent booms in water	Available onsite	unknown	unknown	Employee report

Figure 8.1
SITE DRAINAGE PLAN - Marine Terminal

Figure 8.2
SITE DRAINAGE PLAN – Hocking Valley Dock

APPENDIX A

GENERAL INFORMATION

PAGE
Toledo Refining Company's Principles of Health, Safety and Environment A-2

Toledo Refining Company's Principles of Health, Safety and Environment

Protection of the Biosphere

We will reduce our overall emissions to the environment (air, water and land) with special emphasis on toxic substances. We will pay special attention to the protection of the surrounding environment at present facilities and when planning for new facilities or operations.

Sustainable Use of Natural Resources

We will minimize the use of water in our facility and strive to improve the quality of our water discharge streams. We will employ practical land management and conservation techniques to conserve the soils and forests at our facility. We will make efficient use of non-renewable natural resources through careful planning and employment of conservation techniques.

Reduction and Disposal of Wastes

We will continue to reduce and where possible eliminate waste through the use of source reduction, recycle/reuse and treatment techniques. The handling and disposal of all waste will be conducted in a safe and responsible fashion in accordance with regulatory standards.

Energy Conservation

We will conserve energy through careful selection of raw materials and energy sources and through cost effective improvements in our operations, including technological improvements in new energy-consuming processes. Environmental protection and sustainability will be considered in selecting new energy sources.

Risk Reduction

Our goal is to prevent HSE incidents such as environmental spills and releases, fires, explosions, injuries and illnesses and other accidents. We will utilize sound maintenance and work practices, safety-conscious design, employee training and incident investigations to minimize risks to our employees and the community in which we operate. We will be prepared to respond promptly and professionally should an incident occur.

Safe Products and Services

Through research, planning and analysis we will strive to minimize the environmental impact and health and safety hazards of our company products and services. We will counsel our employees and customers in the safe use and handling of our products and services and, where feasible, attempt to correct unsafe use. We will strive to eliminate the use of purchased products which pose known environmental hazards such as PCBs and CFCs.

Environmental Restoration

We will promptly correct any conditions in our operations which result in a significant health, safety or environmental impact. We will take responsibility for any harm caused by our operations to our employees, customers, the general public or the environment; to the extent feasible, we will also restore the environment.

Toledo Refining Company's Principles of Health, Safety and Environment (Cont'd)

Informing the Public

We will inform appropriate officials, employees, contractors, customers and the public about significant health, safety or environmental hazards related to our facility in a timely manner. We will regularly participate in dialogue with our neighboring community and its residents. No action will be taken against employees for reporting dangerous incidents or conditions to management or appropriate authorities.

Management Commitment

We will ensure that senior management is fully informed about pertinent HSE issues and take responsibility for carrying out HSE policy. We will consider demonstrated environmental commitment and HSE experience as factors in our selection of senior managers.

Audits and Reports

We support the concept of public accountability for HSE performance and intend to report on our progress in consistent, measurable terms.

RESPONSE PLAN COVER SHEET

Facility Name:	Toledo Refining Company, LLC		
EPA FRP ID#:	FRP 05A0539		
Facility Address:	1900-2100 Front Street Toledo, OH 43605.	1819 Woodville Rd Oregon, OH 43616.	
Phone Number: (24 hr)	(419) 698-6600	Fax Number:	(419) 697-6423
County:	Lucas County, OH	Primary SIC Code:	2911
Facility Start Date:	1951	Dun & Bradstreet:	005046511
Facility Latitude:	(b) (7)(F), (b) (3)	Facility Longitude:	(b) (7)(F), (b) (3)
NAICS Code	493190	Distance to Navigable Water:	Adjacent to River
Name of Protected Waterway or Environmentally Sensitive Area:		Maumee River	

Owner Address:	Toledo Refining Company, LLC 1819 Woodville Rd Oregon, OH 43616	Owner Phone Number (24 hr):	419 698-6600

Total Number of ASTs:	3	Largest AST Capacity: (gallons)	(b) (7)(F), (b) (3)
Total Number of USTs:	2	Total UST Storage: (gallons)	
Total Storage of Drums & Transformers that Contain Oil:			
Maximum Oil Storage Capacity (gallons):	(b) (7)(F), (b) (3)	Worst Case Discharge Amount (gallons):	
Number of Surface Impoundments:	0	Total Storage of Surface impoundments:	

Certification of the Applicability of the Substantial Harm Criteria

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons? Yes X No ___

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area? Yes ___ No X

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C–III to this appendix or a comparable formula[1]) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Plans: Fish and Wildlife and Sensitive Environments" (see Appendix E to this part, section 13, for availability) and the applicable Area Contingency Plan.
Yes X No ___

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III to this appendix or a comparable formula[1]) such that a discharge from the facility would shut down a public drinking water intake[2]? Yes X No ___

[1] If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

[2] For the purposes of 40 CFR part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).

5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil discharge in an amount greater than or equal to 10,000 gallons within the last 5 years? Yes X No ___

Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Signature

Refinery Manager
Title

Clark Wrigley
Name (Please type or print)

April 28, 2014
Date

APPENDIX C

RESPONSE RESOURCES

USCG CLASSIFIED OIL SPILL REMOVAL ORGANIZATIONS (OSROs)

Minimum Equipment Requirements for OSRO Classifications C-2

REVISED USCG OSRO CLASSIFICATIONS

The USCG has classified OSROs according to their response capabilities, within each Captain of the Port (COTP) zone, for vessels and for facilities in four types of environments. Response capabilities are rated A, B, C, D, or E as described below.

MINIMUM EQUIPMENT REQUIREMENTS FOR OSRO CLASSIFICATIONS			
Classification	**Resource Quantity Guidelines [2,3]**	**Maximum Facility Response Times**	**Maximum Vessel Response Times**
Rivers/Canals [1]			
A	Boom: 2,000 ft EDRC: 50 bbls TSC: 100 bbls	Boom Deployment: 1 hour EDRC/TSC: 2 hours	Boom Deployment: 1 hour EDRC/TSC: 2 hours
B	Containment Boom/Protective Boom: 4,000 ft / 4,000 ft EDRC: 1,250 bbls TSC: 2,500 bbls	High Volume Ports: 6 hours Other Ports: 12 hours	High Volume Ports: 12 hours Other Ports: 24 hours
C [4]	Containment Boom/Protective Boom: 4,000 ft / 10,000 ft EDRC: 1,875 bbls TSC: 3,000 bbls	High Volume Ports: 6 hours Other Ports: 12 hours	High Volume Ports: 12 hours Other Ports: 24 hours
D [4]	Containment Boom/Protective Boom: 4,000 ft / 16,000 ft EDRC: 3,750 bbls TSC: 6,000 bbls	High Volume Ports: 30 hours Other Ports: 36 hours	High Volume Ports: 36 hours Other Ports: 48 hours
E [4]	Containment Boom/Protective Boom: 4,000 ft / 22,000 ft EDRC: 7,500 bbls TSC: 12,000 bbls	High Volume Ports: 54 hours Other Ports: 60 hours	High Volume Ports: 60 hours Other Ports: 72 hours
Great Lakes			
A	Boom: 2,000 ft EDRC: 50 bbls TSC: 100 bbls	Boom Deployment: 1 hour EDRC/TSC: 2 hours	Boom Deployment: 1 hour EDRC/TSC: 2 hours
B	Containment Boom/Protective Boom: 6,000 ft / 6,000 ft EDRC: 1,250 bbls TSC: 2,500 bbls	All Ports: 6 hours	All Ports: 12 hours
C [4]	Containment Boom/Protective Boom: 12,000 ft / 12,000 ft EDRC: 6,350 bbls TSC: 10,000 bbls	All Ports: 12 hours	All Ports: 18 hours
D [4]	Containment Boom/Protective Boom: 18,000 ft / 18,000 ft EDRC: 12,300 bbls TSC: 20,000 bbls	All Ports: 36 hours	All Ports: 42 hours
E [4]	Containment Boom/Protective Boom: 24,000 ft / 24,000 ft EDRC: 25,000 bbls TSC: 40,000 bbls	All Ports: 60 hours	All Ports: 66 hours

REVISED USCG OSRO CLASSIFICATIONS (Cont'd)

Inland			
A	Boom: 2,000 ft / 6,000 ft EDRC: 50 bbls TSC: 100 bbls	Boom Deployment: 1 hour EDRC/TSC: 2 hours	Boom Deployment: 1 hour EDRC/TSC: 2 hours
B	Containment Boom/Protective Boom: 6,000 ft / 6,000 ft EDRC: 1,250 bbls TSC: 2,500 bbls	High Volume Ports: 6 hours Other Ports: 12 hours	High Volume Ports: 12 hours Other Ports: 24 hours
C [4]	Containment Boom/Protective Boom: 12,000 ft / 12,000 ft EDRC: 12,500 bbls TSC: 20,000 bbls	High Volume Ports: 6 hours Other Ports: 12 hours	High Volume Ports: 12 hours Other Ports: 24 hours
D [4]	Containment Boom/Protective Boom: 18,000 ft / 18,000 ft EDRC: 25,000 bbls TSC: 40,000 bbls	High Volume Ports: 30 hours Other Ports: 36 hours	High Volume Ports: 36 hours Other Ports: 48 hours
E [4]	Containment Boom/Protective Boom: 24,000 ft / 24,000 ft EDRC: 50,000 bbls TSC: 80,000 bbls	High Volume Ports: 54 hours Other Ports: 60 hours	High Volume Ports: 60 hours Other Ports: 72 hours
Oceans			
A	Boom: 2,000 ft EDRC: 50 bbls TSC: 100 bbls	Boom Deployment: 1 hour EDRC/TSC: 2 hours	Boom Deployment: 1 hour EDRC/TSC: 2 hours
B	Containment Boom/Protective Boom/Initial Response Boom [5]: 6,000 ft / 4,000 ft / 4,000 ft EDRC: 1,250 bbls TSC: 2,500 bbls	High Volume Ports: 6 hours Other Locations: 12 hours (for open ocean, plus travel time from shore)	High Volume Ports: 12 hours Other Locations: 24 hours (for open ocean, plus travel time from shore)
C	Containment Boom/Protective Boom/Initial Response Boom [5]: 12,000 ft / 7,000 ft / 5,000 ft EDRC: 12,500 bbls TSC: 20,000 bbls	High Volume Ports: 6 hours Other Locations: 12 hours (for open ocean, plus travel time from shore)	High Volume Ports: 12 hours Other Locations: 24 hours (for open ocean, plus travel time from shore)
D	Containment Boom/Protective Boom/Initial Response Boom [5]: 18,000 ft / 12,000 ft / 6,000 ft EDRC: 25,000 bbls TSC: 40,000 bbls	High Volume Ports: 30 hours Other Locations: 36 hours (for open ocean, plus travel time from shore)	High Volume Ports: 36 hours Other Locations: 48 hours (for open ocean, plus travel time from shore)
E	Containment Boom/Protective Boom/Initial Response Boom [5]: 24,000 ft / 16,000 ft / 8,000 ft EDRC: 50,000 bbls TSC: 80,000 bbls	High Volume Ports: 54 hours Other Locations: 60 hours (for open ocean, plus travel time from shore)	High Volume Ports: 60 hours Other Locations: 72 hours (for open ocean, plus travel time from shore)

[1] Rivers/canals include bodies of water, including the Intracoastal Waterway and other bodies artificially created for navigation, confined within an inland area and having a project depth of 12 feet (3.66 meters).

[2] EDRC stands for "effective daily recovery capacity" or the calculated recovery capacity of oil recovery devices determined by using a formula that takes into account limiting factors such as daylight, weather, sea state, and emulsified oil in the recovered material.

[3] TSC stands for "temporary storage capacity" meaning sufficient storage capacity equal to twice the EDRC of an OSRO. Temporary storage may include inflatable bladders, rubber barges, certified barge capacity, or other temporary storage that can be utilized on scene at a spill response and which is designed and intended for the storage of flammable or combustible liquids. It does not include vessels or barges of opportunity for which no pre-arrangements have been made. Fixed shore-based storage capacity, ensured available by contract or other means, will be acceptable.

[4] 20% of resources must be capable of operating in waters of 6 feet (1.82 meters) or less.

[5] Initial response boom amounts specify the amount of boom that must be available for immediate transport to the site of the spill as far as 50 miles offshore. The other boom can be moved to a shoreline point for transport as needed at a later time.

APPENDIX D

WASTE ANALYSIS / DISPOSAL PLAN

Page

Overview D-2

Handling Excavation Soils (Document No. 26) D-3

Internal Waste Material Handling and Disposal (Document No. 33) D-6

WASTE MANAGEMENT

OVERVIEW

This Section provides Toledo Refining Company policies and guidelines for waste classification, handling, transfer, storage and disposal techniques.

A major oil spill response would generate significant quantities of waste material ranging from oily debris and sorbent materials to sanitation water and used batteries. All these wastes need to be classified and separated (i.e., oily, liquid, etc.), transported from the site and treated and/or disposed of at approved disposal sites. Each of these activities demands that certain health and safety precautions be taken, which are strictly controlled by federal and state laws and regulations.

It is the responsibility of Toledo Refining Company's Waste Disposal Specialist to manage waste disposal needs during an oil spill cleanup in accordance with Toledo Refinery Environmental Procedures, Handling Excavation Soils (Document No. 26) and Internal Waste Material Handling and Disposal (Document No. 33. These documents are presented on the following pages.

Handling Excavation Soils
Document No. 26

Toledo Refining Company

1.0 Purpose/Scope

(Note: Agreements have been made with prior owners that historical undergound events may be covered by their costs and not PBF. It should be noted that the environmental department is tracking and billing previous owners for those such events. Please contact the environmental department should any of these events occur.)

1.1 Purpose: The purpose of this procedure is to provide guidance for the proper handling, sampling and disposal of potentially hydrocarbon contaminated soil which results from an excavation.

1.2 Scope / Applicability: This procedure applies to all refinery personnel that may direct excavation activities associated with potentially hydrocarbon-contaminated soil.

2.0 Definitions

2.1 Petroleum Contaminated Soil (PCS): Soil that has any amount of petroleum constituents in it, from any man made source such as line leaks, spills, or tank-bottom leaks.

2.2 RCRA: Resource Conservation and Recovery Act: The federal regulation that dictates management standards for solid and hazardous wastes. (40 CFR 260-280)

3.0 General Requirements

3.1 According to Ohio EPA letter (Environmental library file number 451), PCS is considered a waste if:

3.1.1 A governmental agency with proper regulatory authority requires that it be disposed of offsite, or

3.1.2 Toledo Refining Company decides to move it offsite, or

3.1.3 Toledo Refining Company considers the soil to be a waste.

3.2 PCS may be used as backfill for excavations, if conditions in Section 4.6 of this procedure are met.

3.3 If soil that is petroleum contaminated has been determined to be a waste and is intended for offsite disposal, the waste must be managed according to RCRA standards, and potentially managed as a hazardous waste. In this event contact the Environmental Department for guidance before starting the job, or as soon as it is decided that the soil is waste.

3.4 The person in charge of the soil excavation job must comply with all the requirements of CA training, including having approved contracts, scope, budget, work order, JSA, etc. for the work to be done.

4.0 Procedure/Process

4.1 Soil piles that are generated, as a response of a spill or line leak, must be treated as hydrocarbon contaminated until documented otherwise. If during other types of excavations, it becomes evident that the soil is contaminated, immediately cease excavation activities until a tarp or roll off box is secured for the contaminated soil only. Reminder: Any non-contaminated soil that comes into contact with hydrocarbon contaminated soil must then be considered contaminated.

4.2 For all excavations, place a sign on the soil pile, noting the origin of soil, and the date. The sign needs to be substantial / weather proof and permanently or firmly affixed to the pile. Signs may be handmade or made on a computer and placed in a plastic sheath. A blank line should be on the sign that can be completed when the determination is made as to if the soil may be reused or if the soil must be disposed of in an offsite facility.

4.3 If there is no evidence of contamination, as listed below. No further action required. Soil is presumed to be hydrocarbon contaminated if any of these conditions exist:

4.3.1 Surface water in an excavation in contact with the soil has a visible sheen,

4.3.2 The soil exhibits a visible and characteristic oil stain,

4.3.3 The soil has a characteristic hydrocarbon odor.

4.4 Guidelines for management of PCS and suspected PCS, to be followed by the individual responsible for the job (this may be RMF Foreman, Contract Administrator, Supervisor or Environmental Engineer):

4.4.1 When conducting a job, task, work order, etc., if PCS is encountered, notify the job supervisor and the Environmental Department immediately.

Note: There is no requirement to remove all PCS in every situation when it is encountered. Notifying the environmental department will allow records to be kept of known subsurface contamination.

4.4.2 Notify the Environmental Department contact for the area you are working in if any petroleum contaminated soil is to be left in place and backfilled.

4.4.3 The Environmental Department will keep a record of any known subsurface contamination that was left in place.

4.4.4 Segregate petroleum contaminated from uncontaminated soil.

4.4.5 Place PCS non-benzene, toluene, crude, xylene bearing contaminated soil on a plastic tarp or sheet. Cover soil pile with another plastic tarp or sheet to prevent rainwater from leaching through the contaminated soil and spread petroleum contamination. For PCS containing or suspected of containing benzene, toluene, crude or xylene see 4.4.6

Note: Tarp must remain in place until soil is properly reused or disposed.

4.4.6 Benzene, toluene, crude or xylene product requirements:

4.4.6.1 If the contaminated soil is known to have benzene, toluene, crude or xylene in it, do not place it on plastic, but instead place it into a roll off box and cover when not in active use. Besides benzene product itself, the following materials may be presumed to contain an appreciable amount of benzene: toluene, gasoline, reformates raffinate, wastewater slop oil, and crude oil.

4.4.6.2 Call the environmental department to get a rolloff box with a vapor-tight lid or cover delivered to the job site.

4.4.6.3 Call the environmental department to have the vapor tight lid on the rolloff box tested once it is loaded to ensure that <500 ppm VOC is detected at the lid-seal portion of the rolloff box with an approved monitoring instrument (Method 21). The environmental department can also ensure that the proper sampling is performed.

4.5 Sampling of contaminated soil is to be done by the individual responsible for the job (this may be the Contract Administrator, Supervisor, or Environmental Engineer):

4.5.1 Obtain clean sampling utensil(s) from the Toledo Refining Company laboratory or the environmental department.

Note**: Utensils must not have been in hydrocarbon contact, unless they have been thoroughly decontaminated.**

4.5.2 Obtain either a clean wide mouth glass jar or a NASCO Whirl-Pak bag from the Toledo Refining Company laboratory to use for sample collection.

4.5.3 Collect multiple samples from different corners/spots in the excavated soil, from several depths (at least 4" to 6" under dirt surface) and combine them into a composite sample.

4.5.4 Fill the sample bottle or bag with a representative sample from the composite sample that was made in Section 4.5.3 above.

Note: Sample must be representative or "worst case", so sample at areas where highest potential for contamination is possible.

4.5.5 Label the container which holds the composite sample with the following sample information:

4.5.5.1 Date, time sample was collected, person that collected the sample, sample name/origin.

4.5.5.2 Contact the Environmental Department to request analytical testing for the sample: These may include TPH (Total Petroleum Hydrocarbon), BTEX (benzene, toluene, ethylbenzene, and xylene), TCLP and flashpoint.

Note: If the sample is going to be used for a hazardous waste determination, contact the environmental department prior to taking the sample for special sampling requirements and to obtain sample preservation instructions.

4.5.6 A completed chain-of-custody (COC) form must accompany samples. The COC indicates the person who had custody or control of the sample starting at the time the sample was taken, and lists every transfer of custody at every point in transit to the off-site commercial laboratory. The Environmental Department will provide chain-of-custody forms, obtained from the commercial laboratory.

4.5.7 All soil samples will be sent to the Environmental Department for coordination of analytical work at an offsite laboratory.

4.5.8 The Environmental Department will:
4.5.8.1 Obtain contract with a qualified lab,
4.5.8.2 Have the lab pick up the samples from the refinery,
4.5.8.3 Receive all sample results from the offsite laboratory.
4.5.8.4 Forward analytical results to the appropriate person in charge.

Note: If a sample is to be shipped to an offsite lab, the refinery laboratory will assist with proper packaging and labeling to comply with DOT regulations.

4.6 Disposition of Petroleum Contaminated Soil (PCS)

4.6.1 Options for onsite re-use of soil contact the environmental department for guidelines.

4.6.2 No PCS shall be used as backfill on property that Toledo Refining Company does not own.

5.0 Monitoring and Reporting

5.1 The Environmental Department will receive the laboratory results from the offsite laboratory.

5.2 The laboratory report will be forwarded to the person who is responsible for the excavation if necessary.

6.0 Recordkeeping

6.1 The Environmental Department will keep the laboratory results on file for a period of 10 years.

Revision Log

Revision Date	Document Authorizer	Document Reviewer	Document Author	Revision Details
June 11, 2003	P Hanley	P Hanley	TNeuhart/SShelt	Added Checklist and modified section 3 and 4
June 15, 2006	P Hanley	P Hanley	S Shelt	Editorial changes, removed C&W
Sept 21, 2006	P Hanley	P Hanley	S Shelt	Editorial changes
March 27, 2007	P. Hanley	P. Hanley	S. Shelt	Revised for MACT changes
March 27, 2009	E. Moore	S. Shelt	S. Shelt	No changes required.
May 18, 2009				Administrative Update – Revised Revision date, updated revision log from 3/27/2009 review of procedure
June 27, 2011		S.Shelt		Adminstrative changes for TRC change-over only.
June 19, 2014	E. Moore	S. Shelt	S.Shelt	Adminstrative and minor changes olny.(Including the beginning note)

Internal Waste Material Handling and Disposal
Document No. 33

Toledo Refining Company

Material Handling and Disposal

Document Number: 33

1.0 Purpose/Scope

The purpose of this procedure is to describe the handling process for waste materials transported, relocated, and/or disposed internal to the refinery and in preparation for shipping material outside the facility.

2.0 Definitions

2.1 *Waste* – any material that has been abandoned, reached the end of its useful life, marked for disposal, and/or destined to be recycled off-site

2.2 *Flowable Waste* – A material meeting the definition of a waste that can be pumped or gravity fed

2.3 *Solid Waste* - A material meeting the definition of a waste that cannot be pumped or gravity fed

2.4 *DOT container* – A container approved by DOT for shipping materials over a public road. Liquid materials are to be in leak tight containers only. Note: solid materials are defined by passing "paint filter" test for landfills. If the material can not pass the "paint filter" test it is to be considered a liquid material and would require a leak tight container.

3.0 General Requirements

This procedure was created to ensure that Toledo Refining Company complies with the appropriate RCRA and DOT regulations. By documenting the transportation, relocation, and/or disposal of waste materials, Toledo Refining Company can more easily demonstrate compliance with federal, state, or local environmental regulations.

4.0 Procedure/Process

4.1 A Toledo Refining Company Representative requests Contractor to transport and/or remove a waste material within the boundaries of the refinery.

4.1.1 Flowable Wastes

- ♦ If waste material is flowable and is a petroleum product, the material can be off-loaded at one of several intra-refinery disposal sites, based on the amount of oil and water in the waste, per the flow chart entitled "Internal

Waste Material Handling and Disposal for Flowable Materials", which can be found in Appendix A. As a guideline; typical hydrocarbon and benzene containing material should go directly to wastewater treatment tanks. If material has a high concentration of water and no benzene the barrel dump can be utilized. The bundle pit should be used for only washing out trucks and during bundle washing. If the material may contain heavy solids then arrangements should be made to put into vac boxes or material may go directly into wastewater tanks depending on the solid content. Wastewater treatment operators should be notified ahead of time to confirm they are able to take any material to be put into their system.

- ♦ If waste material is flowable (not a petroleum product) and is polycase solid/liquid, the material shall be off-loaded in the designated polycase vacuum roll off for disposal or another tank suited for storing until disposal.

- ♦ If waste material is flowable (not a petroleum product or polycase liquid), the Toledo Refining Company Facility Shift Supervisor must be consulted for disposal instructions. *Note: This type material may include but is not limited to high COD, caustics or acid solutions and may require a drain rate before discharging to wastewater.*

4.1.2 Non-Flowable Wastes (Solids and Semi-Solids)

4.1.2.1 If waste material is non-flowable and the waste is suspect hazardous, Contractor is to contact Toledo Refining Company Environmental for verification as to whether sampling prior to staging and/or disposal is required.

- ♦ If sampling is required, the Contractor or environmental depart will use appropriate SW-846 sampling techniques and acquire the appropriate number of samples. A Toledo Refining Company representative may oversee this process. Refer to Environmental Document No. 213 for guidance on sampling techniques.

  After sampling, the waste is placed in an approved DOT container, labeled as a hazardous waste with the suspected or known waste code(s), and staged in the 90-day hazardous waste storage area until hazardous or non-hazardous determination is made from the laboratory sample results.

- ♦ If sampling is not required and the waste is a hazardous waste the waste is then placed in an approved DOT container, labeled as a hazardous waste with the known waste code(s), and staged on the 90-day hazardous waste storage pad until arrangements are made for appropriate off-site disposal.

4.1.2.2 If waste material is non-flowable and the waste is not suspect hazardous, the waste is solidified for load-bearing strength or free

liquids, if needed, and/or placed in an approved DOT container, labeled non-hazardous, and placed in the non-hazardous waste storage area until arrangements are made for appropriate off-site disposal.

4.1.3 If unsure of the appropriate final disposal site of any waste material, verify with Toledo Refining Company Environmental Department or Facility Shift Supervisor prior to movement or disposal.

4.2 Movement Documentation

4.2.1 All pertinent movement data is to be logged onto the "Toledo Refining Company Internal Waste Tracking Log" by the Contractor. After completion of daily "Toledo Refining Company Internal Waste Tracking Log," Contractor should return completed logs to Toledo Refining Company Environmental at the end of each calendar week.

4.2.2 Additions to the container inventory spreadsheet that is maintained by Contractor must be done after staging is complete.

5.0 Monitoring and Reporting

5.1 Individual tracking information from the "Toledo Refining Company Internal Waste Tracking Log" will be compiled daily by the contractor. Copies of this will be kept in the Environmental Department.

5.2 The "Roll-Off Box Status Report" should be compiled weekly and stored on the "X" drive of the Environmental Department.

6.0 Recordkeeping

Toledo Refining Company Environmental will maintain a copy of the completed "Toledo Refining Company Internal Waste Tracking Log" for a period of five (5) years. Toledo Refining Company will retain the completed "Toledo Refining Company Roll-Off Status Report" for a minimum period of 13 weeks.

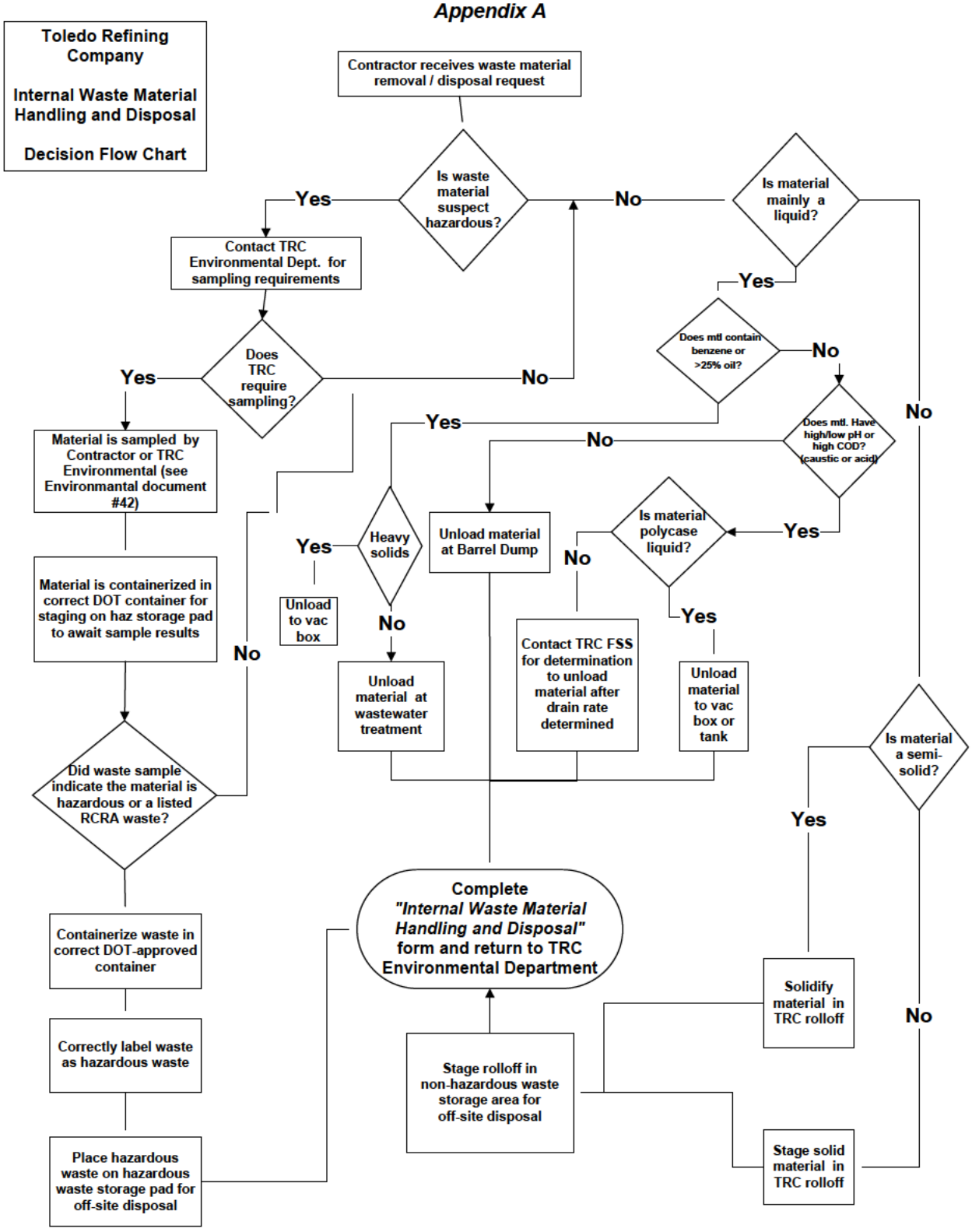
7.0 Records

Revision Log

Revision Date	Document Authorizer	Document Reviewer	Document Author	Revision Details
November 15, 2004	PHanley	PHanley	TNeuhart/SShelt	Fixed flowchart
November 19, 2004	PHanley	PHanley	TNeuhart/SShelt	To section 4.1 and Section 6
April 26, 2005	PHanley	PHanley	TNeuhart/SShelt	To Section 5.0 and 6.0
October 16, 2006	PHanley	Shelt	Shelt	Updated OEMS Info.

October 31, 2006	PHanley	Shelt	Shelt	Updated to include DOT container definition.
October 23, 2008	EMoore	SShelt	SShelt	Changed polycase material handling and Sampling plan document number due to new procedures.
November 1, 2010	E. Moore	S. Shelt	S.Shelt	Removed the 820 tank indication.
August 29, 2012	E. Moore	J. Romp	J. Romp	Updated Off-load points under 4.1.1: Removed TK-510. Changed U.S. Filter Slop Oil Tank to WWTU Slop Oil Tank. M. Rossnagel
November 30, 2012	E. Moore	E. Moore	S. Shelt	Minor wording and flow chart updates
March 22, 2013	E.Moore	E. Moore	S. Shelt	Revised Appendix A and section 4.1 to include wastewater treatment, benzene material, high COD and high/low pH items.

Appendix A


Toledo Refining Company
Internal Waste Material Handling and Disposal
Decision Flow Chart
Contractor receives waste material removal / disposal request
Is waste material suspect hazardous?
Yes
No
Is material mainly a liquid?
Contact TRC Environmental Dept. for sampling requirements
Does TRC require sampling?
Yes
No
Does mtl contain benzene or >25% oil?
Yes
No
Does mtl. Have high/low pH or high COD? (caustic or acid)
Yes
No
Material is sampled by Contractor or TRC Environmental (see Environmantal document #42)
Material is containerized in correct DOT container for staging on haz storage pad to await sample results
Heavy solids
Yes
No
Unload to vac box
Unload material at Barrel Dump
Is material polycase liquid?
Yes
No
Contact TRC FSS for determination to unload material after drain rate determined
Unload material to vac box or tank
Unload material at wastewater treatment
Did waste sample indicate the material is hazardous or a listed RCRA waste?
No
Is material a semi-solid?
Yes
No
Containerize waste in correct DOT-approved container
Correctly label waste as hazardous waste
Place hazardous waste on hazardous waste storage pad for off-site disposal
Complete "Internal Waste Material Handling and Disposal" form and return to TRC Environmental Department
Stage rolloff in non-hazardous waste storage area for off-site disposal
Solidify material in TRC rolloff
Stage solid material in TRC rolloff

Information on Discharge*
Facility: _____

(A) Reporting Party	(B) Suspected Responsible Party
Name:	Name:
Phone:	Phone:
Job Position:	
Company:	Company:
Address:	Organization Type: ☐ Private Citizen ☐ Private Enterprise ☐ Public Utility ☐ Local Government ☐ State Government ☐ Federal Government
City:	City:
State:	State:
Zip:	Zip:
Were materials discharged: ☐ Yes ☐ No	
Calling for Responsible Party: ☐ Yes ☐ No	
Date and Time of report call:	
Other Notifications : ☐ USCG ☐ EPA ☐ State ☐ Other:	

- It is not necessary to wait for all information before calling the National Response Center (NRC) 1-800 424-8802 or direct telephone: 202-267-2675

Incident Description			
Source and /or Cause of incident:			
Date of Incident:	Time of Incident:		
Incident Address/Location Nearest City/Distance from City/Township Range Borough:			
Storage Tank Container: Above Ground: ☐ Below ground: ☐ Other: ☐			
Container capacity (bbls):			
Facility Capacity			
Tank Capacity (bbls):	Latitude:	Longitude:	River Mile:

Information on Discharge*

Facility: _____

Materials	
Material Discharged:	
Quantity in water: (include units)	
Response Action	
Actions Taken to Correct or Mitigate Incident:	
Impact	
Number of Injuries:	Number of Fatalities:
Evacuations required: ☐ Yes ☐ No ☐ Unknown	If Yes: Number Evacuated:
Any Damage: ☐ Yes ☐ No ☐ Unknown	If Yes: Damage in Dollars:
Additional Information	

Toledo Refining Company

Toledo Refinery	***Document Authorizer:*** ***Health, Safety & Security Manager***
Issuing Dept: ***Health & Safety***	***Document Reviewer:*** ***Emergency Response & Security Supervisor***
Revision Date: ***February 18, 2011***	***Document Author:*** ***Emergency Response & Security Administrative Coordinator***
Next Review Date: ***February 18, 2016***	***Document Administrator:*** ***Emergency Response & Security Administrative Coordinator***

INITIAL RESPONSE

ASSIGNMENT

Primary: On-Duty Emergency Response Shift Supervisor

Secondary: On-Duty Senior Fire Marshal/Fire Marshal

The initial Response person is responding quickly to emergencies in (and in close proximity to) the Toledo Refining Company, LLC facilities, including the main refinery, Marine Terminal / Hocking Valley Dock and #2 Tank Farm. This person shall determine the initial actions to be taken to mitigate the emergency.

- Make initial "size up" of the emergency to determine the seriousness and what response is needed from internal personnel and Mutual Aid.
- Make initial set-up of equipment as needed to mitigate the emergency.
- Function as On-Scene Commander until the arrival of the Security Lead or designated relief.
- Utilize 'Incident Command Check Sheet'
    1. Reference note: Check sheet to be reviewed on the same schedule as this procedure.
- At the conclusion of the emergency:
    1. Report "All Clear" to the Dispatcher.
    2. See that all emergency response equipment is returned to the Firehouse and returned to a state of readiness.
    3. Return Fire Water System to state of readiness (firewater pumps, hydrants, monitors, etc.).

EMERGENCY RESPONSE TEAM PERSONNEL

ASSIGNMENT

Primary: Toledo Refining Company, LLC Emergency Response Team Personnel

Secondary: Mutual Aid Personnel

- Emergency Response Team personnel are responsible for carrying out the directives of the On-Scene Commander.
- Report to Refinery Fire Station and don appropriate Personal Protective Equipment for the emergency.
- Proceed to the location identified by the On-Scene Commander.
- Follow directives of On-Scene Commander to mitigate the emergency.
- At the conclusion of the emergency, assist in restoring all emergency response equipment to a ready state.

ON-SCENE COMMANDER

ASSIGNMENT

Primary: Security Lead

Secondary: Emergency Response Shift Supervisor

The On-Scene Commander is responsible for the “field” portion of the Emergency Response.

- Develop tactics for mitigation of the incident.
- Command field Emergency Response.
- Coordinate response with Command Personnel from other responding agencies.
- Maintain close communications and coordination with operations and tactical personnel.
- Maintain close communications with the “Emergency Command Center” and Emergency Manager, with updates on operations, emergency mitigation efforts, environmental impact, possible community impact, etc.
- Utilize cell phone to keep radio traffic to a minimum.
- Assess need for mutual aid/outside assistance

ON SCENE COMMAND POST SCRIBE

ASSIGNMENT

Primary: Process Safety Engineer

Secondary: Environmental Engineer

ROLES / RESPONSIBILITIES

- Immediately respond to Gate 1 for transport to On Scene Command Post (CP).
- Upon arrival at CP, begin transcription of CP communications (radio traffic, face to face discussions, etc.)
- Completion of all necessary Oil Spill Response Forms required
- Can be used by Incident Commander as necessary to facilitate the mitigation of the incident
- Provide situational report to ECC as needed per Incident Commander

EMERGENCY MANAGER

ASSIGNMENT

Primary: Refinery Manager

Secondary: Operations Manager

Tertiary: Area Manager(s)

The Emergency Manager is responsible for incident activities including the development and implementation of strategic decisions and for approving the ordering and releasing of resources.

- Report to Emergency Command Center. (Primary- HR Conference Room, Back-up- Lab Conference Room).
- Obtain incident briefing from On-Scene Commander.
- Activate Emergency Command Center.
- Assess incident situation.
- Activate elements of the Incident Command System as required by incident.
- Coordinate Emergency Command Center staff activity.
- Insure that all regulatory notifications and internal notifications are made by Facility Shift Superintendent or the Environmental Department.
- Depending on Incident, serve as or designate Media Spokesperson.
- Focus on “outside the gate” issues: insurance, neighbors, elected officials, other business groups.
- Get group to brainstorm on-going and/or longer-range issues from incident to work toward resolution of these issues when the immediate situation is handled.
- Ensure that the investigation of the incident is staffed and started.

OIL FLOW OFFICER

ASSIGNMENT

Primary: Planning & Economics Manager

Secondary: Senior Planning & Economics Advisor

- Report to Emergency Command Center (Primary- HR Conference Room, Back-up- Lab Conference Room).
- Obtain briefing from Emergency Manager.
- Assess oil flow impacts of the incident.
- Notify internal and external Supply Chain contacts as appropriate for the incident
- Prepare action plan to address oil flow/business impacts (communicate with the Emergency Manager in the Emergency Command Center).
- Implement Action Plan.
- Monitor incident and adjust action plan as the situation dictates.
- Prepare Economic Impact Assessment for follow-up report.

LIAISON OFFICER

ASSIGNMENT

Primary: Environmental Team Leader

Secondary: Environmental Engineer

The Liaison Officer is responsible for fulfilling requests from the Emergency Manager by providing coordination and appropriate management of all refinery resources.

- Report to Emergency Command Center. (Primary- HR Conference Room, Back-up- Lab Conference Room).
- Obtain briefing from Emergency Manager.
- Provide Primary interface with outside Environmental agencies.
- Assess need for community monitoring, working with Safety officer.
- Notify/update corporate officials as appropriate.
- If the event is an environmental incident only, prepare a one page summary (facts only, in bullet format) covering description, injuries, community impact, business impact, and current status. Send within 24 hours to Refinery Manager and HSE Manager for further distribution.
- Monitor incident operations to identify current or potential organizational problems.

HEALTH and SAFETY OFFICER

ASSIGNMENT

Primary: Health, Safety and Security Team Leader

Secondary: Process Safety Lead

The Safety Officer is responsible for monitoring the HS&S impact of the incident and determining what type of compliance action needs to be taken.

- Report to Emergency Command Center. (Primary- HR Conference Room, Back-up- Lab Conference Room).
- Obtain briefing from Emergency Manager.
- Assess the incident for health and safety impact on response personnel.
- Recommend a course of action to the Emergency Manager.
- Provide liaison between the Emergency Manager and OSHA/Department of Health personnel.
- If the event is an HS&S incident only, prepare a one page summary (facts only, in bullet format) covering description, injuries, community impact, business impact, and current status. Send within 24 hours to Refinery Manager and HSE Manager for further distribution.
- Dispatch appropriate representation to support the field's needs (i.e. Industrial Hygiene, Safety Engineer, security personnel, etc.).
- Liaison between On-Scene Commander and ECC

INFORMATION OFFICER

ASSIGNMENT

Primary: Public Relations

Secondary: Outside Public Relations Firm

The Information Officer is responsible for the formulation and release of information about the incident to the news media and other appropriate agencies and organizations.

- Report to Emergency Command Center. (Primary- HR Conference Room, Back-up- Lab Conference Room).
- Obtain briefing from Emergency Manager.
- Establish Incident Information Center.
- Prepare initial information summary as soon as possible after arrival.
- Obtain approval for release of information from Emergency Manager/Legal.
- Release information to News Media and post information in Emergency Command Center.
- Arrange press conferences with appropriate personnel.
- Respond to special requests for information.
- Stay in touch with News Media.
- Activate insurance claims process.

OPERATIONS FIELD LIAISON

ASSIGNMENT

Primary: Shift Supervisor

Secondary: Shift Supervisor

The Operations Field Liaison is responsible for providing a communications line to Emergency Personnel as to what is happening from an Operations standpoint, and to pass information to Operations Personnel as to Emergency Response activities.

- Report to Emergency (report to the On-Scene Commander).
- Maintain close communications and coordination with Operations and Emergency Response Personnel.

PLANNING OFFICER

ASSIGNMENT

Primary: Technical Manager

Secondary: Technical Support Lead Engineer

The Planning Officer is responsible for the collection, evaluation, dissemination and use of information about the development of the incident and status of resources.

- Report to Emergency Command Center. (Primary- HR Conference Room, Back-up- Lab Conference Room).
- Obtain briefing from Emergency Manager.
- Establish information requirements and reporting schedules for all Incident Command System organizational elements for use in preparing the Incident Action Plan.
- Prepare Incident Action Plan based on strategic and tactical options.
- Identify need for specialized resources. Assemble information of alternative strategies and tactics based on interface with On-Scene Command, Incident Potential, and other incident Command System information.
- Compile and display incident status summary information.
- Prepare recommendations for release of resources for review with the Emergency Manager.

LOGISTICS OFFICER

ASSIGNMENT

Primary: Maintenance Manager

Secondary: Projects and Reliability Manager

The Logistics Officer is responsible for providing facilities, services, and material in support of the incident response.

- Report to Emergency Command Center. (Primary- HR Conference Room, Back-up- Lab Conference Room).
- Obtain briefing from Emergency Manager.
- Identify service and support requirements for planned or expected operations.
- Coordinate and process requests for additional resources.
- Advise Emergency Manager on current service and support capabilities.
- Estimate future service and support requests.

RECORDING OFFICER

ASSIGNMENT

Primary: Human Resources Manager

Secondary: Human Resources Advisor (Services)

The Recording/Finance Officer is responsible for maintaining accurate and complete incident file records. The Recording/Finance Officer is also responsible for all financial and cost analysis aspects of the incident. This position should be heavily involved in the development and implementation of the Incident Action Plan.

- Report to Emergency Command Center. (Primary- HR Conference Room, Back-up- Lab Conference Room).
- Obtain briefing from Emergency Manager.
- Track status of all requests made to Emergency Command Center.
- Maintain Activity Log in chronological order.
- Provide Emergency Manager with status reports.
- Distribute information as needed.
- Compile notes and deliver to Emergency Manager after the incident.
- Establish finance unit in Main Office Building.
- Develop an operation plan for the finance function for the incident.
- Provide input on financial on cost matters.
- Insure that all financial obligation documents initiated at the incident are properly prepared and completed.

MATERIALS MANAGEMENT OFFICER

ASSIGNMENT

Primary: Purchasing Lead

Secondary: Purchasing Specialist

The Materials Management officer is responsible for providing facilities, services, and material in support of the incident response.

- Report to Emergency Command Center. (HR onsite incidents, Laboratory back-up location or designated off-site center).
- Obtain briefing from Emergency Manager.
- Assist Logistics Officer to obtain the required service and support for planned or expected operations.
- Assist with work orders, purchase orders, material tracking and contract services for additional resources.
- Assist Financial Officer with tracking costs of materials consumed.
- Ensure that Oil Spill Response Organization (OSRO) contracts are up-to-date.
- Ensure that agreements are in place and up-to-date for assistance such as vacuum trucks, baker tanks, etc…. in the event of a large incident.
    - Establish finance unit in Main Office Building.
    - Develop an operation plan for the finance function for the incident.
    - Provide input on financial on cost matters.
    - Insure that all financial obligation documents initiated at the incident are properly prepared and completed.

Revision Log

Revision Date	Document Authorizer	Document Reviewer	Document Author	Revision Details
10/25/02	P. Hanley	E. Dunberger	J. Utendorf	Intial Version
8/23/04				Added OEMS information
10/9/05	H. Szymanski	E. Dunberger	J. Utendorf	1. Changed review date to reflect annual review 2. Added role of Materials Management Officer
7/10/06	H. Szymanski	E. Dunberger	J. Utendorf	Changed 'Facility Manager' to 'Operations Manager'
3/28/07	H. Szymanski	E. Dunberger	J. Utendorf	Added Underlined text to 'Initial Response' page, made minor formatting corrections.
3/31/08	R. Vogel	E. Dunberger	J. Utendorf	Emergency Manager Primary, Secondary and Tertiary changed. Safety Officer secondary changed. Materials Management Officer secondary changed. Recording/Finance Officer secondary changed. Logistics Officer secondary changed. Safety and Liaison Officers reporting criteria updated. Corrected minor typos.
10/16/09	R. Vogel	E. Dunberger	K. Dempsey	Updated per revised FRP and staff restructuring.
3/17/11	R. Vogel	E. Dunberger	K. Dempsey	Updated document to reflect change of facility ownership. Added role of On Scene Command Post Scribe

APPENDIX G

MISCELLANEOUS FORMS

Page

Qualified Individual (QI) Notification Exercise - Internal Exercise Documentation G-2

Team Tabletop Exercise - Internal Exercise Documentation G-3

Equipment Deployment Exercise - Internal Exercise Documentation G-4

Discharge Prevention Meeting Log (Sample) G-5

Tank Inspection Checklist G-6

Secondary Containment Inspection Checklist G-7

Forms and Exercise Documentation File Maintenance Procedures

- Forms and exercise documentation records should be maintained in a separate file in the Facility's office filing system.
- These files must be available for presentation upon request by regulatory agency personnel.
- Facility also utilizes Coast Guard Incident Action Plan forms such as ICS201, ICS208, etc. Forms available on the Coast Guard Internet site.

Qualified Individuals (QIs) Notification Exercise
Procedure No. 77

Toledo Refinery – Health, Safety & Security Department

Qualified Individuals Notification Test			
Dispatcher Name:		**Time Text Message was Sent on the Phone System?**	
Emergency Response Shift Supervisor:		**Date of Test:**	

Qualified Individuals Notified	Time QI Called the Dispatcher	Comments
1. Elmer Dunberger		
2. Keith Dempsey		
3. Edward Donnelly		
4. Philip Wojcinski		
5.		

Note: It is not a requirement that 100% of the QI's return the call. Only the QI on call or a delegate is required to be available. This checklist documents that Toledo Refining Company, LLC has tested the system.

Records: Health, Safety & Security Department maintains original for 5 years.
HSE Manager receives copy.
Security Lead receives copy.

Reference Document for this record is Health, Safety & Security Procedure 76.

Spill Management Team Tabletop Exercise
Internal Exercise Documentation
Procedure No. 82

Table Top Exercise

1. Date Performed:			2a. Exercise or Actual Response:	
3. Location:			2b. If Exercise, Announced or Unannounced:	
4. Times:	Start Time:		5. Response plan scenario used simulated ☐ Average most probable discharge (gallons) ☐ Maximum most probable discharge _____ ☐ Worst case discharge	Size of Discharge
	Completion Time:			
6. Preplanned Objective No. 1:				
7. Preplanned Objective No. 2:				
8. Preplanned Objective No. 3:				
9. Preplanned Objective No.4:				
10. Preplanned Objective No.5:				
11. Lessons Learned/Corrective Action Items assigned (if necessary):				

Retain this form and other documentation related to this exercise on file for a period of 5 years.

_____

Certifying Signature - Incident Commander

Equipment Deployment Exercise (Semiannual)
Internal Exercise Documentation Form
Procedure No. 80

Equipment Deployment

1. Date Performed:			2a. Exercise or Actual Response:		
3. Deployment Location:			2b. If Exercise, Announced or Unannounced:		
4. Times:	Start Time:		5. Equipment Deployed was; (check all that apply)	☐ Facility Owned	☐ OSRO Owned
	Time OSRO called:		6. List Type and amount of all equipment deployed and number of support personnel employed:		
	Time On-scene:				
	Time boom deployed:				
	Time recovery equipment on-scene				
	Time Completed				

7. Describe goals of the deployment (Attach sketch of equipment deployments and booming strategies):
8. For deployment of facility owned equipment, was the amount of equipment deployed at least the amount necessary to respond to your facility's average most probable spill and deployed in the intended operating environment.
9. Did personnel responsible for its deployment in the event of an actual spill deploy the equipment?
☐ YES or ☐ NO.
10. Was all deployed equipment operational? If not, why not?
☐ YES or ☐ NO.
IF NO:
11. Identify which of the 15 core components were exercised during this particular exercise:
12. Lessons Learned/Corrective Action Items assigned (if necessary):

_____

Certifying Signature - Incident Commander

SAMPLE

DISCHARGE PREVENTION MEETING LOG

Date:	
Attendees:	

Subject/Issue	Required Action	Implementation

Tank Inspection Checklist

Monthly Aboveground Storage Tank Inspection Report

☐ External Floater (EFR) ☐ Internal Floater (IFR) ☐ Cone ☐ Other

Location:	Tank Status:	Tank Number:
Inspected By:	(INITIAL)	Date of Inspection:
Assess the condition of the following items:		**Remarks for "UNSAT" comments**
Ladders, Stairways, Platforms, and Walkways: - Corrosion ☐ N/A ☐ SAT ☐ UNSAT - Broken or missing parts ☐ N/A ☐ SAT ☐ UNSAT - Cracked, spalled or deteriorated concrete ☐ N/A ☐ SAT ☐ UNSAT - Area lighting ☐ N/A ☐ SAT ☐ UNSAT		
Foundations: - Build up or erosion of soil around tank bottom ☐ N/A ☐ SAT ☐ UNSAT - Excessive settlement of one side of the tank ☐ N/A ☐ SAT ☐ UNSAT - Cracked, spalled or deteriorated ringwall ☐ N/A ☐ SAT ☐ UNSAT - For tanks on concrete foundation – tank grounding ☐ N/A ☐ SAT ☐ UNSAT		
Piping & Shell Connections i.e. nozzles, MWs, mixers, steam traps and valves: - Cracks ☐ N/A ☐ SAT ☐ UNSAT Corrosion ☐ N/A ☐ SAT ☐ UNSAT - Distortions ☐ N/A ☐ SAT ☐ UNSAT Leakage ☐ N/A ☐ SAT ☐ UNSAT - Grounding connections ☐ N/A ☐ SAT ☐ UNSAT - Do all applicable vents, drains and bleeders have plugs? ☐ N/A ☐ YES ☐ NO		
Tank, Shell, Roof and Bottom: - Leaks (including spills and overfills) ☐ N/A ☐ SAT ☐ UNSAT - Visual inspection of under bottom leak detection ☐ N/A ☐ SAT ☐ UNSAT - Corrosion ☐ N/A ☐ SAT ☐ UNSAT - Cracks ☐ N/A ☐ SAT ☐ UNSAT Bulges ☐ N/A ☐ SAT ☐ UNSAT - Labels (DOT Diamond, Tank No., Shell Nozzles, etc) ☐ N/A ☐ SAT ☐ UNSAT - Gauge hatch - operational/fully functional ☐ N/A ☐ SAT ☐ UNSAT - gasket in place and in good condition ☐ N/A ☐ SAT ☐ UNSAT - secured tightly closed ☐ N/A ☐ SAT ☐ UNSAT - (IFR/Cone) Access/Inspection hatches closed ☐ N/A ☐ SAT ☐ UNSAT Vent hoods closed ☐ N/A ☐ SAT ☐ UNSAT - (IFR) Access hatch accessible? ☐ N/A ☐ YES ☐ NO If yes, open roof access hatch and inspect for visible openings, oil & visible seal defects ☐ N/A ☐ SAT ☐ UNSAT - (IFR/EFR) Product level above minimum fill ☐ N/A ☐ SAT ☐ UNSAT - (EFR) Roof free of oil ☐ N/A ☐ SAT ☐ UNSAT Vacuum Breaker(s) closed ☐ N/A ☐ SAT ☐ UNSAT Rim Seals - No visible gaps or defects ☐ N/A ☐ SAT ☐ UNSAT Rim Vents closed ☐ N/A ☐ SAT ☐ UNSAT Gauge Tube Emission Control ☐ N/A ☐ SAT ☐ UNSAT Floating Roof ladder and ground cables ☐ N/A ☐ SAT ☐ UNSAT All other openings in Floating Roof closed ☐ N/A ☐ SAT ☐ UNSAT Roof drain working and normally closed ☐ N/A ☐ SAT ☐ UNSAT		
Dikes: ☐ This Section N/A - Access. ☐ N/A ☐ SAT ☐ UNSAT Clear of weeds, etc ☐ N/A ☐ SAT ☐ UNSAT - Erosion ☐ N/A ☐ SAT ☐ UNSAT Housekeeping ☐ N/A ☐ SAT ☐ UNSAT - Cracks in masonry fire walls ☐ N/A ☐ SAT ☐ UNSAT - No openings in the dike wall ☐ N/A ☐ SAT ☐ UNSAT - Pipe intrusions through the dike wall sealed ☐ N/A ☐ SAT ☐ UNSAT - Drainage and general condition ☐ N/A ☐ SAT ☐ UNSAT - Any accumulation of water? Hydrocarbon? ☐ N/A ☐ SAT ☐ UNSAT - Drain valve operated and okay ☐ N/A ☐ SAT ☐ UNSAT - Drain valve secured in the closed position ☐ N/A ☐ SAT ☐ UNSAT - No open excavations in dike area ☐ N/A ☐ SAT ☐ UNSAT		
Tk Gauges: Auto ☐ N/A ☐ SAT ☐ UNSAT Board ☐ N/A ☐ SAT ☐ UNSAT		
Independent High Level Alarm Test (pull lever): - HH Alarm ☐ N/A ☐ SAT ☐ UNSAT 2nd Alarm ☐ N/A ☐ SAT ☐ UNSAT		
General Comments: ☐ SAT ☐ UNSAT		

ATG Gauge _____ Secondary Gauge _____ Hand Gauge _____ Board Gauge _____ Water Cut _____

Computer Gauge _____ Hand Temp _____ Local Temp _____ Auto Temp _____

Submit completed form to Operations' Supervision — FORM: Monthly AST Inspection Report, Last Rev. 4/23/2009

Paper copies are uncontrolled; latest copy can be obtained from TDMS. — Date Printed: 3/24/2011

Secondary Containment Inspection

Secondary Containment Checklist				
Inspected by:	**Date:**			**Asset No.:**
Inspection Items	**YES**	**NO**	**NA**	**Remarks**
Dike or Berm System				
1. Is there any precipitation in the dike that needs to be drained?	☐	☐	☐	
2. Is there anything wrong with the functionality of the drainage valves?	☐	☐	☐	
3. Are there holes or cracks in the dike or berm?	☐	☐	☐	
Is Condition Present				
Inspection Item	YES	NO	NA	Remarks
Dike or Berm Systems				
1. Is debris present in the d ke/berm?	☐	☐	☐	
2. Is there erosion of earthen dike/berm system?	☐	☐	☐	
3. Is there any discoloration due to oil?	☐	☐	☐	
4. Is there any spilled or leaked material inside the d ke/berm?	☐	☐	☐	
Oil Bearing Sewer Containment Systems				
1. Is debris present that prevents proper sewer flow or causes sewer to backup?	☐	☐	☐	
2. Is spilled or leaking material present?	☐	☐	☐	
Note: If the answer to any of the questions is "Yes", a corrective action item should be entered in the tracking system.				

Records: Environmental Department keeps a copy for 5 years.

APPENDIX I

EVACUATION PLAN

Evacuation Plan I-2

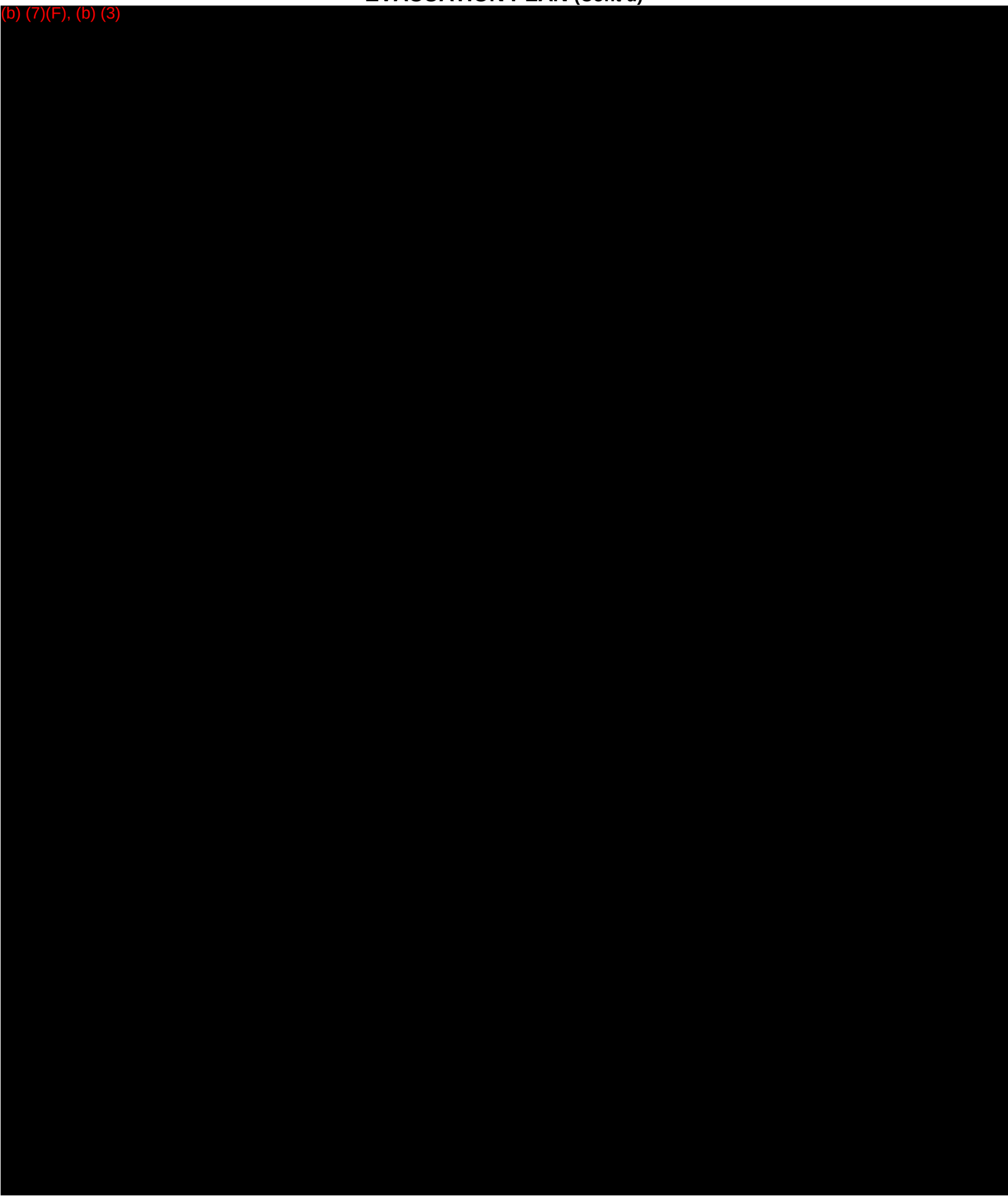
EVACUATION PLAN

(b) (7)(F), (b) (3)

[redacted]

EVACUATION PLAN (Cont'd)

(b) (7)(F), (b) (3)



EVACUATION PLAN (Cont'd)

(b) (7)(F), (b) (3)

[redacted]

SPILL RESPONSE CONTRACT CERTIFICATION

National Response Corporation (NRC) certifies that has **PBF Holding Co., LLC and Toledo Refining Company LLC** "ensured, by contract or other approved means, the availability of private personnel and equipment necessary to respond, to the maximum extent practicable, to a worst case or medium case discharge" for the below named Facilities. NRC agrees that the Client has the right to name NRC and its resources, including those within its Independent Contractor Network (ICN) for Oil Pollution Act of 1990 (OPA) coverage for the below named Facilities. NRC has filed its Spill Response Plan Appendix with the U.S. Coast Guard, and that the Client is authorized to reference this Appendix in their Facility Response Plan. This Appendix presently covers all ports in the U.S. East, West and Gulf Coasts, Great Lakes and the U.S. Caribbean. NRC reserves the right to rescind this authorization in the event of termination of its contractual arrangements with the Facilities.

Entered Facilities:

Toledo Refining Company LLC Refinery Operations
Toledo Refining Company LLC Terminal Operations
Toledo Refining Company LLC Dock Operations
Toledo Refining Company LLC Pipeline Operations

Acknowledged by: Date: **April 25, 2014**

National Response Corporation

_____
President

February, 2014
PREP Credit Report

Dear Client:

Please find attached the - ***NRC 2013 Annual Preparedness for Response Exercise Program (PREP) Equipment Deployment Summary Report*** (Attachment A) for review and retention with an accompanying Letter of Attestation (Attachment B). This report documents OSRO equipment deployment exercise information in compliance with the National Preparedness for Response Exercise Program (PREP) Guidelines for reportable and evaluated on-water equipment deployments during exercises, training and actual spill responses. It provides information necessary for your OSRO equipment deployment credit for the 2013 calendar year.

This report documents deployment of the various types of skimming systems and boom that NRC owns or controls for classification purposes. It includes equipment aboard our Oil Spill Response Vessels and at Independent Contractor Network (ICN) facilities dispersed throughout the various Captain of the Port zones. The information categories include:

COTP ZONE - The COTP Zone in which the response equipment was deployed
LOCATION - The geographical location (city/state) in which the equipment was deployed.
SKIMMING EQUIPMENT - Each type of skimmer in the NRC owned or controlled equipment Inventory. A numeric figure in the columns for each type of skimmer indicates the number of times that personnel at a particular facility or Vessel have activated and deployed this type of skimming system in the water.
BOOM EQUIPMENT - The type and amount of boom deployed by personnel assigned to a particular facility and vessel.

Each Independent Contractor Network (ICN) Participant facility, of which there are over one hundred, has an active file that feeds data to the Summary Report.

NRC's dispersant program includes access to 6 spray aircraft throughout the US, such as DC-4's and a DC-6. NRC conducts dispersant aircraft training through internal exercises on a routine basis.

ICN facility equipment deployment records are held at each facility and at NRC Headquarters in Great River, NY. These internal historical records identify each equipment deployment occurrence by:

- NRC Control No.
- Date of deployment
- Event description - actual spill incident, equipment training or exercise
- Type of environment - sheltered , protected or unsheltered
- Type of skimming system deployed
- Type and quantity of boom deployed

If you have any questions regarding this report, contact Christopher Eilers at 631.328.2517. Please ensure individuals responsible for the PREP program in your organization receive this report. If you would like additional copies they are located on our Web site, which is www.nrcc.com under the client access portion. Widest dissemination of this document is encouraged.

Sincerely,

Steven A. Candito
President

Regional Breakdown

Northeast Region
Regional Manager: John Hielscher
3500 Sunrise Highway, Great River, NY 11739
(631)328-2524 Office
(b) (6) Mobile
States Covered:
Indiana, Michigan, Ohio, New York, Pennsylvania, Maryland, Delaware, New Jersey, Connecticut, Vermont, Massachusetts, Rhode Island, New Hampshire, Maine, West Virginia, Virginia

South Region
Regional Manager: John Robinson
17350 State Highway 249 – Suite 355, Houston, TX 77064
(713)965-4165 Office
(b) (6) Mobile
States Covered:
Texas, Louisiana, Arkansas, Oklahoma, Kansas, Nebraska, Colorado, New Mexico, Mississippi, Alabama

Southeast Region
Regional Manager: Jason DeSantis
104 River Lane, Ormond Beach, FL 32176
(386)441-7719 Office
(b) (6) Mobile
States Covered:
Kentucky, Tennessee, North Carolina, South Carolina, Georgia, Florida, Missouri, Illinois, Iowa, Minnesota, Wisconsin

Pacific Northwest Region
Regional Manager: Bart Dodson
9520 10th AVE, Seattle, WA 98108
(206)607-3010 Office
(b) (6) Mobile
States Covered: Washington, Oregon, Idaho, Montana, Wyoming, Hawaii, North Dakota, South Dakota

West Region
VP/General Manager: Todd Roloff
1805 Ferry Point Road, Alameda, CA 94501
(510)749-4121 Office
(b) (6) Mobile
States Covered: California, Nevada, Utah, Arizona

Caribbean Region
Regional Manager: David Aviles
P.O. Box 9022750, San Juan, PR 00902
(787)789-2000 Office
(b) (6) Mobile
Islands Covered: Puerto Rico, St. Thomas, St. Croix, St. Lucia

Aruba
Regional Manager: James Haeghaert
Bungalow 251, First Ave., Seroe Colorado, San Nicholas, Aruba
Islands Covered: Aruba

2013 ANNUAL PREP EQUIPMENT DEPLOYMENT SUMMARY

NRC USCG OSRO # 0016

Attachment A

Date	COTP Zone	Contractor Name	Location	Boom 6"-18"	Boom 19"-42"	Skimmer Drum, Brush,	Skimmer Floating Suction	Skimmer Belt	Skimmer Rope	Region
1/1/2013	Pittsburgh	McCutcheon Enterprise	Apollo, PA	2400'						Northeast
1/6/2013	Baltimore	Miller Environmental Group	Baltimore, MD	400'		1				Northeast
1/11/2013	Delaware Bay	Miller Environmental Group	Philadelphia, PA	400'		1				Northeast
1/14/2013	New York	Miller Environmental Group	Staten Island, NY	13600'		8				Northeast
1/27/2013	New York	Miller Environmental Group	Astoria, NY	1000'						Northeast
2/4/2013	Delaware Bay	Miller Environmental Group	Milford, DE	400'			2			Northeast
2/11/2013	New York	Miller Environmental Group	Newburgh, NY	1800'						Northeast
2/26/2013	Delaware Bay	Miller Environmental Group	Marcus Hook, PA	1500'		1				Northeast
2/28/2013	Long Island Sound	Miller Environmental Group	Long Island, NY	2000'	2000'					Northeast
3/16/2013	New York	Miller Environmental Group	Astoria, NY	1000'						Northeast
3/18/2013	Boston	National Response Corporation	Boston, MA	1000'		1				Northeast
3/20/2013	Baltimore	Miller Environmental Group	Baltimore, MD	1000'		1				Northeast
3/20/2013	Boston	Boston Line Service	Revere, MA	1500'						Northeast
3/21/2013	Southeastern New England	Moran Environmental Recovery	Buzzards Bay, MA	1300'		1				Northeast
4/4/2013	New York	Miller Environmental Group	Lawrence, NY	1000'						Northeast
4/10/2013	Boston	Boston Line Service	Boston, MA	1000'						Northeast
4/10/2013	Ohio Valley	National Response Corporation	Cincinnati, OH			1				Northeast
4/19/2013	Long Island Sound	Miller Environmental Group	Port Jefferson, NY	100'						Northeast
4/25/2013	Southeastern New England	Coast Line Service	Providence, RI	1500'						Northeast
5/4/2013	Baltimore	Miller Environmental Group	Baltimore, MD	1000'		1				Northeast
5/9/2013	New York	Miller Environmental Group	Gowanus, NY	200'						Northeast
5/10/2013	Southeastern New England	Moran Environmental Recovery	Woodshole, MA	1100'		1				Northeast
5/15/2013	Pittsburgh	National Response Corporation	Apollo, PA	100'		1				Northeast
5/25/2013	Delaware Bay	Moran Environmental Recovery	Delaware, DE	900'			1			Northeast
6/3/2013	New York	Moran Environmental Recovery	New York, NY	1000'			1			Northeast
6/5/2013	Buffalo	National Response Corporation	Buffalo, NY	1000'		1				Northeast
6/12/2013	Boston	Boston Line Service	East Boston, MA	1000'						Northeast
6/12/2013	Southeastern New England	Coast Line Service	Providence, RI	1000'						Northeast
6/19/2013	Boston	Boston Line Service	East Boston, MA	1000'						Northeast
6/20/2013	Northern New England	National Response Corporation	Bangor, ME	1000'		1				Northeast
6/20/2013	Southeastern New England	Coast Line Service	Providence, RI	1600'						Northeast
6/22/2013	Boston	Boston Line Service	Deer Island, MA	1000'						Northeast
6/26/2013	Ohio Valley	Evergreen Environmental	Ohio River	400'						Northeast
7/8/2013	Hampton Roads	Moran Environmental Recovery	Chesapeake Bay, VA	1800'		1				Northeast
7/11/2013	Ohio Valley	Evergreen Environmental	Ohio River Kramers Lane	900'						Northeast
7/11/2013	Sault Ste. Marie	National Response Corporation	Rogers City, MI	2000'		2				Northeast
7/16/2013	Hampton Roads	Moran Environmental Recovery	Portsmouth, VA	200						Northeast
7/17/2013	Delaware Bay	Miller Environmental Group	Pennsauken, NJ	2000'			1			Northeast

Date	COTP Zone	Contractor Name	Location	Boom 6"-18"	Boom 19"-42"	Skimmer Drum, Brush,	Skimmer Floating Suction	Skimmer Belt	Skimmer Rope	Region
8/3/2013	Upper Mississippi Rive	Evergreen Environmental	Evansville, IN	400'						Northeast
8/5/2013	New York	National Response Corporation	Staten Island, NY					1		Northeast
8/8/2013	Baltimore	Miller Environmental Group	Baltimore, MD	1000'		1				Northeast
8/8/2013	Delaware Bay	Miller Environmental Group	Paulsboro, NJ	1500'		1				Northeast
8/8/2013	New York	Moran Environmental Recovery	New York, NY	1000'		1				Northeast
8/13/2013	Upper Mississippi Rive	National Response Corporation	Beulah, ND	500'		1				Northeast
8/28/2013	Delaware Bay	Miller Environmental Group	Delaware City, DE	1200'		2	2			Northeast
9/2/2013	Delaware Bay	Miller Environmental Group	Delaware City, DE	600'		2	2			Northeast
9/4/2013	New York	Miller Environmental Group	Staten Island, NY	500'						Northeast
9/7/2013	Hampton Roads	National Response Corporation	Norfolk, VA	1000'		1				Northeast
9/11/2013	Boston	Boston Line Service	Everett, MA	1000'						Northeast
9/12/2013	Boston	Boston Line Service	Chelsea, MA	1000'						Northeast
9/13/2013	New York	Miller Environmental Group	Staten Island, NY	2000'						Northeast
9/13/2013	Upper Mississippi Rive	Summit Environmental	Evansville, IN	600'	500'	2				Northeast
9/15/2013	New York	Miller Environmental Group	Staten Island, NY	3600'		1				Northeast
9/16/2013	New York	National Response Corporation	New York, NY		200'			1	1	Northeast
9/24/2013	Delaware Bay	Miller Environmental Group	Marcus Hook, PA	1500'		1				Northeast
9/25/2013	Ohio Valley	Evergreen Environmental	Ohio River Greenwood Boat Ramp	500'		1				Northeast
9/26/2013	Southeastern New England	Coast Line Service	Providence, RI	1500'						Northeast
9/29/2013	Upper Mississippi Rive	Summit Environmental	Evansville, IN	1000'		2				Northeast
10/2/2013	New York	Miller Environmental Group	Newburgh, NY	1800'						Northeast
10/7/2013	Baltimore	Miller Environmental Group	Salisbury, MD	1000'						Northeast
10/8/2013	Upper Mississippi Rive	Summit Environmental	Evansville, IN	1000'		1				Northeast
10/9/2013	Baltimore	Miller Environmental Group	Baltimore, MD	200'						Northeast
10/9/2013	New York	Miller Environmental Group	Haverstraw, NY	1300'						Northeast
10/17/2013	Long Island Sound	Miller Environmental Group	Riverhead, NY	1000'						Northeast
10/22/2013	Upper Mississippi Rive	Summit Environmental	Evansville, IN	1000'		1				Northeast
10/23/2013	Delaware Bay	Miller Environmental Group	Philadelphia, PA	1000'			1			Northeast
10/24/2013	Delaware Bay	Miller Environmental Group	Wilmington, DE	600'						Northeast
10/29/2013	Delaware Bay	Miller Environmental Group	Wilmington, DE	200'						Northeast
10/29/2013	Delaware Bay	Moran Environmental Recovery	Philadelphia, PA	1100'			1			Northeast
11/11/2013	Southeastern New England	Coast Line Service	Providence, RI	1000'						Northeast
11/12/2013	Boston	Boston Line Service	Everett, MA	1500'						Northeast
11/12/2013	New York	Miller Environmental Group	Newburgh, NY	2000'						Northeast
11/25/2013	Southeastern New England	Coast Line Service	Providence, RI	1000'						Northeast
11/26/2013	Southeastern New England	Coast Line Service	Providence, RI	1200'						Northeast
12/13/2013	Boston	Boston Line Service	Quincy, MA	1000'						Northeast
12/18/2013	Boston	Boston Line Service	East Boston, MA	1000'						Northeast
12/31/2013	New York	National Response Corporation	Staten Island, NY						1	Northeast
2/28/2013	Puget Sound	National Response Corporation	Nea Bay, WA			1				Northwest
4/11/2013	Portland	National Response Corporation	Columbia River, WA				1			Northwest
5/11/2013	Puget Sound	National Response Corporation	San Juans, WA	1000'						Northwest
6/5/2013	Puget Sound	National Response Corporation	Woodinville, WA				1			Northwest

Date	COTP Zone	Contractor Name	Location	Boom 6"-18"	Boom 19"-42"	Skimmer Drum, Brush,	Skimmer Floating Suction	Skimmer Belt	Skimmer Rope	Region
8/23/2013	Puget Sound	Moran Environmental Recovery	Renton, WA	300'		1				Northwest
8/31/2013	Puget Sound	National Response Corporation	Ferndale, WA			1				Northwest
9/17/2013	Puget Sound	National Response Corporation	Seattle, WA			1				Northwest
9/30/2013	Puget Sound	National Response Corporation	Seattle, WA	400'		1				Northwest
10/2/2013	Puget Sound	Moran Environmental Recovery	Eagle Harbor, WA	1100'		1				Northwest
11/8/2013	Puget Sound	National Response Corporation	Port Townsend, WA	200'						Northwest
12/2/2013	Puget Sound	National Response Corporation	Imperium, WA					1		Northwest
1/22/2013	San Juan	National Response Corporation	Guayanilla Bay			1		1		PR/ USVI
1/31/2013	San Juan	Caribbean Enviromarine Services	Pier 1, San Juan		2000'		1			PR/ USVI
5/20/2013	San Juan	National Response Corporation	Cul de Sac Bay St. Lucia				3			PR/ USVI
11/18/2013	San Juan	National Response Corporation	St. Thomas, USVI	3000'		3	3	1	1	PR/ USVI
11/18/2013	San Juan	National Response Corporation	St. Thomas		1000'	1				PR/ USVI
11/18/2013	San Juan	National Response Corporation	VIWAPA Facility St. Croix		1000'	1				PR/ USVI
11/19/2013	San Juan	National Response Corporation	Yabacoa Bay		1000'	1	1		1	PR/ USVI
11/20/2013	San Juan	Caribbean Enviromarine Services	Yabucoa Marine Terminal	1000'					1	PR/ USVI
1/4/2013	New Orleans	OMI Environmental Solutions	Venice, LA	400'						South
1/5/2013	New Orleans	OMI Environmental Solutions	Gretna, LA	400'						South
1/7/2013	Morgan City	OMI Environmental Solutions	Weeks Island, LA	300'						South
1/19/2013	Morgan City	OMI Environmental Solutions	Concordia, LA	600'						South
1/27/2013	Lower Mississippi River	USES	Vicksburg, MS	5000'		4				South
2/27/2013	Mobile	SWS	Decatur, AL	800'						South
3/8/2013	Mobile	Oil Recovery Company	Mobile, AL	1500'						South
3/16/2013	Morgan City	National Response Corporation	Grand Isle, LA		2000'	1				South
4/7/2013	Corpus Christi	Miller Environmental Services	Ingleside, TX	900'						South
4/27/2013	Corpus Christi	Miller Environmental Services	Ingleside, TX	900'						South
5/1/2013	Corpus Christi	Miller Environmental Services	Ingleside, TX	500'						South
5/1/2013	Corpus Christi	Miller Environmental Services	Ingleside, TX	500'						South
5/2/2013	Port Arthur	OMI Environmental Solutions	Port Arthur, TX	400						South
5/11/2013	Port Arthur	OMI Environmental Solutions	Beaumont, TX	400'						South
5/15/2013	Corpus Christi	Miller Environmental Services	Corpus Christi, TX	1800'			1			South
5/15/2013	Corpus Christi	Miller Environmental Services	Corpus Christi, TX	1800'						South
5/17/2013	Mobile	Oil Recovery Company	Mobile, AL	900'						South
6/5/2013	Houston Galveston	National Response Corporation	Galveston, TX	100'				1	1	South
6/5/2013	Houston Galveston	National Response Corporation	Galveston, TX		1100'			1	1	South

Date	COTP Zone	Contractor Name	Location	Boom 6"-18"	Boom 19"-42"	Skimmer Drum, Brush,	Skimmer Floating Suction	Skimmer Belt	Skimmer Rope	Region
6/10/2013	Mobile	Oil Recovery Company	Mobile, AL	1200'						South
6/18/2013	Morgan City	National Response Corporation	Grand Isle, LA		200'	1				South
6/26/2013	Corpus Christi	National Response Corporation	Corpus Christi, TX			1			2	South
6/26/2013	Houston Galveston	National Response Corporation	Galveston, TX	1100'				1	1	South
6/26/2013	Houston Galveston	National Response Corporation	Galveston, TX		1100'			1	1	South
7/28/2013	Morgan City	National Response Corporation	Grand Isle, LA			1				South
7/30/2013	Corpus Christi	National Response Corporation	Corpus Christi, TX		1200'			1		South
8/1/2013	Corpus Christi	Miller Environmental Services	Aransas Pass, TX	200'						South
8/5/2013	Houston Galveston	OMI Environmental Solutions	LaPorte, TX	1600'						South
8/23/2013	Morgan City	National Response Corporation	Grand Isle, LA		2100'	1				South
8/28/2013	Corpus Christi	National Response Corporation	Corpus Christi, TX		100'					South
8/28/2013	Morgan City	National Response Corporation	Grand Isle, LA	300'		1				South
9/9/2013	Corpus Christi	Miller Environmental Services	Ingleside, TX	1500'						South
9/9/2013	Corpus Christi	Miller Environmental Services	Ingleside, TX	1500'						South
9/11/2013	Houston Galveston	National Response Corporation	Galveston, TX		400'			1	1	South
9/11/2013	New Orleans	OMI Environmental Solutions	Plaquemine, LA	500'			1			South
9/23/2013	Port Arthur	OMI Environmental Solutions	Lake Arthur, LA	100'						South
9/27/2013	Corpus Christi	National Response Corporation	Corpus Christi, TX						2	South
10/15/2013	Corpus Christi	National Response Corporation	Cotulla, TX	1000'		1				South
11/16/2013	Morgan City	OMI Environmental Solutions	Patterson, LA	500'		1				South
11/21/2013	Port Arthur	OMI Environmental Solutions	Cameron, LA	500'						South
11/27/2013	Morgan City	OMI Environmental Solutions	Intracoastal, LA	200'						South
12/4/2013	St. Petersburg	National Response Corporation	Tampa, FL			1				South
12/16/2013	Morgan City	OMI Environmental Solutions	Fourchon, LA	660'						South
12/18/2013	Corpus Christi	National Response Corporation	Corpus Christi, TX			1			2	South
1/5/2013	Mobile	Oil Recovery Company	Mobile, AL	1000'						South
1/30/2013	Corpus Christi	National Response Corporation	Corpus Christi, TX			1		1	2	South
2/8/2013	Port Arthur	Clean Harbors	Port Arthur, TX	1000'						South
3/19/2013	Mobile	National Response Corporation	Mobile, AL				1	1		South
4/23/2013	Morgan City	National Response Corporation	Grand Isle, LA			1				South
8/1/2013	Corpus Christi	Miller Environmental Services	Aransas Pass, TX	200'						South
8/9/2013	Corpus Christi	National Response Corporation	Aransas Pass, TX		1400'					South
8/26/2013	Mobile	SWS	Mobile, AL	1000'						South
12/16/2013	Port Arthur	Clean Harbors	Port Arthur, TX	1000'						South
1/29/2013	St. Petersburg	SWS	St. Petersburg, FL	1200'						Southeast
2/10/2013	St. Petersburg	SWS	St. Petersburg, FL	1200'						Southeast
2/14/2013	St. Petersburg	Moran Environmental Recovery	St. Johns River, FL	1000'		1	1			Southeast
2/16/2013	Miami	CBI	Ft. Lauderdale, FL	1800'						Southeast
2/20/2013	Charleston	National Response Corporation	North Charleston, SC	4000'		1	1			Southeast
2/20/2013	Charleston	National Response Corporation	North Charleston, SC		100'	2				Southeast
2/21/2013	St. Petersburg	Diversified Environmental Services	Tampa, FL	600'						Southeast
2/23/2013	St. Petersburg	SWS	St. Petersburg, FL	1200'						Southeast
2/26/2013	Savannah	National Response Corporation	Savannah, GA			1				Southeast

Date	COTP Zone	Contractor Name	Location	Boom 6"-18"	Boom 19"-42"	Skimmer Drum, Brush,	Skimmer Floating Suction	Skimmer Belt	Skimmer Rope	Region
2/26/2013	Savannah	National Response Corporation	Savannah River, GA	4100'			1			Southeast
3/20/2013	Miami	CBI	Ft. Lauderdale, FL	1000'						Southeast
3/20/2013	Miami	National Response Corporation	Miami, FL				1	1		Southeast
3/20/2013	Miami	National Response Corporation	Miami, FL		100'	1				Southeast
4/9/2013	St. Petersburg	SWS	St. Petersburg, FL		3000'					Southeast
4/23/2013	Miami	SWS	Ft. Lauderdale, FL	1000'						Southeast
4/24/2013	Key west	National Response Corporation	Key west, FL	3000'		1				Southeast
5/1/2013	Ohio Valley	First Environmental	Macon, GA	400'						Southeast
5/8/2013	Charleston	Moran Environmental Recovery	Hawthorne, SC	1100'		1	1			Southeast
5/16/2013	Ohio Valley	SWS	Nashville, TN	300'						Southeast
5/21/2013	Charleston	Moran Environmental Recovery	Charleston, SC	700'			1			Southeast
6/10/2013	Ohio Valley	Evergreen Environmental	Louisville, KY	500'						Southeast
6/13/2013	Ohio Valley	SWS	Nashville, TN	3000'						Southeast
6/13/2013	St. Petersburg	SWS	Tampa, FL	1000'						Southeast
6/27/2013	Miami	CBI	Ft. Lauderdale, FL	400'						Southeast
6/27/2013	Miami	SWS	Ft. Lauderdale, FL	1000'						Southeast
6/28/2013	Miami	National Response Corporation	Miami, FL		2200'	1				Southeast
7/8/2013	Savannah	SWS	Savannah, GA	1200'						Southeast
7/9/2013	St. Petersburg	Diversified Environmental Services	Tampa, FL	700'						Southeast
7/24/2013	Ohio Valley	Evergreen Environmental	Central City, KY	400'						Southeast
7/25/2013	St. Petersburg	SWS	Tampa, FL	100'						Southeast
7/26/2013	Ohio Valley	SWS	Nashville, TN		1					Southeast
7/28/2013	Miami	National Response Corporation	Miami, FL	100'		2	2	1	1	Southeast
7/29/2013	Mobile	SWS	Pensacola, FL	360'						Southeast
7/29/2013	Ohio Valley	SWS	Nashville, TN	300'		1				Southeast
8/7/2013	Jacksonville	National Response Corporation	Jacksonville, FL	500'		3	4			Southeast
8/12/2013	Miami	CBI	Ft. Lauderdale, FL	120'						Southeast
8/15/2013	Delaware Bay	National Response Corporation	Delaware Bay	1000'		1				Southeast
8/23/2013	St. Petersburg	Moran Environmental Recovery	St. Johns River, FL	1300'		1	1			Southeast
8/30/2013	St. Petersburg	SWS	Tampa, FL	1200'						Southeast
9/18/2013	Savannah	Moran Environmental Recovery	Savannah River, GA	1000'		1				Southeast
9/25/2013	Jacksonville	Jacksonville Pollution Control	Jacksonville, FL	2600'		1				Southeast
9/25/2013	Jacksonville	National Response Corporation	Port Canaveral, FL			1				Southeast
10/9/2013	Jacksonville	SWS	Jacksonville, FL	1000'						Southeast
10/9/2013	Ohio Valley	Evergreen Environmental	Central City, KY	400'						Southeast
10/12/2013	Charleston	Moran Environmental Recovery	Mount Pleasant, SC	800'			1			Southeast
10/17/2013	Long Island Sound	National Response Corporation	Long Island, NY	1000'		1				Southeast
10/24/2013	Upper Mississippi River	National Response Corporation	Paducah, KY	2200'			1			Southeast
10/25/2013	Ohio Valley	SWS	Louisville, KY	1000'						Southeast
10/25/2013	St. Petersburg	Diversified Environmental Services	Tampa, FL	500'						Southeast
11/1/2013	Savannah	First Environmental	Waycross, GA	200'						Southeast
11/5/2013	Miami	National Response Corporation	Miami, FL	1000'		1				Southeast
11/19/2013	St. Petersburg	SWS	Tampa, FL	1000'		1				Southeast

Date	COTP Zone	Contractor Name	Location	Boom 6"-18"	Boom 19"-42"	Skimmer Drum, Brush,	Skimmer Floating Suction	Skimmer Belt	Skimmer Rope	Region
11/20/2013	St. Petersburg	Diversified Environmental Services	Tampa, FL	400'						Southeast
11/20/2013	St. Petersburg	SWS	Tampa, FL	500'						Southeast
11/23/2013	St. Petersburg	National Response Corporation	Tampa, FL		4000'	3	1			Southeast
11/30/2013	Miami	National Response Corporation	Miami, FL		2200'	1				Southeast
12/11/2013	St. Petersburg	SWS	Tampa, FL	500'						Southeast
12/12/2013	St. Petersburg	SWS	Tampa, FL			1				Southeast
1/9/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
1/9/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 164		1400'					West
1/9/2013	San Francisco	National Response Corporation	Alameda Point, CA		5000'					West
1/11/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
1/11/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 165		1400'					West
1/17/2013	San Francisco	National Response Corporation	Folsom Lake, CA	1080'						West
1/18/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
1/18/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
1/18/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 166		1400'					West
1/18/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 167		1400'					West
1/22/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
1/22/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 168		1400'					West
1/25/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
1/25/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 169		1400'					West
1/25/2013	San Francisco	National Response Corporation	Feather River, Pluma County	800'	1200'					West
2/12/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
2/12/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 170		1400'					West
2/13/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
2/13/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 171		1400'					West
2/14/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
2/14/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 172		1400'					West
2/27/13	San Diego	National Response Corporation	San Diego County, CA	500'						West
3/8/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
3/8/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 173		1400'					West
3/11/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
3/18/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
3/21/2013	San Francisco	National Response Corporation	Lake Herman Benicia, CA	300'						West
3/26/2013	San Francisco	National Response Corporation	Humboldt Bay	3500'						West
3/26/13	San Francisco	National Response Corporation	Humboldt Bay		3500					West
3/28/13	Portland	National Response Corporation	Contra Costa Water District		100'					West
4/2/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
4/2/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 174		1400'					West
4/3/13	San Francisco	National Response Corporation	Blue Lake, CA		800'					West
4/4/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
4/4/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1100'					West
4/4/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 175		1400'					West
4/8/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West

Date	COTP Zone	Contractor Name	Location	Boom 6"-18"	Boom 19"-42"	Skimmer Drum, Brush,	Skimmer Floating Suction	Skimmer Belt	Skimmer Rope	Region
4/8/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 176		1400'					West
4/9/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
4/9/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 177		1400'					West
4/9/2013	San Francisco	National Response Corporation	Bay Farm Eel Graas, CA		2000'					West
4/12/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
4/12/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 178		1400'					West
4/25/13	San Francisco	National Response Corporation	Nustar, Crockett CA.		600'					West
4/26/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
4/26/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 179		1400'					West
4/26/13	San Francisco	National Response Corporation	Pier 3 Alameda Point		300'					West
4/29/13	San Francisco	National Response Corporation	Pier 3 Alameda Point		300'					West
5/3/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
5/3/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 180		1400'					West
5/7/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
5/7/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 181		1400'					West
5/9/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1000'	2	2			West
5/9/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1100'					West
5/9/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 182		1400'					West
5/9/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth T-15		1000'	3	1			West
5/13/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
5/13/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 183		1400'					West
5/16/2013	San Francisco	National Response Corporation	Berth 32 Port of Oakland, CA	600'				1		West
5/23/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
5/23/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 184		1400'					West
5/23/13	San Francisco	National Response Corporation	Pier 92 Port of San Francisco		600'		1			West
5/24/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
5/24/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 185		1400'					West
5/29/13	San Francisco	National Response Corporation	Santa FE Channel Richmond CA.		2000'					West
5/31/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
5/31/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 186		1400'					West
6/4/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
6/4/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 187		1400'					West
6/12/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
6/12/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 188		1400'					West
6/17/13	San Francisco	National Response Corporation	Pier 50 Port of San Francisco		1800'					West
6/18/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
6/18/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 189		1400'					West
6/19/13	San Diego	National Response Corporation	San Diego County, CA	500'						West
6/19/13	San Francisco	National Response Corporation	BP/ARCO Richmond CA.		600'					West
6/25/13	San Francisco	National Response Corporation	Golden Gate Ferry San Francisco		500'					West
6/26/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
6/26/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 190		1400'					West
6/27/13	San Francisco	National Response Corporation	BP/ARCO Richmond CA.		1000'					West

Date	COTP Zone	Contractor Name	Location	Boom 6"-18"	Boom 19"-42"	Skimmer Drum, Brush,	Skimmer Floating Suction	Skimmer Belt	Skimmer Rope	Region
7/1/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
7/1/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 191		1400'					West
7/3/13	San Francisco	National Response Corporation	Berth 2 Port of Stockton		1400'					West
7/4/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
7/4/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 192		1400'					West
7/5/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1100'					West
7/5/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 193		1400'					West
7/11/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
7/11/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 194		1400'					West
7/15/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
7/15/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 195		1400'					West
7/17/13	San Francisco	National Response Corporation	150 Metcalf road, San Jose CA.		300'					West
7/18/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
7/18/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 196		1400'					West
7/26/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
7/26/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 197		1400'					West
8/1/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
8/1/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 198		1400'					West
8/7/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
8/7/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 199		1400'					West
8/11/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
8/11/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 200		1400'					West
8/13/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
8/13/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 201		1400'					West
8/14/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
8/14/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 202		1400'					West
8/21/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
8/21/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 203		1400'					West
8/23/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
8/23/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 204		1400'					West
9/3/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
9/3/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 205		1400'					West
9/10/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
9/10/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 206		1400'					West
9/17/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
9/17/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 207		1400'					West
9/18/2013	San Diego	National Response Corporation	San Diego County, CA	500'						West
9/25/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
9/25/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 208		1400'					West
10/1/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
10/1/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 209		1400'					West
10/3/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
10/3/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 210		1400'					West

Date	COTP Zone	Contractor Name	Location	Boom 6"-18"	Boom 19"-42"	Skimmer Drum, Brush,	Skimmer Floating Suction	Skimmer Belt	Skimmer Rope	Region
10/8/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400					West
10/8/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 211		1400'					West
10/12/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400					West
10/12/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1100'					West
10/12/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 101		1100'					West
10/12/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 212		1400'					West
10/16/13	San Francisco	National Response Corporation	Cogswell Marsh, Hayward CA		1000'					West
10/16/13	San Francisco	National Response Corporation	Steinberger Slough, Redwood city CA		1000'					West
10/17/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
10/17/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 213		1400'					West
10/25/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
10/25/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 214		1400'					West
11/2/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
11/6/2013	San Diego	National Response Corporation	San Diego County, CA	800'						West
11/9/2013	San Diego	National Response Corporation	San Diego County, CA	1000'						West
11/12/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 215		1400'					West
11/14/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1100'					West
11/14/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 101		1100'					West
11/15/13	San Francisco	National Response Corporation	Martinez Marina, Marina CA.		2000'			1		West
11/18/13	San Francisco	National Response Corporation	BP/ARCO Richmond CA.		600'					West
11/19/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
11/19/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 216		1400'					West
11/20/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
11/20/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 217		1400'					West
11/23/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
11/23/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 218		1400'					West
12/10/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
12/10/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 219		1400'					West
12/18/2013	San Francisco	National Response Corporation	Humboldt Bay	200'						West
12/18/13	San Francisco	National Response Corporation	Humboldt Bay		200					West
12/19/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
12/19/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 220		1400'					West
12/29/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles		1400'					West
12/29/2013	Los Angeles - Long Beach	National Response Corporation	Port of Los Angeles Berth 221		1400'					West

ATTESTATION

I, Steven A. Candito, President of National Response Corporation (NRC), an Oil Spill Removal Organization (OSRO) with full OSRO classifications in all Captain of the Port Zones, for all operating environments within our Area of Service do hereby attest, based upon the information provided to me by the members of the NRC Independent Contractor Network, each of whom are responsible for similar attestations to their own clients under the National Preparedness for Response Exercise Program and based on my own personal knowledge, that boom and skimming systems, more than adequate to satisfy the OSRO field equipment deployment drill requirements of OPA '90 have been deployed on your behalf in the United States East Coast, Gulf Coast, West Coast, Inland River and Caribbean Regions within the most recent calendar year. Further that NRC-owned equipment is inspected and maintained under a formal preventive maintenance program. Personnel training requirements are met through a formal equipment deployment-training program. The personnel who deployed the equipment demonstrated their ability to successfully deploy and operate the equipment and the equipment was in good working order. Further, records of these deployments are maintained at our headquarters in Great River, New York, USA.

Date: 13 February 2014

Steven A. Candito
President
National Response Corporation

Attachment B

National Response Corporation
Resource Availability By Type

Equipment Types: **Boom/Portable Storage/Skimmer/Support Equipment/Transfer Pump/Vacuum System/Vessel**

Zone: Toledo, OH

Toledo - Case# DM14-0175
April 25, 2014

00 to 06 hours (* Does not include recall/mobilization time)

Boom

>=6 and <18 inch

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
12" Boom	0	2000	0	0	ICN	Rudolph	OH	00:45
12" Boom	0	1000	0	0	ICN	Rudolph	OH	00:45
12" Boom	0	300	0	0	ICN	Mcdonald	PA	05:33
10" Boom	0	1300	0	0	ICN	Mcdonald	PA	05:33
12" Boom	0	125	0	0	ICN	Merrillville	IN	05:34
8" Boom	0	2450	0	0	ICN	New Matamoras	OH	05:35
12" Boom	0	450	0	0	ICN	Indianapolis	IN	05:36
10" Boom	0	1252	0	0	ICN	Pittsburgh	PA	05:41
8" Boom	0	350	0	0	ICN	Mooresville	IN	05:52
Sub Total >=6 and <18 inch:		**9227**	**0**	**0**				

>18 and <42 inch

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
24" Boom	0	1000	0	0	ICN	Cleveland	OH	02:45
24" Boom	0	1000	0	0	ICN	Middletown	OH	04:26
24" Boom	0	1000	0	0	ICN	East Liverpool	OH	04:49
30" Boom	0	100	0	0	ICN	Erie	PA	05:07
24" Boom	0	6050	0	0	ICN	Mcdonald	PA	05:33
24" Boom	0	4250	0	0	ICN	New Matamoras	OH	05:35
Sub Total >18 and <42 inch:		**13400**	**0**	**0**				

>42 inch

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
60" Boom	0	50	0	0	ICN	Mcdonald	PA	05:33
44" Boom	0	1100	0	0	ICN	East Chicago	IN	05:49
Sub Total >42 inch:		**1150**	**0**	**0**				

18"

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
18" Boom	0	1000	0	0	ICN	Toledo	OH	00:07
18" Boom	0	4000	0	0	ICN	Rudolph	OH	00:45
18" Boom	0	4000	0	0	ICN	Ypsilanti	MI	01:06
18" Boom	0	500	0	0	ICN	Findlay	OH	01:07
18" Boom	0	11400	0	0	ICN	Detroit	MI	01:23
18" Boom	0	2100	0	0	ICN	Sterling Heights	MI	01:54
18" Boom	0	1500	0	0	ICN	Sterling Heights	MI	02:01
18" Boom	0	1200	0	0	ICN	Middleburg Heights	OH	02:34
18" Boom	0	3000	0	0	ICN	Cleveland	OH	02:45
18" Boom	0	100	0	0	ICN	North Canton	OH	03:27
18" Boom	0	100	0	0	ICN	Elkhart	IN	03:36
18" Boom	0	2200	0	0	ICN	Huber Heights	OH	03:37
18" Boom	0	500	0	0	ICN	Cincinnati	OH	04:47
18" Boom	0	2000	0	0	ICN	East Liverpool	OH	04:51
18" Boom	0	5500	0	0	ICN	Cincinnati	OH	05:07
18" Boom	0	1200	0	0	ICN	Batavia	OH	05:10
18" Boom	0	200	0	0	ICN	Indianapolis	IN	05:33
18" Boom	0	1500	0	0	ICN	Indianapolis	IN	05:36
18" Boom	0	100	0	0	ICN	Cuddy	PA	05:37
18" Boom	0	100	0	0	ICN	Schererville	IN	05:48
18" Boom	0	1000	0	0	ICN	Whiting	IN	05:49
18" Boom	0	13000	0	0	ICN	East Chicago	IN	05:49
18" Boom	0	3000	0	0	ICN	Mooresville	IN	05:52

00 to 06 hours (* Does not include recall/mobilization time)

Sub Total 18":	**59200**	**0**	**0**
Total Boom:	**82977**	**0**	**0**

Portable Storage

Frac Tank

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Frac Tank	0	4	0	1036	ICN	Toledo	OH	00:07
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	1	0	500	ICN	Ypsilanti	MI	01:06
Frac Tank	0	2	0	1000	ICN	North Canton	OH	03:27
Frac Tank	0	6	0	2568	ICN	Huber Heights	OH	03:37
Frac Tank	0	10	0	4770	ICN	East Liverpool	OH	04:49
Frac Tank	0	1	0	523	ICN	Cincinnati	OH	05:07
Frac Tank	0	2	0	856	ICN	Miamitown	OH	05:07
Frac Tank	0	1	0	500	ICN	Cuddy	PA	05:37
Frac Tank	0	16	0	960	ICN	East Chicago	IN	05:49
Sub Total Frac Tank:		**60**	**0**	**21213**				

Portable Tank

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Portable Tank	0	4	0	116	ICN	Toledo	OH	00:07
Tank Truck	0	1	0	162	ICN	Detroit	MI	01:23
Tank Truck	0	1	0	166	ICN	Detroit	MI	01:23
Tank Trailer	0	1	0	119	ICN	Cleveland	OH	02:45
Poly Tote	0	2	0	12	ICN	North Canton	OH	03:27
Poly Tank	0	1	0	7	ICN	North Canton	OH	03:27
Poly Tank	0	1	0	35	ICN	North Canton	OH	03:27
Poly Tote	0	2	0	12	ICN	Elkhart	IN	03:36
Poly Tank	0	1	0	7	ICN	Elkhart	IN	03:36
Poly Tank	0	1	0	35	ICN	Elkhart	IN	03:36
Poly Tank	0	2	0	24	ICN	Merrillville	IN	05:34
Poly Tank	0	1	0	7	ICN	Cuddy	PA	05:37
Poly Tank	0	1	0	35	ICN	Cuddy	PA	05:37
Poly Tote	0	2	0	12	ICN	Cuddy	PA	05:37
Tank Truck	0	18	0	3006	ICN	Carnegie	PA	05:39
Tank Truck	0	3	0	465	ICN	Carnegie	PA	05:39
Poly Tote	0	2	0	12	ICN	Schererville	IN	05:48
Poly Tank	0	1	0	7	ICN	Schererville	IN	05:48
Poly Tank	0	1	0	35	ICN	Schererville	IN	05:48
Tank Truck	0	5	0	655	ICN	East Chicago	IN	05:49
Tank Truck	0	6	0	540	ICN	East Chicago	IN	05:49
Poly Storage Tank	0	4	0	188	ICN	Mooresville	IN	05:52
Sub Total Portable Tank:		**61**	**0**	**5657**				

Tank Truck

00 to 06 hours (* Does not include recall/mobilization time)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Static Trailer	0	1	0	128	ICN	Ypsilanti	MI	01:06
Jumbo Tanker	0	1	0	285	ICN	Ypsilanti	MI	01:06
Tank Truck	0	4	0	304	ICN	East Chicago	IN	05:49
Tank Truck	0	2	0	104	ICN	East Chicago	IN	05:49
Sub Total Tank Truck:		**8**	**0**	**821**				
Total Portable Storage:		**129**	**0**	**27691**				

Skimmer

Drum

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Elastec TDS136 Skimmer	0	1	480	0	ICN	Toledo	OH	00:07
Elastec Magnum 100	0	1	686	0	ICN	Rudolph	OH	00:45
Elastec Magnum 100	0	1	686	0	ICN	Rudolph	OH	00:45
Elastec Magnum 200	0	1	1371	0	ICN	Rudolph	OH	00:45
Elastec Mini Max Skimmer	0	1	137	0	ICN	Rudolph	OH	00:45
Elastec TDS136 Skimmer	0	1	480	0	ICN	Rudolph	OH	00:45
Elastec TDS136 Skimmer	0	1	480	0	ICN	Rudolph	OH	00:45
Elastec TDS136 Skimmer	0	1	480	0	ICN	Rudolph	OH	00:45
Elastec Magnum 100	0	1	686	0	ICN	Rudolph	OH	00:45
Elastec Magnum 100	0	1	686	0	ICN	Rudolph	OH	00:45
Elastec Magnum 100	0	1	686	0	ICN	Rudolph	OH	00:45
Elastec Magnum 100	0	1	686	0	ICN	Rudolph	OH	00:45
Elastec Magnum 100	0	1	686	0	ICN	Rudolph	OH	00:45
Elastec Magnum 200	0	1	1371	0	ICN	Rudolph	OH	00:45
Elastec Mini Max Skimmer	0	1	137	0	ICN	Rudolph	OH	00:45
Elastec Mini Max Skimmer	0	1	137	0	ICN	Rudolph	OH	00:45
Medium Drum Skimmer	0	2	480	0	ICN	Detroit	MI	01:23
Crucial 1D18P24 Skimmer	0	1	171	0	ICN	Detroit	MI	01:23
Crucial 1D18P36 Skimmer	0	2	480	0	ICN	Sterling Heights	MI	01:54
Small Drum Skimmer	0	3	513	0	ICN	Sterling Heights	MI	01:54
Elastec TDS118 Skimmer	0	1	240	0	ICN	Huber Heights	OH	03:37
Small Drum Skimmer	0	1	171	0	ICN	Carroll	OH	03:56
Small Drum Skimmer	0	1	171	0	ICN	East Liverpool	OH	04:51
Small Drum Skimmer	0	2	342	0	ICN	Indianapolis	IN	05:33
Elastec TDS136 Skimmer	0	1	480	0	ICN	Indianapolis	IN	05:36
Small Drum Skimmer	0	3	513	0	ICN	Carnegie	PA	05:39
Elastec Mini-Max Skimmer	0	2	274	0	ICN	East Chicago	IN	05:49
Elastec TDS136 Skimmer	0	6	2880	0	ICN	East Chicago	IN	05:49
Elastec Mini-Max Skimmer	0	2	274	0	ICN	East Chicago	IN	05:49
Medium Drum Skimmer	0	1	240	0	ICN	Mooresville	IN	05:52
Sub Total Drum:		**44**	**17104**	**0**				

Floating Suction

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Manta Ray Skimmer	0	1	315	0	ICN	Detroit	MI	01:23
Manta Ray Skimmer	0	1	315	0	ICN	Huber Heights	OH	03:37
Douglas 4300 SkimPac	0	1	480	0	ICN	Huber Heights	OH	03:37
Manta Ray Skimmer	0	1	315	0	ICN	Miamitown	OH	05:07
Floating Suction Skimmer	0	1	274	0	ICN	East Chicago	IN	05:49
Sub Total Floating Suction:		**5**	**1699**	**0**				

Oleophilic Disk

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
NRC Weir Disk Skimmer	WD-107	1	1371	24	NRC	Cincinnati	OH	05:07
Vikoma Komara 12K Skimmer	0	1	480	0	ICN	East Chicago	IN	05:49
Sub Total Oleophilic Disk:		**2**	**1851**	**24**				

Oleophilic Rope Mop

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Rope Mop Skimmer	0	1	75	0	ICN	Detroit	MI	01:23
Sub Total Oleophilic Rope Mop:		**1**	**75**	**0**				

00 to 06 hours (* Does not include recall/mobilization time)

Total Skimmer:	**52**	**20729**	**24**	

Support Equipment

Ancillary Gear

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
20 yd. Soil Boxes	0	4	0	0	ICN	Middletown	OH	04:26
Sub Total Ancillary Gear:		**4**	**0**	**0**				

ATV

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
ATV	0	1	0	0	ICN	Findlay	OH	01:07
ATV	0	2	0	0	ICN	Detroit	MI	01:23
ATV	0	2	0	0	ICN	North Canton	OH	03 27
ATV	0	2	0	0	ICN	Elkhart	IN	03:36
ATV	0	1	0	0	ICN	Indianapolis	IN	05:16
ATV	0	2	0	0	ICN	Schererville	IN	05:48
ATV	0	4	0	0	ICN	East Chicago	IN	05:49
Sub Total ATV:		**14**	**0**	**0**				

Blower

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Boom Inflator	0	2	0	0	ICN	Cincinnati	OH	05:07
Sub Total Blower:		**2**	**0**	**0**				

Compressor

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Compressor	0	2	0	0	ICN	Toledo	OH	00:07
Compressor	0	1	0	0	ICN	Findlay	OH	01:07
Air Compressor	0	1	0	0	ICN	Sterling Heights	MI	01:54
Air Compressor	0	1	0	0	ICN	Cleveland	OH	02:45
Compressor	0	1	0	0	ICN	North Canton	OH	03:27
Compressor	0	1	0	0	ICN	Elkhart	IN	03:36
Compressor	0	2	0	0	ICN	Cincinnati	OH	05:07
Compressor	0	1	0	0	ICN	Batavia	OH	05:10
Air Compressor	0	1	0	0	ICN	Indianapolis	IN	05:33
Compressor	0	2	0	0	ICN	Indianapolis	IN	05:36
Compressor	0	1	0	0	ICN	Cuddy	PA	05:37
Air Compressors	0	4	0	0	ICN	Carnegie	PA	05:39
Compressor	0	3	0	0	ICN	Pittsburgh	PA	05:41
Compressor	0	1	0	0	ICN	Schererville	IN	05:48
Compressor	0	2	0	0	ICN	Mooresville	IN	05:52
Sub Total Compressor:		**24**	**0**	**0**				

Crane Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Sidebooms/Padded	0	4	0	0	ICN	Walbridge	OH	00:07
Grapple Truck	0	1	0	0	ICN	Washington	PA	05:38
Sidebooms/Padded	0	2	0	0	ICN	Washington	PA	05:38
Crane	0	1	0	0	ICN	Hammond	IN	05:50
Grapple Truck	0	1	0	0	ICN	Hammond	IN	05:50
Sidebooms/Padded	0	2	0	0	ICN	Columbus	IN	05:58
Sub Total Crane Truck:		**11**	**0**	**0**				

Dump Truck/Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Dump Truck	0	2	0	0	ICN	North Canton	OH	03:27
Dump Truck	0	1	0	0	ICN	Groveport	OH	03 38
Dump Truck	0	2	0	0	ICN	Carroll	OH	03:56
Dump Truck	0	1	0	0	ICN	Indianapolis	IN	05:16
Dump Truck	0	1	0	0	ICN	Merrillville	IN	05:34
Dump Truck	0	2	0	0	ICN	Cuddy	PA	05:37
Dump Trailer	0	4	0	0	ICN	Carnegie	PA	05 39
Dump Truck	0	8	0	0	ICN	Carnegie	PA	05:39

00 to 06 hours (* Does not include recall/mobilization time)

Ton Dump	0	2	0	0	ICN	Carnegie	PA	05:39
Sub Total Dump Truck/Trailer:		**23**	**0**	**0**				

Earth Moving Equipment

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
977 Track Loader	0	1	0	0	ICN	Walbridge	OH	00:07
325 Excavator	0	1	0	0	ICN	Walbridge	OH	00:07
Backhoe	0	2	0	0	ICN	Toledo	OH	00:07
Skid Loader	0	1	0	0	ICN	Findlay	OH	01:07
Bobcat	0	1	0	0	ICN	Detroit	MI	01:23
Skid Steer	0	2	0	0	ICN	Marshall	MI	02:28
Excavator	0	1	0	0	ICN	North Canton	OH	03:27
Skid Steer	0	1	0	0	ICN	North Canton	OH	03:27
Excavator	0	1	0	0	ICN	Elkhart	IN	03:36
Skid Steer	0	1	0	0	ICN	Elkhart	IN	03:36
Skid Steer	0	2	0	0	ICN	Groveport	OH	03:38
Excavator	0	3	0	0	ICN	Groveport	OH	03:38
Backhoe	0	1	0	0	ICN	Groveport	OH	03:38
Multi Terrain Loader	0	1	0	0	ICN	Groveport	OH	03:38
Gator	0	1	0	0	ICN	Groveport	OH	03:38
Excavator	0	2	0	0	ICN	Carroll	OH	03:56
Skid Steer	0	1	0	0	ICN	Carroll	OH	03:56
Skidsteer	0	1	0	0	ICN	Cincinnati	OH	04:47
Skidloader	0	4	0	0	ICN	East Liverpool	OH	04:49
Track Loader	0	1	0	0	ICN	Batavia	OH	05:10
Trackhoe	0	1	0	0	ICN	Batavia	OH	05:10
Backhoe	0	1	0	0	ICN	Indianapolis	IN	05:33
Skid Steer	0	1	0	0	ICN	Indianapolis	IN	05:33
Backhoe	0	1	0	0	ICN	Merrillville	IN	05:34
Skid Steer	0	1	0	0	ICN	Merrillville	IN	05:34
Backhoe	0	1	0	0	ICN	Indianapolis	IN	05:36
977 Track Loader	0	1	0	0	ICN	Washington	PA	05:38
Trac Skid Loader	0	4	0	0	ICN	Carnegie	PA	05:39
Bulldozer	0	2	0	0	ICN	Carnegie	PA	05:39
Bobcat	0	1	0	0	ICN	Pittsburgh	PA	05:41
Excavator	0	1	0	0	ICN	Schererville	IN	05:48
Skid Steer	0	1	0	0	ICN	Schererville	IN	05:48
Track Excavator	0	1	0	0	ICN	East Chicago	IN	05:49
Skid Steer Loader	0	4	0	0	ICN	East Chicago	IN	05:49
Track Excavator	0	1	0	0	ICN	East Chicago	IN	05:49
Track Loader	0	1	0	0	ICN	East Chicago	IN	05:49
Hydro-Excavator Truck	0	5	0	0	ICN	East Chicago	IN	05:49
Hydro-Jetter Truck	0	12	0	0	ICN	East Chicago	IN	05:49
Backhoe	0	1	0	0	ICN	East Chicago	IN	05:49
Loader- Front End	0	1	0	0	ICN	East Chicago	IN	05:49
Track Loader	0	1	0	0	ICN	Hammond	IN	05:50
Dozer	0	1	0	0	ICN	Hammond	IN	05:50
Skid Steer	0	3	0	0	ICN	Mooresville	IN	05:52
977 Track Loader	0	1	0	0	ICN	Columbus	IN	05:58
Sub Total Earth Moving Equipment:		**77**	**0**	**0**				

Flatbed Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Drop Deck Trailer	0	5	0	0	ICN	Detroit	MI	01:23
Flatbed Trailer	0	2	0	0	ICN	Detroit	MI	01:23
Stakebed	0	1	0	0	ICN	Sterling Heights	MI	02:01
Stakebed	0	1	0	0	ICN	Middleburg Heights	OH	02:34
Low Boy Trailer	0	1	0	0	ICN	Groveport	OH	03:38
Flatbed Trailer	212	1	0	0	NRC	Cincinnati	OH	05:07
Flatbed Trailer	0	1	0	0	ICN	Dayton	KY	05:12
Deck Trailer	0	1	0	0	ICN	Merrillville	IN	05:34
Flatbed Trailer	0	2	0	0	ICN	Carnegie	PA	05:39

00 to 06 hours (* Does not include recall/mobilization time)

Lowboy Trailer	0	3	0	0	ICN	Carnegie	PA	05:39
Flatbed Trailer	0	2	0	0	ICN	Carnegie	PA	05:39
Drop Deck Trailer	0	2	0	0	ICN	East Chicago	IN	05:49
Low Boy Trailer	0	1	0	0	ICN	Mooresville	IN	05:52
Sub Total Flatbed Trailer:		**23**	**0**	**0**				

Fork Lift

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Forklift	0	1	0	0	ICN	Findlay	OH	01:07
Fork Lift	0	1	0	0	ICN	Cleveland	OH	02:34
Fork Lift	0	1	0	0	ICN	Groveport	OH	03:38
Fork Lift	0	1	0	0	ICN	Carroll	OH	03:56
Forklift	0	1	0	0	ICN	Merrillville	IN	05:34
Fork Lift	0	3	0	0	ICN	Carnegie	PA	05:39
Sub Total Fork Lift:		**8**	**0**	**0**				

Generator

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Generator	0	3	0	0	ICN	Toledo	OH	00:07
Generator	0	1	0	0	ICN	Sterling Heights	MI	02:01
Generator	0	1	0	0	ICN	Marshall	MI	02:28
Generator	0	1	0	0	ICN	Middleburg Heights	OH	02:34
Generator	0	2	0	0	ICN	North Canton	OH	03:27
Generator	0	2	0	0	ICN	Elkhart	IN	03:36
Generator	0	1	0	0	ICN	Carroll	OH	03:56
Generator	0	3	0	0	ICN	Cincinnati	OH	05:07
Generator	0	2	0	0	ICN	Batavia	OH	05:10
Generator	0	1	0	0	ICN	Indianapolis	IN	05:16
Generator	0	2	0	0	ICN	Indianapolis	IN	05:33
Generator	0	2	0	0	ICN	Indianapolis	IN	05:36
Generator	0	2	0	0	ICN	Cuddy	PA	05:37
Generator	0	3	0	0	ICN	Pittsburgh	PA	05:41
Generator	0	2	0	0	ICN	Schererville	IN	05:48
Sub Total Generator:		**28**	**0**	**0**				

Light Plant

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Light Tower	0	2	0	0	ICN	Marshall	MI	02 28
Light Stand	0	6	0	0	ICN	Pittsburgh	PA	05:41
Sub Total Light Plant:		**8**	**0**	**0**				

Pick-Up Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Pick-Up Truck	0	5	0	0	ICN	Toledo	OH	00:07
Operational Vehicle	0	20	0	0	ICN	Detroit	MI	01:23
Pick-Up Truck	0	3	0	0	ICN	Sterling Heights	MI	01:54
Pick-Up Truck	0	3	0	0	ICN	Sterling Heights	MI	02:01
Pick-Up Truck	0	27	0	0	ICN	Marshall	MI	02:28
Pick-Up Truck	0	1	0	0	ICN	Cleveland	OH	02:34
Pick-Up Truck	0	2	0	0	ICN	Middleburg Heights	OH	02:34
Pick-Up Truck	0	7	0	0	ICN	Cleveland	OH	02:45
Pick-Up Truck	0	32	0	0	ICN	Huber Heights	OH	03:37
Pick-Up Truck	0	2	0	0	ICN	Groveport	OH	03:38
Pick-Up Truck	0	2	0	0	ICN	Carroll	OH	03:56
Pick-Up Truck	0	1	0	0	ICN	Steubenville	OH	05:01
Pick-Up Truck	0	7	0	0	ICN	Cincinnati	OH	05:07
Pick-Up Truck	0	15	0	0	ICN	Miamitown	OH	05:07
Pick-Up Truck	0	2	0	0	ICN	Dayton	KY	05:12
Trailblazer	0	2	0	0	ICN	Indianapolis	IN	05:16
Pick-Up Truck	0	1	0	0	ICN	Indianapolis	IN	05:16
Pick-Up Truck	0	3	0	0	ICN	Merrillville	IN	05:34
Pick-Up Truck	0	20	0	0	ICN	Carnegie	PA	05:39
Pick-Up Truck	0	4	0	0	ICN	Pittsburgh	PA	05:41

00 to 06 hours (* Does not include recall/mobilization time)

Rack Body	0	4	0	0	ICN	East Chicago	IN	05:49
Service Truck	0	3	0	0	ICN	East Chicago	IN	05:49
Sub Total Pick-Up Truck:		**166**	**0**	**0**				

Power Pack

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Power Pack	DPP-10-107	1	0	0	NRC	Cincinnati	OH	05:07
Sub Total Power Pack:		**1**	**0**	**0**				

Pressure Washer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Pressure Washer	0	2	0	0	ICN	Toledo	OH	00:07
Power Washer	0	2	0	0	ICN	Rudolph	OH	00:45
Water Blaster	0	1	0	0	ICN	Ypsilanti	MI	01:06
Power Washer	0	10	0	0	ICN	Ypsilanti	MI	01:06
Water Blaster	0	5	0	0	ICN	Ypsilanti	MI	01:06
Pressure Washer	0	2	0	0	ICN	Findlay	OH	01:07
Pressure Washer	0	3	0	0	ICN	Sterling Heights	MI	01:54
Hot Pressure Washer	0	1	0	0	ICN	Sterling Heights	MI	02:01
Pressure Washer Trailer	0	2	0	0	ICN	Marshall	MI	02:28
Pressure Washer	0	3	0	0	ICN	Middleburg Heights	OH	02:34
Pressure Washer- Hot	0	4	0	0	ICN	Cleveland	OH	02:45
Water Blaster	0	35	0	0	ICN	Huber Heights	OH	03:37
Water Blaster Trailer	0	3	0	0	ICN	Groveport	OH	03:38
Hot Pressure Washer	0	1	0	0	ICN	Groveport	OH	03:38
Pressure Washer-Hot	0	1	0	0	ICN	Carroll	OH	03:56
Pressure Washer-Hot/Cold	0	2	0	0	ICN	Steubenville	OH	05:01
Pressure Washer-Hot	0	3	0	0	ICN	Cincinnati	OH	05:07
Pressure Washer-Cold	0	3	0	0	ICN	Cincinnati	OH	05:07
Water Blaster	0	15	0	0	ICN	Miamitown	OH	05:07
Hot Water Pressure Washer	0	4	0	0	ICN	Batavia	OH	05:10
Hot Water Pressure Washer	0	4	0	0	ICN	Indianapolis	IN	05:16
Pressure Washer- Hot	0	2	0	0	ICN	Merrillville	IN	05:34
Pressure Washer	0	4	0	0	ICN	Indianapolis	IN	05:36
Pressure Water Blaster	0	10	0	0	ICN	Carnegie	PA	05:39
Pressure Cleaner	0	2	0	0	ICN	Pittsburgh	PA	05:41
Pressure Washer	0	2	0	0	ICN	Whiting	IN	05:49
Pressure Washer Trailer	0	1	0	0	ICN	Mooresville	IN	05:52
Sub Total Pressure Washer:		**127**	**0**	**0**				

Roll Off Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Roll Off Trailer	0	1	0	0	ICN	Groveport	OH	03 38
Roll Off Trailer	0	1	0	0	ICN	Carroll	OH	03:56
Roll Off Trailer	0	5	0	0	ICN	Carnegie	PA	05:39
Sub Total Roll Off Trailer:		**7**	**0**	**0**				

Roll-Off Boom Container

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Roll-off Boxes	0	5	0	0	ICN	Mooresville	IN	05:52
Sub Total Roll-Off Boom Container:		**5**	**0**	**0**				

Roll Off Container

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Roll-Off Container	0	143	0	0	ICN	Toledo	OH	00:07
Roll-Off Boxes	0	14	0	0	ICN	Detroit	MI	01:23
Roll-Off Boxes	0	8	0	0	ICN	Marshall	MI	02:28
Roll-OffContainer	0	2	0	0	ICN	North Canton	OH	03:27
Roll-Off Container	0	2	0	0	ICN	North Canton	OH	03:27
Roll-Off Boxes	0	30	0	0	ICN	Huber Heights	OH	03:37
Roll-Off Container	0	5	0	0	ICN	Groveport	OH	03:38
Roll-Off Container	0	2	0	0	ICN	Groveport	OH	03:38
Roll-Off Container	0	25	0	0	ICN	New Philadelphia	OH	03:49

00 to 06 hours (* Does not include recall/mobilization time)

Roll-Off Container	0	2	0	0	ICN	Carroll	OH	03:56
Roll-Off Container	0	50	0	0	ICN	East Liverpool	OH	04:49
Roll--Off Container	0	5	0	0	ICN	Miamitown	OH	05:07
Roll-Off Box	0	4	0	0	ICN	Merrillville	IN	05:34
Roll-Off Container	0	2	0	0	ICN	Cuddy	PA	05:37
Roll-Off Container	0	2	0	0	ICN	Cuddy	PA	05:37
Roll-Off Container	0	150	0	0	ICN	Carnegie	PA	05:39
Sub Total Roll-Off Container:		**446**	**0**	**0**				

Roll-off Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Roll-Off Truck	0	1	0	0	ICN	Sterling Heights	MI	01:54
Roll-off Truck	0	1	0	0	ICN	Marshall	MI	02:28
Roll-Off Truck	0	3	0	0	ICN	Huber Heights	OH	03:37
Roll-off Truck	0	4	0	0	ICN	Carroll	OH	03:56
Roll-off Truck	0	8	0	0	ICN	Carnegie	PA	05:39
Roll-off Truck	0	1	0	0	ICN	Mooresville	IN	05:52
Sub Total Roll-off Truck:		**18**	**0**	**0**				

SCBA

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
SCBA	0	2	0	0	ICN	Sterling Heights	MI	01:54
SCBA	0	3	0	0	ICN	Sterling Heights	MI	02:01
SCBA	0	2	0	0	ICN	Marshall	MI	02:28
SCBA	0	10	0	0	ICN	Cincinnati	OH	05:07
SCBA	0	3	0	0	ICN	Batavia	OH	05:10
SCBA	0	4	0	0	ICN	Indianapolis	IN	05:33
SCBA	0	4	0	0	ICN	Mooresville	IN	05:52
Sub Total SCBA:		**28**	**0**	**0**				

Side Boom

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
ide Boom Padded	0	3	0	0	ICN	Hammond	IN	05 50
Sub Total Side Boom		**3**	**0**	**0**				

Support Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Box Truck	0	1	0	0	ICN	Cincinnati	OH	05:07
Sub Total Support Truck:		**1**	**0**	**0**				

Truck - Semi

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Tractors	0	3	0	0	ICN	Detroit	MI	01:23
Roll-Off Frame w/Tractor	0	1	0	0	ICN	Cleveland	OH	02:45
Tractor	0	12	0	0	ICN	Huber Heights	OH	03:37
Tractor	0	1	0	0	ICN	Groveport	OH	03:38
Tractor	0	1	0	0	ICN	Carroll	OH	03:56
Truck- Semi	0	2	0	0	ICN	Cincinnati	OH	05:07
Tractor Trailer Trucks	0	3	0	0	ICN	Merrillville	IN	05:34
Utility Truck	0	5	0	0	ICN	Indianapolis	IN	05:36
Roll-Off Truck	0	1	0	0	ICN	East Chicago	IN	05:49
Box Truck	0	1	0	0	ICN	Mooresville	IN	05:52
Sub Total Truck - Semi:		**30**	**0**	**0**				

Utility Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Utility Trailer	0	1	0	0	ICN	Toledo	OH	00:07
Utility Trailer	0	3	0	0	ICN	Toledo	OH	00:12
Boom Trailer	0	2	0	0	ICN	Sterling Heights	MI	01:54
Cargo Trailer	0	2	0	0	ICN	Sterling Heights	MI	02:01
Job Trailer	0	2	0	0	ICN	Marshall	MI	02:28
Utility Trailer	0	1	0	0	ICN	Cleveland	OH	02:34
Cargo Trailer	0	2	0	0	ICN	Middleburg Heights	OH	02:34
Boom Trailer	0	1	0	0	ICN	Middleburg Heights	OH	02:34

00 to 06 hours (* Does not include recall/mobilization time)

Utility Trailer	0	1	0	0	ICN	Cleveland	OH	02:45
Hot Water Pressure Washer Trailer	0	1	0	0	ICN	North Canton	OH	03:27
Confined Space Entry Trailer	0	1	0	0	ICN	North Canton	OH	03:27
Hot Water Pressure Washer Trailer	0	1	0	0	ICN	Elkhart	IN	03:36
Confined Space Entry Trailer	0	1	0	0	ICN	Elkhart	IN	03:36
Utility Trailer	0	14	0	0	ICN	Groveport	OH	03:38
Utility Trailer	0	4	0	0	ICN	Carroll	OH	03:56
Emergency Response Trailer	0	1	0	0	ICN	Middletown	OH	04:26
Utility Trailer	0	2	0	0	ICN	Steubenville	OH	05:01
Boom Trailer	0	4	0	0	ICN	Cincinnati	OH	05:07
Boom Trailer	0	1	0	0	ICN	Batavia	OH	05:10
Cargo Trailer	0	1	0	0	ICN	Batavia	OH	05:10
Utility Trailer	0	2	0	0	ICN	Dayton	KY	05:12
Utility Trailer	0	3	0	0	ICN	Indianapolis	IN	05:16
Response Trailer	0	1	0	0	ICN	Indianapolis	IN	05:36
Drum Truck	0	2	0	0	ICN	Indianapolis	IN	05:36
Hot Water Pressure Washer Trailer	0	1	0	0	ICN	Cuddy	PA	05:37
Confined Space Entry Trailer	0	1	0	0	ICN	Cuddy	PA	05:37
Utility Trailers	0	8	0	0	ICN	Carnegie	PA	05:39
Utility Trailers	0	4	0	0	ICN	Carnegie	PA	05:39
Decontamination Trailer	0	2	0	0	ICN	Carnegie	PA	05:39
Response Trailer	0	2	0	0	ICN	Carnegie	PA	05:39
Hot Water Pressure Washer Trailer	0	1	0	0	ICN	Schererville	IN	05:48
Confined Space Entry Trailer	0	1	0	0	ICN	Schererville	IN	05:48
Job Trailer	0	4	0	0	ICN	Mooresville	IN	05:52
Sub Total Utility Trailer:		**78**	**0**	**0**				

Utility Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Stakebed	0	3	0	0	ICN	Detroit	MI	01:23
Stake Truck	0	1	0	0	ICN	Sterling Heights	MI	01:54
Utility Truck	0	6	0	0	ICN	North Canton	OH	03:27
Utility Truck	0	4	0	0	ICN	Elkhart	IN	03:36
Emergency Response Truck	0	1	0	0	ICN	Huber Heights	OH	03:37
Box Truck	0	1	0	0	ICN	Groveport	OH	03:38
Club Car	0	1	0	0	ICN	Groveport	OH	03:38
Utility Truck	0	1	0	0	ICN	Carroll	OH	03:56
Box Truck	0	1	0	0	ICN	Indianapolis	IN	05:16
Box Truck	0	1	0	0	ICN	Merrillville	IN	05:34
Response Truck	0	1	0	0	ICN	Merrillville	IN	05:34
Utility Trucks	0	6	0	0	ICN	Cuddy	PA	05:37
Utility Truck	0	1	0	0	ICN	Carnegie	PA	05:39
Stake Bed Truck	0	5	0	0	ICN	Carnegie	PA	05:39
Utility Truck	0	4	0	0	ICN	Schererville	IN	05:48
Sub Total Utility Truck:		**37**	**0**	**0**				

Van Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Spill Response Trailer	0	1	0	0	ICN	Rudolph	OH	00:45
Spill Response Trailer	0	1	0	0	ICN	Rudolph	OH	00:45
Response Trailer	0	3	0	0	ICN	Detroit	MI	01:23
48' Van Trailer	0	1	0	0	ICN	Detroit	MI	01:23
Response Trailer	0	2	0	0	ICN	Sterling Heights	MI	01:54
Spill Response Trailer	0	3	0	0	ICN	Cleveland	OH	02:45
Boom Trailer	0	3	0	0	ICN	Cleveland	OH	02:45
Response Trailer	0	2	0	0	ICN	North Canton	OH	03:27
Response Trailer	0	2	0	0	ICN	Elkhart	IN	03:36
Emergency Response Trailer	0	1	0	0	ICN	Huber Heights	OH	03:37
ER Trailer	0	1	0	0	ICN	Cincinnati	OH	04:47
Roll-Off Trailer	0	1	0	0	ICN	Cincinnati	OH	05:07
Van Trailer	0	2	0	0	ICN	Cincinnati	OH	05:07
Response Trailer	0	4	0	0	ICN	Cincinnati	OH	05:07

00 to 06 hours (* Does not include recall/mobilization time)

Emergency Response/Job Trailer	0	5	0	0	ICN	Indianapolis	IN	05:33
Response Trailer	0	1	0	0	ICN	Merrillville	IN	05:34
Van Trailer	0	2	0	0	ICN	Merrillville	IN	05:34
Response Trailer	0	3	0	0	ICN	Cuddy	PA	05:37
Box Van Trailer	0	1	0	0	ICN	Carnegie	PA	05:39
Box Trailer	0	1	0	0	ICN	Carnegie	PA	05:39
Boom Trailer	0	3	0	0	ICN	Carnegie	PA	05:39
Box Vans	0	5	0	0	ICN	Carnegie	PA	05:39
Response Trailer	0	3	0	0	ICN	Pittsburgh	PA	05:41
Response Trailer	0	2	0	0	ICN	Schererville	IN	05:48
Boom Trailer	0	7	0	0	ICN	East Chicago	IN	05:49
Equipment Trailer	0	3	0	0	ICN	East Chicago	IN	05:49
Equipment Trailer	0	4	0	0	ICN	East Chicago	IN	05:49
Sub Total Van Trailer:		**67**	**0**	**0**				
Total Support Equipment:		**1236**	**0**	**0**				

Transfer Pump

Centrifugal

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Transfer Pump	0	9	0	0	ICN	Toledo	OH	00:07
Trash Pump	0	6	0	0	ICN	Rudolph	OH	00 45
Trash Pump	0	1	0	0	ICN	Rudolph	OH	00:45
Submersible Pump	0	6	0	0	ICN	Detroit	MI	01:23
Transfer Pump	0	3	0	0	ICN	Sterling Heights	MI	01:54
Centrifugal Pump	0	20	0	0	ICN	Marshall	MI	02:28
Drum Vacuum Pump	0	5	0	0	ICN	Cleveland	OH	02:45
2" Double Diaphragm	0	2	0	0	ICN	Middletown	OH	04:26
Transfer Pump	0	1	0	0	ICN	Cincinnati	OH	05:07
Transfer Pump	0	11	0	0	ICN	Indianapolis	IN	05:36
Fire Pump	0	18	0	0	ICN	Carnegie	PA	05:39
Vane Pump	0	1	0	0	ICN	Carnegie	PA	05:39
Sub Total Centrifugal:		**83**	**0**	**0**				

Diaphragm

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Transfer Pump	0	4	0	0	ICN	Sterling Heights	MI	01:54
Diaphragm Pump	0	1	0	0	ICN	Sterling Heights	MI	02:01
Poly Pump	0	1	0	0	ICN	Sterling Heights	MI	02:01
Diaphhragm Pump	0	1	0	0	ICN	Middleburg Heights	OH	02:34
Trash Pump	0	1	0	0	ICN	Cleveland	OH	02:45
Double Diaphragm Pump	0	5	0	0	ICN	Cleveland	OH	02:45
Double Diaphragm Chemical Pump	0	2	0	0	ICN	North Canton	OH	03:27
Double Diaphragm Non-Chem Pump	0	2	0	0	ICN	North Canton	OH	03:27
Double Diaphragm Chem Pump	0	2	0	0	ICN	Elkhart	IN	03:36
Double Diaphragm Non-Chem Pump	0	2	0	0	ICN	Elkhart	IN	03:36
Diaphragm Acid Pump	0	1	0	0	ICN	Groveport	OH	03:38
Transfer Pump	0	1	0	0	ICN	Cincinnati	OH	04:47
Diaphragm Acid Pump	0	1	0	0	ICN	Steubenville	OH	05:01
Transfer Pump	0	8	0	0	ICN	Cincinnati	OH	05:07
Transfer Pump	0	1	0	0	ICN	Cincinnati	OH	05:07
Diaphragm Pump	0	1	0	0	ICN	Batavia	OH	05:10
Poly Diaphragm Pump	0	2	0	0	ICN	Batavia	OH	05:10
Diaphragm Pump	0	2	0	0	ICN	Indianapolis	IN	05:33
Diaphragm Acid Pump	0	1	0	0	ICN	Indianapolis	IN	05:33
Double Diaphragm Chemical Pump	0	2	0	0	ICN	Cuddy	PA	05:37
Double Diaphragm Non-Chem Pump	0	2	0	0	ICN	Cuddy	PA	05:37
Transfer Pump	0	1	0	0	ICN	Carnegie	PA	05:39
Diaphragm Pump	0	30	0	0	ICN	Carnegie	PA	05:39
Diaphragm Pump	0	2	0	0	ICN	Pittsburgh	PA	05:41
Diaphragm Pump	0	1	0	0	ICN	Pittsburgh	PA	05:41
Double Diaphragm Chem Pump	0	2	0	0	ICN	Schererville	IN	05:48

00 to 06 hours (* Does not include recall/mobilization time)

Double Diaphragm Non-Chem Pump	0	2	0	0	ICN	Schererville	IN	05:48
Diaphragm Pump	0	2	0	0	ICN	Mooresville	IN	05:52
Sub Total Diaphragm:		**83**	**0**	**0**				

Pneumatic

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Pneumatic Pump	0	2	0	0	ICN	Cincinnati	OH	05:07
Sub Total Pneumatic:		**2**	**0**	**0**				

Trash Pump

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Trash Pump	0	6	0	0	ICN	Batavia	OH	05:10
Trash Pump	0	2	0	0	ICN	Indianapolis	IN	05:33
Trash Pump	0	18	0	0	ICN	Carnegie	PA	05:39
Trash Pump	0	2	0	0	ICN	Pittsburgh	PA	05:41
Sub Total Trash Pump:		**28**	**0**	**0**				
Total Transfer Pump:		**196**	**0**	**0**				

Vacuum System

Loader

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Skid Mount Vac	0	1	891	65	ICN	Rudolph	OH	00:45
Vacuum Drum Loader	0	2	686	0	ICN	Cincinnati	OH	05:07
Sub Total Loader:		**3**	**1577**	**65**				

Vacuum Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Vacuum Trailer	0	1	343	120	ICN	Cincinnati	OH	05:07
Sub Total Vacuum Trailer:		**1**	**343**	**120**				

Vacuum Transfer Unit

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Vacuum Transfer Unit	0	1	343	12	ICN	Cleveland	OH	02:45
Guzzler	0	1	343	71	ICN	Cleveland	OH	02:45
Vacuum Unit	0	1	343	78	ICN	East Liverpool	OH	04:49
Skid Mount Vac	0	1	343	24	ICN	Cincinnati	OH	05:07
Skid Mount Vac	0	1	343	12	ICN	Cincinnati	OH	05:07
Vacuum Variety	0	15	5145	0	ICN	Mooresville	IN	05:52
Sub Total Vacuum Transfer Unit:		**20**	**6860**	**197**				

Vacuum Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Vacuum Truck	0	4	1372	80	ICN	Toledo	OH	00:07
Vacuum Truck	0	1	343	70	ICN	Rudolph	OH	00:45
Vacuum Truck	0	1	343	70	ICN	Ypsilanti	MI	01:06
Vacuum Truck	0	1	343	70	ICN	Ypsilanti	MI	01:06
Vacuum Truck	0	1	343	70	ICN	Ypsilanti	MI	01:06
Vacuum Truck	0	1	343	70	ICN	Ypsilanti	MI	01:06
Vacuum Truck	0	1	343	70	ICN	Ypsilanti	MI	01:06
Vacuum Truck	0	1	343	70	ICN	Ypsilanti	MI	01:06
Vacuum Truck	0	1	343	107	ICN	Detroit	MI	01:23
Vacuum Truck	0	1	343	131	ICN	Detroit	MI	01:23
Vacuum Truck	0	1	343	119	ICN	Detroit	MI	01:23
Vacuum Truck	0	1	343	143	ICN	Detroit	MI	01:23
Vacuum Truck	0	4	1372	192	ICN	Detroit	MI	01:23
Vacuum Truck	0	2	686	166	ICN	Detroit	MI	01:23
Vacuum Truck	0	3	1029	213	ICN	Detroit	MI	01:23
Vacuum Truck	0	1	343	71	ICN	Cleveland	OH	02:34
Vacuum Trailer	0	1	343	120	ICN	Cleveland	OH	02:45
Vacuum Truck	0	2	686	142	ICN	Cleveland	OH	02:45
Vacuum Truck	0	4	1372	284	ICN	North Canton	OH	03:27
Vacuum Truck	0	4	1372	284	ICN	Elkhart	IN	03:36
Vacuum Truck	0	25	8575	1775	ICN	Huber Heights	OH	03:37

00 to 06 hours (* Does not include recall/mobilization time)

Vacuum Truck	0	2	686	120	ICN	Huber Heights	OH	03:37
Vacuum Truck	0	2	686	142	ICN	New Philadelphia	OH	03:49
Vacuum Truck	0	5	1715	355	ICN	Carroll	OH	03:56
Vacuum Truck	0	1	343	71	ICN	Middletown	OH	04:26
Vacuum Truck	0	1	343	83	ICN	Middletown	OH	04:26
Vacuum Truck	0	1	343	70	ICN	Cincinnati	OH	04:47
Vacuum Truck	0	1	343	74	ICN	East Liverpool	OH	04:49
Vacuum Truck	0	1	343	71	ICN	Steubenville	OH	05:01
Vacuum Truck	0	3	1029	213	ICN	Cincinnati	OH	05:07
Vacuum Truck	0	11	3773	1045	ICN	Miamitown	OH	05:07
Vacuum Truck	0	1	343	71	ICN	Indianapolis	IN	05:33
Vacuum Truck	0	2	686	142	ICN	Merrillville	IN	05:34
Pump Truck	0	1	651	71	ICN	Merrillville	IN	05:34
Vacuum Truck	0	35	12005	4200	ICN	Indianapolis	IN	05:36
Vacuum Truck	0	4	1372	284	ICN	Cuddy	PA	05:37
Vacuum Truck	0	2	686	142	ICN	Washington	PA	05:38
Vacuum Truck	0	1	343	24	ICN	Carnegie	PA	05:39
Vacuum Truck	0	1	343	71	ICN	Carnegie	PA	05:39
Vacuum Truck	0	1	343	67	ICN	Carnegie	PA	05:39
Vacuum Truck	0	4	1372	284	ICN	Carnegie	PA	05:39
Vacuum Truck	0	4	1372	316	ICN	Carnegie	PA	05:39
Vacuum Truck	0	4	1372	284	ICN	Schererville	IN	05:48
Vacuum Truck	0	11	3773	1573	ICN	Whiting	IN	05:49
Vacuum Truck	0	12	4116	852	ICN	East Chicago	IN	05:49
Vacuum Truck	0	15	5145	1065	ICN	East Chicago	IN	05:49
Vacuum Truck	0	1	343	120	ICN	Hammond	IN	05:50
Vacuum Truck	0	1	343	71	ICN	Mooresville	IN	05:52
Sub Total Vacuum Truck:		**189**	**65135**	**16198**				
Total Vacuum System:		**213**	**73915**	**16580**				

Vessel

Deployment Craft (< 25 foot)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
24' Deployment Craft	0	1	0	0	ICN	Toledo	OH	00:07
14' Deployment Craft	0	1	0	0	ICN	Toledo	OH	00:07
18' Deployment Craft	0	1	0	0	ICN	Toledo	OH	00:12
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
18' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
18' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
14' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
12' Deployment Craft	0	1	0	0	ICN	Rudolph	OH	00:45
24' Deployment Craft	0	1	0	0	ICN	Detroit	MI	01:23
20' Deployment Craft	0	1	0	0	ICN	Detroit	MI	01:23
20' Deployment Craft	0	2	0	0	ICN	Detroit	MI	01:23
17' Deployment Craft	0	1	0	0	ICN	Detroit	MI	01:23
13' Deployment Craft	0	1	0	0	ICN	Detroit	MI	01:23
14' Deployment Craft	0	4	0	0	ICN	Sterling Heights	MI	01:54
18' Deployment Craft	0	1	0	0	ICN	Sterling Heights	MI	01:54
12' Deployment Craft	0	1	0	0	ICN	Sterling Heights	MI	01:54
16' Deployment Craft	0	1	0	0	ICN	Sterling Heights	MI	01:54
John Boat	0	13	0	0	ICN	Marshall	MI	02:28
20' Deployment Craft	0	2	0	0	ICN	Middleburg Heights	OH	02:34
16' Deployment Craft	0	1	0	0	ICN	Middleburg Heights	OH	02:34
21' Deployment Craft	0	1	0	0	ICN	Cleveland	OH	02:45

00 to 06 hours (* Does not include recall/mobilization time)

14' Deployment Craft	0	1	0	0	ICN	Cleveland	OH	02:45
12' Deployment Craft	0	1	0	0	ICN	Cleveland	OH	02:45
14' Deployment Craft	0	1	0	0	ICN	North Canton	OH	03:27
14' Deployment Craft	0	1	0	0	ICN	Elkhart	IN	03:36
16' Deployment Craft	0	1	0	0	ICN	Huber Heights	OH	03:37
16' Jon Boat	0	2	0	0	ICN	Middletown	OH	04:26
Response Boat	0	1	0	0	ICN	Cincinnati	OH	04:47
21' Deployment Craft	0	1	0	0	ICN	East Liverpool	OH	04:49
24' Deployment Craft	0	2	0	0	ICN	East Liverpool	OH	04:49
14' Deployment Craft	0	1	0	0	ICN	East Liverpool	OH	04:51
22' Deployment Craft	0	1	0	0	ICN	East Liverpool	OH	04:51
16' Deployment Craft	0	1	0	0	ICN	Steubenville	OH	05:01
24' Deployment Craft	0	1	0	0	ICN	Cincinnati	OH	05:07
14' Deployment Craft	0	2	0	0	ICN	Cincinnati	OH	05:07
22' Deployment Craft	0	1	0	0	ICN	Cincinnati	OH	05:07
23' Deployment Craft	0	1	0	0	ICN	Erie	PA	05:07
21' Deployment Craft	0	1	0	0	ICN	Erie	PA	05:07
20' Deployment Craft	0	1	0	0	ICN	Batavia	OH	05:10
16' Deployment Craft	0	1	0	0	ICN	Batavia	OH	05:10
15' Deployment Craft	0	1	0	0	ICN	Dayton	KY	05:12
18' Deployment Craft	0	1	0	0	ICN	Dayton	KY	05:12
20' Deployment Craft	0	1	0	0	ICN	Indianapolis	IN	05:16
14' Deployment Craft	0	2	0	0	ICN	Indianapolis	IN	05:33
12' Deployment Craft	0	4	0	0	ICN	Indianapolis	IN	05:33
14' Deployment Craft	0	2	0	0	ICN	Merrillville	IN	05:34
12' Deployment Craft	0	1	0	0	ICN	Indianapolis	IN	05:36
14' Deployment Craft	0	1	0	0	ICN	Cuddy	PA	05:37
20' Deployment Craft	0	1	0	0	ICN	Cuddy	PA	05:37
15' Deployment Craft	0	1	0	0	ICN	Carnegie	PA	05:39
14' Deployment Craft	0	10	0	0	ICN	Carnegie	PA	05:39
12' Deployment Craft	0	1	0	0	ICN	Carnegie	PA	05:39
24' Deployment Craft	0	1	0	0	ICN	Carnegie	PA	05:39
23' Deployment Craft	0	1	0	0	ICN	Carnegie	PA	05:39
16' Deployment Craft	0	2	0	0	ICN	Pittsburgh	PA	05:41
14' Deployment Craft	0	1	0	0	ICN	Schererville	IN	05:48
14' Deployment Craft	0	1	0	0	ICN	Whiting	IN	05:49
14' Deployment Craft	0	4	0	0	ICN	East Chicago	IN	05:49
24' Deployment Craft	0	3	0	0	ICN	East Chicago	IN	05:49
18' Deployment Craft	0	1	0	0	ICN	East Chicago	IN	05:49
20' Deployment Craft	0	2	0	0	ICN	East Chicago	IN	05:49
17' Deployment Craft	0	2	0	0	ICN	East Chicago	IN	05:49
15' Deployment Craft	0	1	0	0	ICN	East Chicago	IN	05:49
John Boat	0	3	0	0	ICN	Mooresville	IN	05:52
Sub Total Deployment Craft (< 25 foot):		**114**	**0**	**0**				

Deployment Craft (> 25 foot)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
27' Deployment Craft	0	1	0	0	ICN	Detroit	MI	01:23
28' Deployment Craft	0	1	0	0	ICN	Sterling Heights	MI	02:01
25' Skiff	0	1	0	0	ICN	Middletown	OH	04:26
28' Deployment Craft	0	1	0	0	ICN	Cincinnati	OH	05:07
26' Deployment Craft	0	1	0	0	ICN	Erie	PA	05:07
28' Deployment Craft	0	2	0	0	ICN	Carnegie	PA	05:39
Sub Total Deployment Craft (> 25 foot):		**7**	**0**	**0**				
Total Vessel:		**121**	**0**	**0**				
Total 00 to 06 hours:			**94644**	**44295**				
Running Total from 0 to unknown:			**94644**	**44295**				

06 to 12 hours (* Does not include recall/mobilization time)

Boom

>=6 and <18 inch

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
12" Boom	0	3150	0	0	ICN	Apollo	PA	06:11
6" Boom	0	1050	0	0	ICN	Apollo	PA	06:11
10" Boom	0	400	0	0	ICN	Wheeling	IL	06:29
12" Boom	0	1500	0	0	ICN	Ashland	KY	06:32
10" Boom	0	300	0	0	ICN	Charleston	WV	07:12
8" Boom	0	2300	0	0	ICN	Charleston	WV	07:12
12" Boom	0	400	0	0	ICN	Wauwatosa	WI	07:12
12" Hard Boom	0	420	0	0	ICN	Louisville	KY	07:25
12" Boom	0	1500	0	0	ICN	Lock Haven	PA	09:10
8" Boom	0	2000	0	0	ICN	Nitro	WV	09:25
10" Boom	0	1000	0	0	ICN	Wood River	IL	11:19
10" Boom	0	400	0	0	ICN	St. Louis	MO	11:52
12" Boom	0	900	0	0	ICN	Paducah	KY	11:57
Sub Total >=6 and <18 inch:		**15320**	**0**	**0**				

>18 and <42 inch

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
20" Boom	0	1400	0	0	ICN	Apollo	PA	06:11
36" Boom	0	2000	0	0	ICN	Apollo	PA	06:11
19" Boom	0	1000	0	0	ICN	Burlington	Canada	06:24
24" Boom	0	1500	0	0	ICN	Ashland	KY	06:32
24" Boom	0	200	0	0	ICN	Lemont	IL	06:34
24" Boom	0	2000	0	0	ICN	Cross Lanes	WV	06:54
24" Boom	0	3000	0	0	ICN	Charleston	WV	07:12
36" Boom	0	1000	0	0	ICN	Germantown	WI	07:17
19" Boom	0	200	0	0	ICN	St. Ignace	MI	08:27
Snare Boom (Pom-Pom)	0	4	0	0	ICN	St. Ignace	MI	08:27
24" Boom	0	1500	0	0	ICN	Lock Haven	PA	09:10
24" Boom	0	2000	0	0	ICN	Baltimore	MD	11:27
10" Boom	0	400	0	0	ICN	Nashville	TN	11:54
Sub Total >18 and <42 inch:		**16204**	**0**	**0**				

>42 inch

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
48' Boom Trailer	0	5000	0	0	ICN	Goodlettsville	TN	11:40
Sub Total >42 inch:		**5000**	**0**	**0**				

18"

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
18" Boom	BM21-723	1000	0	0	NRC	South Holland	IL	06:03
18" Boom	0	4700	0	0	ICN	South Holland	IL	06:03
18" Boom	0	22500	0	0	ICN	Glenwood	IL	06:03
18" Boom	BM18-430	6800	0	0	NRC	Apollo	PA	06:11
18" Boom	BM18-739	1600	0	0	NRC	Apollo	PA	06:11
18" Boom	0	3225	0	0	ICN	Apollo	PA	06:11
18" Boom	0	7000	0	0	ICN	Monee	IL	06:16
Containment Boom	0	11200	0	0	ICN	Monee	IL	06:16
Containment Boom	0	11500	0	0	ICN	Monee	IL	06:16
18" Boom	0	500	0	0	ICN	Ashland	KY	06:26
18"Boom	0	11500	0	0	ICN	Wheeling	IL	06:29
18" Boom	0	3750	0	0	ICN	South Point	OH	06:32
18" Boom	0	2200	0	0	ICN	New Lenox	IL	06:33
18" Boom	0	3200	0	0	ICN	Lemont	IL	06:34
18" Boom	0	1200	0	0	ICN	Lemont	IL	06:34
18" Boom	BM18-736	3000	0	0	NRC	Shelbyville	KY	07:00
18" Boom	0	2600	0	0	ICN	Shelbyville	KY	07:00
18" Boom	0	100	0	0	ICN	North Aurora	IL	07:06
18" Boom	0	500	0	0	ICN	Crestwood	KY	07:08

06 to 12 hours (* Does not include recall/mobilization time)

18" Boom	0	1500	0	0	ICN	Menomonee Falls	WI	07:13
18" Boom	0	15400	0	0	ICN	Germantown	WI	07:17
18" Boom	0	100	0	0	ICN	Sheboygan	WI	07:21
18" Boom	BM18-433	7000	0	0	NRC	Rogers City	MI	07:25
18" Boom	BM21-719	1000	0	0	NRC	Rogers City	MI	07:25
18" Boom	BM18-727	1000	0	0	NRC	Rogers City	MI	07:25
18" Boom	BM18-735	3000	0	0	NRC	Nicholasville	KY	07:28
18" Boom	0	4900	0	0	ICN	Louisville	KY	07:34
18" Boom	0	2200	0	0	ICN	De Pere	WI	08:03
18" Boom	0	550	0	0	ICN	St. Ignace	MI	08:27
18" Boom	BM18-432	7000	0	0	NRC	Green Bay	WI	08:34
18" Boom	0	1000	0	0	ICN	Peoria	IL	09:15
18" Boom	0	2000	0	0	ICN	Newburgh	IN	09:19
18" Boom	0	1000	0	0	ICN	Evansville	IN	09:27
18" Boom	0	300	0	0	ICN	Elmira	NY	09:53
18" Boom	0	2000	0	0	ICN	Sunbury	PA	10:06
18" Boom	0	1000	0	0	ICN	Blountville	TN	10:15
18" Boom	BM18-364	100	0	0	NRC	Oswego	NY	10:46
18" Boom	BM21-720	1000	0	0	NRC	Oswego	NY	10:46
18" Boom	0	2600	0	0	ICN	Knoxville	TN	11:04
18" Boom	0	1100	0	0	ICN	Lorton	VA	11:09
18" Boom	0	500	0	0	ICN	East Syracuse	NY	11:12
Harbor Boom	0	100	0	0	ICN	East Syracuse	NY	11:12
18" Boom	0	2000	0	0	ICN	Fredericksburg	VA	11:13
18" Boom	0	1000	0	0	ICN	Laurel	MD	11:15
18" Boom	0	1000	0	0	ICN	Laurel	MD	11:15
18" Boom	0	9000	0	0	ICN	Laurel	MD	11:15
18" Boom	BM21-416	4000	0	0	NRC	Wood River	IL	11:19
18" Boom	0	2000	0	0	ICN	Wood River	IL	11:19
18" Boom	0	3000	0	0	ICN	Baltimore	MD	11:26
18" Boom	0	10000	0	0	ICN	Baltimore	MD	11:27
18" Boom	0	1800	0	0	ICN	Baltimore	MD	11:27
18" Boom	0	300	0	0	ICN	Baltimore	MD	11:27
18" Boom	BM18-737	3000	0	0	NRC	St. Louis	MO	11:40
18" Boom	0	2000	0	0	ICN	Calvert City	KY	11:40
18" Boom	0	1700	0	0	ICN	St. Louis	MO	11:52
18" Boom	0	2300	0	0	ICN	Nashville	TN	11:52
18" Boom	0	2000	0	0	ICN	Nashville	TN	11:54
18" Boom	0	1000	0	0	ICN	St. Louis	MO	11:56
18" Boom	BM18-353	100	0	0	NRC	Paducah	KY	11:57
18" Boom	0	2800	0	0	ICN	Paducah	KY	11:57
Sub Total 18":		**203425**	**0**	**0**				
Total Boom:		**239949**	**0**	**0**				

Portable Storage

Barge - Portable

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Portable Barge Set	101-102	1	0	238	NRC	Oswego	NY	10:46
Portable Barge Set	600-601	1	0	238	NRC	Paducah	KY	11:57
Sub Total Barge - Portable:		**2**	**0**	**476**				

Dracone/Bladder

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Canflex FCB-43E Bladder	BC-53	1	0	100	NRC	Rogers City	MI	07:25
Sub Total Dracone/Bladder:		**1**	**0**	**100**				

Frac Tank

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Frac Tank	0	30	0	14280	ICN	Apollo	PA	06:11
Frac Tank	0	3	0	714	ICN	Apollo	PA	06:11
Frac Tank	0	1	0	357	ICN	Newburgh	IN	09:19

06 to 12 hours (* Does not include recall/mobilization time)

Frac Tank	0	1	0	357	ICN	Newburgh	IN	09:19
Frac Tank	0	1	0	429	ICN	Norway	MI	10:16
Frac Tank	0	3	0	1500	ICN	Stafford	VA	11:12
Frac Tank	0	2	0	952	ICN	Laurel	MD	11:15
Frac Tank	0	3	0	1500	ICN	Baltimore	MD	11:27
Frac Tank	0	1	0	500	ICN	Goodlettsville	TN	11:40
Sub Total Frac Tank:		**45**	**0**	**20589**				

Portable Tank

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Pillow Tank	ELS-44	1	0	24	NRC	South Holland	IL	06:03
Pillow Tank	ELS-09	1	0	24	NRC	South Holland	IL	06:03
Pillow Tank	ELS-10	1	0	24	NRC	South Holland	IL	06:03
Pillow Tank	ELS-11	1	0	24	NRC	South Holland	IL	06:03
Portable Tank	0	3	0	321	ICN	Glenwood	IL	06:03
Tank Trailer	0	1	0	143	ICN	Monee	IL	06:16
Cement Tank	0	1	0	190	ICN	Burlington	Canada	06:24
Poly Tank	0	1	0	12	ICN	Burlington	Canada	06:24
Portable Tank	0	4	0	648	ICN	Wheeling	IL	06:29
Portable Tank	0	70	0	33320	ICN	Wheeling	IL	06:29
Portable Tank	0	40	0	4280	ICN	Wheeling	IL	06:29
Portable Tank	0	2	0	286	ICN	Shelbyville	KY	07:00
Vacuum Tanker Trailer	0	1	0	130	ICN	Shelbyville	KY	07:00
Poly Tote	0	2	0	12	ICN	North Aurora	IL	07:06
Poly Tank	0	1	0	7	ICN	North Aurora	IL	07:06
Poly Tank	0	1	0	35	ICN	North Aurora	IL	07:06
Portable Tank	0	2	0	0	ICN	Wauwatosa	WI	07:12
Pillow Tank	ELS-30	1	0	24	NRC	Rogers City	MI	07:25
Pillow Tank	ELS-31	1	0	24	NRC	Rogers City	MI	07:25
Pillow Tank	ELS-62	1	0	24	NRC	Rogers City	MI	07:25
Pillow Tank	ELS-63	1	0	24	NRC	Rogers City	MI	07:25
Tank Truck	0	1	0	167	ICN	Louisville	KY	07:34
Portable Tank	0	5	0	180	ICN	Louisville	KY	07:34
Poly Tank	0	1	0	6	ICN	St. Ignace	MI	08:27
Poly Tank	0	1	0	5	ICN	St. Ignace	MI	08:27
Portable Tank	0	3	0	285	ICN	Peoria	IL	09:15
Portable Tank	0	4	0	572	ICN	Peoria	IL	09:15
Tanker Truck	0	4	0	476	ICN	Nitro	WV	09:25
Portable Tank	0	1	0	357	ICN	Evansville	IN	09:27
Poly Tank	0	1	0	47	ICN	Blountville	TN	10:15
Poly/Steel Tank	0	1	0	12	ICN	Blountville	TN	10:15
Poly Tank	0	1	0	8	ICN	Blountville	TN	10:15
Pillow Tank	PT-01	1	0	24	NRC	Oswego	NY	10:46
Pillow Tank	PT-02	1	0	24	NRC	Oswego	NY	10:46
Pillow Tank	PT-03	1	0	24	NRC	Oswego	NY	10:46
Pillow Tank	PT-04	1	0	24	NRC	Oswego	NY	10:46
Portable Tank	0	3	0	144	ICN	Knoxville	TN	11:04
Poly Tank	0	4	0	32	ICN	Knoxville	TN	11:04
Poly Tank	0	2	0	24	ICN	East Syracuse	NY	11:12
Portable Tank	0	5	0	60	ICN	Fredericksburg	VA	11:13
Poly Tank	0	5	0	40	ICN	Baltimore	MD	11:26
Storage Container	0	1	0	59	ICN	Baltimore	MD	11:27
Portable Tank	0	1	0	476	ICN	St. Louis	MO	11:52
Portable Tank	0	1	0	47	ICN	St. Louis	MO	11:52
Portable Tank	0	5	0	180	ICN	St. Louis	MO	11:52
Portable Tank	0	2	0	18	ICN	St. Louis	MO	11:52
Portable Tank	0	2	0	12	ICN	St. Louis	MO	11:52
Portable Tank	0	1	0	12	ICN	Nashville	TN	11:52
Poly Tank	0	5	0	40	ICN	Nashville	TN	11:52
Poly Tank	0	2	0	48	ICN	Nashville	TN	11:52
Sub Total Portable Tank:		**203**	**0**	**42979**				

06 to 12 hours (* Does not include recall/mobilization time)

Tank Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Storage Trailers	0	18	0	0	ICN	Apollo	PA	06:11
Tanks Trucks	0	1	0	0	ICN	Louisville	KY	07:25
Tank Trailer	0	1	0	0	ICN	Syracuse	NY	11:10
Sub Total Tank Truck:		**20**	**0**	**0**				
Total Portable Storage:		**271**	**0**	**64144**				

Skimmer

Drum

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Crucial Double Drum 18H-36 Skimmer	CD-002	1	480	0	NRC	South Holland	IL	06:03
Elastec TDS118 Skimmer	0	4	960	0	ICN	South Holland	IL	06:03
Elastec TDS118 Skimmer	0	1	240	0	ICN	Apollo	PA	06:11
Double Drum Skimmer	0	6	4116	0	ICN	Monee	IL	06:16
Double Drum Skimmer	0	8	10968	0	ICN	Monee	IL	06:16
Elastec TDS118 Skimmer	0	1	240	0	ICN	Ashland	KY	06:26
Medium Drum Skimmer	0	1	240	0	ICN	Wheeling	IL	06:29
Elastec TDS136 Skimmer	0	1	480	0	ICN	New Lenox	IL	06:33
Small Drum Skimmer	0	1	171	0	ICN	Lemont	IL	06:34
Elastec TDS136 Skimmer	0	1	480	0	ICN	Lemont	IL	06:34
Crucial 1D18P36 Skimmer	0	1	240	0	ICN	Cross Lanes	WV	06:54
Elastec TDS118 Skimmer	0	1	240	0	ICN	Shelbyville	KY	07:00
Elastec TDS118 Skimmer	0	1	240	0	ICN	Menomonee Falls	WI	07:13
Elastec TDS136 Skimmer	0	1	480	0	ICN	Germantown	WI	07:17
Small Drum Skimmer	0	1	171	0	ICN	Louisville	KY	07:34
Small Drum Skimmer	0	3	513	0	ICN	Evansville	IN	09:27
Large Drum Skimmer	0	1	480	0	ICN	Blountville	TN	10:15
Medium Drum Skimmer	0	1	240	0	ICN	Knoxville	TN	11:04
Elastec TDS118 Skimmer	0	2	480	0	ICN	Stafford	VA	11:12
Elastec TDS118 Skimmer	0	2	480	0	ICN	Laurel	MD	11:15
Small Drum Skimmer	0	1	171	0	ICN	Wood River	IL	11:19
Elastec TDS136 Skimmer	0	1	480	0	ICN	Wood River	IL	11:19
Medium Drum Skimmer	0	1	240	0	ICN	Baltimore	MD	11:26
Elastec TDS136 Skimmer	0	1	480	0	ICN	Baltimore	MD	11:27
Elastec TDS118 Skimmer	0	2	480	0	ICN	Baltimore	MD	11:27
Elastec Mini Max Skimmer	0	1	137	0	ICN	Baltimore	MD	11:27
Elastec TDS118 Skimmer	0	1	240	0	ICN	Baltimore	MD	11:27
Medium Drum Skimmer	0	1	240	0	ICN	Goodlettsville	TN	11:40
Small Drum Skimmer	0	2	342	0	ICN	Calvert City	KY	11:40
Large Drum Skimmer	0	1	480	0	ICN	Nashville	TN	11:52
Small Drum Skimmer	0	1	171	0	ICN	Nashville	TN	11:54
Elastec TDS118 Skimmer	0	1	240	0	ICN	St. Louis	MO	11:56
Small Drum Skimmer	0	1	171	0	ICN	Paducah	KY	11:57
Sub Total Drum:		**54**	**25811**	**0**				

Floating Suction

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Vikoma Fasflo Skimmer	FFP-013	1	2112	0	NRC	Apollo	PA	06:11
Acme Weir Head Skimmer	WH-107	1	0	0	NRC	Apollo	PA	06:11
Vikoma Fasflo Skimmer	FFP-015	1	2112	0	NRC	Apollo	PA	06:11
Manta Ray Skimmer	0	1	315	0	ICN	Apollo	PA	06:11
Acme 39T Skimmer	0	1	1371	0	ICN	Apollo	PA	06:11
Megator Vacuum Skimmer	0	1	377	0	ICN	Apollo	PA	06:11
Duck Bill Skimmer	0	1	549	0	ICN	Monee	IL	06:16
Vikoma Fasflo Skimmer	FFP-011	1	2112	0	NRC	South Point	OH	06:32
Douglas 4300 SkimPac	0	2	960	0	ICN	Germantown	WI	07:17
Douglas 4300 Skimpac	0	2	960	0	ICN	De Pere	WI	08:03
Douglas 2300 SkimPac	0	1	274	0	ICN	St. Ignace	MI	08:27
Douglas 4300 SkimPac	0	2	960	0	ICN	Neenah	WI	08:45

06 to 12 hours (* Does not include recall/mobilization time)

Manta Ray Skimmer	0	1	315	0	ICN	Knoxville	TN	11:04
Manta Ray Skimmer	0	1	315	0	ICN	Fredericksburg	VA	11:13
Vikoma Fasflo Skimmer	FFP-003	1	2112	0	NRC	Wood River	IL	11:19
Vikoma Fasflo Skimmer	FFP-017	1	2112	0	NRC	Baltimore	MD	11:27
Acme Weir Head Skimmer	WH-220	1	0	0	NRC	Baltimore	MD	11:27
Skim Pak Skimmer	0	1	233	0	ICN	Baltimore	MD	11:27
Weir Skimmer	0	2	2058	0	ICN	Baltimore	MD	11:27
Vikoma Fasflo Skimmer	FFP-018	1	2112	0	NRC	Paducah	KY	11:57
Sub Total Floating Suction:		**24**	**21359**	**0**				

Multi Skimmer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Action 24 Skimmer	AP-115	1	823	0	NRC	Rogers City	MI	07:25
Action 18 Skimmer	AP-18-727	1	446	0	NRC	Rogers City	MI	07:25
Action 24 Skimmer	AP-116	1	823	0	NRC	Oswego	NY	10:46
Sub Total Multi Skimmer:		**3**	**2092**	**0**				

Oleophilic Disk

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
NRC Weir Disk Skimmer	WD-105	1	1371	24	NRC	Apollo	PA	06:11
Sub Total Oleophilic Disk:		**1**	**1371**	**24**				

Oleophilic Rope Mop

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Rope Mop	0	1	1200	0	ICN	Baltimore	MD	11:27
Sub Total Oleophilic Rope Mop:		**1**	**1200**	**0**				

Weir

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Alpha Weir Skimmer	0	1	1360	0	ICN	South Holland	IL	06:03
Weir Skimmer	0	2	274	0	ICN	Glenwood	IL	06:03
Sub Total Weir:		**3**	**1634**	**0**				
Total Skimmer:		**86**	**53467**	**24**				

Support Equipment

Ancillary Gear

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Power Pack	0	1	0	0	ICN	Wausau	WI	11:01
Sub Total Ancillary Gear:		**1**	**0**	**0**				

ATV

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
ATV	0	2	0	0	ICN	Apollo	PA	06:11
ATV	0	1	0	0	ICN	Monee	IL	06:16
ATV	0	2	0	0	ICN	North Aurora	IL	07:06
Four-Wheeler	0	1	0	0	ICN	St. Ignace	MI	08:27
ATV	0	1	0	0	ICN	Knoxville	TN	11:04
ATV	0	1	0	0	ICN	Nashville	TN	11:52
Sub Total ATV:		**8**	**0**	**0**				

Blower

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Boom Inflator	0	2	0	0	ICN	Glenwood	IL	06:03
Boom Inflator	0	1	0	0	ICN	Wheeling	IL	06:29
Boom Inflator	0	1	0	0	ICN	Cross Lanes	WV	06:54
Blower	0	3	0	0	ICN	Sunbury	PA	10:06
Blower	0	8	0	0	ICN	Knoxville	TN	11:04
Blower	0	2	0	0	ICN	Fredericksburg	VA	11:13
Blower	0	3	0	0	ICN	Baltimore	MD	11:26
Blower	0	4	0	0	ICN	St. Louis	MO	11:52
Blower	0	3	0	0	ICN	Nashville	TN	11:52
Sub Total Blower:		**27**	**0**	**0**				

Communications

06 to 12 hours (* Does not include recall/mobilization time)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Command Trailer	0	1	0	0	ICN	Monee	IL	06:16
Mobile Command Center	0	1	0	0	ICN	Louisville	KY	07:25
Sub Total Communications:		**2**	**0**	**0**				

Compressor

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Compressor	0	2	0	0	ICN	Glenwood	IL	06:03
Compressor	0	4	0	0	ICN	Apollo	PA	06:11
Compressor	0	3	0	0	ICN	Monee	IL	06:16
Compressor	0	2	0	0	ICN	Burlington	Canada	06:24
Air Compressor	0	1	0	0	ICN	Wheeling	IL	06:29
Compressor	0	6	0	0	ICN	Lemont	IL	06:34
Air Compressor	0	1	0	0	ICN	Cross Lanes	WV	06:54
Compressor	0	1	0	0	ICN	North Aurora	IL	07:06
Compressor	0	1	0	0	ICN	Wauwatosa	WI	07:12
Compressor	0	1	0	0	ICN	Menomonee Falls	WI	07:13
Air Compressor	0	2	0	0	ICN	Amherst	NY	07:23
Air Compressor	0	1	0	0	ICN	Louisville	KY	07:25
Compressor	0	4	0	0	ICN	Louisville	KY	07:34
Compressor	0	2	0	0	ICN	St. Ignace	MI	08:27
Compressor	0	2	0	0	ICN	Rochester	NY	09:00
Air Compressors	0	3	0	0	ICN	Evansville	IN	09:27
Compressor	0	1	0	0	ICN	Sunbury	PA	10:06
Compressor	0	1	0	0	ICN	Blountville	TN	10:15
Air Compressor	0	1	0	0	ICN	Waverly	NY	10:18
Compressor	0	2	0	0	ICN	Knoxville	TN	11:04
Compresssor	0	2	0	0	ICN	Syracuse	NY	11:10
Air Compressor	0	2	0	0	ICN	East Syracuse	NY	11:12
Compressor	0	3	0	0	ICN	Fredericksburg	VA	11:13
Compressor	0	1	0	0	ICN	Laurel	MD	11:15
Compressor	0	3	0	0	ICN	Wood River	IL	11:19
Compressor	0	1	0	0	ICN	Harriman	TN	11:26
Compressor	0	2	0	0	ICN	Baltimore	MD	11:26
Air Compressor 175 cfm	0	1	0	0	ICN	Baltimore	MD	11:27
Air Compressor 185 cfm	0	1	0	0	ICN	Baltimore	MD	11:27
Air Compressor	0	2	0	0	ICN	Calvert City	KY	11:40
Air Compressor	0	5	0	0	ICN	St. Louis	MO	11:52
Compressor	0	4	0	0	ICN	Nashville	TN	11:52
Sub Total Compressor:		**68**	**0**	**0**				

Crane Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Crane Truck	0	2	0	0	ICN	Apollo	PA	06:11
Crane	0	2	0	0	ICN	Chicago	IL	06:14
Sidebooms/Padded	0	2	0	0	ICN	New Oxford	PA	10:11
100T Crane	0	1	0	0	ICN	auget	IL	11 39
Sidebooms/Padded	0	2	0	0	ICN	Sauget	IL	11:39
Sub Total Crane Truck:		**9**	**0**	**0**				

Dump Truck/Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Dump Truck	0	5	0	0	ICN	Apollo	PA	06:11
Dump Trailer	0	8	0	0	ICN	Apollo	PA	06:11
Dump Truck	0	2	0	0	ICN	Ashland	KY	06:32
ER Trailer	0	2	0	0	ICN	Louisville	KY	07:25
Dump Truck	0	1	0	0	ICN	Rochester	NY	09:00
Dump Trailer	0	1	0	0	ICN	Evansville	IN	09:27
Dump Truck	0	1	0	0	ICN	Waverly	NY	10:18
Dump Truck	0	1	0	0	ICN	Fredericksburg	VA	11:13
Dump Trailer	0	2	0	0	ICN	n	VA	11:19
Dump Truck W/ Lift Gate	0	1	0	0	ICN	Goodlettsville	TN	11:40

06 to 12 hours (* Does not include recall/mobilization time)

Dump Truck	0	3	0	0	ICN	Goodlettsville	TN	11:40
Guzzler	0	3	0	0	ICN	Goodlettsville	TN	11:40
Dump Truck	0	1	0	0	ICN	St. Louis	MO	11:52
Dump Truck	0	1	0	0	ICN	Paducah	KY	11:57
Dump Truck	0	1	0	0	ICN	Paducah	KY	11:57
Dump Truck	0	1	0	0	ICN	Paducah	KY	11:57
Sub Total Dump Truck/Trailer:		**34**	**0**	**0**				

Earth Moving Equipment

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Skid Steer	0	2	0	0	ICN	South Holland	IL	06:03
Skid Steer	0	1	0	0	ICN	Glenwood	IL	06:03
Backhoe	0	1	0	0	ICN	Apollo	PA	06:11
Excavator	0	1	0	0	ICN	Apollo	PA	06:11
Backhoe	0	1	0	0	ICN	Apollo	PA	06:11
Bulldozer	0	1	0	0	ICN	Apollo	PA	06:11
Backhoe	0	1	0	0	ICN	Apollo	PA	06:11
Skid Steer Loader	0	4	0	0	ICN	Apollo	PA	06:11
325 Excavator	0	1	0	0	ICN	Chicago	IL	06:14
966 Wheel Loader	0	1	0	0	ICN	Chicago	IL	06:14
Backhoe	0	1	0	0	ICN	Monee	IL	06:16
Skid Steer	0	1	0	0	ICN	Burlington	Canada	06:24
Trackhoes	0	2	0	0	ICN	Hunker	PA	06:28
Skid Steer	0	2	0	0	ICN	Wheeling	IL	06:29
Skid Loader	0	4	0	0	ICN	Ashland	KY	06:32
Backhoe	0	2	0	0	ICN	Lemont	IL	06:34
Loader	0	1	0	0	ICN	Lemont	IL	06:34
Skid Steer	0	1	0	0	ICN	Shelbyville	KY	07:00
Earth Moving Equipment	0	6	0	0	ICN	Shelbyville	KY	07:00
Excavator	0	1	0	0	ICN	North Aurora	IL	07:06
Skid Steer	0	1	0	0	ICN	North Aurora	IL	07:06
Skid Steer	0	1	0	0	ICN	Louisville	KY	07:25
Backhoe	0	1	0	0	ICN	Louisville	KY	07:34
Loader	0	1	0	0	ICN	Louisville	KY	07:34
Backhoe Loader	0	1	0	0	ICN	Rochester	NY	09:00
Skid Steer	0	1	0	0	ICN	Newburgh	IN	09:19
Backhoe	0	8	0	0	ICN	Evansville	IN	09:27
Dozer	0	5	0	0	ICN	Evansville	IN	09:27
Skid Steer	0	4	0	0	ICN	Evansville	IN	09:27
Grader	0	2	0	0	ICN	Evansville	IN	09:27
Compactors	0	6	0	0	ICN	Evansville	IN	09:27
Excavators	0	4	0	0	ICN	Evansville	IN	09:27
Telehandlers	0	2	0	0	ICN	Evansville	IN	09:27
Wheel Loader	0	1	0	0	ICN	Evansville	IN	09:27
977 Track Loader	0	1	0	0	ICN	New Oxford	PA	10:11
325 Excavator	0	1	0	0	ICN	New Oxford	PA	10:11
Skid Steer	0	1	0	0	ICN	New Oxford	PA	10:11
Track Loader	0	1	0	0	ICN	Galesburg	IL	10:16
Excavator	0	1	0	0	ICN	Galesburg	IL	10:16
Backhoe Loader	0	1	0	0	ICN	Waverly	NY	10:18
Excavator	0	1	0	0	ICN	Waverly	NY	10:18
Backhoe	0	1	0	0	ICN	Knoxville	TN	11:04
Backhoe	0	1	0	0	ICN	Syracuse	NY	11:10
Skid Steer	0	1	0	0	ICN	Fredericksburg	VA	11:13
Backhoe	0	1	0	0	ICN	Fredericksburg	VA	11:13
Backhoe	0	1	0	0	ICN	Wood River	IL	11:19
Loader	0	1	0	0	ICN	Wood River	IL	11:19
Backhoe	0	1	0	0	ICN	Baltimore	MD	11:27
Bobcat w/ Attachment	0	1	0	0	ICN	Kingston	TN	11:30
325 Excavator	0	1	0	0	ICN	Sauget	IL	11:39
D5G Dozer	0	1	0	0	ICN	Sauget	IL	11:39

06 to 12 hours (* Does not include recall/mobilization time)

Track Loader	0	1	0	0	ICN	Sauget	IL	11:39
Bobcat W/ Attachment	0	4	0	0	ICN	Goodlettsville	TN	11:40
Excavator	0	2	0	0	ICN	Goodlettsville	TN	11:40
Backhoes	0	2	0	0	ICN	Goodlettsville	TN	11:40
Dozer 58 E	0	1	0	0	ICN	Goodlettsville	TN	11:40
Loader	0	1	0	0	ICN	Goodlettsville	TN	11:40
Skid Steer	0	1	0	0	ICN	Calvert City	KY	11:40
Backhoes	0	2	0	0	ICN	Calvert City	KY	11:40
Skid Steer	0	2	0	0	ICN	St. Louis	MO	11:52
Excavator-Mini	0	2	0	0	ICN	St. Louis	MO	11:52
Bobcat	0	1	0	0	ICN	Nashville	TN	11:52
Tractor	0	4	0	0	ICN	Paducah	KY	11:57
Backhoe	0	1	0	0	ICN	Paducah	KY	11:57
Loader	0	1	0	0	ICN	Paducah	KY	11:57
Sub Total Earth Moving Equipment:		**115**	**0**	**0**				

Flatbed Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Flatbed Trailer	0	1	0	0	ICN	South Holland	IL	06:03
Stakebed	0	3	0	0	ICN	South Holland	IL	06:03
Flatbed Trailer	360	1	0	0	NRC	Apollo	PA	06:11
Flatbed Trailer	704	1	0	0	NRC	Apollo	PA	06:11
Lowboy Trailer	0	3	0	0	ICN	Apollo	PA	06:11
Drop Deck Trailer	0	3	0	0	ICN	Apollo	PA	06:11
Lowboy Trailer	0	1	0	0	ICN	Wheeling	IL	06:29
Flatbed Trailer	0	3	0	0	ICN	Shelbyville	KY	07:00
Lowboy Trailer	0	1	0	0	ICN	Louisville	KY	07:34
Flatbed Trailer	0	1	0	0	ICN	Rochester	NY	09:00
LowboyTrailer	0	2	0	0	ICN	Evansville	IN	09:27
Flatbed Trailer	0	3	0	0	ICN	Blountville	TN	10:15
Flatbed Trailer	0	1	0	0	ICN	Waverly	NY	10:18
Flatbed Trailer	364	1	0	0	NRC	Oswego	NY	10:46
Flatbed Trailer	0	1	0	0	ICN	Knoxville	TN	11:04
Flatbed Trailer	0	4	0	0	ICN	Knoxville	TN	11:04
Flatbed Trailer	0	1	0	0	ICN	Syracuse	NY	11:10
Flatbed Trailer	0	3	0	0	ICN	Syracuse	NY	11:10
Flatbed Trailer	0	4	0	0	ICN	Fredericksburg	VA	11:13
Flatbed Trailer	0	1	0	0	ICN	Fredericksburg	VA	11:13
Car Carrier	0	1	0	0	ICN	n	VA	11:19
Lowboy Flatbed Trailer	0	1	0	0	ICN	Wood River	IL	11:19
Flatbed Trailer	0	1	0	0	ICN	Baltimore	MD	11:26
Flatbed Trailer	0	1	0	0	ICN	Baltimore	MD	11:26
Flatbed Trailer	317	1	0	0	NRC	Baltimore	MD	11:27
Flatbed Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
20' Response Trailer	0	8	0	0	ICN	Goodlettsville	TN	11:40
Flatbed Trailer	0	1	0	0	ICN	Nashville	TN	11:52
Flatbed Trailer	0	6	0	0	ICN	Nashville	TN	11:52
Flatbed Trailer	353	1	0	0	NRC	Paducah	KY	11:57
Flatbed Trailer	701	1	0	0	NRC	Paducah	KY	11:57
Sub Total Flatbed Trailer:		**62**	**0**	**0**				

Fork Lift

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Fork Lift	0	1	0	0	ICN	Glenwood	IL	06:03
Forklift	0	1	0	0	ICN	Apollo	PA	06:11
Fork Lift	0	1	0	0	ICN	Wheeling	IL	06:29
Forklift	0	1	0	0	ICN	Wauwatosa	WI	07:12
Fork Lift	0	1	0	0	ICN	Amherst	NY	07:23
Forklift	0	1	0	0	ICN	Kaukauna	WI	08:36
Fork Lift	0	1	0	0	ICN	Waverly	NY	10:18
Forklift	0	1	0	0	ICN	St. Louis	MO	11:52
Sub Total Fork Lift:		**8**	**0**	**0**				

06 to 12 hours (* Does not include recall/mobilization time)

Generator

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Generator	0	2	0	0	ICN	South Holland	IL	06:03
Generator	0	8	0	0	ICN	Glenwood	IL	06 03
Generator	0	15	0	0	ICN	Apollo	PA	06:11
Generator	0	2	0	0	ICN	Monee	IL	06:16
Generator	0	1	0	0	ICN	Burlington	Canada	06:24
Generator	0	10	0	0	ICN	Wheeling	IL	06:29
Generator	0	2	0	0	ICN	Lemont	IL	06 34
Generator	0	1	0	0	ICN	Cross Lanes	WV	06:54
Generators	0	2	0	0	ICN	North Aurora	IL	07:06
Generator	0	2	0	0	ICN	Wauwatosa	WI	07:12
Generator	0	2	0	0	ICN	Menomonee Falls	WI	07:13
Generator	0	1	0	0	ICN	Louisville	KY	07:25
Generator	0	2	0	0	ICN	Louisville	KY	07:34
Generator	0	2	0	0	ICN	St. Ignace	MI	08:27
Generator	0	1	0	0	ICN	Kaukauna	WI	08:36
Generator	0	2	0	0	ICN	Rochester	NY	09:00
Generator	0	4	0	0	ICN	Evansville	IN	09:27
Generator	0	3	0	0	ICN	Sunbury	PA	10:06
Generator	0	3	0	0	ICN	Blountville	TN	10:15
Generator	0	1	0	0	ICN	Waverly	NY	10:18
Generator	0	4	0	0	ICN	Knoxville	TN	11:04
Generator	0	5	0	0	ICN	Syracuse	NY	11:10
Generator	0	2	0	0	ICN	East Syracuse	NY	11:12
3500w Generator	0	2	0	0	ICN	Stafford	VA	11:12
Generator	0	3	0	0	ICN	Fredericksburg	VA	11:13
Generator	0	2	0	0	ICN	Laurel	MD	11:15
Generator	0	1	0	0	ICN	Binghamton	NY	11:17
Generator	0	2	0	0	ICN	Wood River	IL	11:19
Generator	0	1	0	0	ICN	Baltimore	MD	11:26
1000w Generator	0	7	0	0	ICN	Baltimore	MD	11:27
3500w Generator	0	1	0	0	ICN	Baltimore	MD	11:27
Generator	0	1	0	0	ICN	Calvert City	KY	11:40
Generator	0	5	0	0	ICN	St. Louis	MO	11:52
Generator	0	4	0	0	ICN	Nashville	TN	11:52
Sub Total Generator:		**106**	**0**	**0**				

Light Plant

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Light Plants	0	3	0	0	ICN	Apollo	PA	06:11
Light Tower	0	1	0	0	ICN	Monee	IL	06:16
Light Stand	0	1	0	0	ICN	Sunbury	PA	10:06
Light Plant	0	4	0	0	ICN	Knoxville	TN	11:04
Light Plant	0	1	0	0	ICN	Fredericksburg	VA	11:13
Light Plant	0	3	0	0	ICN	Baltimore	MD	11:26
Light Plant	0	2	0	0	ICN	Nashville	TN	11:52
Sub Total Light Plant:		**15**	**0**	**0**				

Pick-Up Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Pick-Up Truck	0	4	0	0	ICN	South Holland	IL	06:03
Pick-Up Truck	0	10	0	0	ICN	Glenwood	IL	06:03
Pick-Up Truck	0	27	0	0	ICN	Apollo	PA	06:11
Pick-Up Truck	0	6	0	0	ICN	Monee	IL	06:16
Pick-Up Truck	0	5	0	0	ICN	Burlington	Canada	06:24
Pick-Up Truck	0	16	0	0	ICN	Wheeling	IL	06:29
Pick-Up Truck	0	6	0	0	ICN	South Point	OH	06:32
Pick-Up Truck	0	6	0	0	ICN	New Lenox	IL	06:33
Pick-Up Truck	0	3	0	0	ICN	Cross Lanes	WV	06:54
Pick-Up Truck	0	4	0	0	ICN	Wauwatosa	WI	07:12

06 to 12 hours (* Does not include recall/mobilization time)

Pick-Up Truck	0	2	0	0	ICN	Menomonee Falls	WI	07:13
Pick-Up Truck	0	10	0	0	ICN	Germantown	WI	07:17
Pick-Up Truck	0	5	0	0	ICN	Sheboygan	WI	07:21
Pick-Up Truck	0	8	0	0	ICN	Amherst	NY	07:23
Crew Vehicle	0	1	0	0	ICN	Louisville	KY	07:25
Pick-Up Truck	0	1	0	0	ICN	Nicholasville	KY	07:28
Pick-Up Truck	0	2	0	0	ICN	De Pere	WI	08:03
Pick-Up Truck	0	1	0	0	ICN	Kaukauna	WI	08:36
Pick-Up Truck	0	2	0	0	ICN	Neenah	WI	08:45
Pick-Up Truck	0	4	0	0	ICN	Rochester	NY	09:00
Pick-Up Truck	0	2	0	0	ICN	Newburgh	IN	09:19
Pick-Up Truck	0	12	0	0	ICN	Nitro	WV	09:25
Pick-Up Truck	0	48	0	0	ICN	Evansville	IN	09:27
Pick-Up Truck	0	3	0	0	ICN	Sunbury	PA	10:06
Pick-Up Truck	0	1	0	0	ICN	Blountville	TN	10:15
Pick-Up Truck	0	1	0	0	ICN	Blountville	TN	10:15
Pick-Up Truck	0	3	0	0	ICN	Waverly	NY	10:18
Pick-up truck	0	2	0	0	ICN	Wausau	WI	11:01
Pick-Up Truck	0	2	0	0	ICN	Knoxville	TN	11:04
Pick-Up Truck	0	16	0	0	ICN	Syracuse	NY	11:10
Pick-Up Truck	0	3	0	0	ICN	East Syracuse	NY	11:12
Pick-Up Truck	0	4	0	0	ICN	East Syracuse	NY	11:12
Pick-Up Truck	0	1	0	0	ICN	Stafford	VA	11:12
Pick-Up Truck	0	1	0	0	ICN	Stafford	VA	11:12
Pick-Up Truck	0	1	0	0	ICN	Stafford	VA	11:12
Pick-Up Truck	0	5	0	0	ICN	Fredericksburg	VA	11:13
Pick-Up Truck	0	8	0	0	ICN	Laurel	MD	11:15
Pick-Up Truck	0	2	0	0	ICN	Binghamton	NY	11:17
Pick-Up Truck	0	6	0	0	ICN	Wood River	IL	11:19
Pick-Up Truck	0	1	0	0	ICN	Baltimore	MD	11:26
Pick-Up Truck	0	4	0	0	ICN	Baltimore	MD	11:26
Pick-Up Truck	0	1	0	0	ICN	Baltimore	MD	11:26
Pick-Up Truck	0	1	0	0	ICN	Baltimore	MD	11:27
Pick-Up Truck	0	1	0	0	ICN	Baltimore	MD	11:27
Pick-Up Truck	0	1	0	0	ICN	Baltimore	MD	11:27
Pick-Up Truck	0	1	0	0	ICN	Baltimore	MD	11:27
Pick-Up Truck	0	1	0	0	ICN	Baltimore	MD	11:27
Pick-Up Truck	0	1	0	0	ICN	Baltimore	MD	11:27
Pick-Up Truck	0	1	0	0	ICN	Baltimore	MD	11:27
Pick-Up Truck	0	2	0	0	ICN	Calvert City	KY	11:40
Pick-Up Truck	0	8	0	0	ICN	St. Louis	MO	11:52
Pick-Up Truck	0	7	0	0	ICN	Nashville	TN	11:52
Pick-Up Truck	0	17	0	0	ICN	St. Louis	MO	11:56
Pick-Up Truck	0	2	0	0	ICN	Paducah	KY	11:57
Pick-Up Truck	0	1	0	0	ICN	Paducah	KY	11:57
Pick-Up Truck	0	1	0	0	ICN	Paducah	KY	11:57
Sub Total Pick-Up Truck:	**294**	**0**	**0**					

Power Pack

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Power Pack	DPPC-118	1	0	0	NRC	South Holland	IL	06:03
Power Pack	DPP-20-102	1	0	0	NRC	Apollo	PA	06:11
Power Pack	DPP-10-105	1	0	0	NRC	Apollo	PA	06:11
Power Pack	DPP-20-112	1	0	0	NRC	South Point	OH	06:32
Power Pack	DPP-AP-115	1	0	0	NRC	Rogers City	MI	07:25
Power Pack	DPP-18-727	1	0	0	NRC	Rogers City	MI	07:25
Hydraulic Power Pack	0	1	0	0	ICN	De Pere	WI	08:03
Power Pack	0	2	0	0	ICN	Neenah	WI	08:45
Power Pack	DPP-AP-116	1	0	0	NRC	Oswego	NY	10:46
Power Pack	DPP-20-113	1	0	0	NRC	Wood River	IL	11:19
Power Pack	DPP-20-103	1	0	0	NRC	Paducah	KY	11:57
Sub Total Power Pack:	**12**	**0**	**0**					

06 to 12 hours (* Does not include recall/mobilization time)

Pressure Washer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Pressure Washer	0	3	0	0	ICN	South Holland	IL	06:03
Pressure Washe Trailer	0	1	0	0	ICN	South Holland	IL	06:03
Pressure Washer	0	1	0	0	ICN	Glenwood	IL	06:03
Pressure Washer	0	3	0	0	ICN	Glenwood	IL	06:03
Pressure Washer Trailer	0	3	0	0	ICN	Glenwood	IL	06:03
Pressure Washer- Hot	0	6	0	0	ICN	Apollo	PA	06:11
Pressure Washer- Hot	0	1	0	0	ICN	Monee	IL	06:16
Pressure Washer-Cold	0	2	0	0	ICN	Monee	IL	06:16
Blaster	0	2	0	0	ICN	Burlington	Canada	06:24
Pressure Washer	0	2	0	0	ICN	Wheeling	IL	06:29
Pressure Washer Trailer	0	2	0	0	ICN	Wheeling	IL	06:29
Pressure Washer	0	5	0	0	ICN	Lemont	IL	06:34
Pressure Washer-Cold	0	1	0	0	ICN	Cross Lanes	WV	06:54
Pressure Washer-Hot	0	2	0	0	ICN	Cross Lanes	WV	06:54
Pressure Washer	0	2	0	0	ICN	Wauwatosa	WI	07:12
Pressure Washer	0	1	0	0	ICN	Menomonee Falls	WI	07:13
Pressure Washer	0	2	0	0	ICN	Amherst	NY	07:23
Pressure Washer	0	1	0	0	ICN	Louisville	KY	07:25
Pressure Washer	0	6	0	0	ICN	Louisville	KY	07:34
Water Blaster	0	15	0	0	ICN	Louisville	KY	07:38
Pressure Washer	0	1	0	0	ICN	Kaukauna	WI	08:36
Presssure Washer	0	2	0	0	ICN	Rochester	NY	09:00
Pressure Wash- Hot	0	1	0	0	ICN	Newburgh	IN	09:19
Pressure Washer	0	3	0	0	ICN	Sunbury	PA	10:06
Pressure Cleaner	0	1	0	0	ICN	Blountville	TN	10:15
Pressure Washer- Hot	0	1	0	0	ICN	Blountville	TN	10:15
Pressure Washer	0	1	0	0	ICN	Waverly	NY	10:18
Pressure Cleaner	0	1	0	0	ICN	Knoxville	TN	11:04
Pressure Washer-Hot	0	1	0	0	ICN	Knoxville	TN	11:04
Pressure Washer	0	1	0	0	ICN	Syracuse	NY	11:10
3000 psi Pressure Washer	0	1	0	0	ICN	Stafford	VA	11:12
Pressure Washer-Hot	0	2	0	0	ICN	Fredericksburg	VA	11:13
Pressure Cleaner	0	2	0	0	ICN	Fredericksburg	VA	11:13
Pressure Washer	0	3	0	0	ICN	Laurel	MD	11:15
Pressure Washer- Hot	0	4	0	0	ICN	Laurel	MD	11:15
Pressure Waher & Trailer	0	1	0	0	ICN	Binghamton	NY	11:17
Pressure Washer	0	4	0	0	ICN	Wood River	IL	11:19
Pressure Washer-Hot	0	1	0	0	ICN	Baltimore	MD	11:26
3000 psi Pressure Washer	0	1	0	0	ICN	Baltimore	MD	11:27
3000 psi Pressure Washer	0	1	0	0	ICN	Baltimore	MD	11:27
3000 psi Pressure Washer	0	1	0	0	ICN	Baltimore	MD	11:27
3000 psi Pressure Washer	0	1	0	0	ICN	Baltimore	MD	11:27
Pressure Washer	0	4	0	0	ICN	St. Louis	MO	11:52
Pressure Washer Trailer	0	2	0	0	ICN	St. Louis	MO	11:52
Pressure Washer- Hot	0	2	0	0	ICN	Nashville	TN	11:52
Pressure Cleaner	0	2	0	0	ICN	Nashville	TN	11:52
High Pressure Washer	0	2	0	0	ICN	Nashville	TN	11:52
Hydro-Blaster	0	8	0	0	ICN	St. Louis	MO	11:56
Pressure Washer	0	2	0	0	ICN	St. Louis	MO	11:56
Sub Total Pressure Washer:		**118**	**0**	**0**				

Response Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Response Truck	0	1	0	0	ICN	Ashland	KY	06:26
Sub Total Response Truck:		**1**	**0**	**0**				

Roll Off Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Roll-Off Trailer	0	6	0	0	ICN	Monee	IL	06:16

06 to 12 hours (* Does not include recall/mobilization time)

Roll Off Trailer	0	1	0	0	ICN	Sunbury	PA	10:06
Sub Total Roll Off Trailer:		**7**	**0**	**0**				

Roll-Off Container

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Roll-Off Container	0	210	0	0	ICN	Apollo	PA	06:11
Emergency Response Container	0	2	0	0	ICN	Apollo	PA	06:11
Roll-Off Container	0	25	0	0	ICN	Monee	IL	06:16
Roll-Off Container	0	100	0	0	ICN	Hunker	PA	06:28
Roll-Off Box	0	58	0	0	ICN	Wheeling	IL	06:29
Vacuum Boxes	0	2	0	0	ICN	Wheeling	IL	06:29
Roll-Off Container	0	25	0	0	ICN	Ashland	KY	06:32
Roll-Off Boxes	0	4	0	0	ICN	New Lenox	IL	06:33
Roll-Off Container	0	5	0	0	ICN	Cross Lanes	WV	06:54
Roll-Off Box	0	4	0	0	ICN	Shelbyville	KY	07:00
Roll-Off Boxes	0	30	0	0	ICN	Germantown	WI	07:17
Roll-Off Container	0	25	0	0	ICN	Nitro	WV	09:25
Roll-Off Container	0	10	0	0	ICN	Sunbury	PA	10:06
Roll-Off Container	0	4	0	0	ICN	Norway	MI	10:16
Roll-Off Container	0	3	0	0	ICN	Waverly	NY	10:18
Roll-Off Container	0	10	0	0	ICN	Laurel	MD	11:15
30 Yard Roll Off Container	0	12	0	0	ICN	Goodlettsville	TN	11:40
20 Yard Roll Off Container	0	4	0	0	ICN	Goodlettsville	TN	11:40
40 Yard Roll Off Container	0	5	0	0	ICN	Goodlettsville	TN	11:40
Roll-Off Box	0	2	0	0	ICN	St. Louis	MO	11:52
Roll-Off Container	0	31	0	0	ICN	Paducah	KY	11:57
Sub Total Roll-Off Container:		**571**	**0**	**0**				

Roll-off Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Roll-Off Truck	0	1	0	0	ICN	New Lenox	IL	06:33
Roll-Off Truck	0	3	0	0	ICN	Germantown	WI	07:17
Roll-Off Truck	0	2	0	0	ICN	Nitro	WV	09:25
Roll-Off Truck	0	1	0	0	ICN	Norway	MI	10:16
Sub Total Roll-off Truck:		**7**	**0**	**0**				

SCBA

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
SCBA	0	4	0	0	ICN	South Holland	IL	06:03
SCBA	0	6	0	0	ICN	Monee	IL	06:16
SCBA	0	6	0	0	ICN	Wheeling	IL	06:29
SCBA	0	3	0	0	ICN	Cross Lanes	WV	06:54
SCBA	0	2	0	0	ICN	Menomonee Falls	WI	07:13
SCBA	0	2	0	0	ICN	Amherst	NY	07:23
SCBA	0	8	0	0	ICN	Evansville	IN	09:27
SCBA	0	3	0	0	ICN	Sunbury	PA	10:06
SCBA	0	6	0	0	ICN	Blountville	TN	10:15
SCBA	0	12	0	0	ICN	Knoxville	TN	11:04
SCBA	0	2	0	0	ICN	East Syracuse	NY	11:12
SCBA	0	5	0	0	ICN	Fredericksburg	VA	11:13
SCBA	0	4	0	0	ICN	Laurel	MD	11:15
SCBA	0	4	0	0	ICN	Binghamton	NY	11:17
SCBA	0	4	0	0	ICN	Baltimore	MD	11:26
SCBA	0	2	0	0	ICN	Kingston	TN	11:30
SCBA	0	4	0	0	ICN	Goodlettsville	TN	11:40
SCBA	0	2	0	0	ICN	Calvert City	KY	11:40
SCBA	0	4	0	0	ICN	Nashville	TN	11:52
Sub Total SCBA:		**83**	**0**	**0**				

Side Boom

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Sideboom-Padded	0	2	0	0	ICN	Chicago	IL	06:14
Sideboom-Padded	0	2	0	0	ICN	Galesburg	IL	10:16

06 to 12 hours (* Does not include recall/mobilization time)

Sub Total Side Boom:	**4**	**0**	**0**

Spares Van Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Semi Trailer	0	1	0	0	ICN	Peoria	IL	09:15
Sub Total Spares Van Trailer:		**1**	**0**	**0**				

Steam Cleaner

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Steam Cleaner	0	1	0	0	ICN	St. Ignace	MI	08:27
Sub Total Steam Cleaner:		**1**	**0**	**0**				

Truck - Semi

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Cube Van	0	1	0	0	ICN	Glenwood	IL	06:03
Roll-Off Truck	0	11	0	0	ICN	Apollo	PA	06:11
Tractor	0	18	0	0	ICN	Apollo	PA	06:11
Tractor	0	16	0	0	ICN	Monee	IL	06:16
Tractor	0	2	0	0	ICN	Burlington	Canada	06:24
Cube Truck	0	2	0	0	ICN	Burlington	Canada	06:24
Box Truck	0	3	0	0	ICN	Wheeling	IL	06:29
Utility Truck	0	12	0	0	ICN	Lemont	IL	06:34
Tilt Truck	0	1	0	0	ICN	Newburgh	IN	09:19
Tractors	0	4	0	0	ICN	Evansville	IN	09:27
Semi Tractors	0	2	0	0	ICN	Evansville	IN	09:27
Tractor	0	1	0	0	ICN	Sunbury	PA	10:06
Tractor	0	1	0	0	ICN	Waverly	NY	10:18
Tractor	0	1	0	0	ICN	Syracuse	NY	11:10
Frame Truck	0	1	0	0	ICN	Fredericksburg	VA	11:13
Tanker	0	3	0	0	ICN	Fredericksburg	VA	11:13
Road Tractor	0	1	0	0	ICN	Fredericksburg	VA	11:13
Tractor	0	1	0	0	ICN	Laurel	MD	11:15
Box Truck	0	3	0	0	ICN	St. Louis	MO	11:52
Roll-Off Truck	0	1	0	0	ICN	St. Louis	MO	11:52
Sub Total Truck - Semi:		**85**	**0**	**0**				

Utility Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Fast Response Trailer	723	1	0	0	NRC	South Holland	IL	06:03
Utility Trailer	0	6	0	0	ICN	South Holland	IL	06:03
Emergency Response/Job Trailer	0	10	0	0	ICN	Glenwood	IL	06:03
Fast Response Trailer	754	1	0	0	NRC	Apollo	PA	06:11
Pressure Washer Trailer	0	1	0	0	ICN	Monee	IL	06:16
Utility Trailer	0	4	0	0	ICN	Monee	IL	06:16
Cargo Trailer	0	1	0	0	ICN	Ashland	KY	06:26
Job Trailer	0	10	0	0	ICN	Wheeling	IL	06:29
High Hazard Trailer	0	1	0	0	ICN	Wheeling	IL	06:29
Response Trailer	0	1	0	0	ICN	Ashland	KY	06:32
Utility Trailer	0	2	0	0	ICN	Lemont	IL	06:34
Response Trailer	0	1	0	0	ICN	Lemont	IL	06:34
Drum Truck	0	4	0	0	ICN	Lemont	IL	06:34
Boom Trailer	0	1	0	0	ICN	Cross Lanes	WV	06:54
Fast Response Trailer	736	1	0	0	NRC	Shelbyville	KY	07:00
Utility Trailer	0	1	0	0	ICN	Shelbyville	KY	07:00
Utility Trailer	0	7	0	0	ICN	Shelbyville	KY	07:00
Response Trailer	0	3	0	0	ICN	Shelbyville	KY	07:00
Hot Water Pressure Washer Trailer	0	1	0	0	ICN	North Aurora	IL	07:06
Confined Space Entry Trailer	0	1	0	0	ICN	North Aurora	IL	07:06
Utility Trailer	0	1	0	0	ICN	Menomonee Falls	WI	07:13
Boom Trailer	0	4	0	0	ICN	Germantown	WI	07:17
Water Treatment Trailer	0	1	0	0	ICN	Germantown	WI	07:17
Utility Trailer	0	2	0	0	ICN	Amherst	NY	07:23
Spill Trailer	0	2	0	0	ICN	Amherst	NY	07:23

06 to 12 hours (* Does not include recall/mobilization time)

Decon Trailer	0	1	0	0	ICN	Amherst	NY	07:23
Fast Response Trailer	719	1	0	0	NRC	Rogers City	MI	07:25
Fast Response Trailer	727	1	0	0	NRC	Rogers City	MI	07:25
Fast Response Trailer	735	1	0	0	NRC	Nicholasville	KY	07:28
ER Trailer	0	1	0	0	ICN	Nicholasville	KY	07:28
Utility Trailer	0	1	0	0	ICN	Louisville	KY	07:34
Utility Truck	0	5	0	0	ICN	Louisville	KY	07:34
Boom Trailer	0	1	0	0	ICN	De Pere	WI	08:03
Utility Trailer	0	2	0	0	ICN	Rochester	NY	09:00
Water Treatment Trailer	0	1	0	0	ICN	Evansville	IN	09:27
Spill Trailer	0	1	0	0	ICN	Sunbury	PA	10:06
Utility Trailer	0	1	0	0	ICN	Blountville	TN	10:15
Spill Trailer	0	1	0	0	ICN	Waverly	NY	10:18
Utility Trailer	0	1	0	0	ICN	Waverly	NY	10:18
Fast Response Trailer	720	1	0	0	NRC	Oswego	NY	10:46
Boom Trailer	0	1	0	0	ICN	Knoxville	TN	11:04
Chemical Transfer Trailer	0	1	0	0	ICN	Knoxville	TN	11:04
Utility Trailer	0	2	0	0	ICN	Knoxville	TN	11:04
Utility Trailer	0	3	0	0	ICN	Syracuse	NY	11:10
Cargo Trailer	0	1	0	0	ICN	Syracuse	NY	11:10
Storage Trailer	0	1	0	0	ICN	Syracuse	NY	11:10
Decon Trailer	0	3	0	0	ICN	Syracuse	NY	11:10
Equipment Trailer	0	1	0	0	ICN	Stafford	VA	11:12
Boom Trailer	0	1	0	0	ICN	Fredericksburg	VA	11:13
Utility Trailer	0	1	0	0	ICN	Fredericksburg	VA	11:13
Boom Trailer	0	2	0	0	ICN	Laurel	MD	11:15
Utility Trailer	0	4	0	0	ICN	Binghamton	NY	11:17
Response Trailer	0	1	0	0	ICN	Wood River	IL	11:19
Utility Trailer	0	4	0	0	ICN	Baltimore	MD	11:26
Equipment Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Equipment Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Equipment Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Equipment Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Fast Response Trailer	737	1	0	0	NRC	St. Louis	MO	11:40
Job Trailer	0	6	0	0	ICN	St. Louis	MO	11:52
Boom Trailer	0	1	0	0	ICN	Nashville	TN	11:52
Utility Trailer	0	5	0	0	ICN	Nashville	TN	11:52
Sub Total Utility Trailer:		**131**	**0**	**0**				

Utility Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Box Truck	0	1	0	0	ICN	Glenwood	IL	06:03
Emergency Response Truck	0	3	0	0	ICN	Apollo	PA	06:11
Service Vehicles	0	10	0	0	ICN	Apollo	PA	06:11
Van	0	3	0	0	ICN	Apollo	PA	06:11
Gator	0	1	0	0	ICN	Apollo	PA	06:11
Stake Body	0	1	0	0	ICN	Monee	IL	06:16
Box Truck	0	1	0	0	ICN	Cross Lanes	WV	06:54
Utility Truck	0	4	0	0	ICN	North Aurora	IL	07:06
Box Truck	0	1	0	0	ICN	Wauwatosa	WI	07:12
Response Truck	0	2	0	0	ICN	Wauwatosa	WI	07:12
Stake Truck	0	2	0	0	ICN	De Pere	WI	08:03
Response Truck	0	1	0	0	ICN	Kaukauna	WI	08:36
Box Truck	0	1	0	0	ICN	Kaukauna	WI	08:36
Stake Truck	0	3	0	0	ICN	Neenah	WI	08:45
Box Van	0	1	0	0	ICN	Rochester	NY	09:00
SUV	0	1	0	0	ICN	Rochester	NY	09:00
Service Trucks	0	3	0	0	ICN	Peoria	IL	09:15
Stake Body	0	1	0	0	ICN	Sunbury	PA	10:06
Sport Utility Vehicle	0	1	0	0	ICN	Blountville	TN	10:15
Box Van	0	2	0	0	ICN	Waverly	NY	10:18

06 to 12 hours (* Does not include recall/mobilization time)

Box Truck	0	1	0	0	ICN	Knoxville	TN	11:04
Frame Truck	0	1	0	0	ICN	Knoxville	TN	11:04
Sport Utility Vehicle	0	1	0	0	ICN	Knoxville	TN	11:04
Box Van	0	5	0	0	ICN	Syracuse	NY	11:10
SUV	0	4	0	0	ICN	East Syracuse	NY	11:12
Stake Body	0	1	0	0	ICN	Laurel	MD	11:15
Box Truck	0	1	0	0	ICN	Binghamton	NY	11:17
Utility Truck	0	1	0	0	ICN	Baltimore	MD	11:27
Utility Truck	0	1	0	0	ICN	Baltimore	MD	11:27
Utility Truck	0	1	0	0	ICN	Baltimore	MD	11:27
Utility Truck	0	1	0	0	ICN	Baltimore	MD	11:27
Utility Truck	0	1	0	0	ICN	Baltimore	MD	11:27
Sport Utility Vehicle	0	2	0	0	ICN	Nashville	TN	11:52
Sub Total Utility Truck:		**64**	**0**	**0**				

Van Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Roll-Off Trailer	0	2	0	0	ICN	Glenwood	IL	06:03
Van Trailer	430	1	0	0	NRC	Apollo	PA	06:11
Van Trailer	0	8	0	0	ICN	Apollo	PA	06:11
Roll-Off Trailer	0	7	0	0	ICN	Apollo	PA	06:11
Hypalon Lined Trailers	0	5	0	0	ICN	Apollo	PA	06:11
Emergency Response Trailer	0	3	0	0	ICN	Apollo	PA	06:11
Van Truck	0	4	0	0	ICN	Monee	IL	06:16
Van Trailer	0	11	0	0	ICN	Monee	IL	06:16
Response Trailer	0	2	0	0	ICN	Monee	IL	06:16
Boom Trailer	0	2	0	0	ICN	Burlington	Canada	06:24
SpillTrailer	0	3	0	0	ICN	Burlington	Canada	06:24
Roll-Off Trailer	0	4	0	0	ICN	Wheeling	IL	06:29
Van Trailer	0	14	0	0	ICN	Wheeling	IL	06:29
Response Trailer	0	1	0	0	ICN	South Point	OH	06:32
Emergency Response	0	2	0	0	ICN	New Lenox	IL	06:33
Response Trailer	0	1	0	0	ICN	Cross Lanes	WV	06:54
Boom Trailer	0	1	0	0	ICN	Shelbyville	KY	07:00
Response Trailer	0	2	0	0	ICN	North Aurora	IL	07:06
Van Trailer	0	1	0	0	ICN	Wauwatosa	WI	07:12
Response Trailer	0	1	0	0	ICN	Wauwatosa	WI	07:12
Response Trailer	0	1	0	0	ICN	Germantown	WI	07:17
Response Van	0	1	0	0	ICN	Sheboygan	WI	07:21
Box Van	0	2	0	0	ICN	Amherst	NY	07:23
Van Trailer	433	1	0	0	NRC	Rogers City	MI	07:25
Emergency Response Trailer	0	1	0	0	ICN	Louisville	KY	07:25
Response Trailer	0	1	0	0	ICN	Louisville	KY	07:38
Emergency Response Trailer	0	1	0	0	ICN	De Pere	WI	08:03
Boom Trailer	0	1	0	0	ICN	St. Ignace	MI	08:27
Cargo Trailer	0	1	0	0	ICN	St. Ignace	MI	08:27
Van Trailer	432	1	0	0	NRC	Green Bay	WI	08:34
Response Trailer	0	1	0	0	ICN	Neenah	WI	08:45
Spill Trailer	0	2	0	0	ICN	Rochester	NY	09:00
Spill Response Trailer	0	1	0	0	ICN	Peoria	IL	09:15
Boom Trailer	0	1	0	0	ICN	Newburgh	IN	09:19
Response Trailer	0	1	0	0	ICN	Newburgh	IN	09:19
Truck Trailer	0	1	0	0	ICN	Newburgh	IN	09:19
Emergency Response Traile	0	1	0	0	ICN	Nitro	WV	09:25
Emergency Response/Job Trailer	0	20	0	0	ICN	Evansville	IN	09:27
Response Trailer	0	1	0	0	ICN	Blountville	TN	10:15
Response Trailer	0	1	0	0	ICN	Blountville	TN	10:15
Boom Trailer	0	2	0	0	ICN	Blountville	TN	10:15
Response Trailer	0	1	0	0	ICN	Norway	MI	10:16
Emergency Response Traile	0	1	0	0	ICN	Wausau	WI	11:01
Response Trailer	0	1	0	0	ICN	Knoxville	TN	11:04

06 to 12 hours (* Does not include recall/mobilization time)

Response Trailer	0	1	0	0	ICN	Knoxville	TN	11:04
Boom Trailer	0	1	0	0	ICN	Syracuse	NY	11:10
Spill Trailer	0	1	0	0	ICN	Syracuse	NY	11:10
Response Trailer	0	1	0	0	ICN	Fredericksburg	VA	11:13
Response Trailer	0	1	0	0	ICN	Fredericksburg	VA	11:13
Response Trailer	0	2	0	0	ICN	Laurel	MD	11:15
Cube Van	0	1	0	0	ICN	Laurel	MD	11:15
Van Trailer	416	1	0	0	NRC	Wood River	IL	11:19
EmergencyResponse Trailer	0	1	0	0	ICN	Baltimore	MD	11:26
Emergency Response Trailer	0	1	0	0	ICN	Baltimore	MD	11:26
Cargo Box Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Cargo Box Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Cargo Box Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Cargo Box Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Cargo Box Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Sorbent Boom Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
20' Response Trailer	0	1	0	0	ICN	Kingston	TN	11:30
48' Sorbent Boom Trailer	0	1	0	0	ICN	Goodlettsville	TN	11:40
Emergency Response/Job Trailer	0	1	0	0	ICN	Calvert City	KY	11:40
Response Trailer	0	1	0	0	ICN	Nashville	TN	11:52
Response Trailer	0	3	0	0	ICN	Nashville	TN	11:52
Emergency Response	0	2	0	0	ICN	St. Louis	MO	11:56
Response Van	0	1	0	0	ICN	Paducah	KY	11:57
Sub Total Van Trailer:		**148**	**0**	**0**				

Weir-Disk Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Weir-Disk Trailer	WDT-105	1	0	0	NRC	Apollo	PA	06:11
Sub Total Weir-Disk Trailer:		**1**	**0**	**0**				

Workboat Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Workboat Trailer	0	1	0	0	ICN	Rochester	NY	09:00
Boat Trailer	0	2	0	0	ICN	Newburgh	IN	09:19
Boat Trailer	0	4	0	0	ICN	Syracuse	NY	11:10
Work Boat Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Work Boat Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Work Boat Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Work Boat Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Work Boat Trailer	0	1	0	0	ICN	Baltimore	MD	11:27
Sub Total Workboat Trailer:		**13**	**0**	**0**				
Total Support Equipment:		**1996**	**0**	**0**				

Transfer Pump

Bladeless

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Transfer Pump	0	2	0	0	ICN	Neenah	WI	08:45
Sub Total Bladeless:		**2**	**0**	**0**				

Centrifugal

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Centrifugal Pump	0	1	0	0	ICN	Glenwood	IL	06:03
Transfer Pump	0	6	0	0	ICN	Monee	IL	06:16
Centrifugal Pump	0	1	0	0	ICN	Wheeling	IL	06:29
Hydraulic Pump	0	1	0	0	ICN	Shelbyville	KY	07:00
Transfer Pump	0	1	0	0	ICN	St. Ignace	MI	08:27
Hydraulic Pump	0	1	0	0	ICN	Newburgh	IN	09:19
Portable Pump	0	1	0	0	ICN	Lorton	VA	11:09
Stainless Steel Pump	0	1	0	0	ICN	Fredericksburg	VA	11:13
Submersible Pump	0	2	0	0	ICN	Fredericksburg	VA	11:13
Submersible Pump	0	2	0	0	ICN	Laurel	MD	11:15

06 to 12 hours (* Does not include recall/mobilization time)

Transfer Pump	0	26	0	0	ICN	Wood River	IL	11:19
Centrifugall Pump	0	2	0	0	ICN	St. Louis	MO	11:52
Centrifugal Pump	0	2	0	0	ICN	St. Louis	MO	11:52
Electrical Pump	0	1	0	0	ICN	Nashville	TN	11:52
Polypropylene Pump	0	1	0	0	ICN	Nashville	TN	11:52
Stainless Steel Pump	0	1	0	0	ICN	Nashville	TN	11:52
Transfer Pump	0	1	0	0	ICN	Paducah	KY	11:57
Sub Total Centrifugal:		**51**	**0**	**0**				

Diaphragm

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Diaphragm Pump	0	2	0	0	ICN	South Holland	IL	06:03
Trash Pump	0	5	0	0	ICN	South Holland	IL	06:03
Diaphragm Pump	0	7	0	0	ICN	Glenwood	IL	06:03
Transfer Pump	0	10	0	0	ICN	Monee	IL	06:16
Transfer Pump	0	2	0	0	ICN	Burlington	Canada	06:24
Diaphragm Pump	0	6	0	0	ICN	Wheeling	IL	06:29
Manual Daphragm Pump	0	1	0	0	ICN	Cross Lanes	WV	06:54
Double Diaphragm Pump	0	2	0	0	ICN	Cross Lanes	WV	06:54
2" Diaphragm	0	1	0	0	ICN	Shelbyville	KY	07:00
1 1/2" Diaphragm	0	1	0	0	ICN	Shelbyville	KY	07:00
Double Diaphragm Chem Pump	0	2	0	0	ICN	North Aurora	IL	07:06
Double Diaphragm Non-Chem Pump	0	2	0	0	ICN	North Aurora	IL	07:06
Diaphragm Pump	0	2	0	0	ICN	Wauwatosa	WI	07:12
Transfer Pump	0	2	0	0	ICN	Menomonee Falls	WI	07:13
Diaphragm Pump	0	1	0	0	ICN	Amherst	NY	07:23
2" Diaphragm	0	1	0	0	ICN	Newburgh	IN	09:19
Diaphragm Pump	0	4	0	0	ICN	Evansville	IN	09:27
Diaphragm Acid Pump	0	2	0	0	ICN	Evansville	IN	09:27
Diaphragm Pump	0	3	0	0	ICN	Blountville	TN	10:15
Trash Pump	0	7	0	0	ICN	Knoxville	TN	11:04
Diaphragm Pump	0	3	0	0	ICN	Knoxville	TN	11:04
Diaphragm Pump	0	1	0	0	ICN	Knoxville	TN	11:04
Transfer Pump	0	2	0	0	ICN	East Syracuse	NY	11:12
Diaphragm Pump	0	6	0	0	ICN	Fredericksburg	VA	11:13
Diaphragm Pump	0	1	0	0	ICN	Fredericksburg	VA	11:13
Transfer Pump	0	8	0	0	ICN	Laurel	MD	11:15
Diaphragm Pump	0	2	0	0	ICN	Binghamton	NY	11:17
Diaphragm Pump	0	2	0	0	ICN	Baltimore	MD	11:26
2" Diaphragm Pump	0	3	0	0	ICN	Kingston	TN	11:30
2" Wash Pump	0	2	0	0	ICN	Goodlettsville	TN	11:40
2" Air Diaphragm Pump	0	3	0	0	ICN	Goodlettsville	TN	11:40
2" Poly Diaphragm Pump	0	2	0	0	ICN	Goodlettsville	TN	11:40
2" Gas Diaphragm Pump	0	1	0	0	ICN	Goodlettsville	TN	11:40
3" Air Diaphragm Pump	0	1	0	0	ICN	Goodlettsville	TN	11:40
3" Gas Diaphragm Pump	0	1	0	0	ICN	Goodlettsville	TN	11:40
Diaphragm Acid Pump	0	2	0	0	ICN	Calvert City	KY	11:40
Diaphragm Pump	0	5	0	0	ICN	St. Louis	MO	11:52
Diaphragm Pump	0	2	0	0	ICN	Nashville	TN	11:52
Trash Pump	0	1	0	0	ICN	Nashville	TN	11:52
Diaphragm Pump	0	1	0	0	ICN	Nashville	TN	11:52
Wash Pump	0	12	0	0	ICN	Paducah	KY	11:57
Sub Total Diaphragm:		**124**	**0**	**0**				

Pneumatic

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Pneumatic Pump	0	2	0	0	ICN	Monee	IL	06:16
Transfer Pump	0	1	0	0	ICN	St. Ignace	MI	08:27
Transfer Pump	0	1	0	0	ICN	St. Ignace	MI	08:27
Sub Total Pneumatic:		**4**	**0**	**0**				

Trash Pump

06 to 12 hours (* Does not include recall/mobilization time)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Trash Pump	0	4	0	0	ICN	Cross Lanes	WV	06:54
Trash Pump	0	2	0	0	ICN	Rochester	NY	09:00
Trash Pump	0	3	0	0	ICN	Evansville	IN	09:27
Trash Pump	0	1	0	0	ICN	Blountville	TN	10:15
Trash Pump	0	2	0	0	ICN	Lorton	VA	11:09
Trash Pump	0	1	0	0	ICN	Syracuse	NY	11:10
Trash Pump	0	2	0	0	ICN	Fredericksburg	VA	11:13
Trash Pump	0	2	0	0	ICN	Laurel	MD	11:15
Trash Pump	0	1	0	0	ICN	Baltimore	MD	11:26
Trash Pump	0	2	0	0	ICN	Baltimore	MD	11:27
Trash Pump	0	1	0	0	ICN	Calvert City	KY	11:40
Sub Total Trash Pump:		**21**	**0**	**0**				
Total Transfer Pump:		**202**	**0**	**0**				

Vacuum System

Loader

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Skid Mounted Vac	0	1	206	71	ICN	Apollo	PA	06:11
Vacuum Loader	0	3	1029	213	ICN	Burlington	Canada	06:24
Vacuum Drum Loader	0	1	343	0	ICN	Cross Lanes	WV	06:54
Sub Total Loader:		**5**	**1578**	**284**				

Vacuum Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Vacuum Trailer	0	1	1621	124	ICN	Apollo	PA	06:11
Vacuum Trailer	0	1	1651	155	ICN	Apollo	PA	06:11
Vacuum Trailer	0	2	686	262	ICN	Apollo	PA	06:11
Vacuum Trailer	0	1	343	131	ICN	Apollo	PA	06:11
Vacuum Trailer	0	2	3260	260	ICN	Apollo	PA	06:11
Vacuum Trailer	0	2	3306	310	ICN	Apollo	PA	06:11
Vacuum Trailer	0	1	343	95	ICN	Burlington	Canada	06:24
Vacuum Trailer	0	1	343	178	ICN	Burlington	Canada	06:24
Vacuum Trailer	0	4	1372	568	ICN	Ashland	KY	06:32
Vacuum Tanker Trailer	0	1	343	52	ICN	Shelbyville	KY	07:00
Vacuum Trailer	0	1	343	71	ICN	Sunbury	PA	10:06
Vacuum Trailer	0	1	343	125	ICN	Lorton	VA	11:09
Vacuum Trailer	0	1	343	119	ICN	Syracuse	NY	11:10
Vacuum Trailer	0	1	343	142	ICN	Laurel	MD	11:15
Vacuum Tank Trailer	0	1	2057	119	ICN	Baltimore	MD	11:27
Sub Total Vacuum Trailer:		**21**	**16697**	**2711**				

Vacuum Transfer Unit

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Vacuum Transfer Unit	107	1	6857	24	NRC	Apollo	PA	06:11
Vacuum Unit	0	1	686	24	ICN	Monee	IL	06:16
Vacuum Unit	0	1	686	12	ICN	Monee	IL	06:16
Skid Mount Vac	0	1	343	24	ICN	Cross Lanes	WV	06:54
Vacuum Transfer Unit	220	1	6857	24	NRC	Baltimore	MD	11:27
Super Sucker Vacuum	0	1	343	120	ICN	St. Louis	MO	11:52
Sub Total Vacuum Transfer Unit:		**6**	**15772**	**228**				

Vacuum Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Vacuum Truck	0	1	754	71	ICN	Glenwood	IL	06:03
Vacuum Truck	0	1	343	166	ICN	Glenwood	IL	06:03
Vacuum Truck	0	1	1600	86	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	1463	76	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	343	79	ICN	Apollo	PA	06 11
Vacuum Trailer	0	1	1444	76	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	1475	102	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	1575	55	ICN	Apollo	PA	06:11

06 to 12 hours (* Does not include recall/mobilization time)

Vacuum Truck	0	1	1600	86	ICN	Apollo	PA	06:11
Vacuum Trailer	0	1	1273	67	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	1805	95	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	1273	67	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	718	52	ICN	Apollo	PA	06:11
Vacuum Truck	0	2	686	158	ICN	Apollo	PA	06 11
Vacuum Truck	0	1	1803	95	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	1447	76	ICN	Apollo	PA	06:11
Vacuum Truck	0	3	1029	300	ICN	Apollo	PA	06:11
Vacuum Truck	0	1	343	79	ICN	Apollo	PA	06:11
Vacuum Truck	0	4	1372	476	ICN	Monee	IL	06:16
Vacuum Truck	0	1	343	143	ICN	Monee	IL	06:16
Vacuum Truck	0	1	343	71	ICN	Monee	IL	06:16
Vacuum Truck	0	9	3087	1179	ICN	Monee	IL	06:16
Vacuum Truck	0	1	343	90	ICN	Monee	IL	06:16
Vacuum Truck	0	1	343	57	ICN	Ashland	KY	06:26
Vacuum Truck	0	2	1508	142	ICN	Wheeling	IL	06:29
Vacuum Truck	0	5	1715	830	ICN	Wheeling	IL	06:29
Vacuum Truck	0	2	686	48	ICN	Ashland	KY	06:32
Vacuum Truck	0	7	2401	497	ICN	Ashland	KY	06:32
Vacuum Truck	0	4	1372	284	ICN	New Lenox	IL	06:33
Vacuum Truck	0	6	2058	426	ICN	Lemont	IL	06:34
Vacuum Truck	0	1	343	71	ICN	Cross Lanes	WV	06:54
Vacuum Truck	0	2	686	166	ICN	Cross Lanes	WV	06:54
Vacuum Truck	0	1	343	70	ICN	Shelbyville	KY	07:00
Vacuum Truck	0	1	343	70	ICN	Shelbyville	KY	07:00
Vacuum Truck	0	1	343	52	ICN	Shelbyville	KY	07:00
Vacuum Truck	0	2	686	152	ICN	Shelbyville	KY	07:00
Vacuum Truck	0	1	343	71	ICN	Shelbyville	KY	07:00
Vacuum Truck	0	2	686	142	ICN	Shelbyville	KY	07:00
Vacuum Truck	0	4	1372	284	ICN	North Aurora	IL	07:06
Vacuum Truck	0	2	686	142	ICN	Wauwatosa	WI	07:12
Pump Truck	0	3	1953	213	ICN	Wauwatosa	WI	07:12
Vacuum Truck	0	11	3773	660	ICN	Germantown	WI	07:17
Vacuum Truck	0	10	3430	1200	ICN	Sheboygan	WI	07:21
Vacuum Truck	0	1	343	76	ICN	Amherst	NY	07:23
Vacuum Truck	0	1	343	71	ICN	Louisville	KY	07:25
Vacuum Truck	0	3	1029	213	ICN	Louisville	KY	07:34
Vacuum Truck	0	5	1715	600	ICN	Louisville	KY	07:38
Vacuum Truck	0	5	1715	655	ICN	Fort Atkinson	WI	08:09
Vacuum Truck	0	1	343	71	ICN	Kaukauna	WI	08:36
Pump Truck	0	2	1302	142	ICN	Kaukauna	WI	08:36
Vacuum Truck	0	1	343	71	ICN	Rochester	NY	09:00
Liquid Vac Truck	0	1	3086	71	ICN	Peoria	IL	09:15
Vacuum Truck	0	1	343	71	ICN	Newburgh	IN	09:19
Vacuum Truck	0	6	2058	720	ICN	Nitro	WV	09:25
Vacuum Truck	0	2	686	142	ICN	Evansville	IN	09:27
Vacuum Truck	0	1	343	78	ICN	Evansville	IN	09:27
Vacuum Truck	0	4	1372	284	ICN	Sunbury	PA	10:06
Vacuum Truck	0	1	343	71	ICN	Blountville	TN	10:15
Vacuum Truck	0	1	343	71	ICN	Norway	MI	10:16
Vacuum Truck	0	1	343	71	ICN	Waverly	NY	10:18
Vacuum Truck	0	2	686	96	ICN	Wausau	WI	11:01
Vacuum Truck	0	1	343	50	ICN	Knoxville	TN	11:04
Vacuum Truck	0	1	343	75	ICN	Lorton	VA	11:09
Vacuum Truck	0	1	343	71	ICN	Syracuse	NY	11:10
Vacuum Truck	0	1	343	71	ICN	Syracuse	NY	11:10
Vacuum Truck	0	1	343	48	ICN	Syracuse	NY	11:10
Vacuum Truck	0	1	343	71	ICN	Syracuse	NY	11:10
Vacuum Truck	0	1	343	77	ICN	Syracuse	NY	11:10
Vacuum Tractor	0	1	343	71	ICN	East Syracuse	NY	11:12

06 to 12 hours (* Does not include recall/mobilization time)

Vacuum Truck	0	2	686	142	ICN	East Syracuse	NY	11:12
Vacuum Tank Truck	0	1	2057	83	ICN	Stafford	VA	11:12
Vacuum Tank Truck	0	1	2057	76	ICN	Stafford	VA	11:12
Vacuum Tank Truck	0	1	2057	76	ICN	tafford	VA	11 12
Vacuum Truck	0	2	686	166	ICN	Fredericksburg	VA	11:13
Vacuum Truck	0	1	343	71	ICN	Fredericksburg	VA	11:13
Vacuum Truck	0	2	686	142	ICN	Laurel	MD	11:15
Vacuum Truck	0	1	343	59	ICN	Laurel	MD	11:15
Vacuum Truck	0	9	3087	639	ICN	Wood River	IL	11:19
Vacuum Truck	0	1	343	120	ICN	Baltimore	MD	11:26
Vacuum Tanker	0	1	343	71	ICN	Baltimore	MD	11:26
Vacuum Truck	0	1	343	83	ICN	Baltimore	MD	11:26
Vacuum Tank Truck	0	1	2057	95	ICN	Baltimore	MD	11:27
Vacuum Tank Truck	0	1	2057	71	ICN	Baltimore	MD	11:27
Vacuum Tank Truck	0	1	2057	71	ICN	Baltimore	MD	11:27
Vacuum Tank Truck	0	1	2057	83	ICN	Baltimore	MD	11:27
Vacuum Tank Truck	0	1	2057	76	ICN	Baltimore	MD	11:27
Vacuum Tank Truck	0	1	2057	83	ICN	Baltimore	MD	11:27
Vacuum Tank Truck	0	1	2057	71	ICN	Baltimore	MD	11:27
Vacuum Tank Truck	0	1	2057	76	ICN	Baltimore	MD	11:27
Vacuum Truck	0	1	343	130	ICN	Baltimore	MD	11:27
Vacuum Truck	0	1	343	75	ICN	Baltimore	MD	11:27
Vacuum Truck	0	1	343	76	ICN	Baltimore	MD	11:27
Vacuum Truck	0	1	343	70	ICN	Goodlettsville	TN	11:40
Vacuum Truck	0	1	343	70	ICN	Goodlettsville	TN	11:40
Vac Truck	0	1	343	130	ICN	Goodlettsville	TN	11:40
Vacuum Truck	0	1	343	71	ICN	Calvert City	KY	11:40
Vacuum Truck	0	1	754	71	ICN	St. Louis	MO	11:52
Vacuum Truck	0	1	343	83	ICN	Nashville	TN	11:52
Vacuum Truck	0	1	343	71	ICN	Nashville	TN	11:52
Vacuum Truck	0	1	343	71	ICN	Nashville	TN	11:52
Vacuum Truck	0	2	3428	158	ICN	Nashville	TN	11:54
Vacuum Truck	0	17	5831	1207	ICN	St. Louis	MO	11:56
Vacuum Truck	0	4	1372	480	ICN	St. Louis	MO	11:56
Vacuum Truck	0	1	1714	79	ICN	Paducah	KY	11:57
Sub Total Vacuum Truck:		**218**	**117028**	**18626**				
Total Vacuum System:		**250**	**151075**	**21849**				

Vessel

Deck Barge

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
BUDA I Work Barge	0	1	0	0	ICN	Detroit	MI	08:26
BUDA II Vacuum Barge	0	1	0	0	ICN	Detroit	MI	08:26
Sub Total Deck Barge:		**2**	**0**	**0**				

Deployment Craft (< 25 foot)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
18' Deployment Craft	0	1	0	0	ICN	South Holland	IL	06:03
20' Deployment Craft	0	1	0	0	ICN	South Holland	IL	06:03
14' Deployment Craft	0	1	0	0	ICN	South Holland	IL	06:03
John Boat	0	16	0	0	ICN	Glenwood	IL	06 03
22' Deployment Craft	0	1	0	0	ICN	Apollo	PA	06:11
20' Deployment Craft	0	1	0	0	ICN	Apollo	PA	06:11
13' Deployment Craft	0	1	0	0	ICN	Apollo	PA	06:11
18' Deployment Craft	0	1	0	0	ICN	Apollo	PA	06:11
20' Deployment Craft	0	1	0	0	ICN	Apollo	PA	06 11
24' Deployment Craft	0	1	0	0	ICN	Apollo	PA	06:11
16' Deployment Craft	0	1	0	0	ICN	Apollo	PA	06:11
12' Deployment Craft	0	2	0	0	ICN	Apollo	PA	06:11
16' Deployment Craft	0	5	0	0	ICN	Apollo	PA	06:11

06 to 12 hours (* Does not include recall/mobilization time)

18' Deployment Craft	0	1	0	0	ICN	Monee	IL	06:16
14" Deployment Craft	0	1	0	0	ICN	Monee	IL	06:16
24' Deployment Craft	0	1	0	0	ICN	Monee	IL	06:16
12' Deployment Craft	0	3	0	0	ICN	Monee	IL	06:16
13' Deployment Craft	0	1	0	0	ICN	Monee	IL	06:16
10' Deployment Craft	0	1	0	0	ICN	Monee	IL	06:16
16' Deployment Craft	0	2	0	0	ICN	Burlington	Canada	06:24
20' Response Boat	0	1	0	0	ICN	Ashland	KY	06:26
John Boat	0	2	0	0	ICN	Wheeling	IL	06:29
Work Flat	0	13	0	0	ICN	South Point	OH	06:32
18' Deployment Craft	0	2	0	0	ICN	South Point	OH	06:32
22' Deployment Craft	0	4	0	0	ICN	South Point	OH	06:32
16' Deployment Craft	0	4	0	0	ICN	Ashland	KY	06:32
18' Deployment Craft	0	1	0	0	ICN	Ashland	KY	06:32
18' Deployment Craft	0	1	0	0	ICN	New Lenox	IL	06:33
14' Deployment Craft	0	1	0	0	ICN	New Lenox	IL	06:33
14' Deployment Craft	0	1	0	0	ICN	Lemont	IL	06:34
14' Deployment Craft	0	1	0	0	ICN	Lemont	IL	06:34
24' Deployment Craft	0	2	0	0	ICN	Lemont	IL	06:34
24' Deployment Craft	0	1	0	0	ICN	Lemont	IL	06:34
22' Deployment Craft	0	1	0	0	ICN	Cross Lanes	WV	06:54
14' Deployment Craft	0	1	0	0	ICN	Cross Lanes	WV	06:54
11' Deployment Craft	0	1	0	0	ICN	Cross Lanes	WV	06:54
20' Response Boat	0	1	0	0	ICN	Shelbyville	KY	07:00
14' Deployment Craft	0	1	0	0	ICN	North Aurora	IL	07:06
14' Deployment Craft	0	1	0	0	ICN	Wauwatosa	WI	07:12
16' Deployment Craft	0	1	0	0	ICN	Menomonee Falls	WI	07:13
18.5' Deployment Craft	0	1	0	0	ICN	Menomonee Falls	WI	07:13
19' Deployment Craft	0	1	0	0	ICN	Germantown	WI	07:17
16' Deployment Craft	0	4	0	0	ICN	Germantown	WI	07:17
Small Boat w/ Trolling Motor	0	1	0	0	ICN	Louisville	KY	07:25
Response Boat	0	1	0	0	ICN	Louisville	KY	07:25
12' Deployment Craft	0	1	0	0	ICN	Louisville	KY	07:34
24' Deployment Craft	0	1	0	0	ICN	Louisville	KY	07:34
18' Deployment Craft	0	1	0	0	ICN	Louisville	KY	07:34
18' Deployment Craft	0	1	0	0	ICN	Louisville	KY	07:34
19' Deployment Craft	0	1	0	0	ICN	Louisville	KY	07:34
14' Deployment Craft	0	1	0	0	ICN	De Pere	WI	08:03
18' Deployment Craft	0	1	0	0	ICN	De Pere	WI	08:03
20' Deployment Craft	0	1	0	0	ICN	De Pere	WI	08:03
14' Rowboat	0	1	0	0	ICN	St. Ignace	MI	08:27
17' Deployment Craft	0	1	0	0	ICN	St. Ignace	MI	08:27
21' Deployment Craft	0	2	0	0	ICN	Neenah	WI	08:45
18' Deployment Craft	0	1	0	0	ICN	Newburgh	IN	09:19
14' Deployment Craft	0	1	0	0	ICN	Nitro	WV	09:25
20' Deployment Craft	0	1	0	0	ICN	Nitro	WV	09:25
20' Deployment Craft	0	1	0	0	ICN	Evansville	IN	09:27
12' Deployment Craft	0	4	0	0	ICN	Evansville	IN	09:27
14' Deployment Craft	0	2	0	0	ICN	Evansville	IN	09:27
18' Deployment Craft	0	1	0	0	ICN	Sunbury	PA	10:06
16' Deployment Craft	0	1	0	0	ICN	Blountville	TN	10:15
14' Deployment Craft	0	1	0	0	ICN	Wausau	WI	11:01
16' Deployment Craft	0	1	0	0	ICN	Knoxville	TN	11:04
19' Deployment Craft	0	1	0	0	ICN	Knoxville	TN	11:04
18' Deployment Craft	0	1	0	0	ICN	Lorton	VA	11:09
20' Deployment Craft	0	1	0	0	ICN	Lorton	VA	11:09
10' Deployment Craft	0	1	0	0	ICN	Lorton	VA	11:09
18' Deployment Craft	0	1	0	0	ICN	Syracuse	NY	11:10
14' Deployment Craft	0	1	0	0	ICN	Syracuse	NY	11:10
13' Deployment Craft	0	2	0	0	ICN	Stafford	VA	11:12
19' Deployment Craft	0	1	0	0	ICN	Fredericksburg	VA	11:13

06 to 12 hours (* Does not include recall/mobilization time)

16' Deployment Craft	0	1	0	0	ICN	Fredericksburg	VA	11:13
24' Deployment Craft	0	1	0	0	ICN	Laurel	MD	11:15
15' Deployment Craft	0	2	0	0	ICN	Laurel	MD	11:15
20' Deployment Craft	0	5	0	0	ICN	Binghamton	NY	11:17
24' Deployment Craft	0	1	0	0	ICN	Wood River	IL	11:19
16' Deployment Craft	0	1	0	0	ICN	Wood River	IL	11:19
20' Deployment Craft	0	2	0	0	ICN	Baltimore	MD	11:26
13' Deployment Craft	0	2	0	0	ICN	Baltimore	MD	11:27
12' Deployment Craft	0	15	0	0	ICN	Baltimore	MD	11:27
14' Deployment Craft	0	5	0	0	ICN	Baltimore	MD	11:27
15' Deployment Craft	0	9	0	0	ICN	Baltimore	MD	11:27
16' Deployment Craft	0	6	0	0	ICN	Baltimore	MD	11:27
16' Deployment Craft	0	12	0	0	ICN	Baltimore	MD	11:27
14' Deployment Craft	0	4	0	0	ICN	Baltimore	MD	11:27
21' Deployment Craft	0	8	0	0	ICN	Baltimore	MD	11:27
22' Deployment Craft	0	1	0	0	ICN	Baltimore	MD	11:27
24' Deployment Craft	0	1	0	0	ICN	Baltimore	MD	11:27
18' Deployment Craft	0	1	0	0	ICN	Baltimore	MD	11:27
19' Deployment Craft	0	1	0	0	ICN	Baltimore	MD	11:27
14' Deployment Craft	0	1	0	0	ICN	Baltimore	MD	11:27
24' Response Boat	0	1	0	0	ICN	Kingston	TN	11:30
16' Deployment Craft	0	1	0	0	ICN	Kingston	TN	11:30
24' Response Boat	0	1	0	0	ICN	Goodlettsville	TN	11:40
24' Response Boat	0	2	0	0	ICN	Goodlettsville	TN	11:40
20' Deployment Craft	0	1	0	0	ICN	Calvert City	KY	11:40
John Boat	0	2	0	0	ICN	St. Louis	MO	11:52
16' Deployment Craft	0	1	0	0	ICN	Nashville	TN	11:52
19' Deployment Craft	0	1	0	0	ICN	Nashville	TN	11:52
12' Deployment Craft	0	1	0	0	ICN	Nashville	TN	11:52
18' Deployment Craft	0	1	0	0	ICN	St. Louis	MO	11:56
Sub Total Deployment Craft (< 25 foot):		**218**	**0**	**0**				

Deployment Craft (> 25 foot)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
26' Deployment Craft	0	1	0	0	ICN	South Holland	IL	06:03
28' Deployment Craft	0	1	0	0	ICN	Monee	IL	06:16
30' Deployment Craft	0	1	0	0	ICN	Monee	IL	06:16
28' Spill Response Vessel	0	3	0	0	ICN	South Point	OH	06:32
26' Rescue Boat	0	1	0	0	ICN	Shelbyville	KY	07:00
27' Response Boat	0	1	0	0	ICN	Shelbyville	KY	07:00
26' Command Boat	0	1	0	0	ICN	St. Ignace	MI	08:27
29' Deployment Craft	0	1	0	0	ICN	Blountville	TN	10:15
29' Deployment Craft	0	1	0	0	ICN	Knoxville	TN	11:04
27' Deployment Craft	0	1	0	0	ICN	Lorton	VA	11:09
29' Deployment Craft	0	1	0	0	ICN	Fredericksburg	VA	11:13
59' Deployment Craft	0	1	0	0	ICN	Nashville	TN	11:52
28' Deployment Craft	0	1	0	0	ICN	Nashville	TN	11:54
26' Deployment Craft	0	1	0	0	ICN	Paducah	KY	11:57
Sub Total Deployment Craft (> 25 foot):		**16**	**0**	**0**				

WorkBoat

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr mm)
Response Boat	0	1	0	0	ICN	Newburgh	IN	09:19
Tracker	0	1	0	0	ICN	Syracuse	NY	11:10
Pontoon Boat	0	1	0	0	ICN	Syracuse	NY	11:10
Sub Total WorkBoat:		**3**	**0**	**0**				
Total Vessel:		**239**	**0**	**0**				
Total 06 to 12 hours:			**204542**	**86017**				
Running Total from 0 to unknown:			**299186**	**130312**				

HAZARD IDENTIFICATION TANKS
(*Tank = any container that stores oil*)

Tank Number	Substance Stored *(Oil & Haz. Substance)*	Average Quantity Stored *(BBls)*	Maximum Capacity *(Bbls)*	Tank Type *(ie. floating roof, fixed roof, etc.)*	Year Built	Potential Failure	Rate of Flow	Failure / Cause *(Record cause and date of any Tank failure which has resulted in a loss of tank contents)*	Direction of Flow	Secondary Containment Capacity *(Bbls)*
1601	Gas Oil	(b) (7)(F), (b) (3)		Cone Roof	1991	Leak/ Rupture	----	No loss history	Primary drainage is to the containment area	(b) (7)(F), (b) (3)
1603	#2 Fuel Oil			Horizontal	1951	Leak/ Rupture	----	No loss history		
16015	Gas Oil			Cone-Internal Floater	1976	Leak/ Rupture	----	No loss history		
	TOTALS									

HAZARD IDENTIFICATION SURFACE IMPOUNDMENTS (SI)
(*Surface Impoundment = natural topographic depression, man-made excavation, or diked area*)

SI Number	Substance Stored	Quantity Stored (Gallons)	Maximum Capacity (Gallons)	Surface Area	Year Built	Failure / Cause *(Record cause and date of any SI failure which has resulted in the loss of SI contents)*
		There are no Surface Impoundments at this Facility				

HAZARD IDENTIFICATION TANKS
UNDERGROUND STORAGE TANKS

Tank Number	Substance Stored *(Oil & Haz. Substance)*	Average Quantity Stored *(Gallons)*	Maximum Capacity *(Gallons)*	Tank Type *(ie. floating roof, fixed roof, etc.)*	Year Built	Potential Failure	Rate of Flow	Failure / Cause *(Record cause and date of any Tank failure which has resulted in a loss of tank contents)*	Direction of Flow	Secondary Containment Capacity *(Gallons)*
16027	Fuel Oil	(b) (7)(F), (b) (3)		UST – Double Wall	1991	Leak	---	N/A	N/A	(b) (7)(F), (b) (3)
16032	Fuel Oil			UST-Double Wall	1991	Leak	---	NA	NA	

APPENDIX L

DISCHARGE DETECTION SYSTEMS AND FACILITY SELF INSPECTIONS

Page

Discharge Detection L-2

General
Detection by Personnel
Automated Detection Systems

Security L-4

Discharge Detection

The Facility has a discharge detection program which consists of both manual (personnel) and automated detection systems. The Facility maintains the following documents which are related to Discharge Detection:

- Spill Prevention, Control, and Countermeasures (SPCC) Plan
- Hocking Valley Dock Operations Procedures
- Emergency Procedures Manual

General

(b) (7)(F), (b) (3)



documents.

Detection by Personnel

- Daily Visual Inspections (including tanks, secondary containment, aboveground piping, etc.) during operating personnel rounds. Refer to Appendix G for sample Tank Inspection and Secondary Containment Inspection Checklists.
- Monthly inspection of tank gauges and cathodic protection readings.

Discharge Detection (Cont'd)

Detection by Personnel (Cont'd)

- The entire Terminal is adequately illuminated to provide security and safe operations at night.
- In the event of a spill at this Facility, refer to the notification information in Section 2.0 and the response information in Section 3.0 of this Plan.

Automated Detection Systems

- The tanks are equipped with high level alarms.

Aerial Observations

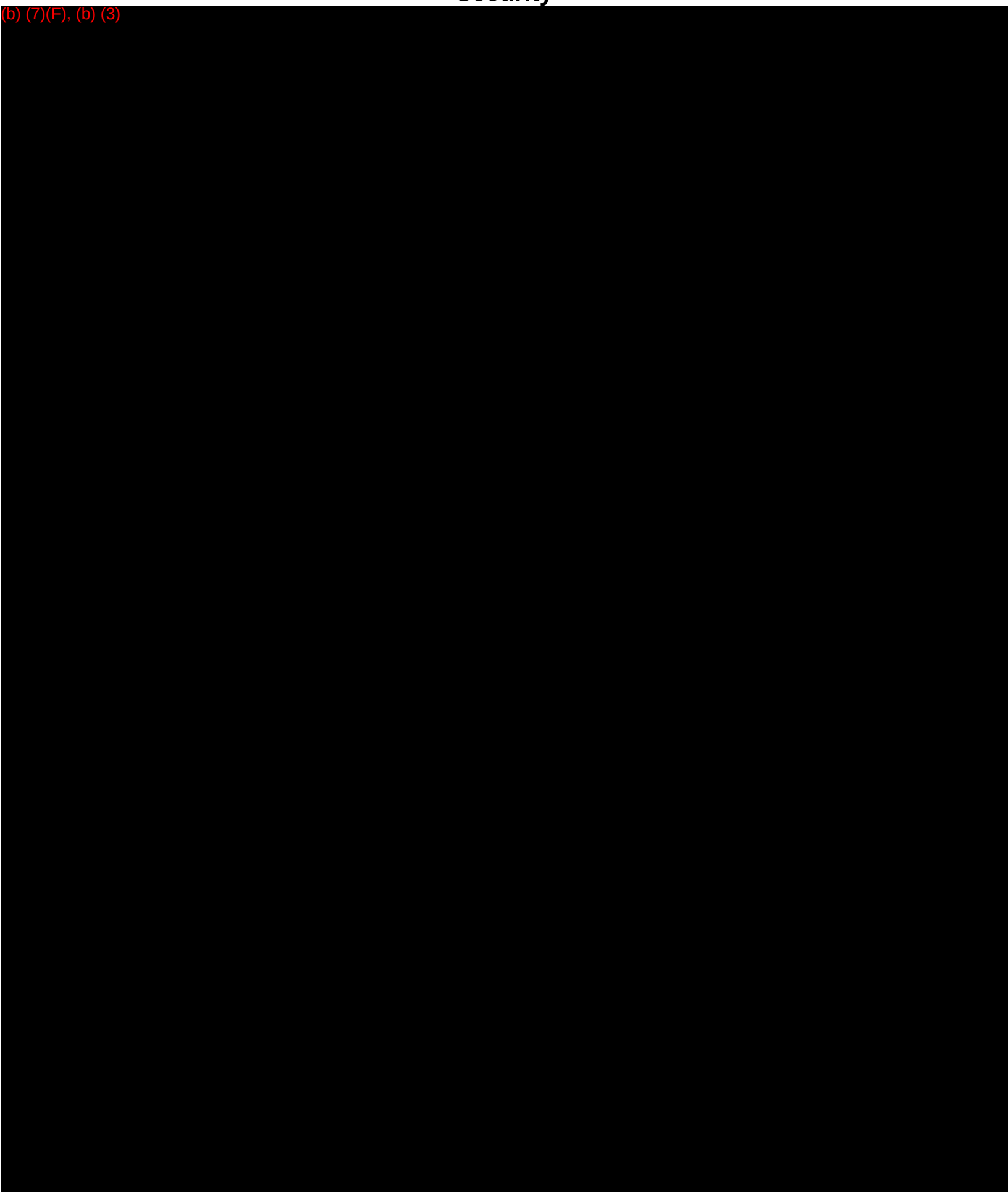
- Visual observation for distressed vegetation indicating discharge is conducted every two weeks by over-flying the pipeline.

Public Awareness and Reporting

- Newsletters are distributed to residents of property surrounding the pipeline. The residents are asked to report any odors or evidence of discharge, and provided with contact telephone numbers.

Security

(b) (7)(F), (b) (3)



APPENDIX M

NATIONAL RESPONSE SYSTEM

Page

National Contingency Plan (NCP) M-2

National Response Team (NRT) M-2

National Response Center (NRC) M-5

Regional Response Team (RRT) M-5

On-Scene Coordinators (OSC) M-6

National Strike Force (NSF) M-7

LIST OF FIGURES

Figure M-1.1 National Response System Organization M-3

Figure M-1.2 Federal Representation on National Response Team M-4

Figure M-1.3 U.S. Environmental Protection Agency (EPA) Regional Offices M-8

Figure M-1.4 U.S. Coast Guard (USCG) Districts M-9

NATIONAL RESPONSE SYSTEM

National Contingency Plan

In 1968, the National Oil and Hazardous Substance Pollution Contingency Plan (NCP) was established to coordinate Federal activities for preventing oil spills and mitigating environmental damages when spills occur. During June 1970, this plan was incorporated as part of the Code of Federal Regulations and applied to all navigable waters and adjoining shorelines of the United States. The plan was recently modified (September 1994) to implement changes made to the Clean Water Act by the Oil Pollution Act of 1990.

To ensure adequate preplanning and provisions for responding to oil spills, the National Contingency Plan established the National Response Center, the National Response Team, the Regional Response Center, Regional Response Teams and the On-Scene Coordinator (Figure M1.1).

National Response Team (NRT)

National planning and coordination for oil spill response is the responsibility of the National Response Team (NRT). The NRT is responsible for evaluating methods for responding to oil spills and hazardous substances spills, and recommending changes to the National Contingency Plan. The NRT also develops procedures to coordinate activities for federal, state and local governments, and private response organizations.

The NRT consists of representatives from each of the agencies shown in Figure J1.2. Normally, the NRT is chaired by the EPA representative while the USCG representative serves as the vice-chairman. If it is activated for spills within the coastal zone of the United States, the USCG representative will hold the chair.

The NRT can be activated when an oil spill exceeds the capability of the Regional Response Team in which it occurs, crosses national boundaries, or presents a significant threat to a population, national policy, property, or national resources; or when requested by any NRT member.

Once activated, the NRT may:

1. Monitor the spill, evaluate reports from the On-Scene Coordinator (OSC), and recommend appropriate actions for abating the spill.

2. Request oil spill response resources from federal, state, and local governments or private agencies.

3. Coordinate the supply of equipment, personnel, or technical advice to the affected region from other regions or districts.

FIGURE M-1.1

NATIONAL RESPONSE SYSTEM ORGANIZATION

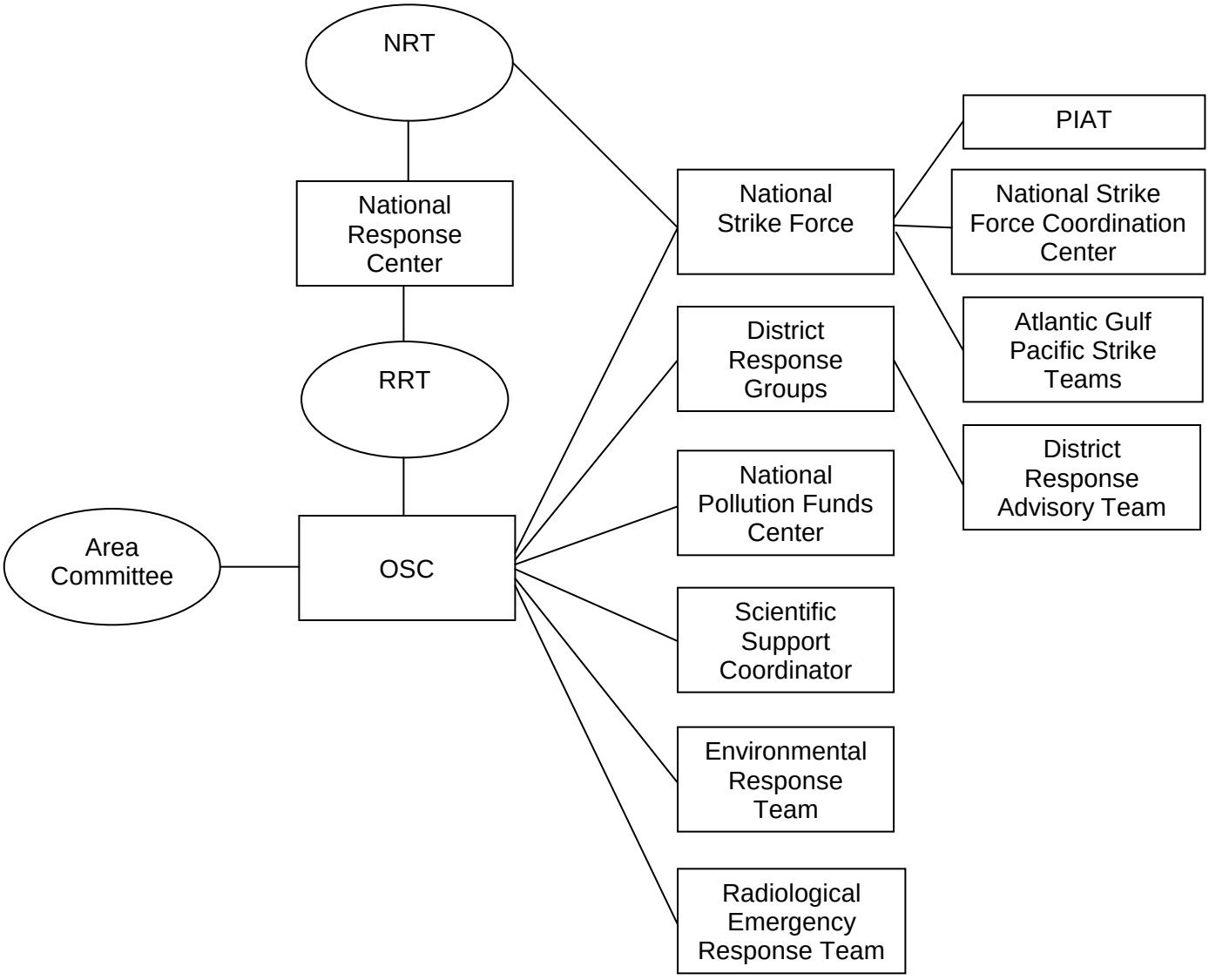
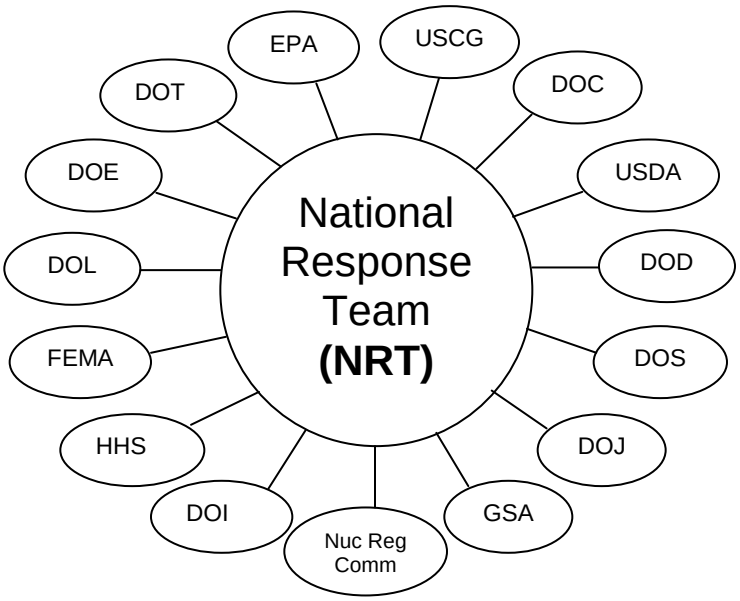


FIGURE M-1.2

FEDERAL REPRESENTATION ON NATIONAL RESPONSE TEAM



DOC	Department of Commerce Scientific expertise from NOAA for marine mammals & oil spill response	DOT	Department of Transportation Expertise on all modes of transporting oil & hazardous substances
DOD	Department of Defense Oil spill response equipment, ship salvage, and boarding & diving	EPA	Environmental Protection Agency Information on environmental impact of spills & provide scientific support coordination
DOE	Department of Energy Removal & disposal of radioactive contamination	FEMA	Federal Emergency Management Agency Coordinate civil emergency planning & mitigation efforts
DOH	Department of Health Assess health hazards associated with response operation & recommend steps for worker & public safety	GSA	General Services Administration Provides logistical and telecommunications support to federal agencies
DOI	Department of Interior Expertise on fish & wildlife	HHS	Department of Health and Human Services Assists with the assessment, preservation, and protection of human health and helps ensure the availability of essential human services
DOJ	Department of Justice Answer legal questions on spills & response actions	USCG	United States Coast Guard Establishes spill contingency planning requirements for vessels and facilities, and OSC responsibilities for wasteful zone
DOL	Department of Labor Expertise needed to minimize exposure to hazardous material during response operation	USDA	United States Department of Agriculture Input on the effect of soil contamination by hazardous and oil spills

National Response Center (NRC)

The National Response Center (NRC) receives and distributes reports regarding oil and hazardous substances spills. It is located at the USCG Headquarters in Washington, D.C., and can be contacted by dialing the phone number listed in Figure 2.5.

All oil spills must be reported to the National Response Center. If a direct report to the National Response Center is not practical, reports may be made to the USCG or EPA predesignated OSC for the geographic area where the spill occurs. If it is not possible to immediately notify the National Response Center or the predesignated OSC, reports may be made immediately to the nearest USCG unit provided that the spiller notifies the NRC as soon as possible. Once the NRC receives notification of a spill, it will promptly notify the appropriate OSC and authorize him to proceed with the appropriate response actions as outlined in the National Contingency Plan.

Regional Response Team (RRT)

The Regional Response Team (RRT) develops oil spill response contingency plans for specific regions of the United States. This team is staffed by representatives from the agencies shown in Figure M1.2 and may include representatives of local governments as agreed upon by the specific State in which the RRT is operative.

The RRT is jointly chaired by the EPA and USCG representatives. See Figures M1.3 and M1.4 for the EPA Regions and the USCG Districts respectively. When activated for inland spills, the EPA representative will be the chairperson. If activated for offshore spills, the USCG representative shall be the chairperson.

The RRT includes two (2) components: a standing team and an incident-specific team. The standing team:

1. reviews regional and local responses to various spills, recommends revisions to the National Contingency Plan, encourages state and local communities to improve their preparedness for oil spill response activities, and reviews actions performed by the On-Scene Coordinator.

2. performs advanced planning for dispersants, surface collection agents, burning agents, biological additives, or other chemical agents that are authorized by the National Contingency Plan.

The incident-specific response team can be activated if an oil spill exceeds the response capability available to the On-Scene Coordinator, if the spill crosses regional boundaries, or if a spill presents a substantial threat to human health and welfare, the environment, or significant amounts of property. It can be activated during a pollution emergency when requested by the Federal On-Scene Coordinator.

The incident-specific response team may:

1. monitor and evaluate reports from the On-Scene Coordinator and recommend specific actions for improving the response operation.

Regional Response Team (Cont'd)

2. request federal, state or local governments, or private organizations to provide resources for responding to the spill.

3. help the On-Scene Coordinator prepare information releases for the public.

4. recommend that a different OSC be designated for the response operation.

5. provide information that will assist the OSC to make timely and appropriate decisions for the response operations.

On-Scene Coordinators

On-Scene Coordinators (OSC) are predesignated by the U.S. Coast Guard or Environmental Protection Agency. The OSC collects pertinent facts about the spill, its source and cause, and the parties responsible for the spill. The OSC also determines the potential impact the spill could have on human health and welfare, and whether it presents a significant threat to the environment. In addition, the OSC establishes priorities for minimizing the impact of oil spills.

If the spiller assumes responsibility for the spill, the OSC will monitor the clean-up activity. Otherwise, the OSC will initiate the response operation and hire commercial contractors as required to clean up the spill as quickly as possible. If commercial resources are not available, the OSC will deploy federal resources. Reimbursement of any federal will be sought from the spiller expenditures after the response. Federal personnel and equipment can be obtained from the National Strike Force and the U.S. Navy.

When a spill report is received, the OSC will:

1. notify the Regional Response Team and National Response Center.

2. investigate the report to determine pertinent information such as the threat posed to public health and welfare, or the environment.

3 officially classify the size of the discharge and determine the course of action to be followed.

4. determine whether the spiller is properly carrying out the clean-up operation.

5. determine whether the State or local government has the capability to carry out response actions and if a contract or cooperative agreement has been established with the appropriate Fund Administrator for this purpose.

6. notify the Regional Response Team and the trustees of the affected natural resources in accordance with the applicable regional plan.

Within 60 days after a major oil spill, the OSC shall submit to the RRT a complete report on the response operation and the actions taken. A copy of this report will be submitted to the National Response Team. The format for this report is provided in the National Contingency Plan.

On-Scene Coordinators (Cont'd)

Each OSC is responsible for developing and updating Area Contingency Plans. Each plan should be a multi-agency effort involving all agencies that would have a role in the local response effort.

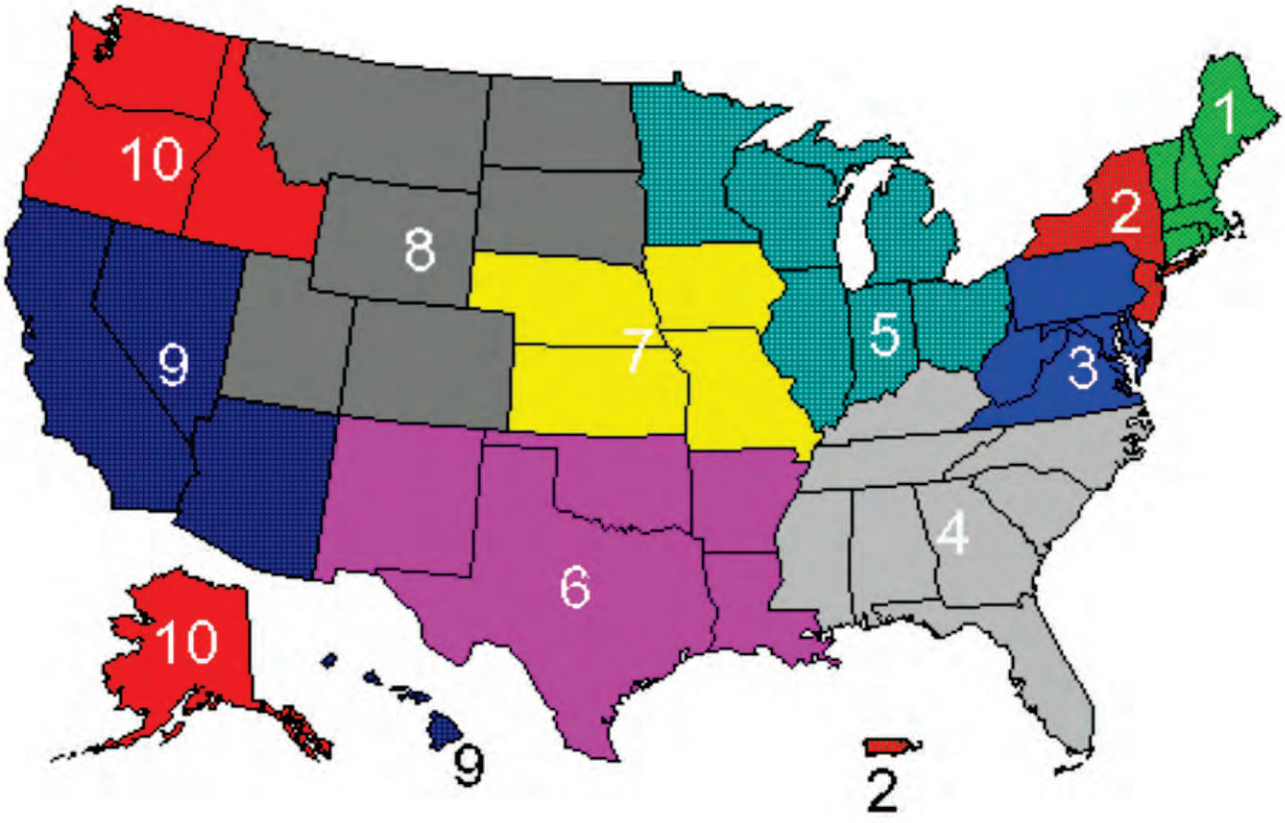
National Strike Force (NSF)

The National Strike Force (NSF) was formed in 1973 after the U.S. Coast Guard was charged with oversight and responsibilities for offshore oil spills under the Federal Water Pollution Control Act. The NSF consists of the Pacific, Gulf and the Atlantic Area Strike Teams. These teams provide experienced personnel and equipment necessary for assisting the OSC in responding to spills in U.S. waters.

The NSF is always on call and maintains a stock of specialized equipment for deployment anywhere in the nation and, in some cases, overseas. This equipment includes open water oil containment and recovery systems, high capacity pumps for transferring oil and chemicals, and protective clothing for working with hazardous materials. Most of this equipment is designed to fit into Coast Guard C-130 cargo planes or load onto flatbed trucks for fast response.

FIGURE M-1.3

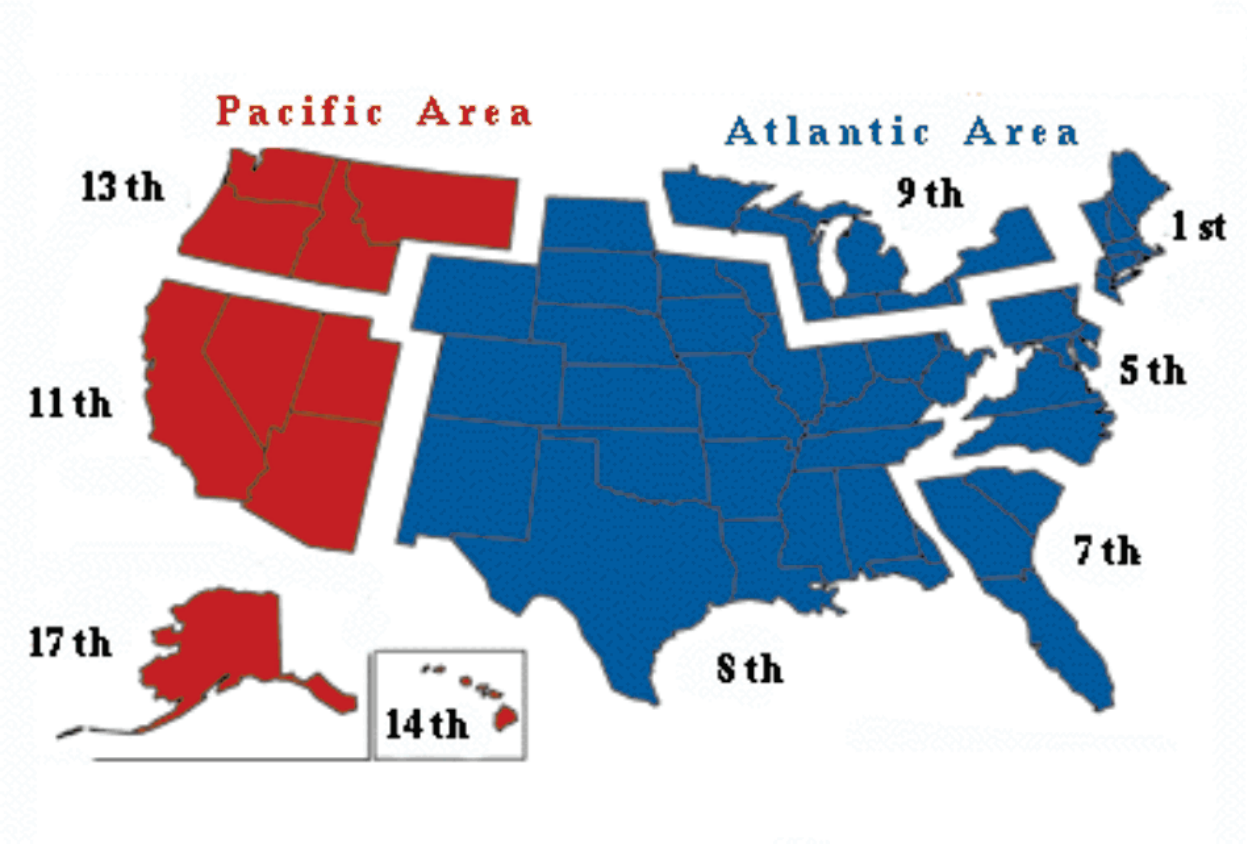
U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) REGIONAL OFFICES



EPA Region 1, Office John F. Kennedy Federal Bldg. Boston, MA 02203	EPA Region 2 Office 26 Federal Plaza New York, NY 10278	EPA Region 3 Office 1650 Arch Street Philadelphia, PA 19103-2029
EPA Region 4 Office 61 Forsythe, 11th Floor Atlanta, GA 30303	EPA Region 5 Office 77 West Jackson Blvd. Chicago, IL 60604	EPA Region 6 Office 1445 Ross Avenue Dallas, TX 75202
EPA Region 7 Office 726 Minnesota Avenue Kansas City, KS 66101	EPA Region 8 Office 999 18th Street Denver, CO 80202	EPA Region 9 Office Public Information Center 215 Fremont Street San Francisco, CA 94105
EPA Region 10 Office 1200 6th Avenue Seattle, WA 98101	U.S. EPA Office of Solid Waste 401 M Street SW Washington, DC 20460-5101	RCRA / Superfund Hotline (800) 424-9346 (in Washington, DC, (202) 879-2693)

FIGURE M-1.4

U.S. COAST GUARD (USCG) DISTRICTS



1st Coast Guard District Battery Park Building, Room 212 1st S. Street New York, NY 10004-5099 (212) 668-7114	11th Coast Guard District Coast Guard Island Building 51-1 Alameda, CA 94501-5100 (510) 437-3700
5th Coast Guard District Federal Building 431 Crawford Street Portsmouth, VA 23704-5004 (757) 398-6272	13th Coast Guard District 915 2nd Avenue, Suite #3352 Seattle, WA 98174-1067 (206) 220-7237
7th Coast Guard District Federal Building 909 S.E. 1st Ave., Room #954 Miami, FL 33131-3050 (305) 415-6683	14th Coast Guard District PJKK Federal Building 300 Ala Moana Blvd. Honolulu, HI 96850-4982 (808) 541-2121
8th Coast Guard District Hale Boggs Federal Building 501 Magazine Street New Orleans, LA 70130-3396 (504) 589-6198	17th Coast Guard District P.O. Box 25517 Juneau, AK 99802 (907) 463-2025
9th Coast Guard District 1240 E. 9th Street Cleveland, OH 44199-2060 (216) 902-6020	

* Note: These addresses may differ from those listed on the Distribution List.

APPENDIX N

GLOSSARY OF TERMS/ACRONYMS

PAGE

Glossary of Terms.....N-2

Acronyms N-11

GLOSSARY OF TERMS & ACRONYMS
GLOSSARY OF TERMS

This glossary contains definitions of terms that will be used frequently during the course of response operations.

Activate: The process of mobilizing personnel and/or equipment within the response organization to engage in response operations.

Activator: An individual in the response organization whose responsibilities include notifying other individuals or groups within the organization to mobilize personnel and/or equipment.

Adverse Weather: The weather conditions that will be considered when identifying response systems and equipment in a response plan for the applicable operating environment. Factors to consider include significant wave height, ice, temperature, weather - related visibility, and currents within the Captain of the Port (COTP) zone in which the systems or equipment are intended to function.

Agency Representative: Individual assigned to an incident from an agency who has been delegated full authority to make decisions on all matters affecting that agency's participation in response operations.

Area Committee: As defined by Sections 311(a)(18) and (j)(4) of CWA, as amended by OPA, means the entity appointed by the President consisting of members from Federal, State, and local agencies with responsibilities that include preparing an Area Contingency Plan for the area designated by the President. The Area Committee may include ex-officio (i.e., non-voting) members (e.g., industry and local interest groups).

Area Contingency Plan: As defined by Sections 311(a)(19) and (j)(4) of CWA, as amended by OPA, means the plan prepared by an Area Committee, that in conjunction with the NCP, shall address the removal of a discharge including a worst-case discharge and the mitigation or prevention of a substantial threat of such a discharge from a vessel, offshore facility, or onshore facility operating in or near an area designated by the President.

Average Most Probable Discharge: A discharge of the lesser of 50 barrels or 1% of the volume of the worst case discharge.

AWAY Team: A predesignated team from various departments in Houston, is responsible for arriving at the scene of an oil spill incident as soon as possible to provide both immediate and longer-term management of the field activities.

Barrel (bbl): Measure of space occupied by 42 U.S. gallons at 60 degrees Fahrenheit.

Bioremediation Agents: Means microbiological cultures, enzyme additives, or nutrient additives that are deliberately introduced into an oil discharge and that will significantly increase the rate of biodegradation to mitigate the effects of the discharge.

Boom: A piece of equipment or a strategy used to either contain free floating oil to a confined area or protect an uncontaminated area from intrusion by oil.

Booming Strategies: Strategic techniques which identify the location and quantity of boom required to protect certain areas. These techniques are generated by identifying a potential spill source and assuming certain conditions which would affect spill movement on water.

Bulk: Material that is stored or transported in a loose, unpackaged liquid, powder, or granular form capable of being conveyed by a pipe, bucket, chute, or belt system.

Captain of the Port Zone (COTP): Means a zone specified in 33 CFR and the seaward extension of that zone to the outer boundary of the exclusive economic zone (EEZ).

Chemical Agents: Means those elements, compounds, or mixtures that coagulate, disperse, dissolve, emulsify, foam, neutralize, precipitate, reduce, solubilize, oxidize, concentrate, congeal, entrap, fix, make the pollutant mass more rigid or viscous, or otherwise facilitate the mitigation of deleterious effects or the removal of the oil pollutant from the water. Chemical agents include biological additives, dispersants, sinking agents, miscellaneous oil spill control agents, and burning agents, but do not include solvents.

Clean-up Contractor: Persons contracted to undertake a response action to clean up a spill.

Cleanup: For the purposes of this document, cleanup refers to the removal and/or treatment of oil, hazardous substances, and/or the waste or contaminated materials generated by the incident. Cleanup includes restoration of the site and its natural resources.

Coastal Waters: For the purpose of classifying the size of discharges, means the waters of the coastal zone except for the Great Lakes and specified ports and harbors on inland rivers.

Coastal Zone: As defined for the purpose of the NCP, means all United States waters subject to the

GLOSSARY OF TERMS & ACRONYMS
GLOSSARY OF TERMS (Cont'd)

tide, United States waters of the Great Lakes, specified ports and harbors on inland rivers, waters of the contiguous zone, other waters of the high seas subject to the NCP, and the land surface or land substrata, ground waters, and ambient air proximal to those waters. The term coastal zone delineates an area of federal responsibility for response action. Precise boundaries are determined by EPA/USCG agreements and identified in federal regional contingency plans.

Coast Guard District Response Ground (DRG): As provided for by CWA sections 311(a)(20) and (j)(3), means the entity established by the Secretary of the department in which the USCG is operating within each USCG district and shall consist of: the combined USCG personnel and equipment, including firefighting equipment, of each port within the district; additional prepositioned response equipment; and a district response advisory team.

Command: The act of controlling manpower and equipment resources by virtue of explicit or delegated authority.

Command Post: A site located at a safe distance form the spill site where response decisions are made, equipment and manpower deployed, and communications handled. The Incident Commander and the On-Scene Coordinators may direct the on-scene response from this location.

Communications Equipment: Equipment that will be utilized during response operations to maintain communication between the Company employees, contractors, Federal/State/Local agencies. (Radio/ telephone equipment and links)

Containment Boom: A flotation/freeboard device, made with a skirt/curtain, longitudinal strength member, and ballast unit/weight designed to entrap and contain the product for recovery.

Contingency Plan: A document used by (1) federal, state, and local agencies to guide their planning and response procedures regarding spills of oil, hazardous substances, or other emergencies; (2) a document used by industry as a response plan to spills of oil, hazardous substances, or other emergencies occurring upon their vessels or at their facilities.

Contract or Other Approved Means: For OPA 90, a written contract with a response contractor; certification by the facility owner or operator that personnel and equipment are owned, operated, or under the direct control of the facility, and available within the stipulated times; active membership in a local or regional oil spill removal organization; and/or the facility's own equipment.

Critical Areas to Monitor: Areas which if impacted by spilled oil may result in threats to public safety or health.

Cultural Resources: Current, historic, prehistoric and archaeological resources which include deposits, structures, ruins, sites, buildings, graves, artifacts, fossils, or other objects of antiquity which provide information pertaining to the historical or prehistorical culture of people in the state as well as to the natural history of the state.

Damage Assessment: The process of determining and measuring damages and injury to the human environment and natural resources, including cultural resources. Damages include differences between the conditions and use of natural resources and the human environment that would have occurred without the incident, and the conditions and use that ensued following the incident. Damage assessment includes planning for restoration and determining the costs of restoration.

Decontamination: The removal of hazardous substances from personnel and their equipment necessary to prevent adverse health effects.

Discharge: Any spilling, leaking, pumping, pouring, emitting, emptying, or dumping.

Dispersants: Means those chemical agents that emulsify, disperse, or solubilize oil into the water column or promote the surface spreading of oil slicks to facilitate dispersal of the oil into the water column.

Diversion Boom: A floatation/freeboard device, made with a skirt/curtain, longitudinal strength member, and ballast unit/weight designed to deflect or divert the product towards a pick up point, or away from certain areas.

Drinking Water Supply: As defined by Section 101(7) of CERCLA, means any raw or finished water source that is or may be used by a public water system (as defined in the Safe Drinking Water Act) or as drinking water by one or more individuals.

Economically Sensitive Areas: Those areas of explicit economic importance to the public that due to their proximity to potential spill sources may require special protection and include, but are not limited to: potable and industrial water intakes; locks and dams; and public and private marinas.

Emergency Service: Those activities provided by state and local government to prepare for and carry out any activity to prevent, minimize, respond to, or recover from an emergency.

Environmentally Sensitive Areas: Streams and water bodies, aquifer recharge zones, springs, wetlands, agricultural areas, bird rookeries, endangered or threatened species (flora and fauna) habitat, wildlife preserves or conservation areas,

GLOSSARY OF TERMS & ACRONYMS
GLOSSARY OF TERMS (Cont'd)

parks, beaches, dunes, or any other area protected or managed for its natural resource value.

Exclusive Economic Zone (EEZ): means the zone contiguous to the territorial sea of the United States extending to a distance up to 200 nautical miles from the baseline from which the breadth of the territorial sea is measured.

Facility: Either an onshore facility or an offshore facility and includes, but is not limited to structures, equipment, and appurtenances thereto, used or capable of being used to transfer oil to or from a vessel or a public vessel. A facility includes federal, state, municipal, and private facilities.

Facility Operator: The person who owns, operates, or is responsible for the operation of the facility.

Federal Fund: The spill liability trust fund established under OPA.

Federal Regional Response Team: The federal response organization (consisting of representatives from selected federal and state agencies) which acts as a regional body responsible for planning and preparedness before an oil spill occurs and providing advice to the FOSC in the event of a major or substantial spill.

Federal Response Plan (FRP): Means the agreement signed by 25 federal departments and agencies in April 1987 and developed under the authorities of the Earthquake Hazards Reduction Act of 1977 and the Disaster Relief Act of 1974, as amended by the Stafford Disaster Relief Act of 1988.

First Responders, First Response Agency: A public health or safety agency (e.g., fire service or police department) charged with responding to a spill during the emergency phase and alleviating immediate danger to human life, health, safety, or property.

Handle: To transfer, transport, pump, treat, process, store, dispose of, drill for, or produce.

Harmful Quantity Of Oil: The presence of oil from an unauthorized discharge in a quantity sufficient either to create a visible film or sheen upon or discoloration of the surface of the water or a shoreline, tidal flat, beach, or marsh, or to cause a sludge or emulsion to be deposited beneath the surface of the water or on a shoreline, tidal flat, beach, or marsh.

Hazardous Material: Any nonradioactive solid, liquid, or gaseous substance which, when uncontrolled, may be harmful to humans, animals, or the environment. Including but not limited to substances otherwise defined as hazardous wastes, dangerous wastes, extremely hazardous wastes, oil, or pollutants.

Hazardous Substance: Any substance designed as such by the Administrator of the EPA pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act; regulated pursuant to Section 311 of the Federal Water Pollution Control Act, or discharged by the SERC.

Hazardous Waste: Any solid waste identified or listed as a hazardous waste by the Administrator of the EPA pursuant to the federal Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA), 42 U.S.C., Section 6901, et seq as amended. The EPA Administrator has identified the characteristics of hazardous wastes and listed certain wastes as hazardous in Title 40 of the Code of Federal Regulations, Part 261, Subparts C and D respectively.

HAZMAT: Hazardous materials or hazardous substances, exposure to which may result in adverse effects on health or safety of employees.

HAZWOPER: Hazardous Waste Operations and Emergency Response Regulations published by OSHA to cover worker safety and health aspects of response operations.

Heat Stress: Dangerous physical condition caused by over exposure to extremely high temperatures.

Hypothermia: Dangerous physical condition caused by over exposure to freezing temperatures.

Incident: Any event that results in a spill or release of oil or hazardous materials. Action by emergency service personnel may be required to prevent or minimize loss of life or damage to property and/or natural resources.

Incident Briefing Meeting: Held to develop a comprehensive, accurate, and up-to-date understanding of the incident, nature of status of control operations, and nature and status of response operations; ensure the adequacy of control and response operations; begin to organize control and response operations; and prepare for interactions with outside world.

Incident Command Post (ICP): That location at which all primary command functions are executed.

Incident Command System (ICS): The combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure, with responsibility for the management of assigned resources at an incident.

GLOSSARY OF TERMS & ACRONYMS
GLOSSARY OF TERMS (Cont'd)

Incident Commander (IC): The one individual in charge at any given time of an incident. The Incident Commander will be responsible for establishing a unified command with all on-scene coordinators.

Indian Tribe: As defined in OPA section 1001, means any Indian tribe, band, nation, or other organized group or community, but not including any Alaska Native regional or village corporation, which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians and has governmental authority over lands belonging to or controlled by the Tribe.

Initial Cleanup: Remedial action at a site to eliminate acute hazards associated with a spill. An initial clean-up action is implemented at a site when a spill of material is an actual or potentially imminent threat to public health or the environment, or difficulty of cleanup increases significantly without timely remedial action. All sites must be evaluated to determine whether initial cleanup is total cleanup, however, this will not be possible in all cases due to site conditions (i.e., a site where overland transport or flooding may occur).

Initial Notification: The process of notifying necessary the Company personnel and Federal/ State/Local agencies that a spill has occurred, including all pertinent available information surrounding the incident.

Initial Response Actions: The immediate actions that are to be taken by the spill observer after detection of a spill.

Inland Area means the area shoreward of the boundary lines defined in 46 CFR part 7, except that in the Gulf of Mexico, it means the area shoreward of the lines of demarcation (COLREG lines) as defined in §80.740 through 80.850 of this chapter. The inland area does not include the Great Lakes.

Inland Waters: State waters not considered coastal waters; lakes, rivers, ponds, streams, underground water, et. al.

Inland Zone: Means the environment inland of the coastal zone excluding the Great Lakes, and specified ports and harbors on inland rivers. The term inland zone delineates an area of federal responsibility for response action. Precise boundaries are determined by EPA/USCG agreements and identified in federal regional contingency plans.

Interim Storage Site: A site used to temporarily store recovered oil or oily waste until the recovered oil or oily waste is disposed of at a permanent disposal site. Interim storage sites include trucks, barges, and other vehicles, used to store waste until the transport begins.

Lead Agency: The government agency that assumes the lead for directing response activities.

Lead Federal Agency: The agency which coordinates the federal response to incident on navigable waters. The lead federal agencies are:

- **U.S. Coast Guard:** Oil and chemically hazardous materials incidents on navigable waters.
- **Environmental Protection Agency:** Oil and chemically hazardous materials incidents on inland waters.

Lead State Agency: The agency which coordinates state support to federal and/or local governments or assumes the lead in the absence of federal response.

Loading: Transfer from Facility to vehicle.

Local Emergency Planning Committee (LEPC): A group of local representatives appointed by the State Emergency Response Commission (SERC) to prepare a comprehensive emergency plan for the local emergency planning district, as required by the Emergency Planning and Community Right-to-know Act (EPCRA).

Local Response Team: Designated Facility individuals who will fulfill the roles determined in the oil spill response plan in the event of an oil or hazardous substance spill. They will supervise and control all response and clean-up operations.

Lower Explosive Limit: Air measurement utilized to determine the lowest concentration of vapors that support combustion. This measurement must be made prior to entry into a spill area.

Marinas: Small harbors with docks, services, etc. for pleasure craft.

Marine Transportation Related Facility (MTR Facility): means an on-shore facility, including piping and any structure used to transfer oil to or from a vessel, subject to regulation under 33 CFR Part 154 and any deepwater port subject to regulation under 33 CFR Part 150.

Maximum Extent Practicable: means the planning values derived from the planning criteria used to evaluate the response resources described in the Response Plan to provide on-water recovery capability and the shoreline protection and cleanup capability to conduct response activities for a worst case discharge from a facility in adverse weather.

Maximum Most Probable Discharge: means a discharge of lesser of 1,200 barrels or 10 percent of the volume of worst case discharge.

GLOSSARY OF TERMS & ACRONYMS
GLOSSARY OF TERMS (Cont'd)

Medium Discharge: Means a discharge greater than 2,100 gallons (50 Bbls) and less than or equal to 36,000 gallons (85+ Bbls) or 10% of the capacity of the largest tank, whichever is less and not to exceed the WCD.

National Contingency Plan: The plan prepared under the Federal Water Pollution Control Act (33 United State Code §1321 et seq) and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 United State Code § 9601 et seq), as revised from time to time.

National Pollution Funds Center (NPFC): Means the entity established by the Secretary of Transportation whose function is the administration of the Oil Spill Liability Trust Fund (OSLTF). Among the NPFC's duties are: providing appropriate access to the OSLTF for federal agencies and states for removal actions and for federal trustees to initiate the assessment of natural resource damages; providing appropriate access to the OSLTF for claims; and coordinating cost recovery efforts.

National Response System (NRS): Is the mechanism for coordinating response actions by all levels of government in support of the OSC. The NRS is composed of the NRT, RRTs, OSC, Area Committees, and Special Teams and related support entities.

National Strike Force (NSF): Is a special team established by the USCG, including the three USCG Strike Teams, the Public Information Assist Team (PIAT), and the National Strike Force Coordination Center. The NSF is available to assist OSCs in their preparedness and response duties.

National Strike Force Coordination Center (NSFCC): Authorized as the National Response Unit by CWA section 311(a)(23) and (j)(2), means the entity established by the Secretary of the department in which the USCG is operating at Elizabeth City, North Carolina, with responsibilities that include administration of the USCG Strike Teams, maintenance of response equipment inventories and logistic networks, and conducting a national exercise program.

Natural Resource: Land, fish, wildlife, biota, air, water, ground water, drinking water supplies, and other such resources belonging to, managed by, held in trust by, appertaining to or otherwise controlled by the state, federal government, private parties, or a municipality.

Navigable Waters: As defined by 40 CFR 110.1 means the waters of the United States, including the territorial seas. The term includes:

All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide;

Interstate waters, including interstate wetlands;

All other waters such as interstate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, and wetlands, the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters;

That are or could be used by interstate or foreign travelers for recreational or other purposes;

From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; and

That are used or could be used for industrial purposes by industries in interstate commerce.

All impoundments of waters otherwise defined as navigable waters under this section;

Tributaries of waters identified in paragraphs (a) through (d) of this definition, including adjacent wetlands; and

Wetlands adjacent to waters identified in paragraphs (a) through (e) of this definition: Provided, that waste treatment systems (other than cooling ponds meeting the criteria of this paragraph) are not waters of the United States.

Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act jurisdiction remains with EPA.

Nearshore Area: For OPA 90, the area extending seaward 12 miles from the boundary lines defined in 46 CFR Part 7, except in the Gulf of Mexico. In the Gulf of Mexico, it means the area extending seaward 12 miles from the line of demarcation defined in §80.740 - 80.850 of title 33 of the CFR.

Non-persistent or Group I Oil: A petroleum-based oil that, at the time of shipment, consists of hydrocarbon fractions:

1. At lease 50% of which by volume, distill at a temperature of 340 degrees C (645 degrees F);
2. At least 95% of which volume, distill at a temperature of 370 degrees C (700 degrees F).

Ocean: The open ocean, offshore area, and nearshore area as defined in this subpart.

Offshore area: The area up to 38 nautical miles

GLOSSARY OF TERMS & ACRONYMS
GLOSSARY OF TERMS (Cont'd)

seaward of the outer boundary of the nearshore area.

Oil or Oils: Naturally occurring liquid hydrocarbons at atmospheric temperature and pressure coming from the earth, including condensate and natural gasoline, and any fractionation thereof, including, but not limited to, crude oil, petroleum gasoline, fuel oil, diesel oil, oil sludge, oil refuse, and oil mixed with wastes other than dredged spoil. Oil does not include any substance listed in Table 302.4 of 40 CFR Part 302 adopted August 14, 1989, under Section 101(14) of the federal comprehensive environmental response, compensation, and liability act of 1980, as amended by P. L. 99-499.

Oil Spill Liability Trust Fund: Means the fund established under section 9509 of the Internal Revenue Code of 1986 (26 U.S.C. 9509).

Oil Spill Removal Organization: means an entity that provides response resources.

Oily Waste: Product contaminated waste resulting from a spill or spill response operations.

On-Scene Coordinator (OSC): Means the federal official predesignated by the EPA or the USCG to coordinate and direct response under subpart D.

On-site: Means the areal extent of contamination and all suitable areas in very close proximity to the contamination necessary for implementation of a response action.

Open Ocean: means the area from 38 nautical miles seaward of the outer boundary of the nearshore area, to the seaward boundary of the exclusive economic zone.

Owner or Operator: Any person, individual, partnership, corporation, association, governmental unit, or public or private organization of any character.

Persistent Oil: A petroleum-based oil that does not meet the distillation criteria for a non-persistent oil. For the purposes of this Appendix, persistent oils are further classified based on specific gravity as follows:

1. Group II specific gravity less than .85
2. Group III specific gravity between .85 and less than .95
3. Group IV specific gravity .95 and including 1.0
4. Group V specific gravity greater than 1.0

Plan Holder: The plan holder is the industry transportation related facility for which a response plan is required by federal regulation to be submitted by a vessel or facility's owner or operator.

Post Emergency Response: The portion of a response performed after the immediate threat of a release has been stabilized or eliminated and cleanup of the sites has begun.

Post Emergency: The phase of response operations conducted after the immediate threat of the release has been stabilized, and cleanup operations have begun.

Primary Response Contractors or Contractors: An individual, company, or cooperative that has contracted directly with the plan holder to provide equipment and/or personnel for the containment or cleanup of spilled oil.

Qualified Individual (QI): That person or entity who has authority to activate a spill cleanup contractors, act as liaison with the "On-Scene Coordinator" and obligate funds required to effectuate response activities.

Recreation Areas: Publicly accessible locations where social/sporting events take place.

Regional Response Team (RRT): The Federal response organization (consisting of representatives from selected Federal and State agencies) which acts as a regional body responsible for overall planning and preparedness for oil and hazardous materials releases and for providing advice to the OSC in the event of a major or substantial spill.

Remove or Removal: As defined by section 311(a)(8) of the CWA, refers to containment and removal of oil or hazardous substances from the water and shorelines or the taking of such other actions as may be necessary to minimize or mitigate damage to the public health or welfare (including, but not limited to, fish, shellfish, wildlife, public and private property, and shorelines and beaches) or to the environment. For the purpose of the NCP, the term also includes monitoring of action to remove discharge.

Response Activities: The containment and removal of oil from the water and shorelines, the temporary storage and disposal of recovered oil, or the taking of other actions as necessary to minimize or mitigate damage to public health or welfare, or the environment.

Response Contractors: Persons/companies contracted to undertake a response action to contain and/or clean up a spill.

Response Guidelines: Guidelines for initial response that are based on the type of product involved in the spill, these guidelines are utilized to determine clean-up methods and equipment.

Response Plan: A practical manual used by industry for responding to a spill. Its features include: (1) identifying the notifications sequence, responsibilities, response techniques, etc. in a easy to use format; (2) using decision trees, flowcharts, and checklists to insure the proper response for

GLOSSARY OF TERMS & ACRONYMS
GLOSSARY OF TERMS (Cont'd)

spills with varying characteristics; and (3) segregating information needed during the response from data required by regulatory agencies to prevent confusion during a spill incident.

Response Resources: All personnel and major items of equipment available, or potentially available, for assignment to incident tasks on which status is maintained.

Responsible Party: Any person, owner/operator, or facility that has control over an oil or hazardous substance immediately before entry of the oil or hazardous substance into the atmosphere or in or upon the water, surface, or subsurface land of the state.

Response Priorities: Mechanism used to maximize the effective use of manpower and equipment resources based upon their availability during an operational period.

Response Resources: All personnel and major items of equipment available, or potentially available, for assignment to incident tasks on which status is maintained.

Restoration: The actions involved in returning a site to its former condition.

Rivers and Canals: A body of water confined within the inland area that has a project depth of 12 feet or less, including the Intracoastal Waterway and other waterways artificially created for navigation.

Securing the Source: Steps that must be taken to stop discharge of oil at the source of the spill.

Sinking Agents: Means those additives applied to oil discharges to sink floating pollutants below the water surface.

Site Characterization: An evaluation of a cleanup site to determine the appropriate safety and health procedures needed to protect employees from identified hazards.

Site Conditions: Details of the area surrounding the facility, including shoreline descriptions, typical weather conditions, socioeconomic breakdowns, etc.

Site Safety and Health Plan: A site specific plan developed at the time of an incident that addresses:

- Safety and health hazard analysis for each operation.
- Personal protective equipment to be used.
- Training requirements for site workers.
- Medical surveillance requirements.
- Air monitoring requirements.
- Site control measures.
- Decontamination procedures.
- Emergency response procedures.
- Confined space entry procedures.

Site Security and Control: Steps that must be taken to provide safeguards needed to protect personnel and property, as well as the general public, to ensure an efficient clean-up operation.

Skimmers: Mechanical devices used to skim the surface of the water and recover floating oil. Skimmers fall into four basic categories (suction heads, floating weirs, oleophilic surface units, and hydrodynamic devices) which vary in efficiency depending on the type of oil and size of spill.

Snare Boom: Oil will adhere to the material of which this boom is made of and thus collect it.

Sorbents: Materials ranging from natural products to synthetic polymeric foams placed in confined areas to soak up small quantities of oil. Sorbents are very effective in protecting walkways, boat decks, working areas, and previously uncontaminated or cleaned areas.

Spill: An unauthorized discharge of oil or hazardous substance into the waters of the state.

Spill Observer: The first Facility individual who discovers a spill. This individual must function as the first responder and person-in-charge until relieved by an authorized supervisor.

Spill of National Significance (SONS): Means a spill which due to its severity, size, location, actual or potential impact on the public health and welfare or the environment, or the necessary response effort, is so complex that it requires extraordinary coordination of federal, state, local, and responsible party resources to contain and cleanup the discharge.

Spill Management Team: The personnel identified to staff the organizational structure identified in a response plan to manage response plan implementation.

Spill Response: All actions taken in responding to spills of oil and hazardous materials, e.g.: receiving and making notifications; information gathering and technical advisory phone calls; preparation for and travel to and from spill sites; direction of clean-up activities; damage assessments; report writing, enforcement investigations and actions; cost recovery; and program development.

Spill Response Personnel: Federal, state, local agency, and industry personnel responsible for participating in or otherwise involved in spill

GLOSSARY OF TERMS & ACRONYMS
GLOSSARY OF TERMS (Cont'd)

response. All spill response personnel will be pre-approved on a list maintained in each region.

Staging Areas: Designated areas near the spill site accessible for gathering and deploying equipment and/or personnel.

State Emergency Response Commission (SERC): A group of officials appointed by the Governor to implement the provisions of Title III of the Federal Superfund Amendments and Re-authorization Act of 1986 (SARA). The SERC approves the State Oil and Hazardous Substance Discharge Prevention and Contingency Plan and Local Emergency Response Plans.

Surface Collecting Agents: Means those chemical agents that form a surface film to control the layer thickness of oil.

Surface Washing Agent: Is any product that removes oil from solid surfaces, such as beaches and rocks, through a detergency mechanism and does not involve dispersing or solubilizing the oil into the water column.

Tanker: A self-propelled tank vessel constructed or adapted primarily to carry or hazardous material in bulk in the cargo spaces.

Tidal Current Tables: Tables which contain the predicted times and heights of the high and low waters for each day of the year for designated areas.

Trajectory Analysis: Estimates made concerning spill size, location, and movement through aerial surveillance or computer models.

Transfer: Any movement of oil to, from, or within a vessel by means of pumping, gravitation, or displacement.

Trustee: Means an official of a federal natural resources management agency designated in subpart G of the NCP or a designated state official or Indian tribe or, in the case of discharges covered by the OPA, a foreign government official, who may pursue claims for damages under section 1006 of the OPA.

Underwriter: An insurer, a surety company, a guarantor, or any other person, other than an owner or operator of a vessel or facility, that undertakes to pay all or part of the liability of an owner or operator.

Unified Command: The method by which local, state, and federal agencies and the responsible party will work with the Incident Commander to:

- Determine their roles and responsibilities for a given incident.
- Determine their overall objectives for management of an incident.
- Select a strategy to achieve agreed-upon objectives.
- Deploy resources to achieve agreed-upon objectives.

Unified or Coordinated Command Meeting: Held to obtain agreement on strategic objectives and response priorities; review tactical strategies; engage in joint planning, integrate response operations; maximize use of resources; and minimize resolve conflicts.

Volunteers: An individual who donates their services or time without receiving monetary compensation.

Waste: Oil or contaminated soil, debris, and other substances removed from coastal waters and adjacent waters, shorelines, estuaries, tidal flats, beaches, or marshes in response to an unauthorized discharge. Waste means any solid, liquid, or other material intended to be disposed of or discarded and generated as a result of an unauthorized discharge of oil. Waste does not include substances intended to be recycled if they are in fact recycled within 90 days of their generation or if they are brought to a recycling facility within that time.

Waters of the U.S. - See Navigable Waters, page G-11.

GLOSSARY OF TERMS & ACRONYMS
GLOSSARY OF TERMS (Cont'd)

Wetlands: Those areas that are inundated or saturated by surface or groundwater at a frequency or duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include playa lakes, swamps, marshes, bogs, and similar areas such as sloughs, prairie potholes, wet meadows, prairie river overflows, mudflats, and natural ponds (40 CFR 112.2(y)).

Wildlife Rescue: Efforts made in conjunction with Federal and State agencies to retrieve, clean, and rehabilitate birds and wildlife affected by an oil spill.

Worst Case Discharge: The largest foreseeable discharge under adverse weather conditions. For facilities located above the high water line of coastal waters, a worst case discharge includes those weather conditions most likely to cause oil discharged from the facility to enter coastal waters.

GLOSSARY OF TERMS & ACRONYMS

ACRONYMS

AC - Area Committee
AOR - Area of Review
AQI - Alternate Qualified Individual
BIA - Bureau of Indian Affairs
BLM - Bureau of Land Management
BPD - Barrels Per Day
BOD - Biological Oxygen Demand
BOM - Bureau of Mines
CERCLA - Comprehensive Environmental Response, Compensation and Liability Act
CFR - Code of Federal Regulations
CHEMTREC - Chemical Transportation Emergency Center
COE - U. S. Army Corps of Engineers
CPI - Corrugated Plate Interceptor
CRZ - Contamination Reduction Zone
CWA - Clean Water Act (Federal - Public Law 100-4)
CWS - Community Water System
CZM - Coastal Zone Management
DECON - Decontamination
DOC - Department of Commerce
DOD - Department of Defense
DOE - Department of Energy
DOI - Department of Interior
DOJ - Department of Justice
DOL - Department of Labor
DOS - Department of State
DOT - Department of Transportation
DRAT - District Response Advisory Team
DRG - District Response Group
EBS - Emergency Broadcast System
EHS - Extremely Hazardous Substance
EMA - Emergency Management Agency
EMS - Emergency Medical Service
EOC - Emergency Operations Center
EPA - U. S. Environmental Protection Agency
EPCRA - The Emergency Planning and Right-to-Know Act of 1986 (Title III of SARA)
EQ - Environmental Quality
ERT - Environmental Response Team
ESA - Endangered Species Act
ETA - Estimated Time of Arrival
FAA - Federal Aviation Administration
FAX - Facsimile Machine
FCC - Federal Communications Commission
FEMA - Federal Emergency Management Agency
FOSC - Federal On-Scene Coordinator
FR - Federal Register
FRDA - Freshwater Resource Damage Assessment
FRF - Federal Revolving Fund
GIS - Geographic Information System
GSA - General Services Administration
HAZWOPER - Hazardous Waste Operations and Emergency Response
HHS - Department of Health and Human Services
IBRRC - International Bird Rescue Research Center
IOCC - Interstate Oil Compact Commission
LEPC - Local Emergency Planning Committee
LFL - Lower Flammable Limit
LOSC - Local On-Scene Coordinator
LRT - Local Response Team
MBL - Mobile
MMS - Minerals Management Service
MOU - Memorandum of Understanding
MSDS - Material Safety Data Sheet
MSO - Marine Safety Office
NCP - National Contingency Plan
NCWS - Non-Community Water System
NEPA - National Environmental Policy Act
NIOSH - National Institute for Occupational Safety and Health
NMFS - National Marine Fisheries Service
NOAA - National Oceanic and Atmospheric Administration (Department of Commerce)
NPDES - National Pollution Discharge Elimination System
NPFC - National Pollution Funds Center