OIL SPILL RESPONSE PLAN

CALUMET LUBRICANTS COMPANY

VOLUME I

Calumet Lubricants Company
3333 Midway Street
Shreveport, Louisiana 71133-3099
P.O. Box 3099
Shreveport, Louisiana 71109
318-636-2711 (Tel)
318-632-4225 (Fax)
800-848-7525 (24-hr Tel)

June 2012

EMERGENCY CALLS

NRC	1 800 424-8802	
EPA	1 866 372-7745	
State Police	1 225 925-6595	
LDEQ	1 318 676 7476} Shreveport - Otis Randle 518-0800	
	1 225 219 3640} Baton Rouge	
OEP	1 318 425-5351	
SFD (911)	1 318 673-6662	
SPD (911)	1 318 673-2583	
LDNR	1 225 342-5505 (Pipeline)	
SWEPCO	1 888-219-3919	Account # 95662275105 # on acct 636-2711

OSRO Spill Contractors		**RESPONSE TIME**
Jones Environmental	1 877 345-4534	45 Minutes
Anderson Pollution Control	1 866 609 6208	1 Hour
SWS Environmental Services	1 800 336-0909	1.5 Hours (Kilgore, TX)
TAS Environmental	1 800 602-7196	45 Minutes (Bossier City)

COPY NO. _____

VOLUME I
TABLE OF CONTENTS

Volume II Appendices v
List of Figures vi
Distribution List vii
Record of Changes viii
Change of Custody of Response Plan Form ix
Cross-Reference Tables x
EPA-Response Plan Cover Sheet xiv
Certification/Approval of Response Plan xvi

PAGE

1.0 INTRODUCTION
1.1 Plan Contents 1-1
1.2 Facility / Operation Description 1-1
1.2.1 Calumet Lubricants Shreveport Refinery 1-1
1.2.2 Ten Inch Crude Oil Pipeline 1-2
1.2.3 Facility Expansion 1-3
1.2.4 Spill Record 1-4
1.2.5 Wellhead Protection Area 1-6
1.3 Emergency Response Manager / Qualified Individual Information 1-6
1.4 Plan Distribution 1-7
1.5 Update Procedures 1-7
1.6 Purpose / Objectives 1-8
1.7 Company Policy / Philosophy 1-9
1.8 Scope of Plan/Geographic Area 1-9
1.9 Regulatory Mandate 1-9
1.10 Interface with Other Plans 1-10

2.0 NOTIFICATION PROCEDURES
2.1 Initial Notification 2-1
2.2 Oil Spill Response Team Callout 2-1
2.2.1 Spill Response Team 2-1
2.2.2 Call-Out Procedures 2-1
2.3 Regulatory Reporting 2-2
2.4 Spill Reporting Guidelines 2-3
2.5 Written Reports 2-3

3.0 RESPONSE ACTIONS
3.1 Immediate Response Steps 3-1
3.2 Evacuation Plan 3-2
3.3 Securing the Source 3-7
3.4 General Spill Response Considerations 3-8

PAGE

3.5 Spill Containment and Recovery....3-8
3.6 Determination of Spill Volume and Extent....3-9
3.7 Sampling and Waste Analysis Procedures....3-9
3.8 Storage / Disposal....3-10
3.9 Endangered Species & Wildlife Rehabilitation....3-10
3.9.1 Endangered / Threatened Species....3-11
3.9.2 Wildlife Rescue....3-11
3.10 Documentation of Initial Response Actions....3-11
3.11 Increasing the Spill Response....3-12
3.12 Pipeline Spill Detection....3-12
3.12.1 10” Oil Pipeline Spill Detection....3-12
3.12.2 6” Canning Plant Pipelines....3-12

4.0 SAFETY/ HEALTH/SECURITY
4.1 Safety....4-1
4.2 Worker Health and Safety Policy....4-1
4.3 Employee and Contractor Orientation....4-1
4.4 Site Characterization....4-2
4.5 Site Control....4-2
4.6 Safety Plan....4-2
4.7 Protective Clothing....4-2
4.8 General Response Safety....4-3
4.9 Temperature Concerns....4-3
4.10 Water Safety....4-4
4.11 Water Rescue....4-4
4.12 Boom Deployment....4-4
4.13 Decontamination....4-5
4.14 Site Security....4-5

5.0 RESPONSE TEAM
5.1 Oil Spill Response Tiers....5-1
5.2 Calumet Lubricants Company Oil Spill Response Team....5-1
5.2.1 Qualified Individual Information....5-1
5.2.2 Response Team Organization....5-2
5.2.3 Response Team Positions....5-3

6.0 EMERGENCY OPERATIONS CENTERS/STAGING AREAS
6.1 Emergency Operations Center....6-1
6.1.1 Location of Emergency Operations Centers....6-1
6.1.2 Equipment....6-1
6.2 Access / Staging Areas....6-2

7.0 COMMUNICATIONS
7.1 Lines of Communication....7-1
7.2 Communications Equipment....7-1
7.2.1 Radios....7-1
7.2.2 Telephones....7-2
7.2.3 Pagers....7-2

PAGE

8.0 RESOURCES
8.1 Calumet Lubricants Company....8-1
8.2 Contractors....8-1
8.3 Volunteers....8-1
8.4 Other Resources....8-1

9.0 HAZARD EVALUATION/SPILL MOVEMENT ESTIMATES
9.1 Hazard Evaluation....9-1
9.1.1 Hazard Identification -Tanks....9-1
9.1.2 Hazard Identification - Surface Impoundments....9-2
9.1.3 Hazard Identification - Facility Transfers....9-2
9.1.4 Day-to-Day Operations....9-3
9.2 Site Drainage....9-3
9.2.1 Drainage from Diked Storage and Transfer Areas....9-4
9.2.2 Drainage from Undiked Areas....9-4
9.2.3 Drainage from Curbed Process Areas....9-5
9.2.4 Drainage from the Remote Area of the Tank Farm....9-5
9.3 Oil Movement....9-6
9.4 Site Conditions....9-6
9.5 Geographic Boundaries....9-5
9.6 Trajectory Analysis....9-6
9.7 Discharge Scenarios....9-7
9.7.1 Small Discharge....9-7
9.7.2 Medium Discharge....9-8
9.7.3 Worst Case Discharge....9-9
9.7.4 Equipment Needs....9-10
9.8 Response Analysis/Planning Volumes....9-11

10.0 CRITICAL/SENSITIVE AREAS AND LOGISTICS
10.1 Critical Areas to Monitor and Protect....10-1
10.2 Environmental Sensitivities....10-2
10.3 Vulnerability Analysis....10-4
10.4 Shoreline Access Sites and Equipment Staging Areas....10-7
10.5 Guidelines for Shoreline Cleanup....10-7

11.0 TEAM TRAINING
11.1 Training....11-1
11.1.1 Annual Plan Review....11-1
11.1.2 Formal Training....11-1
11.1.2.1 HAZWOPER....11-1
11.1.2.2 Spill Training....11-1
11.2 Drills....11-1
11.2.1 Facility / Operation Drills....11-3
11.2.2 Drill Schedule....11-3

PAGE

11.3 Facility Inspections and Records 11-4
11.3.1 Inspections 11-4
11.3.2 Record 11-6

12.0 GLOSSARY 12-1

VOLUME II
APPENDICES

A. Calumets Environmental Policy and Principles

B. Environmental Response Maps

C. Emergency Operating Manual (EOM)

D. Clean Up Plan

E. Environmental Protection Plan

F. Calumet Lubricants SPCC Plan

G. Disposal Plan - Disposal Status Update

H. Wildlife Rehabilitators and Rescue Information

I. Site Specific Safety and Health Plan

J. Response Contractor Equipment Lists and Contracts

LIST OF FIGURES

		PAGE
Figure 1.1	Facility/Operation Location Boundaries	1-11
Figure 1.2	Aerial Photograph	1-12
Figure 1.3	Tank Listing	1-13
Figure 1.4	Calumet Lubricants Company Plot Plan	1-18
Figure 1.5	Interfaces with Other Plans	1-19
Figure 2.1	Spill Notification Sequence - Non-Emergency	2-6
Figure 2.2	Spill Notification Sequence - Emergency	2-7
Figure 2.3	Oil Spill Regulatory Notification Flowchart	2-8
Figure 2.4	Spill Response Notification Form	2-9
Figure 2.5	Emergency Notifications List	2-11
Figure 2.6	DOT Accident Report Hazardous Liquid Pipeline-Form 7000-1	2-13
Figure 3.1	Spill Response Flowchart	3-14
Figure 3.2	Evacuation Diagram	3-15
Figure 3.3	Guideline 1 - Considerations for Spills on Land	3-16
Figure 3.4	Guideline 2 - Considerations for Crude/Distillate Spills on Waterways	3-17
Figure 3.5	Guideline 3 - Considerations for Gasoline/Light Hydrocarbon Spills on Waterways	3-18
Figure 3.6	Guideline 4 - Considerations for Discharge of Asphalt into Waterways	3-19
Figure 5.1	Emergency Response Team	5-5
Figure 5.2	Emergency Response Team Training Record	5-7
Figure 6.1	Calumet Lubricants Company Emergency Operation Center Locations	6-3
Figure 6.2	Emergency Operation Center Locations in Administrative Building	6-3
Figure 7.1	Cellular Phones	7-3
Figure 8.1	Calumet Lubricants Company Equipment List and Location	8-3
Figure 9.1	Refinery Surface Flow	9-10
Figure 9.2	Temperature & Precipitation Data	9-11
Figure 9.3	Worst Case Discharge Calculations	9-12
Figure 9.4	Refinery Process Drainage System	9-19
Figure 9.5	Refinery Firewater System	9-20
Figure 9.6	Refinery Electrical Substation System	9-21
Figure 10.1	Summary of Shoreline Clean-up Techniques	10-8
Figure 11.1	Calumet Lubricants Company HAZWOPER Training	11-5
Figure 11.2	Exercise and Drill Record	11-6
Figure 11.3	QI Notification Form	11-7
Figure 11.4	Storage Tank Inspection History	11-8
Figure 11.5	Tank Dike Drain Check (Firewall)	11-13
Figure 11.6	Tank In-Service Monthly Checklist	11-14
Figure 11.7	Tank Car Inspection Record	11-12
Figure 11.8A	Foam Pumper Truck Checklist	11-17
Figure 11.8B	Environmental Truck Checklist	11-18
Figure11.8C	Ansul Dry Chemical Truck Checklist	11-19
Figure11.8D	Scott Air-Pak Monthly Maintenance Checklist	11-20
Figure 11.8E	Monthly Fire Extinguisher Inspection	11-21

CALUMET LUBRICANTS COMPANY

DISTRIBUTION LIST

PLAN NO.	NAME	JOB TITLE	RESPONSE TEAM JOB TITLE	ISSUE DATE	RECEIPT
1	Tom Germany	Plant Manager	Incident Commander	3/2009	
2	Lyndon B. Johnson	Safety Manager	Operation Command / Liaison Officer	3/2009	
3	Michael Rhoades	Environmental Manager	Operation Command / Liaison Officer	5/2012	
4	Aubrey Marchand	Operations Manager	Planning	10/2009	
5	James Kelly	Technical Services Manager	Planning	10/2009	
6	Mitch Perdue	Product Control Manager	Planning	10/2009	
7	Ken Brown	Reliability Manager	Logistics	10/2009	Misplace Copy
8	Clayton Long	Purchasing Manager	Finance & Security	10/2009	
9	Michael Vaughn	Office Manager	Documentation	10/2009	Misplace Copy
10	John Swanson	Maintenance Manager	Logistics	3/2011	
11	Jack Supple	Manufacturing Support Manager	Logistics	7/2012	

RECORD OF CHANGES

Instructions: Updated sheets are to be inserted in the proper place and the obsolete pages discarded. The holder of this Plan is to record the receipt and review of each revision on this form.

CHANGE NUMBER	PAGE NUMBERS REVISED	DATE OF CHANGE	DATE ENTERED	SIGNATURE OF PERSON ENTERING CHANGE
1	ERAP-iii, ERAP iv, ERAP-2, ERAP-7, ERAP-8, FIGURE 8, FIGURE 9, FIGURE 10, viii, xv, xvii, 1-12 thru 1-17, 2-11, 3-2, thru 3-4, 3-18, 4-1, 4-3, 5-1 thru 5-3, Figure 5-1, 8-1 thru 8-3, Figure 8-1, 9-7, 12-10	March, 1996	March 1996	
2	ERAP-ii, ERAP-iii, ERAP-iv, Figure 3, Figure 9A, 1-2, 2-2, 2-3, 2-11, 2-12, 7-2	April, 1996	April, 1996	
3	ERAP-2, ERAP-4, ERAP-7, ERAP-8, ERAP-Figure 9, Figure 9A, 1-1 thru 1-9, 3-1 thru 3-10, Sect. 5.0, Figure 5.1, 8-1, 8-2, 9-1 thru 9-7, Appendix B(1)	October 1996	October 1996	
4	ERAP-iii, ERAP-iv, i, ii, iii, vii, xvi (Response Plan Cover Sheet-Page 3 of 3), 7-2	December 1996	December 1996	
5	Complete Manual Update (Name change, Tanks, Refinery Expansion, Spill Record, Response Team)	June 1999	June 1999	
6	Complete Manual Update (Response to EPA Audit on July 13, 1999	August, 1999		
7	Complete Manual Update (Name change, Tanks, Refinery Expansion, Spill Record, Response Team)	February 2002	February 2002	
8	Update in Response to EPA Audit	March 2009	March 2009	
9	Section 7, 7.2.2 Pg 2 Cell Phone No; Fig 7.1 ERAP 21; Section 2 Fig 2.1 Pg 6 Spill Notification Seq – Non Emergency; Section 2 Fig 2.2 Pg 7 Spill Notification Seq – Emergency; Sec 3 Pgs 1-2 Response Action; Sec 5 Pg 4 Response Team; Sec 5 Fig 5.1 Pg 5 (2pgs) Response Team Roster; Sec 5 Fig 5.2 Pg 6 Response Team Roster-Training Record; Sec 11 Fig 11.1 Pg 8 Response Team Roster-Training Record; Sec C Pgs 1-19 Emergency Operating Procedure 00-H-0025; Sec F Pg 10 Contact List & Phone Numbers; Sec I Pg 4 On-Site Organization	October 2009	October 2009	Rick Williams / Michelle Carroll

10	Emergency call list; Distribution List / Section 2 Updated 2010 Emergency Occurrences/ Section 5 pg5-3; Fig 5.1 Response Team; /Fig 5.2 Training / Section 6, 6-1 / Section 8, 8-1 Resources / Section 9, pg9-3 Table of Oil Transfer; Resource pg9-11; Section 11 pg11-8; Fig 11-1 Training Record; Internal Exercise; Qtrly Exercise; Fig 11-4 pg 11-8 Storage TK Inspection Summary, pg11-13 Firewall Checklist, 2010 Monthly TK Inspection, Safety Procedures: 00-H-0056, 00-H-0065, 00-H-0064; Section F, page 11; Section C, procedure 00-h-0025	March 2011	March 2011	Rick Williams / Michelle Carroll
11	Cover sheet date/ Distribution List/ Section 1, Tank List/ Section 2 Updated 2011 Emergency Occurrences/ Section 5 pg5-2,5-3,5-4,5-5 , Fig 5.1 Response team/ Fig 5.2 Training/ Section 7 7-1,7-2/ Fig 7.1 Cellular Phones/ Section 8, pg8-1, Fig 8.0 Resources/ Section 11, pg. 11-8, Fig 11.1 Training Record; Internal Exercise; Fig 11.4 Storage TK Inspection Summary, TK Car Inspection Report, Firewall Checklist, 2011 Monthly TK Inspection, Safety Procedures: 00-H-0056, 00-H-0065, 00-H-0064; Monthly Inspection SCBA; Fire Extinguisher Inspection Fig 11.8; Environmental RCRA/ Pumper Truck Inspections Section F SPCC, by CK Associates/ Section J Response Contractor Equipment Lists and Contracts	May 2012	May 2012	Michelle Carroll / James Desonier

EMERGENCY RESPONSE ACTION PLAN
CHANGE OF CUSTODY

Please send this form to: Calumet Lubricants Company
Tom Germany
Plant Manager

I have been reassigned to a new position and wish to inform you of the following change in custody of this plan:	
Plan Copy Number:	
New Holder:	Effective Date:
Position:	
Work Address:	
Work Telephone:	
Previous Holder:	
Position:	
Work Telephone:	

Signatures:

_____
New Holder

_____
Previous Holder

EPA OPA-90 Facility-Specific Response Plan Cross Reference Table[1]		
40 CFR Part 112[1] Appendix F Section		**Location of EPA-Required Information**
1.0	***MODEL FACILITY-SPECIFIC RESPONSE PLAN***	
1.1	Emergency Response Plan	Separate Document (ERAP)
1.2	Facility Information	Section 1.2.1
1.2.1	Facility Name and Location	Section 1.2.1
1.2.2	Latitude and Longitude	Section 1.2.1
1.2.3	Wellhead Protection Area	Section 1.2.5
1.2.4	Owner/Operator	Section 1.2.1
1.2.5	Qualified Individual	Section 1.3
1.2.6	Date of Oil Storage Start-Up	Section 1.2.1
1.2.7	Current Operation	Section 1.2.1
1.2.8	Dates and Type of Substantial Expansion	Section 1.2.3
1.3	***Emergency Response Information***	
1.3.1	Notification Form	Figure 2.4
1.3.2	Response Equipment List	Section 8.1, Figure 8.1, Appendix J
1.3.3	Response Equipment Testing	Section 8.1, Section 11, Appendix J
1.3.4	Personnel	Section 5.0
1.3.5	Evacuation Plans	Section 3.2, Figure 3.2, Table 3.1, Section 6, Appendix C
1.3.6	Qualified Individual Duties	Section 5.2.1
1.4	***Hazard Evaluation***	
1.4.1	Hazard Identification	Section 9.1
1.4.2	Vulnerability Analysis	Section 10.3
1.4.3	Analysis of Potential for an Oil Spill	Section 9.1
1.4.4	Facility Reportable Oil Spill History	Section 1.2.4
1.5	***Discharge Scenarios***	
1.5.1	Small and Medium Discharges	Section 9.7.1, 9.7.2
1.5.2	Worst Case Discharge	Section 9.7.3

EPA OPA-90 Facility-Specific Response Plan Cross Reference Table[1]		
40 CFR Part 112[1] Appendix F Section		**Location of EPA-Required Information**
1.6	***Discharge Detection Systems***	
1.6.1	Discharge Detection by Personnel	Section 11.3
1.6.2	Automated Discharge Detection	Section 11.3
1.7	***Plan Implementation***	
1.7.1	Response Resources for Small, Medium and Worst Case Spills	Section 9.7.4
1.7.2	Disposal Plans	Section 3.8, Appendix G
1.7.3	Containment and Drainage Planning	Section 9.0
1.8	***Self-Inspection, Drills/Exercises, and Response Training***	
1.8.1	Facility Self-Inspection	Section 11.3.1
1.8.2	Facility Drills/Exercises	Section 11.2
1.8.3	Response Training	Section 11.1
1.9	***Diagrams***	Figure 1.1, Figure 1.4, Figure 3.2, Figure 9.1, Figure 9.4
1.10	***Security***	Section 4.14
2.0	***RESPONSE PLAN COVER SHEET***	
2.1	Page One - General Information	page xiv
2.2	Page Two - Applicability of Substantial Harm Criteria	page xv
2.3	Page Three - Certification	page xvi
3.0	***ACRONYMS***	Section 12.0

1. Based on July 1, 1994 Rules and Regulations (Federal Register, Volume 59, Number 126).

CALUMET LUBRICANTS COMPANY
DOT-RSPA-49 CFR 194
CROSS-REFERENCE TABLE

Response Plans for Onshore Oil Pipelines by the Department of Transportation

ITEM		LOCATION[a]
194.107a	Planning for resources for responding to worst case discharge	Section 9.7
194.107b	Requirement for plan to be written in English and any other language necessary to enable response by personnel	Requirement met.
194.107c	Certification by operator that the NCP and applicable ACP have been reviewed and that response plan is consistent with NCP and ACP	Requirement met.
194.107d1	i Information summary as required in 194.113	Sections 1.2, 1.3, 9.0.
	ii Immediate notification procedures	Section 2.0
	iii Spill detection and mitigation procedures	Section 3.0
	iv Full style of oil spill response organization	Section 5.0
	v Response activities and resources	Section 3.0
	vi Notification procedures for relevant federal, state and local agencies	Section 2.0
	vii Training procedures	Section 11.0
	viii Equipment testing	See Operations Manuals and Section 11.0
	ix Drill types, schedules and procedures	Section 11.2
	x Plan review and update procedures	Section 1.5
194.107d2	Response zone specific appendix	Same as above.
194.113a	The core plan must include: 1. Name and address of operator 2. For each response zone meeting the criteria in 194.103, a listing and description of the response zones including county(s) and state(s)	Section 1.2

CALUMET LUBRICANTS COMPANY
DOT-RSPA-49 CFR 194
CROSS-REFERENCE TABLE

Response Plans for Onshore Oil Pipelines by the Department of Transportation

ITEM		LOCATION[a]
194.113b	The response zone appendix must include: 1. The information in 194.113a	Section 1.2
	2. Identification of, and contacts for the qualified individual	Sections 1.3, 5.2.1
	3. Description of the response zone including county(s) and state(s)	Section 1.2
	4. Listing of line sections for each pipeline in the response zone	Section 1.2
	5. Basis for the operator's determination of significant and substantial harm	Based on EPA OPA-90 Rules & Regulations (F.R. 59, No. 126), July 1, 1994
	6. Type and volume of oil of the worst case discharge	Section 9.0
194.115a	Identification (by contract of other approved means) of resources necessary to remove, mitigate, or prevent a worst case discharge	Section 8.0, Appendix J
194.115b	Identification of the response resources available to respond to a worst case discharge within time limits specified	Section 8.0, Appendix J
194.117a	Training procedures for: 1.All personnel	Section 11.0
	2.Reporting personnel	Section 11.0
	3.Personnel engaged in response activities	Section 11.0
194.117b	Training records and locations	Section 11.0
194.117c	Requirement to meet 29 CFR 1910.20 and 40 CFR 311	Requirement met.

EPA - RESPONSE PLAN COVER SHEET
(Page 1 of 3)

General Information	
Owner of Facility:	Calumet Lubricants Company
Operator of Facility:	Calumet Lubricants Company
Facility Name:	Calumet Lubricants Shreveport Refinery
Facility Address:	3333 Midway Street
Facility Phone Number:	(318) 636-2711
Latitude and Longitude:	(b) (7)(F), (b) (3) [redacted]
Standard Industrial Classification (SIC) Code:	2911
Largest Oil Storage Tank Capacity:	(b) (7)(F), (b) (3) [redacted]
Maximum Oil Storage Capacity:	
Number of Oil Storage Tanks:	131
Worst Case Discharge Amount:	(b) (7)(F), (b) (3) [redacted]
Facility Distance from Navigable Waters:	17.1 miles

EPA - RESPONSE PLAN COVER SHEET
(Page 2 of 3)

Applicability of Substantial Harm Criteria	
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?	No
Does the facility have a total oil storage capacity of greater than or equal to 1 million gallons and is the facility located at a distance such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments?	Yes
Does the facility have a total oil storage of greater than or equal to 1 million gallons and is the facility located at a distance such that a discharge from the facility would shut down a public water intake?	No
Does the facility have a total oil storage capacity of greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?	No

EPA - RESPONSE PLAN COVER SHEET
(Page 3 of 3)

CERTIFICATION/APPROVAL

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 information, I believe that the submitted information is true, accurate, and complete.

This spill response plan has the full approval of the management of Calumet Lubricants Company who has the authority to commit the resources required to implement this plan.

All individuals identified on Figure 5-1 of this document have the authority to make appropriate expenditures to execute the plan.

Signature: _____

Name (print or type): Tom Germany

Title: Refinery Manager

Date: _____

1.0 INTRODUCTION

1.1 PLAN CONTENTS

This Calumet Lubricants Company Oil Spill Response Plan (hereinafter referred to as "the Plan") describes organizational lines of responsibility and procedures to be followed when responding to oil spills involving operations at the Calumet Shreveport Refinery (CSR) and the Ten Inch Crude Oil Pipeline from Brown Station to Calumet Lubricants (see Figure 1.1).

This Plan:

- contains comprehensive technical and procedural information necessary for effective management of an oil spill response within the geographic location boundaries of the Plan.
- defines procedures and systems in place to assist in preventing oil spills.
- defines alert and notification procedures for contacting responding employees, company management, government authorities, and the public.
- identifies equipment, manpower, and other resources which can be used during a response operation.
- contains environmental data and spill response guidelines which can provide support for oil spill response planning and response operations.

1.2 FACILITY/OPERATION DESCRIPTION

1.2.1 Calumet Lubricants Shreveport Refinery

The CSR refinery is owned and operated by Calumet Lubricants Company. It is located at the intersection of Midway Street and Jewella Road. It has been in operation since 1922 and occupies approximately 210 acres. This refinery operates 24 hours per day, 365 days a year and employs approximately 105 employees. Figure 1.1 shows the facility/operation location boundaries, and an aerial photograph of the facility is included as Figure 1.2.

The CSR refinery is bordered by an industrial area to the west, Interstate Highway I-20 and an industrial area with a small residential area to the north, and residential areas to the east and south of the property.

The Calumet Lubricants Shreveport Refinery, is a fully integrated facility which refines crude oil by use of atmospheric distillation, vacuum fraction, hydrofinishing, hydrogenation, hydrocracking, solvent extraction, propane deasphalting, and MEK dewaxing to produce fuel oil, diesel fuel, kerosene, lubricating oils, wax, and asphalt. An amine scrubbing unit removes H_2S from the fuel gas system and a Claus Sulfur Recovery Plant converts the recovered H_2S into molten sulfur for sale.

Feedstock and finished products are stored in pressure tanks, floating roof tanks, cone roof tanks, and gas blanketed tanks. The feedstock is received by pipeline, trailer truck, and rail cars. The finished products are shipped by pipeline, truck, and train. The feedstock and finished products are stored in internal and external floating roof tanks,

and fixed roof storage tanks. A complete list of storage tanks, capacities, and products can be found in Figure 1.3.

CSR is engaged in the production of paraffinic lubes, fully refined petroleum waxes, naphthenic lube oils and associated fuel products. CSR currently processes up to 10,000 barrels per day of various types of paraffinic and naphthenic crude oils into specialty and fuel products.

Stormwater drainage ditches run along the south and east sides of the refinery (outside of refinery property). These ditches are owned by the city. Both ditches along with CSR's effluent wastewater make up the headwaters of Brush Bayou. There is also a 52 inch storm drain running through the refinery that belongs to the city. This drain ties into the concrete ditches at the refinery wastewater outfall. A plot plan of the CSR refinery is included as Figure 1.4.

Facility Name/Address:	Calumet Lubricants Company Shreveport Refinery 3333 Midway Street Shreveport, Louisiana 71109 P.O. Box 3099 Shreveport, Louisiana 71133 318-636-2711 318-632-4201 (FAX)
Parish:	Caddo
Latitude:	(b) (7)(F), (b) (3) [redacted]
Longitude:	

1.2.2 Ten Inch Crude Oil Pipeline

CSR owns a 10 inch crude oil pipeline that is approximately 7.5 miles long, running from Brown Station, located in south Shreveport, to the southwest side of the CSR refinery. The estimated holding capacity of this line is approximately 4,050 barrels. CSR owns the line, pumps, meters and safety devices and is responsible for the maintenance of the pipeline, pumps, safety devices, meters, cathodic protection, and right-of-way, the pumping station is owned and operated by CSR. This pipeline was designed for 720 psi with an initial design throughput of 50,000 barrels per day. The normal pumping pressure is 200 psi. CSR schedules crude shipments on a daily basis.

Brown Station is located Caddo Parish, Louisiana, in a wooded area approximately 0.7 of a mile north of the intersection of Colquitt Road and Harper Road. The 10-inch pipeline is underground from Brown Station to the CSR facility. The line enters CSR property near the southwest corner of the refinery.

The Calumet Lubricants Shreveport Refinery does hereby state that neither the six inch or ten inch pipelines pose significant and substantial harm to the environment in the event of a discharge of oil into or on the navigable waters or adjoining shorelines and is, therefore, not subject to 49 CFR Part 194.103 (a), (b), and (c). Additionally, the six inch pipeline is smaller than 6.625 inches in outside nominal diameter and the ten inch pipeline is less than 10 miles in length.

1.2.3 Facility Expansion

Date	Type of Substantial Expansion
1976-1977	Installed the following equipment: (1) steam boilers, (2) cooling towers, (3) storage tanks, (4) Lube Oil Vacuum Distillation Unit, (5) Instrument Control Building, (6) Lube Oil Phenol Treating and Propane Deasphalting Unit, (7) Catalytic Reformer and Hydrotreating Unit, (8) BTX Aromatic Extraction Unit, (9) Crude Distillation Unit, (10) Lube Oil Hydrotreating Unit, and (11) Hydrogeneration Unit to saturate aeromatic feedstock. This expansion was done in order to: (1) further refine the heavy components of crude oils into lubricating oil, extract oils, and asphalts, (2) produce petrochemical feed stocks, and (3) to increase the capacity of CSR to process additional crude oil and condensates. Approximately 552,000 barrels of storage tank capacity was added at the facility.
1978	Added 2 - 25,000 barrel storage tanks for gasoline storage.
1979	Added 1 - 5,000 barrel storage tank for slop oil storage, 2 - 50,000 barrel storage tanks for fuel oil storage.
1980-1982	Added MEK Dewaxing Unit, No. 4 Crude and Vacuum Units, Amine Unit and Lube Oil Hydrotreater to produce high grade lube stocks and food grade wax. Added approximately 770,000 barrels of storage tank capacity at the facility.
1983	Added 3 - 25,000 barrel storage tanks, 2 for lube stock storage and 1 for jet fuel storage.
1988	Added 2 - 25,000 barrel storage tanks for lube stock storage.

1993	Added 1 - 50,000 barrel and 2 - 25,000 barrel storage tanks for lube stock storage. Installed 10,000 barrel per day Diesel Dewaxing Desulfurization unit to reduce sulfur content in Diesel Fuel.
1994	Added 2 - 10,000 barrel and 2 - 20,000 barrel storage tanks for lube stock storage.
1996	Added one 90,000 barrel storage tank for diesel and removed one 55,000 barrel storage tank.
1996-1997	Added a 10,500 BBL/Day catalytic cracking unit, alkylation unit, sulfur recovery unit, one 25,000 BBLwastewater storage tank, activated sludge wastewater treatment plant, and one cooling tower.
2001	Calumet Lubricants purchased refinery from PQS
2005	Gasoline upgrade project. Restarted both platformers, Penex and revamped For a depropanizer and dehexanizer unit.
2006	Restarted BELCO taigas scrubber to meet regulations on Sulfur dioxide.
2007	Added new SRU, hydrogen plant, Sour crude unit, PSA, diesel hydrotreater, 3 flare gas compressors and modified the DDD and #1 vac unit. Increased crude throughput to 65,000 bpd.

1.2.4 Spill Record

The only spills that have left the facility have been by way of an open ditch that used to run through the southeast portion of the facility. The following is a history of those releases prior to covering the ditch.

May 12, 1990, 50 gal. oil spill to Midway Ditch
May 31, 1990, 600 gal. oil spill to Midway Ditch
June 27, 1990, 30 gal. oil spill to Midway Ditch
July 6, 1990, 750 gal. oil spill to Midway Ditch
Nov. 14, 1990, 42 gal. oil spill to Midway Ditch
April 12, 1991, 15 bbl. oil spill to Midway Ditch
April 17, 1991, 1 bbl. oil spill to Midway Ditch

All of the above oil spills came from an area known as “Caddo Lake”. The spill areas were cleaned and all wastes disposed of in an environmentally approved manner. This was a low area on the southeast part of the facility bordered on the west side by the dike along Midway Ditch. Midway Ditch was an open channel carrying water runoff from city streets on the north side of the facility. During heavy rains, storm water runoff and process sewer water and oil would back up in the Caddo Lake area

and overflow the dike into Midway Ditch. This happened because the process water pump in the Caddo Lake area was not large enough to handle the extra load of rain runoff. In mid 1991, CSR installed 2 - 10,000 GPM pumps in the Caddo Lake area to pump this water back to the waste water treatment facility and installed several large overflow lines from the Caddo Lake area to the waste treatment ponds. Since that time CSR has not had any releases to Midway Ditch. That portion of Midway Ditch which was exposed to any spillage was covered in 1993, thus eliminating the possibility of oil getting into Midway Ditch. Midway Ditch is considered the headwaters of Brush Bayou.

The two Midway Ditch spills in April of 1991 required updating the SPCC Plan and submitting a plan to prevent recurrence, which was done. All work described in the plan has been completed.

July 5, 1995 - discharged an oil sheen out and around our NPDES permitted outfall due to overload of system in heavy rains. Booms were installed in outfall ditch to stop discharge of sheen. Volume was less than 42 gallons. CSR is a 24-hour operation. Operating personnel and security are frequently making rounds through the facility, therefore, releases are detected reasonably fast to prevent a reoccurrence. All oily contaminated wastes generated from the incident were disposed of in an environmentally approved manner.

June 1, 1996 - During a 4 inch, one-hour rain, a power failure affected portions of the wastewater treatment facility. Heavy rainfall and loss of pumping equipment caused the wastewater system to flood and oily water separators to overflow. Approximately 42 gallons of slop oil was released. On-site storage of booms and absorbent pads was relocated to expedite deployment. Oil absorbent booms and pads were deployed during the event. Emergency response crews were dispatched to assist in cleanup. The area just outside the southeast corner of the facility was impacted and cleaned up within 24 hours and all wastes generated from the incident were disposed of in an environmentally approved manner.

April 4, 1997 - A 6.5 inch rain of short duration caused extensive flooding in southeast corner of the facility and backed < 42 gallons of oily wastewater out of the wastewater treatment system. Absorbent booms and pads were deployed by on-site employees. There was no evidence of any off-site impact. All wastes generated from the incident were disposed of in an environmentally approved manner.

August 6, 1998 - Heavy rain coupled with power failure and failure of earthen dike caused process sewers to flood and overflow and seep through a crack in the storm drainage ditch. Volume was less than 42 gallons Absorbent booms and pads were deployed. Hole under fence was backfilled and an earthen dike at discharge point was installed to prevent recurrence. All wastes generated from the incident were disposed of in an environmentally approved manner.

January 31, 1999 - Due to 11.3-inch rain over a 48-hour period, oil and water overflowed from the equalization Tank 79 to holding ponds. Volume was less than 42 gallons. Absorbent booms were placed at outfall and at two other locations upstream. Vacuum trucks skimmed oil from ponds. Operator training with emphasis

on actions to be taken when Tank 79 fills up was conducted to prevent recurrence. All wastes generated from the incident were disposed of in an environmentally approved manner.

June 24, 1999 - Heavy rain of over 6 inches resulted in oil spill that caused oil sheen to be discharged from the facility at Outfall 001. Volume was less than 42 gallons. Absorbent booms were deployed at outfall and train rack to aid in cleanup and minimize off-site impact. Extra absorbent booms will be placed in spill areas in the future to avoid hydrocarbon contact with the outfall ditch to prevent recurrence. All wastes generated from the incident were disposed of in an environmentally approved manner.

1.2.5 Wellhead Protection Area

The state of Louisiana has an EPA approved Wellhead Protection Program and is responsible for outlining response plan requirements. According to the Louisiana Department of Environmental Quality (LDEQ), CSR is not located in nor does it drain into a wellhead protection area, as defined by the Safe Drinking Water Act of 1986 (SDWA).

1.3 EMERGENCY RESPONSE MANAGER/QUALIFIED INDIVIDUAL INFORMATION

The CSR Emergency Manager is the designated Qualified Individual (QI). He will have full authority, including contracting authority, to implement removal actions. The CSR Director of Quality is the designated Alternate Qualified Individual. The QI has received First Responder, Awareness Level training in accordance with requirements of 29 CFR 1910.120 and the contents of this Plan. The alternate QI has received a minimum 40-hour initial training, eight hour supervisory training, and an annual eight-hour refresher course addressing emergency response to releases of hazardous materials and the contents of this Plan.

Primary QI

Name:	Tom Germany
Position:	Refinery Manager
Business Address:	3333 Midway Street Shreveport, LA 71109
Emergency Phone #:	Business: 318-632-4077 Cell: (b) (6) [redacted]

Alternate QI

Name:	Lyndon B. Johnson
Position:	Safety Manager
Business Address:	3333 Midway Street Shreveport LA 71109
Emergency Phone #:	Business: 318-632-4269 Cell: (b) (6) [redacted]

1.4 PLAN DISTRIBUTION

A copy of this Plan is distributed to company personnel who may provide assistance during oil spill response activities for Calumet's operations at the Calumet Lubricants Company.

The distribution of this Plan is controlled by the number on the cover page. The Manager of Process and Environmental Engineering is responsible for distributing the Plan.

If the person holding this copy is reassigned, this copy shall be transferred to that person's replacement and the Manager of Process and Environmental Engineering shall be notified.

This Plan has been distributed to those individuals and agencies listed on the “Distribution List” at the front of the Plan, including:

- EPA Region VI
- U.S. Department of Transportation
- Louisiana Department of Environmental Quality

1.5 UPDATE PROCEDURES

This substantial harm Plan shall be reviewed by the Manager of Process and Environmental Engineering or his designee and shall be updated to address new or different conditions or information. The Plan shall be resubmitted to OPS every 5 years from the last submission date.

Revisions shall be approved and distributed to all plan holders with numbered plan copies. (Applicable instructions concerning those revisions shall be included.)

When received, the revisions shall be reviewed immediately and inserted into the Plan and the obsolete pages discarded. This action shall then be recorded on the "Record of Changes" page.

Plan holders with new or incorrect phone numbers shall notify the Manager of Process and Environmental Engineering immediately.

The Manager of Process and Environmental Engineering or his designee(s) shall perform informal audits to verify the accuracy of the Distribution List.

Update Procedures for the 10" Oil Pipeline

49 CFR 194.121(a)(b) requires each operator to resubmit their FRP (Facility Response Plan) every five years from the date of submission and modify the FRP to address new or different operating conditions and/or information. If the new or different operating conditions and/or information would substantially affect the implementation of the FRP, the operator shall immediately modify the FRP and submit it to OPS for approval within 30 days. Any one of the following elements that would cause a significant change requiring a modification to the operator's FRP:

- Pipeline extension or new pipeline construction in a response zone not covered by a previously approved plan;
- A change in the worst case discharge volume, commodities transported, oil spill response organizations, qualified individual(s), or emergency response procedures;
- NCP/ACP changes that significantly affect full implementation of the FRP (deficiencies noted during drill/exercise or post-incident evaluation); and/or
- Other information that may affect full implementation of the FRP (deficiencies noted during drill/exercise or post-incident evaluations).

CSR shall resubmit its FRP within 30 days if any one of the following key factors occurs:

- New pipeline construction or purchase
- Different worst case discharge volume
- Change in commodities transported
- Change in OSRO(s)
- Change in QI(s)
- Changes in the NCP/ACP that significantly impact the appropriateness of response equipment or response strategies
- Changes in response procedures
- Change in ownership
- Any significant change in operating conditions

Improvements of the FRP shall be initiated by the Manager of Process and Environmental Engineering or his designee if post-drill evaluation results or post-incident evaluation results indicate that Plan improvements are needed. If the Plan is modified/revised for any of the aforementioned reasons, then the Manager of Process and Environmental Engineering or his designee shall be responsible for the re-submittal of the Plan to OPS for approval. The modifications/revisions shall be made in the form of addendums to the original plan and shall be submitted within 30 days to OPS for approval.

1.6 PURPOSE/OBJECTIVES

The purpose of this Plan is to:

- help Calumet Lubricants, Shreveport Refinery personnel prepare for, and respond quickly and safely to oil spill incidents.
- ensure an effective, comprehensive response.
- prevent injury or damage to company employees, the public, and the environment.

The specific objectives of the Plan are to:

- define existing procedures utilized to prevent an oil spill.
- define alert and notification procedures to be followed when an oil spill, or the threat of a spill, occurs.
- document equipment, personnel and other resources available to assist with the spill response.
- establish a spill response team, assign individuals to fill the positions on the team, and define the roles and responsibilities of team members.
- define organizational lines of responsibility to be adhered to during an oil spill response.
- outline response procedures and techniques for combating the spill.
- provide guidelines for managing the response operation.

1.7 COMPANY POLICY/PHILOSOPHY

Calumet's Environmental, Safety & Health Policy and Principles (Appendix A) are to conduct its operations in a manner which safeguards the environment, the health and safety of its personnel, local communities, consumers, and the general public and to develop in these areas a preventative approach.

This Plan implements these policies for potential oil spills for Calumet's operations at its Calumet Lubricants Shreveport refinery.

1.8 SCOPE OF PLAN/GEOGRAPHIC AREA

This Plan covers oil spills that could occur at the CSR refinery described in Section 1.2. Figure 1.1 depicts the facility/operations. The CSR geographic location boundaries have been defined as the area occupied by the facilities/operations described in Section 1.2 and those waterways which could be impacted within 27 hours' travel time from a release at CSR (Appendix B.) This would include:

- Calumet Lubricants Company located at the intersection of Midway Street and Jewella Road.

- 7.5 mile 10 inch crude oil pipeline, from Brown Station to CSR, located approximately 0.75 of a mile north of the intersection of Colquitt Road and Harper Road.

1.9 REGULATORY MANDATE

This Plan, in addition to implementing company policy, also satisfies the requirement of the OPA90 Facility/Operation Oil Spill Response Plan requirements and the U.S. Environmental Protection Agency's (EPA) Oil Pollution Prevention Regulations, (40 CFR, Part 112) that require Spill Prevention Control and Countermeasures (SPCC) Plans backed up by a "strong" oil spill contingency plan. Submittal of this plan is intended also to satisfy requirements for the State of Louisiana.

1.10 INTERFACE WITH OTHER PLANS

Major oil spill response operations may require support from many parts of Calumet. This assistance can include:

- local response team management, technical, and administrative support.
- high level management and administrative support.
- advanced technical support.

Numerous other response plans exist which apply to oil spills within the geographic area of the Plan. How these plans interface is shown in Figure 1.5. These other plans include:

- National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR 300)
- U.S. EPA Region VI Inland Area Contingency Plan
- Environmental Protection Agency Region VI Response Plan
- State of Louisiana Spill Contingency Plan
- Louisiana Statewide Emergency Response Plan
- Local Contingency Plans (when developed)
- SPCC Plan

This Plan is designed so that Calumet will interface with the other governmental plans, Area Contingency Plan (ACP), and National Contingency Plan (NCP). Priority to these plans shall be adhered to pursuant to the federal, state, and local laws and regulations. The CSR Incident Commander will interface directly with the State and Federal Emergency Response Managers.

Copies of the applicable plans shall be maintained in the Environmental Coordinator's office and at the designated Command Post for use during a spill response.

FIGURE 1.1

FACILITY/OPERATION LOCATION BOUNDARIES

FIGURE 1.2

CALUMET LUBRICANTS COMPANY
AERIAL PHOTOGRAPH
(COLOR PHOTO)

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

APPROXIMATE SCALE

000 0 2000 FEET

SOURCE:

U.S.G.S. 7.5 MINUTE SERIES TOPOGRAPHIC MAP. SHREVEPORT WEST, LOUISIANA QUADRANGLE (1982, REVISED 1992).

DRAWING NOT TO SCALE

Figure 1.1

FACILITY/OPERATION LOCATION BOUNDARIES

CALUMET LUBRICANTS COMPANY

DAMES & MOORE

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

[redacted]

FIGURE 1.2 CALUMET LUBRICANTS COMPANY SHREVEPORT, LOUISIANA

FIGURE 1.3

CALUMET TANK LISTING

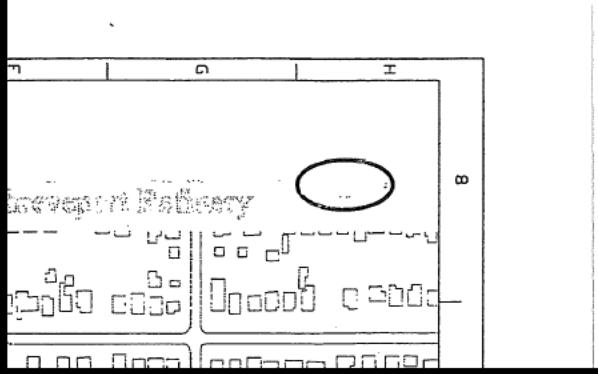
TANK NO.	CAPACITY (GALLONS)	HEIGHT (FEET)	DIAMETER (FEET)	ROOF TYPE	CONTENTS	YEAR BUILT
10	(b) (7)(F), (b) (3) [redacted]			**Cone**	**Heavy Oil**	**1994**
11				**Cone**	**Heavy Oil**	**1994**
12				**Cone**	**Heavy Oil**	**1994**
13				**Cone**	**Heavy Oil**	**1994**
14				**F & D Head**	**Out of Service**	**1994**
15				**Cone**	**Heavy Oil**	**1996**
16				**Cone**	**Heavy Oil**	**1996**
26				**External Floating**	**Intermediate Gas**	**1952**
27				**External Floating**	**Intermediate Gas**	**1952**
28				**Sphere**	**LPG**	**1958**
29				**Cone**	**Intermediate Gas**	**1952**
30				**Cone (Intern. Flt.)**	**Diesel**	**1928**
31				**Sphere**	**LPG**	**1958**
32				**Cone (Intern. Flt.)**	**Intermediate Gas**	**1928**
39				**Cone**	**Out of Service**	**1928**
43				**Cone (Intern. Flt.)**	**Crude Oil**	**1933**
44				**Cone (Intern. Flt.)**	**Gasoline**	**1932**
45				**Cone**	**Gasoline**	**1929**
46				**Cone (Intern. Flt.)**	**Gasoline**	**1929**
47				**Cone**	**Heavy Oil**	**1944**
48				**Cone**	**OUT OF SERVICE**	**1944**
49				**Cone (Intern. Flt.)**	**Crude Oil**	**1929**
50				**Cone (Intern. Flt.)**	**Diesel**	**1930**
52				**Cone**	**Diesel**	**1930**
53				**External Flt.**	**Diesel**	**1971**
54				**Cone (Intern. Flt.)**	**Diesel**	**1971**
55				**External Floating**	**Gasoline**	**1971**
56				**External Floating**	**Diesel**	**1973**
57				**External Floating**	**Intermediate Gas**	**1973**
58				**External Floating**	**Intermediate Gas**	**1973**
59				**Cone**	**Refinery Recycle Oil**	**1981**
60				**External Floating**	**Crude Oil**	**1973**

TANK NO.	CAPACITY (GALLONS)	HEIGHT (FEET)	DIAMETER (FEET)	ROOF TYPE	CONTENTS	YEAR BUILT
61	(b) (7)(F), (b) (3) [redacted]	[redacted]	[redacted]	**External Floating**	**Gasoline**	**1974**
62	[redacted]	[redacted]	[redacted]	**Cone**	**Heavy Oil**	**1976**
63	[redacted]	[redacted]	[redacted]	**Cone**	**Heavy Oil**	**1976**
64	[redacted]	[redacted]	[redacted]	**Cone**	**Heavy Oil**	**1976**
65	[redacted]	[redacted]	[redacted]	**Cone (Intern. Flt)**	**Diesel**	**1976**
67	[redacted]	[redacted]	[redacted]	**External Floating**	**Intermediate Gas**	**1978**
68	[redacted]	[redacted]	[redacted]	**External Floating**	**Intermediate Gas**	**1978**
69	[redacted]	[redacted]	[redacted]	**Cone (Intern. Flt)**	**Refinery Recycle Oil**	**1981**
71	[redacted]	[redacted]	[redacted]	**Cone**	**Wax**	**1944**
72	[redacted]	[redacted]	[redacted]	**Cone**	**Diesel**	**1947**
73	[redacted]	[redacted]	[redacted]	**Cone**	**Diesel**	**1947**
74	[redacted]	[redacted]	[redacted]	**External Floating**	**Jet A**	**1952**
75	[redacted]	[redacted]	[redacted]	**External Floating**	**Jet A**	**1952**
76	[redacted]	[redacted]	[redacted]	**External Floating**	**Gasoline**	**1954**
77	[redacted]	[redacted]	[redacted]	**External Floating**	**Crude Oil**	**1954**
79	[redacted]	[redacted]	[redacted]	**External Floating**	**Process Wastewater**	**1976**
80	[redacted]	[redacted]	[redacted]	**Cone (Intern. Flt)**	**OUT OF SERVICE**	**1974**
81	[redacted]	[redacted]	[redacted]	**Cone (Intern. Flt)**	**Additive**	**1974**
82	[redacted]	[redacted]	[redacted]	**Cone**	**Heavy Oil**	**1976**
83	[redacted]	[redacted]	[redacted]	**Cone**	**Heavy Oil**	**1976**
84	[redacted]	[redacted]	[redacted]	**Cone**	**Heavy Oil**	**1976**
86	[redacted]	[redacted]	[redacted]	**Cone**	**Wax**	**1976**
87	[redacted]	[redacted]	[redacted]	**Cone**	**Wax**	**1976**
89	[redacted]	[redacted]	[redacted]	**Cone**	**Heavy Oil**	**1976**
92	[redacted]	[redacted]	[redacted]	**Cone**	**Heavy Oil**	**1979**
93	[redacted]	[redacted]	[redacted]	**Cone**	**Heavy Oil**	**1979**
94	[redacted]	[redacted]	[redacted]	**Cone**	**Heavy Oil**	**1976**
95	[redacted]	[redacted]	[redacted]	**Cone**	**Heavy Oil**	**1976**
96	[redacted]	[redacted]	[redacted]	**Cone**	**Heavy Oil**	**1976**
97	[redacted]	[redacted]	[redacted]	**Cone**	**Heavy Oil**	**1976**
98	[redacted]	[redacted]	[redacted]	**Cone**	**Heavy Oil**	**1976**
99	[redacted]	[redacted]	[redacted]	**Cone**	**Wax**	**1976**
100	[redacted]	[redacted]	[redacted]	**Cone**	**Heavy Oil**	**1976**
103	[redacted]	[redacted]	[redacted]	**Cone**	**Heavy Oil**	**1976**
104	[redacted]	[redacted]	[redacted]	**Cone**	**Heavy Oil**	**1976**
105	[redacted]	[redacted]	[redacted]	**Cone**	**Heavy Oil**	**1976**

TANK NO.	CAPACITY (GALLONS)	HEIGHT (FEET)	DIAMETER (FEET)	ROOF TYPE	CONTENTS	YEAR BUILT
106	(b) (7)(F), (b) (3) [redacted]			**Cone**	**Heavy Oil**	**1976**
107				**Cone**	**Heavy Oil**	**1976**
108				**Cone**	**Heavy Oil**	**1976**
109				**Cone**	**Heavy Oil**	**1976**
110				**Cone**	**Heavy Oil**	**1981**
111				**Cone**	**Wax**	**1976**
112				**Cone**	**Heavy Oil**	**1976**
113				**Cone**	**Heavy Oil**	**1976**
114				**Cone**	**Heavy Oil**	**1976**
115				**Cone**	**Heavy Oil**	**1977**
116				**Cone**	**Heavy Oil**	**1977**
117				**Cone**	**Heavy Oil**	**1977**
130				**Cone**	**Out of Service**	**1968**
140				**Cone**	**Wax**	**1976**
141				**Cone**	**Heavy Oil**	**1980**
142				**Cone**	**Heavy Oil**	**1980**
143				**Cone**	**Heavy Oil**	**1980**
144				**Cone**	**Heavy Oil**	**1980**
145				**Cone**	**Solvent**	**1980**
146				**Cone**	**Solvent**	**1980**
147				**Cone**	**Solvent**	**1980**
148				**Cone**	**Wax**	**1980**
149				**Cone**	**Wax**	**1980**
150				**Cone**	**Wax**	**1980**
151				**Cone**	**Wax**	**1980**
152				**Cone**	**Wax**	**1980**
153				**Cone**	**Heavy Oil**	**1980**
154				**Cone**	**Heavy Oil**	**1980**
155				**Cone**	**Wax**	**1980**
156				**Cone**	**Wax**	**1980**
157				**Cone**	**Wax**	**1980**
158				**Cone**	**Wax**	**1980**
159				**Cone**	**Heavy Oil**	**1980**
160				**Cone**	**Heavy Oil**	**1980**
161				**Cone**	**Heavy Oil**	**1980**
162				**Cone**	**Heavy Oil**	**1980**

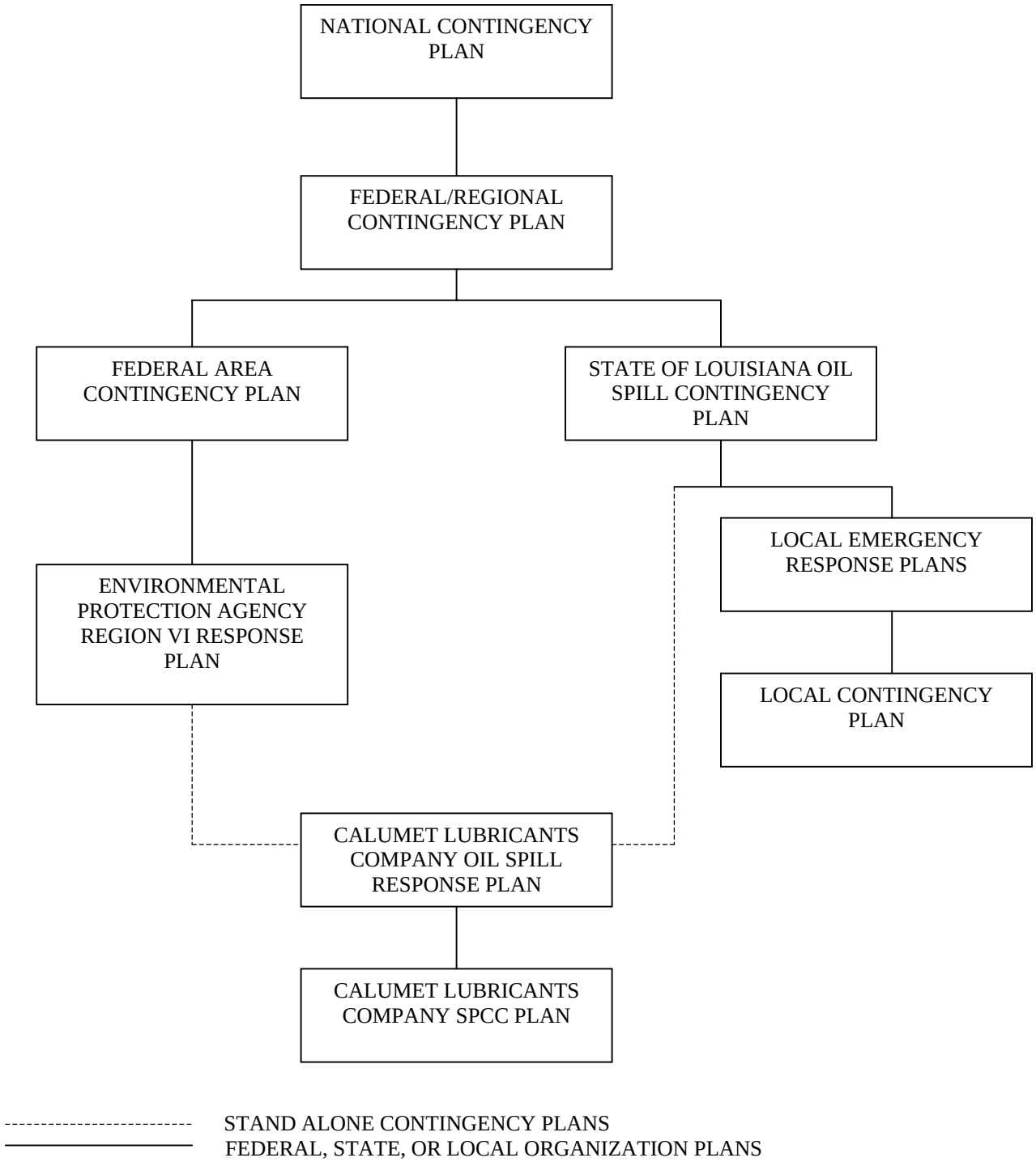
TANK NO.	CAPACITY (GALLONS)	HEIGHT (FEET)	DIAMETER (FEET)	ROOF TYPE	CONTENTS	YEAR BUILT
163	(b) (7)(F), (b) (3) [redacted]			**Cone**	**Heavy Oil**	**1980**
164	[redacted]			**Cone**	**Heavy Oil**	**1980**
165	[redacted]			**Cone**	**Heavy Oil**	**1980**
166	[redacted]			**Cone**	**Heavy Oil**	**1980**
167	[redacted]			**Cone**	**Heavy Oil**	**1980**
168	[redacted]			**Cone**	**Heavy Oil**	**1980**
169	[redacted]			**Cone**	**Heavy Oil**	**1980**
170	[redacted]			**Cone**	**Heavy Oil**	**1981**
171	[redacted]			**Cone**	**Wax**	**1981**
172	[redacted]			**Cone**	**Wax**	**1981**
173	[redacted]			**Cone**	**Wax**	**1981**
174	[redacted]			**Cone**	**Heavy Oil**	**1981**
175	[redacted]			**External Floating ***	**Crude Oil**	**1981**
176	[redacted]			**Cone**	**Heavy Oil**	**1982**
177	[redacted]			**Cone**	**Heavy Oil**	**1983**
178	[redacted]			**Cone**	**Heavy Oil**	**1983**
179	[redacted]			**Cone**	**Heavy Oil**	**1983**
180	[redacted]			**Cone (Intern. Flt)**	**Heavy Oil**	**1983**
181	[redacted]			**Cone**	**Heavy Oil**	**1983**
182	[redacted]			**Cone (Intern. Flt)**	**Intermediate Gas**	**1983**
183	[redacted]			**Cone**	**Wax**	**1988**
184	[redacted]			**Cone**	**Heavy Oil**	**1988**
185	[redacted]			**Cone**	**Diesel**	**1993**
186	[redacted]			**Cone**	**Heavy Oil**	**1993**
187	[redacted]			**Cone**	**Jet A**	**1993**
188	[redacted]			**Open Top**	**Wastewater**	
195	[redacted]			**Sphere**	**Penex Blendstock**	
199	[redacted]			**Cone**	**Diesel**	**1997**
201	[redacted]			**Cone**	**Sour Water**	
2001	[redacted]			**Cone - Intern. Flt**	**Wastewater**	**1997**
3001	[redacted]			**Cone**	**Wax**	
RO-150	[redacted]			**Cone**	**Crankcase Oil**	
RO-320	[redacted]			**Cone**	**Cylinder Oil**	
# OF TANKS	[redacted]					
TOTAL CAPACITY	[redacted]					

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



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

FIGURE 1.5
INTERFACE WITH OTHER PLANS



2.0 NOTIFICATION PROCEDURES

2.1 INITIAL NOTIFICATION

This section is a guide for notification procedures to be taken when a spill or potential spill is first reported or observed.

The first CSR individual who discovers a spill will be responsible for initiating notification procedures. Figures 2.1 and 2.2, respectively, show the notification procedures for CSR during emergency and non-emergency incidents.

2.2 OIL SPILL RESPONSE TEAM CALLOUT

2.2.1 Spill Response Team

The CSR Spill Response Team is trained to respond to oil spills.

- When responding to a spill, Response Team members will fill positions on the CSR Spill Response Team as defined in Section 5.0.
- The detailed job descriptions and checklists in Section 5.0 should be used by all team members to ensure effective and efficient response efforts.
- Each incident is unique. It is not possible to establish precise directions and instructions to be followed by team members for every step of the response process. Sound judgment, based on experience and effective training, must be used by each team member in determining what actions are appropriate in a given situation.

2.2.2 Call-Out Procedures

The call-out procedure and responsibilities for CSR personnel are noted below and illustrated in Figures 2.1 and 2.2.

Call-Out Procedures - **Non-Emergency**

The Spill Observer/First Responder/Person in Charge will notify:

- Shift Supervisor

The Shift Supervisor will notify:

- Unit Supervisor
- Environmental Health & Safety Department

The Environmental Engineer will notify the following as appropriate:

- Regulatory Agencies
- Process & Environmental Engineering Manager
- Spill Response Contractor
- Maintenance Manager
- Security

An event is an emergency if the spill is endangering the public health or welfare through traffic hazard, explosion, fire, or noxious gas. The local fire and police departments shall be contacted at once.

Call-Out Procedure - **Emergency**

The Spill Observer/First Responder/Person in Charge will notify:

- Shift Supervisor

Upon confirmation of a spill, the Shift Supervisor will notify:

- Security
- Unit Supervisor
- Environmental Health & Safety Department

The Environmental Engineer will notify the following

- Regulatory Agencies
- Security
- Process & Environmental Engineering Manager
- Spill Response Contractor
- Maintenance Manager

See Figure 2.2 for the complete emergency spill notification sequence.

2.3 REGULATORY REPORTING

As required by local, state and federal regulations, in the event of a spill, the Environmental Engineer shall notify the:

- National Response Center
- Louisiana Department of Environmental Quality - Baton Rouge
- Louisiana Department of Environmental Quality - Shreveport
- Louisiana Department of Public Safety - State Police
- Local Emergency Planning Committee
- Louisiana Dept. Of Natural Resources, Pipeline Safety (Pipeline Only)

Figure 2.3 contains a flowchart illustrating regulatory notifications for oil spills. The Spill Response Notification Form (Figure 2.4) contains basic information, which should be obtained and recorded in the event of a spill. The emergency notifications list for CSR is Figure 2.5, a comprehensive listing of federal state and local agencies plus emergency medical, police and fire officials.

2.4 SPILL REPORTING GUIDELINES

When reporting a spill, the following guidelines should be observed:

In the event of a spill, CSR will notify the following regulatory agencies as required by local, state and federal regulations:

- National Response Center (immediately)
- EPA Region VI
- Louisiana Department of Environmental Quality - Baton Rouge
- Louisiana Department of Environmental Quality - Shreveport
- Local Emergency Planning Committee
- Louisiana Dept. Of Natural Resources, Pipeline Safety (Pipeline Only)

In the event of a spill that may endanger public health, CSR will also notify the following agencies:

- Shreveport Fire Department (Fire Department will always be contacted if release has entered municipal sewer system.)
- Shreveport Police Department

Provide as much information as possible as outlined on the Spill Response Information Checklist in Figure 2.4.

Document persons/agencies notified and content of message on Figure 2.5.

Do not delay reporting due to incomplete information.

2.5 WRITTEN REPORTS

The Federal Government requires a written report within sixty (60) days from facilities required to have a Spill Prevention Control and Countermeasures (SPCC) Plan if they have:

- a discharge in excess of 1,000 U.S. gallons in a single event or
- two (2) discharge events within any twelve (12) month period into or upon navigable waters of the United States or adjoining shorelines.

The report is to be submitted to:

EPA, Region VI
12th Floor, Suite 1200
1445 Ross Ave.
Dallas, Texas 75202-2733
214-655-6444
214-655-2100
214-655-2222

It is to consist of the following information:

- Name of facility.
- Name(s) of the owner or operator of the facility.
- Location of the facility.
- Date and year of initial facility operation.
- Maximum storage or handling capacity of the facility and normal daily throughput.
- Description of the facility, including maps, flow diagrams, and topographical maps.
- A complete copy of the SPCC Plan with any amendments.
- The cause(s) of such spill, including a failure analysis of the system or subsystem in which the failure occurred.
- The corrective actions and/or countermeasures taken, including an adequate description of equipment repairs and/or replacements.
- Additional preventative measures taken or contemplated to minimize the possibility of recurrence.
- Such other information as the Regional Administrator may reasonably require pertinent to the Plan or spill event.

The U.S. Department of Transportation requires Form 7000-1 (Figure 2.6) be submitted in the event of any failure in a pipeline system that results in hazardous liquid release which causes:

- death or personal injury.
- explosion or a fire not intentionally set by operator.
- estimated damages exceeding $5,000.
- pollution of any stream, river, lake, reservoir, or other similar body of water, or adjoining shorelines or,
- one which, in the judgment of the operator, is a "significant incident" other than those mentioned above.

This report should be submitted to:

Melanie Barber
Office of Pipeline Safety
U.S. Department of Transportation
1200 New Jersey Ave., SE
Washington, D.C. 20590

Within seven days following the verbal report, a written report shall be submitted to:

Louisiana Department of Environmental Quality
P.O. Box 4301
Baton Rouge, LA 70821-4301
Attention: Administrator
Office of Water Resources
Water Quality Management Division

The written report shall include:

A. Name of person, company, or other party who is filing the written report.
B. Time and date of verbal notification, name of person making the notification, and identification of the site or facility, vessel, transport vehicle, or storage area from which the unauthorized discharge occurred.
C. Dates, times, and duration of the unauthorized discharge and, if not corrected, the anticipated time it is expected to continue.
D. Details of the circumstances and events leading to any emergency condition, including incidents of loss of sources of radiation.
E. Common or scientific chemical name, U.S. Department of Transportation hazard classification, and best estimate of amounts of any or all discharged pollutants, including methodology for calculations and estimates.
F. Statement of actual or probable fate or disposition of the pollutant or source of radiation.
G. Remedial actions taken, or to be taken, to stop unauthorized discharges or to recover pollutants or sources of radiation.
H. Procedures or measures, which have or will be adopted to prevent a recurrence of the incident, including incidents of loss of sources of radiation.
I. If an unpermitted or unlicensed site or facility is involved in the unauthorized discharge, a schedule for submitting a permit or license application to the office or rationale for not requiring a permit or license.

FIGURE 2.1
Spill Notification Sequence - **Non-Emergency**

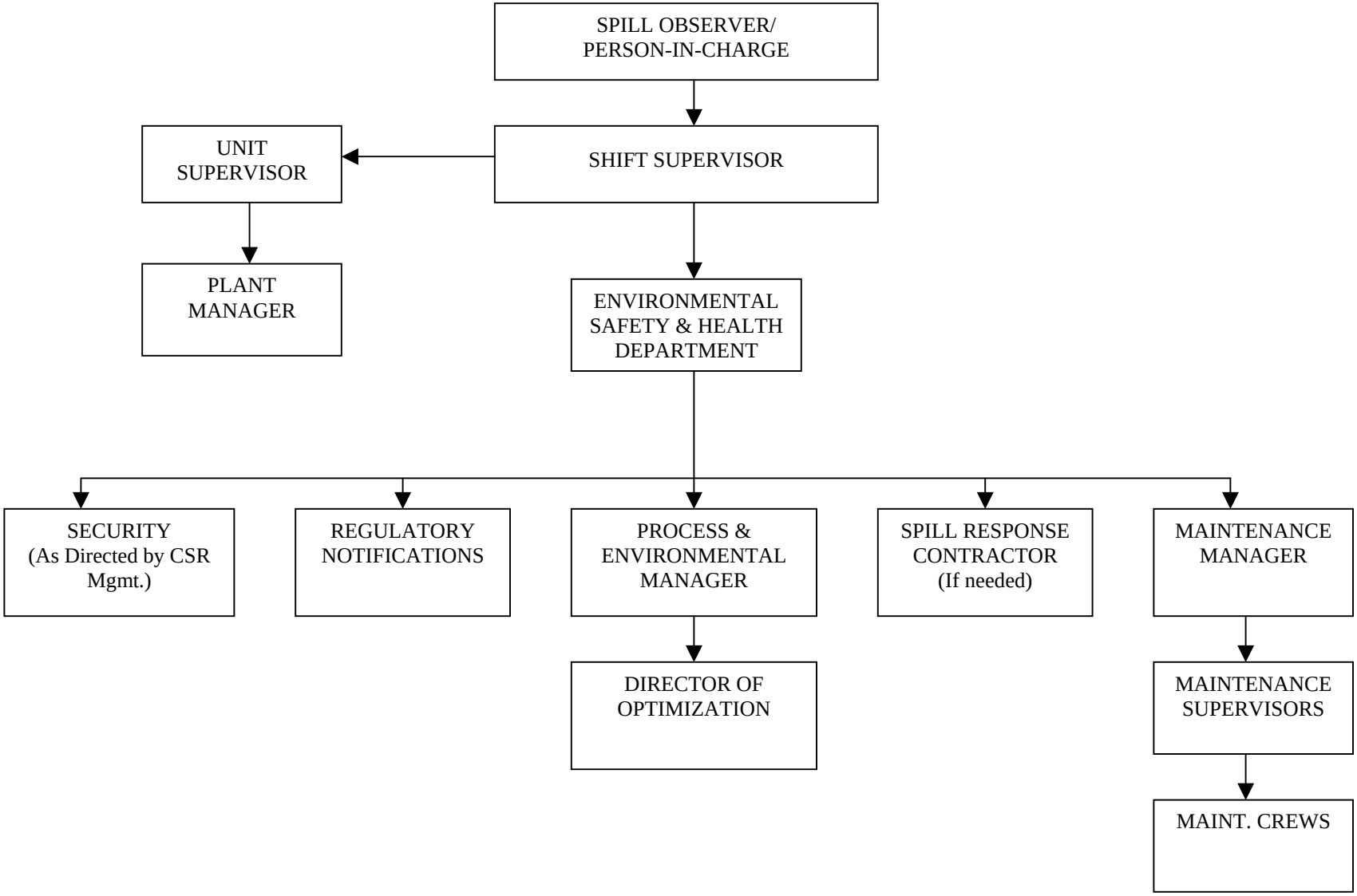
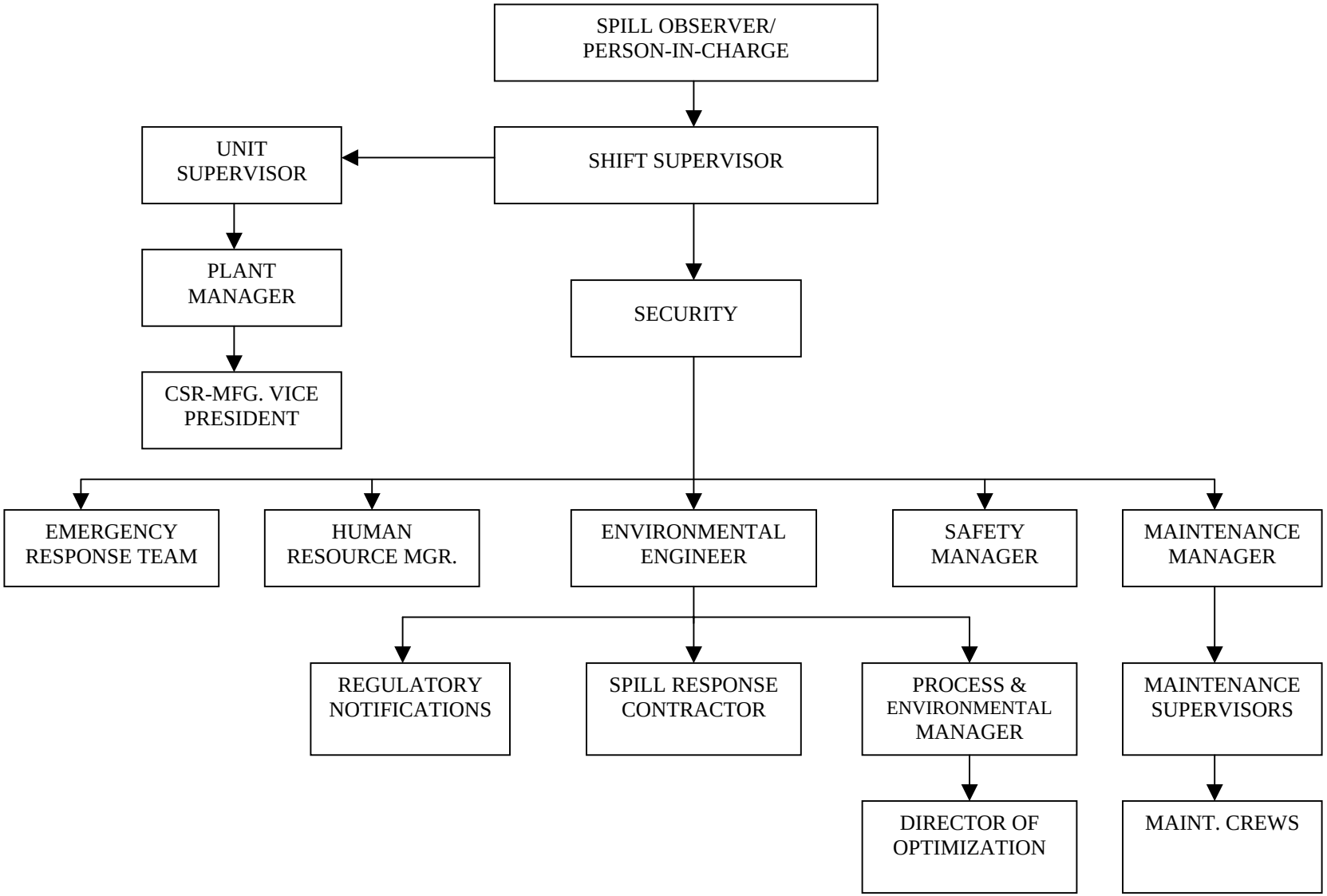


FIGURE 2.2
Spill Notification Sequence - **Emergency**



EMERGENCY - IF THE SPILL IS ENDANGERING THE PUBLIC HEALTH OR WELFARE THROUGH TRAFFIC HAZARD, EXPLOSION, FIRE, OR NOXIOUS GAS, THE LOCAL FIRE AND POLICE DEPTS SHALL BE CONTACTED AT ONCE.

FIGURE 2.3
Oil Spill Regulatory Notification Flowchart

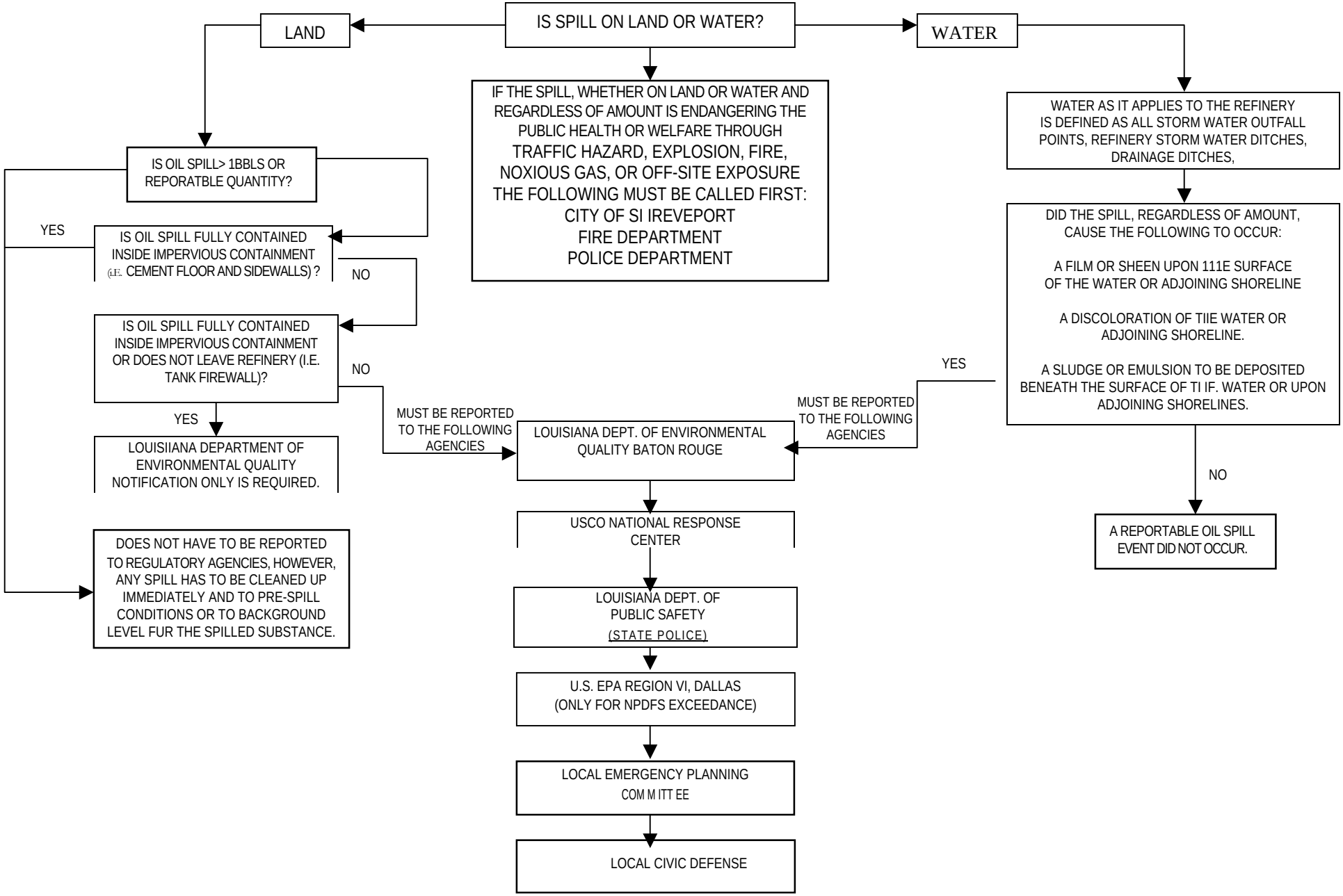


FIGURE 2.4
SPILL RESPONSE NOTIFICATION FORM

Reporter's Last Name: _____First: _____M.I.: _____
Position: _____
Phone Numbers: Day ( ) - Evening ( ) -
Company: _____
Organization Type: _____
Address: _____
_____
City: _____
State: _____
Zip: _____
Were Materials Discharged? __ (Y/N) Confidential? ___ (Y/N)
Meeting Federal Obligations to Report? _____ (Y/N) Date Called: _____
Calling for Responsible Party? _____ (Y/N) Time Called: _____

INCIDENT DESCRIPTION:
Source and/or Cause of Incident: _____
_____
_____
_____
_____
Date of Incident: _____
Time of Incident: _____ AM/PM
Incident Address/Location: _____
_____
Nearest City: _____ State: _____ County: _____ Zip: _____
Distance from City: _____ Units of Measure: _____ Direction from City: _____
Section: _____ Township: _____ Range: _____ Borough: _____
Container Type: _____ Tank Oil Storage Capacity: _____ Units of Measure: _____
Facility Oil Storage Capacity: _____ Units of Measure: _____
Facility Latitude: _____ Degrees _____ Minutes _____ Seconds
Facility Longitude: _____ Degrees _____ Minutes _____ Seconds

FIGURE 2.4 (Continued)
SPILL RESPONSE NOTIFICATION FORM

Material

CHRIS **Code	Discharged quantity	Unit of measure	Material Discharged in water	Quantity	Unit of measure

RESPONSE ACTION:
Actions Taken to Correct, Control or Mitigate Incident:

_____
_____
_____
_____

IMPACT:
Number of Injuries: _____ Number of Deaths: _____

INCIDENT:
Were there evacuations?____ (Y/N) Number Evacuated: _____
Was there any Damage? ____ (Y/N) Medium Affected: _____
Description: _____
More Information about Medium: _____
_____
_____
_____

Caller Notifications
EPA? _____ (Y/N) USCG? _____ (Y/N) State? _____ (Y/N) Other? _____ (Y/N)
Describe: _____

ADDITIONAL INFORMATION:
Any information about the incident not recorded elsewhere in the report:

CHRIS Code** - Chemical Hazardous Response Information System

_____

FIGURE 2.5

EMERGENCY NOTIFICATIONS LIST

It is not necessary to wait for all information to begin notification.

	Telephone No.	Person Notified	Time
Notifications Required:			
National Response Center (24 hrs)	800-424-8802	_____	_____
Louisiana Department of Public Safety (State Police)	225-925-6595	_____	_____
Louisiana Department of Environmental Quality - Shreveport	318-676-7476	_____	_____
Louisiana Department of Environmental Quality - Baton Rouge (24 hrs)	225-342-1234	_____	_____
Local Emergency Planning Committee Civil Defense	911/318-425-5351	_____	_____
EPA Region VI - Dallas (24 hrs)	866-372-7745	_____	_____
CSR Emergency Response Center	800-848-7525	_____	_____
Louisiana DNR, Pipeline Safety	225-342-5505	_____	_____
Louisiana Oil Spill Coordinator's Office (LOSCO)	225-219-5800	_____	_____
Louisiana First Call Emergency Alert	800-917-2081 770-396-3898 Fax 770-396-3790	_____	_____
Notifications Required for Spills That May Endanger Public Health:			
Louisiana State Police	318-741-7411	_____	_____
Hotline	225-925-6595	_____	_____
Caddo Parish Sheriff's Department	318-681-0677	_____	_____
Shreveport Police Department	911/318-673-2583	_____	_____
Shreveport Fire Department		911/318-673-6650	_____
Bossier City Police Department	318-741-8611	_____	_____
Bossier City Fire Department	318-741-8710	_____	_____
Bossier Parish Sheriff's Department	318-965-2203	_____	_____
Hospitals:			
Willis Knighton Medical	318-212-4000	_____	_____
LSU Medical Center	318-675-6893	_____	_____
Other Agencies As Required:			
LA Department of Wildlife and Fisheries	318-676-7594	_____	_____
Other Resources:			
National Weather Service	318-636-7345/2318	_____	_____

FIGURE 2.5 (Continued)

EMERGENCY NOTIFICATIONS LIST

City of Shreveport, Water and Sewerage Department 24-hour Emergency Number		318-673-7600	____
____			
T.L. Amiss Water Purification Plant	318-673-7650	_____	_____
McNeil Street Water Purification Plant	318-673-7658	_____	_____
Local TV and Radio Stations			
KSLA-Channel 12	318-222-1212	_____	_____
Evening Phone	318-677-6713	_____	_____
KTBS-Channel 3	318-861-5800	_____	_____
News Dept.	318-861-5880	_____	_____
Radio Stations KRMD	318-865-5173	_____	_____
KEEL	318-320-5335	_____	_____
KWKH	318-320-1130	_____	_____
Insurance Company:			
John L. Wortham & Son Primary: John Schuhmann, Agent	713-526-3366	_____	_____
Evening Phone	713-526-9876	_____	_____
Alternate: Bruce Dricarell	713-463-3388	_____	_____

FIGURE 2.6

DEPARTMENT OF TRANSPORTATION ACCIDENT REPORT
HAZARDOUS LIQUID PIPELINE - FORM 7000-1

(INSTRUCTIONS)

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No: 7010 2780 0001 4409 2489

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification 12/15/2011 @ 15:07
DEQ Official Contacted: On-line form
Company Official who made the call: Williams, Rick

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
Tank Farm

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

Component	Permit	Permit Limit	Unit of Measure
Fuels Product			

V. Which applicable Reportable Quantity limits were exceeded?

Reportable Quantity Limit Exceeded - 100 lbs

VI. Give the date and time the release began and the duration of the release:
Started: 12/15/2011 8:00:00 AM Ended: 12/15/2011 12:00:00 Duration: 4 Hour
OHM # 111000705 RCA1600 (RCA Conducted)

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

Component	Quantity Released	Unit of Measure
Fuels Product	100	BBL

VIII. Upset description, cause, and what off-site impact resulted:

Description: Diesel storage tank run down line inadvertantly blocked in by operations department, causing a pressure relief valve to open on the diesel salt drums releasing diesel fuel to the ground.

Cause: Tank56 was blocked in causing pressure releif valve to release product

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Tank was blocked in inadvertently causing diesel to spill.

Emergency Occurrences

UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

Agency	Date	Time	Agency Official	Calumet Official	Notification #
LDEQ	12/15/2011	15:07	On-line form	Williams, Rick	3SD59766

XI. Immediate Corrective action taken?

Operations opened line to relieve the pressure

XII. Specific Remedial action and/or planned to prevent recurrence?

Vac trucks removed free product.

XIII. Regulation notification requirement? (Check appropriate)

X	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
	LAC 33:III.1101	Control of Emissions of Smoke
	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No: 7010 2780 0001 4409 1543

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification 11/9/2011 @ 7:04
DEQ Official Contacted: Dennis/Cindy
Company Official who made the call: Williams, Rick

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit	Emission Point	EIQ Number
Main Refinery Flare	V-g	N/A

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

Component	Permit	Permit Limit	Unit of Measure
SO2	0500-00005-V7	0.67	LBS/HR
H2S			

V. Which applicable Reportable Quantity limits were exceeded?

SO2 Reportable Quantity Limit Exceeded - 500 Lbs

VI. Give the date and time the release began and the duration of the release:
Started: 11/9/2011 12:00:00 AM Ended: 11/9/2011 10:30:00 A Duration: 10.5 Hour
OHM # 111000692

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

Component	Quantity Released	Unit of Measure
SO2	1258	Lbs
H2S	3.4	Lbs

VIII. Upset description, cause, and what off-site impact resulted:

Description: Exceeded 500 lb RQ for SO2 from #2 Flare. Flare gas compressors not taking the load of the system. The hydrogen plant #1 was putting excess hydrogen in the flare line causing high flow isuues as well. Based on draeger readings of 10,000 ppm H2S in the flare line and flare flow, it was calculated that 1,258 lbs of SO2 was discharged via the #2 flare.

Cause: Excess hydrogen gas and Flare Gas compressors not fully loaded

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

excess Hydrogen gas could not be released to atmosphere, had to be routed to the flare system.

Emergency Occurrences

UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

Agency	Date	Time	Agency Official	Calumet Official	Notification #
State Police	11/9/2011	7:04	Dennis/Cindy	Williams, Rick	11-06980

XI. Immediate Corrective action taken?

Increased FGC pumping rates

XII. Specific Remedial action and/or planned to prevent recurrence?

None

XIII. Regulation notification requirement? (Check appropriate)

X	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
	LAC 33:III.1101	Control of Emissions of Smoke
	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No: 7001 1140 0002 2357 7718

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification 11/7/2011 @ 13:30
DEQ Official Contacted: Wanda
Company Official who made the call: Williams, Rick

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
SRU

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

Component	Permit	Permit Limit	Unit of Measure
SO2			

V. Which applicable Reportable Quantity limits were exceeded?

VI. Give the date and time the release began and the duration of the release:
Started: 11/6/2011 5:00:00 AM Ended: 11/7/2011 1:00:00 P Duration: 32 Hour
OHM # 111000676

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

Component	Quantity Released	Unit of Measure
SO2	1619	Lbs

VIII. Upset description, cause, and what off-site impact resulted:

Description: Problems with hydrocarbon carryover into the #2 SRU caused the unit to shutdown several times. Based on fuel gas flows and draeger readings it was calculated that 1,619 pounds of SO2 was emitted from the refinery heaters and boilers.

Cause: Hydrocarbon carryover into the #2 SRU

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Could not predict hydrocarbon carryover problems into the #2 SRU

Emergency Occurrences

UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

Agency	Date	Time	Agency Official	Calumet Official	Notification #
State Police	11/7/2011	13:30	Wanda	Williams, Rick	11-06927

XI. Immediate Corrective action taken?

Put #3 SRU online, began looking for hydrocarbon source.

XII. Specific Remedial action and/or planned to prevent recurrence?

None

XIII. Regulation notification requirement? (Check appropriate)

X	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
	LAC 33:III.1101	Control of Emissions of Smoke
	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No:

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification @
DEQ Official Contacted:
Company Official who made the call:

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
Waste Water Treatment

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

V. Which applicable Reportable Quantity limits were exceeded?

VI. Give the date and time the release began and the duration of the release:
Started: 11/4/2011 8:00:00 AM Ended: 11/4/2011 8:00:00 A Duration: 0 Hour
OHM # 111000677

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

VIII. Upset description, cause, and what off-site impact resulted:

Description: The maximum daily lbs/day ammonia at outfall 001 was over permit limits for the month of October. In addition Retest #5 for Biomonitoring Toxicity also failed for both species. Will be reported on monthly DMR's to EPA and LDEQ.

Cause:

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

XI. Immediate Corrective action taken?

None

XII. Specific Remedial action and/or planned to prevent recurrence?

None

XIII. Regulation notification requirement? (Check appropriate)

____	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
____	LAC 33:III.1101	Control of Emissions of Smoke
____	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
____	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No:

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification @
DEQ Official Contacted:
Company Official who made the call:

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
SRU

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

V. Which applicable Reportable Quantity limits were exceeded?

VI. Give the date and time the release began and the duration of the release:
Started: 10/21/2011 5:00:00 AM Ended: 10/21/2011 6:00:00 P Duration: 13 Hour
OHM # 111000667

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

VIII. Upset description, cause, and what off-site impact resulted:

Description: Fuel gas analyzer over 160 ppm 3 hour average . Excess emissions estimated to be 459 lbs SO2 from the Flares based on draeger readings of 10,000 and 9,000 ppm.

Cause: #3 SRU

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Operational problems with SRU #3.

Emergency Occurrences

UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

Agency	Date	Time	Agency Official	Calumet Official	Notification #
none					

XI. Immediate Corrective action taken?

None

XII. Specific Remedial action and/or planned to prevent recurrence?

None

XIII. Regulation notification requirement? (Check appropriate)

____	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
____	LAC 33:III.1101	Control of Emissions of Smoke
____	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
____	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No:

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification @
DEQ Official Contacted:
Company Official who made the call:

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
SRU

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

V. Which applicable Reportable Quantity limits were exceeded?

VI. Give the date and time the release began and the duration of the release:
Started: 10/21/2011 6:28:00 AM Ended: 10/21/2011 12:03:00 Duration: 5.58 Hour
OHM # 111000668

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

VIII. Upset description, cause, and what off-site impact resulted:

Description: Sour gas was routed to the flare from #3 SRU for 46 mins. Draegers were 10,000 ppm and 5,000 ppm H2S. Flow estimated to be 1500 MSCFD. Estimated excess emissions for the period was 80 lbs SO2.

Cause: Front end pressure high on the #3 SRU.

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Operational problems

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

XI. Immediate Corrective action taken?

None

XII. Specific Remedial action and/or planned to prevent recurrence?

None

XIII. Regulation notification requirement? (Check appropriate)

____	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
____	LAC 33:III.1101	Control of Emissions of Smoke
____	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
____	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No: 7008 1140 0004 1863 2058

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification 10/10/2011 @ 14:40
DEQ Official Contacted: on-line SPOC
Company Official who made the call: Williams, Rick

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
Waste Water Treatment

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

V. Which applicable Reportable Quantity limits were exceeded?

VI. Give the date and time the release began and the duration of the release:
Started: 10/10/2011 8:00:00 AM Ended: 10/10/2011 8:00:00 A Duration: 0 Hour
OHM # 111000662 RCA1560

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

VIII. Upset description, cause, and what off-site impact resulted:

Description: Activated sludge aeration basins at the wwtu foamed over sometime during the night, spilling sludge/hydrocarbon on the ground inside the diked area of T-79. Estimated 81 bbls was released from the basins into the diked area.

Cause: Large amounts of diesel in the separators, Tank 79.

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Large amount of diesel came from grit separator into the wwtu.

Emergency Occurrences

UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

Agency	Date	Time	Agency Official	Calumet Official	Notification #
Shreveport DEQ Water	10/10/2011	14:40	on-line SPOC	Williams, Rick	UZIM 9568

XI. Immediate Corrective action taken?

reduced air flows into the basins

XII. Specific Remedial action and/or planned to prevent recurrence?

None

XIII. Regulation notification requirement? (Check appropriate)

X	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
	LAC 33:III.1101	Control of Emissions of Smoke
	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No:

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification @
DEQ Official Contacted:
Company Official who made the call:

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
Waste Water Treatment

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

V. Which applicable Reportable Quantity limits were exceeded?

VI. Give the date and time the release began and the duration of the release:
Started: 10/7/2011 8:00:00 AM Ended: 10/7/2011 8:00:00 A Duration: 0 Hour
OHM # 111000661

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

VIII. Upset description, cause, and what off-site impact resulted:

Description: Exceeded ammonia permit limits for all 3 reportable quantites at Outfall 001, daily maximum(440 lbs/day), monthly average(258 lbs/day) and monthly average(25.3 ppm). Reported on monthly DMR's to LDEQ and EPA.

Cause: WWTU not capable of removing ammonia yet, Final pond needs cleaning, (6 feet of sludge).

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

WWTU not viable for removing ammonia, final pond needs sludge removed.

Emergency Occurrences

UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

XI. Immediate Corrective action taken?
working to complete upgrades on WWTU.

XII. Specific Remedial action and/or planned to prevent recurrence?
None

XIII. Regulation notification requirement? (Check appropriate)

____	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
____	LAC 33:III.1101	Control of Emissions of Smoke
____	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
____	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No:

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification @
DEQ Official Contacted:
Company Official who made the call:

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
Boilers

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

V. Which applicable Reportable Quantity limits were exceeded?

VI. Give the date and time the release began and the duration of the release:
Started: 10/1/2011 12:00:00 AM Ended: 10/25/2011 11:00:00 Duration: 599 Hour

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

VIII. Upset description, cause, and what off-site impact resulted:

Description: #6 Boiler O2 CEM reading over 20.5% O2. Must be less than 14% to be in compliance. Will be reported on quarterly CEM report and semi-annual Title 5. The sample system continues to get moisture in the tubing lines.

Cause: Water in the sample tubing

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Technician responsible not keeping sample tubing free of moisture.

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

XI. Immediate Corrective action taken?
remove water from sample system

XII. Specific Remedial action and/or planned to prevent recurrence?
None

XIII. Regulation notification requirement? (Check appropriate)

____	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
____	LAC 33:III.1101	Control of Emissions of Smoke
____	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
____	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No:

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification @
DEQ Official Contacted:
Company Official who made the call:

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
SRU

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

V. Which applicable Reportable Quantity limits were exceeded?

N/A

VI. Give the date and time the release began and the duration of the release:
Started: 9/8/2011 12:00:00 PM Ended: 9/8/2011 11:00:00 P Duration: 11 Hour
OHM # 111000641

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

VIII. Upset description, cause, and what off-site impact resulted:

Description: Exceeded 12 hr 250 ppm rolling average for SO2 out the Dynawave stack. Average SO2 value recorded for the 12 hours was 491.6 ppm.

Cause: SRU/air demand analyzer

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Continue to have operational issues with SRU and air demand analyzer

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

XI. Immediate Corrective action taken?

None

XII. Specific Remedial action and/or planned to prevent recurrence?

None

XIII. Regulation notification requirement? (Check appropriate)

____	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
____	LAC 33:III.1101	Control of Emissions of Smoke
____	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
____	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No:

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification @
DEQ Official Contacted:
Company Official who made the call:

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
SRU

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

V. Which applicable Reportable Quantity limits were exceeded?

VI. Give the date and time the release began and the duration of the release:
Started: 8/25/2011 12:00:00 AM Ended: 8/25/2011 12:00:00 P Duration: 12 Hour
OHM # 111000629

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

VIII. Upset description, cause, and what off-site impact resulted:

Description: Dynawave SO2 over 12 hr rolling 250 ppm average for time period. Average value recorded was 308 ppm.

Cause: Operational problems with SRU.

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Operational problems with SRU

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

XI. Immediate Corrective action taken?

None

XII. Specific Remedial action and/or planned to prevent recurrence?

None

XIII. Regulation notification requirement? (Check appropriate)

____	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
____	LAC 33:III.1101	Control of Emissions of Smoke
____	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
____	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No:

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification @
DEQ Official Contacted:
Company Official who made the call:

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
SRU

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

V. Which applicable Reportable Quantity limits were exceeded?

VI. Give the date and time the release began and the duration of the release:
Started: 8/24/2011 12:00:00 PM Ended: 8/24/2011 11:00:00 P Duration: 11 Hour
OHM # 111000628

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

VIII. Upset description, cause, and what off-site impact resulted:

Description: 12 hr SO2 rolling average over permit limits of 250 ppm. Average value recorded for the period was 421 ppm.

Cause: SRU problems

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Continue to have operational problems with SRU's

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

XI. Immediate Corrective action taken?

None

XII. Specific Remedial action and/or planned to prevent recurrence?

None

XIII. Regulation notification requirement? (Check appropriate)

____	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
____	LAC 33:III.1101	Control of Emissions of Smoke
____	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
____	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No:

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification @
DEQ Official Contacted:
Company Official who made the call:

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
SRU

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

V. Which applicable Reportable Quantity limits were exceeded?

N/A

VI. Give the date and time the release began and the duration of the release:
Started: 8/16/2011 12:00:00 AM Ended: 8/16/2011 12:00:00 P Duration: 12 Hour
OHM # 111000619

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

VIII. Upset description, cause, and what off-site impact resulted:

Description: Dynawave SO2 exceeded 12-hr rolling average. Average SO2 value recorded for the time period was 401 ppm.

Cause: SRU air demand analyzer problems

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Air demand analyzer not working properly.

Emergency Occurrences

UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

XI. Immediate Corrective action taken?

None

XII. Specific Remedial action and/or planned to prevent recurrence?

None

XIII. Regulation notification requirement? (Check appropriate)

____	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
____	LAC 33:III.1101	Control of Emissions of Smoke
____	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
____	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No: 7008 1140 0002 8970 3994

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification 8/12/2011 @ 8:30
DEQ Official Contacted: Miklos
Company Official who made the call: Williams, Rick

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit	Emission Point	EIQ Number
SRU	FL2001	N/A

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

Component	Permit	Permit Limit	Unit of Measure
SO2	0500-00005-V7	0.005	Lbs/Hr

V. Which applicable Reportable Quantity limits were exceeded?

SO2 Reportable Quantity Limit Exceeded - 500 Lbs

VI. Give the date and time the release began and the duration of the release:
Started: 8/11/2011 8:45:00 PM Ended: 8/12/2011 12:45:00 A Duration: 4 Hour
OHM # 111000617 *

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

Component	Quantity Released	Unit of Measure
SO2	2235	Lbs

VIII. Upset description, cause, and what off-site impact resulted:

Description: Both SRU's were shutdown at 20:45. Problems with CDW unit sending hydrocarbons to the amine processing units. SRU back on-line at 0:45. Based on draeger values given and estimated flare flows, 2,235 pounds of SO2 was emitted from the #3 flare.

Cause: Problems with operation of CDW caused hydrocarbon carryover to upset the amine processing units.

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Upset conditions in the CDW process unit caused hydrocarbon carry over to the amine processing units which caused the SRU's to shutdown.

Emergency Occurrences

UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

Agency	Date	Time	Agency Official	Calumet Official	Notification #
State Police	8/12/2011	8:30	Miklos	Williams, Rick	11-04852

XI. Immediate Corrective action taken?

Engineering/maintenance called to restart SRU's

XII. Specific Remedial action and/or planned to prevent recurrence?

None

XIII. Regulation notification requirement? (Check appropriate)

____	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
____	LAC 33:III.1101	Control of Emissions of Smoke
____	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
____	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No:

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification @
DEQ Official Contacted:
Company Official who made the call:

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
DynaWave

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

V. Which applicable Reportable Quantity limits were exceeded?

N/A

VI. Give the date and time the release began and the duration of the release:
Started: 8/8/2011 12:00:00 AM Ended: 8/8/2011 11:59:00 P Duration: 24 Hour
OHM # 111000618

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

VIII. Upset description, cause, and what off-site impact resulted:

Description: Exceeding the 12-hr SO2 250 ppm rolling average at theDynawave. Average value recorded for the 1st 12 hr hour period was 798 ppm. Average value recorded was 427 ppm for the 2nd 12 hr period.

Cause: Poor operation of air demand analyzers in the SRU's.

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Air demand analyzers in the SRU's are not being operated properly.

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

XI. Immediate Corrective action taken?

None

XII. Specific Remedial action and/or planned to prevent recurrence?

None

XIII. Regulation notification requirement? (Check appropriate)

____	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
____	LAC 33:III.1101	Control of Emissions of Smoke
____	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
____	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No: 7008 1140 0002 8970 3901

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification 8/4/2011 @ 12:10
DEQ Official Contacted: Miklos
Company Official who made the call: Williams, Rick

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit	Emission Point	EIQ Number
SRU	FL2001	N/A

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

Component	Permit	Permit Limit	Unit of Measure
SO2	0500-00005-V7	0.005	Lbs/Hr

V. Which applicable Reportable Quantity limits were exceeded?

SO2 Reportable Quantity Limit Exceeded - 500 Lbs

VI. Give the date and time the release began and the duration of the release:
Started: 8/2/2011 8:00:00 AM Ended: 8/3/2011 8:00:00 PM Duration: 36 Hour
OHM # 111000601 *

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

Component	Quantity Released	Unit of Measure
SO2	30393	Lbs

VIII. Upset description, cause, and what off-site impact resulted:

Description: Having problems keeping an SRU running due to high temperatures and pressures. The flare gas compressors were running, but only partially compressing the gas. After further investigation it was discovered on 8-4-2011 that emissions had exceeded the RQ for sulfur dioxide at the #3 flare (FL2001), and thus the late report. Based on information given by the Engineering Manager, it was estimated that 30,393 lbs of Sulfur dioxide was released from the #3 flare (FL2001).

Cause: Naphtha unifiner hydrocarbon carryover problems into amine/SRU system.

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Sulfur production rates were reduced when the SRU tripped, but all process units could have been put on internal circulation when the SRU's tripped reducing sulfur production to in effect zero. However, the Flare gas compressors are designed to shutdown on high temperatures.

Emergency Occurrences

UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

Agency	Date	Time	Agency Official	Calumet Official	Notification #
State Police	8/4/2011	12:10	Miklos	Williams, Rick	11-04658

XI. Immediate Corrective action taken?

Reduced sulfur production plantwide in the other process units. Maintenance began working on SRU's.

XII. Specific Remedial action and/or planned to prevent recurrence?

None

XIII. Regulation notification requirement? (Check appropriate)

____	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
____	LAC 33:III.1101	Control of Emissions of Smoke
____	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
____	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No:

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification @
DEQ Official Contacted:
Company Official who made the call:

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
Waste Water Treatment

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

V. Which applicable Reportable Quantity limits were exceeded?

N/A

VI. Give the date and time the release began and the duration of the release:
Started: 8/2/2011 2:00:00 PM Ended: 8/2/2011 2:00:00 PM Duration: 0 Hour
OHM # 111000592

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

VIII. Upset description, cause, and what off-site impact resulted:

Description: Failed outfall 001 ammonia for month of July. Maximum lbs/day 253 (232 lbs permitted), Monthly average 142 lbs/day (98 lbs permitted) and Concentration 11.0 mg/L (5.0 mg/L permitted). Reportable on DMR's to EPA and LDEQ.

Cause: poor amine, SWS and WWTU operation and maintenance

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

wastewater treatment unit still in turnaround and cleanout of sludge from pond system still awaiting AFE approval

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

XI. Immediate Corrective action taken?

None

XII. Specific Remedial action and/or planned to prevent recurrence?

None

XIII. Regulation notification requirement? (Check appropriate)

____	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
____	LAC 33:III.1101	Control of Emissions of Smoke
____	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
____	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No:

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification @
DEQ Official Contacted:
Company Official who made the call:

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
SRU

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

Component	Permit	Permit Limit	Unit of Measure
SO2			

V. Which applicable Reportable Quantity limits were exceeded?

VI. Give the date and time the release began and the duration of the release:
Started: 8/1/2011 8:00:00 AM Ended: 8/1/2011 4:00:00 PM Duration: 8 Hour
OHM # 111000593

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

Component	Quantity Released	Unit of Measure
SO2	388	Lbs

VIII. Upset description, cause, and what off-site impact resulted:

Description: Exceeded 3-hr rolling average (160 ppm) for refinery fuel gas. 8 hour average value based on draeger readings was 1800 ppm H2S. Calculated excess SO2 emitted from the heaters and boilers was 388 pounds. Problems with both SRU's, both thermal oxidizers and flare gas compressors. Hydrocarbons from Naphtha Unifiner being carried over to amine system/SRU's. Naphtha Unifiner has fire monitors on exchanger trying to cool it which is causing all the problems.

Cause: Naphtha Unifiner exchanger not working with fire monitors trying to cool it.

Off-Site Impact:

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Should shutdown Naphtha Unifiner, and replace exchanger with one of adequate size to cool.

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

XI. Immediate Corrective action taken?

XII. Specific Remedial action and/or planned to prevent recurrence?

XIII. Regulation notification requirement? (Check appropriate)

____	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
____	LAC 33:III.1101	Control of Emissions of Smoke
____	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
____	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No:

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification @
DEQ Official Contacted:
Company Official who made the call:

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
DynaWave

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

V. Which applicable Reportable Quantity limits were exceeded?

N/A

VI. Give the date and time the release began and the duration of the release:
Started: 8/1/2011 7:00:00 AM Ended: 8/1/2011 7:00:00 PM Duration: 12 Hour
OHM # 111000590

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

VIII. Upset description, cause, and what off-site impact resulted:

Description: Dynawave sulfur dioxide exceeded 12-hr rolling average of 250 ppm. Average concentration of SO2 for the timeframe specified was 348 ppm. Continuous problems with thermal oxidizers shutting down on high temperatuures, expansion joints blowing out, hydrocarbon carryover and SRU's. This unit is too small for operation of 2 SRU's rated for 44 LTONS sulfur production and these problems will continue.

Cause: hydrocarbon carryover to thermal oxidizers and poor operation of SRU's.

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

thermal oxidizers are designed to shutdown on high temperatures.

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

XI. Immediate Corrective action taken?

None

XII. Specific Remedial action and/or planned to prevent recurrence?

None

XIII. Regulation notification requirement? (Check appropriate)

____	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
____	LAC 33:III.1101	Control of Emissions of Smoke
____	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
____	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No: 7008 1140 0002 8970 3963

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification 8/1/2011 @ 21:50
DEQ Official Contacted: Christy
Company Official who made the call: Williams, Rick

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit	Emission Point	EIQ Number
Flare Gas Compressor	FL2001	N/A

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

Component	Permit	Permit Limit	Unit of Measure
SO2	0500-00005-V7	0.005	Lbs/Hr

V. Which applicable Reportable Quantity limits were exceeded?

SO2 Reportable Quantity Limit Exceeded - 500 Lbs

VI. Give the date and time the release began and the duration of the release:
Started: 8/1/2011 3:15:00 PM Ended: 8/1/2011 9:40:00 PM Duration: 6.42 Hour
OHM # 111000591 *

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

Component	Quantity Released	Unit of Measure
SO2	2048	Lbs

VIII. Upset description, cause, and what off-site impact resulted:

Description: All 3 flare gas compressors shutdown on high temperature. Based on draeger readings of the flare line, the 500 lb RQ for SO2 was exceeded at 18:25. Estimated sulfur dioxide emissions from the #3 flare (FL2001) was 2,048 pounds.

Cause: High Temperatures

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Flare gas compressors are designed to shutdown on high temperatures

Emergency Occurrences

UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

Agency	Date	Time	Agency Official	Calumet Official	Notification #
State Police	8/1/2011	21:50	Christy	Williams, Rick	11-04584

XI. Immediate Corrective action taken?

Reduced sulfur production within the process units

XII. Specific Remedial action and/or planned to prevent recurrence?

None

XIII. Regulation notification requirement? (Check appropriate)

X	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
	LAC 33:III.1101	Control of Emissions of Smoke
	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No: 7008 1140 0002 8970 3956

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification 7/28/2011 @ 10:48
DEQ Official Contacted: Miklos
Company Official who made the call: Williams, Rick

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
SRU

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

V. Which applicable Reportable Quantity limits were exceeded?

SO2 Reportable Quantity Limit Exceeded - 500 Lbs

VI. Give the date and time the release began and the duration of the release:
Started: 7/28/2011 7:00:00 AM Ended: 7/28/2011 3:00:00 P Duration: 8 Hour
OHM # 111000589 *

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

VIII. Upset description, cause, and what off-site impact resulted:

Description: Exceeded 500 pound RQ for SO2 at approxiamately 10:30 am. Both SRU's tripped and both thermal oxidizers shutdown on high temperatures. One of the expansion joints in the wet gas scrubber was compromised as a result, and the unit had to be shut down for repair. Based on draeger values of the fuel gas it was calculated that 1520 excess pounds of sulfur dioxide was emitted from the heaters and boilers.

Cause: SRU's and wet gas scrubber thermal oxidizers shutdown due to hydrocarbon carryover from naphtha unifiner

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Hydrocarbon carryover from naphtha unifiner shutdown SRU's, thermal oxidizers and compromised one expansion joint on the Dynawave wet gas scrubber.

Emergency Occurrences

UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

Agency	Date	Time	Agency Official	Calumet Official	Notification #
State Police	7/28/2011	10:48	Miklos	Williams, Rick	11-04489
State Police	7/28/2011	14:30	Dennis	Williams, Rick	11-04489
Shreveport DEQ Air	7/28/2011	14:15	Ada/Amanda	Williams, Rick	Inspection

XI. Immediate Corrective action taken?

Reduced sulfur production rates

XII. Specific Remedial action and/or planned to prevent recurrence?

None

XIII. Regulation notification requirement? (Check appropriate)

____	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
____	LAC 33:III.1101	Control of Emissions of Smoke
____	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
____	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No:

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification @
DEQ Official Contacted:
Company Official who made the call:

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
SRU

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

V. Which applicable Reportable Quantity limits were exceeded?

VI. Give the date and time the release began and the duration of the release:
Started: 7/18/2011 4:00:00 PM Ended: 7/19/2011 4:00:00 A Duration: 12 Hour
OHM # 111000584

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

VIII. Upset description, cause, and what off-site impact resulted:

Description: Dynawave SO2 over permitted 12-Hr rolling average. 12 hr average recorded was 782 ppm. Reported on semi-annual T-5.

Cause: Poor scrubber flow rates

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

XI. Immediate Corrective action taken?

None

XII. Specific Remedial action and/or planned to prevent recurrence?

None

XIII. Regulation notification requirement? (Check appropriate)

____	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
____	LAC 33:III.1101	Control of Emissions of Smoke
____	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
____	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No:

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification @
DEQ Official Contacted:
Company Official who made the call:

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
Waste Water Treatment

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

V. Which applicable Reportable Quantity limits were exceeded?

VI. Give the date and time the release began and the duration of the release:
Started: 7/14/2011 10:00:00 AM Ended: 7/14/2011 10:00:00 A Duration: 0 Hour
OHM # 111000585

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

VIII. Upset description, cause, and what off-site impact resulted:

Description: Outfall 001 Ammonia over permit limits for month of June. In addition the biomonitoring testing, Retest #2 failed as well.

Cause: wwtu has no biological activity due to low air diffusion system and free oil in the basins and clarifier.

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

XI. Immediate Corrective action taken?
None

XII. Specific Remedial action and/or planned to prevent recurrence?
None

XIII. Regulation notification requirement? (Check appropriate)

____	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
____	LAC 33:III.1101	Control of Emissions of Smoke
____	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
____	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No:

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification @
DEQ Official Contacted:
Company Official who made the call:

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
Flare #3

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

V. Which applicable Reportable Quantity limits were exceeded?

VI. Give the date and time the release began and the duration of the release:
Started: 6/24/2011 8:20:00 AM Ended: 6/24/2011 8:20:00 A Duration: 0 Hour
OHM # 111000561

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

VIII. Upset description, cause, and what off-site impact resulted:

Description: None of the 5 pilot flame indicators for the #3 flare are functional. Will be reported on T-5 semi-annual.

Cause: IR's on outfall building need resetting, pilot indicators on #3 flare not working.

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

XI. Immediate Corrective action taken?

None

XII. Specific Remedial action and/or planned to prevent recurrence?

None

XIII. Regulation notification requirement? (Check appropriate)

____	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
____	LAC 33:III.1101	Control of Emissions of Smoke
____	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
____	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No:

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification @
DEQ Official Contacted:
Company Official who made the call:

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
SRU

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

V. Which applicable Reportable Quantity limits were exceeded?

VI. Give the date and time the release began and the duration of the release:
Started: 6/24/2011 12:00:00 AM Ended: 6/24/2011 1:00:00 P Duration: 13 Hour
OHM # 111000562

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

VIII. Upset description, cause, and what off-site impact resulted:

Description: Exceeded 12 hour permit rolling average for SO2 (250 ppm) being discharged from the Dynawave stack. Average concentration was calculated to be 569 ppm for the timeframe specified. Reportable on semi-annual T-5 report.

Cause: Air Demand analyzer

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Problems with both SRU air demand analyzers.

Emergency Occurrences

UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

XI. Immediate Corrective action taken?

None

XII. Specific Remedial action and/or planned to prevent recurrence?

None

XIII. Regulation notification requirement? (Check appropriate)

___	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
___	LAC 33:III.1101	Control of Emissions of Smoke
___	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
___	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No:

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification @
DEQ Official Contacted:
Company Official who made the call:

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
SRU

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

V. Which applicable Reportable Quantity limits were exceeded?

VI. Give the date and time the release began and the duration of the release:
Started: 6/18/2011 12:00:00 AM Ended: 6/18/2011 12:00:00 P Duration: 12 Hour
OHM # 111000544

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

VIII. Upset description, cause, and what off-site impact resulted:

Description: Dynawave SO2 over 12 hr permitted rolling average of 250 ppm. 12 Hour average was 457 ppm.

Cause: air demand analyzer

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Problems with SRU and air demand analyzer

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

XI. Immediate Corrective action taken?

None

XII. Specific Remedial action and/or planned to prevent recurrence?

None

XIII. Regulation notification requirement? (Check appropriate)

____	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
____	LAC 33:III.1101	Control of Emissions of Smoke
____	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
____	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No:

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification @
DEQ Official Contacted:
Company Official who made the call:

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
SRU

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

V. Which applicable Reportable Quantity limits were exceeded?

VI. Give the date and time the release began and the duration of the release:
Started: 6/17/2011 12:00:00 AM Ended: 6/17/2011 11:00:00 A Duration: 11 Hour
OHM # 111000543

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

VIII. Upset description, cause, and what off-site impact resulted:

Description: Dynawave SO2 exceeded 12 hr rolling average 250 ppm permit limit. The average concentration for the 12 hour period was 478 ppm.

Cause: Air demand analyzer

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Problems with SRU #2 air demand analyzer.

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

XI. Immediate Corrective action taken?

None

XII. Specific Remedial action and/or planned to prevent recurrence?

None

XIII. Regulation notification requirement? (Check appropriate)

____	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
____	LAC 33:III.1101	Control of Emissions of Smoke
____	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
____	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No:

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification @
DEQ Official Contacted:
Company Official who made the call:

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
Waste Water Treatment

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

V. Which applicable Reportable Quantity limits were exceeded?

N/A

VI. Give the date and time the release began and the duration of the release:
Started: 6/3/2011 1:00:00 PM Ended: 6/3/2011 1:00:00 PM Duration: 0 Hour
OHM # 111000541

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

VIII. Upset description, cause, and what off-site impact resulted:

Description: Outfall 001 ammonia levels over permit limits for the month of May. The monthly average was 196 lbs/day, monthly maximum was 377 lbs/day and the average ppm was 19.3. Reportable to EPA and DEQ on monthly DMR report.

Cause: Sour water stripper, amine and WWT unit operational problems.

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

XI. Immediate Corrective action taken?

None

XII. Specific Remedial action and/or planned to prevent recurrence?

None

XIII. Regulation notification requirement? (Check appropriate)

____	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
____	LAC 33:III.1101	Control of Emissions of Smoke
____	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
____	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No: 7007 3020 0003 3276 9511

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification 6/3/2011 @ 9:23
DEQ Official Contacted: Wanda
Company Official who made the call: Williams, Rick

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
SRU

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

Component	Permit	Permit Limit	Unit of Measure
SO2			

V. Which applicable Reportable Quantity limits were exceeded?

SO2 Reportable Quantity Limit Exceeded - 500 Lbs

VI. Give the date and time the release began and the duration of the release:
Started: 6/2/2011 4:30:00 PM Ended: 6/3/2011 6:30:00 AM Duration: 14 Hour
OHM # 111000542 *

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

Component	Quantity Released	Unit of Measure
SO2	14160	Lbs

VIII. Upset description, cause, and what off-site impact resulted:

Description: #2 SRU tripped on high pressure and #3 SRU was OOS for scheduled repair. The Flare gas compressors were running on control during the event and therefore no excess sulfur dioxide was emitted from the #3 Flare. The fuel gas CEM went out of compliance as a result. Based on fuel gas usage and draeger readings it was estimated that 14,160 pounds of sulfur dioxide was emitted from the heaters and boilers. Production rates were reduced until the fuel gas H2S was below the 160 ppm NSPS permit limit.

Cause: High pressure on the front end of SRU caused shutdown

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

#2 SRU shutdown by design on high pressure due to sulfur blockage.

Emergency Occurrences

UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

Agency	Date	Time	Agency Official	Calumet Official	Notification #
State Police	6/3/2011	9:23	Wanda	Williams, Rick	11-03239
State Police	6/3/2011	11:30	Miklos	Williams, Rick	11-03239

XI. Immediate Corrective action taken?

Started to reduce production rates to get the sulfur content of the gas low enough that the amine system could scrub the H2S to meet fuel gas permit limits.

XII. Specific Remedial action and/or planned to prevent recurrence?

Working to repair/clean #2 SRU and restart

XIII. Regulation notification requirement? (Check appropriate)

____	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
____	LAC 33:III.1101	Control of Emissions of Smoke
____	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
____	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No:

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification @
DEQ Official Contacted:
Company Official who made the call:

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
Waste Water Treatment

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

V. Which applicable Reportable Quantity limits were exceeded?

VI. Give the date and time the release began and the duration of the release:
Started: 5/5/2011 9:00:00 AM Ended: 5/5/2011 9:00:00 AM Duration: 0 Hour
OHM # 111000514

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

VIII. Upset description, cause, and what off-site impact resulted:

Description: The daily maximum and monthly average (lbs/day) Ammonia were over permit limits for the month of April. Also the (mg/L) ammonia exceeded the 5.0 mg/L permit limit, value was 26.0 mg/L ammonia. All reportable on monthly DMR submitted to LDEQ and EPA.

Cause: Amine/Ammonia problems, WWTU cannot handle flow rates

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Need to shutdown one Amine unit, one SWS and reduce production rates in order to reduce flows and ammonia concentrations to a level that the WWTU can handle.

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

XI. Immediate Corrective action taken?

None

XII. Specific Remedial action and/or planned to prevent recurrence?

None

XIII. Regulation notification requirement? (Check appropriate)

____	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
____	LAC 33:III.1101	Control of Emissions of Smoke
____	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
____	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No:

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification @
DEQ Official Contacted:
Company Official who made the call:

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
Waste Water Treatment

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

V. Which applicable Reportable Quantity limits were exceeded?

N/A

VI. Give the date and time the release began and the duration of the release:
Started: 4/12/2011 8:00:00 AM Ended: 4/12/2011 8:00:00 A Duration: 0 Hour
OHM # 111000499

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

VIII. Upset description, cause, and what off-site impact resulted:

Description: Maximum lbs/day Ammonia and TSS exceeded permit limits for the month of March at outfall 001. Reportable on monthly DMR's to LDEQ and EPA. Poor SWS operation and high flow rates contributed to the failure. The daily maximum for oil and grease at outfall 007 also exceeded permits.

Cause: SWS bottoms ammonia concentrations over 300 ppm during the last week of March caused NH3 failures. High flows due to rainfall contributed and caused the TSS failure.

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

XI. Immediate Corrective action taken?

None

XII. Specific Remedial action and/or planned to prevent recurrence?

None

XIII. Regulation notification requirement? (Check appropriate)

____	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
____	LAC 33:III.1101	Control of Emissions of Smoke
____	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
____	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No: 7008 1140 0002 8970 4274

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification 3/27/2011 @ 10:14
DEQ Official Contacted: On-Line Form
Company Official who made the call: Williams, Rick

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit	Emission Point	EIQ Number
Tank Farm	N/A	N/A

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

Component	Permit	Permit Limit	Unit of Measure
Crude - Paraffinic	N/A	N/A	N/A

V. Which applicable Reportable Quantity limits were exceeded?

Crude Product Spill Reportable Quantity Limit - 1 Bbl

VI. Give the date and time the release began and the duration of the release:
Started: 3/27/2011 8:00:00 AM Ended: 3/27/2011 9:00:00 A Duration: 1 Hour
OHM # 111000475

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

Component	Quantity Released	Unit of Measure
Crude - Paraffinic	5	BBL

VIII. Upset description, cause, and what off-site impact resulted:

Description: 5 bbls of sour crude was released inside the dike wall at Tank 50. A leaking flange and an open bleeder valve caused the release. All of the product was contained inside the dike wall, most of which was floating on water.

Cause: Leaking flange and open bleeder valve

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

The line should have been checked to ensure there were no open bleeder valves or loose flanges.

Emergency Occurrences

UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

Agency	Date	Time	Agency Official	Calumet Official	Notification #
DEQ Baton Rouge	3/27/2011	10:14	On-Line Form	Williams, Rick	XZTV 8905

XI. Immediate Corrective action taken?

Stopped flow and vac trucks sent to remove crude

XII. Specific Remedial action and/or planned to prevent recurrence?

Removed crude oil from the diked area at Tank 50

XIII. Regulation notification requirement? (Check appropriate)

X	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
	LAC 33:III.1101	Control of Emissions of Smoke
	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No: 7008 1140 0002 8970 3789

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification 3/26/2011 @ 12:43
DEQ Official Contacted: On-Line form
Company Official who made the call: Williams, Rick

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit	Emission Point	EIQ Number
Tank Farm	N/A	N/A

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

Component	Permit	Permit Limit	Unit of Measure
Mixed Oil Products	N/A	N/A	N/A

V. Which applicable Reportable Quantity limits were exceeded?

VI. Give the date and time the release began and the duration of the release:
Started: 3/26/2011 8:00:00 AM Ended: 3/26/2011 9:30:00 A Duration: 1.5 Hour
OHM # 111000474

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

Component	Quantity Released	Unit of Measure
Mixed Oil Products	150	BBL

VIII. Upset description, cause, and what off-site impact resulted:

Description: A bleeeder valve was found open which released the oil inside the diked area at Tank 56. Operations estimated the volume to be 150 bbls. There was no off-site impacts. All of the product was contained within the dike wall, most of which was floating on water.

Cause: wrong Bleeder valve was left open

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Human error involved with valve operation.

Emergency Occurrences

UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

Agency	Date	Time	Agency Official	Calumet Official	Notification #
DEQ Baton Rouge	3/26/2011	12:43	On-Line form	Williams, Rick	KJSU 8903

XI. Immediate Corrective action taken?

Closed valve and remediated dike area of Tank 56

XII. Specific Remedial action and/or planned to prevent recurrence?

Removed product with vac trucks

XIII. Regulation notification requirement? (Check appropriate)

X	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
	LAC 33:III.1101	Control of Emissions of Smoke
	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No:

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification @
DEQ Official Contacted:
Company Official who made the call:

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
SRU

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

Component	Permit	Permit Limit	Unit of Measure
SO2			

V. Which applicable Reportable Quantity limits were exceeded?

N/A

VI. Give the date and time the release began and the duration of the release:
Started: 3/23/2011 3:00:00 AM Ended: 3/23/2011 6:00:00 P Duration: 15 Hour
OHM # 111000479

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

Component	Quantity Released	Unit of Measure
SO2	505	PPM

VIII. Upset description, cause, and what off-site impact resulted:

Description: Dynawave SO2 exceeded 250 ppm on 12-hr rolling average. Out of compliance for 16 total hours. Average SO2 concentration for the time period was 505 ppm. Reportable on T-5 deviation report and quarterly CEM report. Continued problems with SRU air demand analyzer.

Cause: Air demand analyzer at SRU

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Poor operation of SRU air demand analyzer

Emergency Occurrences

UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

XI. Immediate Corrective action taken?

None

XII. Specific Remedial action and/or planned to prevent recurrence?

None

XIII. Regulation notification requirement? (Check appropriate)

____	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
____	LAC 33:III.1101	Control of Emissions of Smoke
____	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
____	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No: UPS 1Z 702 930 22 1006 1108

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification 3/23/2011 @ 11:44
DEQ Official Contacted: Susan
Company Official who made the call: Johnson, Lyndon

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
PDA

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

Component	Permit	Permit Limit	Unit of Measure
Propane			

V. Which applicable Reportable Quantity limits were exceeded?

VI. Give the date and time the release began and the duration of the release:
Started: 3/23/2011 11:10:00 AM Ended: 3/23/2011 11:25:00 A Duration: 0.25 Hour
OHM # 111000478 RCA1377 RCA conducted

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

Component	Quantity Released	Unit of Measure
Propane		

VIII. Upset description, cause, and what off-site impact resulted:

Description: The Propane DeAsphalting unit exploded and caught fire at 11:10am. A vapor cloud explosion and fire in the propane deasphalting unit. The propane released came from a 3/4" bleeder. Propane released burned.

HazMat Fire Brigade and 1st Responders extinguished fire at 11:25am

Cause: Unknown

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Emergency Occurrences

UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

Agency	Date	Time	Agency Official	Calumet Official	Notification #
State Police	3/23/2011	11:44	Susan	Johnson, Lyndon	11-01642
Shreveport Fire Depart	3/23/2011	11:55	Scott Wolverton	Johnson, Lyndon	
LDEQ	3/23/2011	11:42	Phillip	Johnson, Lyndon	

XI. Immediate Corrective action taken?

Alarm sirens to evacuate employees and contractors from area, activate first responders / fire frigade members, shutdown unit, activate unit isolation valves, unit depressured

XII. Specific Remedial action and/or planned to prevent recurrence?

None

XIII. Regulation notification requirement? (Check appropriate)

____	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
____	LAC 33:III.1101	Control of Emissions of Smoke
____	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
____	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Johnson, Lyndon

Title: Safety Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No:

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification @
DEQ Official Contacted:
Company Official who made the call:

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
Tank Farm

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

Component	Permit	Permit Limit	Unit of Measure
Paraffinic Lube			

V. Which applicable Reportable Quantity limits were exceeded?

N/A

VI. Give the date and time the release began and the duration of the release:
Started: 3/15/2011 12:00:00 AM Ended: 3/15/2011 1:00:00 A Duration: 1 Hour
OHM #111000472 RCA1410

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

Component	Quantity Released	Unit of Measure
Paraffinic Lube	3	BBL

VIII. Upset description, cause, and what off-site impact resulted:

Description: T-106 overflowed CDW lube product into dike wall area of the tank. Product was being pumped into the tank at the time. Estimated 3 bbls product was remediated from the area.

Cause: Operator neglected to monitor tank level while pumpimg product into it.

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Operator neglected to monitor tank level while pumping product into it.

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

XI. Immediate Corrective action taken?

None

XII. Specific Remedial action and/or planned to prevent recurrence?

None

XIII. Regulation notification requirement? (Check appropriate)

____	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
____	LAC 33:III.1101	Control of Emissions of Smoke
____	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
____	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No: 7008 1140 0002 8970 4281

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification 3/14/2011 @ 9:40
DEQ Official Contacted: Miklos
Company Official who made the call: Williams, Rick

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit	Emission Point	EIQ Number
SRU	FL2001	N/A

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

Component	Permit	Permit Limit	Unit of Measure
SO2	0500-00005-V7	0.005	Lbs/Hr

V. Which applicable Reportable Quantity limits were exceeded?

SO2 Reportable Quantity Limit Exceeded - 500 Lbs
SO2 Reportable Quantity Limit Exceeded - 500 Lbs

VI. Give the date and time the release began and the duration of the release:
Started: 3/14/2011 1:00:00 AM Ended: 3/14/2011 10:00:00 A Duration: 9 Hour
OHM # 111000460 *

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

Component	Quantity Released	Unit of Measure
SO2	9297	Lbs

VIII. Upset description, cause, and what off-site impact resulted:

Description: #3 SRU shutdown with mechanical issues. Gases routed to #3 flare. Draeger readings at 70,000 ppm H2S. Estimated emissions were 9297 lbs SO2 from the #3 Flare (FL2001).

Cause: Mechanical issues with the #3 SRU

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Mechanical problems with the #3 SRU.

Emergency Occurrences

UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

Agency	Date	Time	Agency Official	Calumet Official	Notification #
State Police	3/14/2011	9:40	Miklos	Williams, Rick	11-01412

XI. Immediate Corrective action taken?

Maintainence working the issues.

XII. Specific Remedial action and/or planned to prevent recurrence?

None

XIII. Regulation notification requirement? (Check appropriate)

____	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
____	LAC 33:III.1101	Control of Emissions of Smoke
____	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
____	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No:

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification @
DEQ Official Contacted:
Company Official who made the call:

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit	Emission Point	EIQ Number
Flare #3	FL2001	N/A

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

Component	Permit	Permit Limit	Unit of Measure
SO2	0500-00005-V7	0.005	Lbs/Hr

V. Which applicable Reportable Quantity limits were exceeded?

N/A

VI. Give the date and time the release began and the duration of the release:
Started: 3/5/2011 2:45:00 PM Ended: 3/5/2011 4:45:00 PM Duration: 2 Hour
OHM # 111000455

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

Component	Quantity Released	Unit of Measure
SO2	452	Lbs

VIII. Upset description, cause, and what off-site impact resulted:

Description: All 3 flare gas compressors shutdown with mechanical issues. Based on drager and flow values given by operations, estimated SO2 emitted from #3 flare to be 452 lbs.

Cause: Mechanical problems

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Should be able to keep at least 1 of the 4 FGC's running at all times assuming no plant power failure.

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

XI. Immediate Corrective action taken?
called technicians

XII. Specific Remedial action and/or planned to prevent recurrence?
None

XIII. Regulation notification requirement? (Check appropriate)

____	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
____	LAC 33:III.1101	Control of Emissions of Smoke
____	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
____	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No: 7008 1140 0002 8970 4304

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification @
DEQ Official Contacted:
Company Official who made the call:

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
Waste Water Treatment

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

V. Which applicable Reportable Quantity limits were exceeded?

N/A

VI. Give the date and time the release began and the duration of the release:
Started: 3/2/2011 2:00:00 PM Ended: 3/2/2011 2:00:00 PM Duration: 0 Hour
OHM # 111000456

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

VIII. Upset description, cause, and what off-site impact resulted:

Description: Daily Permitted Maximum(lbs/Day) Ammonia at outfall 001 was above permit limits for the month of February. Permited rate (232 lbs/day), recorded rate (376 lbs/day). Operational problems with the amine units and high flow rates due to rainfall were the contributing factors to the permit exceedance. Reported to LDEQ/EPA on monthly DMR's.

Cause: Amine unit problems and high wastewater flow rates.

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

XI. Immediate Corrective action taken?

None

XII. Specific Remedial action and/or planned to prevent recurrence?

None

XIII. Regulation notification requirement? (Check appropriate)

____	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
____	LAC 33:III.1101	Control of Emissions of Smoke
____	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
____	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No: 7008 1140 0002 8970 4458

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification 2/10/2011 @ 15:54
DEQ Official Contacted: Otis Randle
Company Official who made the call: Williams, Rick

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit	Emission Point	EIQ Number
Flare #3	FL2001	N/A

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

Component	Permit	Permit Limit	Unit of Measure
SO2	0500-00005-V7	0.005	Lbs/Hr
Smoke			

V. Which applicable Reportable Quantity limits were exceeded?

SO2 Reportable Quantity Limit Exceeded - 500 Lbs

VI. Give the date and time the release began and the duration of the release:
Started: 2/10/2011 3:52:00 PM Ended: 2/10/2011 4:15:00 P Duration: 0.38 Hour
OHM # 111000429 *

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

Component	Quantity Released	Unit of Measure
SO2	1386	Lbs
Smoke	30	Minutes

VIII. Upset description, cause, and what off-site impact resulted:

Description: Experienced complete plant power failure for 23 minutes. #3 Flare smoking for time period. Estimated opacity to be 30-40%. Excess sulfur dioxide emitted from the #3 flare was estimated to be 1,386 pounds. Once power was restored, the boilers were restarted, steam put to the flare and it ceased smoking.

Cause: Swepco incoming power failed.

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Swepco off-site power failure. 69 kv transmission line went to fault. According to Swepco a logging company cut a tree that fell into 69 kv line at 8499 walker road south of shreveport regional airport.

Emergency Occurrences

UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

Agency	Date	Time	Agency Official	Calumet Official	Notification #
Shreveport DEQ Air	2/10/2011	15:54	Otis Randle	Williams, Rick	Cell Phone
State Police	2/10/2011	16:00	Miklos	Williams, Rick	11-00734
Homeland Security	2/10/2011	16:05	Lee Ann	Williams, Rick	Cell Phone
NRC	2/10/2011	16:10	Dave	Williams, Rick	967116
NRC	2/10/2011	16:50	Mr. Dove	Williams, Rick	967121

XI. Immediate Corrective action taken?

Could do nothing for 23 minutes until power restored. Begin to restart units when power was restored.

XII. Specific Remedial action and/or planned to prevent recurrence?

None

XIII. Regulation notification requirement? (Check appropriate)

X	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
X	LAC 33:III.1101	Control of Emissions of Smoke
	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No:

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification @
DEQ Official Contacted:
Company Official who made the call:

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
Sewer System

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

V. Which applicable Reportable Quantity limits were exceeded?

VI. Give the date and time the release began and the duration of the release:
Started: 2/8/2011 3:00:00 PM Ended: 2/8/2011 3:30:00 PM Duration: 0.5 Hour
OHM # 111000430

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

VIII. Upset description, cause, and what off-site impact resulted:

Description: Red dye spill at west dock, approxiamately 5 gallons. Piping froze and level control did not work. Sump overflowed to ground, running into stormwater system. Booms put out to contain spill, vac trucks to clean material up.

Cause: Piping froze

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Piping froze, when thawed out pump level control didn't work properly. Overflowed sump.

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

XI. Immediate Corrective action taken?
Turned off sump pump to clean up red dye.

XII. Specific Remedial action and/or planned to prevent recurrence?
Removed dyed/soil from ground.

XIII. Regulation notification requirement? (Check appropriate)

____	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
____	LAC 33:III.1101	Control of Emissions of Smoke
____	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
____	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No: 7008 1140 0004 1863 1433

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification 2/7/2011 @ 7:51
DEQ Official Contacted: on-line report
Company Official who made the call: Williams, Rick

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
Tank Farm

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

Component	Permit	Permit Limit	Unit of Measure
Fuels Product			

V. Which applicable Reportable Quantity limits were exceeded?

Reportable Quantity Limit Exceeded - 100 lbs

VI. Give the date and time the release began and the duration of the release:
Started: 2/6/2011 4:00:00 PM Ended: 2/6/2011 6:00:00 PM Duration: 2 Hour
OHM # 111000422

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

Component	Quantity Released	Unit of Measure
Fuels Product	30	BBL

VIII. Upset description, cause, and what off-site impact resulted:

Description: A 2 inch union/coupling had came off the diesel transfer piping inside the dike wall at Tank 50. There were no injurys orf off-site impacts as the spill was contained inside the diked area, and the product was ultra low sulfur diesel. Estimated 30 bbls inside dike wall area at T-50.

Cause: union/coupling broke on transfer piping.

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Union/coupling fatigued.

Emergency Occurrences

UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

Agency	Date	Time	Agency Official	Calumet Official	Notification #
LDEQ	2/7/2011	7:51	on-line report	Williams, Rick	73PB8668

XI. Immediate Corrective action taken?

Shut all valves off and cleaned the spill up.

XII. Specific Remedial action and/or planned to prevent recurrence?

Vac trucks called to clean up product, and any contaminated soil will be removed.

XIII. Regulation notification requirement? (Check appropriate)

X	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
	LAC 33:III.1101	Control of Emissions of Smoke
	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No: 7008 1140 0004 1863 1426

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification 2/1/2011 @ 11:20
DEQ Official Contacted: Mohsan
Company Official who made the call: Williams, Rick

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit	Emission Point	EIQ Number
Flare #3	FL2001	N/A

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

Component	Permit	Permit Limit	Unit of Measure
SO2	0500-00005-V7	0.005	Lbs/Hr

V. Which applicable Reportable Quantity limits were exceeded?

SO2 Reportable Quantity Limit Exceeded - 500 Lbs

VI. Give the date and time the release began and the duration of the release:
Started: 2/1/2011 11:00:00 AM Ended: 2/1/2011 12:00:00 P Duration: 1 Hour
OHM # 111000421 *

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

Component	Quantity Released	Unit of Measure
SO2	1313	Lbs

VIII. Upset description, cause, and what off-site impact resulted:

Description: Plant power failure caused boilers and process units to go off-line. As a result the #3 Flare (FL2001) lost steam quench and emitted black smoke for 1 hour (estimated 40% opacity). In addition based on flare flow and Sulfur production, it was estimated that 1,313 pounds of sulfur dioxide was also emitted from the #3 flare.

Cause: Off-site incoming power failure.

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Incoming power failure

Emergency Occurrences

UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

Agency	Date	Time	Agency Official	Calumet Official	Notification #
State Police	2/1/2011	11:20	Mohsan	Williams, Rick	11-00556
Shreveport DEQ Air	2/1/2011	11:05	Otis Randle - Phone	Williams, Rick	11-00556

XI. Immediate Corrective action taken?

Restarted process units

XII. Specific Remedial action and/or planned to prevent recurrence?

None

XIII. Regulation notification requirement? (Check appropriate)

X	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
	LAC 33:III.1101	Control of Emissions of Smoke
	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No:

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification @
DEQ Official Contacted:
Company Official who made the call:

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
Waste Water Treatment

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

V. Which applicable Reportable Quantity limits were exceeded?

N/A

VI. Give the date and time the release began and the duration of the release:
Started: 1/21/2011 2:00:00 PM Ended: 1/21/2011 2:00:00 P Duration: 0 Hour
OHM # 111000416

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

VIII. Upset description, cause, and what off-site impact resulted:

Description: Based on Ammonia numbers through 1-12-2011, the Permitted Daily Maximum of 232 lbs/day ammonia will be exceeded for the month of January. Samples were below limits on 1-4 and 1-5. The two samples on 1-11 and 1-12 were 17.6 ppm (371.2 lbs/day) and 24.3 (472.3 lbs/day) respectively. Will be reported on the monthly DMR when submitted to LDEQ and EPA.

Cause: Excess Amine and ammonia entering the process sewer system.

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Excessive ammonia loading on the wastewater system from amine and SWS unit operation.

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

XI. Immediate Corrective action taken?
Changed operating parameters on Amine and SWS units.

XII. Specific Remedial action and/or planned to prevent recurrence?
None

XIII. Regulation notification requirement? (Check appropriate)

____	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
____	LAC 33:III.1101	Control of Emissions of Smoke
____	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
____	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No:

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification @
DEQ Official Contacted:
Company Official who made the call:

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
Tank Farm

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

V. Which applicable Reportable Quantity limits were exceeded?

VI. Give the date and time the release began and the duration of the release:
Started: 1/19/2011 6:00:00 PM Ended: 1/19/2011 6:45:00 P Duration: 0.75 Hour
OHM # 11100415 RCA1332

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

VIII. Upset description, cause, and what off-site impact resulted:

Description: A bleeder was left open on pump. Pump basin overflowed into dike wall area inside T-39. Parraffinic DAO was the product. According to Buck Boyum the volume was extimated to be 5 bbls.

Cause: Bleeder was left open on charge pump.

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Human error. The bleeder should have been closed after maintenance was done on the charge pump.

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

XI. Immediate Corrective action taken?
Spill response team cleaned up spill.

XII. Specific Remedial action and/or planned to prevent recurrence?
Remediated soil

XIII. Regulation notification requirement? (Check appropriate)

X	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
	LAC 33:III.1101	Control of Emissions of Smoke
	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No:

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification @
DEQ Official Contacted:
Company Official who made the call:

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
Sewer System

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

V. Which applicable Reportable Quantity limits were exceeded?

VI. Give the date and time the release began and the duration of the release:
Started: 1/18/2011 11:00:00 PM Ended: 1/18/2011 11:00:00 P Duration: 0 Hour
OHM # 111000414 RCA333

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

VIII. Upset description, cause, and what off-site impact resulted:

Description: East sump overflowed heavy waxy product. PLC problems. Estimated to be 15 bbls.

Cause: Power problems

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Electrical problems

Emergency Occurrences

UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

XI. Immediate Corrective action taken?

None

XII. Specific Remedial action and/or planned to prevent recurrence?

None

XIII. Regulation notification requirement? (Check appropriate)

____	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
____	LAC 33:III.1101	Control of Emissions of Smoke
____	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
____	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No:

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification @
DEQ Official Contacted:
Company Official who made the call:

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit	Emission Point	EIQ Number
Flare Gas Compressor	FL2001	N/A

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

Component	Permit	Permit Limit	Unit of Measure
SO2	0500-00005-V7	0.005	Lbs/Hr

V. Which applicable Reportable Quantity limits were exceeded?

N/A

VI. Give the date and time the release began and the duration of the release:
Started: 1/14/2011 11:39:00 PM Ended: 1/15/2011 1:00:00 A Duration: 1.35 Hour
OHM # 111000417

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

Component	Quantity Released	Unit of Measure
SO2	277.1	Lbs

VIII. Upset description, cause, and what off-site impact resulted:

Description: A & B flare gas compressors started shutting down at the same time. Restarted several times, kept tripping out. Common suction pressure PALL965 may be the problem. Pressure ok. Draeger readings given were 16,000 ppm H2S. PI flare flow FI924 at 1237 mscfd. Estimated excess emissions from #3 flare were 277.1 lbs SO2.

Cause: Low suction pressure

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Designed to shut down on low suction pressure.

Emergency Occurrences

UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

XI. Immediate Corrective action taken?

Instrument technician called in.

XII. Specific Remedial action and/or planned to prevent recurrence?

None

XIII. Regulation notification requirement? (Check appropriate)

____	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
____	LAC 33:III.1101	Control of Emissions of Smoke
____	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
____	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

XI. Immediate Corrective action taken?
Technicians called to fix the air demand analyzer.

XII. Specific Remedial action and/or planned to prevent recurrence?
None

XIII. Regulation notification requirement? (Check appropriate)

____	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
____	LAC 33:III.1101	Control of Emissions of Smoke
____	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
____	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No:

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification @
DEQ Official Contacted:
Company Official who made the call:

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit	Emission Point	EIQ Number
SRU	FL2001	N/A

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

Component	Permit	Permit Limit	Unit of Measure
SO2	0500-00005-V7	0.005	Lbs/Hr

V. Which applicable Reportable Quantity limits were exceeded?

N/A

VI. Give the date and time the release began and the duration of the release:
Started: 1/13/2011 8:30:00 PM Ended: 1/13/2011 9:45:00 P Duration: 1.25 Hour
OHM # 111000412

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

Component	Quantity Released	Unit of Measure
SO2	176.4	Lbs

VIII. Upset description, cause, and what off-site impact resulted:

Description: #2 SRU overpressured and tripped. #3 SRU was on hot standby, but control valves were stuck and would not open to allow acid/sour gas feed entry. According to Greg Sepulvado #2 SRU was back on-line at 21:45. Draeger value given was 16,000 ppm H2S. Estimated excess emissions from the #3 Flare were 176.4 lbs SO2.

Cause: #2 SRU overpressured and tripped. #3 SRU acid/sour gas feed valves would not operate.

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

#2 SRU overpressured and tripped.

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

XI. Immediate Corrective action taken?
Restarted #2 SRU.

XII. Specific Remedial action and/or planned to prevent recurrence?
None

XIII. Regulation notification requirement? (Check appropriate)

____	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
____	LAC 33:III.1101	Control of Emissions of Smoke
____	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
____	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No:

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification @
DEQ Official Contacted:
Company Official who made the call:

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
DynaWave

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

V. Which applicable Reportable Quantity limits were exceeded?

VI. Give the date and time the release began and the duration of the release:
Started: 1/9/2011 11:20:00 AM Ended: 1/10/2011 1:30:00 A Duration: 14.2 Hour
OHM # 111000406 (RCA1325) *

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

VIII. Upset description, cause, and what off-site impact resulted:

Description: Both Thermal oxidizers tripped on low flows below 1000 degrees at the Dynawave scrubber. Low flows were suspected to be the cause.

Cause: Low flows

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

XI. Immediate Corrective action taken?
Restarted the thermal oxidizers.

XII. Specific Remedial action and/or planned to prevent recurrence?
None

XIII. Regulation notification requirement? (Check appropriate)

____	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
____	LAC 33:III.1101	Control of Emissions of Smoke
____	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
____	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No:

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification @
DEQ Official Contacted:
Company Official who made the call:

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit	Emission Point	EIQ Number
Flare #3	FL2001	N/A

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

Component	Permit	Permit Limit	Unit of Measure
SO2	0500-00005-V7	0.005	Lbs/Hr
Smoke			

V. Which applicable Reportable Quantity limits were exceeded?

VI. Give the date and time the release began and the duration of the release:
Started: 1/8/2011 9:00:00 AM Ended: 1/8/2011 12:00:00 P Duration: 3 Hour
OHM # 111000405

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

Component	Quantity Released	Unit of Measure
SO2	140	Lbs
Smoke	54	Minutes

VIII. Upset description, cause, and what off-site impact resulted:

Description: The Diesel Hydrotreater had an exchanger issue, and was relieving to the flare system. The unit was taken offline. During the 3 hour event the #3 flare emitted black smoke intermittantly and resulted in several community complaint calls. Draeger values of the flare line were 19,000 ppm H2S. Based on engineering calculations, the gas flow from the DHT to the #3 flare was 350 MSCFD. Estimated SO2 emissions from the #3 flare was 140 pounds.

Cause: Exchanger failure

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Could not predict exchanger tube failure

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

XI. Immediate Corrective action taken?
shut the unit down

XII. Specific Remedial action and/or planned to prevent recurrence?
Shut the unit down

XIII. Regulation notification requirement? (Check appropriate)

____	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
____	LAC 33:III.1101	Control of Emissions of Smoke
____	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
____	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 5/30/2012

FIGURE 2.6

INSTRUCTIONS FOR COMPLETING DOT FORM 7000-1

DEPARTMENT OF TRANSPORTATION
Liquid Pipeline Accident Report

Instructions: Submit in duplicate for each accident reportable under Code of Federal Regulations. Title 49, Part 195, Subpart B. If the space provided for any question is not adequate, attach an additional sheet. File both copies of this report within 30 days after discovery of the accident with the Information Resources Manager (DPS-21), Office of Pipeline Safety, Department of Transportation. 400 Seventh Street, S.W., Washington, D.C. 20590. However, reports for intrastate pipelines subject to the jurisdiction of a State agency pursuant to certification under Section 205 of the Hazardous Liquid Pipelines Safety Act of 1979 may be submitted in duplicate to the State agency if the regulations of that agency require submission of these reports and provide for further transmittal of one copy within 10 days of receipt to the Information Resources Manager.

Please write or call the Information Resources Manager (202-365-4572) concerning questions about this report or these instructions, or to obtain copies of DOT Form 7000-1.

Each operator shall prepare each report of an accident on Form DOT 7000-1 or a facsimile as follows:

1) General. Each applicable item must be marked or filled in as fully and as accurately as information accessible to the operator at the time of filing the report will permit. More than one item may apply.

2) Part A. Enter the complete corporate name of the operator. Enter the address of the operator's principal place of business, including zip code.

3) Part B. Item 1. Enter the date the accident occurred or was discovered. If the accident was not discovered on the date it occurred, state this under Part K. Indicate whether the accident occurred on Federal /ands. For purposes of this report -Federal lands" means all lands owned by the United States except lands in the National Park System, lands held in trust for an Indian or Indian tribe, and lands on the Outer Continental Shelf.

   Item 2. Enter the time the accident occurred according to a 24-hour clock (e.g., 1945). If the time of occurrence is not known, enter the time the accident was discovered and state this fact under Part K.

4) Part E. Give the number of deaths and injuries known at the time of filing this report even if they were previously reported telephonically to the Department of Transportation. If none, state none.

5) Part F. Indicate the total estimated property damage in present day costs including the cost of the commodity not recovered, damage to other parties, and cost of clean up. If none, state none.

6) Part G. Item 1. State the commonly used name of the commodity spilled such as #2 fuel oil, regular gasoline, propane, etc.

   Item 2. Give the classification of the commodity spilled and *if* it is a petroleum product, indicate whether it is a highly volatile liquid (HVL) or non-HVL. -HVL" means a hazardous liquid which will form a vapor cloud when released to the atmosphere and which has a vapor pressure exceeding 276kPa (40 psia) at 37.8°C (100°F). If the commodity spilled is not anhydrous ammonia, petroleum, or a petroleum product, it is not necessary to file this report.

7) Part K. Give an account of the accident sufficiently complete and detailed to convey an understanding of the cause of the accident. Continue on an extra sheet of paper if more space *is* needed.

US-14

OMB No. 2137-004

ACCIDENT REPORT HAZARDOUS LIQUID PIPELINE

Report date
6/1/99
NO.7000-1
(DOT)

TA-OPERATOR INFORMATION
1. Name of Operator
2. Principal Business Address
3. Is Pipeline Interstate: ☐ Yes ☐ No

CALUMET LUBRICANTS COMPANY
SHREVEPORT REFINERY
3333 MIDWAY STREET
SHREVEPORT, LOUISIANA 71133-3099

PART B-TIME AND LOCATION OF ACCIDENT

1) Date: _____/_____/_____
month day year

2) Hour *(24 hour clock)*_____ *(Time of discovery)*

3) If onshore give state *(including Puerto Rico and Washington D.C.)* and county or city _____

4) If offshore, give offshore coordinates. _____

5) Did accident occur on Federal Land? ☐ Yes ☒ No *(see instructions for definition of Federal Land.)*

6) Specific location *(If Location is near offshore platform, buildings, or other landmarks, such an highways, waterways, **or** railroads, attach a sketch or drawing showing relationship of accident location to these landmarks)*

_____

_____

PART C-ORIGIN OF RELEASE OF LIQUID OR VAPOR

1) Part of system involved (Check all applicable items)

☐ line pipe ☐ tank farm ☐ pump station

2) Item Involved: ☐ pipe ☐ valve ☐ scraper trap ☐ pump ☐ welding fitting
☐ girth weld ☐ tank ☐ bolted fitting ☐ longitudinal weld

Other (specify) _____

3) Year item installed _____

PART D-CAUSE OF ACCIDENT

☐ Corrosion ☐ failed weld ☐ incorrect operation by operator personnel

☐ Failed pipe ☐ outside force damage ☐ Malfunction of control or relief equipment

☐ Other (specify) _____

PART E-DEATH OR INJURY

1) Number of persons killed 0 Operator Employees 0 Non-Employees 0

2) Number of persons injured 0 Operator Employees 0 Non-Employees 0

ART F-ESTIMATED TOTAL PROPERTY DAMAGE

$ _____

PART G-COMMODITY SPILLED

1) Name of commodity spilled: _____

2) Classification of commodity spilled: ☐ Petroleum ☐ Petroleum product ☐ HVL or ☐ Non HVL

3) Estimated amount of commodity involved: _____ Barrels Spilled _____Barrels Recovered

4) Was there an explosion? ☐ Yes ☐ No

5) Was there a fire? ☐ Yes ☐ No

INSTRUCTIONS: Answer section H, I, or J only of it applies to the Particular accident being reported

T H-OCCURRED IN LINE PIPE

1) Normal diameter (inches) _____
2) Wall thickness (inches) _____
3) SMYS (PSI) _____
4) Type of joint: ☐ welded ☒ flanged ☐ threaded ☐ coupled ☐ other
5) Pipe was: ☐ Below ground ☐ Above ground
6) Maximum operating pressure (psig) _____
7) Pressure at time and location of accident (psig) _____
8) Had there been a pressure test on system: ☐ Yes ☐ No
9) Duration of test (hrs) _____
10) Maximum test pressure (psig)
11) Date of latest test: _____/ _____/ _____

PART I-CAUSED BY CORROSION

1) Location of corrosion ☐ internal ☐ external
2) Facility coated? ☐ Yes ☐ No
3) Facility under cathodic protection? ☐ Yes ☐ No
4) Type of corrosion: ☐ galvanic ☐ other *(Specify)* _____

PART J-CAUSED BY OUTSIDE FORCE

1) ☐ Damage by operator or its contractor
☐ Damage by others
☐ Damaged by natural forces
☐ Landslide
☐ Subsidence
☐ Washout
☐ Frostheave
☐ Earthquake
☐ Ship anchor
☐ Mud slide
☐ Fishing operations
☐ Other _____

2) Was a damaged prevention program in effect
3) if yes, was the program ☐ "one-call" ☐ other _____
4) Did excavator call? ☐ Yes ☐ No
5) Was pipeline location temporarily marked for excavator ☐ Yes ☐ No

PART K- ACCOUNT OF ACCIDENT

Attached sheets

NAME AND TITLE OF OPERATOR OFFICIAL FILING THIS REPORT.

Telephone no. (including area code) Date

3.0 RESPONSE ACTIONS

This section is a guide for response actions to be taken when a spill or potential spill is first reported or observed.

- The first responder is the CSR individual who discovers a spill and will be responsible for initiating response procedures. A flow chart showing the logical steps to be followed by the response team is shown in Figure 3.1. T

- All CSR employees are familiar with and trained in the procedures to be followed in an emergency. Specific procedures to be followed for responding will vary depending on the location of the spill and the operations taking place.

3.1 IMMEDIATE RESPONSE STEPS

Immediate steps to be taken by the Calumet first responder include the following:

1. Make an immediate assessment of the incident as observed or as reported.

2. Call for medical assistance if an injury has occurred.

3. If the incident is clearly the result of an operation that the spill observer/first responder can control safely, take immediate steps to correct the operation (see Section 3.3 for specific steps to secure the source).

4. Notify the "A" Operator.

5. Take any steps deemed necessary to minimize any threat to public health and safety and to reduce the severity of the incident.

    - Until confirmed otherwise, the spill environment must be presumed to be hazardous. That presumption remains until the characteristics of the spilled material have been determined.

    - If the first responder does not have information and/or equipment to make the determination, an immediate request for assistance should be made.

6. Function as the responsible Calumet person in charge until relieved by an authorized supervisor who will assume the position of Qualified Individual provided the spill observer/first responder has the appropriate training.

7. Contain or disperse spill as required.

Immediate steps to be taken by the "A" Operator include:

1. Evaluate spill information given by the first responder.

2. Verify medical assistance has been requested if injury is reported.

3. Make required notifications (Figure 2.1 and Figure 2.2).

4. Give spill incident report and current status.

5. Proceed to the spill location and relieve the first responder by assuming the position of Incident Commander until the Safety Manager, or his designee arrives.

3.2 EVACUATION AND STAGING PLAN

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

[redacted]

TABLE 3.1
EVACUATION INSTRUCTIONS

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

[redacted]

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

[redacted]

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

[redacted]

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

[redacted]

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

[redacted]

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

[redacted]

3.3 SECURING THE SOURCE

Securing the source is an extremely important step in oil spill response actions. However, **a source should only be secured if it can be performed safely and pose no threat to human health**. Steps to be taken to secure the source include the following:

For Transfer Equipment

1. If manifold fails, shut down upstream pumps, close upstream valves.
2. If a hose failure is encountered, shut down upstream pumps, close upstream valves and drain hose in catch basin, if feasible.

For Tank Overflow

1. If the source of the oil spill is identified as a tank leaking or overflowing, divert oil to alternative tank or shut down upstream pump close fill line valve and overflow valve (if necessary).
2. For land spills, make every effort to contain the spill so as to limit affected area.

For Tank Failure

1. If the source of the spill is identified as a catastrophic tank failure (i.e., collapse) and safety conditions permit, divert oil to alternative tank and shut in all valves associated with the tank. If this is not possible, shut in the closest upstream valve possible and all tandem lines associated with the failed tank to eliminate the possibility of additional product being discharged.

2. For land spills make every effort to contain the spill so as to limit the affected area.

For Piping Rupture

1. If the source originates from a pipeline (low pressure), shut down pumps, close pipeline block valves on both sides of the spill, and drain blocked section of line.
2. If the source originates from a pipeline (high pressure), shut down pumps, close pipeline block valves on both sides of spill, construct or obtain temporary containment, and bleed pressure off pipeline into containment.

3. For land spills make every effort to contain the spill so as to limit the affected area.

For Explosion or Fire

Liquids -	Gases
1. Control or disperse vapors	1. Disperse vapors
2. Cool heated structures	2. Isolate source of gas
3. Extinguish fire, if practical	3. Protect exposures
4. Divert/control runoff	4. If practical, allow fire to burn itself out
5. Recover products	

For Equipment Failure

1. For all equipment failures, upstream valves will be closed and the appropriate lines or vessels will be drained or, if pressurized, will be bled down into containment structures.
2. For land spills make every effort to contain the spill so as to limit the affected area.

3.4 GENERAL SPILL RESPONSE CONSIDERATIONS

General considerations for responding to an oil spill are given below:

- Fire and explosion potential always exist.
- If you are uncertain about the safety of an area, wear protective gear and a breathing apparatus when approaching the area.
- Approach spilled material from an upwind direction, if possible.
- Keep non-essential personnel away from scene.
- Toxic gases may be released by some spills.
- Do not walk into or touch any spilled material. Avoid inhaling fumes, smoke, and vapors, even if no hazardous materials are involved.
- Do not assume that gases or vapors are harmless because of lack of odor.
- Check the MSDS to determine the flammable and toxic characteristics of the spilled material.
- Speed is essential in recovery efforts, especially during the initial response.
- Determine strategic objectives at the beginning of a spill.

3.5 SPILL CONTAINMENT AND RECOVERY

After initial response actions have been taken to stop further spillage and required agencies have been notified, CSR will begin spill containment, recovery, and disposal operations. (General Clean-up and Environmental Protection Plans are provided as Appendices D and E, respectively.)

The Qualified Individual (QI) will make an assessment of the size and hazards of the spill. The type of oil, its location, and predicted movement will be considered. The expected spill flow direction of liquids spilled at the site is shown in Figure 9.1. The location of stored materials is shown in Figure 3.2. Site conditions such as wind speeds and direction, precipitation, and climate are as follows:

Weather patterns in the area include:

Wind speeds average 8-12 miles per hour (mph), with winds of 20 mph or greater occurring infrequently. The prevailing wind direction is from the south.

Precipitation averages 3-4 inches per month with hail and infrequent snowfall occurring mainly December through March.

The winter months are normally mild with cold spells of generally short duration. Freezing temperatures are recorded on an average of 34 days a year.
The summer months typically are warm and humid. Temperatures exceed 95°F about 45 days a year. Late afternoon humidity rarely drops below 55 percent.

Based on this assessment, clean-up personnel and equipment will be dispatched to the site and deployed to control and contain the spill. Containment booms may be used to surround the spill and contain it. They may also be deployed between the spill and environmentally sensitive areas. Booms may be used to deflect or guide the spill to locations where it can be more effectively cleaned up using skimmers, vacuum trucks, and/or sorbent materials. Clean-up equipment and material will be used in the manner most effective for rapid and complete cleanup of the spill.

The QI will interface and regularly communicate with the Federal On-Scene Coordinator (FOSC) and staff. The CSR Incident Commander will coordinate the clean-up activities to ensure they are being done satisfactorily.

Figures 3.2 through 3.5 contain guidelines for responses to spills on water and land, based on the type of product involved. The guidelines are as follows:

The On-Scene Commander will utilize all of the personnel and material available locally. If additional labor and materials are required, they will be brought in from other Calumet locations, by local contractors, or by OSRO contractors.

Response and cleanup will continue until all recoverable oil is removed, the environment is returned to its pre-spill state, and/or the unified command consisting of Calumet's Qualified Individual, Federal and State On-Scene Coordinators have determined that further response and cleanup is no longer necessary or advisable.

3.6 DETERMINATION OF SPILL VOLUME AND EXTENT

The volume of spilled oil should be determined as soon as possible in order to facilitate planning and initiate response operations. The volume of spilled oil should be determined by utilizing tank gauges and/or pumping rates, if possible.

3.7 SAMPLING AND WASTE ANALYSIS PROCEDURES

Calumet's sampling and waste analysis practices are governed by the regulations of the Louisiana Department of Environmental Quality and the United States EPA. These regulations outline methods and procedures for determining the chemical and physical characteristics of wastes generated by the refinery, including waste associated with spills, so that they may be properly stored, treated, or disposed of. The guidelines contained in the Plan meet the requirements of 40 CFR 265.13 and 265.17 and the requirements of applicable state regulations.

3.8 STORAGE/DISPOSAL

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

- In the event of an oil spill, the Environmental Coordinator will coordinate activities and obtain necessary permits to ensure proper disposal or recycling of recovered product and debris.
- Oily debris will be segregated on site and containerized for temporary storage prior to disposal in accordance with RCRA/CERCLA and any other applicable regulations.
- Transportation of waste material will be performed in accordance with all applicable regulatory guidelines.
- Waste associated with oil spills will be disposed of at predetermined sites approved by Calumet that have the necessary permits to accept the type of waste to be discharged.

Appendix F contains a Spill Prevention Control and Countermeasures Plan (SPCC) that contains more detail on the procedures which will be used at the CSR refinery, and Appendix G is a generic waste disposal plan which should be used to document that the proper steps are taken for disposal of the spilled material.

Key issues to be addressed during a spill to ensure proper handling and effective disposal of recovered product and debris are included as checklist items in Appendix G and Appendix D.

3.9 ENDANGERED SPECIES AND WILDLIFE REHABILITATION

CSR will work with federal and state agency personnel to provide labor and transportation to retrieve, clean, and rehabilitate birds and wildlife affected by an oil spill, as necessary. Oversight of CSR's wildlife preservation activities and coordination with state and federal agencies during an oil spill is the responsibility of the Environmental Coordinator; issues relevant to spill response are addressed in Appendix H and Appendix E.

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 clean-up response. Jurisdictional authorities should be informed and Calumet should work closely with them in identification, decisions and actions related to wildlife. Laws with significant penalties are in place to ensure appropriate protection of these species. The jurisdictional lines of authority, as currently presented to the oil industry, are presented below.

U.S. Fish and Wildlife Service (USF&WS)

Has federal jurisdiction over wildlife related issues.
Shares migratory bird jurisdiction with the Louisiana Dept. of Wildlife & Fisheries.

Louisiana Department of Wildlife & Fisheries

Has state jurisdiction over wildlife related issues.
Shares migratory bird jurisdiction with the U.S. Fish and Wildlife Service.

3.9.1 Endangered/Threatened Species

An endangered/threatened species listing for Louisiana is presented in Figure 3.6. A number of species are being considered for addition to this listing; therefore, periodic update is recommended.

Species can be defined as endangered or threatened by the federal and/or state governments. Definitions are as follows:

- Endangered - Any species in danger of extinction throughout all or a significant portion of its range.
- Threatened - Any species likely to become an endangered species within the foreseeable future through all or a significant portion of its range.
- Extirpated - Any species completely gone from a specific part of its former range.
- Extinct - Any species that is completely gone from the earth, with no living specimens available.
- A database search has been performed by the Louisiana National Heritage Program indicating that there are no endangered/ threatened species located within the location boundaries of this plan.

3.9.2 Wildlife Rescue

Bird cleaning and rehabilitation programs are an important part of the clean-up operation. Appropriate state agencies and/or Regional Permitted Wildlife Rehabilitators should be contacted to supervise oiled bird rehabilitation centers, to consult with contractors, federal, and state agencies, and to assist in training and development of rescue techniques. A listing of contacts and resources for wildlife rehabilitation and points to consider are included as Appendix H.

3.10 DOCUMENTATION OF INITIAL RESPONSE ACTIONS

Individuals that may become first responders, and supervisors that may be involved in the initial spill response actions should become familiar with required documentation procedures. Noted below are guidelines for effective documentation practices.

Keep a log showing the history of the events and communications that occur during a spill. When recording information, remember it may be used in legal proceedings. Therefore:

- record only facts, not speculation. If you do not know, do not guess.
- do not criticize other peoples' efforts and/or methods.
- do not speculate on the spill cause.
- do not relate opinions.
- do not skip lines between entries or make erasures. If you make an error, draw a line through it, add the correct entry above or below it, and initial the change.

Also keep detailed notes of:

- actions taken by government/regulatory officials.
- conversations over the telephone or in person with government/ regulatory officials.
- recommendations and instructions from government/regulatory officials.

Request that government/regulatory officials document and sign their recommendations or orders. This is especially important if company personnel disagree with their suggestions, instructions, or actions.

3.11 Increasing the Spill Response

In the event a spill exceeds the capability of the CSR Spill Response Team:

- the Qualified Individual will request additional assistance from PQS's corporate office.
- Calumet corporate personnel will consult with the Qualified Individual (Incident Commander) to determine if they should request activation and mobilization of other Calumet Response Team personnel. If assistance is deemed necessary, activation and mobilization will be done immediately.
- the Qualified Individual will notify appropriate internal and external parties.

3.12 Pipeline Spill Detection

3.12.1 10" Oil Pipeline Spill Detection

Primary leak detection is provided by low-pressure shut offs on the pumps discharging into the 10" pipeline from Brown Station. The pumps will shut down if the discharge pressure drops 10 psig below normal.

In the event of failure of the low pressure shut off system, additional leak detection is accomplished by comparing flowrates in and out of the pipeline at a frequency of once every 24 hours. At midnight each night the 10" pipeline is shut down and tickets are pulled at the inlet meter and at the outlet meter of the pipeline. The inlet meter is located at Brown Station, the location of the pumps. The outlet meter is located within the confines of CSR. The pumper at Brown Station pulls the tickets at the inlet meter. The CSR pumper pulls the tickets at the outlet end. Shortly after the tickets are pulled, the CSR pumper contacts the pumper at Brown Station and they compare the quantity shipped versus the quantity received. If there is a discrepancy in the two volumes, the CSR pumper is to immediately notify the Shift Supervisor at the CSR Refinery. If a leak is indicated, the Unit Supervisor is to immediately notify the QI or his alternate.

In conjunction with daily comparisons, the Safety, Maintenance & Reliability Manager of CSR has the pipeline flown by Barr Air Patrol once every two weeks. If a pipeline leak is suspected, the leak will be located through visual observation by CSR personnel who will walk the pipeline.

3.12.2 6" Canning Plant Pipelines

The Production Department of CSR oversees the Neutrals Receiving Process. Blenders receive meter readings and pumping data from the Pumping Department at the end of each volume transfer. Blend product inventory is reconciled every 24 hours at 8:00 AM. The CSR Canning Plant notifies the CSR Shreveport Refinery immediately in the event of inventory discrepancies, indicating a leak in a 6" pipeline.

The pipeline right-of-way is also walked monthly by canning plant personnel and observations are recorded on a Monthly Checklist-SPCC Plan. . The pipeline is also walked by an outside contractor on a bi-weekly basis. Results of this inspection are recorded and filed in the Technical Service Office.

The CSR Shreveport Refinery can shutdown the canning plant pipelines within 15 minutes of notification.

FIGURE 3.1
SPILL RESPONSE FLOWCHART

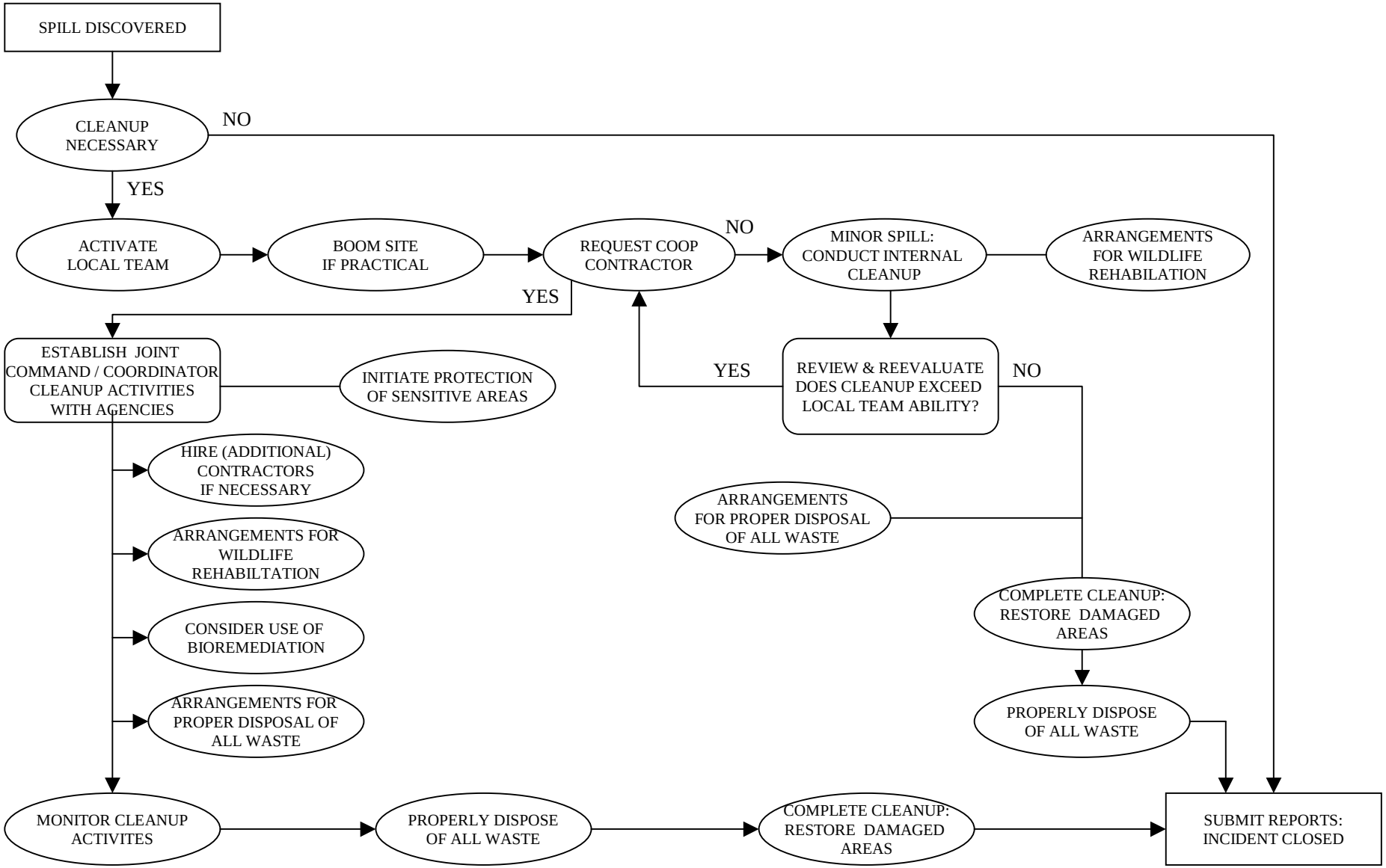


FIGURE 3.2
ALL EVACUATION ROUTES

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

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

ALL EVACUATION POINTS & ROUTES

CALUMET LUBRICANTS COMPANY
SHREVEPORT REFINERY

FIGURE 3.2

12-D-02-0023A

FIGURE 3.3

GUIDELINE 1

Considerations for Spills On Land

NOTE: Personnel safety is the primary consideration in any emergency. Avoid excessive exposure to liquid and vapors. These procedures are considerations only. Actual circumstances may dictate that procedures followed differ somewhat from those listed below.

___ Identify source and stop discharge if possible.

___ Use explosimeter and other approved sampling equipment to assure areas are safe to enter for any response operations.

___ Advise personnel in the area of any threat and/or initiate evacuation of endangered people. Inform affected system operators - such as, utilities, telephone company, or railway.

___ Start confinement operations immediately to prevent oil from reaching waterways or groundwater. Allow oil to spread out versus pool as pooling provides head pressure, which causes soil penetration.

___ If the ground is permeable, consider moving affected soil to a temporary storage location where the ground is less permeable.

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

___ For low flash oil: 1) Use non-sparking systems, 2) Have fire trucks/fire fighting equipment nearby, 3) Warn all involved of the oil's flammability, 4) Allow oil to spread out over a large area, and 5) Consider covering oil with foam.

___ If oil enters any underground piping system, contact operator immediately.

___ As far as possible, do not allow vehicles to run over oil-saturated areas.

___ Do not dig trenches to contain and/or drain oil.

FIGURE 3.4

GUIDELINE 2

Considerations for Crude/Distillate Spills on Waterways
Flash Point Over 100°F

#6 Fuel
Asphalt
Crude Oils
Diesel Fuel
Gas Oils
JETA

NOTE: Personnel safety is the primary consideration in any emergency. Avoid excessive exposure to liquid and vapors. These procedures are considerations only. Actual circumstances may dictate that procedures followed may differ somewhat from those listed below.

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

___ Identify source and stop discharge if possible.

___ Deploy containment boom and vacuum trucks in an attempt to contain and recover as much product as possible. Monitor the boom for effectiveness.

___ Advise neighboring operators and private citizens of any threat to their property or personnel.

___ Determine the direction and expected duration of spill movement.

___ Review the location of environmentally sensitive areas identified on the Environmental Response Maps in Appendix B. Determine which of these may be threatened by the spill and direct the clean-up contractor to proceed with booms and vacuum trucks to these locations. Take appropriate actions as indicated on the response maps and initiate recovery actions.

___ Use explosimeter and other air sampling equipment to assure areas are safe to enter for continued response operations.

FIGURE 3.5

GUIDELINE 3

Considerations for Gasoline/Light Hydrocarbon Spills on Waterways
Flash Point Less Than 100°F

Alkylates	Naphtha
Benzene	Raffinate
Reformate	Gasolines
Toluene	Xylene

NOTE: Personnel safety is the primary consideration in any emergency. Avoid excessive exposure to liquid and vapors. Refer to MSDS. These procedures are considerations only. Actual circumstances may dictate that procedures followed may differ somewhat from those listed below.

These materials float on water and are extremely flammable. Containment of these materials may allow explosive concentrations to accumulate. The preferred response is to knock down the vapors and protect shorelines from fouling and allow evaporation to occur.

___ Identify source and stop discharge if possible.

___ Eliminate sources of vapor cloud ignition. Use waterfog to knock down vapors and disperse material.

___ Stay upwind and evacuate nonessential personnel.

___ Advise neighboring operations and private citizens of any threat to their property or personnel.

___ Determine the direction and expected duration of spill movement.

___ If the discharge escapes initial containment area, review the location of environmentally sensitive areas identified in Appendix B on the Environmental Response Maps. Determine which of these may be threatened by the spill and direct the clean-up contractor to proceed with boom to these areas to divert any remaining spilled product away.

___ Use explosimeter and other air sampling equipment to assure areas are safe to enter for continued response operations.

___ After crude's light ends have dissipated and Unit Supervisor has confirmed that its flash point is above 100°F, may contain crude with boom and mechanically remove.

FIGURE 3.6

GUIDELINE 4

Considerations for Discharges of Asphalt into Waterways

Note: Personnel safety is the primary consideration in any emergency. Avoid excessive exposure to liquid and vapors. Refer to MSDS. These procedures are considerations only. Actual circumstances may dictate that procedures followed may differ somewhat from those listed below.

Asphalt's main components are heavier than water. This material will therefore sink, leaving a sheen from its lighter components. The preferred response is channel the asphalt to shallow water and recover as soon as possible.

___ Identify source and stop discharge if possible.

___ Advise personnel/shore facilities in the area of any threat to their property or personnel.

___ Use skimmers to remove asphalt if it remains liquid.

___ Deploy deflection boom to divert asphalt towards shallow water. Monitor boom for effectiveness. Otherwise, use buckets, dragline, clam shells, etc. to remove asphalt.

___ Determine the direction and expected duration of the asphalt's movement.

___ If asphalt escapes initial containment area, review the location of environmentally sensitive areas identified in Appendix B on the Environmental Response Maps. Determine which of these may be threatened by the spill and direct the clean-up contractor to proceed with boom and clean-up equipment to these locations.

___ If possible, protect shoreline with plastic before asphalt’s impact.

4.0 SAFETY / HEALTH / SECURITY

4.1 SAFETY

Personnel safety is a priority in all operations at Calumet Lubricants Company. Safety becomes particularly important during emergency response operations. It is expected that the following safety information, and all safety policies and principles will be adhered to during emergency operations by all personnel.

It is CSR's policy to provide a safe workplace.

In all situations . . . **safety first!**

4.2 WORKER HEALTHS AND SAFETY POLICY

The OSHA regulations contained in 29 CFR 1910.120 apply to emergency response and post-emergency response clean up of hazardous substance spills. The rules cover employee protection during participation in response and clean-up activities.

CSR is required to provide appropriate levels of training for its employees and to ensure that all personnel involved in responding to an oil spill have the proper training. (To determine the appropriate level of training for any given response team position, refer to Figure 11.1.)

CSR employees and contractors are required to develop a comprehensive work plan for use during spill response operations. The plan includes:

- an organizational structure
- a comprehensive workplan.
- a Site Specific Safety and Health Plan (see Appendix I).
- a safety and health training program.
- a medical surveillance program.
- standard operating procedures for safety and health.
- any necessary interface between the general program and the site-specific activities.

Distribution of the plan may include all employees involved in the response, contractors, sub-contractors, OSHA personnel, and the other federal, state, or local agencies with regulatory authorities over the spill site.

4.3 EMPLOYEES AND CONTRACTOR ORIENTATION

Prior to engaging in any spill response activity, all responders (employees and contractors) must have received appropriate training for their position and orientation to the incident at hand. No employee/contractor shall engage in activities, which place him/her at risk without the appropriate protective equipment and training.

4.4 SITE CHARACTERIZATION

Evaluation of the site to determine proper procedures and protective equipment requirements shall be made prior to personnel exposure. At a minimum, the following considerations should be addressed to ensure that no response personnel are endangered (see Site Specific Safety and Health Plan - Appendix I).

- Existing site hazards
- Presence of toxins
- Presence of combustibles
- Visible vapor clouds
- Biological indicators (dead animals or vegetation)

Personal protective equipment selection shall be based on the results of the survey and shall be appropriate for the hazards expected.

4.5 SITE CONTROL

All response personnel “on scene” must be made aware of practices and procedures to be used during the response. Considerations for site control are included in the “Site Specific Safety and Health Plan” (Appendix I).

Entry to the contaminated area, once established, is to be limited to authorized and necessary personnel. Entry and Exit Logs must be maintained to reflect personnel movement. Site control measures should include (as practical) single point entry/exit to facilitate personnel safety. Exit must be through decontamination facilities as required. It is the intent of this site control plan to prevent the removal of contaminants from the contaminated area and unauthorized entry into contaminated areas.

4.6 SAFETY PLAN

All operations during a spill shall be conducted in accordance with the “Site Specific Safety and Health Plan” (Appendix I).

4.7 PROTECTIVE CLOTHING

Site requirements for protective clothing may be found in the "Site Specific Safety and Health Plan." Any required protective device must be used in accordance with instructions. Protective devices and clothing have been selected based on the known or suspected hazards at the site. No substitutions of the required items may be made without the consent of the site safety representative

4.8 GENERAL RESPONSE SAFETY

All responders shall conduct operations in such a manner as to prevent or reduce exposure to any contaminant. Methods to reduce or prevent exposure include, but are not limited to:

- keeping non-essential personnel away from the spill area.
- utilizing work practices that reduce exposure.
- where possible and practical, using equipment to accomplish tasks rather than personnel.
- using appropriate protective clothing.
- Any operations requiring entry into areas not directly visible to other responders shall be accomplished using the "buddy-system" and the site supervisor shall be notified of the entry. All personnel conducting operations in such areas will establish and maintain communications with their supervisor for the duration of such activities.

An intercom system and onsite telephones shall be used to notify all personnel on site of any emergency, work stoppage, or other condition requiring site wide notification.

4.9 TEMPERATURE CONCERNS

Ambient temperatures can substantially affect work conditions and worker safety. All personnel shall remain alert to changing conditions affecting their safety. Some examples of temperature concerns are:

Heat Stress, Heat Rash, Heat Cramps, and Heat Strokes.

All health problems associated with over heating can be serious and can result in problems ranging from minor discomfort to death! All responders, particularly those wearing protective clothing, shall be aware of conditions and take steps to reduce the risk of injury from heat related problems. Steps to consider include:

- force fluids, sense of thirst is not an adequate indicator of the need for fluids.
- provide opportunity for cooling off during breaks.
- adjust work/rest regimen as temperature increases.

Hypothermia is another serious concern in spill response scenarios and occurs when the body loses heat faster than it can be produced. If the responder is properly protected, cold temperatures pose little problem. **However, over exposure to cold can cause serious health problems and may even lead to death.**

Generally, "layered" clothing offers the best protection against extreme cold. Numerous layers of relatively light clothing coupled with an outer layer of windproof material may provide better protection than a single, "heavy" garment.

4.10 WATER SAFETY

All personnel performing tasks on a dock, pier, or in a boat must wear an approved personal flotation device (PFD) for the duration of those tasks.

Spill response operations on the water can present numerous opportunities for injury. Caution must be exercised! General considerations include:

- Ensure that all vessels have appropriate safety equipment.
- DO NOT overload boats (see vessel ID plate for capacity).
- Properly wear all floatation devices.

4.11 WATER RESCUE

Water rescue operations can be hazardous for the rescuer as well as the person being rescued. Rescue in cold water should be accomplished as soon as possible, but not at the expense of safety. In the event that any person falls into the water, consider the following points.

- Stop the operation and sound the "man overboard" alarm.
- Approach the person FROM downstream or downwind.
- If safe to do so, shut off the boat engine when close.
- Extension devices such as an oar can be used from a boat or from shore to execute a water rescue.
- To recover the person, use a boarding ladder if possible. If no ladder is available, use the area of lowest "freeboard".
- Keep boat balanced.
- Do not go into the water to assist unless the victim is unconscious and it is safe.

4.12 BOOM DEPLOYMENT

Booms will be deployed by response contractors with the exception of absorbent booms used on small stormwater drainage ditches. During boom deployment, the following practices should be considered.

- Effective communication must be maintained between the boat operator and boom deployment site.
- All personnel must stay clear of tow lines. Attach two lines in such a manner that they may be cast loose if necessary. A knife should be onboard in case the boom needs to be freed rapidly.
- Avoid attaching tow line to an "off center" cleat as this can cause difficult steering and/or taking on water.
- NEVER hold a tow line during boom deployment.
- Deploy boom at a reasonable, steady speed.
- Ensure that the boat has adequate power for existing conditions and quantity of boom to be deployed.

4.13 DECONTAMINATION

Decontamination facilities shall be designed to prevent the spread of contaminants from the spill site. Decontamination facilities should be in place prior to employee/contractor exists to areas where potential for exposure to contaminants exists.

Regardless of the decontamination facility or procedures, all efforts to minimize contamination must be given. All collected contaminants, clothing, and debris must be considered waste items to be disposed of and handled properly. Specific decontamination requirements are included in the "Site Specific Safety Plan" (Appendix I).

4.14 SITE SECURITY

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

[redacted]

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

5.0 RESPONSE TEAM

5.1 OIL SPILL RESPONSE TIERS

Below are three categories into which oil spill incidents within Calumet are classified.

Tier I - **Small Spill:** up to 50 barrels typically handled by the facility/operation utilizing facility/operation and local resources.

Tier II - **Medium Spill:** more than 50 barrels but less than 1,200 barrels; typically handled by contractors using regional resources.

Tier III - **Worst Case Discharge:** greater than 1,200 barrels typically involving large spill response contractor resources in addition to local and regional resources.

5.2 CALUMET LUBRICANTS COMPANY OIL SPILL RESPONSE TEAM

5.2.1 Qualified Individual Information

The CSR Qualified Individual (QI) and designated Alternate Qualified Individual will have full authority, including contracting authority, to implement corrective actions. The QI has received First Responder, Awareness Level training in accordance with requirements of 29 CFR 1910.120 and the contents of this Plan. The alternate QI has received a minimum 40-hour initial training, eight hour supervisory training, and an annual eight-hour refresher course addressing emergency response to release of hazardous materials and the contents of this plan.

<u>Primary QI</u>
Name: Tom Germany
Position: Plant Manager
Business Address: 3333 Midway Street
Shreveport, Louisiana 71109
Home Address:

Emergency Phone #: 318-518-9530
Business: 318-632-4077
Home:

<u>Alternate QI</u>
Name: Lyndon B. Johnson
Position: Safety Manager
Home Address:

Emergency Phone #: 218-0778 Business: 632-4269
Home:

Alternate QI
Name: Michael Rhoades
Position: Environmental Manager
Home Address:

Emergency Phone #:742-290-9920 Business: 318-632-4093
Home:

The QI has overall authority and responsibility for ensuring the following actions are accomplished as required.

- Activate internal alarms and hazard communication systems to notify all facility personnel;
- Notify all response personnel as needed;
- Identify the character, exact source, amount, and extent of the release, as well as the other items needed for notification;
- Notify and provide necessary information to the appropriate Federal, State, and local authorities with designated response roles, including the National response Center, State Emergency Response Commission and Local Emergency Planning Committee;
- Assess the interaction of the spilled substance with water and/or other substances stored at the facility and notify response personnel at the scene of that assessment;
- Assess 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 heat-induced explosion);
- Assess and implement prompt removal actions to contain and remove the substance released;
- Coordinate rescue and response actions as previously arranged with all response personnel;
- Use authority to immediately access company funding to initiate cleanup activities;
- Direct cleanup activities until properly relieved of this responsibility.

5.2.2 Response Team Organization

The team organization adopted for this Oil Spill Response Plan is the Incident Command System.

- The organization of the CSR Oil Spill Response Team is modular, depending on the size and scope of the incident. Response team positions will be filled by personnel from CSR on an as-needed basis depending on the circumstances of the spill situation.

A complete roster of CSR Oil Spill Response Team members is included as Figure 5.1 and training levels are shown in Figure 5.2.

5.2.3 Response Team Positions

A brief description of the responsibilities of each team member is shown below.

Primary Qualified Individual (Tom Germany)

- Assess Incident - Contact With Calumet Indiana
- Media Response - Provide News And Background
- Executive Overall Control
- External Relations - Agencies And Community
- Legal Contacts
- Finance Support

Incident Commander (Tom Germany)

- Overall Control of Emergency Response Operations
- Coordination of Mutual Aid
- Coordination with Agencies on site

On-Scene Commander (Lyndon Johnson, Michael Rhoades, John Swanson)

- Coordination of Incident Action Plan
- Coordination of response personnel activities
- Oversees cleanup

Process Control (Mike Hall, Vidal Clay, Greg Sepulvado, Bobby Parks)

- Maintain control of areas not involved
- Make decisions to run or shutdown
- Provide support from process view in incident area

Maintenance Manager (John Swanson, Greg McConnell)

- Manage movement of materials Logistics
- Provide support to Purchasing to obtain materials in from local vendors
- Provide inventory control and reorder
- Support storage and movement of materials in staging area
- Ensure effective communication equipment is provided to EOC and spill site

Human Resources (Lyndon Johnson, Kevin Farley)

- Direct support to Manager
- Handle media and public affairs
- Set up Insurance/Risk Management
- Direct Security

Environmental Coordinator (Michael Rhoades, Lyndon Johnson)

- Provide support in Environmental Issues
- Assess spill/release
- Support surveillance and response
- Natural resource damage assessment

Environmental Engineer (Michael Rhoades, Lyndon Johnson)

- Communicates information to local, state and federal government agencies
- Assures that relevant regulations are followed
- Provides environmental expertise

Medical Officer (Bob Thomas, Steve Rinaudo)

- Provide first aid/medical services
- Advise on proper safety and health practices
- Monitors compliance with Industrial Hygiene Regulations

Recorder (Michael Vaughn, Michelle Carroll)

- Record chronology of event
- Provide administrative support
- Collect all event data, press releases, photos, etc. for file documentation

Security Officer (Guards)

- Provide adequate protection for company equipment
- Monitor gates and perimeter of facility and keep public from interfering with cleanup operation
- Notify response personnel as required

Materials Manager (Aubrey Marchand, Mitch Purdue, James Kelly, Dan McKibben)

- Provide purchasing support required for clean-up operations
- Ensure that services and resources are made available as requested
- Responsible for effective containment, recovery, storage, and disposal operations

SFD

- Respond per EOM and pre-plan
- Serve as Advisor
- Mutual Aid Support

FIGURE 5.1

(Page 1 of 6)

CALUMET LUBRICANTS COMPANY EMERGENCY OIL SPILL RESPONSE TEAM ROSTER

EMERGENCY FUNCTION	NAME	BUSINESS TITLE	WORK PHONE	HOME PHONE	CELL	RADIO CHANNEL	RESPONSE TIME (Minutes)
Incident Command / QI	Tom Germany	Refinery Mgr	318-632-4077	(b) (6) [redacted]	[redacted]	(b) (7)(F), (b) (3) [redacted]	45
Operation Command / QI	Lyndon B. Johnson	Safety Mgr	318-632-4269	[redacted]	[redacted]	[redacted]	45
Operation Command / QI	Michael Rhoades	Environmental Mgr	318-632-4093	[redacted]	[redacted]	[redacted]	45
Finance / Security	Clayton Long	Purchasing Mgr	318-632-4017	[redacted]	[redacted]	[redacted]	45
Planning	Aubrey Marchand	Operations Manager	318-632-4099	[redacted]	[redacted]	[redacted]	45
Planning	Mitch Perdue	Product Control Mgr	318-632-4002	[redacted]	[redacted]	[redacted]	45
Process Control / QI / IC	Vidal Clay	Shift Supervisor	318-632-4193	[redacted]	[redacted]	[redacted]	45
Process Control / QI / IC	Bobby Parks	Shift Supervisor	318-632-4193	[redacted]	[redacted]	[redacted]	45
Logistics	John Swason	Maintenance Mgr	318-632-4183	[redacted]	[redacted]	[redacted]	45
Liaison Officer	Michael Rhoades	Environmental Mgr	318-632-4093	[redacted]	[redacted]	[redacted]	45
	Lyndon Johnson	Safety Mgr	318-632-4269	[redacted]	[redacted]	[redacted]	
Documentation	Michael Vaughn	Office Mgr	318-632-4100	[redacted]	[redacted]	[redacted]	45
Public Information	Lyndon Johnson	Safety Mgr	318-632-4269	[redacted]	[redacted]	[redacted]	45
Security Officer	Contact Security	(Protection Technology)	318-636-2711	[redacted]	[redacted]	[redacted]	Onsite

Qualified Individual- (QI)

FIGURE 5.1

(Page 2 of 6)

CALUMET LUBRICANTS COMPANY EMERGENCY OIL SPILL RESPONSE TEAM ROSTER

Hazwoper Technician

NAME	BUSINESS TITLE	WORK	CELL	RADIO CHANNEL	RESPONSE TIME (Min)
			(b) (6)	(b) (7)(F), (b) (3)	
Adam Bernard	Fuels Suprv	4145	[redacted]	[redacted]	45
Alyson Darbonne	Crude A Op	4101	[redacted]	[redacted]	45
Andre Carter	Fuels C Op	4090	[redacted]	[redacted]	45
Andre Elias	LOHT C Op	4219	[redacted]	[redacted]	45
Andre Britton	LOHT C Op	4219	[redacted]	[redacted]	45
Anthony Rinudao	LOHT C Op	4219	[redacted]	[redacted]	45
Antonio Robinson	Loader	4045	[redacted]	[redacted]	45
Aparicio Williams	LOHT C Op	4219	[redacted]	[redacted]	45
Archie Harrison	Loading Suprv	4045	[redacted]	[redacted]	45
Aubrey Marchand Jr.	Tankerman	4045	[redacted]	[redacted]	45
Barney Kennington	Operations Supv	4266	[redacted]	[redacted]	45
Bertrome Travis	Crude C Op	4101	[redacted]	[redacted]	45
Bert S. Scroggins	Tankerman	4045	[redacted]	[redacted]	45
Billy Meyers	Crude	4101	[redacted]	[redacted]	45
Bobby Coley	Maintenance	4172	[redacted]	[redacted]	45
Bobby J. Hall	Maintenance	4172	[redacted]	[redacted]	45
Bobby Lewis	Fuels C Op	4090	[redacted]	[redacted]	45
Bobby Parks	Shift Suprv	4193	[redacted]	[redacted]	45
Boyd Lloyd Jr.	Lab Tester	4222	[redacted]	[redacted]	45
Brandon Wagemann	Fuels C Op	4090	[redacted]	[redacted]	45
Brent S. Wallace	Crude C Op	4101	[redacted]	[redacted]	45
Carl Roppolo	Tankerman	4045	[redacted]	[redacted]	45
Carlton Mitchell	Crude B Op	4101	[redacted]	[redacted]	45
Carlos Netter	Platformer, B Op	-	[redacted]	[redacted]	45
Casey Hamiter	#4 Crude, B Op	-	[redacted]	[redacted]	45
Cecil Bullock Jr.	LOHT C Op	4219	[redacted]	[redacted]	45
Cedric Long	Crude C Op	4101	[redacted]	[redacted]	45
Charles Bradley	Lab Tester	4222	[redacted]	[redacted]	45
Charles Conly	Maintenance Suprv	4182	[redacted]	[redacted]	45
Charles W. Compton	Maintenance	4172	[redacted]	[redacted]	45
Charles Everett	Loader Asst. Gauger	4045	[redacted]	[redacted]	45
Charles Thompson	Maintenance	4172	[redacted]	[redacted]	45

FIGURE 5.1

(Page 3 of 6)

CALUMET LUBRICANTS COMPANY EMERGENCY OIL SPILL RESPONSE TEAM ROSTER

Hazwoper Technician

NAME	BUSINESS TITLE	WORK	CELL	RADIO CHANNEL	RESPONSE TIME (Min)
			(b) (6)	(b) (7)(F), (b) (3)	
Chris Booras	LOHT Supervisor	4111	[redacted]	[redacted]	45
Chris Frazier	Loader Blender	4045	[redacted]	[redacted]	45
Chris Fulco	LOHT C Op	4219	[redacted]	[redacted]	45
Chris Green	Crude A Op	4101	[redacted]	[redacted]	45
Chuck “Robert” R. Collins	LOHT C Op	4219	[redacted]	[redacted]	45
Chuck Underdown	LOHT A Op	4219	[redacted]	[redacted]	45
Clifford Martin	Tankerman	4045	[redacted]	[redacted]	45
Colby Roy	#4 Crude, Op	4101	[redacted]	[redacted]	45
Cory Allen	LOHT Op	4219	[redacted]	[redacted]	45
Crystal Foust	LOHT Op	4219	[redacted]	[redacted]	45
Daniel Garland	Tankerman	4045	[redacted]	[redacted]	45
Daniel P. Lloyd	Maintenance	4172	[redacted]	[redacted]	45
Danny Reamer	Crude C Op	4101	[redacted]	[redacted]	45
Darryl Montgomery	Loader Blender	4045	[redacted]	[redacted]	45
David W. Toothman	MEK C Op	4195	[redacted]	[redacted]	45
David W. Waggoner	MEK C Op	4195	[redacted]	[redacted]	45
Dean Garret	Loader Blender	4045	[redacted]	[redacted]	45
Derrick Abner	Fuels C Op	4090	[redacted]	[redacted]	45
Donald Daniel	Maintenance	4195	[redacted]	[redacted]	45
Doug D. Hunter	LOHT, C Op	4172	[redacted]	[redacted]	45
Ella Jones	Lab Tester	4222	[redacted]	[redacted]	45
Gary Bragg	Tankerman	4045	[redacted]	[redacted]	45
Gerald Boyum	Loading Supervisor	4124	[redacted]	[redacted]	45
Germel Rawlings	MEK C Op	4195	[redacted]	[redacted]	45
Gregory Frank	Maintenance	4172	[redacted]	[redacted]	45
Greg Sepulvado	Shift Supervisor	4193	[redacted]	[redacted]	45
Houston Pardee	Platformer, B Op	4090	[redacted]	[redacted]	45
Jacob W. Dodd	Tankerman	4045	[redacted]	[redacted]	45
James Rachal	Lab Tester	4222	[redacted]	[redacted]	45
James Singleton	Maintenance	4172	[redacted]	[redacted]	45
James White Jr.	Maintenance Suprv	4172	[redacted]	[redacted]	45
Jarred Boyum	Crude C Op	4101	[redacted]	[redacted]	45

FIGURE 5.1

(Page 4 of 6)

CALUMET LUBRICANTS COMPANY EMERGENCY OIL SPILL RESPONSE TEAM ROSTER

Hazwoper Technician

NAME	BUSINESS TITLE	WORK	CELL	RADIO CHANNEL	RESPONSE TIME (Min)
			(b) (6) [redacted]	(b) (7)(F), (b) (3) [redacted]	
Jarred Provenza	Process Engineer	4120			45
Jason Houston	Tankerman	4045			45
Jason McGuire	Maintenance	4172			45
Jeffery Batiste	Crude C Op	4101			45
Jeffery Cohen	Fuels C Op	4090			45
Jermarsey Phillips	Fuels C Op	4045			45
John Clayton	Platformer, C Op	4090			45
John Hamilton	Fuels Op	4090			45
Johnny Lewter	MEK A Op	4090			45
Johnny Paine	LOHT A Op	4195			45
Jonathan Hall	Maintenance	4172			45
Joe Harper	MEK B Op	4195			45
Ken Brown	Maintenance	4172			45
Kendall Marchand	Tankerman	4045			45
Kenny Zylicz	LOHT, A Op	4219			45
Kevin Farley	Administration	4197			45
Kevin Stephens	Maintenance	4172			45
Kevin Simpson	Maintenance	4172			45
Kyle Conly	Tankerman	4045			45
LC Lister	Maintenance	4172			45
Lee Stephens	#4 Crude, A Op	4101			45
Leon Jernigan	Loader Blender	4045			45
Louis Mayfield	#4 Crude, C Op	4101			45
Lyndon Johnson	Safety Mgr	4269			45
Mark Bissel	Maintenance	4172			45
Mark Greathouse	MEK C Op	4195			45
Melton Staples	Crude C Op	4101			45
Michael Ashby	Platformer, C Op	4090			45
Michael Hall Jr.	Maintenance Laborer	4172			45
Michal Mabry	Maintenance	4172			45
Mike Hall	Shift Supervisor	4193			45
Mike Hubbard	Loader Blender	4045			45

FIGURE 5.1

(Page 5 of 6)

CALUMET LUBRICANTS COMPANY EMERGENCY OIL SPILL RESPONSE TEAM ROSTER

Hazwoper Technician

NAME	BUSINESS TITLE	WORK	CELL	RADIO CHANNEL	RESPONSE TIME (Min)
			(b) (6)	(b) (7)(F), (b) (3)	
Mike McAnn	Crude Supervisor	4110			45
Milton Sneed	Maintenance	4172			45
Mitchell Branch	Tankerman	4095			45
Mitchell Cook	#4 Crude, A Op	4101			45
Morell Boone	Fuels A Op	4090			45
Nathan Allen	Maintenance	4172			45
O'Dean Ray	Administration	4191			45
Odysseus McGee	Tankerman	4045			45
Oscar Hamilton	Crude C Op	4101			45
Otha Gordon	Maintenance	4172			45
Paul McMillin	Maintenance	4172			45
Paul Whitton	Crude C Op	4101			45
Phillp Ambrose	Maintenance	4172			45
Randy Williams	Fuels C Op	4090			45
Reggie Jones	Fuels B Op	4090			45
Rhonda Sapp	Lap Tester	4222			45
Richard Clarkson	MEK C Op	4195			45
Richard Jones	Fuels C Op	4090			45
Richard Leblanc	Maintenance	4172			45
Richard "Tommy" Savel III	LOHT A Op	4219			45
Richard Willis	MEK Supervisor	4303			45
Robert Lester	#4 Crude, C Op	4101			45
Bob C. Waits	Maintenace	4049			45
Roderick Short	LOHT C Op	4219			45
Roderick Youngblood	LOHT B Op	4219			45
Roger Griffie	LOHT Operator	4219			45
Ron Betchel	MEK A Op	4195			45
Ruby Thomas	LOHT B Op	4219			45
Sam Fulco	Crude C Op	4101			45
Samuel Bozeman	Maintenance	4172			45
Samuel Ezernack	Maintenance	4172			45
Steve Rutledge	MEK A Op	4195			45

FIGURE 5.1

(Page 6 of 6)

CALUMET LUBRICANTS COMPANY EMERGENCY OIL SPILL RESPONSE TEAM ROSTER

Hazwoper Technician

NAME	BUSINESS TITLE	WORK	CELL	RADIO CHANNEL	RESPONSE TIME (Min)
			(b) (6)	(b) (7)(F), (b) (3)	
Steve Scott	Platformer, C Op	4090			45
Terry Sanders	Loader Blender	4045			45
Tim Davis	MEK C Op	4195			45
Timothy Johnson	Maintenance	4172			45
Timothy Nidey	Maintenance	4172			45
Todd Hall	MEK, B Op	4195			45
Tommy Woodard	Maintenacne	4172			45
Tony Hughes	MEK C Op	4195			45
Tony Statos	Crude C Op	4101			45
Travis Sonderland	Tankerman	4045			45
Troy Roberts	MEK A Op	4195			45
Tyler Manuel	Tankerman	4045			45
Vidal Clay	Shift Supervisor	4193			45
Wilbert Parker	MEK C Op	4195			45
Zack Foster	Crude B Op	4101			45
Zaleska Bryant	LOHT C Op	4219			45

318 632-4151 * Security at Gate One will make call out to home number

FIGURE 5.2
CALUMET LUBRICANTS COMPANY EMERGENCY OIL SPILL RESPONSE TEAM ROSTER TRAINING RECORD

EMERGENCY FUNCTION	NAME	TRAINING REQUIREMENTS	LAST REFRESHER COURSE DATE
Incident Command (IC) Qualified Individual (QI) Hazwoper Specialist	Tom Germany	Hazwoper 16hr IC / Refresher 8hr IC	3/23/2012
Incident Command / QI (alternate)	Kevin Farley	HazWoper 16hr IC	1/29/2009
Operation Command / QI / Hazwoper Specialist	Lyndon B. Johnson	HazWoper 16hr IC / Refresher 8hr IC	5/20/2010
Incident Command	James Kelly	HazWoper 16hr IC	12/13/2011
Operation Command / QI / Hazwoper Specialist /IC	Michael Rhoades	HazWoper 16hr IC	3/23/2012
Finance / Security /IC	Clayton Long	HazWoper Refresher 8hr IC	12/13/2011
Planning / IC	Aubrey Marchand	Hazwoper 16hr IC / Refresher 8hr IC	12/13/2011
Planning	Mitch Perdue	Hazwoper 16hr IC / Refresher 8hr IC	12/13/2011
Planning (alternate)	Dan McKibben	HazWoper Refresher 8hr IC	2/10/2009
Process Control / QI / IC	Vidal Clay	HazWoper 16hr IC	3/29/2010
Process Control / QI / IC	Bobby Parks	HazWoper 16hr IC / Refresher 8hr IC	3/23/2012
Logistics / QI / Hazwoper Tech	Ken Brown	HazWoper Refresher 8hr IC	2/10/2009
Documentation	Michael Vaughn	HazWoper Refresher 8hr IC	2/10/2009
Hazwoper Technician / IC	Barney Kennington	HazWoper Refresher 8hr IC / 24-HR	3/16/2012
Hazwoper Technician	Carl Roppolo	HazWoper Refresher 8hr IC / 24 HR	3/25/2010
Hazwoper Technician	Carlos Netter	HazWoper Refresher 8hr IC / 24 HR	4/17/2012
Hazwoper Technician	Clifford Martin	HazWoper Refresher 8hr IC / 24 HR	4/26/2012
Hazwoper Technician	Colby Roy	HazWoper Refresher 8hr IC / 24 HR	4/12/2012
Hazwoper Technician	Doug King	HazWoper Refresher 8hr IC	5/20/2010
Hazwoper Technician	Gerald Boyum	HazWoper Refresher 8hr IC / 24 HR	4/12/2012
Hazwoper Technician	Houston Pardee	HazWoper Refresher 8hr IC / 24 HR	4/17/2012
Hazwoper Technician	Jarred Provenza	HazWoper Refresher 8hr IC / 24 HR	3/16/2012
Hazwoper Technician	John Clayton	HazWoper Refresher 8hr IC	4/19/2012
Hazwoper Technician	Kendall Marchand	HazWoper Refresher 8hr IC / 24 HR	4/24/2012
Hazwoper Technician	LC Lister	HazWoper Refresher 8hr IC	8/25/2011
Hazwoper Technician	Louis Mayfield	HazWoper Refresher 8hr IC	4/12/2012
Hazwoper Technician	Lyndon Johnson	HazWoper Refresher 8hr IC	4/26/2012
Hazwoper Technician	Michael Ashby	HazWoper Refresher 8hr IC / 24 HR	4/17/2012
Hazwoper Technician /IC	Mike Hall	HazWoper Refresher 8hr IC/ 24 HR	3/23/2012
Hazwoper Technician	Michael Hall Jr.	HazWoper Refresher 8hr IC / 24 HR	3/23/2012
Hazwoper Technician	Mitchell Cook	HazWoper Refresher 8hr IC	4/12/2012
Hazwoper Technician	Odysseus McGee	HazWoper Refresher 8hr IC / 24 HR	4/24/2012
Hazwoper Technician	Robert Lester	HazWoper Refresher 8hr IC / 24 HR	4/10/2012
Hazwoper Technician	Roger Griffie	HazWoper Refresher 8hr IC / 24 HR	4/26/2012
Hazwoper Technician	Steve Scott	HazWoper Refresher 8hr IC / 24 HR	4/19/2012
Hazwoper Technician	Todd Hall	HazWoper Refresher 8hr IC	4/12/2012
Hazwoper Technician/ IC	Vidal Clay	HazWoper Refresher 8hr IC / 24 HR	3/16/2012
Hazwoper Technician	Alyson Darbonne	HazWoper Refresher 8hr IC	4/10/2012
Hazwoper Technician	Andre Carter	HazWoper Refresher 8hr IC	4/17/2012
Hazwoper Technician	Andre Elias	HazWoper Refresher 8hr IC	4/12/2012
Hazwoper Technician	Andrew Britton	HazWoper Refresher 8hr IC	4/12/2012
Hazwoper Technician	Anthony Rinuado	HazWoper Refresher 8hr IC	4/10/2012
Hazwoper Technician	Antonio Robinson	HazWoper Refresher 8hr IC	3/16/2012

FIGURE 5.2
CALUMET LUBRICANTS COMPANY EMERGENCY OIL SPILL RESPONSE TEAM ROSTER TRAINING RECORD

EMERGENCY FUNCTION	NAME	TRAINING REQUIREMENTS	LAST REFRESHER COURSE DATE
Hazwoper Technician	Aparicio Williams	HazWoper Refresher 8hr IC	4/10/2012
Hazwoper Technician	Archie Harrison	HazWoper Refresher 8hr IC	5/18/2010
Hazwoper Technician	Aubrey Marchand Jr.	HazWoper Refresher 8hr IC	3/23/2012
Hazwoper Technician	Bertrome Travis	HazWoper Refresher 8hr IC	4/19/2012
Hazwoper Technician	Bert S. Scroggins	HazWoper Refresher 8hr IC	4/26/2012
Hazwoper Technician	Billy Meyers	HazWoper Refresher 8hr IC	4/17/2012
Hazwoper Technician	Bobby Coley	HazWoper Refresher 8hr IC	8/25/2011
Hazwoper Technician	Bobby J. Hall	HazWoper Refresher 8hr IC	9/15/2011
Hazwoper Technician	Bobby Lewis	HazWoper Refresher 8hr IC	4/17/2012
Hazwoper Technician	Bobby Parks	HazWoper Refresher 8hr IC	4/24/2012
Hazwoper Technician	Brandon Wagemann	HazWoper Refresher 8hr IC	4/17/2012
Hazwoper Technician	Brent S. Wallace	HazWoper Refresher 8hr IC	4/12/2012
Hazwoper Technician	Carlton Mitchell	HazWoper Refresher 8hr IC	5/20/2010
Hazwoper Technician	Casey Hamiter	HazWoper Refresher 8hr IC	3/16/2012
Hazwoper Technician	Cecil Bullock Jr	HazWoper Refresher 8hr IC	4/24/2012
Hazwoper Technician	Cedric Long	HazWoper Refresher 8hr IC	4/12/2012
Hazwoper Technician	Charles Bradley	HazWoper Refresher 8hr IC	3/18/2010
Hazwoper Technician	Charles Conly	HazWoper Refresher 8hr IC	4/26/2012
Hazwoper Technician	Charles W.Compton	HazWoper Refresher 8hr IC	9/15/2011
Hazwoper Technician	Charles Everett	HazWoper Refresher 8hr IC	3/18/2010
Hazwoper Technician	Charles Thompson	HazWoper Refresher 8hr IC	3/25/2011
Hazwoper Technician	Chris Frazier	HazWoper Refresher 8hr IC	11/10/2010
Hazwoper Technician	Chris Fulco	HazWoper Refresher 8hr IC	4/26/2012
Hazwoper Technician	Chris Green	HazWoper Refresher 8hr IC	2/18/2009
Hazwoper Technician	Chuck Collins	HazWoper Refresher 8hr IC	4/10/2010
Hazwoper Technician	Chuck Underdown	HazWoper Refresher 8hr IC	3/11/2009
Hazwoper Technician	Cory Allen	HazWoper Refresher 8hr IC	4/10/2012
Hazwoper Technician	Crystal Foust	HazWoper Refresher 8hr IC	4/24/2012
Hazwoper Technician	Daniel Garland	HazWoper Refresher 8hr IC	4/24/2012
Hazwoper Technician	Daniel P. Lloyd	HazWoper Refresher 8hr IC	8/25/2011
Hazwoper Technician	Danny Reamer	HazWoper Refresher 8hr IC	4/19/2012
Hazwoper Technician	David W. Toothman	HazWoper Refresher 8hr IC	4/26/2012
Hazwoper Technician	David W. Waggoner	HazWoper Refresher 8hr IC	4/26/2012
Hazwoper Technician	Derrick Abner	HazWoper Refresher 8hr IC	4/17/2012
Hazwoper Technician	Donald Daniel	HazWoper Refresher 8hr IC	4/19/2012
Hazwoper Technician	Doug D. Hunter	HazWoper Refresher 8hr IC	8/25/2011
Hazwoper Technician	Gary Bragg	HazWoper Refresher 8hr IC	4/24/2012
Hazwoper Technician	Germel Rawlings	HazWoper Refresher 8hr IC	4/12/2012
Hazwoper Technician	Gregory Frank	HazWoper Refresher 8hr IC	3/29/2010
Hazwoper Technician	Greg Sepulvado	HazWoper Refresher 8hr IC	3/16/2012
Hazwoper Technician	Jacob W. Dodd	HazWoper Refresher 8hr IC	4/24/2012
Hazwoper Technician	James Singleton	HazWoper Refresher 8hr IC	9/15/2011
Hazwoper Technician	Jarred Boyum	HazWoper Refresher 8hr IC	4/12/2012
Hazwoper Technician	Jarred Provenza	HazWoper Refresher 8hr IC	3/16/2012
Hazwoper Technician	Jason Houston	HazWoper Refresher 8hr IC	4/24/2012
Hazwoper Technician	Jason McGuire	HazWoper Refresher 8hr IC	9/15/2011
Hazwoper Technician	Jeffrey Batiste	HazWoper Refresher 8hr IC	4/12/2012

FIGURE 5.2
CALUMET LUBRICANTS COMPANY EMERGENCY OIL SPILL RESPONSE TEAM ROSTER TRAINING RECORD

EMERGENCY FUNCTION	NAME	TRAINING REQUIREMENTS	LAST REFRESHER COURSE DATE
Hazwoper Technician	Jeffrey Cohen	HazWoper Refresher 8hr IC	4/24/2012
Hazwoper Technician	Jermarsey Phillips	HazWoper Refresher 8hr IC	6/29/2011
Hazwoper Technician	John Hamilton	HazWoper Refresher 8hr IC	4/17/2012
Hazwoper Technician	Johnny Lewter	HazWoper Refresher 8hr IC	4/17/2012
Hazwoper Technician	Johnny Paine	HazWoper Refresher 8hr IC	2/18/2009
Hazwoper Technician	Jonathan Hall	HazWoper Refresher 8hr IC	8/25/2011
Hazwoper Technician	Joe Harper	HazWoper Refresher 8hr IC	4/10/2012
Hazwoper Technician	Kenny Zylicz	HazWoper Refresher 8hr IC	4/12/2012
Hazwoper Technician	Kevin Farley	HazWoper Refresher 8hr IC	1/29/2009
Hazwoper Technician	Kevin Stephens	HazWoper Refresher 8hr IC	8/25/2011
Hazwoper Technician	Kevin Simpson	HazWoper Refresher 8hr IC	9/15/2011
Hazwoper Technician	Kyle Conly	HazWoper Refresher 8hr IC	4/26/2012
Hazwoper Technician	Lee Stephens	HazWoper Refresher 8hr IC	4/12/2012
Hazwoper Technician	Leon Jernigan	HazWoper Refresher 8hr IC	2/1/2010
Hazwoper Technician	Mark Greathouse	HazWoper Refresher 8hr IC	4/19/2012
Hazwoper Technician	Melton Staples	HazWoper Refresher 8hr IC	4/12/2012
Hazwoper Technician	Mike Hubbard	HazWoper Refresher 8hr IC	3/16/2012
Hazwoper Technician	Milton Sneed	HazWoper Refresher 8hr IC	8/25/2011
Hazwoper Technician	Mitchell Branch	HazWoper Refresher 8hr IC	3/16/2012
Hazwoper Technician	Morell Boone	HazWoper Refresher 8hr IC	3/11/2009
Hazwoper Technician	Nathan Allen	HazWoper Refresher 8hr IC	8/25/2011
Hazwoper Technician	Oscar Hamilton	HazWoper Refresher 8hr IC	4/19/2012
Hazwoper Technician	Otha Gordon	HazWoper Refresher 8hr IC	9/15/2011
Hazwoper Technician	Paul McMillin	HazWoper Refresher 8hr IC	3/23/2012
Hazwoper Technician	Paul Whitton	HazWoper Refresher 8hr IC	4/19/2012
Hazwoper Technician	Phillip Ambrose	HazWoper Refresher 8hr IC	9/15/2011
Hazwoper Technician	Randy Holmes	HazWoper Refresher 8hr IC	3/16/2012
Hazwoper Technician	Randy Williams	HazWoper Refresher 8hr IC	4/19/2012
Hazwoper Technician	Reggie Jones	HazWoper Refresher 8hr IC	4/24/2012
Hazwoper Technician	Richard Clarkston	HazWoper Refresher 8hr IC	4/26/2012
Hazwoper Technician	Richard Jones	HazWoper Refresher 8hr IC	4/19/2012
Hazwoper Technician	Richard Leblanc	HazWoper Refresher 8hr IC	9/15/2011
Hazwoper Technician	Richard Savel III	HazWoper Refresher 8hr IC	4/10/2012
Hazwoper Technician	Bob C. Waits	HazWoper Refresher 8hr IC	3/11/2009
Hazwoper Technician	Roderick Short	HazWoper Refresher 8hr IC	4/10/2012
Hazwoper Technician	Roderick Youngblood	HazWoper Refresher 8hr IC	4/10/2012
Hazwoper Technician	Roger Griffie	HazWoper Refresher 8hr IC	4/26/2012
Hazwoper Technician	Ron Bechtel	HazWoper Refresher 8hr IC	4/10/2012
Hazwoper Technician	Ruby Thomas	HazWoper Refresher 8hr IC	4/12/2012
Hazwoper Technician	Sam Fulco	HazWoper Refresher 8hr IC	4/12/2012
Hazwoper Technician	Samuel Bozeman	HazWoper Refresher 8hr IC	9/15/2011
Hazwoper Technician	Stanley Ezernack	HazWoper Refresher 8hr IC	9/15/2011
Hazwoper Technician	Steve Rutledge	HazWoper Refresher 8hr IC	4/19/2012
Hazwoper Technician	Terry Sanders	HazWoper Refresher 8hr IC	2/1/2010
Hazwoper Technician	Tim Davis	HazWoper Refresher 8hr IC	4/19/2012
Hazwoper Technician	Timothy Johnson	HazWoper Refresher 8hr IC	9/15/2011
Hazwoper Technician	Timothy Nidey	HazWoper Refresher 8hr IC	9/15/2011

FIGURE 5.2
CALUMET LUBRICANTS COMPANY EMERGENCY OIL SPILL RESPONSE TEAM ROSTER TRAINING RECORD

EMERGENCY FUNCTION	NAME	TRAINING REQUIREMENTS	LAST REFRESHER COURSE DATE
Hazwoper Technician	Tommy Woodard	HazWoper Refresher 8hr IC	9/15/2011
Hazwoper Technician	Tony Hughes	HazWoper Refresher 8hr IC	4/17/2012
Hazwoper Technician	Tony Statos	HazWoper Refresher 8hr IC	4/19/2012
Hazwoper Technician	Travis Sonderland	HazWoper Refresher 8hr IC	4/26/2012
Hazwoper Technician	Troy Roberts	HazWoper Refresher 8hr IC	4/12/2012
Hazwoper Technician	Tyler Manuel	HazWoper Refresher 8hr IC	4/26/2012
Hazwoper Technician	Wilbert Parker	HazWoper Refresher 8hr IC	4/10/2012
Hazwoper Technician	Zack Foster	HazWoper Refresher 8hr IC	4/10/2012
Hazwoper Technician	Zaleska Bryant	HazWoper Refresher 8hr IC	4/12/2012

6.0 EMERGENCY OPERATIONS CENTERS/STAGING AREAS

6.1 EMERGENCY OPERATIONS CENTER

During a spill event, it is important to establish and maintain a command center to facilitate:

- the creation of a tightly structured chain-of-command.
- the flow of information needed for informed and coherent decision making and planning.
- the flow of accurate and timely information to government agencies and the news media.
- centralized accounting and documentation procedures.

Key issues to be addressed at the Emergency Operations Center include:

- establishment of meeting schedules, participants, and responsibilities for reporting.
- definition of casualty control interface.
- identification of roles for interface with the public, government, and media.
- development of public relations plan, initial press statements/briefings.
- establishment of strategic objectives and response priorities.
- establishment of a communications network.
- establishment of procedure for handling questions/requests from the public.

6.1.1 Location of Emergency Operations Centers

Response Team activities may be conducted at various sites throughout the refinery (Figures 6.1 and 6.2). These primary sites and their functions are as follows:

- the main Emergency Operations Center is located in the Administrative Office's South Wing Conference Room. This location provides adequate space for work stations and multiple phone lines. There is access to a copy machine and a facsimile machine.
- the Human Resource Office will be utilized as an alternative on-site emergency operation center. Multiple phone lines are available at this location.
- the Calumet Lubricants & Waxes Packaging Plant on Hollywood Ave. will be used as an off-site emergency operation center as needed.

6.1.2 Equipment

Equipment that will be accessible at the Emergency Operations Center includes the following:

- several large conference tables
- facsimile machines

- portable radios
- overhead projectors
- copying machines
- office supplies and other materials that may be needed for clerical support
- marker board
- 35 mm camera

Reference material accessible at the command center includes the following:

- three plant maps
- one vicinity map
- one plant aerial photograph
- CSR Spill Response Plans
- CSR Emergency Procedures Manuals
- after hours vendor contact phone numbers
- phone directories for Shreveport
- plant blueprints

6.2 ACCESS/STAGING AREAS

Access/staging areas for personnel and equipment within the location boundaries of the Plan are identified on the Response Maps Appendix B. These access/staging areas should provide the following:

- direct access by foot and vehicle to the area.
- proximity to a parking area, particularly one that can be secured.
- access to public services (water, electricity, sanitary facilities, telephone service, etc.).
- proximity to populated areas.
- proximity to environmentally sensitive areas.

FIGURE 6.1

CALUMET LUBRICANTS COMPANY
EMERGENCY OPERATION CENTER LOCATIONS

FIGURE 6.2

CALUMET LUBRICANTS COMPANY
EMERGENCY OPERATION CENTER LOCATIONS
IN ADMINISTRATIVE BUILDING

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

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

D

C

B

A

6-3

D PROCESS ENGINEERING CONFERENCE ROOM

NOTE:
PENNZOIL PKG. PLANT IS OFFSITE CONTROL CENTER

EMERGENCY OPERATION CENTER LOCATIONS IN ADMINISTRATION BLDG.

3 | 2 | 01-D-52-2500

7.0 COMMUNICATIONS

7.1 LINES OF COMMUNICATION

Overall spill response and planning communications between CSR personnel and responsible\ government agencies in the Federal Regional Response Team (RRT) will occur formally between the CSR Emergency Response Manager and the Federal On-Scene Coordinator (EPA).

7.2 COMMUNICATIONS EQUIPMENT

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

[redacted]

Additionally, a number of cellular phones are available for use during a spill response as noted in Figure 7.1.

Two Shreveport Fire Department Radios are located in the CSR Safety office.

7.2.2 Telephones

Cell numbers available during a spill response are as follows:

- Plant Manager
- Product Control Manager
- Security (Main Gate)
- EHS Manager
- Safety Manager
- Maintenance Manager
- Crude Supervisor
- Lube Supervisor
- Loading Supervisor
- Fuels Supervisor

(b) (6) [redacted]

The in-plant telephone system may be inoperable during a total power failure; however, there are eight in-plant phones that can be used for incoming and outgoing calls during such a power failure.

7.2.3 Pagers

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

FIGURE 7.1

Cellular Phones

Cell numbers available during a spill response are as follows:

Location	Phone No.
➢ Plant Manager	(b) (6) [redacted]
➢ Product Control Manager	
➢ Security (Main Gate)	
➢ EHS Manager	
➢ Safety Manager	
➢ Maintenance Manager	
➢ Crude Supervisor	
➢ Lube Supervisor	
➢ Loading Supervisor	
➢ Fuels Supervisor	

8.0 RESOURCES

8.1 CALUMET LUBRICANTS COMPANY (CSR)

There is spill response equipment available at CSR that can be mobilized within one half hour of a spill incident. Figure 8.1 contains a complete list of this equipment. Fire equipment including but not limited to fire extinguishers, Scott air packs, the foam pumper, the environmental truck, and the fire engine truck are inspected at least monthly. Other types of machinery such as vacuum trucks and front end loading equipment are generally serviced quarterly by the mechanics shop.

8.2 CONTRACTORS

CSR will rely primarily upon spill clean-up contractors for manpower and equipment during a spill response. Listed below are CSR's primary contractors. Approximate times of arrival are included. See Appendix J for a complete list of equipment and copies of contracts.

Contractor	Response Time	Location	Contact #
Jones Environmental	45 Minutes	Bossier City, LA	1-877-345-4534
Anderson Pollution Control	1 Hour	Longview, TX	1-866-609-6208
SWS Environmental Services	1.5 Hours	Kilgore, TX	1-903-984-0001
TAS Environmental Services L.P	45 Minutes	Bossier City, LA	1-888-6540111

8.3 VOLUNTEERS

Calumet normally will not hire and/or train volunteers for work on a spill response incident. Instead, Calumet will refer volunteers to appropriate state and/or local agencies or organizations that are set up to handle volunteers.

8.4 OTHER RESOURCES

As spills vary in volume, proximity to sensitive environmental areas, and distance from equipment and manpower, responses will also vary. Initially, responders will utilize the resources in the immediate area. If local resources are inadequate to handle the situation, then regional resources will be mobilized. Ultimately, national and worldwide resources may be required for a major spill.

Ultimately, national and worldwide resources may be required for a major spill.

FIGURE 8.1

CALUMET LUBRICANTS COMPANY EQUIPMENT LIST AND LOCATION

Last Inspection or Equipment Test Date Ready
Inspection Frequency Daily/Weekly/Monthly
Regional Response Team (RRT) approval:

1. Skimmers/Pumps - Operational Status Ready
   A. Type 3" Homelite Trash Pump Model Year: 1995
      Number 1 Capacity 300 gal/min
      Daily Effective Recovery Rate 432,000 gallons
      Storage Location Tool Room Date Fuel Last Changed used weekly

   B. Type 42 BBL Vacuum Truck Model CTD042 Year 1987
      Daily Effective Recovery Rate 42,336 gallons
      Storage Location Truck Shop Date Fuel Last Changed used daily

   C. Type 48 BBL Vacuum Truck Model D22-D-L-PTO-B-AC32-1B-Dominator
      Year 1998
      Daily Effective Recovery Rate 48,384 gallons
      Storage Location Truck Shop Date Fuel Last Changed used daily

2. Booms - Operational Status Ready
   Type 3M Model 224/270/280 Year 1995
   Number 16/8/8 Size 3" x 24'/8" x 10'/5" x 10'
   Containment Area 40,000 Square feet
   Storage Location Warehouse

3. Chemicals Stored (Dispersants listed on EPA's NCP Product Schedule)
   Not Used

4. Dispersant Dispensing Equipment - Operational Status
   Not Used

FIGURE 8.1 (Con't)

EQUIPMENT AND LOCATION LIST			
Quantity	Type	Year Purchased	Location
A. MACHINERY, EQUIPMENT, AND VEHICLES			
2	42 BBL Vacuum Truck	1987	Maintenance Truck Shop
1	210 John Deere Backhoe	1989	Maintenance Truck Shop
1	6-Yard Dump Truck	1980	Maintenance Truck Shop
1	1845C Case Unloader	1987	Maintenance Truck Shop
2	2-Ton Winch Truck	1982	Maintenance Truck Shop
1	Borderson 6-Ton Motor Crane	Unknown	Maintenance Truck Shop
1	4-Wheel Drive All Terrain Forklift	1987	Maintenance Truck Shop
1	3" Teel Gasoline Driven Pump	Unknown	Tool Room
1	DYNA Generator	Unknown	Tool Room
1	Hazmat Truck	1978	Firehouse
1	Fire/foam Truck	1987	Firehouse
Operational Status: READY			
B. TOOLS			
10	Shovels (Flat & Round Point)	Various	Warehouse
6	Rakes	Various	Warehouse
38	Pipe Wrenches	Various	Warehouse
12	Adjustable Wrenches	Various	Warehouse
25	Squeegees	Various	Warehouse
3	Pipe Wrenches	Various	Hazmat Truck
2	Adjustable Wrenches	Various	Hazmat Truck
4	Hydrant Wrench	Various	Hazmat Truck
2	Bung Wrench	Various	Hazmat Truck
2	Short Handle Shovels	Various	Hazmat Truck
2	Long Handle Shovels	Various	Hazmat Truck
8	Decon Brushes	Various	Hazmat Truck
1	Push Broom	Various	Hazmat Truck
Operational Status: READY			
C. COMMUNICATION EQUIPMENT			
300+	Motorola Radio's	Various	Plantwide
Operational Status: READY			

D. FIRE FIGHTING AND PERSONNEL PROTECTIVE EQUIPMENT			
3	Full face respirators	Various	Warehouse
15	1/2 mask respirators	Various	Warehouse
40	Respirator cartridges (Hydrocarbons)	Various	Warehouse
50	Respirator cartridges (Asbestos)	Various	Warehouse
3	Scott air packs	Various	Warehouse
30	Scott air pack cylinders	Various	Warehouse
400	Disposable coveralls	Various	Warehouse
45 pair	Rubber boots	Various	Warehouse
100 pair	Rubber gloves	Various	Warehouse
14	Safety harness & rope	Various	Warehouse
12	20 lb. fire extinguisher	Various	Warehouse
18	30 lb. fire extinguisher	Various	Warehouse
1	Fire fighting helmet w/face shield	Various	Fire Brigade Members Locker
1	Fire fighting coat	Various	Fire Brigade Members Locker
1	Fire fighting pants	Various	Fire Brigade Members Locker
1	Leather gloves	Various	Fire Brigade Members Locker
1	Nomex hoods	Various	Fire Brigade Members Locker
1	Full face respirators	Various	Fire Brigade Members Locker
1	Two bottle air cart	Various	Firehouse
1	One bottle air cart	Various	Hazmat Truck
6	SCBA	Various	Hazmat Truck
1	SCBA bottles	Various	Hazmat Truck
4	Face mask/escape pack	Various	Hazmat Truck
50 ft.	Air line hose	Various	Hazmat Truck
1	Bunker coat	Various	Hazmat Truck
1	Fire fighting boots	Various	Hazmat Truck
1	Fire fighting helmet	Various	Hazmat Truck
65	Full body tyvek coveralls	Various	Hazmat Truck
50	Partial body tyvek coveralls	Various	Hazmat Truck
24	Full body saranex acid suit	Various	Hazmat Truck
10	Complete saranex acid suit	Various	Hazmat Truck
2-pair	Rubber boots	Various	Hazmat Truck
12-pair	Neoprene rubber gloves	Various	Hazmat Truck
36-pair	Sol-vex gloves	Various	Hazmat Truck
300-pair	Lab gloves	Various	Hazmat Truck
3-pair	Cotton gloves	Various	Hazmat Truck
16/8/8	Booms (12 gal. oil/roll)	Various	Trailer-Waste Water Ponds
125 lbs.	Magic Sorb Oil Absorbent (0.1 gal./lb. of oil sorbent)	Various	Warehouse
5-10 rolls, 38" x 144"	3M Type 10 Roll Absorbent (84 gallons oil/roll)	Various	Warehouse Annex
600 pads	3M Type 156 Oil Absorbent Pads (45 gallons oil/100 pads	Various	Warehouse Annex
Operational Status: READY			

9.0 HAZARD EVALUATION/SPILL MOVEMENT ESTIMATES

9.1 HAZARD EVALUATION

The Calumet Shreveport Refinery has been extensively investigated for subsurface conditions. These investigations have resulted in the general conclusion that the refinery is situated on approximately 60 feet of clay, interbedded with sand seams, that is on top of the Wilcox Sands. These soils are generally considered adequately stable for the tanks and process units that comprise the refinery, considering the engineered foundations, which are used.
Earthquakes are a potential risk for all states, but the risk of earthquakes in Louisiana is relatively low, which results in a low potential for release associated with earthquake releases at the Shreveport Refinery.

A higher risk from spills associated with natural disaster would be Hurricane and other weather-related equipment damage and failures. Weather-related events can have significant spill potential. The risk for releases associated with these events will vary with the frequency and intensity of these weather events, which is not very predictable.

This section addresses the evaluation of the potential for petroleum-based product releases, for assisting in oil spill planning purposes, for reducing the severity of oil spill impacts, and for facilitating operator identification and correction of potential oil release sources.

The hazard evaluation, as defined by the EPA in the July 1, 1994 Final Rule, requires a list of the petroleum and hazardous material storage tanks, surface impoundments, related information on technical specifications, loading and unloading operations, day-to-day operation, secondary containment volumes, and normal daily throughout for the CSR that could potentially release oil to the environment.

CSR facilities which are considered potential spill sources include the storage tanks, process areas and transfer/loading/unloading facilities.

9.1.1 Hazard Identification – Tanks

Calumet operates 132 bulk storage tanks (see Figure 1.3 for the list of tanks, capacity, and content). The tanks range in size from (b) (7)(F), (b) (3) [redacted]. The tanks contain crude oil, intermediate refined products, and finished products including gasoline, diesel, lubricating oil, asphalt, and other refined products to meet customer and market demands. All tanks are above ground, constructed of steel, and fabricated by welding, bolting, or riveting. Due to the age of the refinery, there are some tanks over 50 years old, which results in an increased risk for spills from the older tanks. Calumet maintains an integrity-testing program, consistent with API 653, to monitor and repair the tanks as necessary, but due to the age of some tanks, there is an increased risk of tank failure due to seam failure and external corrosion. In addition, there is a potential risk of failure of piping components associated with the tanks. Failure of these components may be the result of materials failure, packing failures, or accidents that result in damage to the piping and components. Another type of failure is tank overfill. As a normal part of daily operations, tanks are filled and emptied, manually and automatically. All transfers

are monitored and level indicators are used and monitored from control rooms. Calumet tests and maintains level indicators consistent with industry standard, but there is a potential for failure of level indicators that could result in tank overfills.

To reduce the risk of releases associated with tanks, all tanks are provided with secondary containment. Secondary containment for bulk storage tanks was originally designed and constructed to provide 110% containment of the largest tank plus freeboard for precipitation. Calumet is currently evaluating existing containment for the standard of the largest tank plus sufficient freeboard for precipitation (24-hour/25-year storm event). That is an ongoing project (see documentation).

Figure 1.3 lists the tanks, which are identified as potential spill hazards. All of the tanks listed in Figure 1.3 are above ground tanks. Secondary containment is provided for all storage tanks. The volume of secondary containment is greater than or equal to 110 percent of the largest tank in the secondary containment area.

9.1.2 Hazard Identification - Surface Impoundments

All of the surface impoundments at the CSR are designed to handle process wastewater and stormwater and do not contain significant concentrations of petroleum products. Consequently, the impoundments are not considered to be a potential spill source.

9.1.3 Hazard Identification - Facility Transfers

This section identifies the location where transfers occur, and the material transferred. Total plant throughput is currently at 65,000 BPD. As described in Section 9.1.1, there are many internal oil transfer locations within the refinery from tank to process unit, within process units, from process units to tanks, and from tanks to tanks. All of these transfers are monitored from control rooms. There is a risk associated with piping and component failure that may include flange leaks, valve leaks, component failures, and accidental damage. Calumet maintains a component monitoring programs that requires a regular evaluation of potential leaks as well as regular visual inspection.

Calumet also transfers crude oil and refined products when products are received and shipped. Being that the refinery throughput is 65,000 BPD, there is an average transfer of 65,000 BBL received daily and an average transfer of 65,000 BPD shipped daily. Calumet receives product via tanker truck at the North Loading Rack and the Tullos Crude Rack. Calumet received product via rail car at the East Train Rack. Calumet also received crude oil via pipeline from the Brown Station Pipeline. Calumet ships product via truck at the North Loading Rack and the East Loading Rack.

Potential releases during loading and unloading operations may result from transfer hose failure, improper operation of transfer equipment, human error in vehicle operation, and overfills. Each loading and unloading area is provided with secondary containment via immediate containment in the transfer area or by diversionary quick drains to detention areas. Due to the frequent and daily operation of each of these loading areas, the potential for a release is higher than with automated processes. Human error and equipment failure are the most likely causes of a release from these loading and unloading operations.

A summarized table of each oil transfer location is provided below:

Location	Products Handled	Average Received (BPD)	Average Shipped (BPD)	Secondary Containment
Plains Pipeline	Crude Oil	21K	21K	Dike Walls Over pressure Tank
TEPPCO Pipeline	Gasoline Diesel Kerosene Jet Fuel	20K	20K	Dike Walls only
North Loading Rack	Gasoline Diesel Kerosene Jet Fuel	All Produced	8K	Diversion and quick drain system to Separators
East Train Rack	Naphthenic Base Oil Paraffinic Base Oil Waxes	10K	10K	Diversion and quick drain system to East Sump Separator, T-79
East Loading Rack	Naphthenic Base Oil Paraffinic Base Oil Waxes Asphalt Resid	10K	10K	Diversion and quick drain system to East Sump Separator, T-79
West Unloading	Crude Oil	4K	4K	Diversion and quick drain system to Separators
Brown Station Pipeline	Crude Oil	14K	14K	Dike walls only

9.1.4 Day-to-Day Operations

The Calumet Lubricants Company, Shreveport Refinery is an oil refinery which processes crude oil by use of distillation, reforming, hydrotreating, hydrocracking, hydrogenation, solvent extraction, hydrofinishing, propane deasphalting, dewaxing, desulphurization and treating process equipment to produce propane, butane, diesel fuel, fuel oil, lubricating oil, wax, lubestocks, and asphalt. An amine-scrubbing unit removes H_2S from the fuel gas system and a Claus Sulfur Recovery Plant converts the recovered H_2S into molten sulfur for sale.

Feedstock and finished products are stored in pressure tanks, floating roof tanks, cone roof tanks and gas blanketed tanks. The feedstock is received by pipeline, trailer truck and rail cars. The finished products are shipped by pipeline, truck and train. The feedstock and finished products are stored in internal and external floating roof tanks and fixed roof storage tanks. A complete list of storage tanks, capacities and products can be found in Figure 1.3.

CSR is engaged in the production of paraffinic lubes, fully refined petroleum waxes, napthenic lube oils and associated fuel products. CSR has a maximum unit throughput capacity of approximately 65,000 barrels per day.

Concrete stormwater drainage ditches run along the south and east sides of the refinery (outside of refinery property). These ditches are owned by the city of Shreveport. Water in both ditches, along with CSR's effluent wastewater, make up the headwaters of Brush Bayou. There is also a 52-inch storm drain, that belongs to the city, running through the refinery. This drain ties into the concrete ditches at the refinery wastewater outfall.

9.2 SITE DRAINAGE

Process Wastewater System

There are five (5) in-ground ENQUIP type oil-water separators at the facility. The north separator (600 gpm) receives process water from the Platformers, #4 Crude Vacuum unit, both Sulfur Recovery units and the northwest unloading racks. The aboveground RCCU sewer sump (600 gpm) receives process water from the Penex, Purge-water treating and RCCU (out of service) processing units. The southeast and southwest separators (both 600 gpm) receive process water from other processing units, with the exception of the LOHT, MEK, WHF and Hydrogen units. These separators discharge into the Grit Separator (1500 gpm). The water is then pumped from a 10' x 10' x 20' sump into the wastewater equalization tank (T-79 or T-2001). The East Sump separator (600 gpm) receives flow from the LOHT, MEK, WHF and both Hydrogen units. This process wastewater stream is pumped from a 10' x 10' x 20' sump (Lift Station #209) directly to the wastewater equalization tank (T-79 or T-2001). An additional sump, Lift station 211, pumps wastewater from the east dock railcar unloading area into the east sump separator. This sump is approximately 5' x 5' x 15' with a maximum flow of 250 gpm. All separators are equipped with gate-type isolation valves, one on the influent side and one on the effluent side.

There are two 42" gate valves in the concrete ditch at outfall 001. These valves are normally in the open position. These can be manually closed to prevent an oil spill from leaving the refinery and/or stop the flow through Brush Bayou in the event of an off-site spill.

Storm water System

Runoff from the northeast portion of the refinery is pumped from Lift station #106 via two 18" pipes. There are three 50HP electric motor pumps and two emergency 25HP diesel pumps that are utilized to pump the storm water into the north storm water holding pond. The sump is approximately 20' x 20' x 15'. Storm water from refinery ditches are routed to an in-ground storm water separator (1500 gpm). In addition there is a 42" Motor Operated Valve (MOV) at junction box 93 located north of the grit separator utilized to divert storm water to the in ground separators. There are two 48" MOV's located at the south end of the storm water pond system. These are normally in a closed position and are opened only when conditions dictate.

9.2.1 Drainage From Diked Storage and Transfer Areas

Drains are always kept closed when not in use. Any accumulated water is inspected and skimmed if necessary. The dike drain is then opened and the area allowed to drain to the Grit Separator and the dike drain closed when the dike is empty. The status of open dike drains is documented.

Potential spills from oil storage and transfer areas would follow the same routes as stormwater. It is anticipated that small spills would be captured by the wastewater system prior to discharge. Drainage diagrams are included as Figures 9.1 and 9.4. Fire fighting water sources are shown in Figure 9.5. Finally, the location of electrical equipment that might contain oil is shown in Figure 9.6.

9.2.2 Drainage From Undiked Areas

Elevations within the plant grounds are such that drainage from undiked areas goes into a system of earthen stormwater drainage ditches. The runoff entering these ditches flows into the process sewer system or the stormwater surge area (holding ponds). That portion of the runoff that runs to the southeast area of the plant is pumped via a lift station to the North Holding Pond.

Stormwater and tank dike stormwater that enters the earthen east/west ditch is diverted to two underground separators during rain events. The separators discharge water to two earthen holding ponds, North and South Holding Ponds (approximately 5.0 million gallons of storage capacity). Oil from the separators is pumped into the plant oil recovery system. The material in the North Holding Pond can be pumped to the Aeration Ponds or Grit Separator, while the material in the South Holding Pond flows under a weir, through a measurement flume (Outfall 007), and enters the concrete effluent ditch downstream of Outfall 001.

The stormwater holding ponds are equipped with isolation valves between the north and south holding ponds, and overflow lines to the first aeration pond. The overflow lines are gravity lines below the surface of the holding pond water level. This prevents floating oil from entering the first aeration pond while preventing the ponds from overflowing.

9.2.3 Drainage from Curbed Process Areas

Process wastewater and stormwater runoff from the curbed areas of the Resid Cat Cracker (RCC), Butamer, and Alkylation units are routed to above ground oil/water separator systems where free oil is removed from the wastewater prior to pumping to surge Tanks 79 or 2001.

Process area runoff for all process units except the residual catalytic cracker, butamer and alkylation units is carried through underground concrete lines to oil/water separators where most of the oil is removed and pumped to the slop oil recovery system. As this runoff moves from the underground oil/water separators, it goes through a concrete surface-level Grit Separator that separates residual oil and solids from the liquid. (See Figure 9.4)

The water is then pumped to either surge Tank 79 or surge Tank 2001 where any oil that might have carried through may be skimmed. The wastewater is then pumped to the inlet of the wastewater treatment plant, where it goes through neutralization, dissolved gas floatation, cooling, biological treatment, and clarification. The treated effluent exits the wastewater treatment plant into the northwest side of the 2.11-acre earthen Settling Pond (Final Pond) that has approximately 4.13 million gallons of storage capacity. The water exits the Final Pond under an oil-skimming weir and through a water measurement flume (Outfall 001), then leaves the plant grounds through the concrete-bottomed effluent ditch. Plant effluents discharged into navigable waters are continuously monitored and observed frequently (daily, as a minimum) for indication of possible upsets which may cause an oil spill event.

Analyses of the treatment pond effluent are conducted twice a week for biochemical oxygen demand, chemical oxygen demand, oil and grease, and total suspended solids. Tests for ammonia, phenols, sulfate, and sulfide are made weekly. A continuous recording device monitors the pH, temperature, and flow.

The aeration tank system is available for standby use, if needed. The wastewater is pumped from either surge Tank 79 or Tank 2001 into an earthen Aeration Tank for treatment. The wastewater is then sent to the earthen No. 1 Aeration Pond (approximately 1.35 million gallons of storage capacity) for biological treatment. From the weir of the No. 1 Aeration Pond, the water goes to the, earthen “U-shaped” No. 2 Aeration Pond (approximately 2.82 million gallons of storage capacity), then to the Final Pond.

9.2.4 Drainage from the remote area of the Tank Farm

A small plant area in the southwest corner of the plant grounds is outside the drainage system described above. Each of the two tanks in this area has a closed oily water sewer sump and pump, as well as its own dike and drain pipe equipped with a grade valve. The area around the tank dikes has two intermittent discharge points for which the valves are normally closed. When sufficient water has collected, the volume is estimated and recorded, and the valves are opened

for release into earthen drainage ditches. Representative samples are caught and analyzed for total organic carbon and oil/grease. The pH is measured and recorded while the dike is being emptied. After release, the affected valve is closed.

9.3 OIL MOVEMENT

Immediate actions after a spill can minimize potential impact and damage because the spill will move with time and result in potential impact over a greater area. Oil moves across the surface of the water as a result of wind, current and other hydraulic factors, therefore, it is important to have knowledge of currents, prevailing winds, and other factors, which will permit the prediction of how and where a spill will move.

9.4 SITE CONDITIONS

Weather patterns in the area include:

- Wind speeds average 8-12 miles per hour (mph), with winds of 20 mph or greater occurring infrequently. The prevailing wind direction is from the south. The site is infrequently subject to tornado and hurricane warnings during the spring, summer, and fall months. The site is not subject to natural disasters such as earthquakes.

- Precipitation averages 3-4 inches per month with hail and infrequent snowfall occurring mainly December through March.

- The winter months are normally mild with cold spells of generally short duration. Freezing temperatures are recorded on an average of 34 days a year.

- The summer months typically are warm and humid. Temperatures exceed 95°F about 45 days a year. Late afternoon humidity rarely drops below 55 percent.

Figure 9.2 shows average temperature and precipitation in the Shreveport area.

9.5 GEOGRAPHIC BOUNDARIES

The location boundaries established for the PQS are areas that a spill could reach in 27 hours traveling downstream from both the facility and the canning plant. The Environmental Response Maps in Appendix B highlight sensitive areas within the planning distance that oil may be expected to impact during a spill.

9.6 TRAJECTORY ANALYSIS

Spills move with the wind at approximately 3 to 4 percent of the wind velocity.

When wind velocity is low or wind is absent, the spill will tend to move with the current at about the same velocity and in the same direction as the current.

When the wind is blowing, the slick will be affected by both water and wind currents, and the movement of the spill will be a function of both forces.

When the wind direction is opposite to the current, the wind may reduce or possibly reverse the oil spill velocity at the surface.

Although a computer model may be used to estimate spill movements, aerial surveillance provides the most effective means of determining spill size, location, and movement. Frequent helicopter and/or fixed wing aircraft overflights should be utilized during a spill response effort.

9.7 DISCHARGE SCENARIOS

Immediate Action Summary

1. Determine the source of the discharge and stop the product flow by quickly securing pumps, close valves, or other action to stop release.

↓

2. Warn personnel; enforce safety and security measures

↓

3. Eliminate all sources of ignition.

↓

4. Contact his immediate supervisor or the Emergency Coordinator to report the release.

↓

5. Initiate containment; confine the discharge to the smallest possible area.

The following sections describe the potential causes for the three-tiered spill response-planning volumes and identify the response resources necessary to respond to each spill scenario. Based on information provided in this section of the FRP and Section 1, the probability of an oil spill due to failures or chain reactions occurring in the future at the site is not high.

9.7.1 Small Discharge

Although a small discharge scenario is not likely to occur as the result of a total failure of a tank, there may be circumstances where tank overfill, partial seam failure or other types of tank failure could result in a release classified as a small discharge scenario. Due to the age of the refinery, there are some tanks and equipment over 50 years old, which results in an increased risk for spills from the older tanks. Calumet maintains an integrity-testing program, consistent with API 653, to monitor and repair the tanks as necessary, but due to the age of some tanks, there is an increased risk of tank failure due to seam failure and external corrosion.

Small discharges are anticipated to be contained within the refinery, but it is possible that in the event of very heavy precipitation that stormwater discharges could transport an oil spill into the West Canal Boulevard Drainage ditch, which is a stormwater ditch maintained by the City of Shreveport. This canal discharges to Brushy Bayou about 16000 feet south of the refinery. Due to the linear distance and the size of the spill being evaluated, it is not considered likely that a small discharge scenario would result in impacts to Brushy Bayou. Fish and wildlife sensitive environments are not anticipated to be impacted by a small discharge scenario release. Other sensitive environments adjacent to the West Canal Boulevard Drainage Ditch include schools, homes, and businesses, which could be impacted by a small discharge scenario due to evacuation or response actions. Due to the presence of highly flammable hydrocarbons and fuels at the refinery, a small discharge scenario, although unlikely, could discharge from the refinery and cause a fire, which could result in a chain reaction or failures of other equipment at the refinery or downstream of the refinery.

The small discharge (<2,100 gallons or 50 bbls) scenario is a pump seal failure or a small spill of materials inside the facility (such as a tank runover). The types of materials that could potentially be spilled in a small discharge scenario include the materials listed in sections 1.0 (Figure 1.3), and 9.1.3 in the FRP. No impact on the environment is anticipated from such a

spill, as these areas of the refinery are diked or curbed and paved to contain or direct a spill to the oil/water separators. It is anticipated that spill response materials maintained onsite would be adequate to contain and clean up a small discharge. In the event that the spill is not contained in the immediate area, spilled materials would be separated by the oil/water separator and disposed of or recycled properly.

9.7.2 Medium Discharge

Although a medium discharge scenario is not likely to occur as the result of a total failure of a tank, there may be circumstances where partial seam failure or other types of tank failure could result in a release classified as a small discharge scenario. Due to the age of the refinery, there are some tanks and equipment over 50 years old, which results in an increased risk for spills from the older tanks. Calumet maintains an integrity-testing program, consistent with API 653, to monitor and repair the tanks as necessary, but due to the age of some tanks, there is an increased risk of tank failure due to seam failure and external corrosion.
Medium discharges are anticipated to be contained within the refinery in most cases, but it is possible that in the event of very heavy precipitation that stormwater discharges could transport an oil spill from a tank overfill or loading release into the West Canal Boulevard Drainage ditch, which is a stormwater ditch maintained by the City of Shreveport. This canal discharges to Brushy Bayou about 16000 feet south of the refinery. Brush Bayou then travels about 40,000 linear feet where it discharges to Wallace Lake. Due to the linear distance and the size of the spill being evaluated, it is not considered likely that a medium discharge scenario would result in impacts to Wallace Lake, but it is possible that during heavy precipitation and high velocity flows in the West Canal Boulevard Ditch, that released oil could reach Brushy Bayou. Fish and wildlife sensitive environments are not located in West Canaly Boulevard Drainage Ditch. Sensitive environments adjacent to the West Canal Boulevard Drainage Ditch include schools, homes, and businesses, which could be impacted by a small discharge scenario due to evacuation or response actions. Sensitive environments in and adjacent to Brushy Bayou include fish and wildlife habitat as well as businesses, a church, and populated areas. Due to the presence of highly flammable hydrocarbons and fuels at the refinery, a medium discharge scenario, although unlikely, could discharge from the refinery and cause a fire, which could result in a chain reaction or failures of other equipment at the refinery or downstream of the refinery.

The medium discharge (<36,000 gallons or 857 bbls) scenario would be a spill from one of the loading/unloading areas or a large tank overfills. The types of materials that could potentially be spilled in a small discharge scenario include the materials listed in sections 1.0 (Figure 1.3), and 9.1.3 in the FRP. The majority of vehicles loaded or unloaded are approximately 5,400 gallons. The medium discharge scenario would be a failure of one of these vehicles, which would release the entire contents of the tank. The loading/unloading areas are generally concrete or blacktop areas whereas tanks are located in earthen-diked areas that are not concrete. Most of the loading/unloading areas are new and provide adequate secondary containment or diversion structures to direct the spill to a containment system. This secondary containment or diversion structure, would provide the opportunity for CSR personnel to utilize on-site equipment to clean up the spilled material which would then be disposed of or recycled properly. In the event that the spill is not adequately contained in the immediate area, it is anticipated that the relatively small volume of the spill and likelihood that the spill would be immediately identified would allow CSR personnel to contain the spill prior to discharge from the facility and to clean up the spilled material. In the event CSR personnel could not clean up the spill, response contractors would be activated.

9.7.3 Worst Case Discharge

A worst case discharge would only occur as the result of a total failure of a tank Due to the age of the refinery, there are some tanks and equipment over 50 years old, which results in an increased risk for spills from the older tanks. Calumet maintains an integrity testing program, consistent with API 653, to monitor and repair the tanks as necessary, but due to the age of some tanks, there is an increased risk of tank failure.

Worst case discharges are anticipated to immediately impact offsite environments. The impacts would be increased in the event of adverse weather conditions such as heavy precipitation or heavy precipitation just preceding a worst case discharge scenario. A worst case discharge would immediately enter the West Canal Boulevard Drainage Ditch. This canal discharges to Brushy Bayou about 16000 feet south of the refinery. Brush Bayou then travels about 40,000 linear feet where it discharges to Wallace Lake. Due to the linear distance and the size of the spill being evaluated, it is very possible that a worst case discharge during adverse weather conditions would result in impacts to Wallace Lake. Fish and wildlife sensitive environments are not located in West Canal Boulevard Drainage Ditch. Sensitive environments adjacent to the West Canal Boulevard Drainage Ditch include schools, homes, and businesses, which could be impacted by a small discharge scenario due to evacuation or response actions. Sensitive environments in and adjacent to Brushy Bayou include fish and wildlife habitat as well as businesses, a church, and populated areas. Sensitive environments in Wallace Lake include fish and wildlife habitat, wetland areas, boat launches, business on the lakeshore and parks. Due to the presence of highly flammable hydrocarbons and fuels at the refinery, a worst case discharge scenario could discharge from the refinery and cause a fire, which could result in a chain reaction or failures of other equipment at the refinery or downstream of the refinery.

And

For recovery of oil and water associated with the WCD spill, as well as for the small and medium spills, Calumet will utilize existing tankage to contain recovered oil and water (b) (7)(F), (b) (3) [redacted] for storage. It is anticipated that these tanks would be used to allow for separation of water and oil, with tank water draws being treated in existing facility oil water separators to remove residual oil.

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

[redacted]

All tanks are maintained, inspected, and tested in accordance with American Petroleum Institute (API) Standards. Assuming failure of the secondary containment system for Tank 199, it is anticipated this material would discharge from the immediate area of the tank onto the ground and would discharge from the refinery at a point along the southern property line, which is designated as Outfall 008. The WCD would traverse the land through surface and subsurface municipal sewers and enter the West Canal Boulevard drainage ditch, which would convey the

WCD to a navigable waterway, Brush Bayou. Additionally, the portion of oil on the surface of the wastewater stored in 79 and 2001 tanks could potentially discharge into the surface pond area and leave the plant through Outfall 001 located at the southern portion of the plant. Outfall 001 enters a series of stormwater ditches and eventually enters the West Canal Boulevard drainage ditch, which would convey the material to a navigable waterway, Brush Bayou. Although not likely, the contents of Tank 72 could also leave the plant at Outfall 001 eventually making its way to Brush Bayou.

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

[redacted]

Tank 175 was constructed in 1981 and has been maintained, inspected, and tested in accordance with API Standards. Assuming failure of the secondary containment system for Tank 199, it is anticipated this material would discharge from the immediate area of the tank onto the ground and would discharge from the refinery at a point along the southern property line, which is designated as Outfall 008. The WCD would traverse the land through surface and subsurface municipal sewers and enter the West Canal Boulevard drainage ditch, which would convey the WCD to a navigable waterway, Brush Bayou.

Worst Case Discharge Planning Volume calculations and Worst Case Discharge Worksheets are shown in Figure 9.3. A table showing material specific gravities and total storage of oil groups is also shown in Figure 9.3.

After calculating and evaluating the WCD for each Oil Group, the final planning volumes were based on the Group 3 oil since this WCD scenario represented the worst case and required the largest cleanup capacities.

9.7.4 Equipment Needs

To ensure responders are adequately prepared to implement response actions, practice drills will follow content and frequency of the triennial cycle recommended under the PREP Guidelines.

CSR maintains equipment capable of controlling releases that do not discharge from the refinery. If the WCD does discharge from the refinery, it is anticipated that response contractors would be activated to respond to the spill. All of the available personnel listed in the response personnel list would be activated to respond to a WCD which discharges from the refinery as appropriate. In the event of the WCD discharging from the refinery, immediate efforts would be made to place booms in downstream locations to prevent the flow of the WCD from reaching locations farther downstream. This would include placement of booms, as necessary, in the West Canal Boulevard drainage ditch, Brush Bayou, Wallace Lake, Wallace Bayou and Bayou Pierre, or any other drainage structures necessary to contain the flow of the WCD.

As shown by the equipment lists, contracts, on-water recovery capabilities (all shown in Appendix J), response times, and worst case discharge calculations (Figure 9.3), CSR exceeds the Tiered Response Scenario requirements. Jones Environmental, TAS Environmental, Anderson Pollution Control, and Eagle SWS are under contract to Calumet and can respond with the necessary equipment and personnel to facilitate and maintain cleanup of the on-water and shoreline deposits of the worst case discharge. Response times for the contractors are:

Contractor	Response Time
Jones Environmental Bossier City, LA	45 Minutes
Anderson Pollution Control Longview, TX	1 Hour
SWS Environmental Services Kilgore, TX	1.5 Hours
TAS Environmental Services L.P Bossier City, LA	45 Minutes

9.8 RESPONSE ANALYSIS/PLANNING VOLUMES

Based on oil group, location, emulsification, and response time constraints, planning volumes have been calculated. The table below shows the planning volumes under EPA guidelines for Oil Group III based on CSR's location in a Rivers and Canals area.

PLANNING VOLUMES FOR CALUMET LUBRICANTS SHREVEPORT REFINERY			
GROUP OIL: III	**WORST CASE DISCHARGE:** (b) (7)(F), [redacted] **GEOGRAPHIC AREA: Rivers and Canals** **(3 day sustainability)**		
Spill Scenario	**Planning Volume**	**Response Time**	**Regulatory Caps**
Small	50 bbls	1 hour	50 bbls
Medium	857 bbls	1 hour	857 bbls
On-Shore	(b) (7)(F), (b) (3) [redacted]		
Tier I (WCD)			
Tier II (WCD)			
Tier III (WCD)			

Ten Inch Oil Pipeline (182) Worst Case Discharge
(DOT/RSPA Regulated Facility)

The worst case discharge in adverse conditions for the 10 inch pipeline is a discharge of approximately (b) (7) barrels. There is no breakout tankage along the pipeline. (b) (3), (b) (7)(F) [redacted] However, the worst case discharge is based on the assumption that the low pressure shutdown fails.

Meters are installed at both ends of the pipeline for volume comparisons. The meter tickets at both ends are pulled and compared every 24 hours.

The formula used was based on the regulations issued in the DOT RSPA Response Plans for Onshore Pipelines and included the following factors:

Worst Case Discharge for 10" Pipeline

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

[redacted]

Six Inch Canning Plant Pipeline Worst Case Discharge

The worst case discharge in adverse conditions for either of the two 6 inch canning plant pipelines is a discharge of (b) (7) (F) barrels. There is no breakout tankage along the pipeline. The worst case discharge is based on an assumption that a leak is detected by Production Department personnel at the canning plant during daily inventory reconciliations of blend product transfers from CSR.

Worst Case Discharge for 6" Pipeline

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

[redacted]

FIGURE 9.1

DRAINAGE DIAGRAM

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

[redacted]

Refinery Drainage Plan

Surface Flow ⟶

FIGURE 9.2

TEMPERATURE AND PRECIPITATION DATA
SHREVEPORT AREA

MONTH	TEMPERATURE (FAHRENHEIT)	PRECIPITATION (INCHES)
January	51.7	5.84
February	51.6	7.19
March	56.1	4.28
April	63.5	0.79
May	77.3	0.15
June	84.9	1.35
July	88.5	2.84
August	84.6	3.83
September	81.7	7.79
October	68.5	5.72
November	58.0	4.58
December	49.3	6.24
Annual	68.0 (Avg.)	50.6 (total)

FIGURE 9.3

WORST CASE DISCHARGE PLANNING VOLUME CALCULATIONS

GROUP I

	GALLONS	BARRELS
VOLUME OF LARGEST STORAGE TANK AT FACILITY*	(b) (7)(F), (b) (3) [redacted]	
PLUS 10% OF THAT VOLUME (PRECIPITATION CONCENTRATION)	[redacted]	
TOTAL VOLUME OF ALL TANKS WITHOUT SECONDARY CONTAINMENT	[redacted]	
TOTAL WORST CASE DISCHARGE	[redacted]	

GROUP II and III

	GALLONS	BARRELS
VOLUME OF LARGEST STORAGE TANK AT FACILITY*	(b) (7)(F), (b) (3) [redacted]	
PLUS 10% OF THAT VOLUME (PRECIPITATION CONCENTRATION)	[redacted]	
TOTAL VOLUME OF ALL TANKS WITHOUT SECONDARY CONTAINMENT	[redacted]	
TOTAL WORST CASE DISCHARGE	[redacted]	

* No tanks are manifolded such that multiple tanks function as one storage unit.

MATERIAL SPECIFIC GRAVITIES		
OIL GROUP	**TOTAL STORAGE***	
	GALLONS	**BARRELS**
GROUP 1	(b) (7)(F), (b) (3) [redacted]	
GROUP 2	[redacted]	
GROUP 3	[redacted]	
GROUP 4	[redacted]	
GROUP 5	[redacted]	
TOTAL	[redacted]	

* Maximum amounts on hand at any one time.

Attachment E-1 -- Worksheet to Plan Volume of Response Resources for Worst Case Discharge

GROUP I

Part I **Background information**

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

Step (A) Calculate Worst Case Discharge in barrels

Step (B) Oil Group

Step (C) Operating Area (choose one)

	Near shore/Inland Great Lakes	X	or Rivers and Canals

Step (D) Percentages of Oil

Percentage Lost to Natural Dissipation	Percentage Recovered Floating Oil	Percent Oil Onshore
80	10	10
(D1)	(D2)	(D3)

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

Step (E1) On-Water Oil Recovery $\frac{\text{Step (D2) x Step (A)}}{100}$

Step (E2) Shoreline Recovery $\frac{\text{Step (D3) x Step (A)}}{100}$

Step (F) Emulsification Factor

Step (G) On-Water Oil Recovery Resource Mobilization Factor

Tier 1	Tier 2	Tier 3

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

{1} A facility that handles, stores, or transports multiple groups of oil must do separate calculations for each oil group on site except for those oil groups that constitute 10 percent or less volume of the total oil storage capacity at the facility. For purposes of this calculation, the volumes of all products in an oil group must be summed to determine the percentage of the facility's total oil storage capacity.
(GROUP I)

Attachment E-1 -- Worksheet to Plan Volume of Response Resources for Worst Case Discharge

Part II <u>On-Water Oil Recovery Capacity</u> (barrels/day)

Tier 1	Tier 2	Tier 3
(b) (7)(F), (b) (3) [redacted]		

Part III <u>Shoreline Cleanup Volume</u> (barrels). (b) (7)(F), (b) (3) [redacted]

<u>Part IV On-Water Response Capacity By Operating Area</u>
(Amount needed to be contracted for in barrels/day)

Tier 1	Tier 2	Tier 3
(b) (7)(F), (b) (3) [redacted]		

Part V <u>On-Water Amount Needed to be Identified, but not Contracted for in Advance</u> (barrels/day)

Tier 1	Tier 2	Tier 3
(b) (7)(F), (b) (3) [redacted]		

NOTE: To convert from barrels/day to gallons/day, multiply the quantities in Parts II through V by (b) (7)(F), (b) (3) [redacted]

[59 FR 34070, July 1, 1994, as amended at 59 FR 49005, Sept. 26, 1994]

Attachment E-1 -- Worksheet to Plan Volume of Response Resources for Worst Case Discharge

GROUP II

Part I Background information

Step (A) Calculate Worst Case Discharge in barrels

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

Step (B) Oil Group

Step (C) Operating Area (choose one)

	Nearshore/Inland Great Lakes	or Rivers and Canals
		X

Step (D) Percentages of Oil

Percentage Lost to Natural Dissipation	Percentage Recovered Floating Oil	Percent Oil Onshore
40	15	45
(D1)	(D2)	(D3)

Step (E1) On-Water Oil Recovery $\frac{\text{Step (D2) x Step (A)}}{100}$

Step (E2) Shoreline Recovery $\frac{\text{Step (D3) x Step (A)}}{100}$

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

Step (F) Emulsification Factor

Step (G) On-Water Oil Recovery Resource Mobilization Factor

Tier 1	Tier 2	Tier 3
(b) (7)(F), (b) (3) [redacted]		

{1} A facility that handles, stores, or transports multiple groups of oil must do separate calculations for each oil group on site except for those oil groups that constitute 10 percent or less volume of the total oil storage capacity at the facility. For purposes of this calculation, the volumes of all products in an oil group must be summed to determine the percentage of the facility's total oil storage capacity.
(GROUP II)

Attachment E-1 -- Worksheet to Plan Volume of Response Resources for Worst Case Discharge

Part II <u>On-Water Oil Recovery Capacity</u> (barrels/day)

Tier 1	Tier 2	Tier 3
(b) (7)(F), (b) (3) [redacted]		

Part III <u>Shoreline Cleanup Volume</u> (barrels) . (b) (7)(F), (b) (3) [redacted]

<u>Part IV On-Water Response Capacity By Operating Area</u>
(Amount needed to be contracted for in barrels/day)

Tier 1	Tier 2	Tier 3
(b) (7)(F), (b) (3) [redacted]		

Part V <u>On-Water Amount Needed to be Identified, but not Contracted for in Advance</u> (barrels/day)

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

NOTE: To convert from barrels/day to gallons/day, multiply the quantities in Parts II through V by (b) (7)(F), (b) [redacted] **.**

[59 FR 34070, July 1, 1994, as amended at 59 FR 49005, Sept. 26, 1994]

Attachment E-1 -- Worksheet to Plan Volume of Response Resources for Worst Case Discharge

GROUP III

Part I **Background information**

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

Step (A) Calculate Worst Case Discharge in barrels

Step (B) Oil Group

Step (C) Operating Area (choose one)

	Nearshore/Inland Great Lakes	X or Rivers and Canals

Step (D) Percentages of Oil

Percentage Lost to Natural Dissipation	Percentage Recovered Floating Oil	Percent Oil Onshore
20	10	65
(D1)	(D2)	(D3)

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

Step (E1) On-Water Oil Recovery $\frac{\text{Step (D2) x Step (A)}}{100}$

Step (E2) Shoreline Recovery $\frac{\text{Step (D3) x Step (A)}}{100}$

Step (F) Emulsification Factor

Step (G) On-Water Oil Recovery Resource Mobilization Factor

Tier 1	Tier 2	Tier 3

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

{1} A facility that handles, stores, or transports multiple groups of oil must do separate calculations for each oil group on site except for those oil groups that constitute 10 percent or less volume of the total oil storage capacity at the facility. For purposes of this calculation, the volumes of all products in an oil group must be summed to determine the percentage of the facility's total oil storage capacity.
(GROUP III)

Attachment E-1 -- Worksheet to Plan Volume of Response Resources for Worst Case Discharge

Part II On-Water Oil Recovery Capacity (barrels/day)

Tier 1	Tier 2	Tier 3
(b) (7)(F), (b) (3) [redacted]		

Part III Shoreline Cleanup Volume (barrels) . (b) (7)(F), (b) (3) [redacted]

Part IV On-Water Response Capacity By Operating Area
(Amount needed to be contracted for in barrels/day)

Tier 1	Tier 2	Tier 3
(b) (7)(F), (b) (3) [redacted]		

Part V On-Water Amount Needed to be Identified, but not Contracted for in Advance (barrels/day)

Tier 1	Tier 2	Tier 3
(b) (7)(F), (b) (3) [redacted]		

NOTE: To convert from barrels/day to gallons/day, multiply the quantities in Parts II through V by (b) (7)(F), (b) (3) [redacted]

[59 FR 34070, July 1, 1994, as amended at 59 FR 49005, Sept. 26, 1994]

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

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

FIGURE 9.4
Refinery Process Drainage System

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

[redacted]

FIGURE 9.5 August 1999
Refinery Firewater System

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

Figure 9.6

100' 0 100'

GRAPHIC SCALE (FEET)

REV.	BY	DESCRIPTION	DATE	APP.
6	KM	GENERAL REVISION; CORRECTED ALL NODES THAT HAVE BEEN ADDED AND ELIMINATED POLES AND ADDED NEW POLES. ALL CHANGES CONFIRMED BY ROBERT CROSS.	5/10/97	
5	LR	GENERAL REVISION; ADDED SUBSTATION 30, NORMALLY CLOSED OR NORMALLY OPEN TO ALL SWITCHES AND CHANGE LINETYPES FOR CKT #1, CKT #2 CKT #3 & CKT #4.	1/1/96	

ATLAS Processing Company
A Pennzoil Products Company

Engineering Department Shreveport

DRAWN: Rusch
DATE: 6-28-89
SCALE: GRAPHIC SCALE
DATE:
APPR.:

ATLAS REFINERY
12.47 KV FDR STSTEM
PLOT PLAN

EFFECTIVE PLOTTING SCALE: 1=100'

DRAWING NO. 09-E-52-0065

OIL-FILLED OPERATIONAL EQUIPMENT

SHREVEPORT REFINERY	STANDARD OPERATING PROCEDURE
Procedure Name: Repair of Tank Gauging Equipment	**Document Number: 14-W-0116**
Unit: Maintenance & Reliability	**Document System: PSM**
Revision Date: 1/11/02	**Document Owner: Maintenance MGR**

SCOPE

The purpose of this procedure provides guidelines to inspect and certify that the equipment is mechanically sound, calibrated correctly and functions properly.

REQUIREMENTS

This procedure shall apply when applicable to contracted personnel working on Shreveport Refinery property.

The inspection/certification of tank equipment normally occurs once a month for tank gauge setting or when a failure has occurred due to accuracy or calibration questions.

APPLICABLE DOCUMENTS

Opening and blinding of Vessels and Piping Procedure

Safe Work Authorization Permit Procedure

Elevated Work Procedure

Confined Spaces Entry Procedure

MATERIAL AND EQUIPMENT

Safety harness if needed.

SAFETY AND ENVIRONMENTAL

Take necessary precautions to prevent an incident that could result in injury to personnel or damage to equipment.

TRAINING AND KNOWLEDGE

None

QUALITY

None

OUTLINE

1. Mechanical Tank Gauge Failure..... 2

PROCEDURE:

1. Mechanical Tank Gauge Failure

1.1 Obtain all necessary permits.

WARNING: Ensure to verify tank contents for potential H2S exposure, if H2S is present, Fresh Air shall be used.

WARNING: If the tank is blanketed, the instrument technician should inspect the pressure and release as little blanketing gas as possible during maintenance of the tank gauge.

1.2 If the float inside the tank has problems and inspection requires opening of tank, applicable sections of the following shall be followed:

1.21 Verify all process valves are locked out.

1.22 Verify N2 blanket gas is locked out if applicable.

1.23 Check air quality upon opening access hatch to perform repairs.

1.3 Log the system "out of service"

1.4 Make necessary repairs.

1.5 Close tank and notify Operators to return tank to service.

2. REPAIRS TO TAPE AND PULLEYS

2.11 The tape and pulleys are located at the tank edge.

2.12 Safety harness must be worn and secured if working on edge of tank.

2.13 If there is no way to safely secure a safety line, a personnel lift or scaffolding must be used. (See Elevated Work Procedure)

2.2 Make necessary repairs

2.3 Operations personnel to note in log book repairs or modifications made and time placed back in service.

2.4 Obtain work order sign off from operations

****END OF PROCEDURE****

SHREVEPORT REFINERY	STANDARD OPERATING PROCEDURE
Procedure Name: Tank Gauge PM	**Document Number: 14-W-0065**
Unit: Maintenance & Reliability	**Document System: PSM**
Revision Date: 5/1/01	**Document Owner: Maintenance MGR**

SCOPE

This procedure is to be performed on the Shand & Jurs 92030 gauge head coupled with a GPE microprocessor level transmitter model 31423.

REQUIREMENTS

A qualified advanced electrician or instrument technician will perform this procedure. An additional person is required at the receiver. Radio communication between the technicians is necessary.

This procedure shall be performed on a monthly basis.

APPLICABLE DOCUMENTS

GPE Controls Users Manual 31-423-U Issue 0.

MATERIAL AND EQUIPMENT

Two small regular head screwdrivers

2 way radio.

SAFETY AND ENVIRONMENTAL

Safe work permits prior to performing work.

The electrical classification of the area is Class I, Division II. Although flammable liquids should not be present a visual inspection of the area is required to confirm a safe maintenance environment exist.

TRAINING AND KNOWLEDGE

None

QUALITY

Readings should be taken on operating equipment whenever possible.

OUTLINE

1. MECHANICAL 2

2. ELECTRONICS 2

PROCEDURE:

1. MECHANICAL

1.1 Open main cover to the Shan & Jurs mechanical head. Visually inspect internal mechanism for dirt, oil, wax, loose parts and binding parts.

1.2 Climb the tank and inspect the measuring tape and tape rollers. The rollers should be clean and free. If rollers are not free, repair or replace.

2. ELECTRONICS

2.1 Open head to GPE electronics and visually inspect wires for cuts or burns.

2.2 Inspect boards and wire terminations for corrosion or loose screws.

2.3 Check the power supply voltage by disconnecting the power supply. Voltage should be +6 vdc and -5 vdc. Reattach power supply connector.

2.4 Check voltages on main PBC at terminal block positions 5 & 6.

2.41 Minus lead of meter 1.999 vdc pin 7 from front of board.

2.42 Minus lead of meter .997 vdc pin 1 from front of board.

2.43 Minus lead of meter .5935 vdc pin 4 from front of board.

2.5 Balance potentiometers for feet and inches. Pin 5 for feet and pin 2 for inches.

2.6 Align microprocessor board 3142-12900 by factory alignment procedure.

2.7 Note corrective action taken on PM work order. List any components replaced.

****END OF PROCEDURE****

10.0 CRITICAL/SENSITIVE AREAS AND LOGISTICS

The Environmental Response Maps which appear in Appendix B show the geographic location boundaries established for CSR and shows areas a spill could reach in 27 hours traveling downstream from the facility. They are designed to assist in the initiation and development of spill response priorities and strategies prior to the deployment of spill response resources at the CSR facility and drainage area and provide spill responders with rapid access to the following information:

- critical areas to monitor and protect, including applicable; water intakes; recreational areas; historical sites; cemeteries; residentially and commercially developed areas; marinas and yacht harbors; industrial port facilities; groundwater recharge basins; and educational institutions.
- shoreline composition.
- location of major streams, creeks, inlets, wetlands, etc. within the watershed.
- habitat description, including: native species identified within the location boundaries of each map, including the presence of rare, threatened, and endangered species; and the locations of migratory, nesting, spawning, and harvesting grounds of local species.
- location and description of shoreline access sites and equipment staging areas.
- location of boat launching facilities.
- potential containment booming locations.

Descriptions of the information presented on the Environmental Response Maps are provided below:

10.1 CRITICAL AREAS TO MONITOR AND PROTECT

Critical areas may be defined as those areas which, if impacted by spilled oil or hydrocarbons, may result in threats to public safety and health, or in which CSR could incur severe liabilities associated with the pollution of privately or commercially-owned properties.

Critical areas include commercial, municipal, and industrial water intakes; recreational areas and parks; historical sites; cemeteries; residentially, commercially, and industrially developed areas; marinas and yacht harbors; groundwater recharge basins; and educational institutions (schools).

Water Intakes

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

[redacted]

Recreational Areas

Recreational areas, including state and city parks, seasonal beachfront areas, etc., are subject to liabilities associated primarily with potential safety and health threats, in addition to those associated with aesthetics, visibility, and public relations. (Publicly accessible recreational areas may possess adequate shoreline access and may be suited for logistical purposes as an equipment staging area and deployment site.) City parks appear on the Environmental Response Maps in Appendix B, and state recreational and boating facilities are listed in Appendix VI (III) of the USEPA Inland Area Contingency Plan.

Historical Sites, Cemeteries and Churches

Historical sites and cemeteries are particularly sensitive and vulnerable to claims associated with aesthetics and public relations, and should be recognized as a high priority when it comes to planning a spill response operation.

Cemeteries and churches are shown on the Environmental Response Maps in Appendix B.

No historic sites were identified in the planning area.

Residentially and Commercially Developed Areas

Shoreline residentially developed areas should be recognized and closely monitored due to the concentrated presence of human beings, and the liabilities which may be associated with the oiling of privately-owned property. Commercially developed areas also should be recognized from both a public safety and liability point of view.

High costs may result in the restoration and remediation of these areas, and negative public relations claims almost surely will result from both a visibility and aesthetic standpoint.

Residentially and commercially developed areas are shown on the Environmental Response Maps in Appendix B. There are a number of residential dwellings and industrial facilities in the planning area. Moderate population density exists around the CSR, which decreases in a southerly direction from the facility and becomes low from the beginning of Segment 3 through the end of the planning distance.

Educational Institutions

Educational institutions, i.e. grade schools, colleges, universities, etc. in the vicinity of a navigable waterway should be precautionary monitored due to the concentrated presence of grade school children and college students, alike. Plans designed for the evacuation of students should be incorporated should threats of personal safety arise with the impact of a spilled product along a neighboring coastline.

Several educational institutions are situated along the planning distance route. They appear on the Environmental Response Maps in Appendix B.

10.2 ENVIRONMENTAL SENSITIVITIES

Shoreline Composition

The environmental sensitivities of various shoreline compositions and habitats are prioritized within three categories (high, moderate, and low) which rank the specific shoreline type in order of their increasing potential for long term oil persistence and biological damage. This priority system is intended to assist the spill responder while allocating response resources during the initial stages of a spill response operation, with the knowledge that responsible federal and state

resource agency representatives will arrive on site to further clarify priorities within each category.

Shoreline types are typically categorized as follows:

- **High Environmentally Sensitive Areas:**

  Marshes & Wetlands
  Sheltered Tidal Flats
  Sheltered Rocky Shores

  High environmentally sensitive areas are typically sheltered from wave and tidal energy and tend to retain oil over time. Highly sensitive shorelines are usually characterized as biologically productive environments, and remediation techniques can be difficult and extremely time consuming. Low-pressure flushing, the use of sorbent pads and booms, and natural cleaning techniques are viable clean-up methods in these environments.

- **Moderate Environmentally Sensitive Areas:**

  Exposed Tidal Flats
  Gravel Beaches
  Mixed Sand and Gravel Beaches
  Coarse-grained Sand Beaches
  Fine-grained Sand Beaches

  Moderate environmentally sensitive areas include shorelines, which are somewhat resistant to the effects of oiling. Low-pressure flushing, manual removal, and the use of beach-cleaning machines are reasonably acceptable techniques in the cleansing of both fine and coarse-grained sediments, while substrate removal and/or displacement are also considered viable methods in the remediation of finer-grained sediments.

- **Low Environmentally Sensitive Areas:**

  Exposed Rocky Ledges and Wave-Cut Platforms
  Exposed Rocky Shores
  Man-made Shoreline Protection Structures (Concrete Revetments, Bulkhead, Wooden Pilings, Rip-Rap, Jetties, etc.)

  Low environmentally sensitive shorelines are, for the most part, low ecologically productive environments. Manual removal and natural cleaning techniques are most often employed in the reclamation of these shoreline types.

  Note: The National Oceanic and Atmospheric Administration (NOAA) has adopted an Environmental Sensitivity Index (ESI) system which ranks various shoreline types based upon their sensitivity to spilled oils and hydrocarbons. The method used in categorizing the above shoreline types is a "loose" interpretation of those reflected by the Environmental Sensitivity Index (ESI) system.

Habitat Description

Critical habitat for federal endangered species are traversed in the planning distance. This habitat may potentially be impacted by a Worst Case Discharge (WCD). The habitats include areas designated for the following species and are shown on the Environmental Response Maps in Appendix B.

Louisiana Black Bear
Red-cockaded Woodpecker
Ivory-billed Woodpecker
Bald Eagle
Florida Panther
Eskimo Curlew
Bachman's Warbler
American Alligator

No wildlife management areas, federal fisheries, state fisheries, national parks or scenic rivers are identified by the USEPA Inland Area Contingency Plan as being located in the planning distance.

10.3 VULNERABILITY ANALYSIS

Assuming a WCD is not contained until 27 hours after the spill event, the following scenario could occur. A WCD discharge from the CSR would discharge to the West Canal Boulevard drainage ditch. This ditch is a concrete lined ditch, which typically conveys surface storm water runoff from the immediate area of the ditch.

From the West Canal Boulevard drainage ditch, the WCD would travel to Brush Bayou which discharges to Wallace Lake. Brush Bayou is a small, winding, earthen natural drainage waterway, which has been modified and rerouted but remains earthen with banks covered with vegetation.

The WCD would then enter Wallace Lake and spread out until it discharges over the dam structure which flows into Wallace Bayou. Wallace Bayou is a man made lake which is controlled by a drainage structure at the downstream discharge point. The lake has much vegetation and many dead tree stumps.

The area around the West Canal Boulevard drainage ditch includes private residential dwellings and other industrial facilities. The population density is moderated in this area, which is inside the City of Shreveport Corporate Limits. The Brush Bayou area also has private residential dwellings and some industrial facilities. The population density decreases in the southerly direction. Close to the intersection of Brush Bayou and Wallace Lake the population density is low and continues to be low along the remaining downstream planning distance.

Planning Distance

Calculation of the planning distance was based on the following characteristics of the refinery and vicinity:

- the nearest body of moving water is Brush Bayou,
- petroleum product draining from the CSR would enter West Canal Boulevard via the outflow drainage ditch,
- from West Canal Boulevard petroleum product would drain to Brush Bayou via open channel flow,
- Brush Bayou drains into Lake Wallace via open channel flow,
- Lake Wallace drains into Wallace Bayou via Wallace Lake Dam, and
- no downward soil migration was considered because of the definitive runoff path from the site.

In the event of a release, petroleum product would exit the site via the West Canal Boulevard drainage ditch. This ditch is a concrete lined ditch, which typically conveys surface stormwater runoff from the immediate area of the ditch. The concrete lined ditch intersects Brush Bayou approximately 16,000 feet southeast of the refinery. Brush Bayou flows to the south for an approximate distance of 40,200 feet whereupon it discharges into Lake Wallace. Upon entering Lake Wallace, the flow could move to the west approximately 28,000 feet to the Lake Wallace Dam, where it then discharges into Wallace Bayou. Once entering Wallace Bayou, the product could move downstream in a southeasterly direction.

Calculation of the planning distance for transport of petroleum product on moving water was based on guidelines suggested in 40 CFR Part 112, Attachment C-III, and use of the following equation:

$d = v \times t \times c$, where

d = distance downstream from a facility within which an environmentally sensitive area could be injured or drinking water intake would be shut down in the event of an oil discharge (in miles).

v = velocity of the river/navigable water of concern (in feet/seconds) as determined by the Chezy-Manning's equation.

t = time interval (27 hours).

c = constant conversion factor of 0.68 second-mile/hour-foot.

The specified time interval for arrival of response resources was based on those contained in 40 CFR Part 112, Attachment C-III, Table 3, and was determined to be 27 hours.

Calculation of the planning distance consisted of five segments:

Segment 1-2: 15,500 lineal feet of flow in a concrete lined drainage channel which takes approximately 0.72 hours as computed using the Chezy-Manning's equation for open channel flow (see Appendix B - Environmental Response Maps B(1) and B(2)). Based on information provided, this channel was assumed to measure approximately 5 feet deep and 8 feet across the bottom with 1 horizontal to 1 vertical sideslopes. For calculation purposes it was assumed the channel flows full, and the Manning's roughness coefficient (n) was assumed to be 0.013, which is indicative of concrete. The computed velocity for the drainage channel is 5.8 feet per second.

Segment 2-3: 40,200 lineal feet of flow in a drainage channel which takes approximately 8.63 hours as computed using the Chezy-Manning's equation for open channel flow (see Appendix B - Environmental Response Maps B(2) and B(3)). Based on information provided, this channel was assumed to have a mid channel depth of 5 feet. For calculation purposes it was assumed the channel flows full, and the Manning's roughness coefficient (n) was assumed to be 0.10, which is indicative of a natural stream channel with dense grass. The computed velocity for the drainage channel is 1.30 feet per second.

Segment 3-4: 28,000 lineal feet of flow in Lake Wallace which takes approximately 15.14 hours to travel across the lake (see Appendix B - Environmental Response Maps B(3), B(4), B(5) and B(6)). The travel time is based on the discharge moving across the water at 3 percent of a 10 knot wind speed or at 0.35 mile per hour. The 10-knot wind speed is based on local wind data for a westerly and northwesterly wind.

Segment 4-5: 7,640 lineal feet of flow in a drainage channel which takes approximately 2.51 hours as computed using the Chezy-Manning's equation for open channel flow (see Appendix B - Environmental Response Map B (6)). Based on information provided, this channel was assumed to have a mid channel depth of 6 feet. For calculation purposes it was assumed the channel flows full, and the Manning's roughness coefficient (n) was assumed to be 0.10, which is indicative of a natural stream channel with dense grass. The computed velocity for the drainage channel is 0.85 feet per second.

Following is a summary of the segment distances and times:

Segment 1-2:	15,500	ft	0.72 hr
Segment 2-3:	40,200	ft	8.63 hr
Segment 4-5:	28,000	ft	15.14 hr
Segment 5-6:	7,640	ft	2.51 hr
Total	17.06	miles	27.0 hr

Based on the calculations presented above and the characteristics of the facility and vicinity, the planning distance should be set at 17.1 miles (the approximate summation of each segment distance) downstream from CSR, along the above-described path of drainage.

Sensitive environments in the area of the planning distance include potential wetlands in the Wallace Lake area. These potential wetland areas are shown on the United States Geological Society Shreveport West, Stonewall, and Wallace Lake 7.5 Minute Series Quadrangle Maps. Wetlands are also identified as being present by the USEPA Inland Area Contingency Plan for Louisiana (EPA 540/R-94/049) as areas of possible inundation by Wallace Lake.
All of the waterways traversed in the planning distance are categorized by the Louisiana Department of Environmental Quality as the following:

Primary contact recreation
Secondary contact recreation
Propagation of fish and wildlife
Agriculture

10.4 SHORELINE ACCESS SITES AND EQUIPMENT STAGING AREAS

Information designed to assist the spill responder in the deployment of equipment and manpower is illustrated on the Environmental Response Maps in Appendix B.

Shoreline Access Sites/Public Landings

Several shoreline access sites and public landings are located along the planning distance. These are identified on the Environmental Response Maps.

Potential Containment Booming Locations

With the identification of the potential source of a spill and assuming certain conditions, which would govern the movement of a spill on water, strategic containment booming locations may be generated. Locations for the strategic deployment of containment boom may also be based upon shoreline accessibility, proximity to sensitive resources, and areas of expected accumulations of spilled product.

10.5 GUIDELINES FOR SHORELINE CLEANUP

Guidelines for shoreline cleanup for the various types of shoreline prevalent in the Shreveport area are listed in Figure 10.1. Prior to implementing a shoreline response operation, the Emergency Response Manager will consider obtaining input from government agencies. It is also necessary to obtain the landowner's approval prior to beginning the clean-up operation.

In sensitive shoreline areas where the clean-up operation will do more damage to the environment than the oil, it may be prudent to take limited or no action. However, this decision should be based on input from government agencies, the landowner, and the local government, which has jurisdiction over the area.

FIGURE 10.1

SUMMARY OF SHORELINE CLEAN-UP TECHNIQUES

Type of Surface Containing Spill	Recommended Clean-up Techniques	Actions to Avoid
Sand	Use vacuum skimmer and sorbents to clean up pools of free flowing oil. Use shovels to remove and place oiled sand into plastic bags or 55-gallon drums.	Do not let people or equipment travel over oiled sand. Do not bury oiled sand.
Pebble or Gravel	If heavily oiled, use water spray and front-end loader to remove oiled material. If lightly oiled, use water spray and detergent to wash oil films off gravel and pebbles.	Do not place oiled gravel or pebbles in streams or offshore areas.
Snow	Use shovels to place oiled snow in a 55 gallon drums.	Do not place oiled snow on wetlands or offshore areas. Make sure that drums do not have holes in them.
Concrete or Asphalt	Use vacuum skimmers and sorbents to clean up oil. Wash surface with soap and water. Remove oil between cracks.	
Wetlands	Consult DEC, EPA or other agencies for permits to work on wetlands. If cleanup will cause excessive damage to wetlands, request agency approval to leave oil in place.	Do not operate vehicles or heavy equipment on wetlands. Do not disturb nesting areas.
Marshes	Use booms to control oil movement. Use a low pressure water spray to herd oil to areas where it can be recovered with skimmers and sorbents. Seek agency input as to whether oil should be left in place to prevent environmental damage that could result from clean-up operation.	Do not block entrance to marsh with berms or dams. Do not use heavy equipment.
Harbors and Streams	Use booms to prevent oil from spreading. Use skimmers to clean up oil slicks.	Avoid creating waves which may cause oil to spread. Do not use dispersants or chemicals without regulatory agency approval.

11.0 TRAINING / DRILLS / INSPECTIONS

11.1 TRAINING

11.1.1 Annual Plan Review

At least once each calendar year, CSR shall conduct a review of the Plan with plan holders.

11.1.2 Formal Training

11.1.2.1 HAZWOPER

The attached Figure 11.1 indicates the HAZWOPER training for the various team members. Team members are required under state and federal regulations to have the proper up-to-date training level to function in their position.

Training records will be maintained for all team members at the CSR Shreveport Refinery and will reflect training activities for at least the previous three (3) years.

CSR personnel will verify that all response personnel, including contractors and casual labor, have the appropriate training to serve in their capacity during a response. All "non-CSR" personnel responding to a CSR spill will be required to satisfy the HAZWOPER training requirements of 29 CFR 1910.120 for their position.

11.1.2.2 Spill Training

CSR Response Team members will also receive supplemental computer based training (CBT) in other general topics pertinent to discharge prevention and spill response. The types and dates of courses taken by response team members are entered into a data tracking system called **Active Learner**.

This training will be accomplished by attendance at CSR seminars; computer based training, cooperative training classes, outside classes, and seminars. Timing of training will vary based on availability of classes and will not be required for team members to perform their spill team job functions.

11.2 DRILLS

All drills are documented.. The logs shall document actions taken by the response team (both predicted and unpredicted), problems that arose, and actions to be implemented to resolve the

noted problems. A timetable for such implementation shall be noted. Logs and documentation of the facility drills shall be filed at the facility and maintained for five years.

Facility drills will follow the adopted PREP Guidelines and the triennial cycle for drills at the facility as described in the following sections.

Qualified Individual Notification Drills:

These drills will consist of quarterly notification of the qualified individuals listed in the plan. The notification will be performed by the EHS Engineer or designee. The purpose of the notification is to ensure that the qualified individuals are able to be contacted for an emergency and carry out the duties of the position in the event of a release. A log of these drills shall be maintained for three years. The log shall indicate the date, company name, Qualified Individual, emergency scenario, and an evaluation of the drill.

Spill Management Team Table Top Exercises:

Spill Management Team Table Top Exercise will be performed at the refinery on an annual basis.

These exercises will include:

- Review of the response plans
- Identification of needs for plan modification or equipment requirements
- Exercises involving response and plan implementation to small, medium, and worst case discharges

The worst case discharge scenario will be reviewed every three years.

A log of the Table Top Exercise will be maintained for three years. The log will included the date of the drill, company name, Qualified Individual, emergency scenario, drill evaluation, changes to be implemented as a result of the drill, and the timetable for implementing the changes.

Spill Response Equipment Deployment Exercises:

Spill response equipment will be deployed on a semiannual basis (unless used regularly in the refinery, e.g. vacuum truck) after inspection to test the preparedness of the equipment, the capability for deployment, and the ability to effectively control and remediate an oil spill. One deployment drill per year will involve contracted spill response vendors, unless the vendors participate in other approved programs for training and exercises.

SPCC Discharge Prevention Briefings

In accordance with 40CFR112.7(f)(3), Calumet will conduct discharge prevention briefings for all oil-handling personnel at least once a year. The briefings will highlight and describe known discharges or failures, malfunctioning components, and any recently developed precautionary measures.

Unannounced Exercises:

The corporate safety office, the area coordinator, the USEPA, or the LDEQ may initiate unannounced exercises.

Area Exercise:

Facility drills conducted externally include those conducted by the various government agencies or other response organizations. Shreveport will participate in area drills, as warranted, when notified of these activities.

Training Logs

A training log will be maintained. This log will include the type of training (Personnel Response Training, Discharge Prevention Training), the attending employees' names, date of training, and the number of hours of training. A copy of the training log is enclosed with this Annex to document compliance with these training requirements.

Drill Evaluation Procedure

After the completion of drill exercises, a written drill evaluation report will be completed by each participant in the drill exercise. A copy of the Drill Evaluation Report Form is included at the end of this annex.

Response Training Program and Topics

1. Evacuation Plans
2. Response to Spills, Discharges, or Released
3. Actions to Take in Case of Fire or Explosion
4. Actions and Evacuation Procedures for Bad Weather
5. Actions to Take in Case of Bomb Threats
6. Integrated Contingency Plan

Discharge Prevention Meeting Logs

A record of all SPCC and FRP training will be maintained for three years. The record of these meetings will contain the name of those attending, the date of the meeting, the topic discussed, and the name and title of the instructor. A copy of the log is included at the end of this annex.

11.2.1 Facility/Operation Drills

Response Team members, various agencies, contractors and other groups listed as response resources will participate in emergency response simulations as required by state, federal, and local regulations. Various methods will be utilized to conduct exercises in accordance with regulatory requirements for drills and exercises.

CSR will utilize "tabletop" simulations, notification exercises, field deployment drills and/or combinations of all to ensure that each component of the response manual is exercised as required.

11.2.2 Drill Schedule

CSR will conduct exercises to ensure that its response organization and structure are operating in accordance with this Plan. Periodic announced and unannounced drills will be conducted according to the following schedule. Also, whenever possible, actual spill response events shall be documented and may be substituted for planned drills. An Exercise and Drill Record form is attached as Figure 11.2 for use for spill response events.

Qualified Individual Notification Requirements

CSR conducts a weekly exercise to test the notification procedures and process within the facility. All "Qualified Individual(s)" will be alerted. All "Qualified Individual(s)" not receiving notification of the alert shall contact the individual initiating the drill that notification was not received. If it is determined that equipment failure or other problems resulted in the notification being delayed or prevented, such problems will be identified and corrected prior to the next exercise. Notification response shall be logged and maintained for a period of at least three (3) years. A sample of CSR's QI notification form is attached as Figure 11.3.

Semiannual Equipment Exercise

CSR will conduct semiannual equipment deployment drills in accordance with the regulations. During these exercises, facility response equipment will be deployed to simulate local response to a spill occurring at CSR. Deployment should reflect strategies included in the response plan for protecting adjacent interests and areas. Records of the equipment deployed, personnel involved, and other information regarding the exercise shall be maintained for a period of at least three (3) years. Alternatively, actual spill response events will be used in place of the equipment deployment drills and response exercises whenever possible.

Annual Response Exercises

Annually, CSR will conduct at least one (1) unannounced exercise for the response team and contractor(s). The CSR Response Team and selected contractor personnel will be notified and should respond as to a discharge at the CSR facility. Goals and objectives for the exercise will be prepared in advance and the response will be evaluated against the goals/objectives set. Records for these exercises shall indicate personnel and contractors participating, scenario for the exercise, and results obtained and must be maintained for at least three (3) years.

NOTE: If equipment is deployed during this exercise, it may be counted as one of the "semiannual" deployment drills.

11.3 FACILITY INSPECTIONS AND RECORDS

Emergency response notification agencies and contacts are listed with phone numbers in Figure 2.5.

11.3.1 Inspections

Inspections are conducted under the general principles set forth in API Standard 653, “Inspection, Maintenance, Repair, and Reconstruction of Aboveground Storage Tanks.” Internal tank inspections consist of visual and ultrasonic thickness inspections of the tank and associated components. External visual inspections, including shell, nozzles, and roof thickness are verified using an ultrasonic steel thickness-testing machine, and the proper documentation is completed and filed accordingly. Records are maintained in the Tech Services department and are summarized on Figure 11.4. Monthly visual inspections of the tanks, tank foundations, piping, and secondary containment diked areas are conducted by the pumpers and documented on log sheets like the one shown in Figure 11.6 (Tank In-Service Monthly Checklist). Finally, spill response equipment is checked regularly to ensure adequate stock equipment is present. Records of these inspections are maintained at the facility.

Secondary tank dike drains are kept closed when not in use. Any accumulated water is inspected for floating hydrocarbon and skimmed free of hydrocarbon if necessary prior to opening the dike drain. The dike drain is then opened and the area allowed to drain to the Grit Separator. The dike drain is then closed when the dike is empty. The status of dike drains is documented daily on log sheets (see Figure 11.5 for a sample of the type of information recorded).

Tanks are strapped each month by operating personnel to determine the actual level of material in the tank. The strapped level is then compared with the

remote level reading in the control room and the tank level measurement indicator is calibrated if necessary. The monitoring equipment and procedures in the FRP used to prevent tank overflows has been found to be quite effective. In addition, the same equipment and procedures are also effective at detecting spills and overflows.

In addition to routine operations, all tank volumes are reconciled daily for inventory control. Any discrepancies are checked to minimize loss of product. Any suspected release is promptly investigated. Additionally, most tanks are equipped with remote level indicators that can be monitored in the control room to ensure that tanks are not overfilled. There is a low level alarm and a high level "upper stop" alarm preset by the operations department. Some tanks are equipped with radar gauges while others are fitted with float-type gauges. Tank gauges are normally calibrated monthly, but is also dictated by level discrepancies. The operations department will notify the EI Supervisor, write a work order and the gauging system is repaired/recalibrated. Operations also are able to see tank levels rise/fall on their TDC console. Error messages and flat lines will also alert the operator to a potential gauge problem. When the tank level reaches a predetermined level based on the height of tank, an alarm sounds to notify the board operator that the tank is becoming full. The board operator then takes the necessary steps including, but not limited to, rerouting process flows out of the tank into other tanks to prevent the tank from overfilling.

In the event that a spill is identified, a copy of dike discharge records for the most recent time period prior to submittal of the OPA plan have been included for review. Section 2.0 of the FRP covering notification procedures shall be followed.

11.3.2 Records

The following are maintained at the facility:

- A current list of storage tanks, capacities and product stored (Figure 1.3);
- A record of repairs to pipelines and storage tanks;
- A record of environmental incidents (unauthorized discharges to land, air, water and groundwater;
- Incident investigations of selected safety and environmental related incidents;
- A record of tank inspections;
- Notifications of unauthorized discharges to environmental agencies if required.
- A record of training activities and personnel involved (Figure 11.1);
- A log of the usage of storage tank dike (secondary containment) drain valves (Figure 11.5);
- Monthly Tank/Surface impoundment Inspection Logs (Figure 11.6);

- Exercise and Drill Record Form (Figure 11.2); and
- Tank Car Inspection records (Figure 11.7) [Form 20-286].

Where applicable, copies of the records for the most recent time period prior to submittal of the OPA plan have been included in the respective Appendices.

All of the above records will be maintained for a minimum of three years from the date of documentation.

FIGURE 11.1

CALUMET LUBRICANTS COMPANY EMERGENCY OIL SPILL RESPONSE TEAM ROSTER

FIGURE 11.1
CALUMET LUBRICANTS COMPANY EMERGENCY OIL SPILL RESPONSE TEAM ROSTER TRAINING RECORD

EMERGENCY FUNCTION	NAME	TRAINING REQUIREMENTS	LAST REFRESHER COURSE DATE
Incident Command (IC) Qualified Individual (QI) Hazwoper Specialist	Tom Germany	Hazwoper 16hr IC / Refresher 8hr IC	3/23/2012
Incident Command / QI (alternate)	Kevin Farley	HazWoper 16hr IC	1/29/2009
Operation Command / QI / Hazwoper Specialist	Lyndon B. Johnson	HazWoper 16hr IC / Refresher 8hr IC	5/20/2010
Incident Command	James Kelly	HazWoper 16hr IC	12/13/2011
Operation Command / QI / Hazwoper Specialist /IC	Michael Rhoades	HazWoper 16hr IC	3/23/2012
Finance / Security /IC	Clayton Long	HazWoper Refresher 8hr IC	12/13/2011
Planning / IC	Aubrey Marchand	Hazwoper 16hr IC / Refresher 8hr IC	12/13/2011
Planning	Mitch Perdue	Hazwoper 16hr IC / Refresher 8hr IC	12/13/2011
Planning (alternate)	Dan McKibben	HazWoper Refresher 8hr IC	2/10/2009
Process Control / QI / IC	Vidal Clay	HazWoper 16hr IC	3/29/2010
Process Control / QI / IC	Bobby Parks	HazWoper 16hr IC / Refresher 8hr IC	3/23/2012
Logistics / QI / Hazwoper Tech	Ken Brown	HazWoper Refresher 8hr IC	2/10/2009
Documentation	Michael Vaughn	HazWoper Refresher 8hr IC	2/10/2009
Hazwoper Technician / IC	Barney Kennington	HazWoper Refresher 8hr IC / 24-HR	3/16/2012
Hazwoper Technician	Carl Roppolo	HazWoper Refresher 8hr IC / 24 HR	3/25/2010
Hazwoper Technician	Carlos Netter	HazWoper Refresher 8hr IC / 24 HR	4/17/2012
Hazwoper Technician	Clifford Martin	HazWoper Refresher 8hr IC / 24 HR	4/26/2012
Hazwoper Technician	Colby Roy	HazWoper Refresher 8hr IC / 24 HR	4/12/2012
Hazwoper Technician	Doug King	HazWoper Refresher 8hr IC	5/20/2010
Hazwoper Technician	Gerald Boyum	HazWoper Refresher 8hr IC / 24 HR	4/12/2012
Hazwoper Technician	Houston Pardee	HazWoper Refresher 8hr IC / 24 HR	4/17/2012
Hazwoper Technician	Jarred Provenza	HazWoper Refresher 8hr IC / 24 HR	3/16/2012
Hazwoper Technician	John Clayton	HazWoper Refresher 8hr IC	4/19/2012
Hazwoper Technician	Kendall Marchand	HazWoper Refresher 8hr IC / 24 HR	4/24/2012
Hazwoper Technician	LC Lister	HazWoper Refresher 8hr IC	8/25/2011
Hazwoper Technician	Louis Mayfield	HazWoper Refresher 8hr IC	4/12/2012
Hazwoper Technician	Lyndon Johnson	HazWoper Refresher 8hr IC	4/26/2012
Hazwoper Technician	Michael Ashby	HazWoper Refresher 8hr IC / 24 HR	4/17/2012
Hazwoper Technician /IC	Mike Hall	HazWoper Refresher 8hr IC/ 24 HR	3/23/2012
Hazwoper Technician	Michael Hall Jr.	HazWoper Refresher 8hr IC / 24 HR	3/23/2012
Hazwoper Technician	Mitchell Cook	HazWoper Refresher 8hr IC	4/12/2012
Hazwoper Technician	Odysseus McGee	HazWoper Refresher 8hr IC / 24 HR	4/24/2012
Hazwoper Technician	Robert Lester	HazWoper Refresher 8hr IC / 24 HR	4/10/2012
Hazwoper Technician	Roger Griffie	HazWoper Refresher 8hr IC / 24 HR	4/26/2012
Hazwoper Technician	Steve Scott	HazWoper Refresher 8hr IC / 24 HR	4/19/2012
Hazwoper Technician	Todd Hall	HazWoper Refresher 8hr IC	4/12/2012
Hazwoper Technician/ IC	Vidal Clay	HazWoper Refresher 8hr IC / 24 HR	3/16/2012
Hazwoper Technician	Alyson Darbonne	HazWoper Refresher 8hr IC	4/10/2012
Hazwoper Technician	Andre Carter	HazWoper Refresher 8hr IC	4/17/2012
Hazwoper Technician	Andre Elias	HazWoper Refresher 8hr IC	4/12/2012
Hazwoper Technician	Andrew Britton	HazWoper Refresher 8hr IC	4/12/2012
Hazwoper Technician	Anthony Rinuado	HazWoper Refresher 8hr IC	4/10/2012
Hazwoper Technician	Antonio Robinson	HazWoper Refresher 8hr IC	3/16/2012

FIGURE 11.1
CALUMET LUBRICANTS COMPANY EMERGENCY OIL SPILL RESPONSE TEAM ROSTER TRAINING RECORD

EMERGENCY FUNCTION	NAME	TRAINING REQUIREMENTS	LAST REFRESHER COURSE DATE
Hazwoper Technician	Aparicio Williams	HazWoper Refresher 8hr IC	4/10/2012
Hazwoper Technician	Archie Harrison	HazWoper Refresher 8hr IC	5/18/2010
Hazwoper Technician	Aubrey Marchand Jr.	HazWoper Refresher 8hr IC	3/23/2012
Hazwoper Technician	Bertrome Travis	HazWoper Refresher 8hr IC	4/19/2012
Hazwoper Technician	Bert S. Scroggins	HazWoper Refresher 8hr IC	4/26/2012
Hazwoper Technician	Billy Meyers	HazWoper Refresher 8hr IC	4/17/2012
Hazwoper Technician	Bobby Coley	HazWoper Refresher 8hr IC	8/25/2011
Hazwoper Technician	Bobby J. Hall	HazWoper Refresher 8hr IC	9/15/2011
Hazwoper Technician	Bobby Lewis	HazWoper Refresher 8hr IC	4/17/2012
Hazwoper Technician	Bobby Parks	HazWoper Refresher 8hr IC	4/24/2012
Hazwoper Technician	Brandon Wagemann	HazWoper Refresher 8hr IC	4/17/2012
Hazwoper Technician	Brent S. Wallace	HazWoper Refresher 8hr IC	4/12/2012
Hazwoper Technician	Carlton Mitchell	HazWoper Refresher 8hr IC	5/20/2010
Hazwoper Technician	Casey Hamiter	HazWoper Refresher 8hr IC	3/16/2012
Hazwoper Technician	Cecil Bullock Jr	HazWoper Refresher 8hr IC	4/24/2012
Hazwoper Technician	Cedric Long	HazWoper Refresher 8hr IC	4/12/2012
Hazwoper Technician	Charles Bradley	HazWoper Refresher 8hr IC	3/18/2010
Hazwoper Technician	Charles Conly	HazWoper Refresher 8hr IC	4/26/2012
Hazwoper Technician	Charles W.Compton	HazWoper Refresher 8hr IC	9/15/2011
Hazwoper Technician	Charles Everett	HazWoper Refresher 8hr IC	3/18/2010
Hazwoper Technician	Charles Thompson	HazWoper Refresher 8hr IC	3/25/2011
Hazwoper Technician	Chris Frazier	HazWoper Refresher 8hr IC	11/10/2010
Hazwoper Technician	Chris Fulco	HazWoper Refresher 8hr IC	4/26/2012
Hazwoper Technician	Chris Green	HazWoper Refresher 8hr IC	2/18/2009
Hazwoper Technician	Chuck Collins	HazWoper Refresher 8hr IC	4/10/2010
Hazwoper Technician	Chuck Underdown	HazWoper Refresher 8hr IC	3/11/2009
Hazwoper Technician	Cory Allen	HazWoper Refresher 8hr IC	4/10/2012
Hazwoper Technician	Crystal Foust	HazWoper Refresher 8hr IC	4/24/2012
Hazwoper Technician	Daniel Garland	HazWoper Refresher 8hr IC	4/24/2012
Hazwoper Technician	Daniel P. Lloyd	HazWoper Refresher 8hr IC	8/25/2011
Hazwoper Technician	Danny Reamer	HazWoper Refresher 8hr IC	4/19/2012
Hazwoper Technician	David W. Toothman	HazWoper Refresher 8hr IC	4/26/2012
Hazwoper Technician	David W. Waggoner	HazWoper Refresher 8hr IC	4/26/2012
Hazwoper Technician	Derrick Abner	HazWoper Refresher 8hr IC	4/17/2012
Hazwoper Technician	Donald Daniel	HazWoper Refresher 8hr IC	4/19/2012
Hazwoper Technician	Doug D. Hunter	HazWoper Refresher 8hr IC	8/25/2011
Hazwoper Technician	Gary Bragg	HazWoper Refresher 8hr IC	4/24/2012
Hazwoper Technician	Germel Rawlings	HazWoper Refresher 8hr IC	4/12/2012
Hazwoper Technician	Gregory Frank	HazWoper Refresher 8hr IC	3/29/2010
Hazwoper Technician	Greg Sepulvado	HazWoper Refresher 8hr IC	3/16/2012
Hazwoper Technician	Jacob W. Dodd	HazWoper Refresher 8hr IC	4/24/2012
Hazwoper Technician	James Singleton	HazWoper Refresher 8hr IC	9/15/2011
Hazwoper Technician	Jarred Boyum	HazWoper Refresher 8hr IC	4/12/2012
Hazwoper Technician	Jarred Provenza	HazWoper Refresher 8hr IC	3/16/2012
Hazwoper Technician	Jason Houston	HazWoper Refresher 8hr IC	4/24/2012
Hazwoper Technician	Jason McGuire	HazWoper Refresher 8hr IC	9/15/2011
Hazwoper Technician	Jeffrey Batiste	HazWoper Refresher 8hr IC	4/12/2012

FIGURE 11.1
CALUMET LUBRICANTS COMPANY EMERGENCY OIL SPILL RESPONSE TEAM ROSTER TRAINING RECORD

EMERGENCY FUNCTION	NAME	TRAINING REQUIREMENTS	LAST REFRESHER COURSE DATE
Hazwoper Technician	Jeffrey Cohen	HazWoper Refresher 8hr IC	4/24/2012
Hazwoper Technician	Jermarsey Phillips	HazWoper Refresher 8hr IC	6/29/2011
Hazwoper Technician	John Hamilton	HazWoper Refresher 8hr IC	4/17/2012
Hazwoper Technician	Johnny Lewter	HazWoper Refresher 8hr IC	4/17/2012
Hazwoper Technician	Johnny Paine	HazWoper Refresher 8hr IC	2/18/2009
Hazwoper Technician	Jonathan Hall	HazWoper Refresher 8hr IC	8/25/2011
Hazwoper Technician	Joe Harper	HazWoper Refresher 8hr IC	4/10/2012
Hazwoper Technician	Kenny Zylicz	HazWoper Refresher 8hr IC	4/12/2012
Hazwoper Technician	Kevin Farley	HazWoper Refresher 8hr IC	1/29/2009
Hazwoper Technician	Kevin Stephens	HazWoper Refresher 8hr IC	8/25/2011
Hazwoper Technician	Kevin Simpson	HazWoper Refresher 8hr IC	9/15/2011
Hazwoper Technician	Kyle Conly	HazWoper Refresher 8hr IC	4/26/2012
Hazwoper Technician	Lee Stephens	HazWoper Refresher 8hr IC	4/12/2012
Hazwoper Technician	Leon Jernigan	HazWoper Refresher 8hr IC	2/1/2010
Hazwoper Technician	Mark Greathouse	HazWoper Refresher 8hr IC	4/19/2012
Hazwoper Technician	Melton Staples	HazWoper Refresher 8hr IC	4/12/2012
Hazwoper Technician	Mike Hubbard	HazWoper Refresher 8hr IC	3/16/2012
Hazwoper Technician	Milton Sneed	HazWoper Refresher 8hr IC	8/25/2011
Hazwoper Technician	Mitchell Branch	HazWoper Refresher 8hr IC	3/16/2012
Hazwoper Technician	Morell Boone	HazWoper Refresher 8hr IC	3/11/2009
Hazwoper Technician	Nathan Allen	HazWoper Refresher 8hr IC	8/25/2011
Hazwoper Technician	Oscar Hamilton	HazWoper Refresher 8hr IC	4/19/2012
Hazwoper Technician	Otha Gordon	HazWoper Refresher 8hr IC	9/15/2011
Hazwoper Technician	Paul McMillin	HazWoper Refresher 8hr IC	3/23/2012
Hazwoper Technician	Paul Whitton	HazWoper Refresher 8hr IC	4/19/2012
Hazwoper Technician	Phillip Ambrose	HazWoper Refresher 8hr IC	9/15/2011
Hazwoper Technician	Randy Holmes	HazWoper Refresher 8hr IC	3/16/2012
Hazwoper Technician	Randy Williams	HazWoper Refresher 8hr IC	4/19/2012
Hazwoper Technician	Reggie Jones	HazWoper Refresher 8hr IC	4/24/2012
Hazwoper Technician	Richard Clarkston	HazWoper Refresher 8hr IC	4/26/2012
Hazwoper Technician	Richard Jones	HazWoper Refresher 8hr IC	4/19/2012
Hazwoper Technician	Richard Leblanc	HazWoper Refresher 8hr IC	9/15/2011
Hazwoper Technician	Richard Savel III	HazWoper Refresher 8hr IC	4/10/2012
Hazwoper Technician	Bob C. Waits	HazWoper Refresher 8hr IC	3/11/2009
Hazwoper Technician	Roderick Short	HazWoper Refresher 8hr IC	4/10/2012
Hazwoper Technician	Roderick Youngblood	HazWoper Refresher 8hr IC	4/10/2012
Hazwoper Technician	Roger Griffie	HazWoper Refresher 8hr IC	4/26/2012
Hazwoper Technician	Ron Bechtel	HazWoper Refresher 8hr IC	4/10/2012
Hazwoper Technician	Ruby Thomas	HazWoper Refresher 8hr IC	4/12/2012
Hazwoper Technician	Sam Fulco	HazWoper Refresher 8hr IC	4/12/2012
Hazwoper Technician	Samuel Bozeman	HazWoper Refresher 8hr IC	9/15/2011
Hazwoper Technician	Stanley Ezernack	HazWoper Refresher 8hr IC	9/15/2011
Hazwoper Technician	Steve Rutledge	HazWoper Refresher 8hr IC	4/19/2012
Hazwoper Technician	Terry Sanders	HazWoper Refresher 8hr IC	2/1/2010
Hazwoper Technician	Tim Davis	HazWoper Refresher 8hr IC	4/19/2012
Hazwoper Technician	Timothy Johnson	HazWoper Refresher 8hr IC	9/15/2011
Hazwoper Technician	Timothy Nidey	HazWoper Refresher 8hr IC	9/15/2011

FIGURE 11.1
CALUMET LUBRICANTS COMPANY EMERGENCY OIL SPILL RESPONSE TEAM ROSTER TRAINING RECORD

EMERGENCY FUNCTION	NAME	TRAINING REQUIREMENTS	LAST REFRESHER COURSE DATE
Hazwoper Technician	Tommy Woodard	HazWoper Refresher 8hr IC	9/15/2011
Hazwoper Technician	Tony Hughes	HazWoper Refresher 8hr IC	4/17/2012
Hazwoper Technician	Tony Statos	HazWoper Refresher 8hr IC	4/19/2012
Hazwoper Technician	Travis Sonderland	HazWoper Refresher 8hr IC	4/26/2012
Hazwoper Technician	Troy Roberts	HazWoper Refresher 8hr IC	4/12/2012
Hazwoper Technician	Tyler Manuel	HazWoper Refresher 8hr IC	4/26/2012
Hazwoper Technician	Wilbert Parker	HazWoper Refresher 8hr IC	4/10/2012
Hazwoper Technician	Zack Foster	HazWoper Refresher 8hr IC	4/10/2012
Hazwoper Technician	Zaleska Bryant	HazWoper Refresher 8hr IC	4/12/2012

FIGURE 11.2

CALUMET LUBRICANTS COMPANY
EXERCISE AND DRILL RECORD

FIGURE 11.2

CALUMET LUBRICANTS COMPANY
EXERCISE AND DRILL RECORD

FACILITY	
DATE	
TIME INITIATED	
TIME COMPLETED	
RESPONSE TEAM PARTICIPANTS/TITLES	
CONTRACTOR PARTICIPANTS	
DESCRIBE THE EQUIPMENT DEPLOYED (Required for the Semiannual Exercise only)	
DESCRIBE THE SCENARIO FOR THE EXERCISE (Required for the Annual Exercise only)	
DESCRIBE THE RESULTS OF THE EXERCISE	
PROBLEMS IDENTIFIED DURING THE EXERCISE (Unnecessary delays, communication difficulties, etc.)	
MEASURES TAKEN TO CORRECT PROBLEMS IDENTIFIED DURING THE EXERCISE	

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

1st Quarter 2012
Actual Response
Also used for Table Top

Certified Mail No: 7011 0470 0003 4032 7409

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification 2/22/2012 @ 7:12
DEQ Official Contacted: Dennis
Company Official who made the call: Williams, Rick

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
Tank Farm

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

Component	Permit	Permit Limit	Unit of Measure
Crude - Paraffinic			

V. Which applicable Reportable Quantity limits were exceeded?

Crude Product Spill Reportable Quantity Limit - 1 Bbl

VI. Give the date and time the release began and the duration of the release:
Started: 2/22/2012 6:50:00 AM Ended: 2/22/2012 12:00:00 P Duration: 5.17 Hour
OHM # 111000752 RCA1649

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

Component	Quantity Released	Unit of Measure
Crude - Paraffinic	1000	BBL

VIII. Upset description, cause, and what off-site impact resulted:

Description: Operations found crude oil from T-175 flowing from several rusted out holes on the metal sides of the tank near the floor. Vac trucks were called to remove the product which was contained within the dike wall. Foam was applied to suppress any vapors being emitted. Operations began to put water into the tank to "float" the crude and prevent it from continuing to flow from the holes. They also started pumping the remaining crude from T-175 into another available storage tank. It was estimated that 1000bbls of sweet crude were spilled.

Cause: Developed holes in metal around bottom of tank walls. Tank was rusted at the bottom chime ring.

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Emergency Occurrences

UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

Agency	Date	Time	Agency Official	Calumet Official	Notification #
State Police	2/22/2012	7:12	Dennis	Williams, Rick	12-01033
DEQ Baton Rouge	2/22/2012	7:23	On-Line Form	Williams, Rick	CKK29995
Caddo Parish Dispatch	2/22/2012	7:30	Becky	Williams, Rick	Verbal
Shreveport DEQ Water	2/22/2012	7:25	Ada	Williams, Rick	Verbal
State Police	2/24/2012	8:45	Dennis - Closed Incident	Williams, Rick	12-01033

XI. Immediate Corrective action taken?

Put water into tank to float the crude oil and began to remove the crude in the tank to another availble storage tank.

XII. Specific Remedial action and/or planned to prevent recurrence?

Foamed area, vac trucks to remove crude oil. Soil will be remediated when heavy equipment can enter area

XIII. Regulation notification requirement? (Check appropriate)

X	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
	LAC 33:III.1101	Control of Emissions of Smoke
	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 4/24/2012

Hazard Recognition Report

Type	**Environmental: Reportable**		Hazard Number	**111000752**	
Date Occurred	**02/22/2012** Time **04:04pm**		Date Reported	**02/22/2012**	Time **04:04pm**
Brief Description	**Tank 175 Leak RCA1649 ENDB2020**		Status	**Open**	
Full Description	**Tank 175 Leak_RCA1649_ENDB2020** **Operations found crude oil from T-175 flowing from several rusted out holes on the metal sides of the tank near the floor. Vac trucks were called to remove the product which was contained within the dike wall. Foam was applied to suppress any vapors being emitted. Operations began to put water into the tank to "float" the crude and prevent it from continuing to flow from the holes. They also started pumping the remaining crude from T-175 into another available storage tank. It was estimated that 1000bbls of sweet crude were spilled.** **PREVENTABLE: Yes** **COMMENTS: TAZ Environmental and Hill Bros recovering product** **CAUSE: Developed holes in metal around bottom of tank walls. Tank was rusted at the bottom chime ring.** **IMMEDIATE ACTION: Put water into tank to float the crude oil and began to remove the crude in the tank to another availble storage tank.** **REMEDIAL ACTION: Foamed area, vac trucks to remove crude oil. Soil will be remediated when heavy equipment can enter area.** **REPORTABLE: Crude Product Spill Reportable Quantity Limit - 1 Bbl**				
Manager	**PERDUE, MITCHELL J**		Phone		
Mgt. Tour Rep			Phone		
	BOYUM, GERALD A		Phone		
Location	**111**				
Department	**117**		Column/Bay		
Work Group			Result of an Audit		
Job Station	**General Plant**		Union Concern/Grievance		
Shift			Void		
Emp Making Rpt	**Rick Williams**		Date Closed		
Risk Assessment					

Hazard Categories	Contributing Factors
Reportable **Permit Deviation**	**Defective Parts** **Standard Deviation**

Corrective Action	Date Due	Date Completed	Who Responsible
Notification Requirements	**02/22/2012**	**02/22/2012**	**WILLIAMS, RICKY**

Full Description: **Notification Requirements for Unauthorized Discharge**
Crude - Paraffinic (Emission Point T-175) 1000bbls

Entered By	
Date Entered	**02/22/2012**

INTERNAL EXERCISE DOCUMENTATION FORM

Spill Management Team Tabletop Exercise

1. Date(s) Performed: 2 / 22 / 12

2. Exercise or actual response? Actual
   If an exercise, announced or unannounced? Unannounced

3. Location of tabletop: Tk-175

4. Time Started: 7 : 00 am / pm
   Time completed: 12 : 00 am / pm

5. Response plan scenario used (check one):\
   ✓ Average most probable discharge
   _____ Maximum most probable discharge
   _____ Worst case discharge
   Size of (simulated) spill 1000 bbls / gals

6. Describe how the following objectives were exercised:

   a. Spill management team's knowledge of oil-spill response plan:

   Adequate. Team made notifications, mobilized fire brigade and external contractors + engaged operators to quickly dr-inventory tank.

   b. Proper Notifications:

   - EHS Manager/Engineer notified
   - State Police, LDEQ notified, local authorities notified

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No:

1ST QTR 2011

Actual Spill Response

I. Company Name: Calumet Lubricants, Shreveport Refinery AI#-1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
St. or PO Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification @
DEQ Official Contacted:
Company Official who made the call:

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
Tank Farm

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

V. Which applicable Reportable Quantity limits were exceeded?

VI. Give the date and time the release began and the duration of the release:
Started: 1/19/2011 6:00:00 PM Ended: 1/19/2011 6:45:00 P Duration: 0.75 Hours
OHM # 11100415 RCA1332

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

VIII. Upset description, cause, and what off-site impact resulted:

Description: A bleeder was left open on pump. Pump basin overflowed into dike wall area inside T-39. Parraffinic DAO was the product. According to Buck Boyum the volume was extimated to be 5 bbls.

Cause: Bleeder was left open on charge pump.

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Human error. The bleeder should have been closed after maintenance was done on the charge pump.

Emergency Occurrences

UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

XI. Immediate Corrective action taken?

Spill response team cleaned up spill.

XII. Specific Remedial action and/or planned to prevent recurrence?

Remediated soil

XIII. Regulation notification requirement? (Check appropriate)

X	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
	LAC 33:III.1101	Control of Emissions of Smoke
	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature:

Name: Williams, Rick

Title: Environmental Manager

Date: 7/1/2011

Hazard Recognition Report

Type	**Spill / Release**		Hazard Number	**111000415**	
Date Occurred	**01/19/2011** Time **05:20pm**		Date Reported	**01/19/2011**	Time **05:20pm**
Brief Description	**174TK Pump Leak RCA 1332**		Status	**Open**	
Full Description	**174TK Pump Leak_NONREPORTABLE_LAND_ENDB1966_RCA1332** **A bleeder was left open on pump. Pump basin overflowed into dike wall area inside T-39. Parraffinic DAO was the product. According to Buck Boyum the volume was extimated to be 5 bbls.** **PREVENTABLE: Yes, Human error. The bleeder should have been closed after maintenance was done on the charge pump.** **CAUSE: Bleeder was left open on charge pump.**				
Manager	**PERDUE, MITCHELL J**		Phone		
Mgt. Tour Rep			Phone		
	BOYUM, GERALD A		Phone		
Location	**111**				
Department	**128**		Column/Bay		
Work Group	**PO**		Result of an Audit		
Job Station	**General Plant**		Union Concern/Grievance		
Shift	**4**		Void		
Emp Making Rpt	**Gerald Boyum**		Date Closed		
Risk Assessment					
Hazard Categories			Contributing Factors		
Environmental			**Operational**		
Corrective Action		Date Due	Date Completed	Who Responsible	
Spill / Release Information		**01/28/2011**	**02/14/2011**	**BOYUM, GERALD A**	

Full Description: **Substance:___Parafinnic DAO_____**
Media Affected: ___Dyke area and pump basin_____
Source: __Pump bleeder_____
Quantity Release: __5____ Unit of Measure: __bbls_____
Quantity Recovered: ____4 bbls_____
Preventable: _____
Confined to Property: _____

Discipline For Loader Not Following Proc	**01/28/2011**	**03/07/2011**	**STOKER, DALTON M**

Full Description: **Discipline For Loader Not Following Procedure**

Entered By	
Date Entered	**01/24/2011**

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No: 7008 1140 0002 8970 4274

2nd QTR 2011 Actual Spill Response

I. Company Name: Calumet Lubricants, Shreveport Refinery AI#-1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
St. or PO Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification 3/27/2011 @ 10:14
DEQ Official Contacted: On-Line Form
Company Official who made the call: Williams, Rick

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit	Emission Point	EIQ Number
Tank Farm	N/A	N/A

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

Component	Permit	Permit Limit	Unit of Measure
Crude - Paraffinic	N/A	N/A	N/A

V. Which applicable Reportable Quantity limits were exceeded?

Crude Product Spill Reportable Quantity Limit - 1 Bbl

VI. Give the date and time the release began and the duration of the release:
Started: 3/27/2011 8:00:00 AM Ended: 3/27/2011 9:00:00 A Duration: 1 Hours
OHM # 111000475

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

Component	Quantity Released	Unit of Measure
Crude - Paraffinic	5	BBL

VIII. Upset description, cause, and what off-site impact resulted:

Description: 5 bbls of sour crude was released inside the dike wall at Tank 50. A leaking flange and an open bleeder valve caused the release. All of the product was contained inside the dike wall, most of which was floating on water.

Cause: Leaking flange and open bleeder valve

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

The line should have been checked to ensure there were no open bleeder valves or loose flanges.

Emergency Occurrences

UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

Agency	Date	Time	Agency Official	Calumet Official	Notification #
DEQ Baton Rouge	3/27/2011	10:14	On-Line Form	Williams, Rick	XZTV 8905

XI. Immediate Corrective action taken?

Stopped flow and vac trucks sent to remove crude

XII. Specific Remedial action and/or planned to prevent recurrence?

Removed crude oil from the diked area at Tank 50

XIII. Regulation notification requirement? (Check appropriate)

X	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
	LAC 33:III.1101	Control of Emissions of Smoke
	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 7/1/2011

Hazard Recognition Report

Type	Spill / Release			Hazard Number	111000475		
Date Occurred	03/27/2011	Time	08:00am	Date Reported	03/27/2011	Time	09:00am
Brief Description	LAND_REPORTABLE_ENDB1980			Status	Reviewed		

Full Description

LAND_REPORTABLE_ENDB1980 (RCA1380)
Reportable: Crude Product Spill Reportable Quantity Limit - 1 Bbl
TANK FARM
5 bbls of sour crude was released inside the dike wall at Tank 50. A leaking flange and an open bleeder valve caused the release. All of the product was contained inside the dike wall, most of which was floating on water.
PREVENTABLE: Yes, The line should have been checked to ensure there were no open bleeder valves or loose flanges.
CAUSE: Leaking flange and open bleeder valve
REDEMIAL ACTION: Removed crude oil from the diked area at Tank 50
IMMEDIATE ACTION: Stopped flow and vac trucks sent to remove crude

OVERVIEW:
Sour Crude oil was released in two different locations on the charge line from 49 tank to the discharge header of 60 tank. The first source was an open bleeder located at 50 tank inside the dike wall at a switching manifold, with the second located at the tie point flange of the on the discharge header coming from 60 tank.

ROOT CAUSE:
1) Refinery procedures and checklists were not completed by responsible personnel to assure process equipment was ready for service.
a) RFC 5807 not completed or approved for implementation.
b) Post Joint QC inspection of charge line was not completed.
c) PSSR was not performed on the 26th.
d) Operating procedure managing Open-Ended Process Valves, Line and Drains (00-N-0029) was not adhered to. Note all Tankermen Refresh trained 1/12/11 on procedure
e) The Transfer and Loading supervision decision at 3:30pm 3/25/11 to wait until Monday 3/28/11 not communicated to Operations to resend instructions.

Manager	PERDUE, MITCHELL J	Phone	
Mgt. Tour Rep		Phone	
	BOYUM, GERALD A	Phone	
Location	111		
Department	128	Column/Bay	
Work Group		Result of an Audit	
Job Station	General Plant	Union Concern/Grievance	
Shift	4	Void	
Emp Making Rpt	Rick Williams	Date Closed	
Risk Assessment			

Hazard Categories	Contributing Factors
Reportable **Quality Product Loss**	**Standard Deviation**

Corrective Action	Date Due	Date Completed	Who Responsible
Develop Structure That Area Is Broken...	**09/30/2011**	**09/20/2011**	**MARCHAND, AUBREY**

Full Description: **Develop Structure That Area Is Broken down and is assigned**

Review & Update 00-N-0029	**09/30/2012**		**MARCHAND, AUBREY**

Full Description: **Review and update 00-N-0029 to assure all process line and equipment are to be maintained as shown on the P&ID.**

Daily Write Up	**05/31/2011**	**05/02/2011**	**BOYUM, GERALD A**

Full Description: **Shift Supervisor Should Get Copy Of loading supervisor daily write up**

Daily Write Up	**05/31/2011**	**06/02/2011**	**STOKER, DALTON M**

Full Description: **Shift Supervisor Should Get Copy Of loading supervisor daily write up**

Entered By	
Date Entered	03/28/2011

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

3rd Qtr 2011 Actual Response

Certified Mail No: 7008 1140 0004 1863 2058

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification 10/10/2011 @ 14:40
DEQ Official Contacted: on-line SPOC
Company Official who made the call: Williams, Rick

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
Waste Water Treatment

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

V. Which applicable Reportable Quantity limits were exceeded?

VI. Give the date and time the release began and the duration of the release:
Started: 10/10/2011 8:00:00 AM Ended: 10/10/2011 8:00:00 A Duration: 0 Hours
OHM # 111000662 RCA1560

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

VIII. Upset description, cause, and what off-site impact resulted:

Description: Activated sludge aeration basins at the wwtu foamed over sometime during the night, spilling sludge/hydrocarbon on the ground inside the diked area of T-79. Estimated 81 bbls was released from the basins into the diked area.

Cause: Large amounts of diesel in the separators, Tank 79.

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Large amount of diesel came from grit separator into the wwtu.

Emergency Occurrences

UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

Agency	Date	Time	Agency Official	Calumet Official	Notification #
Shreveport DEQ Water	10/10/2011	14:40	on-line SPOC	Williams, Rick	UZIM 9568

XI. Immediate Corrective action taken?

reduced air flows into the basins

XII. Specific Remedial action and/or planned to prevent recurrence?

None

XIII. Regulation notification requirement? (Check appropriate)

X	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
	LAC 33:III.1101	Control of Emissions of Smoke
	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 11/15/2011

Hazard Recognition Report

Type	**Environmental: Reportable**		Hazard Number	**111000662**	
Date Occurred	**10/10/2011** Time **04:01pm**		Date Reported	**10/10/2011**	Time **04:01pm**
Brief Description	**WWTP_LAND_REPORTABLE_ENDB2004_R**		Status	**Reviewed**	
Full Description	**WWTP_LAND_REPORTABLE_ENDB2004_RCA1560** **Activated sludge aeration basins at the wwtu foamed over sometime during the night, spilling sludge/hydrocarbon on the ground inside the diked area of T-79. Estimated 81 bbls was released from the basins into the diked area.** **PREVENTABLE: Yes, Large amount of diesel came from grit separator into the wwtu.** **CAUSE: Large amounts of diesel in the separators, Tank 79.** **IMMEDIATE ACTION: reduced air flows into the basins** **Incident Reviewed 10/11/11 By: LBJ, RWiliams, MPerdue, JSwanson, JKelly, AMarchand, BTurnage**				
Manager	**GERMANY, THOMAS P**		Phone		
Mgt. Tour Rep			Phone		
	WILLIAMS, RICKY		Phone		
Location	**111**				
Department	**117**		Column/Bay		
Work Group			Result of an Audit		
Job Station	**General Plant**		Union Concern/Grievance		
Shift	**4**		Void		
Emp Making Rpt	**Rick Williams**		Date Closed		
Risk Assessment					
Hazard Categories			Contributing Factors		
Permit Deviation			**Standard Deviation**		
Corrective Action		Date Due	Date Completed	Who Responsible	
Agency Notification		**10/10/2011**	**10/10/2011**	**WILLIAMS, RICKY**	

Full Description: **1) Notification Requirements for Unauthorized Discharge**
Shreveport DEQ Water - Notification # UZIM 9568
Online SPOC at 14:40

Create Form To Authorize Draining	**10/31/2011**	**11/03/2011**	**WILLIAMS, RICKY**

Full Description: **create form to authorize draining to process sewer and train**

Entered By	
Date Entered	**10/10/2011**

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

4th Qtr 2011 Actual Response. Also utilized for Table Top Drill Exercise

Certified Mail No: 7010 2780 0001 4409 2489

I. Company Name: Calumet Lubricants Waxes, Shreveport Refinery AI # 1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
Post Office Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification 12/15/2011 @ 15:07
DEQ Official Contacted: On-line form
Company Official who made the call: Williams, Rick

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit
Tank Farm

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

Component	Permit	Permit Limit	Unit of Measure
Fuels Product			

V. Which applicable Reportable Quantity limits were exceeded?

Reportable Quantity Limit Exceeded - 100 lbs

VI. Give the date and time the release began and the duration of the release:
Started: 12/15/2011 8:00:00 AM Ended: 12/15/2011 12:00:00 Duration: 4 Hours
OHM # 111000705 RCA1600 (RCA Conducted)

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

Component	Quantity Released	Unit of Measure
Fuels Product	100	BBL

VIII. Upset description, cause, and what off-site impact resulted:

Description: Diesel storage tank run down line inadvertantly blocked in by operations department, causing a pressure relief valve to open on the diesel salt drums releasing diesel fuel to the ground.

Cause: Tank56 was blocked in causing pressure releif valve to release product

Off-Site Impact: None

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

Tank was blocked in inadvertently causing diesel to spill.

Emergency Occurrences

UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

Agency	Date	Time	Agency Official	Calumet Official	Notification #
LDEQ	12/15/2011	15:07	On-line form	Williams, Rick	3SD59766

XI. Immediate Corrective action taken?

Operations opened line to relieve the pressure

XII. Specific Remedial action and/or planned to prevent recurrence?

Vac trucks removed free product.

XIII. Regulation notification requirement? (Check appropriate)

X	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
	LAC 33:III.1101	Control of Emissions of Smoke
	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 1/11/2012

Hazard Recognition Report

Type	Spill / Release		Hazard Number	111000705	
Date Occurred	12/15/2011	Time 11:09am	Date Reported	12/15/2011	Time 11:09am
Brief Description	RV Lifted On Salt Drum RCA1600		Status	Root Cause Analysis	
Full Description	RV Lifted on Salt Drum_RCA1600_ENDB 2011 12/21/11 Correction to what was reported: only 5bbls spilled. RPR will clean / Pharr Bros to haul Diesel storage tank run down line inadvertantly blocked in by operations department, causing a pressure relief valve to open on the diesel salt drums releasing diesel fuel to the ground. PREVENTABLE: Yes, Tank was blocked in inadvertently causing diesel to spill. CAUSE: Tank56 was blocked in causing pressure releif valve to release product REMEDIAL ACTION: Vac trucks removed free product. RCA CONDUCTED: SUMMARY: A release of diesel from the containment area at the diesel salt drums resulted in a reportable incident. FACTS: "Operations called tanker-man to line up diesel run down to Tk-56. "Tanker-man opened valve at tank to allow diesel to product storage. "At approximately 8am, a crude unit operator reported diesel relieving from salt drum PSV and overflowing from containment wall. "Vacuum truck was called to unit to remove product from the contaminated area. FINDINGS: "Two valves upstream of the tank s inlet valve were found to be closed, causing flow of diesel to back up and relieve through salt drum. "Previous days work had required these valves be closed to steam a connected portion of pipe while the diesel run down to Tk 56 was not in service. (see pictures part of biodiesel blending project)				

Manager	MARCHAND, AUBREY A.	Phone	
Mgt. Tour Rep		Phone	
		Phone	
Location	111		
Department	117	Column/Bay	
Work Group		Result of an Audit	
Job Station	General Plant	Union Concern/Grievance	
Shift		Void	
Emp Making Rpt	Rick Williams	Date Closed	
Risk Assessment			

Hazard Categories	Contributing Factors
Reportable Permit Deviation	Operational

Corrective Action	Date Due	Date Completed	Who Responsible
Refresher Training To Ops	03/30/2012	01/10/2012	HALL SR., MICHAEL D

Full Description: Refresh/emphasize to operators the necessity in walking down a job from initial source to final destination when making line ups. Verify in the field the position of all valves.

On Training Records: reference OHM 111000705 / RCA 1600 (12/16/11 Spill)

Refresher Training To All Ops	03/30/2012	01/10/2012	PARKS, BOBBY G

Full Description: Refresh/emphasize to operators the necessity in walking down a job from initial source to final destination when making line ups. Verify in the field the position of all valves.

On Training Records: reference OHM 111000705 / RCA 1600 (12/16/11 Spill)

Refresher Training To All Ops	03/30/2012		SEPULVADO, GREGORY R

Full Description: Refresh/emphasize to operators the necessity in walking down a job from initial source to final destination when making line ups. Verify in the field the position of all valves.

On Training Records: reference OHM 111000705 / RCA 1600 (12/16/11 Spill)

Refresher Training To All Ops	03/30/2012		CLAY, VIDAL T

Full Description: Refresh/emphasize to operators the necessity in walking down a job from initial source to final destination when making line ups. Verify in the field the position of all valves.

On Training Records: reference OHM 111000705 / RCA 1600 (12/16/11 Spill)

INTERNAL EXERCISE DOCUMENTATION FORM

Spill Management Team Tabletop Exercise

1. Date(s) Performed: 12 / 15 / 11

2. Exercise or actual response? Actual

   If an exercise, announced or unannounced? unannounced

3. Location of tabletop: Diesel Sact Drums

4. Time Started: 8 : 00 (am) / pm

   Time completed: 12 : 00 am / (pm)

5. Response ~~plan~~ scenario used (check one):\

   ✓ Average most probable discharge

   _____ Maximum most probable discharge

   _____ Worst case discharge

   Size of ~~(simulated)~~ Actual spill 100 bbls / gals

6. Describe how the following objectives were exercised:

   a. Spill management team's knowledge of oil-spill response plan:

   Adequate

   b. Proper Notifications:

   EHS notified, LDEQ notified.

   RCA Initiated, OHM # 11000705

c. **Communications System:**

Cellphone, Radios

7. Attach description of lesson(s) learned and person(s) responsible for follow up of corrective measures.

— Operations Responsible for Corrective Actions.

Certifying Signature

Retain this form for a minimum of 3 years (for USCG/RSPA/MMS) or 5 years (for EPA).

Oil Spill Response Notification Exercise in Accordance with OPA 90 (Quarterly Exercise)

Objective: to establish contact with the Qualified Individual (QI) specified in the facility response plan.

Date of Exercise: ___ /___ /_____ Date of Last Exercise: ___ /___ /_____

Facility: _____

Person Initiating Exercise: _____

Name of QI(s) Listed in Plan: _____, _____, _____

QI Notified: _____

Time Exercise Initiated: __: __ am / pm Contact Made: __: __ am / pm

Method of Contact: ☐ Telephone (____) _____ - _____
☐ Fax (____) _____ - _____
☐ Radio ☐ Other _____

Comments:
_____
_____
_____

Note: Person making the notification is to request that the QI provide written documentation that the exercise was completed. The documentation must include the date of the exercise, time call was received by the QI; and certification from the QI that contact was made. The documentation should be forwarded to the initiating party *immediately* upon completion of the exercise via the fastest means possible such as fax or mail service. **It is important to note that this exercise is not complete until the documentation from the QI is attached to this form and filed in the drill file.**

INTERNAL EXERCISE DOCUMENTATION FORM

Emergency Procedures Exercise

1. Date performed: ___ /___ /_____
2. Exercise or actual response? _____
   a. If an exercise, announced or unannounced? _____
3. Location: _____
4. Vessel / Barge / Facility Name: _____
5. Time Started: __: __ am / pm Time Completed: __: __ am / pm
6. Sections of Vessel / Barge / Facility emergency procedures exercised (i.e. response to collision, response to oil spill on deck, response to vessel fire, etc.)?

   _____

   _____

   _____

   _____

7. Description of exercise:

   _____

   _____

   _____

   _____

   _____

8. Identify which if the 15 core components of your response plan were exercised during this particular exercise:

   _____

   _____

   _____

   _____

   _____

INTERNAL EXERCISE DOCUMENTATION FORM

Equipment Deployment Exercise

1. Date(s) performed: ___ /___ /_____ and ___ /___ /_____
2. Exercise or actual response? _____
   a. If an exercise, announced or unannounced? _____
3. Deployment Location(s): _____, _____
4. Time Started: __: __ am / pm Time Completed: __: __ am / pm
5. Equipment deployed was:
   - ☐ Facility –owned
   - ☐ Oil spill removal organization –owned if so, which OSRO? _____
   - ☐ Both
6. List type and amount of all equipment (e.g. boom and skimmers) deployed and number of support personnel employed:

Type Equipment	Amount of Equipment	# of Support Personnel Employed

7. Describe goals of the equipment deployment and list any Area Contingency Plan strategies tested. (Attach a sketch of equipment deployments and booming strategies):

   _____

   _____

   _____

   _____

8. For deployment of facility –owned equipment, was the amount of equipment deployed <u>at least</u> the amount necessary to respond to your facility's average most probable spill?

   _____

   Was the equipment deployed in its intended operating environment?

9. For deployment of OSRO – owned equipment, was a representative sample (at least 1000 feet of each boom type and at least one each skimmer type) deployed?

   _____

Equipment Deployment Exercise *(continued)*

Was the equipment deployed in its intended operating environment?

_____

10. Are all facility personnel that are responsible for response operations involved in a comprehensive training program, and all pollution response equipment involved in a comprehensive maintenance program? _____

    If yes, describe program: Was the equipment deployed in its intended operating environment?

    _____

    _____

    Date of Last equipment inspection: ___ /___ /_____

11. Was the equipment deployed by personnel responsible for its deployment in the event of an actual spill?

    _____

12. Was all deployed equipment operational? If not, why not?

    _____

13. Identify which of the 15 core components of your response plan were exercised during this particular exercise:

    _____

    _____

    _____

    _____

    _____

14. Attach a description of lesson(s) learned and person(s) responsible for follow up of corrective measures.

_____

Certifying Signature

Retain this form and other documentation related to this exercise on file for a minimum of 3 years (for USCG / RSPA / MMS) or for a minimum of 5 years (for EPA).

Oil Spill Response Notification Exercise in Accordance with OPA 90 (Quarterly Exercise)

OBJECTIVE: To establish contact with the Qualified Individual (Q.I.) specified in the facility response plan.

Date of Exercise: 7-13-10 Date of Last Exercise: 1-21-10

Facility: Calumet Shreveport

Person Initiating Exercise: Rick Williams / Buddy Stoker

Name of Q.I.(s) Listed in Plan: Tom Germany, Lyndon Johnson, Aubrey Merchant, Ken Brown, Tomas Kelly, Rick Williams

Q.I. Notified: Tom Germany

Time Exercise Initiated: 0740 [✓] a.m. [ ] p.m.

Contact Made: 0750 [✓] a.m. [ ] p.m. cell

Method of Contact: [✓] Telephone Telephone number: 518-9530

[ ] Fax Fax number:

[ ] Radio [ ] Other:

Comments: 4" Hose Ruptured, Released ≈ 10 bbls crude into Ditch outside Plant.

Note: Person making the notification is to request that the Q.I. provide written documentation that the exercise was completed. The documentation must include the date of the exercise, time call was received by the Q.I., and certification from the Q.I. that contact was made. The documentation should be forwarded to the initiating party immediately upon completion of the exercise via the fastest means possible such as Fax or mail service. It is important to note that this exercise is not complete until the documentation from the Q.I. is attached to this form and filed in the drill file.

INTERNAL EXERCISE DOCUMENTATION FORM

Emergency Procedures Exercise

1. Date performed: 7-13-10
2. Exercise or actual response? Actual
   If an exercise, announced or unannounced?
3. Location: Plains Pipeline Header @ SE corner plant
4. Vessel/Barge/Facility name: Calumet SPORT
5. Time started: 0740
   Time completed: 1330
6. Sections of Vessel/Barge/Facility emergency procedures exercised (i.e., response to collision, response to oil spill on deck, response to vessel fire, etc.)?

   Oil Spill Response, FRP, SPCC

7. Description of exercise:

   Actual Spill Release — See attached Notification Form

8. Identify which of the 15 core components of your response plan were exercised during this particular exercise:

   See Attached Document

INTERNAL EXERCISE DOCUMENTATION FORM

Equipment Deployment Exercise

1. Date(s) performed: 7-13-10
2. Exercise or actual response? Actual
   If an exercise, announced or unannounced?
3. Deployment location(s):
   1. Ditch SE corner of plant
   2. Canal and Hollywood
   3. Canal and 70th street
   4. Canal and Meadow
   5. Mansfield Rd + 70th streets
4. Time started: 0740
   Time completed: 1330
5. Equipment deployed was:
   - ✓ Facility–owned
   - ✓ Oil spill removal organization–owned If so, which OSRO? Jones Env.
   - ✓ Both
6. List type and amount of all equipment (e.g., boom and skimmers) deployed and number of support personnel employed:

   12 - support off-site, 200' Hardboom, numerous sorbent boom, and sorbent PADS.

7. Describe goals of the equipment deployment and list any Area Contingency Plan strategies tested. (Attach a sketch of equipment deployments and booming strategies):

Equipment Deployment Exercise (continued)

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? YES

Was the equipment deployed in its intended operating environment?

YES

9. For deployment of OSRO-owned equipment, was a representative sample (at least 1000 feet of each boom type and at least one of each skimmer type) deployed? NO; 200' Harb boom only/requirval no skimmers needed

Was the equipment deployed in its intended operating environment?

YES

10. Are all facility personnel that are responsible for response operations involved in a comprehensive training program, and all pollution response equipment involved in a comprehensive maintenance program?

If so, describe the program:

Date of last equipment inspection: Unknown

11. Was the equipment deployed by personnel responsible for its deployment in the event of an actual spill? YES

12. Was all deployed equipment operational? If not, why not?

YES

Equipment Deployment Exercise (continued)

13. Identify which of the 15 core components of your response plan were exercised during this particular exercise:

- Vac Trucks
- Haz Mat Team
- Hard boom, Sorbent boom, pads
- OSRO's
- EOC setup
- Notified Agencies (EPA, NRC, DEQ State police

14. Attach a description of lesson(s) learned and person(s) responsible for follow up of corrective measures.

Certifying Signature

Retain this form and other documentation related to this exercise on file for a minimum of 3 years (for USCG/RSPA/MMS) or for a minimum of 5 years (for EPA).

(1) Dike walls will be built around both Crude pipeline stations inside the refinery.

Emergency Occurrences
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Written Follow-Up Report Required By Title 33, Section 3925

Certified Mail No: 7008 1140 0004 1863 2010

I. Company Name: Calumet Lubricants, Shreveport Refinery AI#-1214
Physical Location: 3333 Midway Street, Shreveport, LA 71109
St. or PO Box: PO Box 3099, Shreveport, LA 71133-3099
Telephone Number: (318) 636-2711

II. Date and Time of Verbal Notification 7/13/2010 @ 8:03
DEQ Official Contacted: Mohsan
Company Official who made the call: Johnson, Lyndon

III. Emission point source(s) involved? (Including the process unit and EIQ number if applicable):

Process Unit	Emission Point	EIQ Number
Pipeline	N/A	N/A

IV. Applicable permit # and the current permitted limit (lb/hr) for the pollutant(s) released from the emision point source involved?

Component	Permit	Permit Limit	Unit of Measure
Crude - Paraffinic	N/A	N/A	N/A

V. Which applicable Reportable Quantity limits were exceeded?

Crude Product Spill Reportable Quantity Limit - 1 Bbl

VI. Give the date and time the release began and the duration of the release:
Started: 7/13/2010 7:40:00 AM Ended: 7/13/2010 1:30:00 P Duration: 5.83 Hours
OHM # 111000276

VII. Which specific pollutants were emitted and how much of each compound was released (attach emission calculations if applicable). Emisions were:

Component	Quantity Released	Unit of Measure
Crude - Paraffinic	10	BBL

VIII. Upset description, cause, and what off-site impact resulted:

Description: 4 inch transfer hose burst while calibrating the header meters discharging approximately 10 bbls of crude oil. Estimated 8 bbls went off-site into the north-south concrete ditch on the south east side of the refinery. Hazmat team and EOC activated. Contacted Jones environmental to begin placing hard boom and sorbent boom in the concrete ditch at several locations south of the plant. They were assisted by TAZ environemntal, Anderson Environmental and Rick Pierce Resources. Some oil sheen noted in the concrete ditch at the Mansfield Road and 70th street boom location. All oil/sheen was captured at this point. No free oil nor sheen noted south of this point.

Cause: 4 inch transfer hose burst

Off-Site Impact: Minimal impact, mostly oil sheen which was captured by RPR, TAZ, and Jones Environmental with sorbent pads.

IX. Was the release preventable? Yes / No (Underline one). Give Explanation:

4 inch transfer hose burst while calibrating meters at the plains pipeline header at the southeast corner of the refinery.

Emergency Occurrences

UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

X. What other agencies were notified?

Agency	Date	Time	Agency Official	Calumet Official	Notification #
State Police	7/13/2010	8:03	Mohsan	Johnson, Lyndon	10-03876
NRC	7/13/2010	8:09	Petty Officer Higgins	Johnson, Lyndon	947517
EPA Region VI	7/13/2010	8:19	Gary Moore	Johnson, Lyndon	947517
Shreveport DEQ Water	7/13/2010	8:21	Ben Juno	Johnson, Lyndon	10-03876

XI. Immediate Corrective action taken?

activated EOC, notified agencies and began placing booms in several locations downstream of the refinery. Air monitoring was negative for Benzene, H2S and LEL.

XII. Specific Remedial action and/or planned to prevent recurrence?

Vac trucks, hard boom, sorbent boom and sorbent pads were used to capture the oil and remove the sheen from the concrete ditch. Dike wall will be built higher araound the pipeline header area.

XIII. Regulation notification requirement? (Check appropriate)

X	LAC 33:I.3917	Notification Requirements for Unauthorized Discharge
	LAC 33:III.1101	Control of Emissions of Smoke
	LAC 33:III.5107.B	Air Toxics Discharge Reporting Requirement
	LAC 33:III.927	General Requirements to Report Substantial Increase

XIV. Company Official: Signature: _____

Name: Williams, Rick

Title: Environmental Manager

Date: 7/14/2010

Emergency Occurrences
And/Or Notification Form

- ☐ Environmental Engineer initiates notification with details of the verbal/telephone notifications made immediately after the incident occurred and routes for comments and corrections.
- ☐ Environmental Engineer incorporates comments, calculations, etc.
- ☐ Environmental group leader, or his designee, initials the notification.
- ☐ Manager, Staff Engineer of the Environmental and Technical Services or Senior Environmental Engineer signs the notification.
- ☐ MAIL the report by

Note: Type **"Notification of Unauthorized Discharge"** on outside of envelopes.

Original To Louisiana Department of Environmental Quality
P.O. Box 4313
Baton Rouge, Louisiana 70821-4313
Attention: Administrator: Air Quality Division

Copy To: Louisiana Department of Environmental Quality
1525 Fairfield
Shreveport, Louisiana 71101-4368
Attention: Administrator: Air Quality Division, Otis Randle

Copy To: Louisiana Emergency Response Commission
Department of Public Safety and Corrections
P.O. Box 66168
Baton Rouge, Louisiana 70896

Copy To: Local Emergency Response Commission
Superfund Amendment Reauthorization
P.O. Box 192
c/o Caddo-Bossier Parish Civil Defense
Shreveport, Louisiana 71161-0192

File 2.4

Do not copy this sheet.

Oil Spill Response Notification Exercise in Accordance with OPA 90 (Quarterly Exercise)

OBJECTIVE: To establish contact with the Qualified Individual (Q.I.) specified in the facility response plan.

Date of Exercise: 1-21-10 Date of Last Exercise: 12-17-09

Facility: Calumet Shreveport

Person Initiating Exercise: Buddy Stoker

Name of Q.I.(s) Listed in Plan: Tomberlin, Lynda Johnson, Aubrey Marchand, Tom Kelly, Ken Brown, Rick Williams

Q.I. Notified: YES

Time Exercise Initiated: 10:00 [✓] a.m. [ ] p.m.

Contact Made: 10:30 [✓] a.m. [ ] p.m.

Method of Contact: [ ] Telephone Telephone number: _____

[ ] Fax Fax number: _____

[ ] Radio [✓] Other: cell phone/verbal

Comments: 3/4" nipple broke @ T-83 released approx. 750 bbls asphalt inside Dike area.

Note: Person making the notification is to request that the Q.I. provide written documentation that the exercise was completed. The documentation must include the date of the exercise, time call was received by the Q.I., and certification from the Q.I. that contact was made. The documentation should be forwarded to the initiating party immediately upon completion of the exercise via the fastest means possible such as Fax or mail service. It is important to note that this exercise is not complete until the documentation from the Q.I. is attached to this form and filed in the drill file.

INTERNAL EXERCISE DOCUMENTATION FORM

Emergency Procedures Exercise

1. Date performed: 1-21-10
2. Exercise or actual response? Actual Response
   If an exercise, announced or unannounced?
3. Location: T-83
4. Vessel/Barge/Facility name: Calumet
5. Time started: 10:00
   Time completed: 10:30
6. Sections of Vessel/Barge/Facility emergency procedures exercised (i.e., response to collision, response to oil spill on deck, response to vessel fire, etc.)?

   O:C Spill Response.

7. Description of exercise:

   Actual cleanup - Rick Pierce Resources cleaned material, remediated area.

8. Identify which of the 15 core components of your response plan were exercised during this particular exercise:

INTERNAL EXERCISE DOCUMENTATION FORM

Equipment Deployment Exercise

1. Date(s) performed: 1-21-10 – 1-30-10
2. Exercise or actual response? _____
   If an exercise, announced or unannounced? _____
3. Deployment location(s):
   T-83 Diked area around Tank
4. Time started: 10:00
   Time completed: 10:30
5. Equipment deployed was:
   ____ Facility–owned
   ____ Oil spill removal organization–owned If so, which OSRO? _____
   ✓ Both
6. List type and amount of all equipment (e.g., boom and skimmers) deployed and number of support personnel employed:
   VAC Trucks, Booms, Heavy equipment
7. Describe goals of the equipment deployment and list any Area Contingency Plan strategies tested. (Attach a sketch of equipment deployments and booming strategies):

Equipment Deployment Exercise (continued)

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? YES

   Was the equipment deployed in its intended operating environment?

   YES

9. For deployment of OSRO-owned equipment, was a representative sample (at least 1000 feet of each boom type and at least one of each skimmer type) deployed? N/A

   Was the equipment deployed in its intended operating environment?

   N/A

10. Are all facility personnel that are responsible for response operations involved in a comprehensive training program, and all pollution response equipment involved in a comprehensive maintenance program?

    If so, describe the program:

    Date of last equipment inspection:

11. Was the equipment deployed by personnel responsible for its deployment in the event of an actual spill?

12. Was all deployed equipment operational? If not, why not?

    YES

Equipment Deployment Exercise (continued)

13. Identify which of the 15 core components of your response plan were exercised during this particular exercise:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

14. Attach a description of lesson(s) learned and person(s) responsible for follow up of corrective measures.

_____
Certifying Signature

Retain this form and other documentation related to this exercise on file for a minimum of 3 years (for USCG/RSPA/MMS) or for a minimum of 5 years (for EPA).

FIGURE 11.3
CALUMET LUBRICANTS COMPANY

QUALIFIED INDIVIDUAL (QI) NOTIFICATION DRILL

DATE of NOTIFICATION _____

Name of QI Notified	QI Response		COMMENTS/Corrective Action
	Yes	No	

Confirmed by:

Name _____
Print Only

Signature _____ Date_____

1) All "Qualified Individual(s)" will be alerted on Thursday of every week.
2) All "Qualified Individual(s)" not receiving notification of the alert shall contact the individual initiating the drill that notification was not received.
3) Notification response shall be logged and maintained for a period of at least three (3) years.
4) If it is determined that equipment failure or other problems resulted in the notification being delayed or prevented, such problems will be identified and corrected prior to the next exercise.
5) All completed inspection sheets shall be submitted monthly to the Environmental Group.

Figure 11.4

CALUMET LUBRICANTS COMPANY
SHREVEPORT, LA
STORAGE TANK INSPECTION SUMMARY

DATE **Last Update – 03/01/12**

REPAIR CODE

A	Repaired Bottom
B	New bottom installed
C	Reinforcing ring installed at bottom of lower shell ring
D	Top ring renewed
E	New roof installed
F	Repair made to internal floating roof
G	New internal floating roof installed in cone roof tank
H	Repaired secondary seal
I	Repair primary seal

REPAIR CODE

J	Replaced primary seal
K	Replace secondary seal
L	Repaired steam coil
M	Repaired roof
N	Repaired shell
O	Cleaned and tested steam coil heater
P	Installed electric heater
Q	Replaced roof drain system
R	Installation of new steam coil
S	Installation of Gas Fired Heaters

PAINTING CODES

a	External coating
b	Internal coating

TANK NO.	CAPACITY (BBLS)	DIAMETER (FT.)	HEIGHT (FT.)	TYPE	TYPE JOINTS	YEAR BUILT	LAST REPAIR	LAST CLEANED	LAST PAINTED	LAST INSPECTION	
										EXTERNAL	INTERNAL
10	(b) (7)(F), (b) (3) [redacted]			Cone	Welded	1994	1997M		1994	12/03/08	10/02
11	[redacted]			Cone	Welded	1994			1994	12/03/08	1994
12	[redacted]			Cone	Welded	1994		7/17/01	1994	12/03/08	1994
13	[redacted]			Cone	Welded	1994		7/30/01	1994	12/03/08	1994
27	[redacted]			External Floating	Welded	1952	1995 J,K,Q	6/18/01		12/03/08	11/04
28	[redacted]			Sphere	Welded	1958		1985	1985	02/09	10/04
31	[redacted]			Sphere	Welded	1958			1987	02/09	10/04
32	[redacted]			Cone (Internal Float)	Rivet	1928	1995 B,F	8/20/01	1995	02/09	11/10
43	[redacted]			Cone (Internal Float)	Rivet	1933	1993 B & G	1993	1988	02/09	05/11
44	[redacted]			Cone (Internal Float)	Rivet	1932	1996 B & F	**3/20/10**	1989	01/09	03/16/10
49	[redacted]			Cone (Internal Float)	Rivet	1929	1991 B	1991	1987	11/08	08/11
50	[redacted]			Cone (Internal Float)	Rivet	1930	1985 B	1993	1985	12/03/08	10/04
52	[redacted]			Cone	Rivet	1930	2007E	1992	1980	12/19/08	01/07
53	[redacted]			External Floating	Welded	1971	1989 I	**06/20/10**	1971	12/03/08	06/29/10
54	[redacted]			Cone (Internal Float)	Welded	1971	1995J, K	6/12/01	1971	12/03/08	12/10
55	[redacted]			External Floating	Welded	1971	89 J, K / 93 Q	12/09	12/08	12/03/08	12/01/09
56	[redacted]			External Floating	Welded	1973	97 J, K, & M		1986	12/18/08	11/04
57	[redacted]			External Floating	Welded	1973	N,J,K,Q,H,I	7/14/01	1987 b	12/18/08	10/10
58	[redacted]			External Floating	Welded	1973	1990 Q	7/30/01	1990 b	12/18/08	**01/12**
59	[redacted]			Cone	Welded	1981	1985	1993	Insulated	12/03/08	1993
60	[redacted]			External Floating	Welded	1973	1981 J, K	6/25/01		06/07	06/07
61	[redacted]			External Floating	Welded	1974	1996 L,Q	1991	1988	06/07	07/11

TANK NO.	CAPACITY (BBLS)	DIAMETER (FT.)	HEIGHT (FT.)	TYPE	TYPE JOINTS	YEAR BUILT	LAST REPAIR	LAST CLEANED	LAST PAINTED	LAST INSPECTION	
										EXTERNAL	INTERNAL
67	(b) (7)(F), (b) (3) [redacted]			External Floating	Welded	1978	2001 J, K & Q	6/21/01	1987	12/18/08	10/04
68	[redacted]			External Floating	Welded	1978	01 - Q	11/09	1987	12/03/08	11/18/2009
69	[redacted]			Cone	Welded		A-09	“ 09”		09/04/09	09/04/09
71	[redacted]			Cone	Rivet	1944	01 R	8/01	Insulated	01/09	11/94
72	[redacted]			Cone	Rivet	1947	1992 E	7/13/01	1988 a	12/03/08	6/00
74	[redacted]			External Floating	Welded	1952	98C, B, J & K	1986	1988 a	04/08	04/08
75	[redacted]			External Floating	Welded	1952	1988 J,K,A	1988	1988 b	01/09	1988
76	[redacted]			External Floating	Welded	1954	92 Q / 01 K	7/30/01	1988	01/09	1992
77	[redacted]			External Floating	Welded	1954	1987 J,H,B	1987	1987	01/09	04/95
79	[redacted]			External Floating	Welded	1976	90 J,K,B/ 02 JK	1990	1990	01/09	**None**
81	[redacted]			Internal Floating	Welded	1974					11/96
82	[redacted]			Cone	Welded	1976	1994 M,N	1994	Insulated	02/09	11/94
83	[redacted]			Cone	Welded	1976			Insulated	12/22/08	**None**
84	[redacted]			Cone	Welded	1976		5/24/01	Insulated	12/22/08	**None**
86	[redacted]			Cone	Welded	1976	97 M, N / 01 R	8/2/01	Insulated	01/09	04/97
87	[redacted]			Cone	Welded	1976	01 A	2/12/01	Insulated	01/09	2/01
93	[redacted]			Cone	Welded	1979	1995 D,E	1995	Insulated	11/08	05/05
94	[redacted]			Cone	Welded	1976			Insulated	02/09	10/09/03
95	[redacted]			Cone	Welded	1976		1985	Insulated	01/09	01/03
96	[redacted]			Cone	Welded	1976	6/20/01 N	4/10/01	Insulated	01/09	11/11
97	[redacted]			Cone	Welded	1976	01 E	6/01	Insulated	01/09	**None**
98	[redacted]			Cone	Welded	1976	1981 L	1981	Insulated	02/09	**None**
99	[redacted]			Cone	Welded	1976	1993 M			01/09	04/03
100	[redacted]			Cone	Welded	1976	CUI 2000	1995	Insulated	01/09	03/03
103	[redacted]			Cone	Welded	1976	Pin holes in roof	1994		12/03/08	**None**
104	[redacted]			Cone	Welded	1976		1994		12/03/08	**03/2012**
105	[redacted]			Cone	Welded	1976	1994			12/03/08	10/94
106	[redacted]			Cone	Welded	1976				12/03/08	**None**
107	[redacted]			Cone	Welded	1976	01 S	1/10/01	Insulated	02/09	**None**
108	[redacted]			Cone	Welded	1976	01 S	5/07/01	Insulated	01/09	**None**
109	[redacted]			Cone	Welded	1976	01 E, R, N	5/21/01	Insulated	01/09	05/01
111	[redacted]			Cone	Welded	1976	1994	1985	Insulated	01/09	12/94
112	[redacted]			Cone	Welded	1976		1995	Insulated	04/08	04/08
113	[redacted]			Cone	Welded	1976	1994	1985	Insulated	12/03/08	12/02
140	[redacted]			Cone	Welded	1980	1998 B	1998	Insulated	01/09	1998
141	[redacted]			Cone	Welded	1980	1997 B	1997	Insulated	01/09	06/97
142	[redacted]			Cone	Welded	1980	1997 B	1997	Insulated	01/09	05/97
143	[redacted]			Cone	Welded	1980			Insulated	01/09	**None**
144	[redacted]			Cone	Welded	1980			Insulated	01/09	**None**
145	[redacted]			Cone	Welded	1980				12/08	**None**
146	[redacted]			Cone	Welded	1980				12/08	**None**
147	[redacted]			Cone (Internal Float)	Welded	1980				12/08	02/09/99

TANK NO.	CAPACITY (BBLS)	DIAMETER (FT.)	HEIGHT (FT.)	TYPE	TYPE JOINTS	YEAR BUILT	LAST REPAIR	LAST CLEANED	LAST PAINTED	LAST INSPECTION	
										EXTERNAL	INTERNAL
148	(b) (7)(F), (b) (3)	[redacted]		Cone	Welded	1980	11/01 B	11/10/01	Insulated	02/09	01/02/99
149	[redacted]			Cone (Internal Float)	Welded	1980	99 G			12/08	**None**
150	[redacted]			Cone	Welded	1980	2/5/02 B	1/15/02	Insulated	02/09	01/04
151	[redacted]			Cone	Welded	1980	3/20/02 B	12/13/02	Insulated	02/09	01/21/99
152	[redacted]			Cone	Welded	1980			Insulated	01/09	**None**
153	[redacted]			Cone	Welded	1980		5/24/01	Insulated	01/09	**None**
154	[redacted]			Cone	Welded	1980			Insulated	01/09	**None**
155	[redacted]			Cone	Welded	1980	1994 A	6/25/01	Insulated	02/09	09/94
156	[redacted]			Cone	Welded	1980	1982	1982	Insulated	02/09	05/96
157	[redacted]			Cone	Welded	1980	1995 N	1982	Insulated	02/09	1982
158	[redacted]			Cone	Welded	1980	1995 E	1988	Insulated	02/09	09/95
159	[redacted]			Cone	Welded	1980	9/13/01 R	01		10/24/08	**None**
160	[redacted]			Cone	Welded	1980				10/24/08	**None**
161	[redacted]			Cone	Welded	1980		7/3/01		10/24/08	**None**
162	[redacted]			Cone	Welded	1980				10/24/08	**None**
163	[redacted]			Cone	Welded	1980		7/2/01	Insulated	10/24/08	09/03
164	[redacted]			Cone	Welded	1980	1993 N, M	1993	Insulated	01/09	**None**
165	[redacted]			Cone	Welded	1980			Insulated	01/09	**None**
166	[redacted]			Cone	Welded	1980				12/08	1997
167	[redacted]			Cone	Welded	1980				12/08	10/96
168	[redacted]			Cone	Welded	1980				12/08	**None**
169	[redacted]			Cone	Welded	1980		8/05/01		12/08	**None**
170	[redacted]			Cone	Welded	1981				12/08	04/00
171	[redacted]			Cone	Welded	1981	7/23/01 R	7/17/01		12/08	**None**
172	[redacted]			Cone	Welded	1981	8/21/01 R	7/12/01		01/09	**None**
173	[redacted]			Cone	Welded	1981	**01/15/10**	7/30/01		02/09	01/13/10
174	[redacted]			Cone	Welded	1981		5/23/01	Insulated	04/08	04/08
175	[redacted]			External Floating *	Welded	1981		8/29/01		01/09	**None**
177	[redacted]			Cone	Welded	11/83				12/08	01/03
178	[redacted]			Cone	Welded	11/83				12/08	01/03
179	[redacted]			Cone	Welded	11/83				12/08	01/03
180	[redacted]			Cone (Internal Float)	Welded	7/83		5/24/01		12/08	02/03
181	[redacted]			Cone	Welded	1983		1991		02/09	01/04
182	[redacted]			Cone (Internal Float)	Welded	7/83	1996 B	1985		01/09	10/96
183	[redacted]			Cone	Welded	1988	7/27/01 R	7/12/01		12/08	**None**
184	[redacted]			Cone	Welded	1988				12/08	**None**
185	[redacted]			Cone	Welded	1993				02/09	11/04
186	[redacted]			Cone	Welded	1993		6/27/01		01/09	1993
187	[redacted]			Cone	Welded	1993		8/20/01		02/09	07/04
194	[redacted]			Sphere	Welded	1997	API 510			02/09	1997
195	[redacted]			Sphere	Welded	1997	API 510			02/09	1997
196	[redacted]			Horizontal	Welded	1997	API 510			02/09	1997

TANK NO.	CAPACITY (BBLS)	DIAMETER (FT.)	HEIGHT (FT.)	TYPE	TYPE JOINTS	YEAR BUILT	LAST REPAIR	LAST CLEANED	LAST PAINTED	LAST INSPECTION	
										EXTERNAL	INTERNAL
197	(b) (7)(F), (b) (3) [redacted]			Horizontal	Welded	1997	API 510			02/09	1997
199	[redacted]			Replacing Tank 51	Welded	1997			1997	02/09	1997
200	[redacted]			Cone	Welded	1997			1997	12/03/08	1997
201	[redacted]			External Floating	Welded	1999		**05/10**		12/08	05/10
202	[redacted]									02/09	**None**
209	[redacted]			Cone (Internal Float)			Brown Station	05/09		02/09	05/09
210	[redacted]			Cone (Internal Float)			Brown Station	08/09		02/09	08/09
211	[redacted]					2009	Brown Station	2009	2009	01/09	01/09
2001	[redacted]				Welded	1997			1997	02/09	1997
2009	[redacted]						Fiberglass Tk.			02/09	
3001	[redacted]									01/09	

FIGURE 11.6
CALUMET LUBRICANTS
TANK IN SERVICE MONTHLY CHECKLIST

TANK ID #	_____	**DATE**	_____
CONCRETE RINGWALL	_____	**EARTH GRADE**	_____
PAINTED	_____	**INSULATED**	_____

LEAKS

1. Drip Marks	YES ☐	NO ☐
2. Tank Discoloration	YES ☐	NO ☐
3. Puddles Containing Leaks	YES ☐	NO ☐
4. Corrosion Present	YES ☐	NO ☐
5. Cracks Present	YES ☐	NO ☐
6. Dead Vegetation	YES ☐	NO ☐

FOUNDATION

1. Cracks in concrete	YES ☐	NO ☐
2. Signs of Settlement	YES ☐	NO ☐
3. Discoloration of Concrete/ Earth Fill	YES ☐	NO ☐
4. Puddles Containing Spills	YES ☐	NO ☐
5. Gaps Between Tank and Foundation	YES ☐	NO ☐
6. Damage caused by vegetation	YES ☐	NO ☐

PIPING

1. Leaks or Droplets of stored material	YES ☐	NO ☐
2. Discoloration of piping	YES ☐	NO ☐
3. Corrosion present	YES ☐	NO ☐
4. Bowing of pipes between supports	YES ☐	NO ☐
5. Evidence of stored material seepage from valves, seals	YES ☐	NO ☐
6. Localized dead vegetation	YES ☐	NO ☐

SECONDARY CONTAINMENT

1. Dike in good condition	YES ☐	NO ☐
2. Dike Valve drain in operable condition	YES ☐	NO ☐
3. Does area around tank have proper drainage	YES ☐	NO ☐

COMMENTS

INSPECTOR/PUMPER _____ DATE _____

DEFECENCIES FOUND

INSPECTOR/PUMPER _____ DATE _____

Monthly Tank Inspection
Summary
March 2012

Tank No.	Deficiencies:
10	Evidence of a 2" flange leak on south east side of tank. Surface oxidation only in areas of coating failure.
11	Dike Area needs cleaning. Surface oxidation only in areas of coating failure on shell and roof. North Man way showing signs of leaking – oily residue
12	Soil contamination on northeast to southeast side. Surface oxidation only in areas of coating failure on shell and roof. Same for the piping.
13	Dead vegetation around the tank. Minor cracks in the foundation. Buildup of soil and gravel against the shell. Water pudding in dike wall.
27	Repaired areas and various areas have surface oxidation only. Soil and rock buildup around the tank. Uncoated piping has surface oxidation. No Dike valve.
28	Surface oxidation on uncoated surface areas. Top manway flange shows signs of active corrosion. Recommend cleaning and coating. Surface oxidation on uncoated piping. 2" line on ground under tank is leaking. No dike valve. Fireproof legs have cracking and coating failure.
31	Surface oxidation on uncoated surface areas. Fireproofing leg supports has cracking and deterioration. Surface oxidation on uncoated piping
32	Surface oxidation on uncoated surface areas of shell. Surface oxidation with non-measurable corrosion noted on roof.
43	Surface oxidation on uncoated surface areas. All three pumps leaking. Block valves east of south pump has light buildup due to leaking. All uncoated piping has surface oxidation. Soil and gravel buildup on shell. Steam leak @ south pump one east side. No dike valve. No grounding straps.
44	Various areas of corrosion around the tank. Leak @shell course 4/5 lap southeast side. Possible floor leak in various areas around the tank. Buildup of soil and gravel against the shell. Surface oxidation on all uncoated areas on piping and tank.
49	Obvious shell distortion, Corrosion around the bottom of tank. Surface oxidation on uncoated surface areas. No ground straps.
50	Soil and gravel buildup on shell. Concrete ring is deteriorating. Product buildup on 4" valve on northeast side. Roof has multiple bowed areas. No grounding straps.
52	Active corrosion on southwest chime. Water is standing 6" upon south side of tank.
53	Surface oxidation on uncoated surface areas on shell and piping. Roof has standing water and surface oxidation. Contaminated soil along north side of tank.
54	Isolated areas of coating failure with surface oxidation. Significant cracking and deterioration of concrete foundation. 4" nozzle leaking @flange on north side.
55	Roof is distorted. Standing water/product on floating roof. Surface oxidation on uncoated surface areas. Corrosion on piping at interface with air and soil – Underground piping.
56	Shell & roof surface type corrosion noted. No dike drain valve
57	Isolated areas of coating failure with surface oxidation. Standing water on external floating roof with active type corrosion in multiple areas. No drain valve
58	Surface oxidation and corrosion in several uncoated areas. No dike valves. South grounding strap disconnected.
59	Product stains cover most tof the shell and ground areas.
60	Hydrocarbon on roof and ground. Corrosion present on upper support ring due to standing water. North grounding wire disconnected.
61	Shell & roof oxidation in areas of coating failure noted. Buildup of soil and gravel against the shell.
67	Chime erosion present on north side of tank. Surface oxidation were coating has failed. Soil buildup on southeast to northwest corner of tank. No drain valve.
68	Surface oxidation on uncoated surface areas on shell, roof and piping. No dike drain valve
69	Tank coating has total failure –product seepage noted around the tank and at all valves.
71	Buildup of soil and gravel against the shell.
72	Tank ring wall is under water. North side has product stains.
74	Buildup of soil and gravel against the shell. Some coating failure with active corrosion on the upper shell course.
75	Buildup of soil and gravel against the shell. Surface oxidation and corrosion in several uncoated areas. Firewall valve is bad. Poor Dike Drainage. 8" Nozzle –North Side Leaking

Monthly Tank Inspection
Summary
March 2012

Tank No.	Deficiencies:
76	Good
77	Surface oxidation on uncoated surface areas on shell, roof and piping. Floating roof has surface oxidation and product buildup. Some roof components appeared to be damaged Buildup of soil and gravel against the shell. No grounding straps. Dike valve is corroded and needs replacing.
79	Good
81	Surface corrosion around chime 360º around. Surface oxidation at areas of coating failure.
82	Possible floor leak on north side. Pump containment area has standing product and water. Roof is distorted. 2" valve on southwest is leaking & standing water in dike area.
83	Surface oxidation on roof. Standing product on ground. Leaking valves at pumps. Standing water in dike area.
84	Standing product/water in pump containment. Leaks around pumps – recommend inspection piping after insulation is removed.
86	Four areas of damaged insulation – 2 on N and 2 on S side. Surface oxidation on roof and standing water in dike area.
87	Puddles of wax on ground N&W sides. Coating failure on piping
89	Poor dike drainage. Firewall valve needs replacing. Dike drain needs excavation.
93	Buildup of soil and gravel against the shell. Poor dike drainage. *Burning smell between insulation and shell @ stairs Vapor coming out from tank.*
94	Poor dike drainage and poor pump basin –process sewer drainage. 6" of water standing in dike area.
95	Sign of leakage around pumps. Dike drain needs excavation.
96	Poor drainage – Excavate drainage. Minor cracks in ring wall.
97	Sign of leakage around pumps and tanks. Product and water around pumps and tank.
98	Poor dike drainage. Buildup of soil and gravel against the shell. Product on the ground. Surface oxidation on roof.
99	Sign of leakage around pumps. Roof is damaged – Shell and roof has corrosion cells. Foundation has multiple cracks.
100	Buildup of soil and gravel against the shell. Poor drainage – Dike drain needs excavation – Condensate leak needs repair.
103	Sign of leakage around pumps. Buildup of soil and gravel against the shell. Shell needs painting – surface oxidation.
104	Sign of leakage around pumps. Coating failure – oxidation on shell.
105	Tank needs painting – oxidation present – Leaking manway on northwest side. Leaking pump flanges
106	Leaking 8" and 4" Tank flanges. Leaking pump flanges. Surface oxidation at coating failure.
107	Sign of leakage around SW manway and pump areas. Product on insulation skin and pump area. Some areas of oxidation of shell.

Notes: All tanks have grade, water vegetation, etc. up against the shell wall. All dike areas need to be re-graded in order to slope grade material away from the tank walls.

Monthly Tank Inspection
Summary

Tank No.	Deficiencies:
108	Sign of leakage around pumps. Steam leaks @ pumps. Surface oxidation on shell. Product buildup around pumps. Poor drainage
109	Sign of leakage around pumps. Roof is sucked in and shell appears to have a leak at the top. Insulation is damaged. Dike wall has poor drainage. Buildup of soil and gravel against the shell.
111	Buildup of soil and gravel against the shell. Poor dike and pump basin drainage.
112	Buildup of soil and gravel against the shell. Poor dike drainage.
113	Buildup of soil and gravel against the shell. Shell has distortion. Inactive corrosion on shell. North vent is leaking.
115	Roof is slightly distorted. Corrosion at soil & air interface of piping entering the ground on the north side. Surface oxidation in areas of coating failure.
116	Leaking valve on SE side. Surface oxidation on piping system
117	Surface oxidation on piping system
140	Sign of leakage around pump. Dike wall has poor drainage. Soil is contaminated with hydrocarbon. Vegetation growth is high.
141	Sign of leakage around pump. Buildup of soil and gravel against the shell. Pump basin has product standing. Insulation damaged on south side.
142	Sign of leakage around pump. Buildup of soil and gravel against the shell. Dike has poor drainage.
143	Buildup of soil and gravel against the shell. Dike has poor drainage.
144	Buildup of soil and gravel against the shell. Dike has poor drainage.
145	Buildup of soil and gravel against the shell. Dike has poor drainage. Shell & roof corrosion noted. Surface oxidation.
146	Buildup of soil and gravel against the shell. Shell & roof corrosion noted. Surface oxidation.
147	Buildup of soil and gravel against the shell. Dike has poor drainage. Surface oxidation on uncoated piping.
148	Buildup of soil and gravel against the shell. Dike has poor drainage. Product on insulation skin. Insulation damage on roof. Possible shell leak on NE to SE side.
149	Buildup of soil and gravel against the shell. Dike has poor drainage. Surface oxidation on uncoated shell & piping.
150	Buildup of soil and gravel against the shell. Dike wall needs cleaning. Product on insulation skin. Insulation damage on north side.
151	Buildup of soil and gravel against the shell. Poor dike drainage. Pump is leaking wax on ground.
152	Buildup of soil and gravel against the shell. Poor dike drainage. Pump is leaking wax on ground.
153	Buildup of soil and gravel against the shell. Poor dike drainage. Insulation is damaged. Thermowell is bent. Mixer is leaking.
154	Buildup of soil and gravel against the shell. Poor dike drainage. Product around the pumps. Manway is leaking.
155	Buildup of soil and gravel against the shell. Poor dike drainage.
156	Buildup of soil and gravel against the shell. Poor dike drainage. Product buildup around pumps.
157	Buildup of soil and gravel against the shell. Evidence of leak on SE side of shell.

Monthly Tank Inspection
Summary

Tank No.	Deficiencies:
158	Possible roof leak on north side to southeast side. Product stain on insulation. Cleanout door leaking.
159	Surface oxidation on roof. Contaminated soil on east side @ pumps. Oxidation on uncoated portion of roof and nozzles.
160	Buildup of soil and gravel against the shell. Oxidation on uncoated portion of roof and nozzles.
161	Buildup of soil and gravel against the shell. Grounding disconnected. Oxidation on uncoated areas of shell and roof.
162	Buildup of soil and gravel against the shell. Shell & roof oxidation noted. Leaking valve on 6" nozzle.
163	Buildup of soil and gravel against the shell. Poor dike drainage. Sign of leakage around cleanout. Leak in Thread-O-Let. Damaged insulation on pump piping.
164	Roof corrosion – has a hole – Product on ground. Insulation damaged. Buildup of soil and gravel against the shell. The shell has obvious distortion.
165	Buildup of soil and gravel against the shell. Poor dike drainage. Sign of leakage around pump. Insulation damage on roof and east side of shell. Product buildup on south manway..
166	Buildup of soil and gravel against the shell. Poor dike drainage. Sign of leakage around pump. Soil is contaminated with product. Shell has oxidation due to coating failure.
167	Sign of leakage around pump. Soil is contaminated around the dike wall.
168	Sign of leakage around pump. East cleanout and southwest manway – leaking.
169	Sign of leakage around pump. Soil is contaminated around the dike wall. Surface oxidation on areas of coating failure. Grounding straps are disconnected.
170	Sign of leakage around pump. Shell has oxidation due to coating failure. Disconnected grounding.
171	Buildup of soil and gravel against the shell. Poor dike drainage
172	Buildup of soil and gravel against the shell. Sign of leakage around pump. Insulation damage due to fire around the pumps. Poor dike drainage
173	Sign of leakage around pump and at water draw. Buildup of soil and gravel against the shell. Product buildup under NW manway.
174	Dike area has poor drainage. Dike valve is bad. Product noted on the shell. Outside gauge needs replacing. Buildup of soil and gravel against the shell. Southeast manway leaking.
175	Shell and roof has corrosion - Recommend evaluation by Inspection. Hole in shell and tank bottom. Tank is out of service.
177	6" & 8" valves on west side leaking. Roof has oxidation type corrosion. Leaking blind flange on pumping piping.
178	Roof has oxidation type corrosion – Steam leak in piping.
179	Roof has oxidation type corrosion.
180	Surface oxidation on uncoated portion of shell. Corrosion on chime around shell.
181	Hydrocarbon noted on the ground. Corrosion on chime around shell. Surface oxidation on uncoated portion of shell. East grounding disconnected.
182	Buildup of soil and gravel against the shell. Knife edge corrosion around the chime ring. Surface oxidation were coating failure exist.
183	Buildup of soil and gravel against the shell. Damaged insulation on SW side of shell. SW manway appears to be leaking. Leaking 6" valve on SW side. Two leaking drain valves on secondary containment system.

Monthly Tank Inspection
Summary
Jan. 2012

Tank No.	Deficiencies:
184	Sign of leakage around pump. Two 6" valves leaking on east side. Buildup of soil and gravel against the shell. Dike area has poor drainage. Shell and roof has surface oxidation due to coating failure.
185	Shell, roof and piping have surface oxidation due to coating failure. Soil is contaminated from Water Draw.
186	Dike area has poor drainage. Dike valve is bad. Process Sewer is also bad. Product buildup around pumps. Surface oxidation on shell and roof in areas of coating failure.
187	Surface oxidation on areas of shell and roof due to coating failure. 6" valve leaking on NE side.
194	Good
195	Piping is stained. No grounding noted.
196	Coating failure throughout tank. Water standing in dike area.
197	Coating failure throughout tank. Water standing in dike area.
199	Sign of leaking along bottom of north cleanout and bottom of NW manway. Possible floor leak on NE to SW in various areas. Surface oxidation on areas of shell and piping due to coating failure.
201	No grounding noted.
202	Four areas of shell repairs noted. Product on ground around pumps and piping. Gap between tank bottom and foundation.
209	Drip marks and stains from stair platform. Coating failure on chime and bottom of 1st shell course – surface oxidation. 3/8" cracks in foundation. Trees and bushes around tank foundations.
210	Leaks at mixer. Minor cracks in foundation.
609	Dike area has poor drainage. Piping uncoated.
610	Dike area has poor drainage. Piping uncoated.
211	Leaks at mixer. Drip marks down side of tank.
2001	Dike area needs cleaning. Surface oxidation in areas of coating failure. Some corrosion evident along the chime.
2009	Contaminated soil surrounding tank
3001	Shell is distorted and has surface oxidation due to coating failure. Possible leak in tank bottom.

Inspections Performed By: Inspection **Date:** 03/01 – 30/ 2012

Inspections Reviewed By: Bill Taylor **Date:** 04/23/2012

12/16/2011

FIREWALL CHECKLIST

TANK #	VALVE LOCATION	Open	Time	Closed	Time	comments
26	Northeast of 26 tank			X		tank is empty, and out of service
27	North of 27 tank			n/a		drains to T-26
29	East of 29 tank	X				drains to T-26
30	North of 30 tank			X		tank out of service, drains to T-29
32	North of 32 tank			X		
53/54	East of 54 tank			X		
43	Northeast of 43 tank			X		
44	East of 44 tank	X				
45/67	North of 45 tank			X		
65	North of 65 tank			X		
182	East of 182 tank			X		valve stuck WOW ? dike is cut drains to T-43
80/81	Southeast of 81 tank			X		
199	Southeast of 199 tank			X		
175	East of 175 tank			X		
77	East of 77 tank			X		
50	Southeast of 50 tank			X		
52	Southeast of 52 tank			X		
76/185	East of 185 tank			X		
75	East of 75 tank			X		excavation outside wall w.o.78350
74	East of 74 tank			X		
49	East of 49 tank	X				tank is mty and out of service/ drain open for contractor
46/68	North of 46 tank			X		
55	North of 55 tank			X		
56	North of 56 tank			X		
186/187	East of 187 tank	X				valve bad stuck open? (W.O. 68079)
72/73/174	South of 73 tank	X				line plugged WOW
82/98/60/180/181	Southeast of 82 tank			X		hydrocarbon in dike area WOW
83/84/86	South of 83 tank			X		
105-110	West of 109 tank	X				
148-154	South of 154 tank			X		
71/140	Southwest of 140 tank			X		
100/87/99/114	Southeast of 87 tank	X				open for condensate leak
96/113	South of 96 tank	X				
111/112/94/95	South of 95 tank	X				t-95 heater return leak WOW ???
89	South of 89 tank	X				valve needs replaceing, slow drain
155/156/157/158/159/160	East of 160 tank			X		poor drainage
163/164/92/93	South of 93 tank			X		
97-165	South of 165 tank			X		
166-184	Northwest of 166 tank	X				draining
57/58	North of 58 Tank	X				draining
103/104	Southwest of 104 Tank			X		
28	South of 28 Tank			X		
31	South of 31 Tank			X		
10/11/12/13	Southeast of 13 tank			X		
115/116/117	southwest of 115 tank			X		
2001	east 2001 tank			X		
141	east of T-141			X		
145,146,147,148,	south of t-148			X		dike needs slope graded W.O. 78348

12-16-11

CALUMET

SHREVEPORT REFINERY	STANDARD OPERATING PROCEDURE
Procedure Name: Foam Pumper Truck Checklist	**Document Number: 00-H-0056**
Unit: Plantwide	**Document System: Safety & Health**
	Document Owner: Safety Manager

FOAM PUMPER TRUCK CHECKLIST

MONTH _____

YEAR 20_____

*WEEKLY	1ST WEEK	2ND WEEK	3RD WEEK	4TH WEEK	5TH WEEK
GENERAL CHECK					
FUEL					
OIL					
WATER					
TIRE					
GAGES					
START AND RUN					
CHECKED BY:					

Note: Monthly and semi-annual checks should be assigned to a maint. Supervisor and that person will delegate as he deems advisable. A written report is to be sent to the safety dept. any deficiencies are to be noted and corrected immediately.

Note: Annual performance test handled directly by safety dept. with outside support.

END OF CHECKLIST

CALUMET

SHREVEPORT REFINERY	REFERENCE
Procedure Name: Environmental Truck Checklist	Document Number: 00-H-0065
Unit: Plantwide	Document System: Safety
	Document Owner: Safety Manager

ENVIRONMENTAL TRUCK CHECKLIST

Month_____

Year 20_____

*WEEKLY	1ST WEEK	2ND WEEK	3RD WEEK	4TH WEEK	5TH WEEK
GENERAL CHECK					
FUEL					
OIL					
WATER					
TIRE					
GAUGES					
START AND RUN					
CHECKED BY:					

END OF PROCEDURE

CALUMET

SHREVEPORT REFINERY	REFERENCE
Procedure Name: Ansul Dry Chemical Truck Checklist	Document Number: 00-H-0064
Unit: Plantwide	Document System: Safety & Health
	Document Owner: Safety Manager

ANSUL DRY CHEMICAL TRUCK CHECKLIST

Month_____

Year 20_____

*WEEKLY	1ST WEEK	2ND WEEK	3RD WEEK	4TH WEEK	5TH WEEK
GENERAL CHECK					
FUEL					
OIL					
WATER					
TIRE					
GAGES					
START AND RUN					
CHECKED BY:					

END OF CHECKLIST

CALUMET

SHREVEPORT REFINERY	REFERENCE
Procedure Name: Ansul Dry Chemical Truck Checklist	Document Number: 00-H-0064
Unit: Plantwide	Document System: Safety & Health
	Document Owner: Safety Manager

ANSUL DRY CHEMICAL TRUCK CHECKLIST

Month 7

Year 20 12

*WEEKLY	1ST WEEK	2ND WEEK	3RD WEEK	4TH WEEK	5TH WEEK
GENERAL CHECK	✓				
FUEL	✓				
OIL	✓				
WATER	?				
TIRE	✓				
GAGES	✓				
START AND RUN	✗	Battery dead / put charged on it			EF
CHECKED BY:	J. Hc				

7-3-12

FIRE TRUCK DID NOT START. HAD TO BE JUMPED.

END OF CHECKLIST

CALUMET

SHREVEPORT REFINERY	REFERENCE
Procedure Name: Fire Prevention-Mobile Fire Equipment	Document Number: 00-H-0066
Unit: Plantwide	Document System: Safety
Revision Date: 06/10/93	Document Owner: Safety Manager

MONTHLY REVIEW MOBILE FIRE EQUIPMENT

Month 6

Year 12

Equipment	Yes	No	Notes
Foam Pumper	✓		
General Appearance	✓		
Cleanliness	✓		
Gauges	✓		
Knobs and Dials	✓		
Equipment Cabinets	✓		
Light System	✓		
Emergency Lights	✓		
Trickle Charge			
Start Engine	✓		
Engage Pump	✓		
Discharge Water	✓		
Semi-Annual Discharge Foam			
License Plate	✓		
Inspection Sticker	✓		
Foam Level	✓		
Hydraulic Level (Fire System)	✓		
Hose Bed - Nozzles	✓		
Air Pressure	✓		
Valves Suct - Discharge	✓		
Radio/PA	✓		

J.H.

Calumet Shreveport Refinery Vacuum Truck Self Audit Checklist

Date: _____ **Area:** _____

Participants: _____

Instructions: Place a checkmark in the appropriate column for each item. For each "no" response, make a notation in the "Comments" section using the item number and describing what needs improvement and what correction was or will be made.	**Yes**	**No**	**NA**

1. Equipment

1.1.	**Is the truck in good repair?**			
1.2.	**Does the truck have a sufficient length of vacuum pump exhaust hose (min. 50 ft)?**			
1.3.	**Are the truck's hoses tested annually or replaced?**			
1.4.	**Does the truck have a minimum of a 30-pound Class B dry chemical fire extinguisher?**			
1.5.	**Does the truck have chock blocks available?**			
1.6.	**Does the truck have an antistatic grounding device?**			

2. Work Practices

2.1.	**Is the truck situated so that flammable vapors or liquids cannot be carried to the truck engine or other ignition source?**			
2.2.	**Is an exhaust hose connected and its outlet located downwind from the truck?**			
2.3.	**If the truck is in position for loading or offloading, are chock blocks in place?**			
2.4.	**Is the truck bonded with an antistatic grounding device when materials are being transferred?**			
2.5.	**If vacuum hoses are disconnected, have caps been placed on the vacuum tank outlets and on stationary process lines?**			
2.6.	**If the truck is being connected to process equipment, is the permitting operator in attendance to open and close process equipment valves?**			
2.7.	**If liquid is being gravity drained to an open sump, is a hose or drain spout being used?**			
2.8.	**If a truck is left loaded overnight, is the key tagged with the date, contents, and reason for the truck being left loaded? (If hydrocarbon is in the truck, is it parked out-of-doors?)**			
2.9.	**Has the driver been instructed on the location of safety showers and eyewash facilities?**			

3. PPE and Permits

3.1.	**If a respirator is required, is it being worn?**			
3.2.	**Is the following PPE clean and available in the truck: face shield, chemical gloves, PVC suit, and boots.**			
3.3.	**Is the driver wearing PPE as required by the permit?**			
3.4.	**If others are in the vicinity and can be exposed to accidental releases of the material being transferred, are they wearing the same PPE as the driver?**			
3.5.	**Are plastic bags available for depositing contaminated PPE?**			
3.6.	**Has a waste disposal and departmental work permit been obtained?**			
3.7.	**Has an automotive entry permit been obtained if driving in any area other than on roads designated for traffic?**			

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

[redacted]

NOTE: Be sure blue sign is raised, derails are in proper location, and brakes & chocks are set.

TANK CAR INSPECTION REPORT

Date: 6-1-12	Car Number: GATX 204208	Capacity: 23500	Operator: [illegible]

☐ Review construction data and due dates:

Date Built: N/A	Tank Test Due: 2020	Coil Test Due: N/A	Paint Date: N/A
Safety Valve Test Due: 2020		Condition of Paint: ☐ Good ☐ Fair ☐ Poor	

☐ Complete safety visual inspection:		Comments:
1. Grab Irons	☐ Broken ☐ Missing ☑ Okay	
2. Running Boards	☐ Broken ☐ Missing ☑ Okay	
3. Hand Rails	☐ Broken ☐ Missing ☑ Okay	
4. Sill Steps	☐ Broken ☐ Missing ☑ Okay	
5. Platforms	☐ Broken ☐ Missing ☑ Okay	
6. Ladders	☐ Broken ☐ Missing ☑ Okay	
7. Placard Holders (4 Needed)	☐ Broken ☐ Missing ☑ Okay	
8. Springs	☐ Broken ☐ Missing ☑ Okay	
(NOTE: Notify Supv. of safety issues.)		

☐ Railcar inspected Clean and Dry: Yes ____ No ✓

Defect card present:	☐ Yes ☑ No	If Yes, turn card into Traffic and DO NOT LOAD	
Signs of derailment?	☐ Yes ☑ No	Condition:	
Signs of overflow?	☐ Yes ☑ No	If Yes, is cleaning required?	☐ Yes ☐ No
Coils:	☐ Exterior	☐ Interior	Damages:
Noticeable odor from valves:	☐ Yes ☑ No	Comments:	

Are there signs of excessive wear, cracks or breaks to:		Comments
9. Wheels	☐ Yes ☑ No	
10. Couplers	☐ Yes ☑ No	
11. Air hoses	☐ Yes ☑ No	
12. Body bolsters	☐ Yes ☑ No	
13. Dome gasket, cover and bolts (Replace gasket as needed)	☐ Yes ☑ No	
14. Shell	☐ Yes ☑ No	
15. Brake Pads	☐ Yes ☑ No	
(NOTE: Notify Supv. of excessive wear, cracks or breaks.)		

☐ Inspect outlet valve condition.				
Outlet valve operable?	☑ Yes ☐ No	Belly valve cap tightened:	☑ Yes ☐ No	Loader initials [illegible]
Outlet valve sealable?	☑ Yes ☐ No	Dome lid bolts tightened:	☑ Yes ☐ No	Loader Initials [illegible]
		Is inside Dome lid clean	☑ Yes ☐ No	Loader Initial [illegible]

☐ Is there any other condition which would prevent this Rail Car from making a loaded trip?	☐ Yes ☑ No	If Yes, describe condition

Signature [illegible] Date SAME

Rev date: 04/15/2010

John

CALUMET
Monthly Scba Inspections

CALUMET LUBRICANTS (Monthly Inspection) May 21, 2012

	Model	Unit #	Pressure Reducer	Regulator	Cyl. # Assig.by Hagem	Cylinder serial #	Hydro mo / yr	mfg mo / yr	Location	Last Functional Flow Test	notes
1	2.2 IND	01	115S01006004270	115S01004001550	001	DG299284	11-09	11-09	CR4	04-2012	May Monthly Inspection
2	2.2 IND	02	115S01006004306	115S01004001540	005	DG297080	11-09	11-09	SW 6	04-2012	May Monthly Inspection
3	2.2 IND	03	115S01006004294	115S01004001549	003	DG299870	12-09	11-09	DP 3	04-2012	May Monthly Inspection
4	2.2 IND	04	115S01006004318	115S01004001544	004	DG299794	12-09	12-09	CU 1	04-2012	May Monthly Inspection
5	2.2 IND	05	115S01006004305	115S01004002797	002	DG299291	11-09	11-09	SW 5	04-2012	May Monthly Inspection
6	2.2 IND	06	115S01006004313	115S01004002796	138	DG343897	07-11	07-11	TEK2	04-2012	**Handle on Box Broken**
7	2.2 IND	07	115S01006004285	115S01004001553	007	DG297112	11-09	11-09	SW 3	04-2012	May Monthly Inspection
8	2.2 IND	08	115S01006004281	115S01004002203	008	DG299867	12-09	12-09	Close to NU 1	04-2012	May Monthly Inspection
9	2.2 IND	09	115S01006004319	115S01004004329	009	T172890	11-09	03-88	TF 6	04-2012	May Monthly Inspection
10	2.2 IND	10	115S01006004309	115S01004007262	010	DG297441	11-09	11-09	CR 3	04-2012	May Monthly Inspection
11	2.2 IND	11	115S01006004287	115S01004004605	011	DG299807	12-09	12-09	TF 10	04-2012	May Monthly Inspection
12	2.2 IND	12	115S01006004317	115S01004007260	012	DG299808	12-09	12-09	SW 2	04-2012	May Monthly Inspection
13	2.2 IND	13	115S01006004276	115S01004007258	021	DG129232	04-10	09-07	SU 1	04-2012	May Monthly Inspection
14	2.2 IND	14	115S01006004307	115S01004007259	014	DG299815	12-09	12-09	SW 4	04-2012	May Monthly Inspection
15	2.2 IND	15	115S01006004282	115S01004007261	015	DG299786	12-09	12-09	TF 7	04-2012	May Monthly Inspection
16	2.2 IND	16	115S01006004269	115S01004004330	016	DG299792	12-09	12-09	ARU 2	04-2012	May Monthly Inspection
17	2.2 IND	17	115S01006004308	115S01004004328	017	DG303684	02-10	02-10	TF 9	04-2012	May Monthly Inspection
18	2.2	18	69010824	69011218	118	IJ334235	04-11	04-11	Tool Room	04-2012	**Did not Locate in May**
19	2.2	19	69400493	69500515	019				V12	04-2012	May Monthly Inspection
20	2.2	20	69011046	69011040	034				SU1	04-2012	May Monthly Inspection
21	2.2	21	69011035	69011252	114	IJ333874	03-11	03-11	Tool Room	04-2012	**Did not Locate in May**
22	2.2	22	69011014	69011227	022	T174495	11-09	11-78	TF1	04-2012	**Handle on Box Broken**

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CALUMET
Monthly Scba Inspections

23	2.2	23	69011038	69011247	023	DG317794	08-10	08-10	V11	04-2012	May Monthly Inspection
24	2.2	24	69011032	69011239	143	DG317782	08-10	08-10	LH1	04-2012	May Monthly Inspection
25	2.2	25	49200499	49300096	025	T184122	11-09	08-88	LH3	04-2012	May Monthly Inspection
26	2.2	26	39500450	39501210	130	DG345401	07-11	07-11	TF3	04-2012	May Monthly Inspection
27	2.2	27	39800186	39302074	137	DG345408	07-11	07-11	LH2	04-2012	May Monthly Inspection
28	2.2	28	39500452	39501200	028	DG249158	02-08	02-08	CR6	04-2012	May Monthly Inspection
29	2.2	29	39500449	39501228	029	DG249164	02-08	02-08	PF1	04-2012	**Handle on Box Broken**
30	2.2	30	69011042	69011038	030	DG249148	02-08	02-08	TEKA	04-2012	May Monthly Inspection
31	2.2	31	69010881	69011173	031	T27015	04-12	03-83	MP1	04-2012	May Monthly Inspection
32	2.2	32	69010890	69011165	032	T184126	05-09	08-88	V41	04-2012	May Monthly Inspection
33	2.2	33	69011047	69011051	131	DG343861	07-11	07-11	DP1	04-2012	May Monthly Inspection
34	2.2	34	69010928	69011044	116	IJ334257	04-11	04-11	Tool Room	04-2012	**Did not Locate in May**
35	2.2	35	69010891	69011168	035	T179258	11-09	06-88	TF5	04-2012	May Monthly Inspection
36	2.2	36	69011024	69011255	136	DG343895	07-11	07-11	BUTA5	04-2012	May Monthly Inspection
37	2.2	37	69011052	69011052	013	DG299821	12-09	12-09	SW1	04-2012	May Monthly Inspection
38	2.2	38	39500158	39500686	134	DG344503	07-11	07-11	NU1	04-2012	May Monthly Inspection
39	2.2	39	39500167	39500692	043	T152338	05-09	07-87	C/R	04-2012	May Monthly Inspection
40	2.2	40	69010825	69011220	040				DP3	04-2012	May Monthly Inspection
41	2.2	41	79500165	79500997	146	T27151	11-09	03-83	CR5	04-2012	May Monthly Inspection
42	2.2	42	69010896	69011089	042				TEKB	04-2012	May Monthly Inspection
43	2.2	43	69010888	69011166	145	T27459	11-09	03-83	CR7	04-2012	May Monthly Inspection
44	2.2	44	39800181	39802047	135	DG343849	07-11	07-11	V42	04-2012	May Monthly Inspection
45	2.2	45	69100759	69200132	045	DG245011	04-10	09-07	CU2	04-2012	May Monthly Inspection
46	2.2	46	29500739	29500977	055	DG249186	02-08	02-08	CD2	04-2012	**Handle on Box Broken**
47	2.2	47	69011015	69011267		DG297261	11-09	11-09	C/R	04-2012	May Monthly Inspection
48	2.2	48	69011031	69011250	048				PX2	04-2012	May Monthly Inspection

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CALUMET
Monthly Scba Inspections

49	2.2	49	69011022	69011251	049				BUTA6	04-2012	May Monthly Inspection
50	2.2	50	69010827	69011079	050	DG128614	04-10	09-07	DP1	04-2012	May Monthly Inspection
51	2.2	51	69011012	69011238	142	T166523	11-09	02-88	SW1	04-2012	May Monthly Inspection
52	2.2 IND	52	115S0803005557	115S0810003099	052	T174239	05-09	11-78	P1	04-2012	May Monthly Inspection
53	2.2 IND	53	115S0803005569	115S0810003127	132	DG343855	07-11	07-11	P2	04-2012	May Monthly Inspection
54	2.2 IND	54	115S0747002408	115S0810003110	054	DG249156	02-08	02-08	CD 1	04-2012	May Monthly Inspection
55	2.2 IND	55	115S0803005568	115S0810003133	006				DP2		May Monthly Inspection
56	2.2 IND	56	115S0810003538	115S0803003098	141	DG249147	02-08	02-08	Alky 2	04-2012	May Monthly Inspection
57	2.2 IND	57	115S0803005567	115S0810003136	057	DG249146	02-08	02-08	CD 3	04-2012	May Monthly Inspection
58	2.2 IND	58	115S1038001756	115S1038004288	058	DG317796	08-10	08-10	TF8	04-2012	May Monthly Inspection
59	2.2 IND	59	115S1068001762	115S1038004273	047	DG303902	02-10	02-10	TF2	04-2012	May Monthly Inspection
60	2.2 IND	60	115S1038004285	115S1038001742	120	IJ334243	04-11	04-11	Tool Room	04-2012	**Did not Locate in May**
61	2.2 IND	61	115S1038001758	115S1038004282	119	IJ334226	04-11	04-11	Tool Room	04-2012	**Did not Locate in May**
62	2.2 IND	62	115S1038001763	115S1038004299	148	IJ340908	04-11	04-11	Tool Room	04-2012	May Monthly Inspection
63	2.2 IND	63	115S1038001743	115S1038004291	140	DG317796	08-10	08-10	TEK1	04-2012	May Monthly Inspection
64	2.2 IND	64	115S1038001761	115S1038004286	113	IJ334319	04-11	04-11	Tool Room	04-2012	**Did not Locate in May**
65	2.2 IND	65	115S0725003261	115S0728006394	133	DG343860	07-11	07-11	BC 1	04-2012	May Monthly Inspection
66	2.2 IND	66	115S0747002412	115S0810003137	066				Lab	04-2012	May Monthly Inspection
67	2.2 IND	67	115S0810003534	115S0810003097	067				Alky 9	04-2012	May Monthly Inspection
	2.2 IND	70	115S0810003540	115S0810003109	070	DG247593	02-08	02-08	PX 1	04-2012	May Monthly Inspection
	2.2 IND	73	115S0749005342	115S0810003108	039	DG249161	02-08	02-08	Tool Room	04-2012	May Monthly Inspection
	2.2 IND	74	115S0749005344	115S0810003135	021	T176904	03-09	11-78	Waste Water	04-2012	May Monthly Inspection
	2.2	75	69010978	69011204	144	DG317767	08-10	08-10	LHT5	04-2012	May Monthly Inspection
	2.2	76	69011048	690111053	024	T240044	04-11	10-90	LHT4	04-2012	May Monthly Inspection
	2.2 IND	77	115S1201001219	115S1150007900	117	IJ334225	04-11	04-11	Tool Room	04-2012	May Monthly Inspection
	2.2 IND	78	115S1151004752	115S1150007901	156	IJ340922	10-11	10-11	C/R	04-2012	May Monthly Inspection

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CALUMET
Monthly Scba Inspections

	2.2 IND	79	115S1151004749	115S1150007905	151	IJ340915	10-11	10-11	C/R	04-2012	May Monthly Inspection
	2.2 IND	80	115S1201001238	115S1150007945	149	IJ340901	10-11	10-11	C/R	04-2012	May Monthly Inspection
	2.2 IND	81	115S1151004745	115S1150007941	153	IJ340920	10-11	10-11	C/R	04-2012	May Monthly Inspection
	2.2 IND	82	115S1201001223	115S1150007904	150	IJ340924	10-11	10-11	C/R	04-2012	May Monthly Inspection
	2.2 IND	83	69010799	69011033	121	DG343853	07-11	07-11	Rail Load	04-2012	May Monthly Inspection
80	4.5	V02	69011039	69011039	107	OP329195	11-10	11-10	Spill Truck	04-2012	May Monthly Inspection
81	4.5	V03	69011028	69011248	102	OP329213	11-10	11-10	Fire Truck	04-2012	May Monthly Inspection
82	4.5	V04	69011043	69011037	110	OP328852	11-10	11-10	Spill Truck	04-2012	May Monthly Inspection
83	4.5	V05	69010898	69011176	101	OP242059	05-09	05-09	Fire Truck	04-2012	May Monthly Inspection
84	4.5	V06	69011017	69011237	126	OP342396	08-11	08-11	Spill Truck	04-2012	May Monthly Inspection
85	4.5	V08	69010895	69011090	103	OP329042	11-10	11-10	Spill Truck	04-2012	May Monthly Inspection
86	4.5	V09	69010879	69011167	105	OP329119	11-10	11-10	Spill Truck	04-2012	May Monthly Inspection
87	4.5	V10	69011018	69011249	111	OP328199	10-10	10-10	Spill Truck	04-2012	May Monthly Inspection
88	4.5	V12	69010893	69011175	104	OP329211	11-10	11-10	Spill Truck	04-2012	May Monthly Inspection
89	4.5	V13	69010892	69011096	112	OP242063	05-09	05-09	LBJ Office	04-2012	May Monthly Inspection
90	4.5	V16	39500251	39500675	109	OP242504	05-09	05-09	Spill Truck	04-2012	May Monthly Inspection
91	4.5	V17	69010901	69011172	106	OP329204	11-10	11-10	Spill Truck	04-2012	May Monthly Inspection
92	Ska-Pak			09600245		A078908	04-11	03-90	Tool Room	04-2012	May Monthly Inspection
93	Ska-Pak			19100135		A17025	01-10	01-96	Tool Room	04-2012	**Not Located (1)**
94	Ska-Pak			19100137		A075205	10-06	10-89	Tool Room		**Not Located (10)**
95	Ska-Pak			39800131		A060943	04-09	06-88	Tool Room	04-2012	**No Facepiece**
96	Ska-Pak			69010079			04-09	06-88	Tool Room		**Not Located (4)**
97	Ska-Pak			69010085		A084500	04-09	06-88	Tool Room	04-2012	May Monthly Inspection
98	Ska-Pak			69800128		A060935	04-09	06-88	Tool Room	04-2012	**No Facepiece**
99	Ska-Pak			69800203		A16413	04-09	04-96	Tool Room	04-2012	**Not Located (1)**
100	Ska-Pak			190100133		A16984	04-09	10-96	Tool Room	04-2012	**No Facepiece**

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TANK YARD 2/22/2011

11713	20 ABC11172	2008	tank 44
11712	20 abc 10043	2008	Pump by tank 199 section 3
11711	20 abc 10134	1996	By tank 181 section 13
11710	20 ABC11227	2008	by tank 170 and 184
11709	30 ansul10089	1981	By tank 167 section 10
11708	30 ansul10106	1986	By tank 93 section 11
11707	30 ansul10091	1973	By tank 183 section 11
11706	20 ansul10083	1999	Pole water treatment section 8
11705	20 ABC11417	2010	flarestack/clean up
11704	20 ansul10069	1993	By tank 68 section 6
11703	20 abc 10070	2008	By tank 67 section 6
11660	30 ansul10102	1982	By tank 160 section 11
11659	30 ansul10103	1982	By tank 160 section 11
11658	20 abc 10104	2008	By tank 164 section 11
11656	20 abc 10105	2008	By tank 164 section 11
11655	20 abc 10088	2008	By tank 167 section 10
11654	20 ansul10087	1996	By tank 166 section 10
11653	20 abc 11507	2010	Pump pad wst of stack
11652	20 abc 10084	2008	Pole water treatment section 8
11651	20 ansul 10056	1996	By tank 79 dog run section 5
11650	20 ansul10057	1996	By tank 74 section 5
11649	20 ansul10058	1996	By tank 79 dog run section 5
11648	20 ansul10059	1996	By tank 79 dog run section 5
11647	20 ansul10060	1996	By tank 79 dog run section 5
11646	15 CO210062	2007	Mcc room dog run section 5
11645	15 CO210061	2007	Mcc room dog run section 5
11644	20 ansul10121	1996	Vego truck loading section 12
11643	20 ansul10122	1996	Vego truck loading section 12
11642	20 ansul10123	1996	V ego truck loading up stairs section 12
11641	20 ansul10125	1996	Vego truck loading up stairs section 12
11640	20 abc 10126	2008	Vego truck loading section 12
11639	20 ansul10127	1996	By tank 10 section 12
11638	20ansul11637	1996	vego truck loading platform
11635	30 ansul10129	1984	Vego truck loading section 12
11634	20 abc 10120	2008	Mcc room by tank 13 section 12
11633	15 CO210119	1995	Mcc room by tank 13 section 12
11632	20 abc10118	2007	By tank 13 section 12
11631	20 ansul10117	1996	By tank 153 section 12
11630	20 abc 10116	2007	By tank 152 section 12
11629	20 abc 10115	2008	By tank 151 truck loading section 12
11628	20 abc 10114	2007	By tank 151 truck loading section 12
11627	20 abc 10113	1996	By tank 149 section 12
11626	20 abc 10112	1981	By tank 145 section 12
11625	20 abc 10111	2007	By tank 71 section12
11624	20 abc 10110	2007	By tank 100 section 12
11623	30 ansul10109	1982	By tank 100 section 12
11622	30 ansul10136	1981	By tank 89 section 14

TANK YARD 2/22/2011

11621	20 abc 10135	2007	Across from tank 95 section 13
11620	20 abc 10137	1993	By tank 113 section 14
11619	20 ansul11454	1996	cooling tower section 12
11618	20 ansul10108	1996	By cooling tower section 12
11617	30 ansul10107	1996	By cooling tower section 12
11616	20 abc 10080	2008	Nitrogen plant section 8
11615	20 abc 10092	2007	By tank 97 section 11
11614	20 abc 10082	2008	Nitrogen plant section 8
11613	20 abc 10133	2008	By tank 82 section 13
11612	30 ansul10081	1983	Nitrogen plant section 8
11611	20 ansul 10073	1996	Wast storage by tank 73 section 7
11610	20 abc 10076	2007	By tank 59 section 7
11609	20 abc 10075	1998	By tank 72 section 7
11608	20 abc 10074	2007	By tank 72 section 7
11607	20 abc 10039	1997	By tank 58 section 2
11606	20 abc 10038	2007	By tank 186 section 2
11605	20 abc 10037	2007	Across from tank 187 section 2
11604	20 ansul10036	2007	Across from tank 187 section 2
11603	20 ansul10034	1996	Across from tank 67 blending manifold section 2
11602	20 ansul10033	1996	Acroos from tank 196 propane storage section 2@3
11601	30 ansul10031	1982	By tank 196 propane storage section 2@3
11600	20 ansul10032	1996	By tank 196 propane storage section 2@3
11599	20 abc 10063	2008	By tank 49 section5
11590	20 ABC10095	1996	by tank 75
11589	30 ABC11176	1981	by tank 75
11588	20 ABC10022	2008	mcc room by flare stack
11587	30 ABC11423	1979	by flare stack
11586	30 ABC11522	1987	by tank 76
11585	20 abc 10042	2008	By tank 199 section 3
11584	10# abc 11446	1998	across from tank 184
11583	20 ansul 10086	1996	By tank 184 section 10
11582	20# abc 11372	2008	dishcharge jack spring
11581	20 # abc 12004	2007	flare west
11580	30 ansul 11505	1979	Flare stack 3 section 9
11579	20 abc 10055	2007	By tank 79 dog run section 5
11578	20 ansul 10054	1996	Wastwater treatment section5
11577	20 abc 10053	2008	Metal storage building section 5
11576	20 abc 10067	2008	By tank 56 section6
11575	30 ansul 10068	1991	By tank 68 section 6
11574	20 # bc 11426	1996	vgo tank 175
11573	20 # abc 11443	2010	tank 173
11572	30 ansul 10099	1981	By tank 179 section 11
11571	20# bc 10098	1999	By tank 178 section 11
11570	30 ansul 10100	1981	By tank 177 secton11
11569	20 ansul 10096	1994	By tank 172 section11
11568	20 ansul 10130	1996	By tank 86 section 12
11567	20 abc 11094	2007	By tank 173 section11

TANK YARD 2/22/2011

11566	30 ansul 10131	1973	By tank 86 section 12
11565	20 ansul 10093	1996	By tank 97 section 11
11564	30 ansul 10132	1981	By tank 98 section 13
11563	30 ansul 10072	1982	By tank 56 section6
11562	20 ansul 10077	1996	By tank 187 section 7
11561	20 abc 10071	2007	By tank 46 section 6
11560	30 ansul 10035	1983	By tank 43 section 2
11559	30 ansul10064	1979	By tank 49 section5
11558	20 ansul10048	2007	Propane storage tank 609 section3
11557	30 ansul10047	1981	Backside tank 44 section 3
11556	20 abc 10046	2008	Backside tank 77 section 3
11555	20 abc 10045	2008	Backside tank 50 section 3
11554	20 abc 10065	2007	By tank 74 section 5
11553	20 abc 10066	2008	By tank 74 cross roads section5
11552	30 ansul10051	1981	By tank 185 section 4
11551	20 ABC10050	2008	Across from tank 52 section 4
11550	20 abc 10049	2007	By tank 52 section 4
11549	20 abc 1004	2008	By tank 50 section 3
11548	20 abc 10030	2007	By tank 44 section 2@3
11547	20 ansul10029	2008	On scba rack by tank 44 section2@3
11546	20 abc 10027	2008	crude unloading section 2
11545	20 abc 10026	2007	crude unloading section 2
11543	20 abc 10025	2008	West guard shack section 2
11541	20 ABC 11542	2011	Across from tank 62 section 2
11540	20 abc 10024	2008	By tank 62 section 2
11539	20 abc 10022	2008	By tank 64 section 2
11538	20 abc 10021	2008	By tank 194 section 1@2
11536	20 abc 10020	2008	By tank 195 section 1
11535	30 ansul 10041	1984	By tank 31 section 1
11534	30 ansul 10040	1983	By tank 28 section 1
10137	20 abc 10137	1993	By tank 113 section 14

Fire Extinguisher Inspection
Figure 11.8

11713	Monthly	Pass	Good	3/22/2012	20	ABC11172	2008	tank 44	Yes
11536	Monthly	Pass	Good	3/22/2012	20	abc 10020	2008	By tank 195 section 1	yes
11538	Monthly	Pass	Good	3/22/2012	20	abc 10021	2008	By tank 194 section 1@2	yes
11539	Monthly	Pass	Good	3/22/2012	20	abc 10022	2008	By tank 64 section 2	yes
11540	Monthly	Pass	Good	3/22/2012	20	abc 10024	2008	By tank 62 section 2	yes
11541	Monthly	Pass	Good	3/22/2012	20	ABC 11542	2011	Across from tank 62 section 2	yes
11543	Monthly	Pass	Good	3/22/2012	20	abc 10025	2008	West guard shack section 2	yes
11545	Monthly	Pass	Good	3/22/2012	20	abc 10026	2007	crude unloading section 2	yes
11546	Monthly	Pass	Good	3/22/2012	20	abc 10027	2008	crude unloading section 2	yes
11547	Monthly	Pass	Good	3/22/2012	20	ansul10029	2008	On scba rack by tank 44 section2@3	yes
11548	Monthly	Pass	Good	3/22/2012	20	abc 10030	2007	By tank 44 section 2@3	yes
11549	Monthly	Pass	Good	3/22/2012	20	abc 1004	2008	By tank 50 section 3	yes
11550	Monthly	Pass	Good	3/22/2012	20	abc 10049	2007	By tank 52 section 4	yes
11551	Monthly	Pass	Good	3/22/2012	20	ABC10050	2008	Across from tank 52 section 4	yes
11552	Monthly	Pass	Good	3/22/2012	30	ansul10051	1981	By tank 185 section 4	yes
11553	Monthly	Pass	Good	3/22/2012	20	abc 10066	2008	By tank 74 cross roads section5	yes
11554	Monthly	Pass	Good	3/22/2012	20	abc 10065	2007	By tank 74 section 5	yes
11555	Monthly	Pass	Good	3/22/2012	20	abc 10045	2008	Backside tank 50 section 3	yes
11556	Monthly	Pass	Good	3/22/2012	20	abc 10046	2008	Backside tank 77 section 3	yes
11557	Monthly	Pass	Good	3/22/2012	30	ansul10047	1981	Backside tank 44 section 3	yes
11558	Monthly	Pass	Good	3/22/2012	20	ansul10048	2007	Propane storage tank 609 section3	yes
11559	Monthly	Pass	Good	3/22/2012	30	ansul10064	1979	By tank 49 section5	yes
11560	Monthly	Pass	Good	3/22/2012	30	ansul 10035	1983	By tank 43 section 2	yes
11561	Monthly	Pass	Good	3/22/2012	20	abc 10071	2007	By tank 46 section 6	yes
11562	Monthly	Pass	Good	3/22/2012	20	ansul 10077	1996	By tank 187 section 7	yes
11563	Monthly	Pass	Good	3/22/2012	30	ansul 10072	1982	By tank 56 section6	yes
11564	Monthly	Pass	Good	3/22/2012	30	ansul 10132	1981	By tank 98 section 13	yes
11565	Monthly	Pass	Good	3/22/2012	20	ansul 10093	1996	By tank 97 section 11	yes
11566	Monthly	Pass	Good	3/22/2012	30	ansul 10131	1973	By tank 86 section 12	yes

Tank Yard Check List

11567	Monthly	Pass	Good	3/22/2012	20 abc 11094	2007	By tank 173 section11	yes
11570	Monthly	Pass	Good	3/22/2012	30 ansul 10100	1981	By tank 177 secton11	yes
11571	Monthly	Pass	Good	3/22/2012	20# bc 10098	1999	By tank 178 section 11	yes
11572	Monthly	Pass	Good	3/22/2012	30 ansul 10099	1981	By tank 179 section 11	yes
11573	Monthly	Pass	Good	3/22/2012	20 # abc 11443	2010	tank 173	Yes
11574	Monthly	Pass	Good	3/22/2012	20 # bc 11426	1996	vgo tank 175	Yes
11575	Monthly	Pass	Good	3/22/2012	30 ansul 10068	1991	By tank 68 section 6	yes
11576	Monthly	Pass	Good	3/22/2012	20 abc 10067	2008	By tank 56 section6	yes
11577	Monthly	Pass	Good	3/22/2012	20 abc 10053	2008	Metal storage building section 5	yes
11578	Monthly	Pass	Good	3/22/2012	20 ansul 10054	1996	Wastwater treatment section5	yes
11579	Monthly	Pass	Good	3/22/2012	20 abc 10055	2007	By tank 79 dog run section 5	yes
11580	Monthly	Pass	Good	3/22/2012	30 ansul 11505	1979	Flare stack 3 section 9	yes
11583	Monthly	Pass	Good	3/22/2012	20 ansul 10086	1996	By tank 184 section 10	yes
11584	Monthly	Pass	Good	3/22/2012	10# abc 11446	1998	across from tank 184	Yes
11585	Monthly	Pass	Good	3/22/2012	20 abc 10042	2008	By tank 199 section 3	yes
11586	Monthly	Pass	Good	3/22/2012	30 ABC11522	1987	by tank 76	Yes
11587	Monthly	Pass	Good	3/22/2012	30 ABC11423	1979	by flare stack	Yes
11588	Monthly	Pass	Good	3/22/2012	20 ABC10022	2008	mcc room by flare stack	Yes
11589	Monthly	Pass	Good	3/22/2012	30 ABC11176	1981	by tank 75	Yes
11599	Monthly	Pass	Good	3/22/2012	20 abc 10063	2008	By tank 49 section5	yes
11599	Monthly	Pass	Good	3/22/2012	20 abc 10063	2008	By tank 49 section5	yes
11600	Monthly	Pass	Good	3/22/2012	20 ansul10032	1996	By tank 196 propane storage section 2	yes
11601	Monthly	Pass	Good	3/22/2012	30 ansul10031	1982	By tank 196 propane storage section 2	yes
11602	Monthly	Pass	Good	3/22/2012	20 ansul10033	1996	Acroos from tank 196 propane storage	yes
11603	Monthly	Pass	Good	3/22/2012	20 ansul10034	1996	Across from tank 67 blending manifold	yes
11604	Monthly	Pass	Good	3/22/2012	20 ansul10036	2007	Across from tank 187 section 2	yes
11605	Monthly	Pass	Good	3/22/2012	20 abc 10037	2007	Across from tank 187 section 2	yes
11606	Monthly	Pass	Good	3/22/2012	20 abc 10038	2007	By tank 186 section 2	yes
11607	Monthly	Pass	Good	3/22/2012	20 abc 10039	1997	By tank 58 section 2	yes
11608	Monthly	Pass	Good	3/22/2012	20 abc 10074	2007	By tank 72 section 7	yes
11609	Monthly	Pass	Good	3/22/2012	20 abc 10075	1998	By tank 72 section 7	yes
11610	Monthly	Pass	Good	3/22/2012	20 abc 10076	2007	By tank 59 section 7	yes
11611	Monthly	Pass	Good	3/22/2012	20 ansul 10073	1996	Wast storage by tank 73 section 7	yes

Tank Yard Check List

11612	Monthly	Pass	Good	3/22/2012	30	ansul10081	1983	Nitrogen plant section 8	yes
11613	Monthly	Pass	Good	3/22/2012	20	abc 10133	2008	By tank 82 section 13	yes
11614	Monthly	Pass	Good	3/22/2012	20	abc 10082	2008	Nitrogen plant section 8	yes
11615	Monthly	Pass	Good	3/22/2012	20	abc 10092	2007	By tank 97 section 11	yes
11616	Monthly	Pass	Good	3/22/2012	20	abc 10080	2008	Nitrogen plant section 8	yes
11617	Monthly	Pass	Good	3/22/2012	30	ansul10107	1996	By cooling tower section 12	yes
11618	Monthly	Pass	Good	3/22/2012	20	ansul10108	1996	By cooling tower section 12	yes
11619	Monthly	Pass	Good	3/22/2012	20	ansul11454	1996	cooling tower section 12	yes
11620	Monthly	Pass	Good	3/22/2012	20	abc 10137	1993	By tank 113 section 14	yes
11621	Monthly	Pass	Good	3/22/2012	20	abc 10135	2007	Across from tank 95 section 13	yes
11622	Monthly	Pass	Good	3/22/2012	30	ansul10136	1981	By tank 89 section 14	yes
11623	Monthly	Pass	Good	3/22/2012	30	ansul10109	1982	By tank 100 section 12	yes
11624	Monthly	Pass	Good	3/22/2012	20	abc 10110	2007	By tank 100 section 12	yes
11625	Monthly	Pass	Good	3/22/2012	20	abc 10111	2007	By tank 71 section12	yes
11626	Monthly	Pass	Good	3/22/2012	20	abc 10112	1981	By tank 145 section 12	yes
11628	Monthly	Pass	Good	3/22/2012	20	abc 10114	2007	By tank 151 truck loading section 12	yes
11629	Monthly	Pass	Good	3/22/2012	20	abc 10115	2008	By tank 151 truck loading section 12	yes
11630	Monthly	Pass	Good	3/22/2012	20	abc 10116	2007	By tank 152 section 12	yes
11631	Monthly	Pass	Good	3/22/2012	20	ansul10117	1996	By tank 153 section 12	yes
11632	Monthly	Pass	Good	3/22/2012	20	abc10118	2007	By tank 13 section 12	yes
11638	Monthly	Pass	Good	3/22/2012	20	ansul11637	1996	vego truck loading platform	Yes
11639	Monthly	Pass	Good	3/22/2012	20	ansul10127	1996	By tank 10 section 12	yes
11640	Monthly	Pass	Good	3/22/2012	20	abc 10126	2008	Vego truck loading section 12	yes
11641	Monthly	Pass	Good	3/22/2012	20	ansul10125	1996	Vego truck loading up stairs section 12	yes
11642	Monthly	Pass	Good	3/22/2012	20	ansul10123	1996	V ego truck loading up stairs section 12	yes
11643	Monthly	Pass	Good	3/22/2012	20	ansul10122	1996	Vego truck loading section 12	yes
11645	Monthly	Pass	Good	3/22/2012	15	CO210061	2007	Mcc room dog run section 5	yes
11646	Monthly	Pass	Good	3/22/2012	15	CO210062	2007	Mcc room dog run section 5	yes
11647	Monthly	Pass	Good	3/22/2012	20	ansul10060	1996	By tank 79 dog run section 5	yes
11648	Monthly	Pass	Good	3/22/2012	20	ansul10059	1996	By tank 79 dog run section 5	yes
11649	Monthly	Pass	Good	3/22/2012	20	ansul10058	1996	By tank 79 dog run section 5	yes
11650	Monthly	Pass	Good	3/22/2012	20	ansul10057	1996	By tank 74 section 5	yes
11651	Monthly	Pass	Good	3/22/2012	20	ansul 10056	1996	By tank 79 dog run section 5	yes

Tank Yard Check List

11652	Monthly	Pass	Good	3/22/2012	20 abc 10084	2008	Pole water treatment section 8	yes
11653	Monthly	Pass	Good	3/22/2012	20 abc 11507	2010	Pump pad wst of stack	yes
11654	Monthly	Pass	Good	3/22/2012	20 ansul10087	1996	By tank 166 section 10	yes
11655	Monthly	Pass	Good	3/22/2012	20 abc 10088	2008	By tank 167 section 10	yes
11656	Monthly	Pass	Good	3/22/2012	20 abc 10105	2008	By tank 164 section 11	yes
11658	Monthly	Pass	Good	3/22/2012	20 abc 10104	2008	By tank 164 section 11	yes
11659	Monthly	Pass	Good	3/22/2012	30 ansul10103	1982	By tank 160 section 11	yes
11660	Monthly	Pass	Good	3/22/2012	30 ansul10102	1982	By tank 160 section 11	yes
11703	Monthly	Pass	Good	3/22/2012	20 abc 10070	2008	By tank 67 section 6	yes
11704	Monthly	Pass	Good	3/22/2012	20 ansul10069	1993	By tank 68 section 6	yes
11705	Monthly	Pass	Good	3/22/2012	20 ABC11417	2010	flarestack/clean up	Yes
11706	Monthly	Pass	Good	3/22/2012	20 ansul10083	1999	Pole water treatment section 8	yes
11707	Monthly	Pass	Good	3/22/2012	30 ansul10091	1973	By tank 183 section 11	yes
11708	Monthly	Fail	Good	3/22/2012	30 ansul10106	1986	By tank 93 section 11	yes
11709	Monthly	Pass	Good	3/22/2012	30 ansul10089	1981	By tank 167 section 10	yes
11710	Monthly	Pass	Good	3/22/2012	20 ABC11227	2008	by tank 170 and 184	Yes
11711	Monthly	Pass	Good	3/22/2012	20 abc 10134	1996	By tank 181 section 13	yes
11712	Monthly	Pass	Good	3/22/2012	20 abc 10043	2008	Pump by tank 199 section 3	yes

11534	Annual	Pass	Good	8/22/2011	30 ansul 10040	1983
11535	Annual	Pass	Good	8/22/2011	30 ansul 10041	1984
11536	Annual	Pass	Good	8/22/2011	20 abc 10020	2008
11538	Annual	Pass	Good	8/22/2011	20 abc 10021	2008
11539	Annual	Pass	Good	8/22/2011	30 ABC11416	2007
11539	Annual	Fail	Replaced	8/22/2011	20 abc 10022	2008
11540	Annual	Pass	Good	8/23/2011	20 ABC12003	2008
11540	Annual	Fail	Replaced	8/22/2011	20 abc 10024	2008
11541	Annual	Pass	Good	8/22/2011	20 ABC 11542	2011
11543	Annual	Pass	Good	8/22/2011	20 abc 10025	2008
11545	Annual	Pass	Good	8/22/2011	20 abc 10026	2007
11546	Annual	Pass	Good	8/22/2011	20 abc 10027	2008
11547	Annual	Pass	Good	8/22/2011	20 ansul10029	2008
11548	Annual	Pass	Good	8/22/2011	20 abc 10030	2007
11549	Annual	Pass	Good	8/22/2011	20 abc 1004	2008
11550	Annual	Pass	Good	8/22/2011	20 abc 10049	2007
11551	Annual	Pass	Good	8/22/2011	20 ABC10050	2008
11552	Annual	Pass	Good	8/22/2011	30 ansul10051	1981
11553	Annual	Pass	Good	8/22/2011	20 abc 10066	2008
11554	Annual	Pass	Good	8/22/2011	20 abc 10065	2007
11555	Annual	Pass	Good	8/22/2011	20 abc 10045	2008
11556	Annual	Pass	Good	8/22/2011	20 abc 10046	2008
11557	Annual	Pass	Good	8/22/2011	30 ansul10047	1981
11558	Annual	Pass	Good	8/22/2011	20 ansul10048	2007
11559	Annual	Pass	Good	8/22/2011	30 ansul10064	1979
11560	Annual	Pass	Good	8/22/2011	30 ansul 10035	1983
11561	Annual	Pass	Good	8/22/2011	20 abc 10071	2007
11562	Annual	Pass	Good	8/22/2011	20 ansul 10077	1996
11563	Annual	Pass	Good	8/22/2011	30 ansul 10072	1982
11564	Annual	Pass	Good	8/22/2011	30 ansul 10132	1981
11565	Annual	Pass	Good	8/22/2011	20 ansul 10093	1996
11566	Annual	Pass	Good	8/22/2011	30 ansul 10131	1973
11567	Annual	Pass	Good	8/23/2011	20 abc 11094	2007
11568	Annual	Pass	Good	8/22/2011	20 ansul 10130	1996
11569	Annual	Pass	Good	8/22/2011	20 ansul 10096	1994
11570	Annual	Pass	Good	8/22/2011	30 ansul 10100	1981
11571	Annual	Pass	Good	8/22/2011	20# bc 10098	1999
11572	Annual	Pass	Good	8/22/2011	30 ansul 10099	1981
11573	Annual	Pass	Good	8/22/2011	20 # abc 11443	2010
11574	Annual	Pass	Good	8/22/2011	20 # bc 11426	1996
11575	Annual	Pass	Good	8/23/2011	30 ansul 10068	1991
11576	Annual	Pass	Good	8/23/2011	20 abc 10067	2008
11577	Annual	Pass	Good	8/23/2011	20 abc 10053	2008
11578	Annual	Pass	Good	8/23/2011	20 ansul 10054	1996
11579	Annual	Pass	Good	8/23/2011	20 abc 10055	2007
11580	Annual	Pass	Good	8/23/2011	30 ansul 11505	1979
11581	Annual	Pass	Good	8/23/2011	20 # abc 12004	2008
11582	Annual	Pass	Good	8/23/2011	20# abc 11372	2008
11583	Annual	Pass	Good	8/23/2011	20 ansul 10086	1996
11584	Annual	Pass	Good	8/23/2011	10# abc 11446	1998

11585	Annual	Pass	Good	8/23/2011	20 abc 10042	2008
11587	Annual	Pass	Good	8/23/2011	30 ABC11423	1979
11588	Annual	Pass	Good	8/23/2011	20 ABC10022	2008
11589	Annual	Pass	Good	8/23/2011	30 ABC11176	1981
11590	Annual	Pass	Good	8/23/2011	20 ABC10095	1996
11599	Annual	Pass	Good	8/22/2011	20 abc 10063	2008
11600	Annual	Pass	Good	8/22/2011	20 ansul10032	1996
11601	Annual	Pass	Good	8/22/2011	30 ansul10031	1982
11602	Annual	Pass	Good	8/22/2011	20 ansul10033	1996
11603	Annual	Pass	Good	8/22/2011	20 ansul10034	1996
11604	Annual	Pass	Good	8/22/2011	20 10036	2007
11605	Annual	Pass	Good	8/22/2011	20 abc 10037	2007
11606	Annual	Pass	Good	8/22/2011	20 abc 10038	2007
11607	Annual	Pass	Good	8/22/2011	20 abc 10039	1997
11608	Annual	Pass	Good	8/22/2011	20 abc 10074	2007
11609	Annual	Pass	Good	8/22/2011	20 abc 10075	1998
11610	Annual	Pass	Good	8/22/2011	20 abc 10076	2007
11611	Annual	Pass	Good	8/22/2011	20 ansul 10073	1996
11612	Annual	Pass	Good	8/22/2011	30 ansul10081	1983
11613	Annual	Pass	Good	8/22/2011	20 abc 10133	2008
11614	Annual	Pass	Good	8/22/2011	20 abc 10082	2008
11615	Annual	Pass	Good	8/22/2011	20 abc 10092	2007
11616	Annual	Pass	Good	8/22/2011	20 abc 10080	2008
11617	Annual	Pass	Good	8/22/2011	30 ansul10107	1996
11618	Annual	Pass	Good	8/22/2011	20 ansul10108	1996
11619	Annual	Pass	Good	8/22/2011	20 ansul11454	1996
11620	Annual	Pass	Good	8/22/2011	20 abc 10137	1993
11621	Annual	Pass	Good	8/22/2011	20 abc 10135	2007
11622	Annual	Pass	Good	8/22/2011	30 ansul10136	1981
11623	Annual	Pass	Good	8/22/2011	30 ansul10109	1982
11624	Annual	Pass	Good	8/22/2011	20 abc 10110	2007
11625	Annual	Pass	Good	8/22/2011	20 abc 10111	2007
11626	Annual	Pass	Good	8/22/2011	20 abc 10112	1981
11627	Annual	Pass	Good	8/22/2011	20 abc 10113	1996
11628	Annual	Pass	Good	8/22/2011	20 abc 10114	2007
11629	Annual	Pass	Good	8/22/2011	20 abc 10115	2008
11630	Annual	Pass	Good	8/22/2011	20 abc 10116	2007
11631	Annual	Pass	Good	8/22/2011	20 ansul10117	1996
11632	Annual	Pass	Good	8/22/2011	20 10118	2007
11633	Annual	Pass	Good	8/22/2011	15 CO210119	1995
11634	Annual	Pass	Good	8/22/2011	20 abc 10120	2008
11635	Annual	Pass	Good	8/22/2011	30 ansul10129	1984
11638	Annual	Pass	Good	8/22/2011	20ansul11637	1996
11639	Annual	Pass	Good	8/22/2011	20 ansul10127	1996
11640	Annual	Pass	Good	8/22/2011	20 abc 10126	2008
11641	Annual	Pass	Good	8/22/2011	20 ansul10125	1996
11642	Annual	Pass	Good	8/22/2011	20 ansul10123	1996
11643	Annual	Pass	Good	8/22/2011	20 ansul10122	1996
11644	Annual	Pass	Good	8/22/2011	20 ansul10121	1996
11645	Annual	Pass	Good	8/23/2011	15 CO210061	2007

11646	Annual	Pass	Good	8/23/2011	15 CO210062	2007
11647	Annual	Pass	Good	8/23/2011	20 ansul10060	1996
11648	Annual	Pass	Good	8/23/2011	20abc 10059	1996
11649	Annual	Pass	Good	8/23/2011	20 ansul10058	1996
11650	Annual	Pass	Good	8/23/2011	20 ansul10057	1996
11651	Annual	Pass	Good	8/23/2011	20 ansul 10056	1996
11652	Annual	Pass	Good	8/23/2011	20 abc 10084	2008
11653	Annual	Pass	Good	8/23/2011	20 abc 11507	2010
11654	Annual	Pass	Good	8/23/2011	20 ansul10087	1996
11655	Annual	Pass	Good	8/23/2011	20 abc 10088	2008
11656	Annual	Pass	Good	8/23/2011	20 abc 10105	2008
11658	Annual	Pass	Good	8/23/2011	20 abc 10104	2008
11659	Annual	Pass	Good	8/23/2011	30 ansul10103	1982
11660	Annual	Pass	Good	8/23/2011	30 ansul10102	1982
11660	Annual	Pass	Good	8/23/2011	30 ansul10102	1982
11703	Annual	Pass	Good	8/23/2011	20 abc 10070	2008
11704	Annual	Pass	Good	8/23/2011	20 ansul10069	1993
11705	Annual	Pass	Good	8/23/2011	20 ABC11417	2010
11706	Annual	Pass	Good	8/23/2011	20 ansul10083	1999
11707	Annual	Pass	Good	8/23/2011	30 ansul10091	1973
11708	Annual	Pass	Good	8/23/2011	30 ansul10106	1986
11709	Annual	Pass	Good	8/23/2011	30 ansul10089	1981
11710	Annual	Pass	Good	8/23/2011	20 ABC11227	2008
11711	Annual	Pass	Good	8/23/2011	20 abc 10134	1996
11712	Annual	Pass	Good	8/23/2011	20 abc 10043	2008
11713	Annual	Pass	Good	8/23/2011	20 ABC11172	2008

By tank 28 section 1	Yes
By tank 31 section 1	yes
By tank 195 section 1	yes
By tank 194 section 1@2	yes
by tank 64	Yes
By tank 64 section 2	yes
by tank 182	Yes
By tank 62 section 2	yes
Across from tank 62 section 2	yes
West guard shack section 2	yes
crude unloading section 2	yes
crude unloading section 2	yes
On scba rack by tank 44 section2@3	yes
By tank 44 section 2@3	yes
By tank 50 section 3	yes
By tank 52 section 4	yes
Across from tank 52 section 4	yes
By tank 185 section 4	yes
By tank 74 cross roads section5	yes
By tank 74 section 5	yes
Backside tank 50 section 3	yes
Backside tank 77 section 3	yes
Backside tank 44 section 3	yes
Propane storage tank 609 section3	yes
By tank 49 section5	yes
By tank 43 section 2	yes
By tank 46 section 6	yes
By tank 187 section 7	yes
By tank 56 section6	yes
By tank 98 section 13	yes
By tank 97 section 11	yes
By tank 86 section 12	yes
By tank 173 section11	yes
By tank 86 section 12	yes
By tank 172 section11	yes
By tank 177 secton11	yes
By tank 178 section 11	yes
By tank 179 section 11	yes
tank 173	Yes
vgo tank 175	Yes
By tank 68 section 6	yes
By tank 56 section6	yes
Metal storage building section 5	yes
Wastwater treatment section5	yes
By tank 79 dog run section 5	yes
Flare stack 3 section 9	yes
flare west	Yes
dishcharge jack spring	Yes
By tank 184 section 10	yes
across from tank 184	Yes

By tank 199 section 3	yes
by flare stack	Yes
mcc room by flare stack	Yes
by tank 75	Yes
by tank 75	Yes
By tank 49 section5	yes
By tank 196 propane storage section 2@3	yes
By tank 196 propane storage section 2@3	yes
Acroos from tank 196 propane storage section 2@3	yes
Across from tank 67 blending manifold section 2	yes
Across from tank 187 section 2	yes
Across from tank 187 section 2	yes
By tank 186 section 2	yes
By tank 58 section 2	yes
By tank 72 section 7	yes
By tank 72 section 7	yes
By tank 59 section 7	yes
Wast storage by tank 73 section 7	yes
Nitrogen plant section 8	yes
By tank 82 section 13	yes
Nitrogen plant section 8	yes
By tank 97 section 11	yes
Nitrogen plant section 8	yes
By cooling tower section 12	yes
By cooling tower section 12	yes
cooling tower section 12	yes
By tank 113 section 14	yes
Across from tank 95 section 13	yes
By tank 89 section 14	yes
By tank 100 section 12	yes
By tank 100 section 12	yes
By tank 71 section12	yes
By tank 145 section 12	yes
By tank 149 section 12	yes
By tank 151 truck loading section 12	yes
By tank 151 truck loading section 12	yes
By tank 152 section 12	yes
By tank 153 section 12	yes
By tank 13 section 12	yes
Mcc room by tank 13 section 12	yes
Mcc room by tank 13 section 12	yes
Vego truck loading section 12	yes
vego truck loading platform	Yes
By tank 10 section 12	yes
Vego truck loading section 12	yes
Vego truck loading up stairs section 12	yes
V ego truck loading up stairs section 12	yes
Vego truck loading section 12	yes
Vego truck loading section 12	yes
Mcc room dog run section 5	yes

Mcc room dog run section 5	yes
By tank 79 dog run section 5	yes
By tank 79 dog run section 5	yes
By tank 79 dog run section 5	yes
By tank 74 section 5	yes
By tank 79 dog run section 5	yes
Pole water treatment section 8	yes
Pump pad wst of stack	yes
By tank 166 section 10	yes
By tank 167 section 10	yes
By tank 164 section 11	yes
By tank 164 section 11	yes
By tank 160 section 11	yes
By tank 160 section 11	yes
By tank 160 section 3	yes
By tank 67 section 6	yes
By tank 68 section 6	yes
flarestack/clean up	Yes
Pole water treatment section 8	yes
By tank 183 section 11	yes
By tank 93 section 11	yes
By tank 167 section 10	yes
by tank 170 and 184	Yes
By tank 181 section 13	yes
Pump by tank 199 section 3	yes
tank 44	Yes

EAST TANK TRUCK LOADING

11774	20 ansul11356	1996	Rail tank loading south eastside 2nd level
11772	20 ansul11355	1986	Rail tank loading south eastside 3rd level
11771	20 ansul11354	1996	Rail tank loading south center 3rd level
11770	20 ansul11353	1996	Rail tank loading south center 3rd level
11768	20 abc 11352	2007	Rail tank loading south top of stairs westside 3rd level
11766	20 ansul11767	1996	Rail tank loading nw road
11765	20 ansul11349	1996	Rail tank loading north between rails
11764	20 ansul11350	2008	Rail tank loading north east road
11743	30 bc 11775	1982	east electrical station
11742	20 bc 11087	1996	east load east platform
11741	10 ansul 11339	1986	Scalehouse
11740	20 abc 11344	2007	Tank loading north east truck loading
11739	20 abc 11341	2007	Tank loading north center truck loading
11738	20 ansul 11340	1996	Tank loading north west truck loading
11737	20 abc 11345	2008	Top east corner 2nd level truck loading
11736	20 abc 11346	2008	Top center 2nd level truck loading
11735	20 abc 11347	2008	Top west corner 2nd level truck loading
11734	20 bc 11450	1996	east loading west platfoqm
11733	20 ansul 11343	1998	Tank loading south west truck loading
11732	20 bc 11178	1996	east loading southend
11729	30 ansul 11338	1982	Breakroom by scale house
11728	20 abc 11337	2007	Telephone pole by scale house
11727	30 ansul11373	1980	East building by fence
11685	30 ansul11368	1988	Rail tank loading south ground between 1@2
11684	30 ansul11367	1983	Rail tank loading south ground between 1@2
11683	20 ansul11366	1999	Rail tank loading south bottom of stairs between 1@2
11682	30 ansul11365	1982	Rail tank loading south 2nd level middle between 1@2
11681	30 ansul11364	1979	Rail tank loading south 2nd level between 1@2
11680	20 ansul11363	1996	Rail tank loading south 2nd level between 1@2
11679	20 abc 11362	2007	Rail tank loading south on stairs between 1@2
11678	30 ansul11371	1982	Rail tank loading south ground between 1@2
11677	30 ABC11370	1981	southth rail
11676	30 ansul11369	1973	Rail tank loading south ground between 1@2
11675	20 ansul11360	1996	Rail tank loading south center between track 2@3
11674	20 ansul11357	1996	Rail tank loading south bottom of stairs eastside
11673	30 ansul11359	1980	Rail tank loading south middle between track 3@4
11672	30 ansul11358	1970	Rail tank loading south eastside by fence

Fire Extinguisher Inspection
Figure 11.8

11657	Monthly	Pass	Good	3/21/2012	30ansul 11351		by stairs	Yes
11672	Monthly	Pass	Good	3/21/2012	30ansul 11358	2005	by road at rail	Yes
11673	Monthly	Pass	Good	3/21/2012	30 ansul11359	1980	Rail tank loading south middle between track 3@4	yes
11674	Monthly	Pass	Good	3/21/2012	20 ansul11357	1996	Rail tank loading south bottom of stairs eastside	yes
11675	Monthly	Pass	Good	3/21/2012	20 ansul11360	1996	Rail tank loading south center between track 2@3	yes
11676	Monthly	pass	Good	3/21/2012	30 ansul11369	1973	Rail tank loading south ground between 1@2	yes
11677	Monthly	Pass	Good	3/21/2012	30 ABC11370	1981	southth rail	Yes
11678	Monthly	Pass	Good	3/21/2012	30 ansul11371	1982	Rail tank loading south ground between 1@2	yes
11679	Monthly	Pass	Good	3/21/2012	20 abc 11362	2007	Rail tank loading south on stairs between 1@2	yes
11681	Monthly	Pass	Good	3/21/2012	30 ansul11364	1979	Rail tank loading south 2nd level between 1@2	yes
11682	Monthly	Pass	Good	3/21/2012	30 ansul11365	1982	Rail tank loading south 2nd level middle between 1@2	yes
11683	Monthly	Pass	Good	3/21/2012	20 ansul11366	1999	Rail tank loading south bottom of stairs between 1@2	yes
11684	Monthly	Pass	Good	3/21/2012	30 ansul11367	1983	Rail tank loading south ground between 1@2	yes
11685	Monthly	Pass	Good	3/21/2012	30 ansul11368	1988	Rail tank loading south ground between 1@2	yes
11728	Monthly	Pass	Good	3/21/2012	20 abc 11337	2007	Telephone pole by scale house	yes
11729	Monthly	Pass	Good	3/21/2012	30 ansul 11338	1982	Breakroom by scale house	yes
11732	Monthly	Pass	Good	3/21/2012	20 bc 11178	1996	east loading southend	Yes
11733	Monthly	Pass	Good	3/21/2012	20 ansul 11343	1998	Tank loading south west truck loading	yes
11734	Monthly	Pass	Good	3/21/2012	20 bc 11450	1996	east loading west platfoqm	Yes
11735	Monthly	Pass	Good	3/21/2012	20 abc 11347	2008	Top west corner 2nd level truck loading	yes
11736	Monthly	Pass	Good	3/21/2012	20 abc 11346	2008	Top center 2nd level truck loading	yes
11737	Monthly	Pass	Good	3/21/2012	20 abc 11345	2008	Top east corner 2nd level truck loading	yes
11738	Monthly	Pass	Good	3/21/2012	20 ansul 11340	1996	Tank loading north west truck loading	yes
11739	Monthly	Pass	Good	3/21/2012	20 abc 11341	2007	Tank loading north center truck loading	yes
11740	Monthly	Pass	Good	3/21/2012	20 abc 11344	2007	Tank loading north east truck loading	yes
11741	Monthly	Pass	Good	3/21/2012	10 ansul 11339	1986	Scalehouse	yes
11742	Monthly	Pass	Good	3/21/2012	20 bc 11087	1996	east load east platform	Yes
11764	Monthly	Pass	Good	3/21/2012	20 ansul11350	2008	Rail tank loading north east road	yes
11766	Monthly	Pass	Good	3/21/2012	20 ansul11767	1996	Rail tank loading nw road	yes

East Tank Truck Check List

11768	Monthly	Pass	Good	3/21/2012	20 abc 11352	2007	Rail tank loading south top of stairs westside 3rd level	yes
11770	Monthly	Pass	Good	3/21/2012	20 ansul11353	1996	Rail tank loading south center 3rd level	yes
11771	Monthly	Pass	Good	3/21/2012	20 ansul11354	1996	Rail tank loading south center 3rd level	yes
11772	Monthly	Pass	Good	3/21/2012	20 ansul11355	1986	Rail tank loading south eastside 3rd level	yes
11774	Monthly	Pass	Good	3/21/2012	20 ansul11356	1996	Rail tank loading south eastside 2nd level	yes

11672	Annual	Pass	Good	8/24/2011	30 ansul11358	1970
11673	Annual	Pass	Good	8/24/2011	30 ansul11359	1980
11674	Annual	Pass	Good	8/24/2011	20 ansul11357	1996
11675	Annual	Pass	Good	8/24/2011	20 ansul11360	1996
11676	Annual	Pass	Good	8/24/2011	30 ansul11369	1973
11677	Annual	Pass	Good	8/24/2011	30 ABC11370	1981
11678	Annual	Pass	Good	8/24/2011	30 ansul11371	1982
11679	Annual	Pass	Good	8/24/2011	20 abc 11362	2007
11680	Annual	Pass	Good	8/24/2011	20 ansul11363	1996
11681	Annual	Pass	Good	8/24/2011	30 ansul11364	1979
11682	Annual	Pass	Good	8/24/2011	30 ansul11365	1982
11683	Annual	Pass	Good	8/24/2011	20 ansul11366	1999
11684	Annual	Pass	Good	8/24/2011	30ansul11367	1983
11685	Annual	Pass	Good	8/24/2011	30 ansul11368	1988
11727	Annual	Pass	Good	8/24/2011	30 ansul11373	1980
11728	Annual	Pass	Good	8/24/2011	20 abc 11337	2007
11729	Annual	Pass	Good	8/24/2011	30 ansul 11338	1982
11732	Annual	Pass	Good	8/24/2011	20 bc 11178	1996
11733	Annual	Pass	Good	8/24/2011	20 ansul 11343	1998
11734	Annual	Pass	Good	8/24/2011	20 bc 11450	1996
11735	Annual	Pass	Good	8/24/2011	20 abc 11347	2008
11736	Annual	Pass	Good	8/24/2011	20 abc 11346	2008
11737	Annual	Pass	Good	8/24/2011	20 abc 11345	2008
11738	Annual	Pass	Good	8/24/2011	20 ansul 11340	1996
11739	Annual	Pass	Good	8/24/2011	20 abc 11341	2007
11740	Annual	Pass	Good	8/24/2011	20 abc 11344	2007
11741	Annual	Pass	Good	8/24/2011	10 ansul 11339	1986
11742	Annual	Pass	Good	8/24/2011	20 bc 11087	1996
11743	Annual	Pass	Good	8/24/2011	30 bc 11775	1982
11764	Annual	Pass	Good	8/24/2011	20 ansul11350	2008
11765	Annual	Pass	Good	8/24/2011	20 ansul11349	1996
11766	Annual	Pass	Good	8/24/2011	20 ansul11767	1996
11768	Annual	Pass	Good	8/24/2011	20 abc 11352	2007
11770	Annual	Pass	Good	8/24/2011	20 ansul11353	1996
11771	Annual	Pass	Good	8/24/2011	20 ansul11354	1996
11772	Annual	Pass	Good	8/24/2011	20 ansul11355	1986
11774	Annual	Pass	Good	8/24/2011	20 ansul11356	1996

Rail tank loading south eastside by fence
Rail tank loading south middle between track 3@4
Rail tank loading south bottom of stairs eastside
Rail tank loading south center between track 2@3
Rail tank loading south ground between 1@2
southh rail
Rail tank loading south ground between 1@2
Rail tank loading south on stairs between 1@2
Rail tank loading south 2nd level between 1@2
Rail tank loading south 2nd level between 1@2
Rail tank loading south 2nd level middle between 1@2
Rail tank loading south bottom of stairs between 1@2
Rail tank loading south ground between 1@2
Rail tank loading south ground between 1@2
East building by fence
Telephone pole by scale house
Breakroom by scale house
east loading southend
Tank loading south west truck loading
east loading west platfoqm
Top west corner 2nd level truck loading
Top center 2nd level truck loading
Top east corner 2nd level truck loading
Tank loading north west truck loading
Tank loading north center truck loading
Tank loading north east truck loading
Scalehouse
east load east platform
east electrical station
Rail tank loading north east road
Rail tank loading north between rails
Rail tank loading nw road
Rail tank loading south top of stairs westside 3rd level
Rail tank loading south center 3rd level
Rail tank loading south center 3rd level
Rail tank loading south eastside 3rd level
Rail tank loading south eastside 2nd level

LUBE NORTHSIDE

19968	20abc10116	1996	pole20
13375	20bc11085	1998	top
13374	20bc11082	1998	6 level
13373	30bc11904	1997	wax pump c
13372	30bc	1998	wax pump a
13178	20 ansul11801	1982	Across from control room lube
13177	20 ansul11008	1999	West by stairs lube finish #66
13176	20ansul11441	1999	north corner
13175	20 ansul10470	1996	North platform Hydro 1
13174	20 ansul11050	1996	West by stairs MEK #43
13173	20 ansul11051	1996	South MEK #44
13172	30 ansul11052	1981	South MEK #45
13171	30 ansul11048	1982	North walkway MEK #41
13170	30 ansul11049	1981	North walkway MEK #42
13169	20 abc11068	2008	North wet solvent decanter #58
13168	30 ansul11070	1982	West wet solvent decanter #60
13167	20 abc11069	2007	West wet solvent decanter #59
13166	30 abc11530	2004	2nd lube finish
13165	20 ansul11091	1998	Between ground and 2nd level north lube finish
13164	20 abc11090	2007	2nd level north lube finish
13162	30 abc11528	2004	3rd lube finish
13161	30 abc11415	2004	4th lube finish
13160	20 abc11089	2008	3rd level north lube finish
13158	20 abc11086	2007	4th level north lube finish
13157	30 abc11421	2004	5th lube finish
13156	30 abc11526	2006	6th lube finish
13155	20 ansul11168	2008	7th level south lube finish
13055	20 ansul10500	1999	Across from control room lube
13054	30 ansul11067	1981	Up ladder wet solvent decanter
13053	30 ansul11065	1984	Between ground and 2nd level MEK #47
13052	20 ansul11064	1994	2nd level south MEK #50
13051	20 abc11056	2007	2nd level north MEK #49
13049	20 ansul11055	1993	2nd level east MEK #48
13048	30 ansul11054	1980	South by stairs MEK #47
13047	20 abc11047	2008	North walkway MEK #40
13046	30 ansul11046	1982	North walkway MEK #38
13045	20 abc11045	2007	5th level wax hydro finisher
13044	20 abc11044	2005	4th level wax hydro finisher
13043	20 ansul11043	1994	Between 3rd and 4th level wax hydro finisher
13042	20 ansul11042	1996	3rd level wax hydro finisher
13041	20 abc11041	2007	3rd level wax hydro finisher
13040	20 abc11040	2007	3rd level wax hydro finisher
13039	20 abc11039	2007	Up ladder 2nd level wax hydro finisher
13038	20 ansul11038	2008	2nd level wax hydro finisher by stairs
13037	30 ansul11037	1984	2nd level wax hydro finisher
13036	30 ansul11036	1982	West wax hydro finisher by stairs
13035	30 ansul11035	1977	West wax hydro finisher

LUBE NORTHSIDE

13034	20	ansul10112	1984	East wax hydro finisher
13033	30	ansul11032	1982	East wax hydro finisher
13032	30	ansul11031	1982	East wax hydro finisher
13031	20	ansul13030	1994	South by job box wax hydro finisher
13029	20	abc11034	2007	North wax hydro finisher
13028	20	ansul11092	1995	Southwest of Atmos tower
13027	20	ansul11010	1996	South of Atmos tower
13026	20	ansul11021	1997	Westside of Atmos tower
13025	20	abc11029	2008	3rd level Atmos tower
13024	20	abc11028	2008	2nd level Atmos tower
13023	20	ansul11020	1996	Northside of Atmos tower
13022	30	ansul11027	1983	East of Atmos tower
13021	20	abc11456	2007	East of Atmos tower
13020	30	ansul11026	1981	East of Atmos tower
13019	20	abc11019	2008	4th level stripper
13018	20	ansul11018	1991	Between 3rd and 4th level on fin fan deck
13017	30	ansul11017	1988	Between 3rd and 4th level on fin fan deck
13016	20	ansul11016	1996	Between 3rd and 4th level on fin fan deck
13015	20	abc11015	2008	3rd level stripper
13014	20	abc11014	2007	2nd level stripper
13013	20	abc11013	2008	Between ground and 2nd level stripper
13012	20	abc11012	2007	By starter rack 12a
13011	20	ansul11414	1994	pole btm stripper pump south
13010	20	ansul11440	1996	By DWG LOHT 65
13009	20	ansul11024	1996	On pole southside of stack
13008	30	ansul10341	1979	On pole eastside of stack
13007	20	abc11006	2007	On outside pole on stack
13006	30	ansul11005	1982	Mid draw reflux pump
13005	20	abc11004	2007	On rail mid stripper
13004	20	ansul11007	1994	Behind stripper pumps
13003	30	ansul11003	1981	Behind feed coalescer
13002	30	ansul11002	1988	On rail at feed coalescer
13001	20	ansul11001	1977	On rail at feed coalescer
11968	20	bc10116	1997	pole20 blue
11967	20	ansul11066	1983	Up ladder wet solvent decanter
11966	20	ansul11057	1996	Between 2nd and 3rd level MEK #57
11965	20	abc11058	2007	3rd level MEK #56
11964	20	abc11059	2007	3rd level MEK #55
11963	20	ansul11060	1993	3rd level MEK
11962	20	ansul11061	1996	Up ladder 4th level MEK #54
11961	20	ansul11063	1994	Between 2nd and 3rd level MEK #51
11960	20	abc11062	2008	Between 2nd and 3rd level MEK #52
11959	20	abc10252	2007	5th level south ladder top of roof MEK
11958	20	abc10253	2007	5th level south ladder top of roof MEK
11957	20	abc10251	2008	4th level north MEK
11956	20	abc10250	2008	4th level north MEK
11955	20	abc10249	2008	4th level north MEK

LUBE NORTHSIDE

11954	20	abc10248	2007	4th level south by ladder MEK
11953	30	ansul10247	1982	4th level finfan deck MEK
11952	20	ansul10246	1993	4th level finfan deck MEK
11951	20	abc10244	2008	4th level south Mek
11950	30	ansul10243	1981	4th level north MEK
11949	20	abc10237	2005	3rd level west MEK
11948	20	ansul10242	1996	3rd level north MEK
11946	20	ansul10241	1996	3rd level north MEK
11945	20	abc10240	2007	3rd level east MEK
11944	20	ansul10239	1996	3rd level south by ladder MEK
11943	20	ansul10238	1996	3rd level south center MEK
11942	20	abc10236	2007	3rd level south west MEK
11941	20	ansul11449	1994	3rd level north west MEK
11940	20	ansul11442	1999	2nd level north MEK
11939	30	ansul10231	1988	2nd level south east MEK
11938	20	abc10232	2007	2nd level south MEK
11937	20	ansul10233	1995	2nd level south west MEK
11936	30	ansul11935	1982	2nd level north west MEK
11934	20	abc10219	2007	South east of chain and sprockets
11933	30	ansul10220	1982	North by starter rack
11932	20	abc10225	2008	Under building #17 MEK
11931	30	ansul10224	1983	East corner #36 MEK
11930	20	abc10229	2008	Under building #16 MEK
11929	20	abc10227	2008	Under building #18 MEK
11928	20	abc11926	2008	North under stairs #19 MEK
11927	30	ansul10116	1982	North under building #20 MEK
11925	20abc10221		2008	south walkway mek
11924	20	abc10222	2008	South walkway #15 MEK
11923	30	ansul10223	1988	East #37 MEK
11922	30	ansul10254	1982	Ground south walkway #38
11921	30	ansul10264	1986	south walkway wax pumps
11920	30	ansul10262	1988	south walkway wax pumps
11919	20	ansul10261	1999	South west corner little blue building 2nd level
11918	30	ansul10260	1970	West little blue building 2nd level
11917	30	ansul10259	1982	East little blue building 2nd level
11915	20	ansul10255	1999	North corner little blue building
11914	30	ansul10256	1987	South west corner little blue building
11913	30	ansul10257	1979	South east little blue building
11912	20	abc10263	2008	North of blue building wax pumps
11909	30	ansul10258	1983	North east little blue building
11908	30	ansul11907	1979	Wax pump A
11906	20	abc11905	2007	Wax pump B
11903	30	ansul11904	1978	Wax pumps C
11902	20	abc10270	2008	West walkway
11901	20	abc10268	2008	south walkway wax pumps
11900	20	abc10269	2008	West walkway
11899	20	abc10271	2008	East facing LOHT job box

LUBE NORTHSIDE

11898	20	ansul11088	1998	6th level north lube finish
11897	20	ansul11084	1999	7th level south lube finish
11896	20	ansul11083	1995	6th level south lube finish
11895	20	abc11081	2007	4th level south lube finish
11894	20	ansul11080	1994	3rd level south lube finish
11893	20	ansul11079	1994	2nd level south lube finish #70
11892	20	abc11078	2007	2nd level blue building lube finish #69
11891	20	ansul11077	1999	2nd level blue building lube finish #68
11890	20	ansul11076	1995	West lube finish #67
11889	30	ansul11074	1988	East lube finish #65
11888	20	abc11073	2007	East lube finish #64
11887	20	abc11071	2007	East lube finish #62
11886	20	abc10218	1996	North by ladder 3rd level
11885	20	abc10217	2007	East by ladder 3rd level
11884	30	ansul10216	1992	North by ladder 2nd level
11883	30	ansul10215	1992	East 2nd level
11882	20	abc10214	2007	West 2nd level
11881	30	ansul10213	1968	West by stairs silver building
11880	30	ansul10211	1992	South east inside burm
11879	20	abc10210	2007	North facing fence inside burm
11878	20	abc10209	2007	Platform across from control room
11877	20	ansul10208	1996	Platform across from control room
11876	30	ansul10207	1982	Inside fence across from fire house
11875	20	abc10205	2008	West by tan building Hydro 2
11874	20	ansul10204	1996	West by gas drum Hydro2
11873	20	ansul10203	1994	South Hydro 2
11872	20	ansul10201	1991	In walkway Hydro 2
11871	20	abc10199	2008	North in walkway Hydro2
11870	20	ansul10200	1978	North in walkway Hydro2
11869	30	ansul10198	1985	North Hydro 2
11868	20	ansul10202	1993	In walkway Hydro 2
11867	30	ansul10197	1985	East by absorber tanks Hydro 2
11866	30	ansul 10196	1986	Behind white insturment house Hydro 1
11865	30	ansul 10195	1992	West by reformer a Hydro 1
11864	20	abc10193	2008	Inside walkway Hydro1
11863	20	abc10192	2008	Inside walkway Hydro1
11862	20	abc10191	2008	Inside walkway Hydro1
11861	30	ansul 10189	1979	East Hydro 1
11860	30	ansul 10188	1996	South Hydro 1
11859	20	ansul10187	1993	West LOHT
11858	20	ansul10185	1996	South stairs 2nd level LOHT
11857	20	abc10184	2008	South east 2nd level LOHT
11856	30	ansul10183	1982	South east stairs 2nd level LOHT
11855	20	abc10182	2008	South west 2nd level LOHT
11854	20	ansul10181	1994	West 2nd level LOHT
11853	20	abc10180	2008	North corner LOHT 2nd level
11851	20	abc10179	2008	West walkway LOHT

LUBE NORTHSIDE

11850	20 abc10178	2008	East walkway LOHT
11849	20 abc10177	2008	Southeast LOHT
11072	150wheel	1998	East lube finish
11053	350wheel	1989	South MEK
11022	350wheel	1977	Westside of Atmos tower
10245	350wheel	1993	4th level MEK
10221	20 abc10221	2008	South walkway #14 MEK
10212	350wheel	1982	South west by chain and sprockets
10206	350wheel	1984	North outside Hydro 2
10186	350wheel	1994	South LOHT

Fire Extinguisher Inspection
Figure 11.8

10186	Monthly	Pass	Good	3/22/2012	350wheel	1994	South LOHT	yes
10206	Monthly	Pass	Good	3/22/2012	350wheel	1984	North outside Hydro 2	yes
10212	Monthly	Pass	Good	3/22/2012	350wheel	1982	South west by chain and sprockets	yes
10245	Monthly	Pass	Good	3/22/2012	350wheel	1993	4th level MEK	yes
11072	Monthly	Pass	Good	3/22/2012	150wheel	1998	East lube finish	yes
11849	Monthly	Pass	Good	3/22/2012	20 abc10177	2008	Southeast LOHT	yes
11850	Monthly	Pass	Good	3/22/2012	20 abc10178	2008	East walkway LOHT	yes
11851	Monthly	Pass	Good	3/22/2012	20 abc10179	2008	West walkway LOHT	yes
11853	Monthly	Pass	Good	3/22/2012	20 abc10180	2008	North corner LOHT 2nd level	yes
11854	Monthly	Pass	Good	3/22/2012	20 ansul10181	1994	West 2nd level LOHT	yes
11855	Monthly	Pass	Good	3/22/2012	20 abc10182	2008	South west 2nd level LOHT	yes
11856	Monthly	Pass	Good	3/22/2012	30 ansul10183	1982	South east stairs 2nd level LOHT	yes
11857	Monthly	Pass	Good	3/22/2012	20 abc10184	2008	South east 2nd level LOHT	yes
11858	Monthly	Pass	Good	3/22/2012	20 ansul10185	1996	South stairs 2nd level LOHT	yes
11859	Monthly	Pass	Good	3/22/2012	20 ansul10187	1993	West LOHT	yes
11860	Monthly	Pass	Good	3/22/2012	30 ansul 10188	1996	South Hydro 1	yes
11861	Monthly	Pass	Good	3/22/2012	30 ansul 10189	1979	East Hydro 1	yes
11862	Monthly	Pass	Good	3/22/2012	20 abc10191	2008	Inside walkway Hydro1	yes
11863	Monthly	Pass	Good	3/22/2012	20 abc10192	2008	Inside walkway Hydro1	yes
11864	Monthly	Pass	Good	3/22/2012	20 abc10193	2008	Inside walkway Hydro1	yes
11865	Monthly	Pass	Good	3/22/2012	30 ansul 10195	1992	West by reformer a Hydro 1	yes
11866	Monthly	Pass	Good	3/22/2012	30 ansul 10196	1986	Behind white insturment house Hydro 1	yes
11867	Monthly	Pass	Good	3/22/2012	30 ansul10197	1985	East by absorber tanks Hydro 2	yes
11868	Monthly	Pass	Good	3/22/2012	20 ansul10202	1993	In walkway Hydro 2	yes
11869	Monthly	Pass	Good	3/22/2012	30 ansul10198	1985	North Hydro 2	yes
11870	Monthly	Pass	Good	3/22/2012	20 ansul10200	1978	North in walkway Hydro2	yes
11871	Monthly	Pass	Good	3/22/2012	20 abc10199	2008	North in walkway Hydro2	yes
11872	Monthly	Pass	Good	3/22/2012	20 ansul10201	1991	In walkway Hydro 2	yes
11873	Monthly	Pass	Good	3/22/2012	20 ansul10203	1994	South Hydro 2	yes
11874	Monthly	Pass	Good	3/22/2012	20 ansul10204	1996	West by gas drum Hydro2	yes
11875	Monthly	Pass	Good	3/22/2012	20 abc10205	2008	West by tan building Hydro 2	yes
11876	Monthly	Pass	Good	3/22/2012	30 ansul10207	1982	Inside fence across from fire house	yes
11877	Monthly	Pass	Good	3/22/2012	20 ansul10208	1996	Platform across from control room	yes
11878	Monthly	Pass	Good	3/22/2012	20 abc10209	2007	Platform across from control room	yes
11880	Monthly	Pass	Good	3/22/2012	30 ansul10211	1992	South east inside burm	yes
11881	Monthly	Pass	Good	3/22/2012	30 ansul10213	1968	West by stairs silver building	yes
11882	Monthly	Pass	Good	3/22/2012	20 abc10214	2007	West 2nd level	yes
11883	Monthly	Pass	Good	3/22/2012	30 ansul10215	1992	East 2nd level	yes
11884	Monthly	Pass	Good	3/22/2012	30 ansul10216	1992	North by ladder 2nd level	yes
11885	Monthly	Pass	Good	3/22/2012	20 abc10217	2007	East by ladder 3rd level	yes
11886	Monthly	Pass	Good	3/22/2012	20 abc10218	1996	North by ladder 3rd level	yes
11887	Monthly	Pass	Good	3/22/2012	20 abc11071	2007	East lube finish #62	yes

Lube Northside Check List

11888	Monthly	Pass	Good	3/22/2012	20	abc11073	2007	East lube finish #64	yes
11889	Monthly	Pass	Good	3/22/2012	30	ansul11074	1988	East lube finish #65	yes
11890	Monthly	Pass	Good	3/22/2012	20	ansul11076	1995	West lube finish #67	yes
11891	Monthly	Pass	Good	3/22/2012	20	ansul11077	1999	2nd level blue building lube finish #68	yes
11892	Monthly	Pass	Good	3/22/2012	20	abc11078	2007	2nd level blue building lube finish #69	yes
11893	Monthly	Pass	Good	3/22/2012	20	ansul11079	1994	2nd level south lube finish #70	yes
11894	Monthly	Pass	Good	3/22/2012	20	ansul11080	1994	3rd level south lube finish	yes
11895	Monthly	Pass	Good	3/22/2012	20	abc11081	2007	4th level south lube finish	yes
11896	Monthly	Pass	Good	3/22/2012	20	ansul11083	1995	6th level south lube finish	yes
11897	Monthly	Pass	Good	3/22/2012	20	ansul11084	1999	7th level south lube finish	yes
11898	Monthly	Pass	Good	3/22/2012	20	ansul11088	1998	6th level north lube finish	yes
11899	Monthly	Pass	Good	3/22/2012	20	abc10271	2008	East facing LOHT job box	yes
11900	Monthly	Pass	Good	3/22/2012	20	abc10269	2008	West walkway	yes
11901	Monthly	Pass	Good	3/22/2012	20	abc10268	2008	south walkway wax pumps	yes
11902	Monthly	Pass	Good	3/22/2012	20	abc10270	2008	West walkway	yes
11909	Monthly	Pass	Good	3/22/2012	30	ansul10258	1983	North east little blue building	yes
11912	Monthly	Pass	Good	3/22/2012	20	abc10263	2008	North of blue building wax pumps	yes
11913	Monthly	Pass	Good	3/22/2012	30	ansul10257	1979	South east little blue building	yes
11914	Monthly	Pass	Good	3/22/2012	30	ansul10256	1987	South west corner little blue building	yes
11915	Monthly	Pass	Good	3/22/2012	20	ansul10255	1999	North corner little blue building	yes
11917	Monthly	Pass	Good	3/22/2012	30	ansul10259	1982	East little blue building 2nd level	yes
11918	Monthly	Pass	Good	3/22/2012	30	ansul10260	1970	West little blue building 2nd level	yes
11919	Monthly	Pass	Good	3/22/2012	20	ansul10261	1999	South west corner little blue building 2nd level	yes
11920	Monthly	Pass	Good	3/22/2012	30	ansul10262	1988	south walkway wax pumps	yes
11921	Monthly	Pass	Good	3/22/2012	30	ansul10264	1986	south walkway wax pumps	yes
11922	Monthly	Pass	Good	3/22/2012	30	ansul10254	1982	Ground south walkway #38	yes
11923	Monthly	Pass	Good	3/22/2012	30	ansul10223	1988	East #37 MEK	yes
11924	Monthly	Pass	Good	3/22/2012	20	abc10222	2008	South walkway #15 MEK	yes
11925	Monthly	Pass	Good	3/22/2012	20	abc10221	2008	south walkway mek	Yes
11928	Monthly	Pass	Good	3/22/2012	20	abc11926	2008	North under stairs #19 MEK	yes
11929	Monthly	Pass	Good	3/22/2012	20	abc10227	2008	Under building #18 MEK	yes
11930	Monthly	Pass	Good	3/22/2012	20	abc10229	2008	Under building #16 MEK	yes
11931	Monthly	Pass	Good	3/22/2012	30	ansul10224	1983	East corner #36 MEK	yes
11932	Monthly	Pass	Good	3/22/2012	20	abc10225	2008	Under building #17 MEK	yes
11933	Monthly	Pass	Good	3/22/2012	30	ansul10220	1982	North by starter rack	yes
11934	Monthly	Pass	Good	3/22/2012	20	abc10219	2007	South east of chain and sprockets	yes
11936	Monthly	Pass	Good	3/22/2012	30	ansul11935	1982	2nd level north west MEK	yes
11937	Monthly	Pass	Good	3/22/2012	20	ansul10233	1995	2nd level south west MEK	yes
11938	Monthly	Pass	Good	3/22/2012	20	abc10232	2007	2nd level south MEK	yes
11939	Monthly	Pass	Good	3/22/2012	30	ansul10231	1988	2nd level south east MEK	yes
11941	Monthly	Pass	Good	3/22/2012	20	ansul11449	1994	3rd level north west MEK	yes
11942	Monthly	Pass	Good	3/22/2012	20	abc10236	2007	3rd level south west MEK	yes
11943	Monthly	Pass	Good	3/22/2012	20	ansul10238	1996	3rd level south center MEK	yes
11944	Monthly	Pass	Good	3/22/2012	20	ansul10239	1996	3rd level south by ladder MEK	yes
11945	Monthly	Pass	Good	3/22/2012	20	abc10240	2007	3rd level east MEK	yes
11946	Monthly	Pass	Good	3/22/2012	20	ansul10241	1996	3rd level north MEK	yes

Lube Northside Check List

11948	Monthly	Pass	Good	3/22/2012	20	ansul10242	1996	3rd level north MEK	yes
11949	Monthly	Pass	Good	3/22/2012	20	abc10237	2005	3rd level west MEK	yes
11950	Monthly	Pass	Good	3/22/2012	30	ansul10243	1981	4th level north MEK	yes
11951	Monthly	Pass	Good	3/22/2012	20	abc10244	2008	4th level south Mek	yes
11952	Monthly	Pass	Good	3/22/2012	20	ansul10246	1993	4th level finfan deck MEK	yes
11953	Monthly	Pass	Good	3/22/2012	30	ansul10247	1982	4th level finfan deck MEK	yes
11954	Monthly	Pass	Good	3/22/2012	20	abc10248	2007	4th level south by ladder MEK	yes
11956	Monthly	Pass	Good	3/22/2012	20	abc10250	2008	4th level north MEK	yes
11957	Monthly	Pass	Good	3/22/2012	20	abc10251	2008	4th level north MEK	yes
11958	Monthly	Pass	Good	3/22/2012	20	abc10253	2007	5th level south ladder top of roof MEK	yes
11959	Monthly	Pass	Good	3/22/2012	20	abc10252	2007	5th level south ladder top of roof MEK	yes
11960	Monthly	Pass	Good	3/22/2012	20	abc11062	2008	Between 2nd and 3rd level MEK #52	yes
11961	Monthly	Pass	Good	3/22/2012	20	ansul11063	1994	Between 2nd and 3rd level MEK #51	yes
11962	Monthly	Pass	Good	3/22/2012	20	ansul11061	1996	Up ladder 4th level MEK #54	yes
11963	Monthly	Pass	Good	3/22/2012	20	ansul11060	1993	3rd level MEK	yes
11965	Monthly	Pass	Good	3/22/2012	20	abc11058	2007	3rd level MEK #56	yes
11966	Monthly	Pass	Good	3/22/2012	20	ansul11057	1996	Between 2nd and 3rd level MEK #57	yes
11967	Monthly	Pass	Good	3/22/2012	20	ansul11066	1983	Up ladder wet solvent decanter	yes
11968	Monthly	Pass	Good	3/22/2012	20	bc10116	1997	pole20 blue	Yes
13001	Monthly	Pass	Good	3/22/2012	20	ansul11001	1977	On rail at feed coalescer	yes
13002	Monthly	Pass	Good	3/22/2012	30	ansul11002	1988	On rail at feed coalescer	yes
13003	Monthly	Pass	Good	3/22/2012	30	ansul11003	1981	Behind feed coalescer	yes
13004	Monthly	Pass	Good	3/22/2012	20	ansul11007	1994	Behind stripper pumps	yes
13005	Monthly	Pass	Good	3/22/2012	20	abc11004	2007	On rail mid stripper	yes
13006	Monthly	Pass	Good	3/22/2012	30	ansul11005	1982	Mid draw reflux pump	yes
13007	Monthly	Pass	Good	3/22/2012	20	abc11006	2007	On outside pole on stack	yes
13008	Monthly	Pass	Good	3/22/2012	30	ansul10341	1979	On pole eastside of stack	yes
13009	Monthly	Pass	Good	3/22/2012	20	ansul11024	1996	On pole southside of stack	yes
13010	Monthly	Pass	Good	3/22/2012	20	ansul11440	1996	By DWG LOHT 65	yes
13011	Monthly	Pass	Good	3/22/2012	20	ansul11414	1994	pole btm stripper pump south	yes
13012	Monthly	Pass	Good	3/22/2012	20	abc11012	2007	By starter rack 12a	yes
13013	Monthly	Pass	Good	3/22/2012	20	abc11013	2008	Between ground and 2nd level stripper	yes
13014	Monthly	Pass	Good	3/22/2012	20	abc11014	2007	2nd level stripper	yes
13015	Monthly	Pass	Good	3/22/2012	20	abc11015	2008	3rd level stripper	yes
13017	Monthly	Pass	Good	3/22/2012	30	ansul11017	1988	Between 3rd and 4th level on fin fan deck	yes
13018	Monthly	Pass	Good	3/22/2012	20	ansul11018	1991	Between 3rd and 4th level on fin fan deck	yes
13019	Monthly	Pass	Good	3/22/2012	20	abc11019	2008	4th level stripper	yes
13021	Monthly	Pass	Good	3/22/2012	20	abc11456	2007	East of Atmos tower	yes
13021	Monthly	Pass	Good	3/22/2012	20	abc11456	2007	East of Atmos tower	yes
13022	Monthly	Pass	Good	3/22/2012	30	ansul11027	1983	East of Atmos tower	yes
13023	Monthly	Pass	Good	3/22/2012	20	ansul11020	1996	Northside of Atmos tower	yes
13024	Monthly	Pass	Good	3/22/2012	20	abc11028	2008	2nd level Atmos tower	yes
13025	Monthly	Pass	Good	3/22/2012	20	abc11029	2008	3rd level Atmos tower	yes
13026	Monthly	Pass	Good	3/22/2012	20	ansul11021	1997	Westside of Atmos tower	yes
13027	Monthly	Pass	Good	3/22/2012	20	ansul11010	1996	South of Atmos tower	yes
13028	Monthly	Pass	Good	3/22/2012	20	ansul11092	1995	Southwest of Atmos tower	yes

Lube Northside Check List

13029	Monthly	Pass	Good	3/22/2012	20 abc11034	2007	North wax hydro finisher	yes
13031	Monthly	Pass	Good	3/22/2012	20 ansul13030	1994	South by job box wax hydro finisher	yes
13032	Monthly	Pass	Good	3/22/2012	30 ansul11031	1982	East wax hydro finisher	yes
13033	Monthly	Pass	Good	3/22/2012	30 ansul11032	1982	East wax hydro finisher	yes
13034	Monthly	Pass	Good	3/22/2012	20 ansul10112	1984	East wax hydro finisher	yes
13035	Monthly	Pass	Good	3/22/2012	30 ansul11035	1977	West wax hydro finisher	yes
13036	Monthly	Pass	Good	3/22/2012	30 ansul11036	1982	West wax hydro finisher by stairs	yes
13037	Monthly	Pass	Good	3/22/2012	30 ansul11037	1984	2nd level wax hydro finisher	yes
13040	Monthly	Pass	Good	3/22/2012	20 abc11040	2007	3rd level wax hydro finisher	yes
13041	Monthly	Pass	Good	3/22/2012	20 abc11041	2007	3rd level wax hydro finisher	yes
13042	Monthly	Pass	Good	3/22/2012	20 ansul11042	1996	3rd level wax hydro finisher	yes
13043	Monthly	Pass	Good	3/22/2012	20 ansul11043	1994	Between 3rd and 4th level wax hydro finisher	yes
13044	Monthly	Pass	Good	3/22/2012	20 abc11044	2005	4th level wax hydro finisher	yes
13045	Monthly	Pass	Good	3/22/2012	20 abc11045	2007	5th level wax hydro finisher	yes
13046	Monthly	Pass	Good	3/22/2012	30 ansul11046	1982	North walkway MEK #38	yes
13047	Monthly	Pass	Good	3/22/2012	20 abc11047	2008	North walkway MEK #40	yes
13048	Monthly	Pass	Good	3/22/2012	30 ansul11054	1980	South by stairs MEK #47	yes
13049	Monthly	Pass	Good	3/22/2012	20 ansul11055	1993	2nd level east MEK #48	yes
13052	Monthly	Pass	Good	3/22/2012	20 ansul11064	1994	2nd level south MEK #50	yes
13053	Monthly	Pass	Good	3/22/2012	30 ansul11065	1984	Between ground and 2nd level MEK #47	yes
13054	Monthly	Pass	Good	3/22/2012	30 ansul11067	1981	Up ladder wet solvent decanter	yes
13055	Monthly	Pass	Good	3/22/2012	20 ansul10500	1999	Across from control room lube	yes
13155	Monthly	Pass	Good	3/22/2012	20 ansul11168	2008	7th level south lube finish	yes
13156	Monthly	Pass	Good	3/22/2012	30 abc11526	2006	6th lube finish	yes
13157	Monthly	Pass	Good	3/22/2012	30 abc11421	2004	5th lube finish	yes
13158	Monthly	Pass	Good	3/22/2012	20 abc11086	2007	4th level north lube finish	yes
13160	Monthly	Pass	Good	3/22/2012	20 abc11089	2008	3rd level north lube finish	yes
13161	Monthly	Pass	Good	3/22/2012	30 abc11415	2004	4th lube finish	yes
13164	Monthly	Pass	Good	3/22/2012	20 abc11090	2007	2nd level north lube finish	yes
13165	Monthly	Pass	Good	3/22/2012	20 ansul11091	1998	Between ground and 2nd level north lube finisl	yes
13166	Monthly	Pass	Good	3/22/2012	30 abc11530	2004	2nd lube finish	yes
13168	Monthly	Pass	Good	3/22/2012	30 ansul11070	1982	West wet solvent decanter #60	yes
13169	Monthly	Pass	Good	3/22/2012	20 abc11068	2008	North wet solvent decanter #58	yes
13170	Monthly	Pass	Good	3/22/2012	30 ansul11049	1981	North walkway MEK #42	yes
13171	Monthly	Pass	Good	3/22/2012	30 ansul11048	1982	North walkway MEK #41	yes
13174	Monthly	Pass	Good	3/22/2012	20 ansul11050	1996	West by stairs MEK #43	yes
13175	Monthly	Pass	Good	3/22/2012	20 ansul10470	1996	North platform Hydro 1	yes
13176	Monthly	Pass	Good	3/22/2012	20ansul11441	1999	north corner	Yes
13177	Monthly	Pass	Good	3/22/2012	20 ansul11008	1999	West by stairs lube finish #66	yes
13178	Monthly	Pass	Good	3/22/2012	20 ansul11801	1982	Across from control room lube	yes
13373	Monthly	Pass	Good	3/22/2012	30bc11904	1997	wax pump c	Yes
13374	Monthly	Pass	Good	3/22/2012	20bc11082	1998	6 level	Yes
13375	Monthly	Pass	Good	3/22/2012	20bc11085	1998	top	Yes

11849	Annual	Pass	Good	9/20/2011	20 abc10177	2008
11850	Annual	Pass	Good	9/20/2011	20 abc10178	2008
11851	Annual	Pass	Good	9/20/2011	20 abc10179	2008
11853	Annual	Pass	Good	9/20/2011	20 abc10180	2008
11854	Annual	Pass	Good	9/20/2011	20 ansul10181	1994
11855	Annual	Pass	Good	9/20/2011	20 abc10182	2008
11856	Annual	Pass	Good	9/20/2011	30 ansul10183	1982
11857	Annual	Pass	Good	9/20/2011	20 abc10184	2008
11858	Annual	Pass	Good	9/20/2011	20 ansul10185	1996
10186	Annual	Pass	Good	9/20/2011	350wheel	1994
11859	Annual	Pass	Good	9/20/2011	20 ansul10187	1993
11860	Annual	Pass	Good	9/20/2011	30 ansul 10188	1996
11861	Annual	Pass	Good	9/20/2011	30 ansul 10189	1979
13175	Annual	Pass	Good	9/20/2011	20 ansul10470	1996
11862	Annual	Pass	Good	9/20/2011	20 abc10191	2008
11863	Annual	Pass	Good	9/20/2011	20 abc10192	2008
11864	Annual	Pass	Good	9/20/2011	20 abc10193	2008
11441	Annual	Pass	Good	9/20/2011	20 ansul	1999
11865	Annual	Pass	Good	9/20/2011	30 ansul 10195	1992
11866	Annual	Pass	Good	9/20/2011	30 ansul 10196	1986
11867	Annual	Pass	Good	9/20/2011	30 ansul10197	1985
11869	Annual	Pass	Good	9/20/2011	30 ansul10198	1985
11871	Annual	Pass	Good	9/20/2011	20 abc10199	2008
11870	Annual	Pass	Good	9/20/2011	20 ansul10200	1978
11872	Annual	Pass	Good	9/20/2011	20 ansul10201	1991
11868	Annual	Pass	Good	9/20/2011	20 ansul10202	1993
11873	Annual	Pass	Good	9/20/2011	20 ansul10203	1994
11874	Annual	Pass	Good	9/20/2011	20 ansul10204	1996
11875	Annual	Pass	Good	9/20/2011	20 abc10205	2008
10206	Annual	Pass	Good	9/20/2011	350wheel	1984
11876	Annual	Pass	Good	9/20/2011	30 ansul10207	1982
11877	Annual	Pass	Good	9/20/2011	20 ansul10208	1996
11878	Annual	Pass	Good	9/20/2011	20 abc10209	2007
11879	Annual	Pass	Good	9/20/2011	20 abc10210	2007
11880	Annual	Pass	Good	9/20/2011	30 ansul10211	1992
10212	Annual	Pass	Good	9/20/2011	350wheel	1982
11881	Annual	Pass	Good	9/20/2011	30 ansul10213	1968
11882	Annual	Pass	Good	9/20/2011	20 abc10214	2007
11883	Annual	Pass	Good	9/20/2011	30 ansul10215	1992
11884	Annual	Pass	Good	9/20/2011	30 ansul10216	1992
11885	Annual	Pass	Good	9/20/2011	20 abc10217	2007
11886	Annual	Pass	Good	9/20/2011	20 abc10218	1996
11934	Annual	Pass	Good	9/20/2011	20 abc10219	2007
11933	Annual	Pass	Good	9/20/2011	30 ansul10220	1982
10221	Annual	Pass	Good	9/20/2011	20 abc10221	2008
11924	Annual	Pass	Good	9/20/2011	20 abc10222	2008
11923	Annual	Pass	Good	9/20/2011	30 ansul10223	1988
11931	Annual	Pass	Good	9/20/2011	30 ansul10224	1983
11928	Annual	Pass	Good	9/20/2011	20 abc11926	2008
11927	Annual	Pass	Good	9/20/2011	30 ansul10116	1982

11929	Annual	Pass	Good	9/20/2011	20 abc10227	2008
11932	Annual	Pass	Good	9/20/2011	20 abc10225	2008
11930	Annual	Pass	Good	9/20/2011	20 abc10229	2008
11940	Annual	Pass	Good	9/20/2011	20 ansul11442	1999
11939	Annual	Pass	Good	9/20/2011	30 ansul10231	1988
11938	Annual	Pass	Good	9/20/2011	20 abc10232	2007
11937	Annual	Pass	Good	9/20/2011	20 ansul10233	1995
11936	Annual	Pass	Good	9/20/2011	30 ansul11935	1982
11941	Annual	Pass	Good	9/20/2011	20 ansul11449	1994
11942	Annual	Pass	Good	9/20/2011	20 abc10236	2007
11949	Annual	Pass	Good	9/20/2011	20 abc10237	2005
11943	Annual	Pass	Good	9/20/2011	20 ansul10238	1996
11944	Annual	Pass	Good	9/20/2011	20 ansul10239	1996
11945	Annual	Pass	Good	9/20/2011	20 abc10240	2007
11946	Annual	Pass	Good	9/20/2011	20 ansul10241	1996
11948	Annual	Pass	Good	9/20/2011	20 ansul10242	1996
11950	Annual	Pass	Good	9/20/2011	30 ansul10243	1981
11951	Annual	Pass	Good	9/20/2011	20 abc10244	2008
10245	Annual	Pass	Good	9/20/2011	350wheel	1993
11952	Annual	Pass	Good	9/20/2011	20 ansul10246	1993
11953	Annual	Pass	Good	9/20/2011	30 ansul10247	1982
11954	Annual	Pass	Good	9/20/2011	20 abc10248	2007
11955	Annual	Pass	Good	9/20/2011	20 abc10249	2008
11956	Annual	Pass	Good	9/20/2011	20 abc10250	2008
11957	Annual	Pass	Good	9/20/2011	20 abc10251	2008
11959	Annual	Pass	Good	9/20/2011	20 abc10252	2007
11958	Annual	Pass	Good	9/20/2011	20 abc10253	2007
11922	Annual	Pass	Good	9/20/2011	30 ansul10254	1982
11915	Annual	Pass	Good	9/20/2011	20 ansul10255	1999
11914	Annual	Pass	Good	9/20/2011	30 ansul10256	1987
11913	Annual	Pass	Good	9/20/2011	30 ansul10257	1979
11909	Annual	Pass	Good	9/20/2011	30 ansul10258	1983
11917	Annual	Pass	Good	9/20/2011	30 ansul10259	1982
11918	Annual	Pass	Good	9/20/2011	30 ansul10260	1970
11919	Annual	Pass	Good	9/20/2011	20 ansul10261	1999
11920	Annual	Pass	Good	9/20/2011	30 ansul10262	1988
11912	Annual	Pass	Good	9/20/2011	20 abc10263	2008
11921	Annual	Pass	Good	9/20/2011	30 ansul10264	1986
11908	Annual	Pass	Good	9/20/2011	30 ansul11907	1979
11903	Annual	Pass	Good	9/20/2011	30 ansul11904	1978
11901	Annual	Pass	Good	9/20/2011	20 abc10268	2008
11900	Annual	Pass	Good	9/20/2011	20 abc10269	2008
11902	Annual	Pass	Good	9/20/2011	20 abc10270	2008
11899	Annual	Pass	Good	9/20/2011	20 abc10271	2008
13010	Annual	Pass	Good	9/20/2011	20 ansul11440	1996
11906	Annual	Pass	Good	9/20/2011	20 abc11905	2007
13055	Annual	Pass	Good	9/20/2011	20 ansul10500	1999
13001	Annual	Pass	Good	9/20/2011	20 ansul11001	1977
13002	Annual	Pass	Good	9/20/2011	30 ansul11002	1988
13003	Annual	Pass	Good	9/20/2011	30 ansul11003	1981

13005	Annual	Pass	Good	9/20/2011	20 abc11004	2007
13006	Annual	Pass	Good	9/20/2011	30 ansul11005	1982
13007	Annual	Pass	Good	9/20/2011	20 abc11006	2007
13004	Annual	Pass	Good	9/20/2011	20 ansul11007	1994
13009	Annual	Pass	Good	9/20/2011	20 ansul11024	1996
13013	Annual	Pass	Good	9/20/2011	20 abc11013	2008
13014	Annual	Pass	Good	9/20/2011	20 abc11014	2007
13015	Annual	Pass	Good	9/20/2011	20 abc11015	2008
13016	Annual	Pass	Good	9/20/2011	20 ansul11016	1996
13017	Annual	Pass	Good	9/20/2011	30 ansul11017	1988
13018	Annual	Pass	Good	9/20/2011	20 ansul11018	1991
13019	Annual	Pass	Good	9/20/2011	20 abc11019	2008
13023	Annual	Pass	Good	9/20/2011	20 ansul11020	1996
13026	Annual	Pass	Good	9/20/2011	20 ansul11021	1997
11022	Annual	Pass	Good	9/20/2011	350wheel	1977
13028	Annual	Pass	Good	9/20/2011	20 ansul11092	1995
13027	Annual	Pass	Good	9/20/2011	20 ansul11010	1996
13021	Annual	Pass	Good	9/20/2011	20 abc11456	2007
13020	Annual	Pass	Good	9/20/2011	30 ansul11026	1981
13022	Annual	Pass	Good	9/20/2011	30 ansul11027	1983
13024	Annual	Pass	Good	9/20/2011	20 abc11028	2008
13025	Annual	Pass	Good	9/20/2011	20 abc11029	2008
13031	Annual	Pass	Good	9/20/2011	20 ansul13030	1994
13032	Annual	Pass	Good	9/20/2011	30 ansul11031	1982
13033	Annual	Pass	Good	9/20/2011	30 ansul11032	1982
13034	Annual	Pass	Good	9/20/2011	20 ansul10112	1984
13029	Annual	Pass	Good	9/20/2011	20 abc11034	2007
13035	Annual	Pass	Good	9/20/2011	30 ansul11035	1977
13036	Annual	Pass	Good	9/20/2011	30 ansul11036	1982
13037	Annual	Pass	Good	9/20/2011	30 ansul11037	1984
13038	Annual	Pass	Good	9/20/2011	20 ansul11038	2008
13039	Annual	Pass	Good	9/20/2011	20 abc11039	2007
13040	Annual	Pass	Good	9/20/2011	20 abc11040	2007
13041	Annual	Pass	Good	9/20/2011	20 abc11041	2007
13042	Annual	Pass	Good	9/20/2011	20 ansul11042	1996
13043	Annual	Pass	Good	9/20/2011	20 ansul11043	1994
13044	Annual	Pass	Good	9/20/2011	20 abc11044	2005
13045	Annual	Pass	Good	9/20/2011	20 abc11045	2007
13046	Annual	Pass	Good	9/20/2011	30 ansul11046	1982
13047	Annual	Pass	Good	9/20/2011	20 abc11047	2008
13171	Annual	Pass	Good	9/20/2011	30 ansul11048	1982
13170	Annual	Pass	Good	9/20/2011	30 ansul11049	1981
13174	Annual	Pass	Good	9/20/2011	20 ansul11050	1996
13173	Annual	Pass	Good	9/20/2011	20 ansul11051	1996
13172	Annual	Pass	Good	9/20/2011	30 ansul11052	1981
11053	Annual	Pass	Good	9/20/2011	350wheel	1989
13048	Annual	Pass	Good	9/20/2011	30 ansul11054	1980
13049	Annual	Pass	Good	9/20/2011	20 ansul11055	1993
13051	Annual	Pass	Good	9/20/2011	20 abc11056	2007
11966	Annual	Pass	Good	9/20/2011	20 ansul11057	1996

11965	Annual	Pass	Good	9/20/2011	20 abc11058	2007
11964	Annual	Pass	Good	9/20/2011	20 abc11059	2007
11963	Annual	Pass	Good	9/20/2011	20 ansul11060	1993
11962	Annual	Pass	Good	9/20/2011	20 ansul11061	1996
11960	Annual	Pass	Good	9/20/2011	20 abc11062	2008
11961	Annual	Pass	Good	9/20/2011	20 ansul11063	1994
13052	Annual	Pass	Good	9/20/2011	20 ansul11064	1994
13053	Annual	Pass	Good	9/20/2011	30 ansul11065	1984
11967	Annual	Pass	Good	9/20/2011	20 ansul11066	1983
13054	Annual	Pass	Good	9/20/2011	30 ansul11067	1981
13169	Annual	Pass	Good	9/20/2011	20 abc11068	2008
13167	Annual	Pass	Good	9/20/2011	20 abc11069	2007
13168	Annual	Pass	Good	9/20/2011	30 ansul11070	1982
11887	Annual	Pass	Good	9/20/2011	20 abc11071	2007
11072	Annual	Pass	Good	9/20/2011	150wheel	1998
11888	Annual	Pass	Good	9/20/2011	20 abc11073	2007
11889	Annual	Pass	Good	9/20/2011	30 ansul11074	1988
13177	Annual	Pass	Good	9/20/2011	20 ansul11008	1999
11890	Annual	Pass	Good	9/20/2011	20 ansul11076	1995
11891	Annual	Pass	Good	9/20/2011	20 ansul11077	1999
11892	Annual	Pass	Good	9/20/2011	20 abc11078	2007
11893	Annual	Pass	Good	9/20/2011	20 ansul11079	1994
11894	Annual	Pass	Good	9/20/2011	20 ansul11080	1994
11895	Annual	Pass	Good	9/20/2011	20 abc11081	2007
11082	Annual	Pass	Good	9/20/2011	20 ansul	1998
11896	Annual	Pass	Good	9/20/2011	20 ansul11083	1995
11897	Annual	Pass	Good	9/20/2011	20 ansul11084	1999
11085	Annual	Pass	Good	9/20/2011	20 ansul	1998
13158	Annual	Pass	Good	9/20/2011	20 abc11086	2007
11087	Annual	Pass	Good	9/20/2011	20 ansul	1996
11898	Annual	Pass	Good	9/20/2011	20 ansul11088	1998
13160	Annual	Pass	Good	9/20/2011	20 abc11089	2008
13164	Annual	Pass	Good	9/20/2011	20 abc11090	2007
13165	Annual	Pass	Good	9/20/2011	20 ansul11091	1998
13178	Annual	Pass	Good	9/20/2011	20 ansul11801	1982
13155	Annual	Pass	Good	9/20/2011	20 ansul11168	2008
11414	Annual	Pass	Good	9/20/2011	30 ansul	1993
13161	Annual	Pass	Good	9/20/2011	30 abc11415	2004
13157	Annual	Pass	Good	9/20/2011	30 abc11421	2004
13008	Annual	Pass	Good	9/20/2011	30 ansul10341	1979
13012	Annual	Pass	Good	9/20/2011	20 abc11012	2007
13156	Annual	Pass	Good	9/20/2011	30 abc11526	2006
13162	Annual	Pass	Good	9/20/2011	30 abc11528	2004
13166	Annual	Pass	Good	9/20/2011	30 abc11530	2004
13011	Annual	Pass	Good	9/20/2011	20ansul11414	1994

Southeast LOHT	yes
East walkway LOHT	yes
West walkway LOHT	yes
North corner LOHT 2nd level	yes
West 2nd level LOHT	yes
South west 2nd level LOHT	yes
South east stairs 2nd level LOHT	yes
South east 2nd level LOHT	yes
South stairs 2nd level LOHT	yes
South LOHT	yes
West LOHT	yes
South Hydro 1	yes
East Hydro 1	yes
North platform Hydro 1	yes
Inside walkway Hydro1	yes
Inside walkway Hydro1	yes
Inside walkway Hydro1	yes
North corner Hydro 1	yes
West by reformer a Hydro 1	yes
Behind white insturment house Hydro 1	yes
East by absorber tanks Hydro 2	yes
North Hydro 2	yes
North in walkway Hydro2	yes
North in walkway Hydro2	yes
In walkway Hydro 2	yes
In walkway Hydro 2	yes
South Hydro 2	yes
West by gas drum Hydro2	yes
West by tan building Hydro 2	yes
North outside Hydro 2	yes
Inside fence across from fire house	yes
Platform across from control room	yes
Platform across from control room	yes
North facing fence inside burm	yes
South east inside burm	yes
South west by chain and sprockets	yes
West by stairs silver building	yes
West 2nd level	yes
East 2nd level	yes
North by ladder 2nd level	yes
East by ladder 3rd level	yes
North by ladder 3rd level	yes
South east of chain and sprockets	yes
North by starter rack	yes
South walkway #14 MEK	yes
South walkway #15 MEK	yes
East #37 MEK	yes
East corner #36 MEK	yes
North under stairs #19 MEK	yes
North under building #20 MEK	yes

Under building #18 MEK	yes
Under building #17 MEK	yes
Under building #16 MEK	yes
2nd level north MEK	yes
2nd level south east MEK	yes
2nd level south MEK	yes
2nd level south west MEK	yes
2nd level north west MEK	yes
3rd level north west MEK	yes
3rd level south west MEK	yes
3rd level west MEK	yes
3rd level south center MEK	yes
3rd level south by ladder MEK	yes
3rd level east MEK	yes
3rd level north MEK	yes
3rd level north MEK	yes
4th level north MEK	yes
4th level south Mek	yes
4th level MEK	yes
4th level finfan deck MEK	yes
4th level finfan deck MEK	yes
4th level south by ladder MEK	yes
4th level north MEK	yes
4th level north MEK	yes
4th level north MEK	yes
5th level south ladder top of roof MEK	yes
5th level south ladder top of roof MEK	yes
Ground south walkway #38	yes
North corner little blue building	yes
South west corner little blue building	yes
South east little blue building	yes
North east little blue building	yes
East little blue building 2nd level	yes
West little blue building 2nd level	yes
South west corner little blue building 2nd level	yes
south walkway wax pumps	yes
North of blue building wax pumps	yes
south walkway wax pumps	yes
Wax pump A	yes
Wax pumps C	yes
south walkway wax pumps	yes
West walkway	yes
West walkway	yes
East facing LOHT job box	yes
By DWG LOHT 65	yes
Wax pump B	yes
Across from control room lube	yes
On rail at feed coalescer	yes
On rail at feed coalescer	yes
Behind feed coalescer	yes

On rail mid stripper	yes
Mid draw reflux pump	yes
On outside pole on stack	yes
Behind stripper pumps	yes
On pole southside of stack	yes
Between ground and 2nd level stripper	yes
2nd level stripper	yes
3rd level stripper	yes
Between 3rd and 4th level on fin fan deck	yes
Between 3rd and 4th level on fin fan deck	yes
Between 3rd and 4th level on fin fan deck	yes
4th level stripper	yes
Northside of Atmos tower	yes
Westside of Atmos tower	yes
Westside of Atmos tower	yes
Southwest of Atmos tower	yes
South of Atmos tower	yes
East of Atmos tower	yes
East of Atmos tower	yes
East of Atmos tower	yes
2nd level Atmos tower	yes
3rd level Atmos tower	yes
South by job box wax hydro finisher	yes
East wax hydro finisher	yes
East wax hydro finisher	yes
East wax hydro finisher	yes
North wax hydro finisher	yes
West wax hydro finisher	yes
West wax hydro finisher by stairs	yes
2nd level wax hydro finisher	yes
2nd level wax hydro finisher by stairs	yes
Up ladder 2nd level wax hydro finisher	yes
3rd level wax hydro finisher	yes
3rd level wax hydro finisher	yes
3rd level wax hydro finisher	yes
Between 3rd and 4th level wax hydro finisher	yes
4th level wax hydro finisher	yes
5th level wax hydro finisher	yes
North walkway MEK #38	yes
North walkway MEK #40	yes
North walkway MEK #41	yes
North walkway MEK #42	yes
West by stairs MEK #43	yes
South MEK #44	yes
South MEK #45	yes
South MEK	yes
South by stairs MEK #47	yes
2nd level east MEK #48	yes
2nd level north MEK #49	yes
Between 2nd and 3rd level MEK #57	yes

3rd level MEK #56	yes
3rd level MEK #55	yes
3rd level MEK	yes
Up ladder 4th level MEK #54	yes
Between 2nd and 3rd level MEK #52	yes
Between 2nd and 3rd level MEK #51	yes
2nd level south MEK #50	yes
Between ground and 2nd level MEK #47	yes
Up ladder wet solvent decanter	yes
Up ladder wet solvent decanter	yes
North wet solvent decanter #58	yes
West wet solvent decanter #59	yes
West wet solvent decanter #60	yes
East lube finish #62	yes
East lube finish	yes
East lube finish #64	yes
East lube finish #65	yes
West by stairs lube finish #66	yes
West lube finish #67	yes
2nd level blue building lube finish #68	yes
2nd level blue building lube finish #69	yes
2nd level south lube finish #70	yes
3rd level south lube finish	yes
4th level south lube finish	yes
5th level south lube finish	yes
6th level south lube finish	yes
7th level south lube finish	yes
8th level south lube finish	yes
4th level north lube finish	yes
5th level north lube finish	yes
6th level north lube finish	yes
3rd level north lube finish	yes
2nd level north lube finish	yes
Between ground and 2nd level north lube finish	yes
Across from control room lube	yes
7th level south lube finish	yes
BTM stripper product pump south	yes
4th lube finish	yes
5th lube finish	yes
On pole eastside of stack	yes
By starter rack 12a	yes
6th lube finish	yes
3rd lube finish	yes
2nd lube finish	yes
pole btm stripper pump south	yes

MAINTANCE

13387	20 ansul 11382	1996	Guardshack inside
11785	20 abc 11432	2010	smoke pen fire house
11784	20 abc 11466	2008	West door fire house
11783	20 ansul 11465	1996	Foam truck inside fire house
11782	20 ansul 11464	1996	By door fire house
11781	5 abc 11406	2007	Maintance office east by exit
11780	5 bc11402	1988	Hall north end cabinet by lunch room
11779	20 abc11395	2007	Insulator shop
11778	20 ansul11394	1995	Insulator shop
11777	20 ansul11393	1996	Carpenters shop
11776	20 ansul11388	1996	Maintance shop by flamable cabinet
11763	20 ansul 11399	1993	Northside of shop outside
11762	5 abc 11400	2007	Eastside of electric shop
11761	5 abc 11401	2001	Westside of electric shop
11760	20 ansul 11392	1993	Carpenters shop
11759	20 ansul 11385	1996	Machine maintance shop east door
11758	20 ansul 11384	1996	Machine maintance shop south east corner
11757	20 ansul 11386	1996	Machine maintance shop south door
11756	10 abc 11387	2000	Machine maintance shop in south door cabinet
11755	20 abc 11396	2007	Up stairs over insulator shop south door
11754	5 abc 11397	1995	Up stairs over insulator shop cabinet east wall
11753	30 ansul 11398	1979	Up stairs over insulator shop by double door
11752	20 ansul 11391	1996	Maintance shop by north door
11751	20ansul 11389	1996	Maintance shop by east door by hardware
11750	20 ansul 11383	1996	Guardshack across from pumps
11748	20 abc 11381	2008	Guardshack back door
11747	20 abc 11377	2008	Warehouse storage north door
11746	20 ansul 11378	1996	Warehouse storage east door
11745	20 abc 11379	2008	Warehouse storage south east corner
11744	20 ansul 11380	1996	Warrehouse storage south door
11700	20 abc 11457	2008	Warehouse by unloading door
11699	20 abc 11460	2007	up stairs 2nd level
11697	20 ansul 11458	1995	Up stairs 2nd level
11696	20 ansul 11459	1996	Up stairs 2nd level
11695	30 ansul 11461	1981	Entrance to warehouse
11694	20 ansul 11456	1998	Warehouse next to spares
11693	5 abc 11407	2000	Maintance office by copy machine
11692	5 abc 11405	1997	Maintance office west by exit
11691	20 ansul 11404	1993	locker room west door
11690	20 ansul 11403	1996	Locker room by door eastside
11689	5 CO2 11408	2005	Lunch room
11688	20 abc 11376	2007	Fire pump control house
11687	20 abc 11374	2008	Fire pump control house
11686	30 ansul 11375	1981	Fire pump control house

Fire Extinguisher Inspection
Figure 11.8

13387	Monthly	Pass	Good	3/23/2012	20 ansul 11382	1996	Guardshack inside	yes
11784	Monthly	Pass	Good	3/23/2012	20 abc 11466	2008	West door fire house	yes
11783	Monthly	Pass	Good	3/23/2012	20 ansul 11465	1996	Foam truck inside fire house	yes
11782	Monthly	Pass	Good	3/23/2012	20 ansul 11464	1996	By door fire house	yes
11781	Monthly	Pass	Good	3/23/2012	5 abc 11406	2007	Maintance office east by exit	yes
11780	Monthly	Pass	Good	3/23/2012	5 bc11402	1988	Hall north end cabinet by lunch room	yes
11779	Monthly	Pass	Good	3/23/2012	20 abc11395	2007	Insulator shop	yes
11778	Monthly	Pass	Good	3/23/2012	20 ansul11394	1995	Insulator shop	yes
11776	Monthly	Pass	Good	3/23/2012	20 ansul11388	1996	Maintance shop by flamable cabinet	yes
11763	Monthly	Pass	Good	3/23/2012	20 ansul 11399	1993	Northside of shop outside	yes
11762	Monthly	Pass	Good	3/23/2012	5 abc 11400	2007	Eastside of electric shop	yes
11761	Monthly	Pass	Good	3/23/2012	5 abc 11401	2001	Westside of electric shop	yes
11759	Monthly	Pass	Good	3/23/2012	20 ansul 11385	1996	Machine maintance shop east door	yes
11758	Monthly	Pass	Good	3/23/2012	20 ansul 11384	1996	Machine maintance shop south east corner	yes
11757	Monthly	Pass	Good	3/23/2012	20 ansul 11386	1996	Machine maintance shop south door	yes
11756	Monthly	Pass	Good	3/23/2012	10 abc 11387	2000	Machine maintance shop in south door cabinet	yes
11755	Monthly	Pass	Good	3/23/2012	20 abc 11396	2007	Up stairs over insulator shop south door	yes
11754	Monthly	Pass	Good	3/23/2012	5 abc 11397	1995	Up stairs over insulator shop cabinet east wall	yes
11753	Monthly	Pass	Good	3/23/2012	30 ansul 11398	1979	Up stairs over insulator shop by double door	yes
11752	Monthly	Pass	Good	3/23/2012	20 ansul 11391	1996	Maintance shop by north door	yes
11751	Monthly	Pass	Good	3/23/2012	20ansul 11389	1996	Maintance shop by east door by hardware	yes
11750	Monthly	Pass	Good	3/23/2012	20 ansul 11383	1996	Guardshack across from pumps	yes
11748	Monthly	Pass	Good	3/23/2012	20 abc 11381	2008	Guardshack back door	yes
11747	Monthly	Pass	Good	3/23/2012	20 abc 11377	2008	Warehouse storage north door	yes
11746	Monthly	Pass	Good	3/23/2012	20 ansul 11378	1996	Warehouse storage east door	yes
11745	Monthly	Pass	Good	3/23/2012	20 abc 11379	2008	Warehouse storage south east corner	yes
11744	Monthly	Pass	Good	3/23/2012	20 ansul 11380	1996	Warrehouse storage south door	yes
11700	Monthly	Pass	Good	3/23/2012	20 abc 11457	2008	Warehouse by unloading door	yes
11699	Monthly	Pass	Good	3/23/2012	20 abc 11460	2007	up stairs 2nd level	yes

Maintance Check List 2/24/2011

11697	Monthly	Pass	Good	3/23/2012	20 ansul 11458	1995	Up stairs 2nd level	yes
11695	Monthly	Pass	Good	3/23/2012	30 ansul 11461	1981	Entrance to warehouse	yes
11694	Monthly	Pass	Good	3/23/2012	20 ansul 11456	1998	Warehouse next to spares	yes
11693	Monthly	Pass	Good	3/23/2012	5 abc 11407	2000	Maintance office by copy machine	yes
11692	Monthly	Pass	Good	3/23/2012	5 abc 11405	1997	Maintance office west by exit	yes
11691	Monthly	Pass	Good	3/23/2012	20 ansul 11404	1993	locker room west door	yes
11690	Monthly	Pass	Good	3/23/2012	20 ansul 11403	1996	Locker room by door eastside	yes
11689	Monthly	Pass	Good	3/23/2012	5 CO2 11408	2005	Lunch room	yes
11688	Monthly	Pass	Good	3/23/2012	20 abc 11376	2007	Fire pump control house	yes
11687	Monthly	Pass	Good	3/23/2012	20 abc 11374	2008	Fire pump control house	yes
11686	Monthly	Pass	Good	3/23/2012	30 ansul 11375	1981	Fire pump control house	yes

11686	Annual	Pass	Good	8/24/2011	30 ansul 11375	1981
11687	Annual	Pass	Good	8/24/2011	20 abc 11374	2008
11688	Annual	Pass	Good	8/24/2011	20 abc 11376	2007
11744	Annual	Pass	Good	8/24/2011	20 ansul 11380	1996
11745	Annual	Pass	Good	8/24/2011	20 abc 11379	2008
11746	Annual	Pass	Good	8/24/2011	20 ansul 11378	1996
11747	Annual	Pass	Good	8/24/2011	20 abc 11377	2008
11748	Annual	Pass	Good	8/24/2011	20 abc 11381	2008
11749	Annual	Pass	Good	8/24/2011	20 ansul 11382	1996
11750	Annual	Pass	Good	8/24/2011	20 ansul 11383	1996
11751	Annual	Pass	Good	8/24/2011	20ansul 11389	1996
11752	Annual	Pass	Good	8/24/2011	20 ansul 11391	1996
11753	Annual	Pass	Good	8/24/2011	30 ansul 11398	1979
11754	Annual	Pass	Good	8/24/2011	5 abc 11397	1995
11755	Annual	Pass	Good	8/24/2011	20 abc 11396	2007
11689	Annual	Pass	Good	8/24/2011	5 CO2 11408	2005
11776	Annual	Pass	Good	8/24/2011	20 ansul11388	1996
11756	Annual	Pass	Good	8/24/2011	10 abc 11387	2000
11757	Annual	Pass	Good	8/24/2011	20 ansul 11386	1996
11758	Annual	Pass	Good	8/24/2011	20 ansul 11384	1996
11759	Annual	Pass	Good	8/24/2011	20 ansul 11385	1996
11760	Annual	Pass	Good	8/24/2011	20 ansul 11392	1993
11777	Annual	Pass	Good	8/24/2011	20 ansul11393	1996
11778	Annual	Pass	Good	8/24/2011	20 ansul11394	1995
11779	Annual	Pass	Good	8/24/2011	20 abc11395	2007
11780	Annual	Pass	Good	8/24/2011	5 bc11402	1988
11761	Annual	Pass	Good	8/24/2011	5 abc 11401	2001
11762	Annual	Pass	Good	8/24/2011	5 abc 11400	2007
11763	Annual	Pass	Good	8/24/2011	20 ansul 11399	1993
11690	Annual	Pass	Good	8/24/2011	20 ansul 11403	1996
11691	Annual	Pass	Good	8/24/2011	20 ansul 11404	1993
11692	Annual	Pass	Good	8/24/2011	5 abc 11405	1997
11781	Annual	Pass	Good	8/24/2011	5 abc 11406	2007
11693	Annual	Pass	Good	8/24/2011	5 abc 11407	2000
11694	Annual	Pass	Good	8/24/2011	20 ansul 11456	1998
11695	Annual	Pass	Good	8/24/2011	30 ansul 11461	1981
11696	Annual	Pass	Good	8/24/2011	20 ansul 11459	1996
11697	Annual	Pass	Good	8/24/2011	20 ansul 11458	1995
11699	Annual	Pass	Good	8/24/2011	20 abc 11460	2007
11700	Annual	Pass	Good	8/24/2011	20 abc 11457	2008
11782	Annual	Pass	Good	8/24/2011	20 ansul 11464	1996
11783	Annual	Pass	Good	8/24/2011	20 ansul 11465	1996
11784	Annual	Pass	Good	8/24/2011	20 abc 11466	2008
11785	Annual	Pass	Good	8/24/2011	20 abc 11432	2010

Fire pump control house	yes
Fire pump control house	yes
Fire pump control house	yes
Warrehouse storage south door	yes
Warehouse storage south east corner	yes
Warehouse storage east door	yes
Warehouse storage north door	yes
Guardshack back door	yes
Guardshack inside	yes
Guardshack across from pumps	yes
Maintance shop by east door by hardware	yes
Maintance shop by north door	yes
Up stairs over insulator shop by double door	yes
Up stairs over insulator shop cabinet east wall	yes
Up stairs over insulator shop south door	yes
Lunch room	yes
Maintance shop by flamable cabinet	yes
Machine maintance shop in south door cabinet	yes
Machine maintance shop south door	yes
Machine maintance shop south east corner	yes
Machine maintance shop east door	yes
Carpenters shop	yes
Carpenters shop	yes
Insulator shop	yes
Insulator shop	yes
Hall north end cabinet by lunch room	yes
Westside of electric shop	yes
Eastside of electric shop	yes
Northside of shop outside	yes
Locker room by door eastside	yes
locker room west door	yes
Maintance office west by exit	yes
Maintance office east by exit	yes
Maintance office by copy machine	yes
Warehouse next to spares	yes
Entrance to warehouse	yes
Up stairs 2nd level	yes
Up stairs 2nd level	yes
up stairs 2nd level	yes
Warehouse by unloading door	yes
By door fire house	yes
Foam truck inside fire house	yes
West door fire house	yes
smoke pen fire house	Yes

CONTROL ROOM

13180	20 ansul10272	1996	control roo m hall by kitchen
13179	20abc10273	1995	kitchen
13187	10 halon10274	2001	control room #5
13188	10 halon10275	2001	control room #6
13189	10 halon10276	2001	control room #7
13182	10 halon10277	2001	control room west door #8
13181	10 halon10278	2001	control room west door #9
13190	20 abc10279	2010	control room south east door to hall
13191	20 abc10280	2007	hall by meeting room #14
13185	10 halon10281	2001	building behind control room electronic repairs #13
13184	10 halon10282	2001	blue box room by door #12
13186	10halon10283	2001	north east door blue box room #11
13183	10 halon10284	2001	west door to ac room
13193	30 ansul10285	1984	on fence north of control room
13192	20 ansul11425	1996	smoking area

Fire Extinguisher Inspection
Figure 11.8

13180	Monthly	Pass	Good	3/22/2012	20	ansul10272	1996	control roo m hall by kitchen	yes
13180	Monthly	Pass	Good	3/22/2012	20	ansul10272	1996	control roo m hall by kitchen	yes
13187	Monthly	Pass	Good	3/22/2012	10	halon10274	2001	control room #5	yes
13188	Monthly	Pass	Good	3/22/2012	10	halon10275	2001	control room #6	yes
13189	Monthly	Pass	Good	3/22/2012	10	halon10276	2001	control room #7	yes
13182	Monthly	Pass	Good	3/22/2012	10	halon10277	2001	control room west door #8	yes
13181	Monthly	Pass	Good	3/22/2012	10	halon10278	2001	control room west door #9	yes
13190	Monthly	Pass	Good	3/22/2012	20	abc10279	2010	control room south east door to hall	yes
13191	Monthly	Pass	Good	3/22/2012	20	abc10280	2007	hall by meeting room #14	yes
13185	Monthly	Pass	Good	3/22/2012	10	halon10281	2001	building behind control room electronic repairs #13	yes
13184	Monthly	Pass	Good	3/22/2012	10	halon10282	2001	blue box room by door #12	yes
13186	Monthly	Pass	Good	3/22/2012	10	halon10283	2001	north east door blue box room #11	yes
13183	Monthly	Pass	Good	3/22/2012	10	halon10284	2001	west door to ac room	yes
13193	Monthly	Pass	Good	3/22/2012	30	ansul10285	1984	on fence north of control room	yes
13192	Monthly	Pass	Good	3/22/2012	20	ansul11425	1996	smoking area	yes

13180	Annual	Pass	Good	9/21/2011	20 ansul10272	1996
13179	Annual	Pass	Good	9/21/2011	20abc10273	1995
13187	Annual	Pass	Good	9/21/2011	10 halon10274	2001
13188	Annual	Pass	Good	9/21/2011	10 halon10275	2001
13189	Annual	Pass	Good	9/21/2011	10 halon10276	2001
13182	Annual	Pass	Good	9/21/2011	10 halon10277	2001
13181	Annual	Pass	Good	9/21/2011	10 halon10278	2001
13190	Annual	Pass	Good	9/21/2011	20 abc10279	2010
13191	Annual	Pass	Good	9/21/2011	20 abc10280	2007
13185	Annual	Pass	Good	9/21/2011	10 halon10281	2001
13184	Annual	Pass	Good	9/21/2011	10 halon10282	2001
13186	Annual	Pass	Good	9/21/2011	10halon10283	2001
13183	Annual	Pass	Good	9/21/2011	10 halon10284	2001
13193	Annual	Pass	Good	9/21/2011	30 ansul10285	1984
13192	Annual	Pass	Good	9/21/2011	20 ansul11425	1996

control roo m hall by kitchen	yes
kitchen	yes
control room #5	yes
control room #6	yes
control room #7	yes
control room west door #8	yes
control room west door #9	yes
control room south east door to hall	yes
hall by meeting room #14	yes
building behind control room electronic repairs #13	yes
blue box room by door #12	yes
north east door blue box room #11	yes
west door to ac room	yes
on fence north of control room	yes
smoking area	yes

OFFICE/LAB

11840	20 abc11487	2008	Hallway by mens book room lab
11839	20 abc11486	2008	Hallway by mens locker room lab
11838	5 CO211484	2009	Chemist lab
11837	5 CO211485	2009	Entrance chemist lab
11836	5 CO211483	2009	AA lab
11835	5 CO211482	2009	Tech service lab
11834	20 abc11481	2008	By copy machine lab
11833	20 abc11480	2007	North west entrance lab
11832	20 abc11479	2008	North west entrance lab
11831	5 abc11468	2007	By LBJ office
11830	5 abc11829	1988	East hall by AED
11828	10 abc11477	1988	Back hall by exit
11827	10 abc11476	1988	Board room by hualth services nw-12
11826	10 abc11475	2010	By health services nw-11
11825	20 ansul11474	1999	By Jimmy Allen office
11824	5 abc11472	1988	By rest rooms nw-8
11823	5 abc11471	2010	Library nw-7
11822	10 abc11470	1988	By room 3 nw-6
11800	30 ansul11503	1984	Storage room lab
11799	20 abc11501	2008	Storage room lab
11798	20 abc11502	2007	Storage room lab
11797	30 ansul11500	1985	Storage room lab
11796	20 abc11499	2007	Outside lab
11795	10 CO211498	1989	Routine lab
11794	10 CO211497	1989	Routine lab
11793	5 CO211493	2007	Routine lab
11792	10 CO211495	2004	Routine lab
11791	5 CO211496	2005	Routine lab
11790	10 CO211494	1998	Routine lab
11789	5 CO211492	2008	Routine lab
11788	5 CO211488	2009	Octane room lab
11787	CO21011439	2009	lab
11786	5 CO21490	2009	Octane room lab

Fire Extinguisher Inspection
Figure 11.8

11848	Monthly	Pass	Good	3/23/2012	Extinguisher Not Found			
11840	Monthly	Pass	Good	3/23/2012	20 abc11487	2008	Hallway by mens book room lab	yes
11839	Monthly	Pass	Good	3/23/2012	20 abc11486	2008	Hallway by mens locker room lab	yes
11838	Monthly	Pass	Good	3/23/2012	5 CO211484	2009	Chemist lab	yes
11837	Monthly	Pass	Good	3/23/2012	5 CO211485	2009	Entrance chemist lab	yes
11836	Monthly	Pass	Good	3/23/2012	5 CO211483	2009	AA lab	yes
11835	Monthly	Pass	Good	3/23/2012	5 CO211482	2009	Tech service lab	yes
11834	Monthly	Pass	Good	3/23/2012	20 abc11481	2008	By copy machine lab	yes
11833	Monthly	Pass	Good	3/23/2012	20 abc11480	2007	North west entrance lab	yes
11832	Monthly	Pass	Good	3/23/2012	20 abc11479	2008	North west entrance lab	yes
11831	Monthly	Pass	Good	3/23/2012	5 abc11468	2007	By LBJ office	yes
11830	Monthly	Pass	Good	3/23/2012	5 abc11829	1988	East hall by AED	yes
11828	Monthly	Pass	Good	3/23/2012	10 abc11477	1988	Back hall by exit	yes
11827	Monthly	Pass	Good	3/23/2012	10 abc11476	1988	Board room by hualth services nw-12	yes
11826	Monthly	Pass	Good	3/23/2012	10 abc11475	2010	By health services nw-11	yes
11825	Monthly	Pass	Good	3/23/2012	20 ansul11474	1999	By Jimmy Allen office	yes
11824	Monthly	Pass	Good	3/23/2012	5 abc11472	1988	By rest rooms nw-8	yes
11823	Monthly	Pass	Good	3/23/2012	5 abc11471	2010	Library nw-7	yes
11822	Monthly	Pass	Good	3/23/2012	10 abc11470	1988	By room 3 nw-6	yes
11800	Monthly	Pass	Good	3/23/2012	30 ansul11503	1984	Storage room lab	yes
11799	Monthly	Pass	Good	3/23/2012	20 abc11501	2008	Storage room lab	yes
11798	Monthly	Pass	Good	3/23/2012	20 abc11502	2007	Storage room lab	yes
11797	Monthly	Pass	Good	3/23/2012	30 ansul11500	1985	Storage room lab	yes
11796	Monthly	Pass	Good	3/23/2012	20 abc11499	2007	Outside lab	yes
11795	Monthly	Pass	Good	3/23/2012	10 CO211498	1989	Routine lab	yes
11794	Monthly	Pass	Good	3/23/2012	10 CO211497	1989	Routine lab	yes
11793	Monthly	Pass	Good	3/23/2012	5 CO211493	2007	Routine lab	yes
11792	Monthly	Pass	Good	3/23/2012	10 CO211495	2004	Routine lab	yes
11791	Monthly	Pass	Good	3/23/2012	5 CO211496	2005	Routine lab	yes
11790	Monthly	Pass	Good	3/23/2012	10 CO211494	1998	Routine lab	yes

Office/Lab Check List 2/24/2011

11789	Monthly	Pass	Good	3/23/2012	5 CO211492	2008	Routine lab	yes
11788	Monthly	Pass	Good	3/23/2012	5 CO211488	2009	Octane room lab	yes
11787	Monthly	Pass	Good	3/23/2012	CO21011439	2009	lab	Yes
11786	Monthly	Pass	Good	3/23/2012	5 CO21490	2009	Octane room lab	yes

11830	Annual	Pass	Replaced	8/24/2011	5 abc11829	1988
11821	Annual	Pass	Good	8/24/2011	5 abc11469	2010
11822	Annual	Pass	Good	8/24/2011	10 abc11470	1988
11823	Annual	Pass	Good	8/24/2011	5 abc11471	2010
11824	Annual	Pass	Good	8/24/2011	5 abc11472	1988
11825	Annual	Pass	Good	8/24/2011	20 ansul11474	1999
11826	Annual	Pass	Good	8/24/2011	10 abc11475	2010
11827	Annual	Pass	Good	8/24/2011	10 abc11476	1988
11828	Annual	Pass	Good	8/24/2011	10 abc11477	1988
11832	Annual	Pass	Good	8/24/2011	20 abc11479	2008
11833	Annual	Pass	Good	8/24/2011	20 abc11480	2007
11834	Annual	Pass	Good	8/24/2011	20 abc11481	2008
11835	Annual	Pass	Good	8/24/2011	5 CO211482	2009
11836	Annual	Pass	Good	8/24/2011	5 CO211483	2009
11837	Annual	Pass	Good	8/24/2011	5 CO211485	2009
11838	Annual	Pass	Good	8/24/2011	5 CO211484	2009
11839	Annual	Pass	Good	8/24/2011	20 abc11486	2008
11840	Annual	Pass	Good	8/24/2011	20 abc11487	2008
11787	Annual	Pass	Good	8/24/2011	CO21011439	2009
11788	Annual	Pass	Good	8/24/2011	5 CO211488	2009
11786	Annual	Pass	Good	8/24/2011	5 CO21490	2009
11789	Annual	Pass	Good	8/24/2011	5 CO211492	2008
11790	Annual	Pass	Good	8/24/2011	10 CO211494	1998
11792	Annual	Pass	Good	8/24/2011	10 CO211495	2004
11793	Annual	Pass	Good	8/24/2011	5 CO211493	2007
11791	Annual	Pass	Good	8/24/2011	5 CO211496	2005
11794	Annual	Pass	Good	8/24/2011	10 CO211497	1989
11795	Annual	Pass	Good	8/24/2011	10 CO211498	1989
11796	Annual	Pass	Good	8/24/2011	20 abc11499	2007
11797	Annual	Pass	Good	8/24/2011	30 ansul11500	1985
11799	Annual	Pass	Good	8/24/2011	20 abc11501	2008
11798	Annual	Pass	Good	8/24/2011	20 abc11502	2007
11800	Annual	Pass	Good	8/24/2011	30 ansul11503	1984

East hall by AED	yes
By break room	yes
By room 3 nw-6	yes
Library nw-7	yes
By rest rooms nw-8	yes
By Jimmy Allen office	yes
By health services nw-11	yes
Board room by hualth services nw-12	yes
Back hall by exit	yes
North west entrance lab	yes
North west entrance lab	yes
By copy machine lab	yes
Tech service lab	yes
AA lab	yes
Entrance chemist lab	yes
Chemist lab	yes
Hallway by mens locker room lab	yes
Hallway by mens book room lab	yes
lab	Yes
Octane room lab	yes
Octane room lab	yes
Routine lab	yes
Routine lab	yes
Routine lab	yes
Routine lab	yes
Routine lab	yes
Routine lab	yes
Routine lab	yes
Outside lab	yes
Storage room lab	yes
Storage room lab	yes
Storage room lab	yes
Storage room lab	yes

CDW/VAC/NMP

13376	30ansul11513	########	by salt drum
13371	30 ansul10316	1979	South center by fan house SCV
13370	30 ansul10317	1980	South west corner fan house SCV
13369	30 BC 11514	1996	37 EX
13368	30 ansul10318	1982	West of fan house SCV
13367	20 ansul10319	1996	West behind SCBA box SCV
13366	20 ansul10320	1975	2nd level SCV
13365	30 ansul10321	1981	3rd level catwalk SCV
13364	30 ansul 10322	1982	3rd level catwalk SCV
13363	30 ansul10323	1983	4th level SCV
13362	30 ansul10324	1999	5th level SCv
13361	20ansul10331	2008	cdw cooling console
13360	20 abc10344	2007	Up ladder west on platform CDU
13359	30 ansul10335	1982	Center front of pump platform CDU
13358	20 abc12009	2008	Auto shop
13357	20 abc10350	1994	Auto shop
13356	20 ansul11803	1996	West of platform CDU
13355	20 ansul13108	1996	West of platform CDU
13354	20 abc11290	2008	West of platform CDU
13261	20 ansul10331	1996	South east by road CDU
13252	20 abc10349	2008	Auto shop
13251	20 abc10347	2008	Auto shop
13250	30 ansul10337	1982	By seperator center CDU
13249	30 ansul10336	1982	Center by breakers to pump CDU
13248	30 ansul10334	1973	South west pump platform CDU
13247	30 ansul10333	1980	South center pump platform CDU
13246	30 ansul10332	1986	South east platform CDU
13242	30 ansul10330	1987	South east by road CDU
13241	20 ansul10328	1996	East by amine absorber CDU
13240	20 ansul10327	1993	East by flash drum CDU
13222	30 ansul10315	1979	South east corner SCV
13221	30 ansul10314	1982	South center by fan house SCV
13220	30 ansul10312	1983	East by job box SCV
13218	20 ansul10313	1994	East by job box SCV
13217	30 ansul10311	1983	East by water rack #45 SCV
13216	30 ansul10310	1990	East by draw pumps SCV
13215	30 ansul10308	1982	North east of unit between panels SCV
13214	30 ansul10309	1982	East by road SCV
13213	20 abc 10301	2007	East by evaporator NMP
13212	20 ansul11448	1997	West by kleen tanks NMP
13211	30 ansul10300	1973	East catwalk across job box 5th level NMP
13210	20 abc10299	2007	East catwalk across job box 3rd level NMP
13209	30 ansul10298	1981	East catwalk across job box 2nd level NMP
13208	30 ansul10304	1979	Under unit facing west NMP
13207	30 ansul10305	1980	Under unit by eyewash station NMP
13206	30 ansul10307	1982	North west corner NMP
13205	30 ansul10306	1990	North of unit NMP

CDW/VAC/NMP

13204	20	abc10291	2007	Soy wax 3rd level south
13203	20	abc10290	2007	Soy wax 3rd level by ladder
13202	20	abc10289	2008	Soy wax 2nd level by ladder
13201	20	abc10288	2007	Soy wax 2nd level
13200	20	abc10287	2008	Soy wax south
13199	20	abc10286	2007	Soy wax by stairs
13198	20	ansul10293	1999	Top of ladder 2nd level NMP
13197	30	ansul10292	1981	East NMP
13196	20	ansul10294	1997	East by emp cooler NMP
13195	20	ansul10295	1999	2nd level east of unit NMP
13194	30	ansul10296	1982	East by lockout station NMP
13109	20	abc11802	2008	Up ladder west on platform CDU
13107	20	abc10351	2008	Auto shop
13106	30	ansul10346	1981	Auto shop
13105	20	ansul10345	1997	3rd level frac OVHD receiver CDU
13104	20	abc11527	2008	Center under platform CDU
13103	20abc11418		2007	west by steam genarator
13102	20ansul1509		2008	by sing in box
13101	30	ansul10342	1983	Center by stripper bottoms CDU
13100	30	ansul10329	1974	Center by discharge pump CDU
13099	30	ansul10326	1981	East walkway under finfan CDU
10325	350wheel		2008	Walkway by job box CDU
10297	350wheel		1984	East of unit by job box NMP

Fire Extinguisher Inspection
Figure 11.8

13099	Monthly	Pass	Good	3/22/2012	30 ansul10326	1981	East walkway under finfan CDU	yes
13100	Monthly	Pass	Good	3/22/2012	30 ansul10329	1974	Center by discharge pump CDU	yes
13102	Monthly	Pass	Good	3/22/2012	20ansul1509	2008	by sing in box	Yes
13103	Monthly	Pass	Good	3/22/2012	20abc11418	2007	west by steam genarator	yes
13104	Monthly	Pass	Good	3/22/2012	20 abc11527	2008	Center under platform CDU	yes
13105	Monthly	Pass	Good	3/22/2012	20 ansul10345	1997	3rd level frac OVHD receiver CDU	yes
13106	Monthly	Pass	Good	3/22/2012	30 ansul10346	1981	Auto shop	yes
13106	Monthly	Pass	Good	3/22/2012	30 ansul10346	1981	Auto shop	yes
13107	Monthly	Pass	Good	3/22/2012	20 abc10351	2008	Auto shop	yes
13109	Monthly	Pass	Good	3/22/2012	20 abc11802	2008	Up ladder west on platform CDU	yes
13194	Monthly	Pass	Good	3/22/2012	30 ansul10296	1982	East by lockout station NMP	yes
13195	Monthly	Pass	Good	3/22/2012	20 ansul10295	1999	2nd level east of unit NMP	yes
13196	Monthly	Pass	Good	3/22/2012	20 ansul10294	1997	East by emp cooler NMP	yes
13197	Monthly	Pass	Good	3/22/2012	30 ansul10292	1981	East NMP	yes
13198	Monthly	Pass	Good	3/22/2012	20 ansul10293	1999	Top of ladder 2nd level NMP	Yes
13199	Monthly	Pass	Good	3/22/2012	20 abc10286	2007	Soy wax by stairs	Yes
13200	Monthly	Pass	Good	3/22/2012	20 abc10287	2008	Soy wax south	yes
13200	Monthly	Pass	Good	3/22/2012	20 abc10287	2008	Soy wax south	yes
13201	Monthly	Pass	Good	3/22/2012	20 abc10288	2007	Soy wax 2nd level	yes
13202	Monthly	Pass	Good	3/22/2012	20 abc10289	2008	Soy wax 2nd level by ladder	yes
13203	Monthly	Pass	Good	3/22/2012	20 abc10290	2007	Soy wax 3rd level by ladder	yes
13204	Monthly	Pass	Good	3/22/2012	20 abc10291	2007	Soy wax 3rd level south	yes
13205	Monthly	Pass	Good	3/22/2012	30 ansul10306	1990	North of unit NMP	yes
13206	Monthly	Pass	Good	3/22/2012	30 ansul10307	1982	North west corner NMP	yes
13207	Monthly	Pass	Good	3/22/2012	30 ansul10305	1980	Under unit by eyewash station NMP	yes
13208	Monthly	Pass	Good	3/22/2012	30 ansul10304	1979	Under unit facing west NMP	yes
13209	Monthly	Pass	Good	3/22/2012	30 ansul10298	1981	East catwalk across job box 2nd level NMP	yes
13210	Monthly	Pass	Good	3/22/2012	20 abc10299	2007	East catwalk across job box 3rd level NMP	yes
13211	Monthly	Pass	Good	3/22/2012	30 ansul10300	1973	East catwalk across job box 5th level NMP	yes

CDW/VAC/NMP Check List

13212	Monthly	Pass	Good	3/22/2012	20	ansul11448	1997	West by kleen tanks NMP	yes
13213	Monthly	Pass	Good	3/22/2012	20	abc 10301	2007	East by evaporator NMP	yes
13214	Monthly	Pass	Good	3/22/2012	30	ansul10309	1982	East by road SCV	yes
13215	Monthly	Pass	Good	3/22/2012	30	ansul10308	1982	North east of unit between panels SCV	yes
13216	Monthly	Pass	Good	3/22/2012	30	ansul10310	1990	East by draw pumps SCV	yes
13217	Monthly	Pass	Good	3/22/2012	30	ansul10311	1983	East by water rack #45 SCV	yes
13218	Monthly	Pass	Good	3/22/2012	20	ansul10313	1994	East by job box SCV	yes
13220	Monthly	Pass	Good	3/22/2012	30	ansul10312	1983	East by job box SCV	yes
13221	Monthly	Pass	Good	3/22/2012	30	ansul10314	1982	South center by fan house SCV	yes
13222	Monthly	Pass	Good	3/22/2012	30	ansul10315	1979	South east corner SCV	yes
13240	Monthly	Pass	Good	3/22/2012	20	ansul10327	1993	East by flash drum CDU	yes
13241	Monthly	Pass	Good	3/22/2012	20	ansul10328	1996	East by amine absorber CDU	yes
13242	Monthly	Pass	Good	3/22/2012	30	ansul10330	1987	South east by road CDU	yes
13246	Monthly	Pass	Good	3/22/2012	30	ansul10332	1986	South east platform CDU	yes
13247	Monthly	Pass	Good	3/22/2012	30	ansul10333	1980	South center pump platform CDU	yes
13248	Monthly	Pass	Good	3/22/2012	30	ansul10334	1973	South west pump platform CDU	yes
13249	Monthly	Pass	Good	3/22/2012	30	ansul10336	1982	Center by breakers to pump CDU	yes
13250	Monthly	Pass	Good	3/22/2012	30	ansul10337	1982	By seperator center CDU	yes
13251	Monthly	Pass	Good	3/22/2012	20	abc10347	2008	Auto shop	yes
13252	Monthly	Pass	Good	3/22/2012	20	abc10349	2008	Auto shop	yes
13354	Monthly	Pass	Good	3/22/2012	20	abc11290	2008	West of platform CDU	yes
13355	Monthly	Pass	Good	3/22/2012	20	ansul13108	1996	West of platform CDU	yes
13356	Monthly	Pass	Good	3/22/2012	20	ansul11803	1996	West of platform CDU	yes
13357	Monthly	Pass	Good	3/22/2012	20	abc10350	1994	Auto shop	yes
13358	Monthly	Pass	Good	3/22/2012	20	abc12009	2008	Auto shop	yes
13359	Monthly	Pass	Good	3/22/2012	30	ansul10335	1982	Center front of pump platform CDU	yes
13360	Monthly	Pass	Good	3/22/2012	20	abc10344	2007	Up ladder west on platform CDU	yes
13361	Monthly	Pass	Good	3/22/2012	20	ansul10331	2008	cdw cooling console	Yes
13362	Monthly	Pass	Good	3/22/2012	30	ansul10324	1999	5th level SCv	yes
13363	Monthly	Pass	Good	3/22/2012	30	ansul10323	1983	4th level SCV	yes
13364	Monthly	Pass	Good	3/22/2012	30	ansul 10322	1982	3rd level catwalk SCV	yes
13365	Monthly	Pass	Good	3/22/2012	30	ansul10321	1981	3rd level catwalk SCV	yes
13366	Monthly	Pass	Good	3/22/2012	20	ansul10320	1975	2nd level SCV	yes

CDW/VAC/NMP Check List

13367	Monthly	Pass	Good	3/22/2012	20 ansul10319	1996	West behind SCBA box SCV	yes
13368	Monthly	Pass	Good	3/22/2012	30 ansul10318	1982	West of fan house SCV	yes
13369	Monthly	Pass	Good	3/22/2012	30 BC 11514	1996	37 EX	Yes
13370	Monthly	Pass	Good	3/22/2012	30 ansul10317	1980	South west corner fan house SCV	yes
13371	Monthly	Pass	Good	3/22/2012	30 ansul10316	1979	South center by fan house SCV	yes
13376	Monthly	Pass	Good	3/22/2012	30ansul11513	1998	by salt drum	Yes

13371	Annual	Pass	Good	9/21/2011	30	ansul10316	1979
13370	Annual	Pass	Good	9/21/2011	30	ansul10317	1980
13368	Annual	Pass	Good	9/21/2011	30	ansul10318	1982
13367	Annual	Pass	Good	9/21/2011	20	ansul10319	1996
13366	Annual	Pass	Good	9/21/2011	20	ansul10320	1975
13365	Annual	Pass	Good	9/21/2011	30	ansul10321	1981
13364	Annual	Pass	Good	9/21/2011	30	ansul 10322	1982
13363	Annual	Pass	Good	9/21/2011	30	ansul10323	1983
13362	Annual	Pass	Good	9/21/2011	30	ansul10324	1999
13360	Annual	Pass	Good	9/21/2011	20	abc10344	2007
13359	Annual	Pass	Good	9/21/2011	30	ansul10335	1982
13358	Annual	Pass	Good	9/21/2011	20	abc12009	2008
13357	Annual	Pass	Good	9/21/2011	20	abc10350	1994
13356	Annual	Pass	Good	9/21/2011	20	ansul11803	1996
13355	Annual	Pass	Good	9/21/2011	20	ansul13108	1996
13354	Annual	Pass	Good	9/21/2011	20	abc11290	2008
13261	Annual	Pass	Good	9/21/2011	20	ansul10331	1996
13252	Annual	Pass	Good	9/21/2011	20	abc10349	2008
13251	Annual	Pass	Good	9/21/2011	20	abc10347	2008
13250	Annual	Pass	Good	9/21/2011	30	ansul10337	1982
13249	Annual	Pass	Good	9/21/2011	30	ansul10336	1982
13248	Annual	Pass	Good	9/21/2011	30	ansul10334	1973
13247	Annual	Pass	Good	9/21/2011	30	ansul10333	1980
13246	Annual	Pass	Good	9/21/2011	30	ansul10332	1986
13242	Annual	Pass	Good	9/21/2011	30	ansul10330	1987
13241	Annual	Pass	Good	9/21/2011	20	ansul10328	1996
13240	Annual	Pass	Good	9/21/2011	20	ansul10327	1993
13222	Annual	Pass	Good	9/21/2011	30	ansul10315	1979
13221	Annual	Pass	Good	9/21/2011	30	ansul10314	1982
13220	Annual	Pass	Good	9/21/2011	30	ansul10312	1983
13218	Annual	Pass	Good	9/21/2011	20	ansul10313	1994
13217	Annual	Pass	Good	9/21/2011	30	ansul10311	1983
13216	Annual	Pass	Good	9/21/2011	30	ansul10310	1990
13215	Annual	Pass	Good	9/21/2011	30	ansul10308	1982
13214	Annual	Pass	Good	9/21/2011	30	ansul10309	1982
13213	Annual	Pass	Good	9/21/2011	20	abc 10301	2007
13212	Annual	Pass	Good	9/21/2011	20	ansul11448	1997
13211	Annual	Pass	Good	9/21/2011	30	ansul10300	1973
13210	Annual	Pass	Good	9/21/2011	20	abc10299	2007
13209	Annual	Pass	Good	9/21/2011	30	ansul10298	1981
13208	Annual	Pass	Good	9/21/2011	30	ansul10304	1979
13207	Annual	Pass	Good	9/21/2011	30	ansul10305	1980
13206	Annual	Pass	Good	9/21/2011	30	ansul10307	1982
13205	Annual	Pass	Good	9/21/2011	30	ansul10306	1990
13204	Annual	Pass	Good	9/21/2011	20	abc10291	2007
13203	Annual	Pass	Good	9/21/2011	20	abc10290	2007
13202	Annual	Pass	Good	9/21/2011	20	abc10289	2008
13201	Annual	Pass	Good	9/21/2011	20	abc10288	2007
13200	Annual	Pass	Good	9/21/2011	20	abc10287	2008

13199	Annual	Pass	Good	9/21/2011	20 abc10286	2007
13198	Annual	Pass	Good	9/21/2011	20 ansul10293	1999
13197	Annual	Pass	Good	9/21/2011	30 ansul10292	1981
13196	Annual	Pass	Good	9/21/2011	20 ansul10294	1997
13195	Annual	Pass	Good	9/21/2011	20 ansul10295	1999
13194	Annual	Pass	Good	9/21/2011	30 ansul10296	1982
13109	Annual	Pass	Good	9/21/2011	20 abc11802	2008
13107	Annual	Pass	Good	9/21/2011	20 abc10351	2008
13106	Annual	Pass	Good	9/21/2011	30 ansul10346	1981
13105	Annual	Pass	Good	9/21/2011	20 ansul10345	1997
13104	Annual	Pass	Good	9/21/2011	20 abc11527	2008
13103	Annual	Pass	Good	9/21/2011	20abc11418	2007
13101	Annual	Pass	Good	9/21/2011	30 ansul10342	1983
13100	Annual	Pass	Good	9/21/2011	30 ansul10329	1974
13099	Annual	Pass	Good	9/21/2011	30 ansul10326	1981
10325	Annual	Pass	Good	9/21/2011	350wheel	2008
10297	Annual	Pass	Good	9/21/2011	350wheel	1984

South center by fan house SCV	yes
South west corner fan house SCV	yes
West of fan house SCV	yes
West behind SCBA box SCV	yes
2nd level SCV	yes
3rd level catwalk SCV	yes
3rd level catwalk SCV	yes
4th level SCV	yes
5th level SCv	yes
Up ladder west on platform CDU	yes
Center front of pump platform CDU	yes
Auto shop	yes
Auto shop	yes
West of platform CDU	yes
West of platform CDU	yes
West of platform CDU	yes
South east by road CDU	yes
Auto shop	yes
Auto shop	yes
By seperator center CDU	yes
Center by breakers to pump CDU	yes
South west pump platform CDU	yes
South center pump platform CDU	yes
South east platform CDU	yes
South east by road CDU	yes
East by amine absorber CDU	yes
East by flash drum CDU	yes
South east corner SCV	yes
South center by fan house SCV	yes
East by job box SCV	yes
East by job box SCV	yes
East by water rack #45 SCV	yes
East by draw pumps SCV	yes
North east of unit between panels SCV	yes
East by road SCV	yes
East by evaporator NMP	yes
West by kleen tanks NMP	yes
East catwalk across job box 5th level NMP	yes
East catwalk across job box 3rd level NMP	yes
East catwalk across job box 2nd level NMP	yes
Under unit facing west NMP	yes
Under unit by eyewash station NMP	yes
North west corner NMP	yes
North of unit NMP	yes
Soy wax 3rd level south	yes
Soy wax 3rd level by ladder	yes
Soy wax 2nd level by ladder	yes
Soy wax 2nd level	yes
Soy wax south	yes

Soy wax by stairs	yes
Top of ladder 2nd level NMP	yes
East NMP	yes
East by emp cooler NMP	yes
2nd level east of unit NMP	yes
East by lockout station NMP	yes
Up ladder west on platform CDU	yes
Auto shop	yes
Auto shop	yes
3rd level frac OVHD receiver CDU	yes
Center under platform CDU	yes
west by steam genarator	yes
Center by stripper bottoms CDU	yes
Center by discharge pump CDU	yes
East walkway under finfan CDU	yes
Walkway by job box CDU	yes
East of unit by job box NMP	yes

WEST TANK TRUCK LOADING

13378	20 abc11030	2007	Pole by water tower
13306	20 ABC12005	1996	butane lane 16
11731	20 abc10157	2007	Ticket building
11726	20 ansul 10167	1996	Fcc loading
11725	20 abc 10149	2007	Fuels loading rack
11724	20 abc 10165	2007	Fcc loading
11723	20 abc 10166	2007	Fcc loading
11722	15 CO2 10168	2006	Mcc room fcc loading
11721	15 CO2 10169	2006	Mcc room fcc loading
11720	30 ansul 10140	1981	Storage building west side
11719	30 ansul 10151	1991	Fuels loading rack
11718	20 ansul 10152	1996	Fuels loading rack
11717	20 abc 10153	2007	Fuels loading rack
11716	20 ansul10158	1996	Butane loading
11715	20 ansul10146	1981	By truckers lounge
11714	20 abc 10164	2007	Fcc loading
11671	30 ansul 10150	1981	Fuels loading rack
11670	20 ansul 10141	1996	Outside pump house
11669	30 ansul 10143	1994	By diesel pumps
11668	20 abc 10144	2007	By boiler
11666	20 ansul 10145	1996	By truck loading west gate entrance
11665	30 ansul 10148	1979	Fuels loading rack
11664	20 bc 11427	1996	loading bay
11662	20 ansul 10155	1996	Fuels loading rack
11661	20 Ansul10097	1996	ttermminal officem
11598	20 abc10160	2007	Butane loading
11597	20 abc10159	2007	Butane loading
11596	20 ansul10161	1977	Butane loading
11595	20 ABC11730	2008	butane lane 10
11594	20 ansul10162	1996	Butane loading
11593	20 ansul 10142	1996	By storage tank 80
11592	20 ABC 10154	2007	Fuels loading rack
10740	20 ansul 10156	1996	Fuels loading rack
10739	30 ansul13379	1988	Fuels loading rack lane 6b

Fire Extinguisher Inspection
Figure 11.8

11662	Monthly	Pass	Good	3/21/2012	20 ansul 10155	1996	Fuels loading rack	yes
11718	Monthly	Pass	Good	3/21/2012	20 ansul 10152	1996	Fuels loading rack	yes
11719	Monthly	Pass	Good	3/21/2012	30 ansul 10151	1991	Fuels loading rack	yes
11720	Monthly	Pass	Good	3/21/2012	30 ansul 10140	1981	Storage building west side	yes
11721	Monthly	Pass	Good	3/21/2012	15 CO2 10169	2006	Mcc room fcc loading	yes
11722	Monthly	Pass	Good	3/21/2012	15 CO2 10168	2006	Mcc room fcc loading	yes
11669	Monthly	Pass	Good	3/21/2012	30 ansul 10143	1994	By diesel pumps	yes
11670	Monthly	Pass	Good	3/21/2012	20 ansul 10141	1996	Outside pump house	yes
11668	Monthly	Pass	Good	3/21/2012	20 abc 10144	2007	By boiler	yes
13366	Monthly	Pass	Good	3/21/2012	20 ansul10320	1975	2nd level SCV	yes
13365	Monthly	Pass	Good	3/21/2012	30 ansul10321	1981	3rd level catwalk SCV	yes
13364	Monthly	Pass	Good	3/21/2012	30 ansul 10322	1982	3rd level catwalk SCV	yes
13363	Monthly	Pass	Good	3/21/2012	30 ansul10323	1983	4th level SCV	yes
13362	Monthly	Pass	Good	3/21/2012	30 ansul10324	1999	5th level SCv	yes
13359	Monthly	Pass	Good	3/21/2012	30 ansul10335	1982	Center front of pump platform CDU	yes
13250	Monthly	Pass	Good	3/21/2012	30 ansul10337	1982	By seperator center CDU	yes
13249	Monthly	Pass	Good	3/21/2012	30 ansul10336	1982	Center by breakers to pump CDU	yes
13200	Monthly	Pass	Good	3/21/2012	20 abc10287	2008	Soy wax south	yes
11661	Monthly	Pass	Good	3/21/2012	20 Ansul10097	1996	ttermminal officem	Yes
10739	Monthly	Pass	Good	3/21/2012	30 ansul13379	1988	Fuels loading rack lane 6b	yes
11592	Monthly	Pass	Good	3/21/2012	20 ABC 10154	2007	Fuels loading rack	yes
11593	Monthly	Pass	Good	3/21/2012	20 ansul 10142	1996	By storage tank 80	yes
11594	Monthly	Pass	Good	3/21/2012	20 ansul10162	1996	Butane loading	yes
11595	Monthly	Pass	Good	3/21/2012	20 ABC11730	2008	butane lane 10	Yes
11715	Monthly	Pass	Good	3/21/2012	20 ansul10146	1981	By truckers lounge	yes
11596	Monthly	Pass	Good	3/21/2012	20 ansul10161	1977	Butane loading	yes
11597	Monthly	Pass	Good	3/21/2012	20 abc10159	2007	Butane loading	yes
11598	Monthly	Pass	Good	3/21/2012	20 abc10160	2007	Butane loading	yes
11714	Monthly	Pass	Good	3/21/2012	20 abc 10164	2007	Fcc loading	yes
11716	Monthly	Pass	Good	3/21/2012	20 ansul10158	1996	Butane loading	yes

West Tank Truck Loading Check List

10740	Monthly	Pass	Good	3/21/2012	20 ansul 10156	1996	Fuels loading rack	yes
11731	Monthly	Pass	Good	3/21/2012	20 abc10157	2007	Ticket building	yes
11664	Monthly	Pass	Good	3/21/2012	20 bc 11427	1996	loading bay	Yes
11665	Monthly	Pass	Good	3/21/2012	30 ansul 10148	1979	Fuels loading rack	yes
11666	Monthly	Pass	Good	3/21/2012	20 ansul 10145	1996	By truck loading west gate entrance	yes
11723	Monthly	Pass	Good	3/21/2012	20 abc 10166	2007	Fcc loading	yes
11724	Monthly	Fail	Good	3/21/2012	20 abc 10165	2007	Fcc loading	yes
11671	Monthly	Pass	Good	3/21/2012	30 ansul 10150	1981	Fuels loading rack	yes
11725	Monthly	Pass	Good	3/21/2012	20 abc 10149	2007	Fuels loading rack	yes
11726	Monthly	Pass	Good	3/21/2012	20 ansul 10167	1996	Fcc loading	yes
13306	Monthly	Pass	Good	3/21/2012	20 ABC12005	1996	butane lane 16	Yes

11731	Annual	Pass	Good	8/23/2011	20 ABC12005	1996
11726	Annual	Pass	Good	8/23/2011	30 ansul 10140	1981
11725	Annual	Pass	Good	8/23/2011	20 ansul 10141	1996
11724	Annual	Pass	Good	8/23/2011	30 ansul 10143	1994
11723	Annual	Pass	Good	8/23/2011	20 abc 10144	2007
11722	Annual	Pass	Good	8/23/2011	15 CO2 10169	2006
11721	Annual	Pass	Good	8/23/2011	15 CO2 10168	2006
11720	Annual	Pass	Good	8/23/2011	20 abc 10164	2007
11719	Annual	Pass	Good	8/23/2011	20 abc 10166	2007
11718	Annual	Pass	Good	8/23/2011	20 abc 10165	2007
11717	Annual	Pass	Good	8/23/2011	20 ansul 10167	1996
11716	Annual	Pass	Good	8/23/2011	20 ansul 10156	1996
11715	Annual	Pass	Good	8/23/2011	20 ansul 10155	1996
11714	Annual	Pass	Good	8/23/2011	20 bc 11427	1996
11671	Annual	Pass	Good	8/23/2011	20 ansul 10142	1996
11670	Annual	Pass	Good	8/23/2011	20 ansul10162	1996
11669	Annual	Pass	Good	8/23/2011	20 ABC11730	2008
11668	Annual	Pass	Good	8/23/2011	20 ansul10161	1977
11666	Annual	Pass	Good	8/23/2011	20 abc10160	2007
11665	Annual	Pass	Good	8/23/2011	20 abc10159	2007
11664	Annual	Pass	Good	8/23/2011	20 ansul10158	1996
11662	Annual	Pass	Good	8/23/2011	20 Ansul10097	1996
11661	Annual	Pass	Good	8/23/2011	20 ansul10146	1981
11598	Annual	Pass	Good	8/23/2011	20 ABC 10154	2007
11597	Annual	Pass	Good	8/23/2011	20 abc 10153	2007
11596	Annual	Pass	Good	8/23/2011	20 ansul 10152	1996
11595	Annual	Pass	Good	8/23/2011	30 ansul 10151	1991
11594	Annual	Pass	Good	8/23/2011	30 ansul 10150	1981
11593	Annual	Pass	Good	8/23/2011	20 abc 10149	2007
11592	Annual	Pass	Good	8/23/2011	30 ansul10148	1979
11591	Annual	Pass	Good	8/23/2011	20 ansul 10145	1996
10157	Annual	Pass	Good	8/23/2011	20 abc	2007

butane lane 16	Yes
Storage building west side	yes
Outside pump house	yes
By diesel pumps	yes
By boiler	yes
Mcc room fcc loading	yes
Mcc room fcc loading	yes
Fcc loading	yes
Fcc loading	yes
Fcc loading	yes
Fcc loading	yes
Fuels loading rack	yes
Fuels loading rack	yes
loading bay	Yes
By storage tank 80	yes
Butane loading	yes
butane lane 10	Yes
Butane loading	yes
Butane loading	yes
Butane loading	yes
Butane loading	yes
ttermminal officem	Yes
By truckers lounge	yes
Fuels loading rack	yes
Fuels loading rack	yes
Fuels loading rack	yes
Fuels loading rack	yes
Fuels loading rack	yes
Fuels loading rack	yes
Fuels loading rack	yes
By truck loading west gate entrance	yes
Ticket building	yes

SOURCRUDE/DHT/CRUDE4

13239	20ansul11445	2010	pole by cwr
13238	20 ansul11174	1996	Center west crude 4
13237	20 ansul11181	1996	West crude4
13236	20 ansul11175	1996	Center crude 4
13235	20 abc 11420	2007	North crude 4
13234	20 abc11411	2008	South crude 4
13233	20 ansul11438	1996	Center crude 4
13232	20 ansul11177	1996	Center crude 4
13231	30 ansul11518	1982	Center crude 4
13230	20 ansul11171	1996	East crude 4
13229	30 ansul11169	1982	Center by pumps crude 4
13228	20 ansul11170	1996	East crude 4
13227	20 ansul11524	1994	North crude 4
13226	20 abc11135	2008	2nd level south center crude
13225	20 abc11134	2008	2nd level south crude
13224	20 abc11133	2008	2nd level north center crude
13223	20 abc11131	2008	2nd level north crude
13098	20abc11182	2007	Behind cooling tower east side
13097	20 ansul11188	2008	South tullos unit
13096	20 ansul11187	1997	South tullos unit
13095	20 abc11186	2008	South tullos unit
13094	20 ansul11183	1991	East tullos unit
13093	20 abc 11184	2007	East tullos unit
13092	20 abc11102	2007	East feed filter DHT
13091	20 abc11117	2007	Bottom platform water stripper
13090	20 abc11116	2007	Bottom platform water stripper
13087	20 abc11111	2007	Process water stripper platform east
13086	20 abc11112	2007	Process water stripper platform north
13086	20 abc11115	2007	Process water stripper platform north
13085	20 abc11114	2007	Process water stripper platformwest
13084	20 abc11113	2007	Process water stripper platform south
13083	20 abc11110	2007	Process water stripper platform south
13082	20 abc11130	2008	Behind water stripper crude
13081	20 abc11129	2008	Desalter H20 recycle pump crude
13080	20 abc11120	2007	Pump 212b crude
13079	20 abc11121	2007	Pump 207a crude
13078	20 abc11122	2007	Pump 205b crude
13077	20 abc11123	2006	Pump 206a crude
13076	20 abc11124	2008	Pump 204b crude
13075	20 abc11125	2008	Pump 209a crude
13074	20 abc11126	2008	Pump 211a crude
13073	20 ansul11127	1996	Pump 209b crude
13072	20 ansul11128	1996	Pump 211b crude
13071	20 abc11100	2007	South stripper sour water pump DHT
13070	20 abc11099	2008	Across east feed filter
13069	20 abc11103	2008	Stripper feed bottom DHT
13068	20 abc11104	2007	South charge pump DHT

SOURCRUDE/DHT/CRUDE4

13067	20 abc11105	2008	South charge pump DHT
13066	20 abc 11106	2007	Behind stripper feed bottom exch DHT
13065	20 ansul11107	1996	Under stairs DHT
13063	20 abc11435	2007	By circulation pump DHT
13062	20 abc13061	1991	Across from circulation pump DHT
13060	20 abc11119	2008	Stairs of crude
13059	20abc11447	2010	staircase to reboiler
13058	20abc11521	2008	under reboiler heater
13057	20 abc11437	2008	By reboiler heater DHT
13056	20 abc11517	2007	By (scba box) DHT
12000	20 abc11151	2008	5th level south crude
11999	20 abc 11150	2008	5th level south center crude
11998	20 abc11149	2008	5th level south crude
11997	20 abc11148	2008	5th level north crude
11996	20 abc11147	2008	5th level north crude
11995	20 abc 11146	2008	4th level south crude
11994	20 abc11145	2008	4th level south center crude
11993	20 abc11144	2008	4th level south crude
11992	20 abc11143	2008	4th level north center crude
11991	20 abc 11142	2008	4th level north crude
11990	20 abc11136	2008	3rd level north crude
11989	20 abc11138	2008	3rd level south center crude
11988	20 abc11137	2008	3rd level south crude
11987	20 abc 11141	2008	3rd level north center crude
11986	20 abc11139	2008	3rd level south crude
11985	20 abc11140	2008	3rd level north crude
11984	20 abc11155	2008	5th level north DHT
11983	20 abc11154	2008	5th level south DHT
11982	20 abc11153	2008	5th level south DHT
11981	20 abc11152	2008	4th level north DHT
11980	20 abc 11159	2008	4th level south DHT
11979	20 abc11158	2008	4th level south DHT
11978	20 abc11157	2008	4th level north DHT
11977	20 ABC11158	2008	3rd level dht
11976	20 abc11162	2008	3rd level south DHT
11975	20 abc11161	2008	3rd level north DHT
11974	20 abc11160	2008	4th level north DHT
11973	20 abc11164	2008	2nd level north DHT
11972	20 abc11165	2008	2nd level south DHT
11971	20 abc11166	2008	2nd level south DHT
11970	20 abc11163	2008	3rd level south DHT
11969	20abc11108	2007	dht at staircase behind scba
11118	350wheel	2007	Front of crude stairs
11109	350wheel	2007	Process water stripper platform
11093	150wheel	2008	By sign in box DHT
10866	20ansul11179	2008	pole by pumps
10865	20 ABC	2008	plateform

Fire Extinguisher Inspection
Figure 11.8

10865	Monthly	Pass	Good	3/22/2012	20 ABC	2008	plateform	Yes
10866	Monthly	Pass	Good	3/22/2012	20ansul11179	2008	pole by pumps	Yes
11969	Monthly	Pass	Good	3/22/2012	20abc11108	2007	dht at staircase behind scba	yes
11970	Monthly	Pass	Good	3/22/2012	20 abc11163	2008	3rd level south DHT	yes
11971	Monthly	Pass	Good	3/22/2012	20 abc11166	2008	2nd level south DHT	yes
11972	Monthly	Pass	Good	3/22/2012	20 abc11165	2008	2nd level south DHT	yes
11973	Monthly	Pass	Good	3/22/2012	20 abc11164	2008	2nd level north DHT	yes
11974	Monthly	Pass	Good	3/22/2012	20 abc11160	2008	4th level north DHT	yes
11975	Monthly	Pass	Good	3/22/2012	20 abc11161	2008	3rd level north DHT	yes
11976	Monthly	Pass	Good	3/22/2012	20 abc11162	2008	3rd level south DHT	yes
11977	Monthly	Pass	Good	3/22/2012	20 ABC11158	2008	3rd level dht	Yes
11978	Monthly	Pass	Good	3/22/2012	20 abc11157	2008	4th level north DHT	yes
11979	Monthly	Pass	Good	3/22/2012	20 abc11158	2008	4th level south DHT	yes
11980	Monthly	Pass	Good	3/22/2012	20 abc 11159	2008	4th level south DHT	yes
11981	Monthly	Pass	Good	3/22/2012	20 abc11152	2008	4th level north DHT	yes
11982	Monthly	Pass	Good	3/22/2012	20 abc11153	2008	5th level south DHT	yes
11983	Monthly	Pass	Good	3/22/2012	20 abc11154	2008	5th level south DHT	yes
11984	Monthly	Pass	Good	3/22/2012	20 abc11155	2008	5th level north DHT	yes
11985	Monthly	Pass	Good	3/22/2012	20 abc11140	2008	3rd level north crude	yes
11986	Monthly	Pass	Good	3/22/2012	20 abc11139	2008	3rd level south crude	yes
11987	Monthly	Pass	Good	3/22/2012	20 abc 11141	2008	3rd level north center crude	yes
11988	Monthly	Pass	Good	3/22/2012	20 abc11137	2008	3rd level south crude	Yes
11989	Monthly	Pass	Good	3/22/2012	20 abc11138	2008	3rd level south center crude	yes
11990	Monthly	Pass	Good	3/22/2012	20 abc11136	2008	3rd level north crude	yes
11991	Monthly	Pass	Good	3/22/2012	20 abc 11142	2008	4th level north crude	yes
11992	Monthly	Pass	Good	3/22/2012	20 abc11143	2008	4th level north center crude	yes
11993	Monthly	Pass	Good	3/22/2012	20 abc11144	2008	4th level south crude	yes
11994	Monthly	Pass	Good	3/22/2012	20 abc11145	2008	4th level south center crude	yes
11995	Monthly	Pass	Good	3/22/2012	20 abc 11146	2008	4th level south crude	yes

Sourcrude DHT Check List

11996	Monthly	Pass	Good	3/22/2012	20 abc11147	2008	5th level north crude	yes
11997	Monthly	Pass	Good	3/22/2012	20 abc11148	2008	5th level north crude	yes
11998	Monthly	Pass	Good	3/22/2012	20 abc11149	2008	5th level south crude	yes
11999	Monthly	Pass	Good	3/22/2012	20 abc 11150	2008	5th level south center crude	yes
12000	Monthly	Pass	Good	3/22/2012	20 abc11151	2008	5th level south crude	yes
13056	Monthly	Pass	Good	3/22/2012	20 abc11517	2007	By (scba box) DHT	yes
13057	Monthly	Pass	Good	3/22/2012	20 abc11437	2008	By reboiler heater DHT	yes
13058	Monthly	Pass	Good	3/22/2012	20abc11521	2008	under reboiler heater	yes
13059	Monthly	Pass	Good	3/22/2012	20abc11447	2010	staircase to reboiler	yes
13060	Monthly	Pass	Good	3/22/2012	20 abc11119	2008	Stairs of crude	yes
13062	Monthly	Pass	Good	3/22/2012	20 abc13061	1991	Across from circulation pump DHT	yes
13063	Monthly	Pass	Good	3/22/2012	20 abc11435	2007	By circulation pump DHT	yes
13066	Monthly	Pass	Good	3/22/2012	20 abc 11106	2007	Behind stripper feed bottom exch DHT	yes
13066	Monthly	Pass	Good	3/22/2012	20 abc 11106	2007	Behind stripper feed bottom exch DHT	yes
13067	Monthly	Pass	Good	3/22/2012	20 abc11105	2008	South charge pump DHT	yes
13068	Monthly	Pass	Good	3/22/2012	20 abc11104	2007	South charge pump DHT	yes
13069	Monthly	Pass	Good	3/22/2012	20 abc11103	2008	Stripper feed bottom DHT	yes
13070	Monthly	Pass	Good	3/22/2012	20 abc11099	2008	Across east feed filter	yes
13071	Monthly	Pass	Good	3/22/2012	20 abc11100	2007	South stripper sour water pump DHT	yes
13072	Monthly	Pass	Good	3/22/2012	20 ansul11128	1996	Pump 211b crude	yes
13073	Monthly	Pass	Good	3/22/2012	20 ansul11127	1996	Pump 209b crude	yes
13074	Monthly	Pass	Good	3/22/2012	20 abc11126	2008	Pump 211a crude	yes
13075	Monthly	Pass	Good	3/22/2012	20 abc11125	2008	Pump 209a crude	yes
13076	Monthly	Pass	Good	3/22/2012	20 abc11124	2008	Pump 204b crude	yes
13077	Monthly	Pass	Good	3/22/2012	20 abc11123	2006	Pump 206a crude	yes
13078	Monthly	Pass	Good	3/22/2012	20 abc11122	2007	Pump 205b crude	yes
13079	Monthly	Pass	Good	3/22/2012	20 abc11121	2007	Pump 207a crude	yes
13080	Monthly	Pass	Good	3/22/2012	20 abc11120	2007	Pump 212b crude	yes
13081	Monthly	Pass	Good	3/22/2012	20 abc11129	2008	Desalter H20 recycle pump crude	yes
13082	Monthly	Pass	Good	3/22/2012	20 abc11130	2008	Behind water stripper crude	yes
13083	Monthly	Pass	Good	3/22/2012	20 abc11110	2007	Process water stripper platform south	yes
13084	Monthly	Pass	Good	3/22/2012	20 abc11113	2007	Process water stripper platform south	yes
13085	Monthly	Pass	Good	3/22/2012	20 abc11114	2007	Process water stripper platformwest	yes

Sourcrude DHT Check List

13086	Monthly	Pass	Good	3/22/2012	20 abc11112	2007	Process water stripper platform	north	yes
13087	Monthly	Pass	Good	3/22/2012	20 abc11111	2007	Process water stripper platform	east	yes
13090	Monthly	Pass	Good	3/22/2012	20 abc11116	2007	Bottom platform water stripper		yes
13091	Monthly	Pass	Good	3/22/2012	20 abc11117	2007	Bottom platform water stripper		yes
13092	Monthly	Pass	Good	3/22/2012	20 abc11102	2007	East feed filter DHT		yes
13093	Monthly	Pass	Good	3/22/2012	20 abc 11184	2007	East tullos unit		yes
13094	Monthly	Pass	Good	3/22/2012	20 ansul11183	1991	East tullos unit		yes
13095	Monthly	Pass	Good	3/22/2012	20 abc11186	2008	South tullos unit		yes
13096	Monthly	Pass	Good	3/22/2012	20 ansul11187	1997	South tullos unit		yes
13096	Monthly	Pass	Good	3/22/2012	20 ansul11187	1997	South tullos unit		yes
13097	Monthly	Pass	Good	3/22/2012	20 ansul11188	2008	South tullos unit		yes
13098	Monthly	Pass	Good	3/22/2012	20abc11182	2007	Behind cooling tower east side		yes
13223	Monthly	Pass	Good	3/22/2012	20 abc11131	2008	2nd level north crude		yes
13224	Monthly	Pass	Good	3/22/2012	20 abc11133	2008	2nd level north center crude		yes
13225	Monthly	Pass	Good	3/22/2012	20 abc11134	2008	2nd level south crude		yes
13226	Monthly	Pass	Good	3/22/2012	20 abc11135	2008	2nd level south center crude		yes
13227	Monthly	Pass	Good	3/22/2012	20 ansul11524	1994	North crude 4		yes
13228	Monthly	Pass	Good	3/22/2012	20 ansul11170	1996	East crude 4		yes
13229	Monthly	Pass	Good	3/22/2012	30 ansul11169	1982	Center by pumps crude 4		yes
13230	Monthly	Pass	Good	3/22/2012	20 ansul11171	1996	East crude 4		yes
13231	Monthly	Pass	Good	3/22/2012	30 ansul11518	1982	Center crude 4		yes
13232	Monthly	Pass	Good	3/22/2012	20 ansul11177	1996	Center crude 4		Yes
13233	Monthly	Pass	Good	3/22/2012	20 ansul11438	1996	Center crude 4		yes
13234	Monthly	Pass	Good	3/22/2012	20 abc11411	2008	South crude 4		yes
13235	Monthly	Pass	Good	3/22/2012	20 abc 11420	2007	North crude 4		yes
13236	Monthly	Pass	Good	3/22/2012	20 ansul11175	1996	Center crude 4		Yes
13237	Monthly	Pass	Good	3/22/2012	20 ansul11181	1996	West crude4		yes
13238	Monthly	Pass	Good	3/22/2012	20 ansul11174	1996	Center west crude 4		yes
13239	Monthly	Pass	Good	3/22/2012	20ansul11445	2010	pole by cwr		Yes

13238	Annual	Pass	Good	9/21/2011	20	ansul11174	1996
13237	Annual	Pass	Good	9/21/2011	20	ansul11181	1996
13236	Annual	Pass	Good	9/21/2011	20	ansul11175	1996
13235	Annual	Pass	Good	9/21/2011	20	abc 11420	2007
13234	Annual	Pass	Good	9/21/2011	20	abc11411	2008
13233	Annual	Pass	Good	9/21/2011	20	ansul11438	1996
13232	Annual	Pass	Good	9/21/2011	20	ansul11177	1996
13231	Annual	Pass	Good	9/21/2011	30	ansul11518	1982
13230	Annual	Pass	Good	9/21/2011	20	ansul11171	1996
13229	Annual	Pass	Good	9/21/2011	30	ansul11169	1982
13228	Annual	Pass	Good	9/21/2011	20	ansul11170	1996
13227	Annual	Pass	Good	9/21/2011	20	ansul11524	1994
13226	Annual	Pass	Good	9/21/2011	20	abc11135	2008
13225	Annual	Pass	Good	9/21/2011	20	abc11134	2008
13224	Annual	Pass	Good	9/21/2011	20	abc11133	2008
13223	Annual	Pass	Good	9/21/2011	20	abc11131	2008
13098	Annual	Pass	Good	9/21/2011	20	abc11182	2007
13097	Annual	Pass	Good	9/21/2011	20	ansul11188	2008
13096	Annual	Pass	Good	9/21/2011	20	ansul11187	1997
13095	Annual	Pass	Good	9/21/2011	20	abc11186	2008
13094	Annual	Pass	Good	9/21/2011	20	ansul11183	1991
13093	Annual	Pass	Good	9/21/2011	20	abc 11184	2007
13092	Annual	Pass	Good	9/21/2011	20	abc11102	2007
13091	Annual	Pass	Good	9/21/2011	20	abc11117	2007
13090	Annual	Pass	Good	9/21/2011	20	abc11116	2007
13087	Annual	Pass	Good	9/21/2011	20	abc11111	2007
13086	Annual	Pass	Good	9/21/2011	20	abc11112	2007
13085	Annual	Pass	Good	9/21/2011	20	abc11114	2007
13084	Annual	Pass	Good	9/21/2011	20	abc11113	2007
13083	Annual	Pass	Good	9/21/2011	20	abc11110	2007
13082	Annual	Pass	Good	9/21/2011	20	abc11130	2008
13081	Annual	Pass	Good	9/21/2011	20	abc11129	2008
13080	Annual	Pass	Good	9/21/2011	20	abc11120	2007
13079	Annual	Pass	Good	9/21/2011	20	abc11121	2007
13078	Annual	Pass	Good	9/21/2011	20	abc11122	2007
13077	Annual	Pass	Good	9/21/2011	20	abc11123	2006
13076	Annual	Pass	Good	9/21/2011	20	abc11124	2008
13075	Annual	Pass	Good	9/21/2011	20	abc11125	2008
13074	Annual	Pass	Good	9/21/2011	20	abc11126	2008
13073	Monthly	Pass	Good	9/21/2011	20	ansul11127	1996
13072	Annual	Pass	Good	9/21/2011	20	ansul11128	1996
13071	Annual	Pass	Good	9/21/2011	20	abc11100	2007
13070	Annual	Pass	Good	9/21/2011	20	abc11099	2008
13069	Annual	Pass	Good	9/21/2011	20	abc11103	2008
13068	Annual	Pass	Good	9/21/2011	20	abc11104	2007
13067	Annual	Pass	Good	9/21/2011	20	abc11105	2008
13066	Annual	Pass	Good	9/21/2011	20	abc 11106	2007

13065	Annual	Pass	Good	9/21/2011	20 ansul11107	1996
13063	Annual	Pass	Good	9/21/2011	20 abc11435	2007
13062	Annual	Pass	Good	9/21/2011	20 abc13061	1991
13060	Annual	Pass	Good	9/21/2011	20 abc11119	2008
13059	Annual	Pass	Good	9/21/2011	20abc11447	2010
13058	Annual	Pass	Good	9/21/2011	20abc11521	2008
13057	Annual	Pass	Good	9/21/2011	20 abc11437	2008
13056	Annual	Pass	Good	9/21/2011	20 abc11517	2007
12000	Monthly	Pass	Good	9/21/2011	20 abc11151	2008
11999	Annual	Pass	Good	9/21/2011	20 abc 11150	2008
11998	Annual	Pass	Good	9/21/2011	20 abc11149	2008
11997	Annual	Pass	Good	9/21/2011	20 abc11148	2008
11996	Annual	Pass	Good	9/21/2011	20 abc11147	2008
11995	Annual	Pass	Good	9/21/2011	20 abc 11146	2008
11994	Annual	Pass	Good	9/21/2011	20 abc11145	2008
11993	Annual	Pass	Good	9/21/2011	20 abc11144	2008
11992	Annual	Pass	Good	9/21/2011	20 abc11143	2008
11991	Annual	Pass	Good	9/21/2011	20 abc 11142	2008
11990	Annual	Pass	Good	9/21/2011	20 abc11136	2008
11989	Annual	Pass	Good	9/21/2011	20 abc11138	2008
11988	Annual	Pass	Good	9/21/2011	20 abc11137	2008
11987	Annual	Pass	Good	9/21/2011	20 abc 11141	2008
11986	Annual	Pass	Good	9/21/2011	20 abc11139	2008
11985	Annual	Pass	Good	9/21/2011	20 abc11140	2008
11984	Annual	Pass	Good	9/21/2011	20 abc11155	2008
11983	Annual	Pass	Good	9/21/2011	20 abc11154	2008
11982	Annual	Pass	Good	9/21/2011	20 abc11153	2008
11981	Annual	Pass	Good	9/21/2011	20 abc11152	2008
11980	Annual	Pass	Good	9/21/2011	20 abc 11159	2008
11979	Annual	Pass	Good	9/21/2011	20 abc11158	2008
11978	Annual	Pass	Good	9/21/2011	20 abc11157	2008
11976	Annual	Pass	Good	9/21/2011	20 abc11162	2008
11975	Annual	Pass	Good	9/21/2011	20 abc11161	2008
11974	Annual	Pass	Good	9/21/2011	20 abc11160	2008
11973	Annual	Pass	Good	9/21/2011	20 abc11164	2008
11972	Annual	Pass	Good	9/21/2011	20 abc11165	2008
11971	Annual	Pass	Good	9/21/2011	20 abc11166	2008
11970	Annual	Pass	Good	9/21/2011	20 abc11163	2008
11969	Annual	Pass	Good	9/21/2011	20abc11108	2007
11118	Annual	Pass	Good	9/21/2011	350wheel	2007
11109	Annual	Pass	Good	9/21/2011	350wheel	2007
11093	Annual	Pass	Good	9/21/2011	150wheel	2008

Center west crude 4	yes
West crude4	yes
Center crude 4	yes
North crude 4	yes
South crude 4	yes
Center crude 4	yes
Center crude 4	yes
Center crude 4	yes
East crude 4	yes
Center by pumps crude 4	yes
East crude 4	yes
North crude 4	yes
2nd level south center crude	yes
2nd level south crude	yes
2nd level north center crude	yes
2nd level north crude	yes
Behind cooling tower east side	yes
South tullos unit	yes
South tullos unit	yes
South tullos unit	yes
East tullos unit	yes
East tullos unit	yes
East feed filter DHT	yes
Bottom platform water stripper	yes
Bottom platform water stripper	yes
Process water stripper platform east	yes
Process water stripper platform north	yes
Process water stripper platformwest	yes
Process water stripper platform south	yes
Process water stripper platform south	yes
Behind water stripper crude	yes
Desalter H20 recycle pump crude	yes
Pump 212b crude	yes
Pump 207a crude	yes
Pump 205b crude	yes
Pump 206a crude	yes
Pump 204b crude	yes
Pump 209a crude	yes
Pump 211a crude	yes
Pump 209b crude	yes
Pump 211b crude	yes
South stripper sour water pump DHT	yes
Across east feed filter	yes
Stripper feed bottom DHT	yes
South charge pump DHT	yes
South charge pump DHT	yes
Behind stripper feed bottom exch DHT	yes

Under stairs DHT	yes
By circulation pump DHT	yes
Across from circulation pump DHT	yes
Stairs of crude	yes
staircase to reboiler	yes
under reboiler heater	yes
By reboiler heater DHT	yes
By (scba box) DHT	yes
5th level south crude	yes
5th level south center crude	yes
5th level south crude	yes
5th level north crude	yes
5th level north crude	yes
4th level south crude	yes
4th level south center crude	yes
4th level south crude	yes
4th level north center crude	yes
4th level north crude	yes
3rd level north crude	yes
3rd level south center crude	yes
3rd level south crude	yes
3rd level north center crude	yes
3rd level south crude	yes
3rd level north crude	yes
5th level north DHT	yes
5th level south DHT	yes
5th level south DHT	yes
4th level north DHT	yes
4th level south DHT	yes
4th level south DHT	yes
4th level north DHT	yes
3rd level south DHT	yes
3rd level north DHT	yes
4th level north DHT	yes
2nd level north DHT	yes
2nd level south DHT	yes
2nd level south DHT	yes
3rd level south DHT	yes
dht at staircase behind scba	yes
Front of crude stairs	yes
Process water stripper platform	yes
By sign in box DHT	yes

PLATFORM1/PSA/MCC ROOM

13382	30ansul11410	2007	boiler
13277	15CO2 10387	1995	Transformers sub 101
13276	15CO2 10386	1995	Transformers sub 101
13275	15CO2 10385	1995	Transformers sub 101
13274	15CO2 10384	1995	Transformers sub 101
13273	15CO210383	1995	Transformers sub 101
13272	15 co2 10382	2001	Transformers sub 101
13271	15 co2 10381	2001	Transformers sub 101
13270	15CO210380	1995	Transformers sub 101
13269	20 ansul10366	1996	North of abandoned compressors platform 2
13268	20 ansul10367	1995	North of abandoned compressors platform 2
13267	20 ansul10368	1996	North of abandoned compressors platform 2
13266	20 abc10369	2007	Under platform 2 walkway
13265	20ansul11841	1996	snuffing steam 4
13263	20 ansul10373	1996	Under piperack opening south platform 2
13262	20 ansul10370	1996	Under platform 2 walkway
13261	20 ansul10371	1996	Under platform 2 walkway
13260	30 ansul10375	1976	By reheater platform2
13259	20 ansul10374	1997	Under piperack north platform2
13258	30 ansul10357	1982	South in boiler area
13257	20 abc10354	2008	South of walkway boiler area
13256	20ansul10352	1996	South of saltwater tank walkway boiler area
13255	20 ansul10353	1996	South of walkway boiler area
13253	30 ansul10356	1981	North in boiler area
10706	30 ansul11207	1988	Pumps behind cooling tower platform1
10705	20 abc11208	2008	Up ladder on 3rd level platform1
10704	30 ansul11206	1977	Center walkway platform1
10703	30 ansul11205	1973	Center walkway platform1
10701	20 ansul11204	1996	Center walkway platform1
10700	30 ansul11203	1977	Center platform1
10699	20 abc11199	2007	Northwest platform1
10698	20 ansul11197	1996	Tail gas southeast PSA compressor
10697	20 ansul11196	1997	Tail gas southeast PSA compressor
10696	20 ansul11198	1994	Tail gas northeast PSA compressor
10695	20 ansul11195	1996	Tail gas center PSA compressor
10694	20 ansul11194	1996	Tail gas southwest PSA compressor
10693	20 ansul11193	1994	Tail gas northwest PSA compressor
10692	20 ansul11192	1996	Generator east roosvelt PSA
10691	20 ansul11191	1994	Generator east roosvelt PSA
10689	20 abc11189	2008	Cooling tower stairs
10640	20 ansul 11075	1996	seperater shell
10639	20 ansul 11210	1996	By cooling water tubes platform1
10638	20 ansul 11212	1996	By stabilizer tower
10637	20 abc 11213	2007	Platform2 up ladder west
10636	20 ansul 11211	1996	By cooling water tubes platform1
10635	20 abc 10635	2008	South center platform1
10634	30 ansul 11201	1982	South center platform1

PLATFORM1/PSA/MCC ROOM

10633	30 ansul 11202	1982	Northeast platform1
10632	30 ansul 10379	1979	Platform 2 2nd level south
10631	30 ansul 10365	1981	South of abandoned compressors 2nd level platform 2
10630	20 ansul 10363	1996	West of silver tanks on steps naptha
10629	20 ansul 10364	1996	Acid tank vapor scrubber 2nd level platform 2
10628	20 ansul 10362	1996	South east of unit naptha
10627	20 ansul 10361	1996	East on steps naptha
10626	30 ansul 10360	1980	East on road across from rccu naptha
10625	20 ansul 10359	1996	East by tan shed
10624	20 ansul 10358	1996	East by tan shed (scba box) naptha
10623	20 abc 10378	2008	South west by tan building naphta

Fire Extinguisher Inspection

Figure 11.8

10623	Monthly	Pass	Good	3/22/2012	20 abc 10378	2008	South west by tan building naphta	yes
10624	Monthly	Pass	Good	3/22/2012	20 ansul 10358	1996	East by tan shed (scba box) naptha	yes
10625	Monthly	Pass	Good	3/22/2012	20 ansul 10359	1996	East by tan shed	yes
10626	Monthly	Pass	Good	3/22/2012	30 ansul 10360	1980	East on road across from rccu naptha	yes
10627	Monthly	Pass	Good	3/22/2012	20 ansul 10361	1996	East on steps naptha	yes
10628	Monthly	Pass	Good	3/22/2012	20 ansul 10362	1996	South east of unit naptha	yes
10629	Monthly	Pass	Good	3/22/2012	20 ansul 10364	1996	Acid tank vapor scrubber 2nd level platform 2	yes
10630	Monthly	Pass	Good	3/22/2012	20 ansul 10363	1996	West of silver tanks on steps naptha	yes
10631	Monthly	Pass	Good	3/22/2012	30 ansul 10365	1981	South of abandoned compressors 2nd level platform 2	yes
10632	Monthly	Pass	Good	3/22/2012	30 ansul 10379	1979	Platform 2 2nd level south	yes
10633	Monthly	Pass	Good	3/22/2012	30 ansul 11202	1982	Northeast platform1	yes
10634	Monthly	Pass	Good	3/22/2012	30 ansul 11201	1982	South center platform1	yes
10635	Monthly	Pass	Good	3/22/2012	20 abc 10635	2008	South center platform1	yes
10636	Monthly	Pass	Good	3/22/2012	20 ansul 11211	1996	By cooling water tubes platform1	Yes
10637	Monthly	Pass	Good	3/22/2012	20 abc 11213	2007	Platform2 up ladder west	yes
10638	Monthly	Pass	Good	3/22/2012	20 ansul 11212	1996	By stabilizer tower	Yes
10639	Monthly	Pass	Good	3/22/2012	20 ansul 11210	1996	By cooling water tubes platform1	yes
10640	Monthly	Pass	Good	3/22/2012	20 ansul 11075	1996	seperater shell	Yes
10689	Monthly	Pass	Good	3/22/2012	20 abc11189	2008	Cooling tower stairs	yes
10691	Monthly	Pass	Good	3/22/2012	20 ansul11191	1994	Generator east roosvelt PSA	yes
10692	Monthly	Pass	Good	3/22/2012	20 ansul11192	1996	Generator east roosvelt PSA	yes
10693	Monthly	Pass	Good	3/22/2012	20 ansul11193	1994	Tail gas northwest PSA compressor	yes
10694	Monthly	Pass	Good	3/22/2012	20 ansul11194	1996	Tail gas southwest PSA compressor	yes
10695	Monthly	Pass	Good	3/22/2012	20 ansul11195	1996	Tail gas center PSA compressor	yes
10696	Monthly	Pass	Good	3/22/2012	20 ansul11198	1994	Tail gas northeast PSA compressor	yes
10697	Monthly	Pass	Good	3/22/2012	20 ansul11196	1997	Tail gas southeast PSA compressor	yes
10698	Monthly	Pass	Good	3/22/2012	20 ansul11197	1996	Tail gas southeast PSA compressor	yes
10699	Monthly	Pass	Good	3/22/2012	20 abc11199	2007	Northwest platform1	yes
10700	Monthly	Pass	Good	3/22/2012	30 ansul11203	1977	Center platform1	yes
10701	Monthly	Pass	Good	3/22/2012	20 ansul11204	1996	Center walkway platform1	yes
10703	Monthly	Pass	Good	3/22/2012	30 ansul11205	1973	Center walkway platform1	Yes

Platform 1/PSA/MCC

10704	Monthly	Pass	Good	3/22/2012	30 ansul11206	1977	Center walkway platform1	yes
10705	Monthly	Pass	Good	3/22/2012	20 abc11208	2008	Up ladder on 3rd level platform1	yes
10706	Monthly	Pass	Good	3/22/2012	30 ansul11207	1988	Pumps behind cooling tower platform1	yes
13253	Monthly	Pass	Good	3/22/2012	30 ansul10356	1981	North in boiler area	yes
13255	Monthly	Pass	Good	3/22/2012	20 ansul10353	1996	South of walkway boiler area	yes
13257	Monthly	Pass	Good	3/22/2012	20 abc10354	2008	South of walkway boiler area	yes
13258	Monthly	Pass	Good	3/22/2012	30 ansul10357	1982	South in boiler area	yes
13259	Monthly	Pass	Good	3/22/2012	20 ansul10374	1997	Under piperack north platform2	yes
13260	Monthly	Pass	Good	3/22/2012	30 ansul10375	1976	By reheater platform2	yes
13261	Monthly	Pass	Good	3/22/2012	20 ansul10371	1996	Under platform 2 walkway	yes
13262	Monthly	Pass	Good	3/22/2012	20 ansul10370	1996	Under platform 2 walkway	yes
13263	Monthly	Pass	Good	3/22/2012	20 ansul10373	1996	Under piperack opening south platform 2	yes
13265	Monthly	Pass	Good	3/22/2012	20ansul11841	1996	snuffing steam 4	yes
13266	Monthly	Pass	Good	3/22/2012	20 abc10369	2007	Under platform 2 walkway	yes
13267	Monthly	Pass	Good	3/22/2012	20 ansul10368	1996	North of abandoned compressors platform 2	yes
13268	Monthly	Pass	Good	3/22/2012	20 ansul10367	1995	North of abandoned compressors platform 2	yes
13269	Monthly	Pass	Good	3/22/2012	20 ansul10366	1996	North of abandoned compressors platform 2	yes
13270	Monthly	Pass	Good	3/22/2012	15CO210380	1995	Transformers sub 101	yes
13271	Monthly	Pass	Good	3/22/2012	15 co2 10381	2001	Transformers sub 101	yes
13272	Monthly	Pass	Good	3/22/2012	15 co2 10382	2001	Transformers sub 101	yes
13273	Monthly	Pass	Good	3/22/2012	15CO210383	1995	Transformers sub 101	yes
13274	Monthly	Pass	Good	3/22/2012	15CO2 10384	1995	Transformers sub 101	yes
13275	Monthly	Pass	Good	3/22/2012	15CO2 10385	1995	Transformers sub 101	yes
13276	Monthly	Pass	Good	3/22/2012	15CO2 10386	1995	Transformers sub 101	yes
13277	Monthly	Pass	Good	3/22/2012	15CO2 10387	1995	Transformers sub 101	yes

13277	Annual	Pass	Good	10/18/2011	15CO2 10387	1995
13276	Annual	Pass	Good	10/18/2011	15CO2 10386	1995
13275	Annual	Pass	Good	10/18/2011	15CO2 10385	1995
13274	Annual	Pass	Good	10/18/2011	15CO2 10384	1995
13273	Annual	Pass	Good	10/18/2011	15CO210383	1995
13272	Annual	Pass	Good	10/18/2011	15 co2 10382	2001
13271	Annual	Pass	Good	10/18/2011	15 co2 10381	2001
13270	Annual	Pass	Good	10/18/2011	15CO210380	1995
13269	Annual	Pass	Good	10/18/2011	20 ansul10366	1996
13268	Annual	Pass	Good	10/18/2011	20 ansul10367	1995
13267	Annual	Pass	Good	10/18/2011	20 ansul10368	1996
13266	Annual	Pass	Good	10/18/2011	20 abc10369	2007
13265	Annual	Pass	Good	10/18/2011	20ansul11841	1996
13263	Annual	Pass	Good	10/18/2011	20 ansul10373	1996
13262	Annual	Pass	Good	10/18/2011	20 ansul10370	1996
13261	Annual	Pass	Good	10/18/2011	20 ansul10371	1996
13260	Annual	Pass	Good	10/18/2011	30 ansul10375	1976
13259	Annual	Pass	Good	10/18/2011	20 ansul10374	1997
13258	Annual	Pass	Good	10/18/2011	30 ansul10357	1982
13257	Annual	Pass	Good	10/18/2011	20 abc10354	2008
13256	Annual	Pass	Good	10/18/2011	20 ansul10352	1996
13255	Annual	Pass	Good	10/18/2011	20 ansul10353	1996
13253	Annual	Pass	Good	10/18/2011	30 ansul10356	1981
10706	Annual	Pass	Good	10/18/2011	30 ansul11207	1988
10705	Annual	Pass	Good	10/18/2011	20 abc11208	2008
10704	Annual	Pass	Good	10/18/2011	30 ansul11206	1977
10703	Annual	Pass	Good	10/18/2011	30 ansul11205	1973
10701	Annual	Pass	Good	10/18/2011	20 ansul11204	1996
10700	Annual	Pass	Good	10/18/2011	30 ansul11203	1977
10699	Annual	Pass	Good	10/18/2011	20 abc11199	2007
10698	Annual	Pass	Good	10/18/2011	20 ansul11197	1996
10697	Annual	Pass	Good	10/18/2011	20 ansul11196	1997
10696	Annual	Fail	Replaced	10/18/2011	20 ansul11198	1994
10695	Annual	Pass	Good	10/18/2011	20 ansul11195	1996
10694	Annual	Pass	Good	10/18/2011	20 ansul11194	1996
10693	Annual	Pass	Good	10/18/2011	20 ansul11193	1994
10692	Annual	Pass	Good	10/18/2011	20 ansul11192	1996
10691	Annual	Pass	Good	10/18/2011	20 ansul11191	1994
10689	Annual	Pass	Good	10/18/2011	20 abc11189	2008
10640	Annual	Pass	Good	10/18/2011	20 ansul 11075	40834
10639	Annual	Pass	Good	10/18/2011	20 ansul 11210	1996
10638	Annual	Pass	Good	10/18/2011	20 ansul 11212	1996
10637	Annual	Pass	Good	10/18/2011	20 abc 11213	2007
10636	Annual	Pass	Good	10/18/2011	20 ansul 11211	1996
10635	Annual	Pass	Good	10/18/2011	20 abc 10635	2008
10634	Annual	Pass	Good	10/18/2011	30 ansul 11201	1982
10633	Annual	Pass	Good	10/18/2011	30 ansul 11202	1982
10632	Annual	Pass	Good	10/18/2011	30 ansul 10379	1979
10631	Annual	Pass	Good	10/18/2011	30 ansul 10365	1981
10630	Annual	Pass	Good	10/18/2011	20 ansul 10363	1996

10629	Annual	Pass	Good	10/18/2011	20 ansul 10364	1996
10628	Annual	Pass	Good	10/18/2011	20 ansul 10362	1996
10626	Annual	Pass	Good	10/18/2011	30 ansul 10360	1980
10625	Annual	Pass	Good	10/18/2011	20 ansul 10359	1996
10624	Annual	Pass	Good	10/18/2011	20 ansul 10358	1996
10623	Annual	Pass	Good	10/18/2011	20 abc 10378	2008

Transformers sub 101	yes
Transformers sub 101	yes
Transformers sub 101	yes
Transformers sub 101	yes
Transformers sub 101	yes
Transformers sub 101	yes
Transformers sub 101	yes
Transformers sub 101	yes
North of abandoned compressors platform 2	yes
North of abandoned compressors platform 2	yes
North of abandoned compressors platform 2	yes
Under platform 2 walkway	yes
snuffing steam 4	yes
Under piperack opening south platform 2	yes
Under platform 2 walkway	yes
Under platform 2 walkway	yes
By reheater platform2	yes
Under piperack north platform2	yes
South in boiler area	yes
South of walkway boiler area	yes
South of saltwater tank walkway boiler area	yes
South of walkway boiler area	yes
North in boiler area	yes
Pumps behind cooling tower platform1	yes
Up ladder on 3rd level platform1	yes
Center walkway platform1	yes
Center walkway platform1	yes
Center walkway platform1	yes
Center platform1	yes
Northwest platform1	yes
Tail gas southeast PSA compressor	yes
Tail gas southeast PSA compressor	yes
Tail gas northeast PSA compressor	yes
Tail gas center PSA compressor	yes
Tail gas southwest PSA compressor	yes
Tail gas northwest PSA compressor	yes
Generator east roosvelt PSA	yes
Generator east roosvelt PSA	yes
Cooling tower stairs	yes
seperater shell	Yes
By cooling water tubes platform1	yes
By stabilizer tower	Yes
Platform2 up ladder west	yes
By cooling water tubes platform1	yes
South center platform1	yes
South center platform1	yes
Northeast platform1	yes
Platform 2 2nd level south	yes
South of abandoned compressors 2nd level platform 2	yes
West of silver tanks on steps naptha	yes

Acid tank vapor scrubber 2nd level platform 2	yes
South east of unit naptha	yes
East on road across from rccu naptha	yes
East by tan shed	yes
East by tan shed (scba box) naptha	yes
South west by tan building naphta	yes

WESTRAIL

11842	20	ansul10171	1999	West Rail
11843	20	abc10173	2007	West Rail
11844	30	ansul10172	1988	West Rail
11845	20	ansul10174	1994	Between train track
11846	20	ansul10175	1996	Between train track
11847	20	ansul10176	1994	West Rail

Fire Extinguisher Inspection
Figure 11.8

11842	Monthly	Pass	Good	3/21/2012	20	ansul10171	1999	West Rail	yes
11843	Monthly	Pass	Good	3/21/2012	20	abc10173	2007	West Rail	yes
11844	Monthly	Pass	Good	3/21/2012	30	ansul10172	1988	West Rail	yes
11845	Monthly	Pass	Good	3/21/2012	20	ansul10174	1994	Between train track	yes
11846	Monthly	Pass	Good	3/21/2012	20	ansul10175	1996	Between train track	yes
11847	Monthly	Pass	Good	3/21/2012	20	ansul10176	1994	West Rail	yes

10170	Monthly	Pass	Good	8/25/2011	350wheel	2004
11842	Annual	Pass	Good	8/25/2011	20 ansul10171	1999
11843	Annual	Pass	Good	8/25/2011	20 abc10173	2007
11844	Annual	Pass	Good	8/25/2011	30 ansul10172	1988
11845	Annual	Pass	Good	8/25/2011	20 ansul10174	1994
11846	Annual	Pass	Good	8/25/2011	20 ansul10175	1996
11847	Annual	Pass	Good	8/25/2011	20 ansul10176	1994

West Rail	yes
West Rail	yes
West Rail	yes
West Rail	yes
Between train track	yes
Between train track	yes
West Rail	yes

DEHEX/DEPROP SOUTHSIDE

10534	20 ansul10389	1971	South west corner ground dehex
10539	30 ansul10392	1973	South east by stairs ground dehex
10608	20 ansul 11222	1979	South by ladder #10 ground deprop
10603	30 ansul 11224	1982	By staircase #11 ground deprop
10503	30 ansul 11230	1982	Southside by sign in box deprop
10531	30 ansul10388	1983	Center walkway west dehex
10609	20 ansul 11221	1994	Middle wesside #3 ground deprop
10675	20 abc10414	2007	North 2nd level step down dehex
10535	20abc10536	2007	
10537	20 abc10390	2007	Nort west corner ground dehex
10538	20 abc10391	2007	North east corner ground dehex
10546	20abc10545	2007	
10502	20abc11231	2008	Southside behind staircase deprp
10602	20 abc 11232	2008	Center by stair deprop
10604	20 abc 11226	2008	2nd level by propane dryer #13 deprop
10605	20 abc 11436	2008	3rd level top of stairs #14 deprop
10606	20 abc 11228	2008	3rd level #15 deprop
10607	20 abc 11229	2008	3rd level #16 deprop
10610	20 abc 11214	2008	South east corner of blue building ground deprop
10611	20 abc 11216	2008	2nd level blue roof #5 deprop
10612	20 abc 11217	2008	2nd level blue roof #6 deprop
10613	20 abc 11219	2008	Up ladder on to of vessel flash drum deprop
10614	20 abc 11218	2008	Up ladder on to of vessel flash drum deprop
10615	20 abc 11225	2008	By pumps ground deprop
10616	20 abc 10408	2008	South walkway blowdown drum dehex
10617	20 abc 11220	2008	Corner westsid #1 ground deprop
10618	20 abc 10403	2008	South end of water wash drum dehex
10619	20 abc 10406	2008	South end of burm #64 ground dehex
10620	20 abc 11233	2008	By motors center alley deprop
10621	20 abc 11223	2008	Up ladder propane dryer platform deprop
10622	10 ABC 11247	2008	Propane storage south of unit
13344	20 abc11234	2008	2nd level butane #22 deprop
13345	20 abc11235	2008	2nd level butane #23 deprop
13346	20 abc11236	2008	2nd level butane #24 deprop
13348	20 abc11238	2008	3rd level butane #26 deprop
13349	20 abc11239	2008	3rd level butane #27 deprop
13350	20 abc11240	2008	4th level butane #28 deprop
13351	20 abc11241	2008	4th level butane #29 deprop
13353	20 abc10413	2008	North 2nd level #70 dehex
13352	20 abc10418	2008	Southend of 2nd level dehex
10674	20 abc10417	2008	North 2nd level step down dehex
10676	20 abc10415	2008	Middle 2nd level step down dehex
10677	20 abc10416	2008	South 2nd lvel step down by ladder dehex
10678	20 abc10419	2008	North east 3rd level dehex
10679	20 abc10421	2008	North 3rd level dehex
10680	20 abc10422	2008	South west 3rd level dehex
10681	20 abc10420	2008	South east 3rd level dehex

DEHEX/DEPROP SOUTHSIDE

10682	20 abc10411	2008	East end #68 dehex
10683	20 abc10410	2008	North end by #67 dehex
10685	20 abc10404	2008	North end inside burm ground dehex
10686	20 abc10405	2008	Middle inside burm ground dehex
10687	20abc10409	2008	Between blowdown drum dehex
10688	20 abc10412	2008	Southeast #69 dehex
10529	20 abc10402	2008	South walkway by breaker group dehex
10530	20 abc11242	2008	By monitor on center alley deprop
10532	20 abc11246	2008	Up ladder next to road #39 deprop
10533	20 abc11245	2008	Up ladder next to road #40 deprop
10540	20 abc10393	2008	South east of 2nd level by stairs dehex
10541	20 abc10394	2008	2nd level dehex
10542	20 abc10395	2008	2nd level by ladder dehex
10543	20 abc10396	2008	3rd level dehex
10544	20 abc10397	2008	3rd level dehex
10547	20 abc10398	2008	4th level dehex
10548	20 abc10400	2008	4th level dehex
10549	20 abc10401	2008	4th level dehex
10550	20 abc10399	2008	4th level dehex
10551	20 abc10423	2008	Fin fan deck north dehex
10552	20 abc10424	2008	Fin fan deck south dehex

Fire Extinguisher Inspection
Figure 11.8

10502	Monthly	Pass	Good	3/23/2012	20abc11231	2008	Southside behind staircase deprp	yes
10503	Monthly	Pass	Good	3/23/2012	30 ansul 11230	1982	Southside by sign in box deprop	yes
10529	Monthly	Pass	Good	3/23/2012	20 abc10402	2008	South walkway by breaker group dehex	yes
10530	Monthly	Pass	Good	3/23/2012	20 abc11242	2008	By monitor on center alley deprop	yes
10531	Monthly	Pass	Good	3/23/2012	30 ansul10388	1983	Center walkway west dehex	yes
10532	Monthly	Pass	Good	3/23/2012	20 abc11246	2008	Up ladder next to road #39 deprop	yes
10533	Monthly	Pass	Good	3/23/2012	20 abc11245	2008	Up ladder next to road #40 deprop	yes
10534	Monthly	Pass	Good	3/23/2012	20 ansul10389	1971	South west corner ground dehex	yes
10535	Monthly	Pass	Good	3/23/2012	20abc10536	2007		Yes
10537	Monthly	Pass	Good	3/23/2012	20 abc10390	2007	Nort west corner ground dehex	yes
10538	Monthly	Pass	Good	3/23/2012	20 abc10391	2007	North east corner ground dehex	yes
10539	Monthly	Pass	Good	3/23/2012	30 ansul10392	1973	South east by stairs ground dehex	yes
10540	Monthly	Pass	Good	3/23/2012	20 abc10393	2008	South east of 2nd level by stairs dehex	yes
10541	Monthly	Pass	Good	3/23/2012	20 abc10394	2008	2nd level dehex	yes
10542	Monthly	Pass	Good	3/23/2012	20 abc10395	2008	2nd level by ladder dehex	yes
10543	Monthly	Pass	Good	3/23/2012	20 abc10396	2008	3rd level dehex	yes
10544	Monthly	Pass	Good	3/23/2012	20 abc10397	2008	3rd level dehex	yes
10546	Monthly	Pass	Good	3/23/2012	20abc10545	2007		Yes
10547	Monthly	Pass	Good	3/23/2012	20 abc10398	2008	4th level dehex	yes
10548	Monthly	Pass	Good	3/23/2012	20 abc10400	2008	4th level dehex	yes
10549	Monthly	Pass	Good	3/23/2012	20 abc10401	2008	4th level dehex	yes

Dehex Dprop Southside Check List

10550	Monthly	Pass	Good	3/23/2012	20 abc10399	2008	4th level dehex	yes
10551	Monthly	Pass	Good	3/23/2012	20 abc10423	2008	Fin fan deck north dehex	yes
10552	Monthly	Pass	Good	3/23/2012	20 abc10424	2008	Fin fan deck south dehex	yes
10602	Monthly	Pass	Good	3/23/2012	20 abc 11232	2008	Center by stair deprop	yes
10603	Monthly	Pass	Good	3/23/2012	30 ansul 11224	1982	By staircase #11 ground deprop	yes
10604	Monthly	Pass	Good	3/23/2012	20 abc 11226	2008	2nd level by propane dryer #13 deprop	yes
10605	Monthly	Pass	Good	3/23/2012	20 abc 11436	2008	3rd level top of stairs #14 deprop	yes
10606	Monthly	Pass	Good	3/23/2012	20 abc 11228	2008	3rd level #15 deprop	yes
10607	Monthly	Pass	Good	3/23/2012	20 abc 11229	2008	3rd level #16 deprop	yes
10608	Monthly	Pass	Good	3/23/2012	20 ansul 11222	1979	South by ladder #10 ground deprop	yes
10609	Monthly	Pass	Good	3/23/2012	20 ansul 11221	1994	Middle wesside #3 ground deprop	yes
10610	Monthly	Pass	Good	3/23/2012	20 abc 11214	2008	South east corner of blue building ground d	yes
10611	Monthly	Pass	Good	3/23/2012	20 abc 11216	2008	2nd level blue roof #5 deprop	yes
10612	Monthly	Pass	Good	3/23/2012	20 abc 11217	2008	2nd level blue roof #6 deprop	yes
10613	Monthly	Pass	Good	3/23/2012	20 abc 11219	2008	Up ladder on to of vessel flash drum depro	yes
10614	Monthly	Pass	Good	3/23/2012	20 abc 11218	2008	Up ladder on to of vessel flash drum depro	yes
10615	Monthly	Pass	Good	3/23/2012	20 abc 11225	2008	By pumps ground deprop	yes
10616	Monthly	Pass	Good	3/23/2012	20 abc 10408	2008	South walkway blowdown drum dehex	yes
10617	Monthly	Pass	Good	3/23/2012	20 abc 11220	2008	Corner westsid #1 ground deprop	yes
10618	Monthly	Pass	Good	3/23/2012	20 abc 10403	2008	South end of water wash drum dehex	yes
10619	Monthly	Pass	Good	3/23/2012	20 abc 10406	2008	South end of burm #64 ground dehex	yes
10620	Monthly	Pass	Good	3/23/2012	20 abc 11233	2008	By motors center alley deprop	yes
10621	Monthly	Pass	Good	3/23/2012	20 abc 11223	2008	Up ladder propane dryer platform deprop	yes
10622	Monthly	Pass	Good	3/23/2012	10 ABC 11247	2008	Propane storage south of unit	yes

Dehex Dprop Southside Check List

10674	Monthly	Pass	Good	3/23/2012	20 abc10417	2008	North 2nd level step down dehex	yes
10675	Monthly	Pass	Good	3/23/2012	20 abc10414	2007	North 2nd level step down dehex	yes
10676	Monthly	Pass	Good	3/23/2012	20 abc10415	2008	Middle 2nd level step down dehex	yes
10677	Monthly	Pass	Good	3/23/2012	20 abc10416	2008	South 2nd lvel step down by ladder dehex	yes
10678	Monthly	Pass	Good	3/23/2012	20 abc10419	2008	North east 3rd level dehex	yes
10679	Monthly	Pass	Good	3/23/2012	20 abc10421	2008	North 3rd level dehex	yes
10680	Monthly	Pass	Good	3/23/2012	20 abc10422	2008	South west 3rd level dehex	yes
10681	Monthly	Pass	Good	3/23/2012	20 abc10420	2008	South east 3rd level dehex	yes
10682	Monthly	Pass	Good	3/23/2012	20 abc10411	2008	East end #68 dehex	yes
10683	Monthly	Pass	Good	3/23/2012	20 abc10410	2008	North end by #67 dehex	yes
10685	Monthly	Pass	Good	3/23/2012	20 abc10404	2008	North end inside burm ground dehex	yes
10686	Monthly	Pass	Good	3/23/2012	20 abc10405	2008	Middle inside burm ground dehex	yes
10687	Monthly	Pass	Good	3/23/2012	20abc10409	2008	Between blowdown drum dehex	yes
10688	Monthly	Pass	Good	3/23/2012	20 abc10412	2008	Southeast #69 dehex	yes
13344	Monthly	Pass	Good	3/23/2012	20 abc11234	2008	2nd level butane #22 deprop	yes
13345	Monthly	Pass	Good	3/23/2012	20 abc11235	2008	2nd level butane #23 deprop	yes
13346	Monthly	Pass	Good	3/23/2012	20 abc11236	2008	2nd level butane #24 deprop	yes
13348	Monthly	Pass	Good	3/23/2012	20 abc11238	2008	3rd level butane #26 deprop	yes
13349	Monthly	Pass	Good	3/23/2012	20 abc11239	2008	3rd level butane #27 deprop	yes
13350	Monthly	Pass	Good	3/23/2012	20 abc11240	2008	4th level butane #28 deprop	yes
13351	Monthly	Pass	Good	3/23/2012	20 abc11241	2008	4th level butane #29 deprop	yes
13352	Monthly	Pass	Good	3/23/2012	20 abc10418	2008	Southend of 2nd level dehex	yes
13353	Monthly	Pass	Good	3/23/2012	20 abc10413	2008	North 2nd level #70 dehex	yes

10503	Annual	Pass	Good	10/17/2011	30 ansul 11230	1982
13344	Annual	Pass	Good	10/17/2011	20 abc11234	2008
13345	Annual	Pass	Good	10/17/2011	20 abc11235	2008
13346	Annual	Pass	Good	10/17/2011	20 abc11236	2008
13347	Annual	Pass	Good	10/17/2011		
13348	Annual	Pass	Good	10/17/2011	20 abc11238	2008
13349	Annual	Pass	Good	10/17/2011	20 abc11239	2008
13350	Annual	Pass	Good	10/17/2011	20 abc11240	2008
13351	Annual	Pass	Good	10/17/2011	20 abc11241	2008
13353	Annual	Pass	Good	10/17/2011	20 abc10413	2008
13352	Annual	Pass	Good	10/17/2011	20 abc10418	2008
10674	Annual	Pass	Good	10/17/2011	20 abc10417	2008
10675	Annual	Pass	Good	10/17/2011	20 abc10414	2007
10676	Annual	Pass	Good	10/17/2011	20 abc10415	2008
10677	Annual	Pass	Good	10/17/2011	20 abc10416	2008
10678	Annual	Pass	Good	10/17/2011	20 abc10419	2008
10679	Annual	Pass	Good	10/17/2011	20 abc10421	2008
10680	Annual	Pass	Good	10/17/2011	20 abc10422	2008
10681	Annual	Pass	Good	10/17/2011	20 abc10420	2008
10682	Annual	Pass	Good	10/17/2011	20 abc10411	2008
10683	Annual	Pass	Good	10/17/2011	20 abc10410	2008
10685	Annual	Pass	Good	10/17/2011	20 abc10404	2008
10686	Annual	Pass	Good	10/17/2011	20 abc10405	2008
10687	Annual	Pass	Good	10/17/2011	20abc10409	2008
10688	Annual	Pass	Good	10/17/2011	20 abc10412	2008
10620	Annual	Pass	Good	10/17/2011	20 abc 11233	2008
10621	Annual	Pass	Good	10/17/2011	20 abc 11223	2008
10622	Annual	Pass	Good	10/17/2011	10 ABC 11247	2008
10502	Annual	Pass	Good	10/17/2011	20abc11231	2008
10602	Annual	Pass	Good	10/17/2011	20 abc 11232	2008
10603	Annual	Pass	Good	10/17/2011	30 ansul 11224	1982
10604	Annual	Pass	Good	10/17/2011	20 abc 11226	2008
10605	Annual	Pass	Good	10/17/2011	20 abc 11436	2008
10606	Annual	Pass	Good	10/17/2011	20 abc 11228	2008
10607	Annual	Pass	Good	10/17/2011	20 abc 11229	2008
10608	Annual	Pass	Good	10/17/2011	20 ansul 11222	1979
10609	Annual	Pass	Good	10/17/2011	20 ansul 11221	1994
10610	Annual	Pass	Good	10/17/2011	20 abc 11214	2008
10611	Annual	Pass	Good	10/17/2011	20 abc 11216	2008
10612	Annual	Pass	Good	10/17/2011	20 abc 11217	2008
10613	Annual	Pass	Good	10/17/2011	20 abc 11219	2008
10614	Annual	Pass	Good	10/17/2011	20 abc 11218	2008
10615	Annual	Pass	Good	10/17/2011	20 abc 11225	2008
10616	Annual	Pass	Good	10/17/2011	20 abc 10408	2008
10617	Annual	Pass	Good	10/17/2011	20 abc 11220	2008
10618	Annual	Pass	Good	10/17/2011	20 abc 10403	2008
10619	Annual	Pass	Good	10/17/2011	20 abc 10406	2008
10529	Annual	Pass	Good	10/17/2011	20 abc10402	2008
10530	Annual	Pass	Good	10/17/2011	20 abc11242	2008
10531	Annual	Pass	Good	10/17/2011	30 ansul10388	1983

10532	Annual	Pass	Good	10/17/2011	20 abc11246	2008
10533	Annual	Pass	Good	10/17/2011	20 abc11245	2008
10534	Annual	Pass	Good	10/17/2011	20 ansul10389	1971
10535	Annual	Pass	Good	10/17/2011	20abc10536	2008
10537	Annual	Pass	Good	10/17/2011	20 abc10390	2007
10538	Annual	Pass	Good	10/17/2011	20 abc10391	2007
10539	Annual	Pass	Good	10/17/2011	30 ansul10392	1973
10540	Annual	Pass	Good	10/17/2011	20 abc10393	2008
10541	Annual	Pass	Good	10/17/2011	20 abc10394	2008
10542	Annual	Pass	Good	10/17/2011	20 abc10395	2008
10543	Annual	Pass	Good	10/17/2011	20 abc10396	2008
10544	Annual	Pass	Good	10/17/2011	20 abc10397	2008
10546	Annual	Pass	Good	10/17/2011	20abc10545	40833
10547	Annual	Pass	Good	10/17/2011	20 abc10398	2008
10548	Annual	Pass	Good	10/17/2011	20 abc10400	2008
10549	Annual	Pass	Good	10/17/2011	20 abc10401	2008
10550	Annual	Pass	Good	10/17/2011	20 abc10399	2008
10551	Annual	Pass	Good	10/17/2011	20 abc10423	2008
10552	Annual	Pass	Good	10/17/2011	20 abc10424	2008

Southside by sign in box deprop	yes
2nd level butane #22 deprop	yes
2nd level butane #23 deprop	yes
2nd level butane #24 deprop	yes
3rd level butane #26 deprop	yes
3rd level butane #27 deprop	yes
4th level butane #28 deprop	yes
4th level butane #29 deprop	yes
North 2nd level #70 dehex	yes
Southend of 2nd level dehex	yes
North 2nd level step down dehex	yes
North 2nd level step down dehex	yes
Middle 2nd level step down dehex	yes
South 2nd lvel step down by ladder dehex	yes
North east 3rd level dehex	yes
North 3rd level dehex	yes
South west 3rd level dehex	yes
South east 3rd level dehex	yes
East end #68 dehex	yes
North end by #67 dehex	yes
North end inside burm ground dehex	yes
Middle inside burm ground dehex	yes
Between blowdown drum dehex	yes
Southeast #69 dehex	yes
By motors center alley deprop	yes
Up ladder propane dryer platform deprop	yes
Propane storage south of unit	yes
Southside behind staircase deprp	yes
Center by stair deprop	yes
By staircase #11 ground deprop	yes
2nd level by propane dryer #13 deprop	yes
3rd level top of stairs #14 deprop	yes
3rd level #15 deprop	yes
3rd level #16 deprop	yes
South by ladder #10 ground deprop	yes
Middle wesside #3 ground deprop	yes
South east corner of blue building ground deprop	yes
2nd level blue roof #5 deprop	yes
2nd level blue roof #6 deprop	yes
Up ladder on to of vessel flash drum deprop	yes
Up ladder on to of vessel flash drum deprop	yes
By pumps ground deprop	yes
South walkway blowdown drum dehex	yes
Corner westsid #1 ground deprop	yes
South end of water wash drum dehex	yes
South end of burm #64 ground dehex	yes
South walkway by breaker group dehex	yes
By monitor on center alley deprop	yes
Center walkway west dehex	yes

Up ladder next to road #39 deprop	yes
Up ladder next to road #40 deprop	yes
South west corner ground dehex	yes
	Yes
Nort west corner ground dehex	yes
North east corner ground dehex	yes
South east by stairs ground dehex	yes
South east of 2nd level by stairs dehex	yes
2nd level dehex	yes
2nd level by ladder dehex	yes
3rd level dehex	yes
3rd level dehex	yes
3rd level dehex	Yes
4th level dehex	yes
4th level dehex	yes
4th level dehex	yes
4th level dehex	yes
Fin fan deck north dehex	yes
Fin fan deck south dehex	yes

PENEX/RCCU

11252	20	abc11252	2008	Ground level corner by holding tank #15 mericat
10577	20	abc10425	2009	Pole by job box penex
10504	20	abc11251	2007	Ground level surge drum mericat #11
10505	20	ansul11250	1996	2nd ladder surge drum mericat
10506	20	ansul10506	1996	First ladder across from job box mericat
10509	20	abc11252	2008	Ground level corner by holding tank #15 mericat
10510	20	abc11253	2008	Ground level by net gas KOPV 3002 #10 mericat
10511	30	ansul11422	1989	top of stairs mericat new section
10512	20	abc11254	2008	Across from primary isom rx feed #1 mericat
10513	20	abc11255	2007	On westside corner #2
10514	20	ansul11256	1996	Up ladder westside back of unit 2nd level mericat
10515	20	ansul11257	1996	Up ladder westside back of unit 2nd level mericat
10516	20	abc10443	2008	Compressor penex
10517	20	abc10452	2008	Eastside by ladder RCCU
10518	20	abc10449	2008	Northeast corner RCCU
10519	20	abc10448	2008	Northside of RCCU
10520	20	abc10450	2008	Middle by eyewash staition RCCU
10521	20	ansul10451	1996	Middle by bolier pipe RCCU
10522	20	11511	2009	On pole on main road of RCCU
10523	20	ansul10453	1997	Walkway eastside RCCU
10524	20	abc10455	2008	Walkway eastside gascon #13
10525	20	abc11283	2008	RCCU by monitor and pumps
10526	20	ansul11282	1996	RCCU by pumps
10599	20	abc11277	2008	RCCU by pumps
10527	20	abc11278	2008	RCCU behind staircase primary absorber
10528	20	abc11279	2008	RCCU by staircase
13323	20	ansul11263	1996	Down ladder 2nd level north side mericat
11281	20	ansul11281	1996	RCCU 3rd level
13317	20	ansul10429	1996	3rd level over job box penex
13318	20	ansul10428	1996	3rd level over job box penex
13319	20	ansul10426	1996	2nd level over job box penex
13320	20	ansul10427	1996	2nd level over job box penex
13321	20	ansul10436	1996	East top platform penex
13322	20	ansul10437	1996	West top platform penex
13324	20	ansul11262	1996	3rd level top catwalk northside
13325	20	ansul11261	1996	Next ladder 3rd level top cat walk mericat
13326	20	ansul11260	1996	Up ladder by #10 2nd level mericat
13327	30	ansul11271	1976	Belco by tank 21
13328	20	abc11267	2008	Belco by tank 21 #6
13329	20	abc11266	2008	Belco top of stair Mcc room outside
13330	20	abc11264	2008	Belco east corner #5
13331	20	abc11265	2008	Belco south corner #4
13332	20	ansul11269	1997	Belco by staircase tank 21 #3
13333	20	abc 11268	2007	Belco staircase to tank 21 #7
13334	20	abc11270	2008	Belco by tank 21 #2
13335	20	abc10501	2007	Middle section up stairs flare stack
13336	20	abc11272	2008	Belco by flare stack

PENEX/RCCU

13337	20ansul13338	1996	up ladder belco
13339	20 abc11284	2008	RCCU southend corner
13341	20 abc11276	2008	RCCU by sign in box
13340	20 abc11275	2008	RCCU southend by mcc room
13342	20 abc11273	2007	RCCU southend corner
10600	20 abc11274	2008	RCCU behind job box
13343	20 ansul11280	1996	RCCU 2nd level
10578	20 ansul 10445	1999	On top of sumpdrum east of job box
10579	20 bc 11510	########	
10580	20 ansul 10430	1996	Feed driver 2nd level platform penex
10581	20 ansul 10431	1996	Feed driver 3rd level platform penex
10582	20 abc 11259	2008	Middle of unit #8 mericat
10583	20 abc 10433	2008	Pole #16 penex
10584	20 abc 10435	2008	North east behind job box #13 penex
10585	20 abc 10434	2008	Pole #12 penex
10586	20 abc 10438	2008	Westside walkway #6 by eyewash penex
10587	20 abc 10444	2008	North under pipe rack
10588	20 abc 10442	2008	By naptha absorber #4 penex
10589	20 abc 10439	2008	Westside walkway middle #7 penex
10590	20 abc 10441	2008	West end #3 penex
10591	20 ansul 10457	1996	East by stairs gascon #3 2nd level RCCU
10592	30 ansul 10458	1983	North by ladder gascon #4 2nd level RCCU
10593	20 ansul 10459	1996	East stairs gascon #7 3rd level RCCU
10594	30 ansul 10460	1988	North by ladder gascon #8 3rd level RCCU
10595	20 ansul 10461	1996	East by stairs gascon #10 4thlevel RCCU
10596	20 ansul 10462	1996	North by ladder gascon #11 4th level RCCU
10597	20 ansul 10456	1993	West of RCCU
10598	30 ansul 10463	1979	East by stripper reboiler grond RCCU

Fire Extinguisher Inspection
Figure 11.8

10504	Monthly	Pass	Good	3/23/2012	20 abc11251	2007	Ground level surge drum mericat #11	yes
10505	Monthly	Pass	Good	3/23/2012	20 ansul11250	1996	2nd ladder surge drum mericat	yes
10506	Monthly	Pass	Good	3/23/2012	20ansul10506	1996	First ladder across from job box mericat	yes
10509	Monthly	Pass	Good	3/23/2012	20 abc11252	2008	Ground level corner by holding tank #15 mericat	yes
10510	Monthly	Pass	Good	3/23/2012	20 abc11253	2008	Ground level by net gas KOPV 3002 #10 mericat	yes
10511	Monthly	Pass	Good	3/23/2012	30 ansul11422	1989	top of stairs mericat new section	yes
10512	Monthly	Pass	Good	3/23/2012	20 abc11254	2008	Across from primary isom rx feed #1 mericat	yes
10513	Monthly	Pass	Good	3/23/2012	20 abc11255	2007	On westside corner #2	yes
10514	Monthly	Pass	Good	3/23/2012	20 ansul11256	1996	Up ladder westside back of unit 2nd level mericat	yes
10515	Monthly	Pass	Good	3/23/2012	20 ansul11257	1996	Up ladder westside back of unit 2nd level mericat	yes
10516	Monthly	Pass	Good	3/23/2012	20 abc10443	2008	Compressor penex	yes
10517	Monthly	Pass	Good	3/23/2012	20 abc10452	2008	Eastside by ladder RCCU	yes
10518	Monthly	Pass	Good	3/23/2012	20 abc10449	2008	Northeast corner RCCU	yes
10519	Monthly	Pass	Good	3/23/2012	20abc10448	2008	Northside of RCCU	yes
10520	Monthly	Pass	Good	3/23/2012	20 abc10450	2008	Middle by eyewash staition RCCU	yes
10521	Monthly	Pass	Good	3/23/2012	20 ansul10451	1996	Middle by bolier pipe RCCU	yes
10522	Monthly	Pass	Good	3/23/2012	20 11511	2009	On pole on main road of RCCU	yes
10523	Monthly	Pass	Good	3/23/2012	20 ansul10453	1997	Walkway eastside RCCU	yes
10524	Monthly	Pass	Good	3/23/2012	20 abc10455	2008	Walkway eastside gascon #13	yes
10525	Monthly	Pass	Good	3/23/2012	20 abc11283	2008	RCCU by monitor and pumps	yes
10526	Monthly	Pass	Good	3/23/2012	20 ansul11282	1996	RCCU by pumps	yes
10527	Monthly	Pass	Good	3/23/2012	20 abc11278	2008	RCCU behind staircase primary absorber	Yes
10528	Monthly	Pass	Good	3/23/2012	20 abc11279	2008	RCCU by staircase	Yes
10577	Monthly	Pass	Good	3/23/2012	20 abc10425	2009	Pole by job box penex	yes
10578	Monthly	Pass	Good	3/23/2012	20 ansul 10445	1999	On top of sumpdrum east of job box	yes
10581	Monthly	Pass	Good	3/23/2012	20 ansul 10431	1996	Feed driver 3rd level platform penex	yes
10582	Monthly	Pass	Good	3/23/2012	20 abc 11259	2008	Middle of unit #8 mericat	yes
10583	Monthly	Pass	Good	3/23/2012	20 abc 10433	2008	Pole #16 penex	yes
10584	Monthly	Pass	Good	3/23/2012	20 abc 10435	2008	North east behind job box #13 penex	yes
10585	Monthly	Pass	Good	3/23/2012	20 abc 10434	2008	Pole #12 penex	yes
10586	Monthly	Pass	Good	3/23/2012	20 abc 10438	2008	Westside walkway #6 by eyewash penex	yes
10587	Monthly	Pass	Good	3/23/2012	20 abc 10444	2008	North under pipe rack	yes
10588	Monthly	Pass	Good	3/23/2012	20 abc 10442	2008	By naptha absorber #4 penex	Yes
10589	Monthly	Pass	Good	3/23/2012	20 abc 10439	2008	Westside walkway middle #7 penex	yes
10590	Monthly	Pass	Good	3/23/2012	20 abc 10441	2008	West end #3 penex	yes

Pennex RCCU Check List

10591	Monthly	Pass	Good	3/23/2012	20 ansul 10457	1996	East by stairs gascon #3 2nd level RCCU	yes
10592	Monthly	Pass	Good	3/23/2012	30 ansul 10458	1983	North by ladder gascon #4 2nd level RCCU	yes
10593	Monthly	Pass	Good	3/23/2012	20 ansul 10459	1996	East stairs gascon #7 3rd level RCCU	yes
10594	Monthly	Pass	Good	3/23/2012	30 ansul 10460	1988	North by ladder gascon #8 3rd level RCCU	yes
10595	Monthly	Pass	Good	3/23/2012	20 ansul 10461	1996	East by stairs gascon #10 4thlevel RCCU	yes
10596	Monthly	Pass	Good	3/23/2012	20 ansul 10462	1996	North by ladder gascon #11 4th level RCCU	yes
10597	Monthly	Pass	Good	3/23/2012	20 ansul 10456	1993	West of RCCU	yes
10598	Monthly	Pass	Good	3/23/2012	30 ansul 10463	1979	East by stripper reboiler grond RCCU	yes
10599	Monthly	Pass	Good	3/23/2012	20 abc11277	2008	RCCU by pumps	yes
10600	Monthly	Pass	Good	3/23/2012	20 abc11274	2008	RCCU behind job box	yes
10601	Monthly	Pass	Good	3/23/2012	20 bc 11281	1996	top ldvel	Yes
13317	Monthly	Pass	Good	3/23/2012	20 ansul10429	1996	3rd level over job box penex	yes
13318	Monthly	Pass	Good	3/23/2012	20 ansul10428	1996	3rd level over job box penex	yes
13319	Monthly	Pass	Good	3/23/2012	20 ansul10426	1996	2nd level over job box penex	yes
13320	Monthly	Pass	Good	3/23/2012	20 ansul10427	1996	2nd level over job box penex	yes
13321	Monthly	Pass	Good	3/23/2012	20 ansul10436	1996	East top platform penex	yes
13322	Monthly	Pass	Good	3/23/2012	20 ansul10437	1996	West top platform penex	yes
13323	Monthly	Pass	Good	3/23/2012	20 ansul11263	1996	Down ladder 2nd level north side mericat	yes
13324	Monthly	Pass	Good	3/23/2012	20 ansul11262	1996	3rd level top catwalk northside	yes
13325	Monthly	Pass	Good	3/23/2012	20 ansul11261	1996	Next ladder 3rd level top cat walk mericat	yes
13326	Monthly	Pass	Good	3/23/2012	20 ansul11260	1996	Up ladder by #10 2nd level mericat	yes
13327	Monthly	Pass	Good	3/23/2012	30 ansul11271	1976	Belco by tank 21	yes
13328	Monthly	Pass	Good	3/23/2012	20 abc11267	2008	Belco by tank 21 #6	yes
13329	Monthly	Pass	Good	3/23/2012	20 abc11266	2008	Belco top of stair Mcc room outside	yes
13330	Monthly	Pass	Good	3/23/2012	20 abc11264	2008	Belco east corner #5	yes
13331	Monthly	Pass	Good	3/23/2012	20 abc11265	2008	Belco south corner #4	yes
13332	Monthly	Pass	Good	3/23/2012	20 ansul11269	1997	Belco by staircase tank 21 #3	yes
13333	Monthly	Pass	Good	3/23/2012	20 abc 11268	2007	Belco staircase to tank 21 #7	yes
13334	Monthly	Pass	Good	3/23/2012	20 abc11270	2008	Belco by tank 21 #2	yes
13335	Monthly	Pass	Good	3/23/2012	20 abc10501	2007	Middle section up stairs flare stack	yes
13336	Monthly	Pass	Good	3/23/2012	20 abc11272	2008	Belco by flare stack	yes
13337	Monthly	Pass	Good	3/23/2012	20ansul13338	1996	up ladder belco	Yes
13339	Monthly	Pass	Good	3/23/2012	20 abc11284	2008	RCCU southend corner	yes
13340	Monthly	Pass	Good	3/23/2012	20 abc11275	2008	RCCU southend by mcc room	yes
13341	Monthly	Pass	Good	3/23/2012	20 abc11276	2008	RCCU by sign in box	yes
13342	Monthly	Pass	Good	3/23/2012	20 abc11273	2007	RCCU southend corner	yes
13343	Monthly	Pass	Good	3/23/2012	20 ansul11280	1996	RCCU 2nd level	yes
13386	Monthly	Pass	Good	3/23/2012	20 abc 10446	2007	api 1	Yes

10577	Annual	Pass	Good	10/17/2011	20 abc10425	2009
10504	Annual	Pass	Good	10/17/2011	20 abc11251	2007
10505	Annual	Pass	Good	10/17/2011	20 ansul11250	1996
10506	Annual	Pass	Good	10/17/2011	20ansul10506	1996
10509	Annual	Pass	Good	10/17/2011	20abc11252	2008
10510	Annual	Pass	Good	10/17/2011	20 abc11253	2008
10511	Annual	Pass	Good	10/17/2011	30 ansul11422	1989
10512	Annual	Pass	Good	10/17/2011	20 abc11254	2008
10513	Annual	Pass	Good	10/17/2011	20 abc11255	2007
10514	Annual	Pass	Good	10/17/2011	20 ansul11256	1996
10515	Annual	Pass	Good	10/17/2011	20 ansul11257	1996
10516	Annual	Pass	Good	10/17/2011	20 abc10443	2008
10517	Annual	Pass	Good	10/17/2011	20 abc10452	2008
10518	Annual	Pass	Good	10/17/2011	20 abc10449	2008
10519	Annual	Pass	Good	10/17/2011	20abc10448	2008
10520	Annual	Pass	Good	10/17/2011	20 abc10450	2008
10521	Annual	Pass	Good	10/17/2011	20 ansul10451	1996
10522	Annual	Pass	Good	10/17/2011	20 11511	2009
10523	Annual	Pass	Good	10/17/2011	20 ansul10453	1997
10524	Annual	Pass	Good	10/17/2011	20 abc10455	2008
10525	Annual	Pass	Good	10/17/2011	20 abc11283	2008
10526	Annual	Pass	Good	10/17/2011	20 ansul11282	1996
10599	Annual	Pass	Good	10/17/2011	20 abc11277	2008
10527	Annual	Pass	Good	10/17/2011	20 abc11278	2008
10528	Annual	Pass	Good	10/17/2011	20 abc11279	2008
13317	Annual	Pass	Good	10/17/2011	20 ansul10429	1996
13318	Annual	Pass	Good	10/17/2011	20 ansul10428	1996
13319	Annual	Pass	Good	10/17/2011	20 ansul10426	1996
13320	Annual	Pass	Good	10/17/2011	20 ansul10427	1996
13321	Annual	Pass	Good	10/17/2011	20 ansul10436	1996
13322	Annual	Pass	Good	10/17/2011	20 ansul10437	1996
13323	Annual	Pass	Good	10/17/2011	20 ansul11263	1996
13324	Annual	Pass	Good	10/17/2011	20 ansul11262	1996
13325	Annual	Pass	Good	10/17/2011	20 ansul11261	1996
13326	Annual	Pass	Good	10/17/2011	20 ansul11260	1996
13327	Annual	Pass	Good	10/17/2011	30 ansul11271	1976
13328	Annual	Pass	Good	10/17/2011	20 abc11267	2008
13329	Annual	Pass	Good	10/17/2011	20 abc11266	2008
13330	Annual	Pass	Good	10/17/2011	20 abc11264	2008
13331	Annual	Pass	Good	10/17/2011	20 abc11265	2008
13332	Annual	Pass	Good	10/17/2011	20 ansul11269	1997
13333	Annual	Pass	Good	10/17/2011	20 abc 11268	2007
13334	Annual	Pass	Good	10/17/2011	20 abc11270	2008
13335	Annual	Pass	Good	10/17/2011	20 abc10501	2007
13336	Annual	Pass	Good	10/17/2011	20 abc11272	2008
13337	Annual	Pass	Good	10/17/2011	20ansul13338	1996
13339	Annual	Pass	Good	10/17/2011	20 abc11284	2008
13341	Annual	Pass	Good	10/17/2011	20 abc11276	2008
13340	Annual	Pass	Good	10/17/2011	20 abc11275	2008
13342	Annual	Pass	Good	10/17/2011	20 abc11273	2007

10600	Annual	Pass	Good	10/17/2011	20 abc11274	2008
13343	Annual	Pass	Good	10/17/2011	20 ansul11280	1996
11281	Annual	Pass	Good	10/17/2011	20ansul11281	1996
10578	Annual	Pass	Good	10/17/2011	20 ansul 10445	1999
10579	Annual	Pass	Good	10/17/2011	20 bc 11510	########
10432	Annual	Pass	Good	10/17/2011	350wheel	2010
10580	Annual	Pass	Good	10/17/2011	20 ansul 10430	1996
10581	Annual	Pass	Good	10/17/2011	20 ansul 10431	1996
10582	Annual	Pass	Good	10/17/2011	20 abc 11259	2008
10583	Annual	Pass	Good	10/17/2011	20 abc 10433	2008
10584	Annual	Pass	Good	10/17/2011	20 abc 10435	2008
10585	Annual	Pass	Good	10/17/2011	20 abc 10434	2008
10586	Annual	Pass	Good	10/17/2011	20 abc 10438	2008
10587	Annual	Pass	Good	10/17/2011	20 abc 10444	2008
10588	Annual	Pass	Good	10/17/2011	20 abc 10442	2008
10589	Annual	Pass	Good	10/17/2011	20 abc 10439	2008
10590	Annual	Pass	Good	10/17/2011	20 abc 10441	2008
10591	Annual	Pass	Good	10/17/2011	20 ansul 10457	1996
10592	Annual	Pass	Good	10/17/2011	30 ansul 10458	1983
10593	Annual	Pass	Good	10/17/2011	20 ansul 10459	1996
10594	Annual	Pass	Good	10/17/2011	30 ansul 10460	1988
10595	Annual	Pass	Good	10/17/2011	20 ansul 10461	1996
10596	Annual	Pass	Good	10/17/2011	20 ansul 10462	1996
10597	Annual	Pass	Good	10/17/2011	20 ansul 10456	1993
10598	Annual	Pass	Good	10/17/2011	30 ansul 10463	1979

Pole by job box penex	yes
Ground level surge drum mericat #11	yes
2nd ladder surge drum mericat	yes
First ladder across from job box mericat	yes
Ground level corner by holding tank #15 mericat	yes
Ground level by net gas KOPV 3002 #10 mericat	yes
top of stairs mericat new section	yes
Across from primary isom rx feed #1 mericat	yes
On westside corner #2	yes
Up ladder westside back of unit 2nd level mericat	yes
Up ladder westside back of unit 2nd level mericat	yes
Compressor penex	yes
Eastside by ladder RCCU	yes
Northeast corner RCCU	yes
Northside of RCCU	yes
Middle by eyewash staition RCCU	yes
Middle by bolier pipe RCCU	yes
On pole on main road of RCCU	yes
Walkway eastside RCCU	yes
Walkway eastside gascon #13	yes
RCCU by monitor and pumps	yes
RCCU by pumps	yes
RCCU by pumps	yes
RCCU behind staircase primary absorber	yes
RCCU by staircase	yes
3rd level over job box penex	yes
3rd level over job box penex	yes
2nd level over job box penex	yes
2nd level over job box penex	yes
East top platform penex	yes
West top platform penex	yes
Down ladder 2nd level north side mericat	yes
3rd level top catwalk northside	yes
Next ladder 3rd level top cat walk mericat	yes
Up ladder by #10 2nd level mericat	yes
Belco by tank 21	yes
Belco by tank 21 #6	yes
Belco top of stair Mcc room outside	yes
Belco east corner #5	yes
Belco south corner #4	yes
Belco by staircase tank 21 #3	yes
Belco staircase to tank 21 #7	yes
Belco by tank 21 #2	yes
Middle section up stairs flare stack	yes
Belco by flare stack	yes
up ladder belco	Yes
RCCU southend corner	yes
RCCU by sign in box	yes
RCCU southend by mcc room	yes
RCCU southend corner	yes

RCCU behind job box	yes
RCCU 2nd level	yes
RCCU 3rd level	yes
On top of sumpdrum east of job box	yes
	Yes
Ground by job box penex	yes
Feed driver 2nd level platform penex	yes
Feed driver 3rd level platform penex	yes
Middle of unit #8 mericat	yes
Pole #16 penex	yes
North east behind job box #13 penex	yes
Pole #12 penex	yes
Westside walkway #6 by eyewash penex	yes
North under pipe rack	yes
By naptha absorber #4 penex	yes
Westside walkway middle #7 penex	yes
West end #3 penex	yes
East by stairs gascon #3 2nd level RCCU	yes
North by ladder gascon #4 2nd level RCCU	yes
East stairs gascon #7 3rd level RCCU	yes
North by ladder gascon #8 3rd level RCCU	yes
East by stairs gascon #10 4thlevel RCCU	yes
North by ladder gascon #11 4th level RCCU	yes
West of RCCU	yes
East by stripper reboiler grond RCCU	yes

Course Code: 1105 **Rev**

Course Title: # Environmental -RCRA- Awareness

Employee ID	First Name	Last Name	Completion
ADAMB	Adam	Bernard	07/11/2011
ADAMG	Adam	Grantham	03/12/2012
ALYD	Alyson	Darbonne	11/18/2011
ANDREC	Andre	Carter	09/21/2011
ANDREE	Andre L	Elias	05/08/2012
ANDREWB	Andrew	Britton	04/28/2012
ANTHONYR	Anthony	Rinaudo	05/10/2012
ANTONIOR	ANTONIO	ROBINSON	08/31/2011
APARICIOW	Aparicio	Williams	09/21/2011
ARCHIEH	Archie	Harrison	03/25/2012
ARDISJ	Ardis	Johnson, III,	05/08/2012
AUBREYMA	Aubrey	Marchand Jr.	08/24/2011
AUSTINK	Austin	Kipp	06/01/2011
BARNEYK	Barney Glen	Kennington	01/10/2012
BERTROMET	Bertrome	Travis	08/02/2011
BERTS	Bert S	Scroggins	07/28/2011
BILLYM	Billy	Meyers	08/19/2011
BOBBYC	Bobby	Coley	01/28/2012
BOBBYHALL	Bobby J	Hall	01/20/2012
BOBBYHUGHES	George (Bobby) R	Hughes	12/16/2011
BOBBYL	Bobby	Lewis	11/26/2011
BOBBYP	Bobby	Parks	05/13/2012
BRANDONW	Brandon	Wagemann	11/07/2011
BRENTW	Brent S	Wallace	07/10/2011
CARLOSN	Carlos	Netter	03/02/2011
CARLP	Carl	Paskey	07/29/2011
CARLR	Carl	Roppolo	08/23/2011
CARLTONM	Carlton	Mitchell	01/13/2012
CASEYH	Casey	Hamiter	09/27/2011
CECILB	Cecil	Bullock Jr.	10/02/2011
CEDRICL	Cedric	Long	03/31/2012
CHARLESB	Charles	Bradley	06/29/2011
CHARLESC	Charles	Conly	12/06/2011
CHARLESCO	Charles W	Compton	06/27/2011
CHARLESE	Charles	Everett	07/30/2011
CHARLEST	Charles	Thompson	02/04/2012
CHRISB	Chris	Booras	07/08/2011
CHRISF	Chris	Frazier	01/09/2012
CHRISFU	Chris	Fulco	05/21/2012
CHRISG	Chris	Green	05/28/2012
CHRISS	Christopher	Smith	10/24/2011
ChristopherHe	Christopher	Henderson	11/15/2011
CHUCKC	Chuck 'Robert'	Collins	01/19/2012
CHUCKU	Chuck	Underdown	07/11/2011
CLAUDET	Claude C	Toney	01/13/2012
CLIFFORDM	Clifford	Martin	04/25/2012

COLBYR	Colby	Roy	05/07/2012
COLINB	Colin	Bryant	04/30/2012
CORYA	CORY	ALLEN	01/17/2012
CRYSTALF	Crystal	Foust	01/07/2012
DAMOND	Damon	Danner	12/08/2011
DANIELG	Daniel	Garland	01/12/2012
DANIELPL	Daniel P	Lloyd	04/02/2012
DANM	Dan	McKibben	01/27/2012
DANNYR	Danny	Reamer	08/11/2011
DARRINL	Darrin	Landrus	01/27/2012
DARRYLM	Darryl	Montgomery	07/31/2011
DAVIDF	David	Fleming	09/29/2011
DAVIDM	David	Malcolm	09/23/2011
DAVIDT	David W	Toothman	04/01/2012
DAVIDW	David W	Waggoner	09/16/2011
DEANG	Dean	Garrett	07/30/2011
DERRICKA	Derrick	Abner	06/29/2011
DONALDD	Donald	Daniel	03/21/2012
DOUGH	Doug D	Hunter	01/28/2012
DUANES	Duane	Schleder	03/01/2012
EDMUNDS	ED	STIER	01/23/2012
ERICE	Eric	Evans	04/05/2012
GARYB	Gary	Bragg	03/20/2012
GERALDB	Gerald	Boyum Jr.	10/03/2011
GERMELR	Germel	Rawlings	05/16/2012
GREGM	Gregory	McConnell	11/21/2011
GREGORYF	Gregory	Frank	01/03/2012
GREGS	Greg	Sepulvado	03/31/2012
GustavoC	Gustavo	Contasti	05/29/2012
harryk	Harry F	Kleinpeter	11/09/2011
HOUSTONP	Houston	Pardee	12/27/2011
JACOBD	Jacob W	Dodd	05/04/2012
JAMESA	James	Andrews	02/19/2012
JAMESD	James	Desonier	03/14/2012
JAMESS	James	Singleton	01/21/2012
JAMESSI	James	Simpson	12/12/2011
JAMESST	James	Stoker	11/09/2011
JAMESW	James	White Jr	01/13/2012
JAREDB	Jared	Boyum	12/07/2011
JARREDP	Jarred L	Provenza	10/03/2011
JASONH	Jason	Houston	09/01/2011
JASONM	Jason B	McGuire	01/03/2012
JAVIERL	Javier	Lopez	08/19/2011
JEFFREYBA	Jeffrey	Batiste	08/09/2011
JEFFREYC	Jeffrey	Cohen	02/01/2012
JERMARSEYP	Jermarsey	Phillips	08/01/2011
JOEF	Joe	Ferlito	08/01/2011
JOHNC	John	Clayton	11/07/2011
JOHNHA	John	Hamilton	12/07/2011
JOHNNYL	Johnny	Lewter	09/03/2011
JOHNNYP	Johnny	Paine	05/04/2012
JONATHANH	Jonathan	Hall	01/18/2012

JOSEPHH	Joe	Harper	11/15/2011
KENDALLM	Kendall	Marchand	02/13/2012
KENNYZ	Kenny W	Zylicz	04/27/2012
KEVINS	Kevin	Stephens	02/01/2012
KEVINSI	Kevin	Simpson	01/21/2012
KYLEC	Kyle M	Conly	08/01/2011
LCL	L.C.	Lister	12/07/2011
LEES	Lee D	Stephens	06/12/2011
LEONJ	Leon	Jernigan	03/02/2012
LOUISM	Louis	Mayfield	11/16/2011
LYNDONJ	Lyndon	Johnson	01/13/2012
MARKB	Mark	Bissell	11/16/2011
MARKG	Mark	Greathouse	03/14/2012
MELTONS	Melton	Staples	08/08/2011
MICHAELA	Michael	Ashby	04/16/2012
MICHAELB	Michael	Busceme	08/29/2011
MICHAELH	Mike	Hubbard	10/11/2011
MICHAELHA	Michael D	Hall Jr.	04/23/2012
MICHAELM	Michael	Mabry	07/25/2011
MICHAELP	Michael	Pickett	11/04/2011
MICHAELT	Mike	Tyler	10/30/2011
MICHELLEC	Michelle A	Carroll	01/25/2011
MIKEH	Mike	Hall	09/20/2011
MIKEMC	Mike	McAnn	03/07/2012
MILTONS	Milton	Sneed	02/17/2012
MITCHELLB	Mitchell	Branch	07/31/2011
MITCHELLC	Mitchell	Cook	01/16/2012
MORELLB	Morell	Boone	03/19/2012
NATHANA	Nathan	Allen	07/13/2011
NaveenM	Naveen	Mangala	04/18/2012
ODYSSEUSM	Odysseus	McGee	04/19/2012
OSCARH	Oscar	Hamilton	12/26/2011
OTHAG	Otha	Gordon	01/07/2012
Paulmc	Paul	McMillin	03/13/2012
PAULW	Paul W	Whitton	11/29/2011
PHILIPA	Philip	Ambrose	04/23/2012
PHILLIPH	Phillip	Hays	01/19/2012
RANDYH	Randy	Holmes	12/05/2011
RANDYW	Randy A	Williams	04/12/2012
REGGIEJ	Reggie	Jones	05/17/2012
RICHARDC	Richard	Clarkston	10/20/2011
RICHARDHANKS	Richard	Hanks	04/30/2012
RICHARDJO	Richard	Jones	10/03/2011
RICHARDL	Richard	LeBlanc	01/18/2012
RICHARDS	Richard 'Tommy'	Savell III	01/17/2012
RICHARDW	Richard D	Willis	07/10/2011
ROBERTJ	Robert	Johnson	03/06/2011
ROBERTL	Robert L	Lester	08/11/2011
ROBERTV	Robert	Vaughn	05/07/2012
ROBERTW	Bob C	Waits	12/12/2011
RODERICKS	Roderick	Short	01/14/2012
RODERICKY	Roderick D	Youngblood	11/26/2011

ROGERG	Roger	Griffie	01/18/2012
RONB	Ron	Bechtel	09/14/2011
RUBYT	Ruby	Thomas	07/10/2011
RYANE	Ryan	Eubanks	09/12/2011
SAMF	Sam	Fulco	09/17/2011
SAMM	Sam	Maggio III	08/22/2011
SAMUELB	Samuel L	Bozeman	02/08/2012
SHAWNW	Shawn K	Wilson	08/19/2011
SOND	Son	Do	01/26/2012
STANLEYE	Stanley L	Ezernack	08/03/2011
STEVENB	Steven	Bogan	12/04/2011
STEVENR	Steve	Rutledge	03/24/2012
STEVENS	Steven	Scott	05/31/2011
STEVER	Steve J	Rinaudo	11/07/2011
TERRYS	Terry	Sanders	07/27/2011
TIMD	Tim	Davis	05/19/2012
TIMH	Tim C	Harrison	01/13/2012
TIMOTHYJ	Timothy	Johnson	12/13/2011
TIMOTHYN	Timothy	Nidey	10/22/2011
TODDH	Todd	Hall	12/21/2011
TOMMYW	Tommy J	Woodard	01/29/2012
TONYH	Tony	Hughes	10/12/2011
TONYS	Tony	Statos	09/11/2011
TRAVISS	Travis	Sonderland	03/03/2012
TROYR	Troy	Roberts	10/04/2011
TYLERM	Tyler	Manuel	01/15/2012
VIDALC	Vidal	Clay	01/08/2012
WILBERTP	Wilbert	Parker	10/19/2011
WILLIAMTU	William (Bill)	Turnage	05/09/2011
WILLM	Will	McBride,	09/26/2011
ZACHF	Zach	Foster	03/01/2012
ZALESKAB	Zaleska	Bryant	4/26/2011

APPENDIX A
CALUMET ENVIRONMENTAL POLICY & PRINCIPLES

POLICY SUBJECT	EMPLOYEES AFFECTED
ENVIRONMENTAL HEALTH & SAFETY	**ALL**

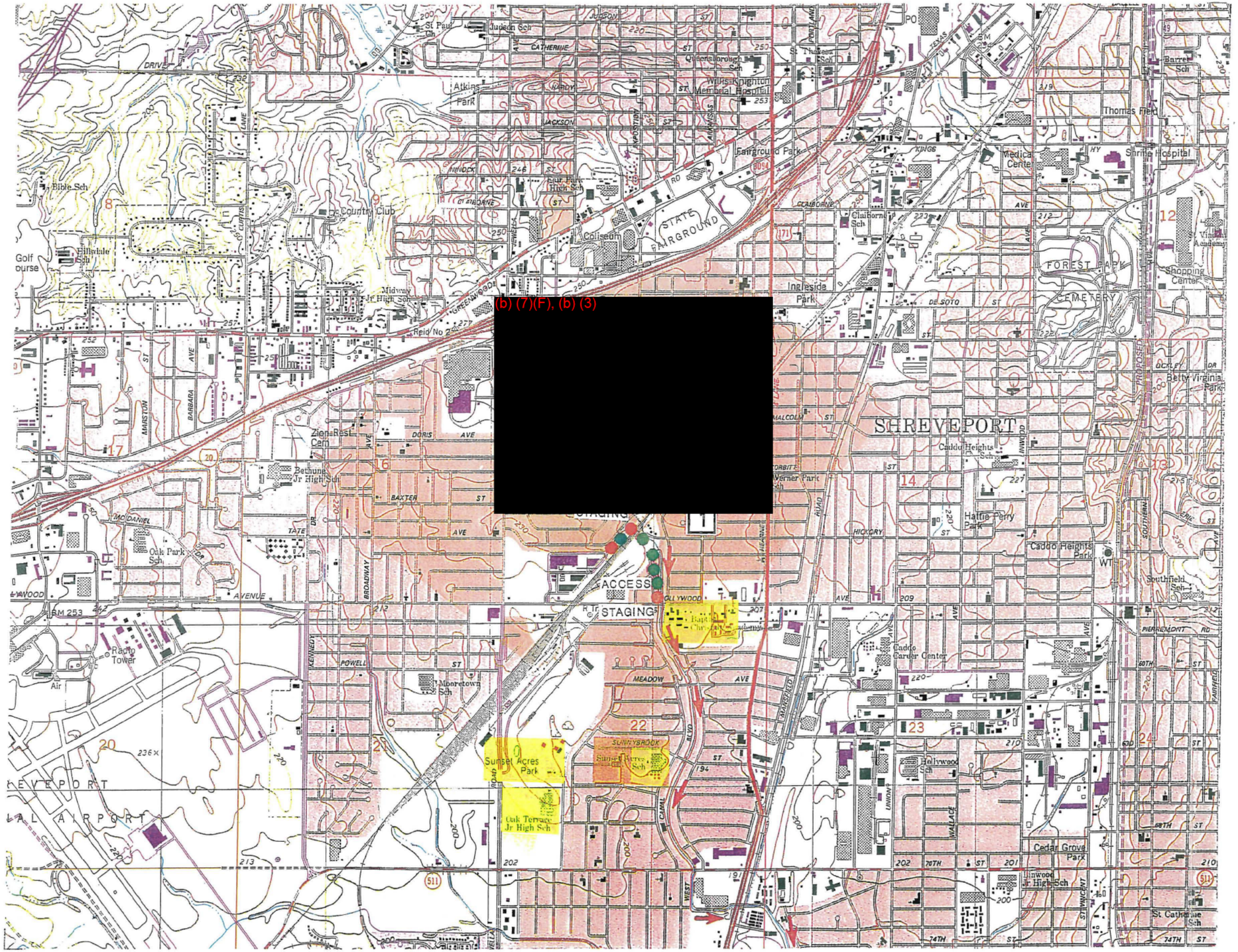
PURPOSE
To establish Calumet Lubricants environmental, health and safety policy.

POLICY
Protecting the environment and the safety and health of employees, customers, contractors, communities and the public is fundamental to the way Calumet conducts its business. To integrate environmental, health and safety management into business activities worldwide, the Company will:

1. Pursue excellence in the design, construction, operation and restoration of all properties and facilities;
2. Be a responsible steward of all products and services;
3. Prepare for emergencies and other contingencies;
4. Communicate openly regarding business activities;
5. Assign clear responsibilities to all employees and contractors;
6. Provide employees with resources and training to meet assigned responsibilities;
7. Assess the potential risks of business activities;
8. Comply with all applicable laws and regulations;
9. Participate in the development of new laws, regulations and technologies;
10. Review performance and communicate progress; and
11. Expect continuous improvement.

MANAGING DEPARTMENT	REVISED
EHS	FEBRUARY 7, 2002

APPENDIX B
ENVIRONMENTAL RESPONSE MAPS



DRAWING NOT TO SCALE

N

SOURCE: U.S.G.S. 7.5–Minute Series Topographic Maps. Shreveport West (1992), Wallace Lake (1980) and Stonewall (Provisional Edition, 1982), Louisiana Quadrangles.

Contour Interval 10 feet

0 2000 4000

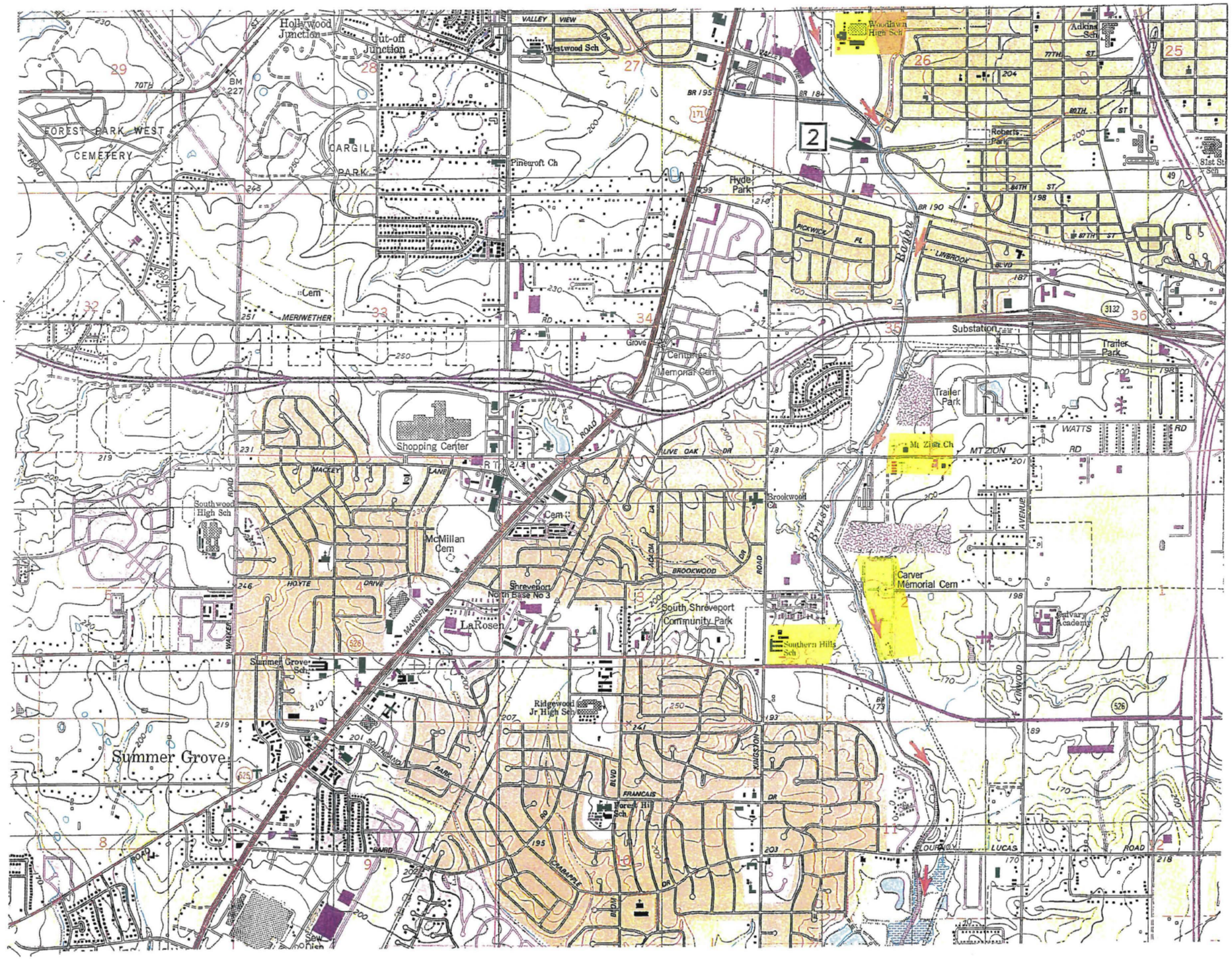
Scale in Feet

SENSITIVE RESOURCES

Calumet Lubricants COMPANY

APPENDIX B(1)

DAMES & MOORE



DRAWING NOT TO SCALE

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SOURCE: U.S.G.S. 7.5–Minute Series Topographic Maps. Shreveport West (1992), Wallace Lake (1980) and Stonewall (Provisional Edition, 1982), Louisiana Quadrangles.

Contour Interval 10 feet

0 2000 4000

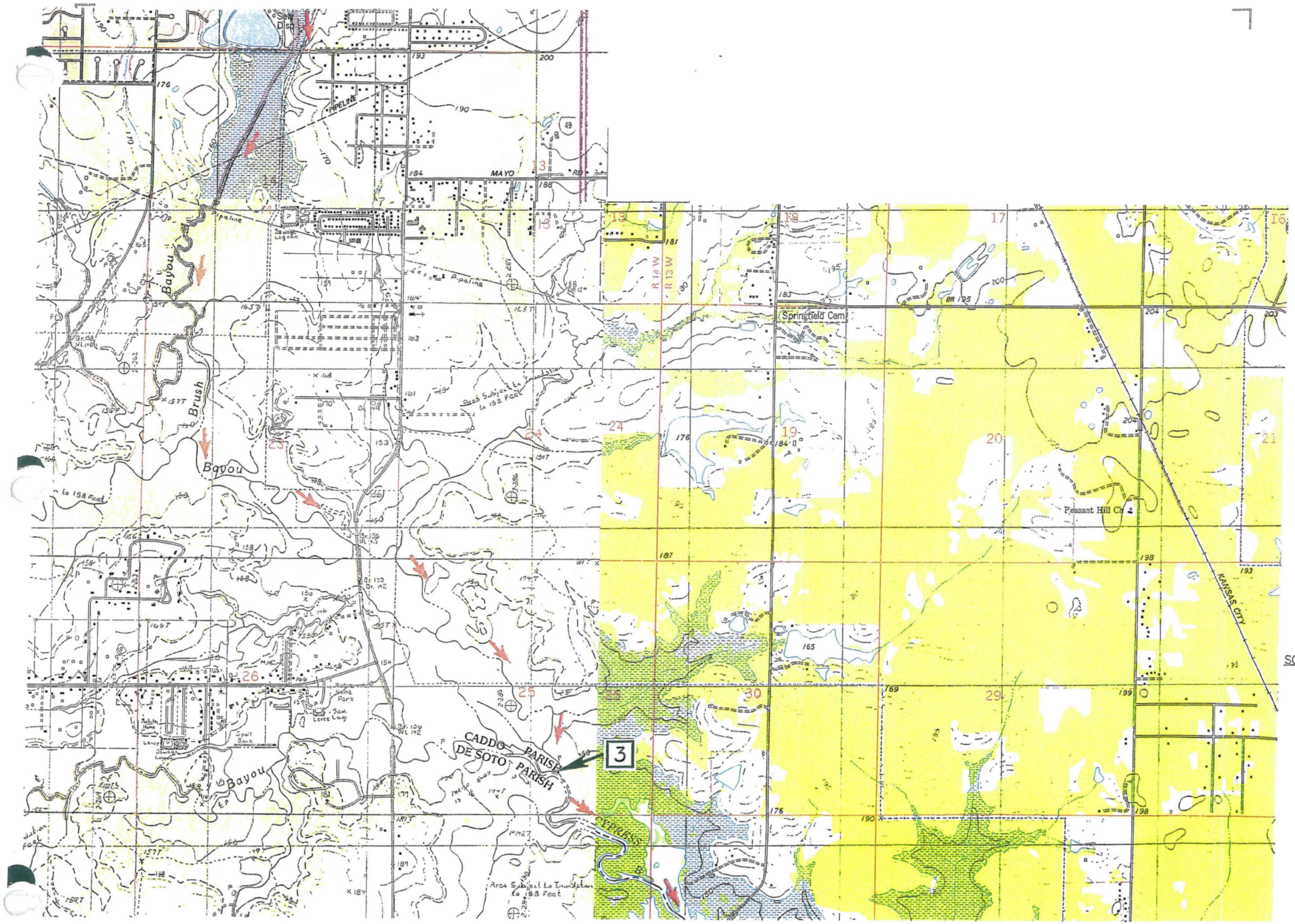
Scale in Feet

SENSITIVE RESOURCES

Calumet Lubricants

APPENDIX B(2)

DAMES & MOORE



DRAWING NOT TO SCALE

N

SOURCE: U.S.G.S. 7.5–Minute Series Topographic Maps. Shreveport West (1992), Wallace Lake (1980) and Stonewall (Provisional Edition, 1982), Louisiana Quadrangles.

Contour Interval 10 feet

0 2000 4000

Scale in Feet

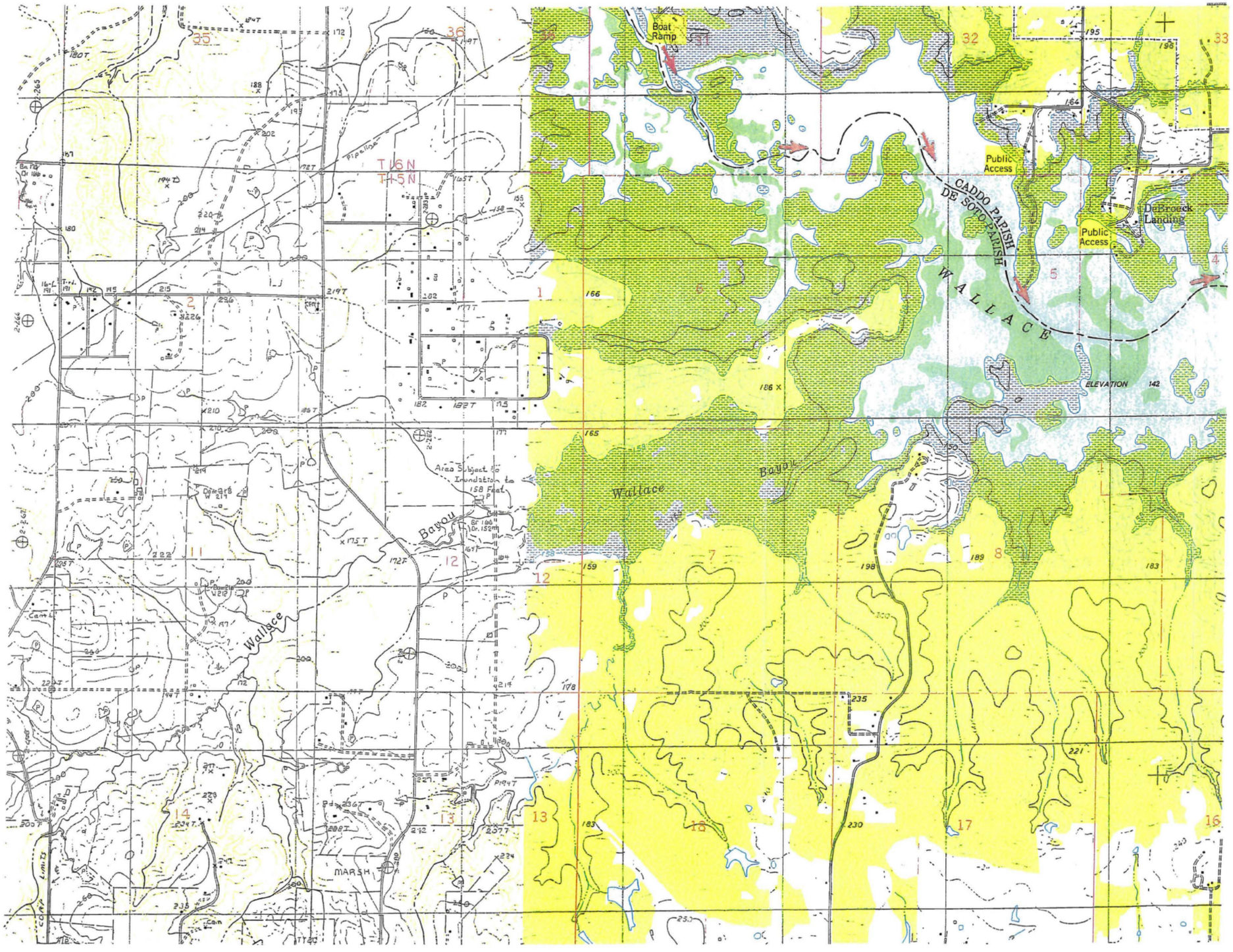
SENSITIVE RESOURCES

Calumet Lubricants COMPANY

APPENDIX B(3)

DAMES & MOORE

PHMSA 000112013



DRAWING NOT TO SCALE

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SOURCE: U.S.G.S. 7.5–Minute Series Topographic Maps. Shreveport West (1992), Wallace Lake (1980) and Stonewall (Provisional Edition, 1982), Louisiana Quadrangles.

Contour Interval 10 feet

0 2000 4000

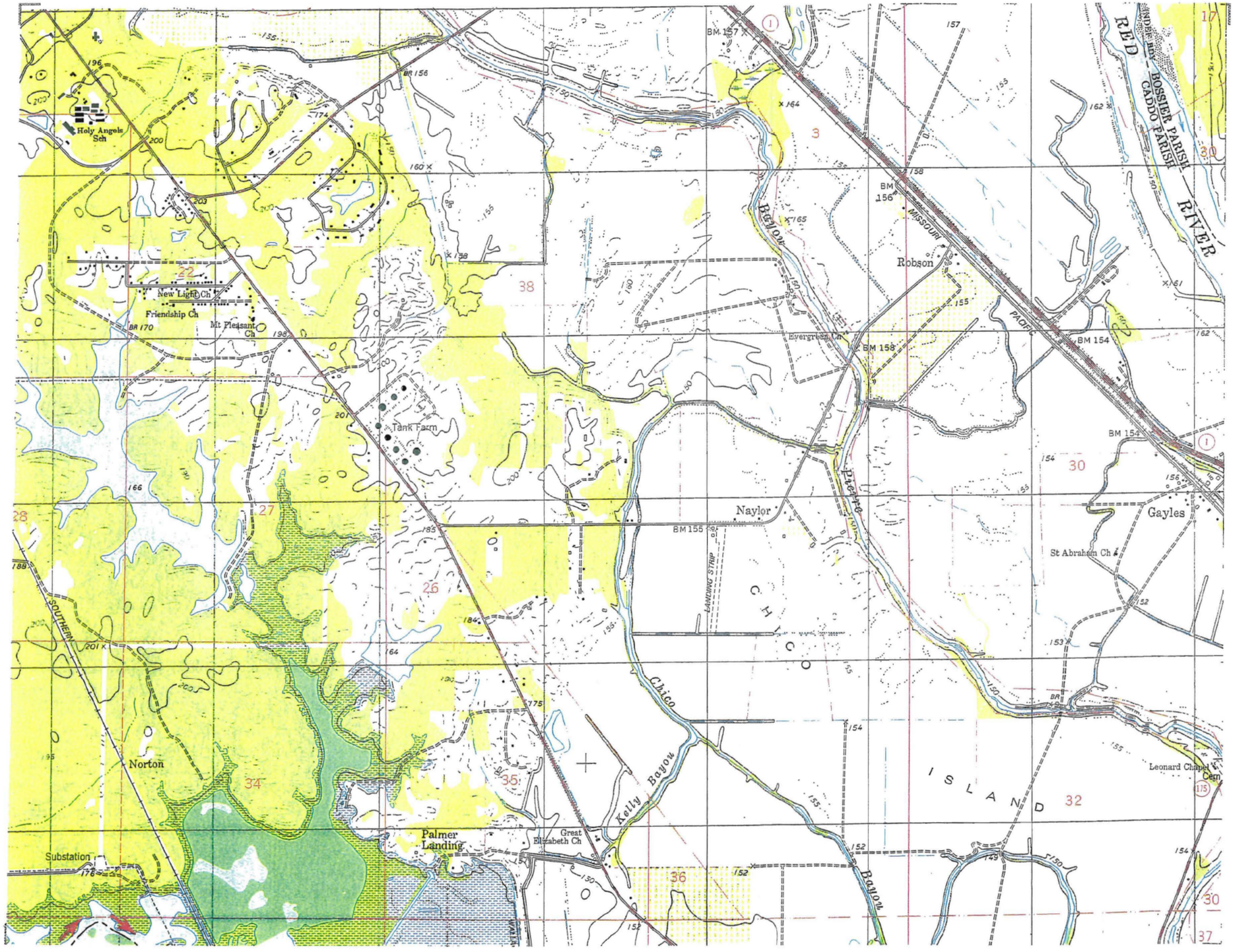
Scale in Feet

SENSITIVE RESOURCES

Calumet Lubricants COMPANY

APPENDIX B(4)

DAMES & MOORE



DRAWING NOT TO SCALE

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SOURCE: U.S.G.S. 7.5–Minute Series Topographic Maps. Shreveport West (1992), Wallace Lake (1980) and Stonewall (Provisional Edition, 1982), Louisiana Quadrangles.

Contour Interval 10 feet

0 2000 4000

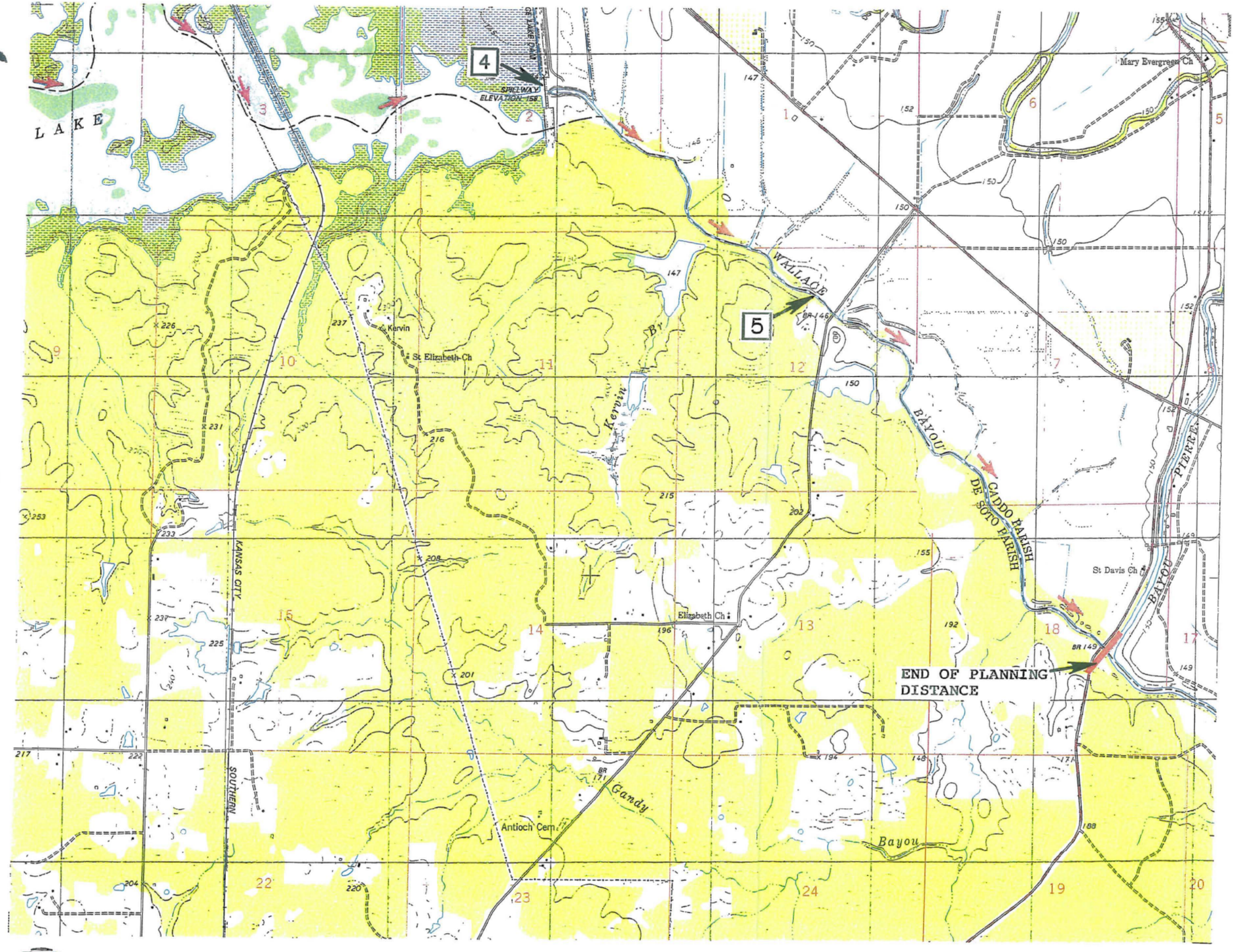
Scale in Feet

SENSITIVE RESOURCES

Calumet Lubricants COMPANY

APPENDIX B(5)

DAMES & MOORE



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SOURCE: U.S.G.S. 7.5-Minute Series Topographic Maps. Shreveport West (1992), Wallace Lake (1980) and Stonewall (Provisional Edition, 1982), Louisiana Quadrangles.

Contour Interval 10 feet

0 2000 4000
Scale in Feet

SENSITIVE RESOURCES

Calumet Lubricants COMPANY

APPENDIX B(6)

DAMES & MOORE

Critical Areas to Monitor and Protect

Residential Properties

Private residential properties adjacent to the Atlas Shreveport Refinery pipeline right-of-way within the subdivisions of Silver Pine Village and Hickory Place, and along Meriwether Road.

Recreational Areas

Cargill Park
Lotus Avenue
City of Shreveport Parks and Recreation
(318) 673-SPAR

Cemeteries

Forest Park West Cemetery
4000 Meriwether Road
(318) 686-1461

Churches

Foursquare Gospel Church
3359 Meriwether Road
(318) 688-1543

Calumet Refinery Pipeline Right-of-Way Access

(i) **Airport Observation Unimproved Parking Area**
Pipeline right-of-way access is attainable via an undeveloped, dirt parking area paralleling the southern side of West 70th Street (State Highway 511) just south of the Greater Shreveport Municipal Airport.

(j) **Walker Road Underpass**
Pipeline right-of-way access is attainable via the Walker Road underpass. The pipeline and Union Pacific Railroad are elevated and pass over Walker Road, however, access to the pipeline may be accomplished along the Walker Road sod-lined, road-cut embankments.

(k) **Residential Properties along Parkdale Drive**
Pipeline right-of-way access is attainable towards the rear of several residential properties within the Silver Pine Village subdivision adjacent to Parkdale Drive.
Note: Site clearance must be granted via the individual property owners prior to the initiation of any spill response activities.

(l) **Meriwether Road Crossing**
Pipeline right-of-way access is attainable at the Meriwether Road crossing just south of the Union Pacific Railroad roadway crossing and north of the Foursquare Gospel Church.

(m) **Hickory Ridge Road Crossing**
Pipeline right-of-way access is attainable at the termination of Hickory Ridge Road just east of the Union Pacific Railroad roadway crossing. Prior to the intersection with the Union Pacific Railroad, Hickory Ridge Road converts from an asphalt-surfaced to an unimproved, dirt-surfaced roadway.

(n) **Dean Road**
Pipeline right-of-way access is attainable at the termination of Dean Road (unimproved, dirt-surfaced roadway) adjacent to the quarry / remedial site. Accessible via Hickory Ridge Road from the north and Flournoy Lucas Road from the south.

SHREVEPORT, LOUISIANA Forest Park West Cemetery	Environmental Response Map 3

Continued on Map 3

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

[redacted]

Not Mapped

Not Mapped

Continued on Map 5

SHREVEPORT, LOUISIANA Flournoy Lucas Road	Environmental Response Map 4

Critical Areas to Monitor and Protect

Residential Properties

Private residential properties adjacent to Gilmer Bayou within the subdivisions of Pine Forest South, Edgewood Village, and Summer Grove.

Private residential properties adjacent to the Atlas Shreveport Refinery pipeline right-of-way within the subdivision of Pine Forest South.

Recreational Areas

Hot Wheels Skating Palace
9241 Southland Park Drive North
(318) 686-6095

Churches

Shreveport Bible Church
4781 Bert Kouns
(318) 686-5530

Commercial Properties

Ben E. Keith Foods
4980 Flournoy Lucas Road
(318) 687-9680

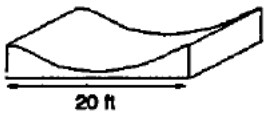
Hot Wheels Skating Palace
9241 Southland Park Drive North
(318) 686-6095

Poulan / Weed Eater Division
White Consolidated Industries, Inc.
5020 Flournoy Lucas Road
(318) 687-0100

Gilmer Bayou Shoreline Access Sites

K

Flournoy Lucas Road Crossing
Gilmer Bayou shoreline access is attainable at the Flournoy Lucas Road bridge crossing via an unimproved, dirt-surfaced area along the southern side of the roadway adjacent to the eastern embankment of the waterway. Access is also attainable via a concrete-surfaced parking area at the Shreveport Bible Church along the western side of the channel.



Silt and Consolidated Sediment-Lined Riparian Drainage Channel
Moderately-Sloping Channel Embankments
Limited Vegetative Undergrowth

L

Residential Properties along Sandalwood
Gilmer Bayou shoreline access is attainable via private residential properties within the Pine Forest South subdivision adjacent to Sandalwood.
Note: Site clearance must be granted via the individual property owners prior to the initiation of any spill response activities.

Silt and Consolidated Sediment-Lined Riparian Drainage Channel
Moderately-Sloping Channel Embankments
Limited Vegetative Undergrowth

SHREVEPORT, LOUISIANA
Flournoy Lucas Road

Environmental Response Map 4

Calumet Refinery Pipeline Right-of-Way Access

(o) **Flournoy Lucas Road (State Highway 3222) Crossing**
Pipeline right-of-way access is attainable at the Flournoy Lucas Road (State Highway 3222) crossing just west of the Ben E. Keith Foods property.

(p) **Industrial Loop Expressway (State Highway 526) Crossing**
Pipeline right-of-way access is attainable at the Industrial Loop Expressway (State Highway 526) crossing west of the intersection with Green Forest Road and the fork at the intersection with Flournoy Lucas Road.

Gilmer Bayou Shoreline Composition

Silt and Consolidated Sediment-Lined Riparian Drainage Channel
Moderately-Sloping Channel Embankments
Limited Vegetative Undergrowth

SHREVEPORT, LOUISIANA Flournoy Lucas Road	Environmental Response Map 4

Not Mapped

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

[redacted]

Continued on Map 4

Not Mapped

Brown Station

HARPER RO

Not Mapped

SHREVEPORT, LOUISIANA Colquit Road	Environmental Response Map 5

Critical Areas to Monitor and Protect

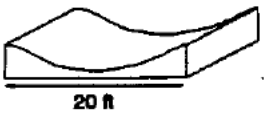
Residential Properties

- Private residential properties adjacent to Gilmer Bayou and Boggy Bayou within the subdivisions of Colquitt Estates and Briarcliff, and along Colquitt Road.

Gilmer Bayou Shoreline Access Sites

M

Colquitt Road (State Highway 525) Crossing
Gilmer Bayou shoreline access is attainable at the Colquitt Road (State Highway 525) bridge crossing just west of the intersection with Dean Road and Ardis Taylor Drive, with bayou access restricted to the roadside shoulder.



Silt and Consolidated Sediment-Lined Riparian Drainage Channel
Moderately-Sloping Channel Embankments
Dense Vegetative Undergrowth

Calumet Refinery Pipeline Right-of-Way Access

q

ENRON Brown Station
3460 Industrial Drive
Bossier City, Louisiana
(318) 746-7441
Emergency: (318) 746-7441
Accessible via an unimproved, private roadway off of Colquit Road just east of the intersection with Chandler Road.

Gilmer Bayou Shoreline Composition

Silt and Consolidated Sediment-Lined Riparian Drainage Channel
Moderately-Sloping Channel Embankments
Dense Vegetative Undergrowth

SHREVEPORT, LOUISIANA Colquitt Road	Environmental Response Map 5

Continued on Map 1

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

[redacted]

Continued on Map 2

Not Mapped

Continued on Map 7

SHREVEPORT, LOUISIANA Canal Boulevard	Environmental Response Map 6

Critical Areas to Monitor and Protect

Residential Properties

Private residential properties adjacent to the stormwater drainage ditches along West Canal Boulevard, Canal Boulevard, Meadow Avenue, Sunnybrook Street, Dollarway Drive, Wilshire Drive, Valley View Drive, Louise Street, and Red Bud Lane.

Southern Oaks Apartments
1111 70th Street
(318) 865-8996

Educational Institutions

Sunset Acres Elementary School
6514 West Canal Boulevard
(318) 631-7121

Woodlawn Senior High School
7340 Wyngate Boulevard
(318) 686-3161

Churches

Bryant Temple Church of God in Christ
6805 West Canal Boulevard
(318) 635-3211

Saint Abraham Baptist Church
7104 Wilshire Drive
(318) 688-2836

Recreational Areas

Crystal Palace Skating Center
7143 Mansfield Road
(318) 686-8736

Wildwood Park
Mansfield Road
City of Shreveport Parks & Recreation
(318) 673-SPAR

Commercial Properties

Commercial properties adjacent to the stormwater drainage ditch along West 70th Street (State Highway 511):

Dairy Queen
2905 West 70th Street
(318) 686-7301

State Finance
2902 West 70th Street
(318) 636-9642

Westgate Shopping Center
Cloth World, Discount Wallpaper, Eckerd Drugs, Fashion Gal, 50% Off Stores, Mac Frugals Bargain Close-Outs
2700 West 70th Street

Industrial properties adjacent to the stormwater drainage ditch along Valley View Drive:

Georgia-Pacific Lumber Office
2801 Valley View Drive
(318) 687-9400

Specialty Oil Co.
2748 Valley View Drive
(318) 687-8000

Westland Oil Co.
2740 Valley View Drive
(318) 688-1300

Wincup, Inc.
Valley View Drive

Commercial properties adjacent to the stormwater drainage ditch along Valley View Drive:

Garden Valley Shopping Center
Valley View Drive

SHREVEPORT, LOUISIANA
Canal Boulevard

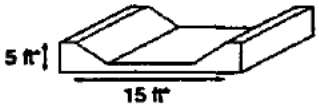
Environmental Response Map 6

Stormwater Drainage Ditch Access Sites

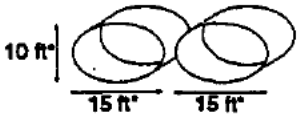
N

Meadow Avenue Crossing

Stormwater drainage ditch access is attainable via the Meadow Avenue bridge crossing. A concrete-surfaced pedestrian footpath parallels the shoulder along both sides of the roadway at the bridge crossing. Residential properties flank the perimeter of the drainage channel both north and south of the Meadow Avenue bridge.



Concrete-Lined, Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.



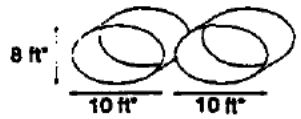
Corrugated Metal Culvert with 45 degree Inlet & Discharge Pipes
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

O

Sunnybrook Street Crossing

Stormwater drainage ditch access is attainable via the Sunnybrook Street bridge crossing. A concrete-surfaced pedestrian footpath parallels the shoulder along both sides of the roadway at the bridge crossing. Residential properties flank the perimeter of the drainage channel both north and south of the Sunnybrook Street bridge.

Concrete-Lined, Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

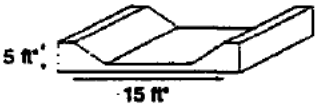


Elliptical, Concrete-Lined Culvert with Concrete Headwall
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

P

Elmhurst Street

Stormwater drainage ditch access is attainable at the termination of Elmhurst Street just west of the intersection with Canal Boulevard. Residential properties parallel the drainage ditch right-of-way along both Elmhurst Street and Canal Boulevard.



Concrete-Lined, Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

Q

Bryant Temple Church of God in Christ

6805 West Canal Boulevard
(318) 635-3211

Stormwater drainage ditch access is attainable via a concrete-surfaced parking area towards the rear of the Bryant Temple Church of God in Christ property. Accessible via West Canal Boulevard at the intersection with Marquette Street.

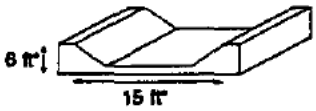
SHREVEPORT, LOUISIANA Canal Boulevard	Environmental Response Map 6

Stormwater Drainage Ditch Access Sites (Cont'd)

R

Westgate Shopping Center

Stormwater drainage ditch access is attainable via an unimproved, concrete-surfaced parking area and local store delivery and service area towards the rear of the Westgate Shopping Center. (Refer to previous section for the local store operators within the shopping center.) Suitable as a spill response equipment staging area and spilled product recovery location.

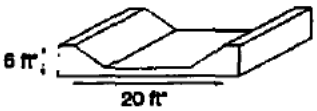


Concrete-Lined, Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

S

Mansfield Road (U.S. Highway 171) Crossing

Stormwater drainage ditch access is attainable at the Mansfield Road bridge crossing via an unimproved, concrete-surfaced, local store delivery and service area along the southeasternmost perimeter of the Westgate Shopping Center. (Refer to previous section for the local store operators within the shopping center.



Concrete-Lined, Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

T

Crystal Palace Skating Center

7143 Mansfield Road
(318) 686-8736

Stormwater drainage ditch access is attainable via a concrete-surfaced parking area towards the rear of the Crystal Palace Skating Center. Residential properties along Wilshire Drive and the Saint Abraham Baptist Church parallel the opposite (eastern) side of the drainage channel.

Cobblestone-Lined Riparian Drainage Channel
Steep Channel Embankments
Moderate Vegetative Undergrowth

U

Woodlawn Senior High School

7340 Wyngate Boulevard
(318) 686-3161

Stormwater drainage ditch access is attainable along the far western perimeter of the Woodlawn Senior High School campus adjacent to the track & field center. Drainage ditch access via paved areas is restricted, as the area adjacent to the channel right-of-way is largely undeveloped and grass sod-surfaced.

Grass and Sod-Lined Riparian Drainage Channel
Moderately-Sloping Channel Embankments
Moderate Vegetative Undergrowth

V

Specialty Oil Co. and Westland Oil Co. Properties

Specialty Oil Co.	Westland Oil Co.
2748 Valley View Drive	2740 Valley View Drive
(318) 687-8000	(318) 688-1300

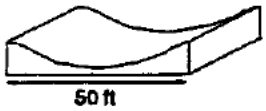
Stormwater drainage ditch access is attainable towards the rear of the Specialty Oil Co. and Westland Oil Co. properties and accessible via a large, undeveloped, sparsely vegetated floodplain.
(Continued on the following Environmental Response Map 6 Index Page.)

Stormwater Drainage Ditch Access Sites (Cont'd)

V

Specialty Oil Co. and Westland Oil Co. Properties (Cont'd)

(Continued from the preceding Environmental Response Map 6 Index Page.)

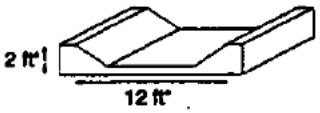


Grass and Sod-Lined Riparian Drainage Channel
Moderately-Sloping Channel Embankments
Moderate Vegetative Undergrowth

W

Residential Properties accessible via Red Bud Lane and Louise Street

Stormwater drainage ditch access is attainable via private, residential properties along Red Bud Lane and Louise Street north of the intersections with Valley View Drive.
Note: Site clearance must be granted via the individual property owners prior to the initiation of any spill response activities.

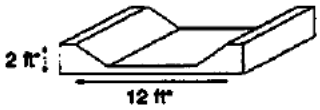


Concrete-Lined, Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

X

Valley View Drive Crossing

Stormwater drainage ditch access is attainable via the Valley View Drive bridge crossing. A concrete-surfaced pedestrian footpath parallels the shoulder along either side of the roadway at the bridge crossing. Residential properties flank the perimeter of the drainage channel north of the Valley View Drive bridge.

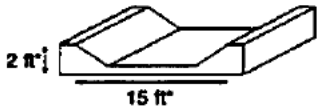


Concrete-Lined, Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

Y

Mansfield Road (U.S. Highway 171) Crossing

Stormwater drainage ditch access is attainable at the Mansfield Road bridge crossing via a steep, thinly vegetated, floodplain embankment along the northern side of the roadway. Waterway access is somewhat restricted, as the Mansfield Road bridge has an approximately 30 to 40-foot vertical clearance.

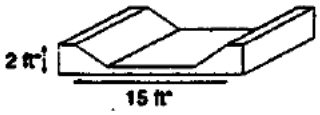


Concrete-Lined, Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

Z

Trammel Drive

Stormwater drainage ditch access is attainable at the termination of Trammel Drive south of the intersection with Valley View Drive, and adjacent to the Georgia-Pacific Lumber Office and Wincup, Inc. industrial properties. Drainage channel access is available via sparse vegetative underbrush adjacent to the cul-de-sac at the termination of Trammel Drive.



Concrete-Lined, Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

Stormwater Drainage Ditch Access Sites (Cont'd)

AA

Valley View Drive Crossing
Stormwater drainage ditch access is attainable at the Valley View Drive crossing via an undeveloped, sparsely vegetated floodplain and an unimproved, dirt roadway paralleling the southern side of the channel. The concrete-lined, trapezoidal drainage channel discharges across a concrete-surfaced spillway at the bridge crossing, whereupon the stormwater flow becomes channelized within earthern and rubblestone-lined embankments south of Valley View Drive.

Concrete-Lined, Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

Stormwater Drainage Ditch Composition

Grass and Sod-Lined Riparian Drainage Channel
Moderately-Sloping Channel Embankments
Limited to Moderate Vegetative Undergrowth

Concrete-Lined Trapezoidal Drainage Channel

SHREVEPORT, LOUISIANA
Canal Boulevard

Environmental Response Map 6

Continued on Map 6

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

[redacted]

Not Mapped

Not Mapped

Continued on Map 8

SHREVEPORT, LOUISIANA Inner Loop Expressway	Environmental Response Map 7

Critical Areas to Monitor and Protect

Residential Properties

Private residential properties adjacent to Brush Bayou along Woodmont Place, Pickwick Place, Hyde Park Place, Kingstowne Place, Westbrook Place, Coyth Lane, and Shady Lane.

Churches

Mt. Zion Baptist Church
620 Mt. Zion Road
(318) 688-9722

Commercial Properties

A-1 Mini Warehouse, Inc.
695 Mt. Zion Road
(318) 687-4627

Lipper-Stutsman Co., Inc.
8101 Wyngate Boulevard
(318) 687-1585

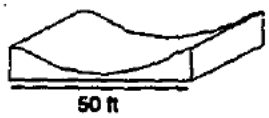
Netherton Co., Inc. Quarry
Linwood Avenue
(318) 635-9721

Brush Bayou Shoreline Access Sites

BB

Wyngate Boulevard Crossing

Brush Bayou shoreline access is attainable at the Wyngate Boulevard bridge crossing via an unimproved, dirt road paralleling the southern embankment of the channel adjacent to the radio tower. Shoreline access is also available towards the rea'Bof the Lipper-Stutsman Co., Inc. property via an undeveloped, sparsely vegetated, floodplain area. The Brush Bayou channel is approximately 20 feet wide under average flow conditions, however, the floodway adjacent to the waterway nears a width of 50 feet.



Grass and Sod-Lined Riparian Drainage Channel
Moderately-Sloping Channel Embankments
Moderate Vegetative Undergrowth

CC

West 84th Street Crossing

Brush Bayou shoreline access is attainable at the West 84th Street bridge crossing via the roadside shoulder.

Silt and Consolidated Sediment-Lined Riparian Drainage Channel
Moderately-Sloping Channel Embankments
Dense Vegetative Undergrowth

DD

Residential Properties along Westbrook Place

Brush Bayou shoreline access is attainable via private, residential properties adjacent to Westbrook Place. As late as the summer of 1993, numerous drainage channel improvements were still in progress within the Brush Bayou watershed from West 84th Street to the Inner Loop Expressway.

Note: Site clearance must be granted via the individual property owners prior to the initiation of any spill response activities in the area.

(Continued on the following Environmental Response Map 7 Index Page.)

SHREVEPORT, LOUISIANA
Inner Loop Expressway

Environmental Response Map 7

Brush Bayou Shoreline Access Sites (Cont'd)

DD

Residential Properties along Westbrook Place (Cont'd)

(Continued from the preceding Environmental Response Map 7 Index Page.)

Concrete-Lined, Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

EE

Residential Properties along Coyth Lane

Brush Bayou shoreline access is attainable via private, residential properties adjacent to Coyth Lane. An undeveloped residential lot providing direct access to Brush Bayou is located at the intersection of Coyth Lane and Lynbrook Boulevard. As late as the summer of 1993, numerous drainage channel improvements were still in progress within the Brush Bayou watershed from West 84th Street to the Inner Loop Expressway. Note: Site clearance must be granted via the individual property owners prior to the initiation of any spill response activities in the area.

Concrete-Lined, Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

FF

Inner Loop Expressway (State Highway 3132) Crossing

Brush Bayou shoreline access is attainable at the Inner Loop Expressway (State Highway 3132) crossing via the roadside shoulder. Dense vegetative undergrowth paralleling the waterway embankments and the distinct vertical clearance of the roadway crossing somewhat inhibits access to the creek within this vicinity.

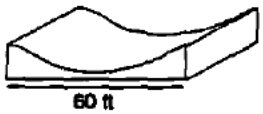
Concrete-Lined, Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

GG

Netherton Co., Inc. Pit

Lynwood Avenue
(318) 635-9721

Brush Bayou shoreline access is attainable via the westernmost perimeter of the Netherton Co., Inc. Pit. Accessible via an unimproved roadway off of Lynwood Avenue south of the intersection with the Inner Loop Expressway.

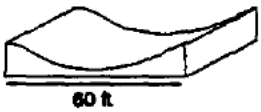


Silt and Consolidated Sediment-Lined Riparian Drainage Channel
Moderately-Sloping Channel Embankments
Dense Vegetative Undergrowth

HH

Mt. Zion Road Crossing

Brush Bayou shoreline access is attainable at the Mt. Zion Road bridge crossing via the roadside shoulder. Dense vegetative undergrowth within the bayou right-of-way inhibits access adjacent to the channel.



Silt and Consolidated Sediment-Lined Riparian Drainage Channel
Moderately-Sloping Channel Embankments
Dense Vegetative Undergrowth

Brush Bayou Shoreline Composition

Silt and Consolidated Sediment-Lined Riparian Drainage Channel
Moderately-Sloping Channel Embankments
Moderate to Dense Vegetative Undergrowth

Concrete-Lined Trapezoidal Drainage Channel

SHREVEPORT, LOUISIANA
Inner Loop Expressway

Environmental Response Map 7

Continued on Map 7

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

[redacted]

Not Mapped

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SHREVEPORT, LOUISIANA Flournoy Lucas Road	Environmental Response Map 8

Critical Areas to Monitor and Protect

Residential Properties

Private residential properties adjacent to Brush Bayou along Melba Drive, Kildare Park, Crooked Creek Drive, Quiet Cove, Flournoy Lucas Road, and Overlook Drive.

Cemeteries

Carver Memorial Cemetery
Kennie Road
(318) 925-8039

Educational Institutions

Southern Hills Elementary School
9075 Kingston Road
(318) 686-1974

Commercial Properties

Allen's Automotive
500 Flournoy Lucas Road
(318) 686-0658

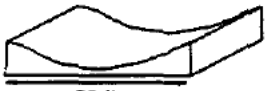
Browning Ferris Industries
Woolworth Road Regional Landfill
10580 Woolworth Road
(318) 925-2262

City of Shreveport Water & Sewerage Department
Flournoy Lucas Lift Station
Overlook Drive
24 hours: (318) 673-7600

Brush Bayou Shoreline Access Sites

II

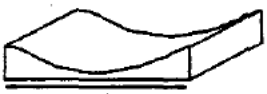
Carver Memorial Cemetery
Kennie Road
(318) 925-8039
Brush Bayou shoreline access is attainable via the Carver Memorial Cemetery unimproved access roadways circumjacent to the cemetery. Accessible via Linwood Avenue and Kennie Road.
Note: Site clearance must be granted via the Carver Memorial Cemetery prior to the initiation of any spill response activities within the cemetery grounds.



Eastern Embankment: Large Riprap Boulder Channel Embankments
Western Embankment: Silt and Consolidated Sediment-Lined Riparian Channel Embankments
Limited Vegetative Undergrowth

JJ

Bert Kouns Industrial Loop (State Highway 526) Crossing
Brush Bayou shoreline access is attainable at the Bert Kouns Industrial Loop (State Highway 526) bridge crossing via an unimproved area paralleling the eastern periphery of the channel along the northern side of the roadway.



Silt and Consolidated Sediment-Lined Riparian Channel Embankments
Moderate to Steep-Sloping Embankments
North of Roadway: Limited Vegetative Undergrowth
South of Roadway: Dense Vegetative Undergrowth

SHREVEPORT, LOUISIANA
Flournoy Lucas Road

Environmental Response Map 8

Brush Bayou Shoreline Access Sites (Cont'd)

KK

Undeveloped Residential Lots along Crooked Creek Drive

Brush Bayou shoreline access is attainable via undeveloped, sparsely vegetated, residential lots adjacent to Crooked Creek Drive. Accessible via Flournoy Lucas Road just west of the Brush Bayou bridge crossing.

Silt and Consolidated Sediment-Lined Riparian Drainage Channel
Moderately-Sloping Channel Embankments
Moderate Vegetative Undergrowth

LL

Allen's Automotive

500 Flournoy Lucas Road
(318) 686-0658

Brush Bayou shoreline access is attainable via a concrete-surfaced parking area adjacent to Allen's Automotive and a local commercial park along the eastern embankment of the channel. Accessible via Flournoy Lucas Road just east of the Brush Bayou bridge crossing.

Silt and Consolidated Sediment-Lined Riparian Drainage Channel
Moderately-Sloping Channel Embankments
Moderate to Dense Vegetative Undergrowth

MM

Flournoy Lucas Road (State Highway 3204) Crossing

Brush Bayou shoreline access is attainable at the Flournoy Lucas Road (State Highway 3204) bridge crossing with bayou access restricted to the roadside shoulder due to the dense vegetative groundcover.

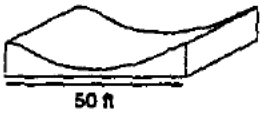
Silt and Consolidated Sediment-Lined Riparian Drainage Channel
Moderately-Sloping Channel Embankments
Dense Vegetative Undergrowth

NN

City of Shreveport Water & Sewerage Department
Flournoy Lucas Lift Station

Overlook Drive
24 hours: (318) 673-7600

Brush Bayou shoreline access is attainable via the City of Shreveport Water & Sewerage Department, Flournoy Lucas Lift Station facility. Accessible via Flournoy Lucas Road and Overlook Drive.



Silt and Consolidated Sediment-Lined Riparian Drainage Channel
Moderately-Sloping Channel Embankments
Dense Vegetative Undergrowth

SHREVEPORT, LOUISIANA Flournoy Lucas Road	Environmental Response Map 8

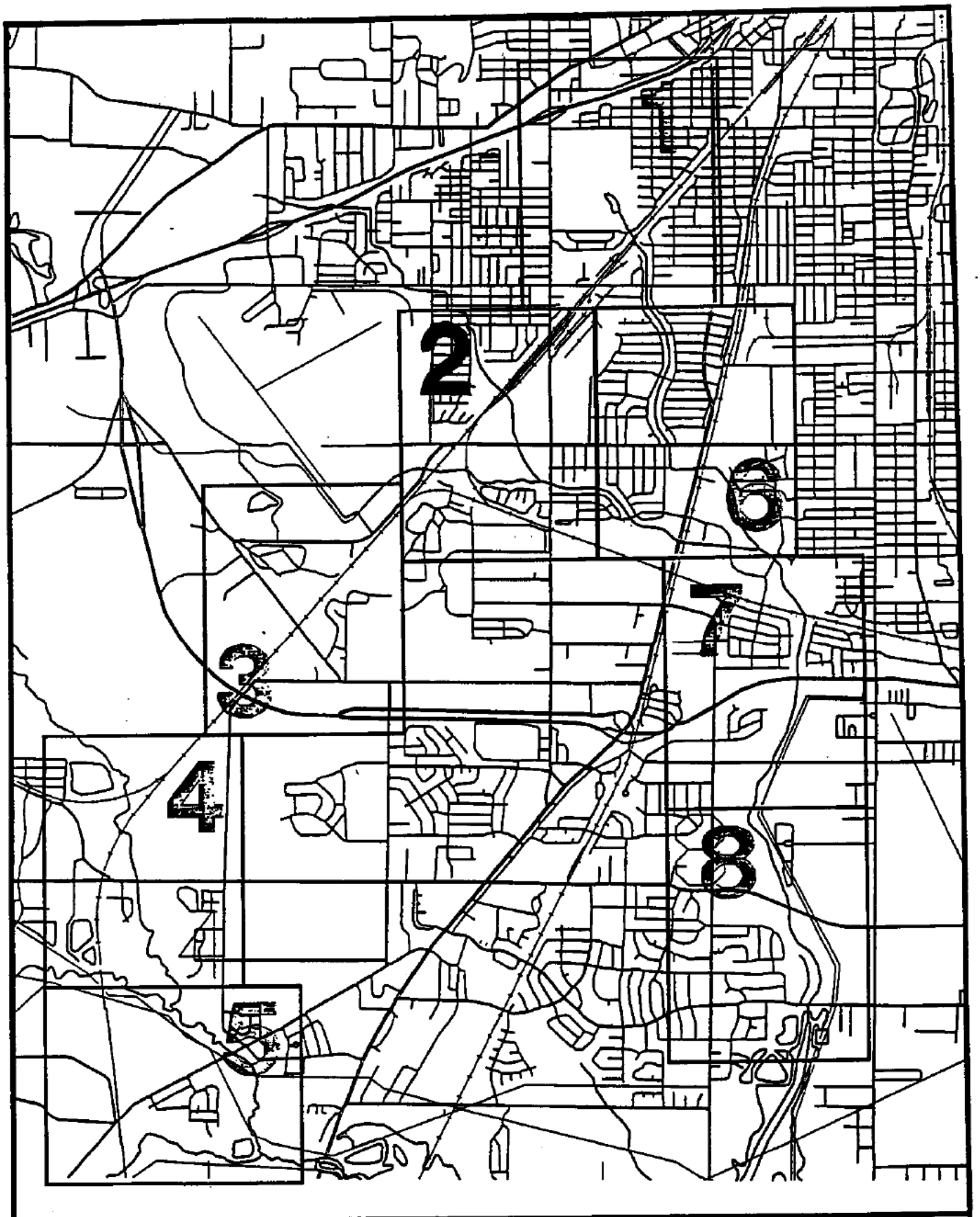
Brush Bayou Shoreline Composition

Silt and Consolidated Sediment-Lined Riparian Drainage Channel
Moderately-Sloping Channel Embankments
Moderate to Dense Vegetative Undergrowth

Riprap Boulders
Limited Vegetative Undergrowth

SHREVEPORT, LOUISIANA
Flournoy Lucas Road

Environmental Response Map 8



Calumet Lubricants / SHREVEPORT PACKAGING PLANT

Environmental Response Map Index

FIGURE 12.A

Legend of Symbols

Surface Water
i.e. Stormwater Drainage Ditches, Creeks, Bayous, Retention Ponds, Lakes, etc.

Secondary Surface Stormwater Conveyors
i.e. Secondary, Intermittent-Flow, Stormwater Drainage Ditches

Buried Pipeline

Remedial Sites

A **Shoreline / Stormwater Drainage Ditch Access Sites**

a **Pipeline Right-of-Way Access Sites**

Recreation Areas

123 **State Highway**

Cemeteries

Railroads

SHREVEPORT, LOUISIANA	Environmental Response Maps

Not Mapped

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

[redacted]

Not Mapped

Continued on Map 2

SHREVEPORT, LOUISIANA Hollywood Avenue	Environmental Response Map 1

Critical Areas to Monitor and Protect

Residential Properties

- Private residential properties adjacent to the Atlas Shreveport Refinery pipeline right-of-way and the Pennzoil Shreveport Packaging Plant pipeline spur along Pleasant Drive and Alto Vista Avenue.
- Private residential properties adjacent to the stormwater drainage ditch right-of-way along Hudson Street, Alto Vista Avenue, Pleasant Drive, Clark Boulevard, Prentiss Avenue, and West Canal Boulevard.

Educational Institutions

Baptist Christian College
3031 Hollywood Avenue
(318) 631-8875

Baptist Christian University
2835 Hollywood Avenue
(318) 635-5110

Commercial Properties

Commercial properties adjacent to the stormwater drainage ditch at the termination of Morningside Avenue west of the intersection with Prentiss Avenue:

- **Accurate Truck & Auto, Inc.**
  Morningside Avenue
  (318) 631-0110
- **Couvillion Plumbing & Heating**
  Morningside Avenue
  (318) 631-4508
- **Marine Salvage & Sales**
  3108 Morningside Avenue
  (318) 631-5461

Commercial Properties (Cont'd)

Commercial properties adjacent to the stormwater drainage ditch along West Canal Boulevard north of the intersection with Hollywood Avenue:

- **Barlow's Towing**
  West Canal Boulevard
  (318) 631-7086
- **Martin Auto Parts**
  3112 Hollywood Avenue
  (318) 631-5092
- **Sam's Air Conditioning & Heating**
  5513 Work Avenue
  (318) 636-0745
- **Tri-State Elevator Co.**
  5603 West Canal Boulevard
  (318) 635-8147
- **Wico Automotive**
  5609 West Canal Boulevard
  (318) 635-5341 or 635-5342

Commercial and/or Industrial properties adjacent to the Atlas Shreveport Refinery pipeline right-of-way along Hollywood Avenue:

Discount Building Materials
3210 Hollywood Avenue
(318) 636-4444

Pennzoil Products Co. Shreveport Packaging Plant
3450 Hollywood Avenue
(318) 636-7350

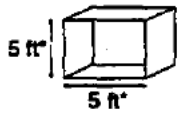
SHREVEPORT, LOUISIANA Hollywood Avenue	Environmental Response Map 1

Stormwater Drainage Ditch Access Sites

A — Alto Vista Avenue Crossing

Stormwater drainage ditch access is attainable via the Alto Vista Avenue bridge crossing. An unimproved pathway parallels the eastern perimeter of the channel south of the Alto Vista Avenue to a point downstream adjacent to the railroad bridge crossing. Areas along the drainage ditch right-of-way are composed of low-cut grass and sod and limited vegetative undergrowth. Residential properties parallel the western periphery of the drainage channel adjacent to Clark Boulevard and Alto Vista Avenue. Suitable as a spilled product recovery site.

Concrete-Lined, Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

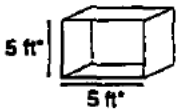


Southern Pacific Railroad Crossing
Rectangular, Concrete-Lined Box Culvert
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

B — Morningside Drive

Stormwater drainage ditch access is attainable via an asphalt-surfaced parking area and a manicured sod area at the termination of Morningside Drive. Local commercial properties adjacent to the parking areas include the following: Accurate Truck & Auto, Inc., Couvillion Plumbing & Heating, and Marine Salvage & Sales. (Refer to previous section for the corresponding telephone notification numbers.) An unimproved pathway parallels the northern side of the channel to a point upstream adjacent to the railroad bridge crossing. Suitable as a spilled product recovery site.

Concrete-Lined, Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.



Southern Pacific Railroad Crossing
Rectangular, Concrete-Lined Box Culvert
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

C — West Canal Boulevard

Stormwater drainage ditch access is attainable via local commercial properties along the western perimeter of the channel adjacent to West Canal Boulevard. A chain-link fence denotes the property boundary between the local business operators and the drainage ditch right-of-way. Local commercial properties along West Canal Blvd. include the following: Barlow's Towing, Martin's Auto Parts, Sam's Air Conditioning & Heating, Tri-State Elevator Co., and Wico Automotive. (Refer to previous section for the corresponding telephone notification numbers.)

Concrete-Lined, Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

SHREVEPORT, LOUISIANA Hollywood Avenue	Environmental Response Map 1

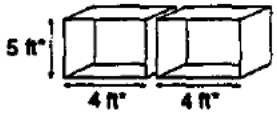
Stormwater Drainage Ditch Access Sites (Cont'd)

D

Hollywood Avenue Crossing

Stormwater drainage ditch access is attainable via the Hollywood Avenue bridge crossing and an abandoned, concrete-surfaced parking area along the north side of the roadway east of the drainage channel.
Note: Hollywood Avenue is a five-lane, major thoroughfare, and spill response activities at this particular site will interfere with the normal traffic flow within the vicinity.

Concrete-Lined, Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.



Rectangular, Concrete-Lined, Double Box Culverts
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

E

Canal Boulevard

Stormwater drainage ditch access is attainable via a manicured grassy area adjacent to the western perimeter of Canal Boulevard directly across from the Baptist Christian College campus. Suitable as a spilled product recovery site, as heavy equipment and vacuum trucks may be deployed along the asphalt-surfaced roadway adjacent to the stormwater outfall channel.

Concrete-Lined, Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

Calumet Refinery Pipeline Right-of-Way Access

a

Atlas Shreveport Refinery

The pipeline right-of-way parallels the easternmost perimeter of the Atlas Shreveport Refinery property adjacent to the incoming railroad spur. Direct access to the pipeline right-of-way is available at numerous locations along the eastern side of the refinery property.

b

Alto Vista Avenue Crossing

Pipeline right-of-way access is attainable at the Alto Vista Avenue crossing and adjacent to several residential properties along Alto Vista Avenue, Pleasant Avenue, and Clark Boulevard.
Note: Site clearance must be granted via the individual property owners prior to the initiation of any spill spill response activities.

c

Hollywood Avenue Crossing

Pipeline right-of-way access is attainable at the Hollywood Avenue crossing and via an undeveloped, sparsely vegetated field to the west of the Discount Building Materials property. (Refer to previous section for the corresponding telephone notification number.)

SHREVEPORT, LOUISIANA Hollywood Avenue	Environmental Response Map 1

Calumet Refinery Pipeline Rigt-of-Way Access (Cont'd)

(d) **East Jewella Road**
Pipeline right-of-way access is attainable via an unimproved, dirt road accessible via East Jewella Road just south of the intersection with Hollywood Avenue and north of the Union Pacific Railroad Hollywood Yard. The pipeline right-of-way parallels the northern side of East Jewella Road from it's intersection with Hollywood Avenue to the Jewella Road crossing.

Stormwater Drainage Ditch Composition

Concrete-Lined Trapezoidal Drainage Channel

SHREVEPORT, LOUISIANA Hollywood Avenue	Environmental Response Map 1

Continued on Map 1

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

[redacted]

Continued on Map 3

Continued on Map 6

Not Mapped

SHREVEPORT, LOUISIANA Union Pacific Railroad Hollywood Yard	Environmental Response Map 2

Critical Areas to Monitor and Protect

Residential Properties

Private residential properties adjacent to the Atlas Shreveport Refinery pipeline right-of-way within the subdivisions of Holly Hill, Forest Oak, and The Meadows.

Private residential properties adjacent to the stormwater drainage ditches right-of-ways within the subdivisions of Forest Oak, The Meadows, and Chateau Village, and along Red Bud Lane and Dollarway Drive.

Tiffany Square Apartments
7200 Jewella Road
(318) 687-1787

Villa Marquis Apartments I
3701 Valley View Drive
(318) 687-1181

Recreational Areas

Sunset Acres Park
Quillen Road
City of Shreveport Parks and Recreation
(318) 673-SPAR

Commercial Properties

Commercial properties adjacent to the stormwater drainage ditches within the watershed and the Atlas Shreveport pipeline right-of-way:

Hayes Subaru
7120 Jewella Road
(318) 686-5996

Hollis Body Shop
3850 West 70th Street
(318) 635-1028

Union Pacific Railroad Company
East Jewella Road
Hollywood Yard: (318) 636-6364
Security: (318) 687-1713

Educational Institutions

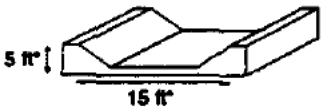
Mooretown Elementary School
3913 Powell
(318) 631-7297

Oak Terrace Alternative School
6660 Quilen Road
(318) 635-5363

Stormwater Drainage Ditch Access Sites

F

West 70th Street Crossing
Stormwater drainage ditch access is attainable via the West 70th Street (State Highway 511) bridge crossing. An unimproved area south of West 70th Street along the western embankment of the channel provides direct access to the waterway and is suitable as a spilled product recovery site. Hollis Body Shop, located along the northern side of West 70th Street, parallels the confluence of the two drainage ditches and yields reasonably adequate access to both stormwater channels.



Concrete-Lined Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

SHREVEPORT, LOUISIANA
Union Pacific Railroad Hollywood Yard

Environmental Response Map 2

Stormwater Drainage Ditch Access Sites (Cont'd)

G

Residential Properties along Bordeaux Drive and Chateau Drive

Stormwater drainage ditch access is attainable via private residential properties within The Meadows and Chateau Village subdivisions adjacent to Bordeaux Drive and Chateau Drive.
Note: Site clearance must be granted via the individual property owners prior to the initiation of any spill response activities.

Concrete-Lined Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

H

Tiffany Square Apartments

7200 Jewella Road
(318) 687-1787
Stormwater drainage ditch access is attainable via a concrete-surfaced parking area and an undeveloped, sparsely vegetated field towards the rear of the Tiffany Square Apartments property, just downstream of the confluence of the two drainage channels. Accessible via Valley View Drive west of the intersection with Jewella Road.

Concrete-Lined Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

I

Villa Marquis Apartments I

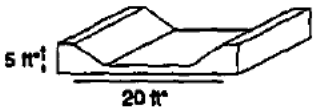
3701 Valley View Drive
(318) 687-1181
Stormwater drainage ditch access is attainable via a concrete-surfaced parking area along the southern perimeter of the Villa Marquis Apartments I property, downstream of the Jewella Road bridge crossing. Accessible via Dollarway Drive east of the intersection with Jewella Road.

Concrete-Lined Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

J

Residential Properties accessible via Dollarway Drive

Stormwater drainage ditch access is attainable via private residential properties and dead-end roadways at the termination of Janey Street, Arnie Street, Karen Street, Penny Street, and Elsie Street south of the intersections with Dollarway Drive.
Note: Site clearance must be granted via the individual property owners prior to the initiation of any spill response activities.



Concrete-Lined Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

SHREVEPORT, LOUISIANA Union Pacific Railroad Hollywood Yard	Environmental Response Map 2

Calumet Refinery Pipeline Right-of-Way Access

(e) **East Jewella Road**
Pipeline right-of-way access is attainable via an undeveloped, sparsely vegetated area paralleling the north side of Jewella Road northeast of the Union Pacific Railroad Hollywood Yard.

(f) **Union Pacific Railroad Company Hollywood Yard**
East Jewella Road
Hollywood Yard: (318) 636-6364
Security: (318) 687-1713
Pipeline right-of-way access is attainable via the Union Pacific Railroad Hollywood Yard. The pipeline right-of-way parallels the southern perimeter of the Union Pacific railroads and is easily accessible throughout the railroad yard property.

(g) **West 70th Street (State Highway 511) Crossing**
Pipeline right-of-way access is attainable at the West 70th Street (State Highway 511) crossing just east of the Union Pacific Railroad roadway crossing.

(h) **West 70th Street (State Highway 511)**
Pipeline right-of-way access is attainable via an undeveloped area along the southern side of West 70th Street (State Highway 511) adjacent to the southern property line of the Greater Shreveport Municipal Airport. Several unimproved access roadways traverse the railroad and provide direct pipeline right-of-way access from West 70th Street.

Stormwater Drainage Ditch Composition

Concrete-Lined Trapezoidal Drainage Channel

SHREVEPORT, LOUISIANA Union Pacific Railroad Hollywood Yard	Environmental Response Map 2

Not Mapped

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

[redacted]

Not Mapped

Continued on Map 2

Continued on Map 4

SHREVEPORT, LOUISIANA Forest Park West Cemetery	Environmental Response Map 3

Critical Areas to Monitor and Protect

Residential Properties

Private residential properties adjacent to the Atlas Shreveport Refinery pipeline right-of-way within the subdivisions of Silver Pine Village and Hickory Place, and along Meriwether Road.

Recreational Areas

Cargill Park
Lotus Avenue
City of Shreveport Parks and Recreation
(318) 673-SPAR

Cemeteries

Forest Park West Cemetery
4000 Meriwether Road
(318) 686-1461

Churches

Foursquare Gospel Church
3359 Meriwether Road
(318) 688-1543

Calumet Refinery Pipeline Right-of-Way Access

(i) **Airport Observation Unimproved Parking Area**
Pipeline right-of-way access is attainable via an undeveloped, dirt parking area paralleling the southern side of West 70th Street (State Highway 511) just south of the Greater Shreveport Municipal Airport.

(j) **Walker Road Underpass**
Pipeline right-of-way access is attainable via the Walker Road underpass. The pipeline and Union Pacific Railroad are elevated and pass over Walker Road, however, access to the pipeline may be accomplished along the Walker Road sod-lined, road-cut embankments.

(k) **Residential Properties along Parkdale Drive**
Pipeline right-of-way access is attainable towards the rear of several residential properties within the Silver Pine Village subdivision adjacent to Parkdale Drive.
Note: Site clearance must be granted via the individual property owners prior to the initiation of any spill response activities.

(l) **Meriwether Road Crossing**
Pipeline right-of-way access is attainable at the Meriwether Road crossing just south of the Union Pacific Railroad roadway crossing and north of the Foursquare Gospel Church.

(m) **Hickory Ridge Road Crossing**
Pipeline right-of-way access is attainable at the termination of Hickory Ridge Road just east of the Union Pacific Railroad roadway crossing. Prior to the intersection with the Union Pacific Railroad, Hickory Ridge Road converts from an asphalt-surfaced to an unimproved, dirt-surfaced roadway.

(n) **Dean Road**
Pipeline right-of-way access is attainable at the termination of Dean Road (unimproved, dirt-surfaced roadway) adjacent to the quarry / remedial site. Accessible via Hickory Ridge Road from the north and Flournoy Lucas Road from the south.

SHREVEPORT, LOUISIANA Forest Park West Cemetery	Environmental Response Map 3

Continued on Map 3

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

[redacted]

Not Mapped

Not Mapped

Continued on Map 5

SHREVEPORT, LOUISIANA Flournoy Lucas Road	Environmental Response Map 4

Critical Areas to Monitor and Protect

Residential Properties

Private residential properties adjacent to Gilmer Bayou within the subdivisions of Pine Forest South, Edgewood Village, and Summer Grove.

Private residential properties adjacent to the Atlas Shreveport Refinery pipeline right-of-way within the subdivision of Pine Forest South.

Recreational Areas

Hot Wheels Skating Palace
9241 Southland Park Drive North
(318) 686-6095

Churches

Shreveport Bible Church
4761 Bert Kouns
(318) 686-5530

Commercial Properties

Ben E. Keith Foods
4980 Flournoy Lucas Road
(318) 687-9680

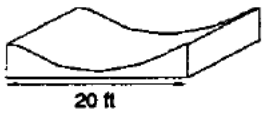
Hot Wheels Skating Palace
9241 Southland Park Drive North
(318) 686-6095

Poulan / Weed Eater Division
White Consolidated Industries, Inc.
5020 Flournoy Lucas Road
(318) 687-0100

Gilmer Bayou Shoreline Access Sites

K

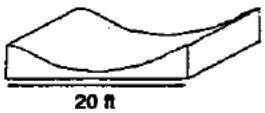
Flournoy Lucas Road Crossing
Gilmer Bayou shoreline access is attainable at the Flournoy Lucas Road bridge crossing via an unimproved, dirt-surfaced area along the southern side of the roadway adjacent to the eastern embankment of the waterway. Access is also attainable via a concrete-surfaced parking area at the Shreveport Bible Church along the western side of the channel.



Silt and Consolidated Sediment-Lined Riparian Drainage Channel
Moderately-Sloping Channel Embankments
Limited Vegetative Undergrowth

L

Residential Properties along Sandalwood
Gilmer Bayou shoreline access is attainable via private residential properties within the Pine Forest South subdivision adjacent to Sandalwood.
Note: Site clearance must be granted via the individual property owners prior to the initiation of any spill response activities.



Silt and Consolidated Sediment-Lined Riparian Drainage Channel
Moderately-Sloping Channel Embankments
Limited Vegetative Undergrowth

SHREVEPORT, LOUISIANA
Flournoy Lucas Road

Environmental Response Map 4

Atlas Shreveport Pipeline Right-of-Way Access

(o) **Flournoy Lucas Road (State Highway 3222) Crossing**
Pipeline right-of-way access is attainable at the Flournoy Lucas Road (State Highway 3222) crossing just west of the Ben E. Keith Foods property.

(p) **Industrial Loop Expressway (State Highway 526) Crossing**
Pipeline right-of-way access is attainable at the Industrial Loop Expressway (State Highway 526) crossing west of the intersection with Green Forest Road and the fork at the intersection with Flournoy Lucas Road.

Gilmer Bayou Shoreline Composition

Silt and Consolidated Sediment-Lined Riparian Drainage Channel
Moderately-Sloping Channel Embankments
Limited Vegetative Undergrowth

SHREVEPORT, LOUISIANA
Flournoy Lucas Road

Environmental Response Map 4

Not Mapped

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

[redacted]

Continued on Map 4

Not Mapped

Not Mapped

SHREVEPORT, LOUISIANA Colquit Road	Environmental Response Map 5

Critical Areas to Monitor and Protect

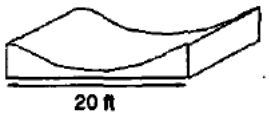
Residential Properties

Private residential properties adjacent to Gilmer Bayou and Boggy Bayou within the subdivisions of Colquitt Estates and Briarcliff, and along Colquitt Road.

Gilmer Bayou Shoreline Access Sites

M

Colquitt Road (State Highway 525) Crossing
Gilmer Bayou shoreline access is attainable at the Colquitt Road (State Highway 525) bridge crossing just west of the intersection with Dean Road and Ardis Taylor Drive, with bayou access restricted to the roadside shoulder.



Silt and Consolidated Sediment-Lined Riparian Drainage Channel
Moderately-Sloping Channel Embankments
Dense Vegetative Undergrowth

Calumet Refinery Pipeline Right-of-Way Access

q

ENRON Brown Station
3460 Industrial Drive
Bossier City, Louisiana
(318) 746-7441
Emergency: (318) 746-7441
Accessible via an unimproved, private roadway off of Colquit Road just east of the intersection with Chandler Road.

Gilmer Bayou Shoreline Composition

Silt and Consolidated Sediment-Lined Riparian Drainage Channel
Moderately-Sloping Channel Embankments
Dense Vegetative Undergrowth

SHREVEPORT, LOUISIANA Colquitt Road	Environmental Response Map 5

Continued on Map 1

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

[redacted]

Continued on Map 2

Not Mapped

Continued on Map 7

SHREVEPORT, LOUISIANA Canal Boulevard	Environmental Response Map 6

Critical Areas to Monitor and Protect

Residential Properties

Private residential properties adjacent to the stormwater drainage ditches along West Canal Boulevard, Canal Boulevard, Meadow Avenue, Sunnybrook Street, Dollarway Drive, Wilshire Drive, Valley View Drive, Louise Street, and Red Bud Lane.

Southern Oaks Apartments
1111 70th Street
(318) 865-8996

Educational Institutions

Sunset Acres Elementary School
6514 West Canal Boulevard
(318) 631-7121

Woodlawn Senior High School
7340 Wyngate Boulevard
(318) 686-3161

Churches

Bryant Temple Church of God In Christ
6805 West Canal Boulevard
(318) 635-3211

Saint Abraham Baptist Church
7104 Wilshire Drive
(318) 688-2836

Recreational Areas

Crystal Palace Skating Center
7143 Mansfield Road
(318) 686-8736

Wildwood Park
Mansfield Road
City of Shreveport Parks & Recreation
(318) 673-SPAR

Commercial Properties

Commercial properties adjacent to the stormwater drainage ditch along West 70th Street (State Highway 511):

Dairy Queen
2905 West 70th Street
(318) 686-7301

State Finance
2902 West 70th Street
(318) 636-9642

Westgate Shopping Center
Cloth World, Discount Wallpaper, Eckerd Drugs, Fashion Gal, 50% Off Stores, Mac Frugals Bargain Close-Outs
2700 West 70th Street

Industrial properties adjacent to the stormwater drainage ditch along Valley View Drive:

Georgia-Pacific Lumber Office
2801 Valley View Drive
(318) 687-9400

Specialty Oil Co.
2748 Valley View Drive
(318) 687-8000

Westland Oil Co.
2740 Valley View Drive
(318) 688-1300

Wincup, Inc.
Valley View Drive

Commercial properties adjacent to the stormwater drainage ditch along Valley View Drive:

Garden Valley Shopping Center
Valley View Drive

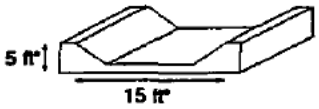
SHREVEPORT, LOUISIANA
Canal Boulevard

Environmental Response Map 6

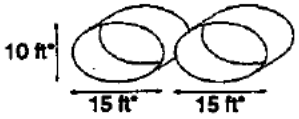
Stormwater Drainage Ditch Access Sites

N — Meadow Avenue Crossing

Stormwater drainage ditch access is attainable via the Meadow Avenue bridge crossing. A concrete-surfaced pedestrian footpath parallels the shoulder along both sides of the roadway at the bridge crossing. Residential properties flank the perimeter of the drainage channel both north and south of the Meadow Avenue bridge.



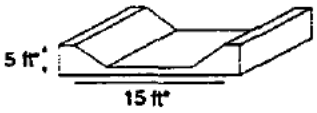
Concrete-Lined, Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.



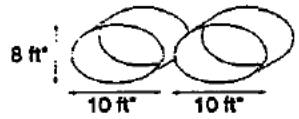
Corrugated Metal Culvert with 45 degree Inlet & Discharge Pipes
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

O — Sunnybrook Street Crossing

Stormwater drainage ditch access is attainable via the Sunnybrook Street bridge crossing. A concrete-surfaced pedestrian footpath parallels the shoulder along both sides of the roadway at the bridge crossing. Residential properties flank the perimeter of the drainage channel both north and south of the Sunnybrook Street bridge.



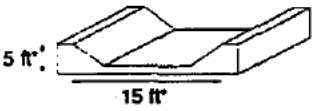
Concrete-Lined, Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.



Elliptical, Concrete-Lined Culvert with Concrete Headwall
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

P — Elmhurst Street

Stormwater drainage ditch access is attainable at the termination of Elmhurst Street just west of the intersection with Canal Boulevard. Residential properties parallel the drainage ditch right-of-way along both Elmhurst Street and Canal Boulevard.



Concrete-Lined, Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

Q — Bryant Temple Church of God in Christ

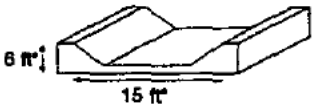
6805 West Canal Boulevard
(318) 635-3211
Stormwater drainage ditch access is attainable via a concrete-surfaced parking area towards the rear of the Bryant Temple Church of God in Christ property. Accessible via West Canal Boulevard at the intersection with Marquette Street.

Stormwater Drainage Ditch Access Sites (Cont'd)

R

Westgate Shopping Center

Stormwater drainage ditch access is attainable via an unimproved, concrete-surfaced parking area and local store delivery and service area towards the rear of the Westgate Shopping Center. (Refer to previous section for the local store operators within the shopping center.) Suitable as a spill response equipment staging area and spilled product recovery location.

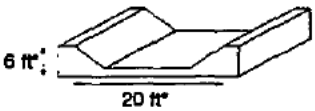


Concrete-Lined, Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

S

Mansfield Road (U.S. Highway 171) Crossing

Stormwater drainage ditch access is attainable at the Mansfield Road bridge crossing via an unimproved, concrete-surfaced, local store delivery and service area along the southeasternmost perimeter of the Westgate Shopping Center. (Refer to previous section for the local store operators within the shopping center.



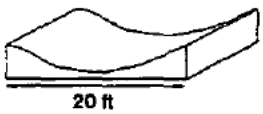
Concrete-Lined, Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

T

Crystal Palace Skating Center

7143 Mansfield Road
(318) 686-8736

Stormwater drainage ditch access is attainable via a concrete-surfaced parking area towards the rear of the Crystal Palace Skating Center. Residential properties along Wilshire Drive and the Saint Abraham Baptist Church parallel the opposite (eastern) side of the drainage channel.



Cobblestone-Lined Riparian Drainage Channel
Steep Channel Embankments
Moderate Vegetative Undergrowth

U

Woodlawn Senior High School

7340 Wyngate Boulevard
(318) 686-3161

Stormwater drainage ditch access is attainable along the far western perimeter of the Woodlawn Senior High School campus adjacent to the track & field center. Drainage ditch access via paved areas is restricted, as the area adjacent to the channel right-of-way is largely undeveloped and grass sod-surfaced.

Grass and Sod-Lined Riparian Drainage Channel
Moderately-Sloping Channel Embankments
Moderate Vegetative Undergrowth

V

Specialty Oil Co. and Westland Oil Co. Properties

Specialty Oil Co.	Westland Oil Co.
2748 Valley View Drive	2740 Valley View Drive
(318) 687-8000	(318) 688-1300

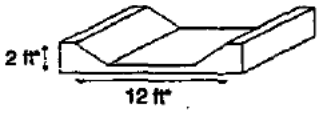
Stormwater drainage ditch access is attainable towards the rear of the Specialty Oil Co. and Westland Oil Co. properties and accessible via a large, undeveloped, sparsely vegetated floodplain.
(Continued on the following Environmental Response Map 6 Index Page.)

Stormwater Drainage Ditch Access Sites (Cont'd)

V **Specialty Oil Co. and Westland Oil Co. Properties (Cont'd)**
(Continued from the preceding Environmental Response Map 6 Index Page.)

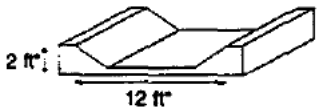
Grass and Sod-Lined Riparian Drainage Channel
Moderately-Sloping Channel Embankments
Moderate Vegetative Undergrowth

W **Residential Properties accessible via Red Bud Lane and Louise Street**
Stormwater drainage ditch access is attainable via private, residential properties along Red Bud Lane and Louise Street north of the intersections with Valley View Drive.
Note: Site clearance must be granted via the individual property owners prior to the initiation of any spill response activities.



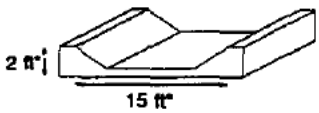
Concrete-Lined, Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

X **Valley View Drive Crossing**
Stormwater drainage ditch access is attainable via the Valley View Drive bridge crossing. A concrete-surfaced pedestrian footpath parallels the shoulder along either side of the roadway at the bridge crossing. Residential properties flank the perimeter of the drainage channel north of the Valley View Drive bridge.



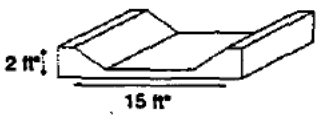
Concrete-Lined, Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

Y **Mansfield Road (U.S. Highway 171) Crossing**
Stormwater drainage ditch access is attainable at the Mansfield Road bridge crossing via a steep, thinly vegetated, floodplain embankment along the northern side of the roadway. Waterway access is somewhat restricted, as the Mansfield Road bridge has an approximately 30 to 40-foot vertical clearance.



Concrete-Lined, Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

Z **Trammel Drive**
Stormwater drainage ditch access is attainable at the termination of Trammel Drive south of the intersection with Valley View Drive, and adjacent to the Georgia-Pacific Lumber Office and Wincup, Inc. industrial properties. Drainage channel access is available via sparse vegetative underbrush adjacent to the cul-de-sac at the termination of Trammel Drive.



Concrete-Lined, Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

Stormwater Drainage Ditch Access Sites (Cont'd)

AA

Valley View Drive Crossing
Stormwater drainage ditch access is attainable at the Valley View Drive crossing via an undeveloped, sparsely vegetated floodplain and an unimproved, dirt roadway paralleling the southern side of the channel. The concrete-lined, trapezoidal drainage channel discharges across a concrete-surfaced spillway at the bridge crossing, whereupon the stormwater flow becomes channelized within earthern and rubblestone-lined embankments south of Valley View Drive.

Concrete-Lined, Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

Stormwater Drainage Ditch Composition

Grass and Sod-Lined Riparian Drainage Channel
Moderately-Sloping Channel Embankments
Limited to Moderate Vegetative Undergrowth

Concrete-Lined Trapezoidal Drainage Channel

SHREVEPORT, LOUISIANA
Canal Boulevard

Environmental Response Map 6

Continued on Map 6

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

[redacted]

Not Mapped

Not Mapped

Continued on Map 8

SHREVEPORT, LOUISIANA Inner Loop Expressway	Environmental Response Map 7

Critical Areas to Monitor and Protect

Residential Properties

Private residential properties adjacent to Brush Bayou along Woodmont Place, Pickwick Place, Hyde Park Place, Kingstowne Place, Westbrook Place, Coyth Lane, and Shady Lane.

Churches

Mt. Zion Baptist Church
620 Mt. Zion Road
(318) 688-9722

Commercial Properties

A-1 Mini Warehouse, Inc.
695 Mt. Zion Road
(318) 687-4627

Lipper-Stutsman Co., Inc.
8101 Wyngate Boulevard
(318) 687-1585

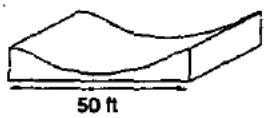
Netherton Co., Inc. Quarry
Linwood Avenue
(318) 635-9721

Brush Bayou Shoreline Access Sites

BB

Wyngate Boulevard Crossing

Brush Bayou shoreline access is attainable at the Wyngate Boulevard bridge crossing via an unimproved, dirt road paralleling the southern embankment of the channel adjacent to the radio tower. Shoreline access is also available towards the rea'Bof the Lipper-Stutsman Co., Inc. property via an undeveloped, sparsely vegetated, floodplain area. The Brush Bayou channel is approximately 20 feet wide under average flow conditions, however, the floodway adjacent to the waterway nears a width of 50 feet.

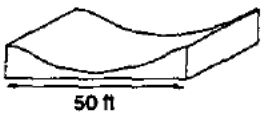


Grass and Sod-Lined Riparian Drainage Channel
Moderately-Sloping Channel Embankments
Moderate Vegetative Undergrowth

CC

West 84th Street Crossing

Brush Bayou shoreline access is attainable at the West 84th Street bridge crossing via the roadside shoulder.



Silt and Consolidated Sediment-Lined Riparian Drainage Channel
Moderately-Sloping Channel Embankments
Dense Vegetative Undergrowth

DD

Residential Properties along Westbrook Place

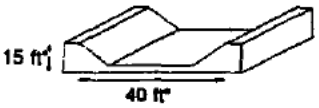
Brush Bayou shoreline access is attainable via private, residential properties adjacent to Westbrook Place. As late as the summer of 1993, numerous drainage channel improvements were still in progress within the Brush Bayou watershed from West 84th Street to the Inner Loop Expressway.
Note: Site clearance must be granted via the individual property owners prior to the initiation of any spill response activities in the area.
(Continued on the following Environmental Response Map 7 Index Page.)

Brush Bayou Shoreline Access Sites (Cont'd)

DD **Residential Properties along Westbrook Place (Cont'd)**
(Continued from the preceding Environmental Response Map 7 Index Page.)

Concrete-Lined, Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

EE **Residential Properties along Coyth Lane**
Brush Bayou shoreline access is attainable via private, residential properties adjacent to Coyth Lane. An undeveloped residential lot providing direct access to Brush Bayou is located at the intersection of Coyth Lane and Lynbrook Boulevard. As late as the summer of 1993, numerous drainage channel improvements were still in progress within the Brush Bayou watershed from West 84th Street to the Inner Loop Expressway. Note: Site clearance must be grranted via the individual property owners prior to the initiation of any spill response activities in the area.

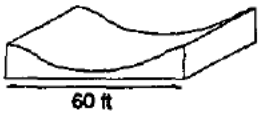


Concrete-Lined, Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

FF **Inner Loop Expressway (State Highway 3132) Crossing**
Brush Bayou shoreline access is attainable at the Inner Loop Expressway (State Highway 3132) crossing via the roadside shoulder. Dense vegetative undergrowth paralleling the waterway embankments and the distinct vertical clearance of the roadway crossing somewhat inhibits access to the creek within this vicinity.

Concrete-Lined, Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

GG **Netherton Co., Inc. Pit**
Lynwood Avenue
(318) 635-9721
Brush Bayou shoreline access is attainable via the westernmost perimeter of the Netherton Co., Inc. Pit. Accessible via an unimproved roadway off of Lynwood Avenue south of the intersection with the Inner Loop Expressway.



Silt and Consolidated Sediment-Lined Riparian Drainage Channel
Moderately-Sloping Channel Embankments
Dense Vegetative Undergrowth

HH **Mt. Zion Road Crossing**
Brush Bayou shoreline access is attainable at the Mt. Zion Road bridge crossing via the roadside shoulder. Dense vegetative undergrowth within the bayou right-of-way inhibits access adjacent to the channel.

Silt and Consolidated Sediment-Lined Riparian Drainage Channel
Moderately-Sloping Channel Embankments
Dense Vegetative Undergrowth

Brush Bayou Shoreline Composition

Silt and Consolidated Sediment-Lined Riparian Drainage Channel
Moderately-Sloping Channel Embankments
Moderate to Dense Vegetative Undergrowth

Concrete-Lined Trapezoidal Drainage Channel

SHREVEPORT, LOUISIANA
Inner Loop Expressway

Environmental
Response Map 7

Continued on Map 7

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

[redacted]

Not Mapped

Not Mapped

Not Mapped

SHREVEPORT, LOUISIANA Flournoy Lucas Road	Environmental Response Map 8

Critical Areas to Monitor and Protect

Residential Properties

Private residential properties adjacent to Brush Bayou along Melba Drive, Kildare Park, Crooked Creek Drive, Quiet Cove, Flournoy Lucas Road, and Overlook Drive.

Cemeteries

Carver Memorial Cemetery
Kennie Road
(318) 925-8039

Educational Institutions

Southern Hills Elementary School
9075 Kingston Road
(318) 686-1974

Commercial Properties

Allen's Automotive
500 Flournoy Lucas Road
(318) 686-0658

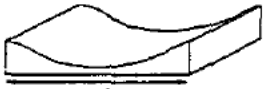
Browning Ferris Industries
Woolworth Road Regional Landfill
10580 Woolworth Road
(318) 925-2262

City of Shreveport Water & Sewerage Department
Flournoy Lucas Lift Station
Overlook Drive
24 hours: (318) 673-7600

Brush Bayou Shoreline Access Sites

II

Carver Memorial Cemetery
Kennie Road
(318) 925-8039
Brush Bayou shoreline access is attainable via the Carver Memorial Cemetery unimproved access roadways circumjacent to the cemetery. Accessible via Linwood Avenue and Kennie Road.
Note: Site clearance must be granted via the Carver Memorial Cemetery prior to the initiation of any spill response activities within the cemetery grounds.



Eastern Embankment: Large Riprap Boulder Channel Embankments
Western Embankment: Silt and Consolidated Sediment-Lined Riparian Channel Embankments
Limited Vegetative Undergrowth

JJ

Bert Kouns Industrial Loop (State Highway 526) Crossing
Brush Bayou shoreline access is attainable at the Bert Kouns Industrial Loop (State Highway 526) bridge crossing via an unimproved area paralleling the eastern periphery of the channel along the northern side of the roadway.

Silt and Consolidated Sediment-Lined Riparian Channel Embankments
Moderate to Steep-Sloping Embankments
North of Roadway: Limited Vegetative Undergrowth
South of Roadway: Dense Vegetative Undergrowth

SHREVEPORT, LOUISIANA
Flournoy Lucas Road

Environmental Response Map 8

Brush Bayou Shoreline Access Sites (Cont'd)

KK

Undeveloped Residential Lots along Crooked Creek Drive
Brush Bayou shoreline access is attainable via undeveloped, sparsely vegetated, residential lots adjacent to Crooked Creek Drive. Accessible via Flournoy Lucas Road just west of the Brush Bayou bridge crossing.

Silt and Consolidated Sediment-Lined Riparian Drainage Channel
Moderately-Sloping Channel Embankments
Moderate Vegetative Undergrowth

LL

Allen's Automotive
500 Flournoy Lucas Road
(318) 686-0658
Brush Bayou shoreline access is attainable via a concrete-surfaced parking area adjacent to Allen's Automotive and a local commercial park along the eastern embankment of the channel. Accessible via Flournoy Lucas Road just east of the Brush Bayou bridge crossing.

Silt and Consolidated Sediment-Lined Riparian Drainage Channel
Moderately-Sloping Channel Embankments
Moderate to Dense Vegetative Undergrowth

MM

Flournoy Lucas Road (State Highway 3204) Crossing
Brush Bayou shoreline access is attainable at the Flournoy Lucas Road (State Highway 3204) bridge crossing with bayou access restricted to the roadside shoulder due to the dense vegetative groundcover.

Silt and Consolidated Sediment-Lined Riparian Drainage Channel
Moderately-Sloping Channel Embankments
Dense Vegetative Undergrowth

NN

City of Shreveport Water & Sewerage Department
Flournoy Lucas Lift Station
Overlook Drive
24 hours: (318) 673-7600
Brush Bayou shoreline access is attainable via the City of Shreveport Water & Sewerage Department, Flournoy Lucas Lift Station facility. Accessible via Flournoy Lucas Road and Overlook Drive.

Silt and Consolidated Sediment-Lined Riparian Drainage Channel
Moderately-Sloping Channel Embankments
Dense Vegetative Undergrowth

SHREVEPORT, LOUISIANA
Flournoy Lucas Road

Environmental Response Map 8

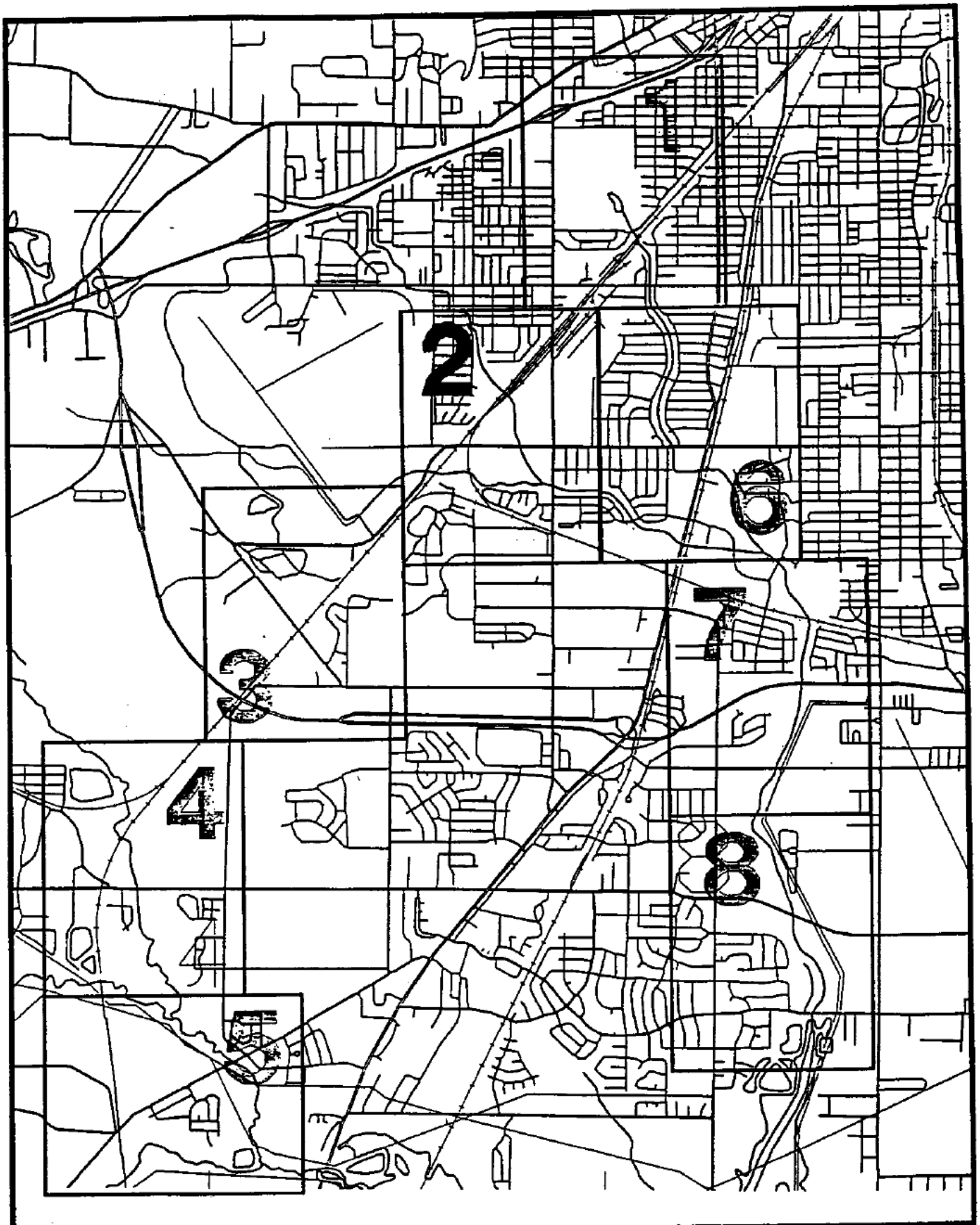
Brush Bayou Shoreline Composition

Silt and Consolidated Sediment-Lined Riparian Drainage Channel
Moderately-Sloping Channel Embankments
Moderate to Dense Vegetative Undergrowth

Riprap Boulders
Limited Vegetative Undergrowth

SHREVEPORT, LOUISIANA
Flournoy Lucas Road

Environmental Response Map 8



Calumet Lubricants / SHREVEPORT PACKAGING PLANT

Environmental Response Map Index

FIGURE 12.A

Legend of Symbols

Surface Water
i.e. Stormwater Drainage Ditches, Creeks, Bayous, Retention Ponds, Lakes, etc.

Secondary Surface Stormwater Conveyors
i.e. Secondary, Intermittent-Flow, Stormwater Drainage Ditches

Buried Pipeline

Remedial Sites

A **Shoreline / Stormwater Drainage Ditch Access Sites**

a **Pipeline Right-of-Way Access Sites**

Recreation Areas

123 **State Highway**

Cemeteries

Railroads

SHREVEPORT, LOUISIANA	Environmental Response Maps

Not Mapped

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

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Not Mapped

Not Mapped

Baptist Christian College

Continued on Map 2

SHREVEPORT, LOUISIANA Hollywood Avenue	Environmental Response Map 1

Critical Areas to Monitor and Protect

Residential Properties

Private residential properties adjacent to the Atlas Shreveport Refinery pipeline right-of-way and the Pennzoil Shreveport Packaging Plant pipeline spur along Pleasant Drive and Alto Vista Avenue.

Private residential properties adjacent to the stormwater drainage ditch right-of-way along Hudson Street, Alto Vista Avenue, Pleasant Drive, Clark Boulevard, Prentiss Avenue, and West Canal Boulevard.

Educational Institutions

Baptist Christian College
3031 Hollywood Avenue
(318) 631-8875

Baptist Christian University
2835 Hollywood Avenue
(318) 635-5110

Commercial Properties

Commercial properties adjacent to the stormwater drainage ditch at the termination of Morningside Avenue west of the intersection with Prentiss Avenue:

- **Accurate Truck & Auto, Inc.**
  Morningside Avenue
  (318) 631-0110
- **Couvillion Plumbing & Heating**
  Morningside Avenue
  (318) 631-4508
- **Marine Salvage & Sales**
  3108 Morningside Avenue
  (318) 631-5461

Commercial Properties (Cont'd)

Commercial properties adjacent to the stormwater drainage ditch along West Canal Boulevard north of the intersection with Hollywood Avenue:

- **Barlow's Towing**
  West Canal Boulevard
  (318) 631-7086
- **Martin Auto Parts**
  3112 Hollywood Avenue
  (318) 631-5092
- **Sam's Air Conditioning & Heating**
  5513 Work Avenue
  (318) 636-0745
- **Tri-State Elevator Co.**
  5603 West Canal Boulevard
  (318) 635-8147
- **Wico Automotive**
  5609 West Canal Boulevard
  (318) 635-5341 or 635-5342

Commercial and/or Industrial properties adjacent to the Atlas Shreveport Refinery pipeline right-of-way along Hollywood Avenue:

Discount Building Materials
3210 Hollywood Avenue
(318) 636-4444

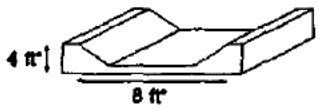
Pennzoil Products Co. Shreveport Packaging Plant
3450 Hollywood Avenue
(318) 636-7350

SHREVEPORT, LOUISIANA Hollywood Avenue	Environmental Response Map 1

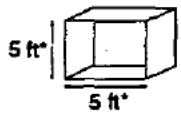
Stormwater Drainage Ditch Access Sites

A — Alto Vista Avenue Crossing

Stormwater drainage ditch access is attainable via the Alto Vista Avenue bridge crossing. An unimproved pathway parallels the eastern perimeter of the channel south of the Alto Vista Avenue to a point downstream adjacent to the railroad bridge crossing. Areas along the drainage ditch right-of-way are composed of low-cut grass and sod and limited vegetative undergrowth. Residential properties parallel the western periphery of the drainage channel adjacent to Clark Boulevard and Alto Vista Avenue. Suitable as a spilled product recovery site.



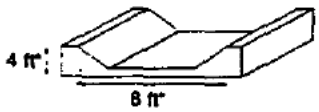
Concrete-Lined, Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.



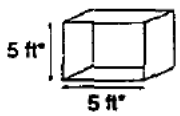
Southern Pacific Railroad Crossing
Rectangular, Concrete-Lined Box Culvert
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

B — Morningside Drive

Stormwater drainage ditch access is attainable via an asphalt-surfaced parking area and a manicured sod area at the termination of Morningside Drive. Local commercial properties adjacent to the parking areas include the following: Accurate Truck & Auto, Inc., Couvillion Plumbing & Heating, and Marine Salvage & Sales. (Refer to previous section for the corresponding telephone notification numbers.) An unimproved pathway parallels the northern side of the channel to a point upstream adjacent to the railroad bridge crossing. Suitable as a spilled product recovery site.



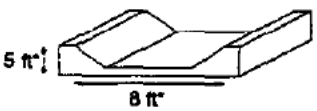
Concrete-Lined, Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.



Southern Pacific Railroad Crossing
Rectangular, Concrete-Lined Box Culvert
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

C — West Canal Boulevard

Stormwater drainage ditch access is attainable via local commercial properties along the western perimeter of the channel adjacent to West Canal Boulevard. A chain-link fence denotes the property boundary between the local business operators and the drainage ditch right-of-way. Local commercial properties along West Canal Blvd. include the following: Barlow's Towing, Martin's Auto Parts, Sam's Air Conditioning & Heating, Tri-State Elevator Co., and Wico Automotive. (Refer to previous section for the corresponding telephone notification numbers.)



Concrete-Lined, Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

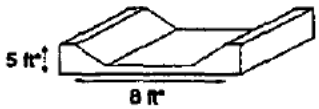
SHREVEPORT, LOUISIANA Hollywood Avenue	Environmental Response Map 1

Stormwater Drainage Ditch Access Sites (Cont'd)

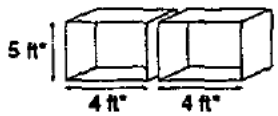
D

Hollywood Avenue Crossing

Stormwater drainage ditch access is attainable via the Hollywood Avenue bridge crossing and an abandoned, concrete-surfaced parking area along the north side of the roadway east of the drainage channel.
Note: Hollywood Avenue is a five-lane, major thoroughfare, and spill response activities at this particular site will interfere with the normal traffic flow within the vicinity.



Concrete-Lined, Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

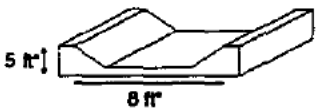


Rectangular, Concrete-Lined, Double Box Culverts
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

E

Canal Boulevard

Stormwater drainage ditch access is attainable via a manicured grassy area adjacent to the western perimeter of Canal Boulevard directly across from the Baptist Christian College campus. Suitable as a spilled product recovery site, as heavy equipment and vacuum trucks may be deployed along the asphalt-surfaced roadway adjacent to the stormwater outfall channel.



Concrete-Lined, Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

Calumet Refinery Pipeline Right-of-Way Access

a

Atlas Shreveport Refinery

The pipeline right-of-way parallels the easternmost perimeter of the Atlas Shreveport Refinery property adjacent to the incoming railroad spur. Direct access to the pipeline right-of-way is available at numerous locations along the eastern side of the refinery property.

b

Alto Vista Avenue Crossing

Pipeline right-of-way access is attainable at the Alto Vista Avenue crossing and adjacent to several residential properties along Alto Vista Avenue, Pleasant Avenue, and Clark Boulevard.
Note: Site clearance must be granted via the individual property owners prior to the initiation of any spill spill response activities.

c

Hollywood Avenue Crossing

Pipeline right-of-way access is attainable at the Hollywood Avenue crossing and via an undeveloped, sparsely vegetated field to the west of the Discount Building Materials property. (Refer to previous section for the corresponding telephone notification number.)

SHREVEPORT, LOUISIANA Hollywood Avenue	Environmental Response Map 1

Calumet Refinery Pipeline Rigt-of-Way Access (Cont'd)

(d) **East Jewella Road**
Pipeline right-of-way access is attainable via an unimproved, dirt road accessible via East Jewella Road just south of the intersection with Hollywood Avenue and north of the Union Pacific Railroad Hollywood Yard. The pipeline right-of-way parallels the northern side of East Jewella Road from it's intersection with Hollywood Avenue to the Jewella Road crossing.

Stormwater Drainage Ditch Composition

Concrete-Lined Trapezoidal Drainage Channel

SHREVEPORT, LOUISIANA
Hollywood Avenue

Environmental Response Map 1

Continued on Map 1

Continued on Map 3

Continued on Map 6

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

[redacted]

SHREVEPORT, LOUISIANA
Union Pacific Railroad Hollywood Yard

Environmental Response Map 2

Critical Areas to Monitor and Protect

Residential Properties

Private residential properties adjacent to the Atlas Shreveport Refinery pipeline right-of-way within the subdivisions of Holly Hill, Forest Oak, and The Meadows.

Private residential properties adjacent to the stormwater drainage ditches right-of-ways within the subdivisions of Forest Oak, The Meadows, and Chateau Village, and along Red Bud Lane and Dollarway Drive.

Tiffany Square Apartments
7200 Jewella Road
(318) 687-1787

Villa Marquis Apartments I
3701 Valley View Drive
(318) 687-1181

Recreational Areas

Sunset Acres Park
Quillen Road
City of Shreveport Parks and Recreation
(318) 673-SPAR

Commercial Properties

Commercial properties adjacent to the stormwater drainage ditches within the watershed and the Atlas Shreveport pipeline right-of-way:

Hayes Subaru
7120 Jewella Road
(318) 686-5996

Hollis Body Shop
3850 West 70th Street
(318) 635-1028

Union Pacific Railroad Company
East Jewella Road
Hollywood Yard: (318) 636-6364
Security: (318) 687-1713

Educational Institutions

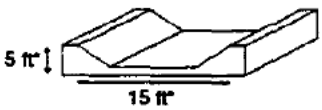
Mooretown Elementary School
3913 Powell
(318) 631-7297

Oak Terrace Alternative School
6660 Quilen Road
(318) 635-5363

Stormwater Drainage Ditch Access Sites

F

West 70th Street Crossing
Stormwater drainage ditch access is attainable via the West 70th Street (State Highway 511) bridge crossing. An unimproved area south of West 70th Street along the western embankment of the channel provides direct access to the waterway and is suitable as a spilled product recovery site. Hollis Body Shop, located along the northern side of West 70th Street, parallels the confluence of the two drainage ditches and yields reasonably adequate access to both stormwater channels.



Concrete-Lined Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

SHREVEPORT, LOUISIANA
Union Pacific Railroad Hollywood Yard

Environmental Response Map 2

Stormwater Drainage Ditch Access Sites (Cont'd)

G

Residential Properties along Bordeaux Drive and Chateau Drive

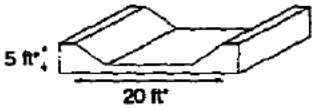
Stormwater drainage ditch access is attainable via private residential properties within The Meadows and Chateau Village subdivisions adjacent to Bordeaux Drive and Chateau Drive.
Note: Site clearance must be granted via the individual property owners prior to the initiation of any spill response activities.

Concrete-Lined Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

H

Tiffany Square Apartments

7200 Jewella Road
(318) 687-1787
Stormwater drainage ditch access is attainable via a concrete-surfaced parking area and an undeveloped, sparsely vegetated field towards the rear of the Tiffany Square Apartments property, just downstream of the confluence of the two drainage channels. Accessible via Valley View Drive west of the intersection with Jewella Road.



Concrete-Lined Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

I

Villa Marquis Apartments I

3701 Valley View Drive
(318) 687-1181
Stormwater drainage ditch access is attainable via a concrete-surfaced parking area along the southern perimeter of the Villa Marquis Apartments I property, downstream of the Jewella Road bridge crossing. Accessible via Dollarway Drive east of the intersection with Jewella Road.

Concrete-Lined Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

J

Residential Properties accessible via Dollarway Drive

Stormwater drainage ditch access is attainable via private residential properties and dead-end roadways at the termination of Janey Street, Arnie Street, Karen Street, Penny Street, and Elsie Street south of the intersections with Dollarway Drive.
Note: Site clearance must be granted via the individual property owners prior to the initiation of any spill response activities.

Concrete-Lined Trapezoidal Drainage Channel
* Note: These dimensions are purely estimates, as the City of Shreveport Public Works Department does not maintain an updated inventory of the exact dimensions of the drainage structures throughout the watershed.

Calumet Refinery Pipeline Right-of-Way Access

(e) **East Jewella Road**
Pipeline right-of-way access is attainable via an undeveloped, sparsely vegetated area paralleling the north side of Jewella Road northeast of the Union Pacific Railroad Hollywood Yard.

(f) **Union Pacific Railroad Company Hollywood Yard**
East Jewella Road
Hollywood Yard: (318) 636-6364
Security: (318) 687-1713
Pipeline right-of-way access is attainable via the Union Pacific Railroad Hollywood Yard. The pipeline right-of-way parallels the southern perimeter of the Union Pacific railroads and is easily accessible throughout the railroad yard property.

(g) **West 70th Street (State Highway 511) Crossing**
Pipeline right-of-way access is attainable at the West 70th Street (State Highway 511) crossing just east of the Union Pacific Railroad roadway crossing.

(h) **West 70th Street (State Highway 511)**
Pipeline right-of-way access is attainable via an undeveloped area along the southern side of West 70th Street (State Highway 511) adjacent to the southern property line of the Greater Shreveport Municipal Airport. Several unimproved access roadways traverse the railroad and provide direct pipeline right-of-way access from West 70th Street.

Stormwater Drainage Ditch Composition

Concrete-Lined Trapezoidal Drainage Channel

SHREVEPORT, LOUISIANA
Union Pacific Railroad Hollywood Yard

Environmental Response Map 2

Not Mapped

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

[redacted]

Not Mapped

Continued on Map 2

Continued on Map 4

SHREVEPORT, LOUISIANA Forest Park West Cemetery	Environmental Response Map 3

APPENDIX D
GENERAL CLEANUP PLAN

APPENDIX D

GENERAL CLEANUP PLAN

The purpose of this plan is to be able to rapidly plan a response to an oil release and to inform interested parties of Calumet Lubricants Co. approach. It is not all-inclusive and should only be used as a guide when planning for particular incident.

I. Incident Description

Date of Incident: ___ / ____ / _____ Present Site: _____

Cause of Release: _____

Location: _____

Spilled Oil's Location: _____

II. Initial Actions

Steps taken to stop discharge at source of spill are:

_____

_____

_____

The process for containment and removal of oil at the source was:

_____

_____

_____

Initial Incident Briefing Meeting consisted of the following assessment information:

_____

_____

_____

_____

Application for the use of dispersants was submitted on: ___ / ____ / _____

APPENDIX D

III. Present Situation

a) Safety Status

	Number	Nature
Fatality	_____	_____
Disabling Injury	_____	_____
Non-disabling Injury	_____	_____

b) Current Weather

Wind Speed _____

Temperature _____

Visibility _____

Ceiling _____

c) Oil Status / Amounts

Total Oil Lost _____

Recovered Liquids _____

Evaporated _____

Dispersed _____

Slick Size _____

d) Status of Spilling Facility

Location _____

Activity _____

e) Responders

	Onsite	In Route / ETA
Company	_____	_____
Contractors	_____	_____
Agencies	_____	_____
Volunteers	_____	_____
Other	_____	_____
Total	_____	_____

APPENDIX D

f) Wildlife

Type Birds	Dead	Treated	Total
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

g) Resources

Type	Deployed	Available	Required
Vessels	_____	_____	_____
Helicopters	_____	_____	_____
Aircraft	_____	_____	_____
Boom	_____	_____	_____
Skimmers	_____	_____	_____
Sorbents	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

h) Name of Contractors

_____

_____

_____

_____

_____

_____

i) Waste

Type	**Amount**
Liquids (mixture)	_____
Debris	_____

APPENDIX D

j) Shoreline Impact

Class	**Amount**
Light	_____
Medium	_____
Heavy	_____
Unknown	_____
Total	_____

k) Command Post Location: _____

l) Staging Areas: _____

m) Site Characterization by Industrial Hygienist: _____

_____

IV. Clean Up Strategy

a) Next 24 Hours:

_____

_____

_____

_____

b) 24 to 48 Hours:

_____

_____

_____

_____

c) 48 Hours to 1 Week:

_____

_____

_____

_____

APPENDIX D

d) 1 Week to 2 Weeks:

_____

_____

_____

_____

e) Thereafter:

_____

_____

_____

_____

V. This plan will be modified as necessary:

Prepared By:

Name	Signature	Phone
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

APPENDIX E

ENVIRONMENTAL PROTECTION PLAN

The purpose of this plan is to be able to rapidly plan a response to an oil release and to inform interested parties of Calumet Lubricants Co. approach. It is not all-inclusive and should only be used as a guide when planning for particular incident.

Date: ___ / ____ / _____ Location: _____

Source of Release: _____ Amount of Release: _____

Weather Conditions: _____

Tidal State / Current Direction: _____

Wave Action: _____

State agency representative responsible for environmental protection: _____

_____

I. **Assessment**

Meteorological Data:

Initial Wind: Speed: _____ Direction: _____

Air Temperature: _____

Precipitation: _____ Rain _____ Snow _____ None _____

Visibility: (estimate) _____ Good _____Fair _____ Poor _____

Oceanographic Data:

Water Current: Speed: _____ Direction: _____

Water Temperature: _____

Sea State: 1____ 2____ 3____ 4____ 5____

Tide Phase: ____Flood ____High ____Ebb ____Low

Impacted Areas at Spill Site:

_____

_____

_____

_____

APPENDIX E

Impacted Wildlife (including marine mammals):

_____

_____

_____

_____

Number Dead Animals Found: _____

Where: _____

Description of Surrounding Areas (including socioeconomic environment):

_____

_____

_____

_____

Approximate time before oil impacts shoreline (if not immediate):

_____

_____

Assessments for damage to natural resources are necessary by the responsible party:

_____ Yes _____No

If yes, water column and sediment samples to assess background conditions were taken on:

_____

_____

Initial studies to determine amount of wildlife activity at leading edge of spill were made on:

_____

_____

Commercial values and recreational levels of activity in the area threatened by the spill have been determined as:

_____

_____

_____

_____

APPENDIX E

Qualify the effects of the spill by determining the extent to which services have been reduced as a result of natural resources injuries, including:

Recreation: _____

Aesthetics: _____

Wildlife: _____

Habitat: _____

II. Impacts

Refer to response maps to determine areas that need immediate protection:

_____

_____

_____

Using response plan, identify environmentally sensitive areas or endangered species:

_____

_____

_____

Specify habitat classification, shoreline type, and retention potential:

_____

_____

_____

Possible areas in danger with oil movement:

_____

_____

_____

Tracking of oil in regards to impacting environmental has been overseen. Aerial surveillance and tracking maps attached.

APPENDIX E

III. Immediate Action

Identify all containment methods that may be used to protect shoreline:

Sorbent Booming [ ]
Exclusion Booming [ ]
Containment Booming [ ]
Cascading Diversion Booms [ ]
Single Diversion Booms [ ]
Sorbent Barriers [ ]

List specific booming strategies given the above information:

_____

_____

_____

How much booming materials will be utilized: _____

Is there sufficient quantity available: _____

If not, identify all feasible sources that are being utilized (COOPS, contractors, etc.)

_____

_____

Identify all deterrent methods that may be used for wildlife:

Floating / Stationary Figures [ ]
Helium Filled Ballons [ ]
Propane Cannons / AV-Alarms [ ]
Bird Scare-A-Ware Guns [ ]
Other Noisemakers [ ]
Herding / Hazing Aircraft [ ]
Herding Boats [ ]
Capture / Relocation [ ]
Electromagnetic Currents [ ]

Methods utilized for capture / cleanup / recovery of wildlife:

_____

_____

APPENDIX E

Resources available for methods identified above:

_____

_____

Special equipment necessary:

_____

_____

Special facilities that are being utilized (rehabilitation, cleanup, disposal, etc)

_____

_____

Transport vehicles that are being utilized to move oiled mammal / birds:

_____

_____

Recovery and rehabilitation crews that are being mobilized to coordinate environmental operations:

_____

_____

IV. **Volunteers**

Individual in charge of volunteer supervision: _____

Determine if volunteers will be necessary for cleanup: _____

If yes, estimate number: _____

Specify where volunteers will be utilized: _____

_____

_____

Detail volunteer duties and responsibilities: _____

_____

_____

APPENDIX E

V. **This plan will be modified as necessary:**

Prepared By:

Name	Signature	Phone
_____	_____	____ - _____
_____	_____	____ - _____
_____	_____	____ - _____
_____	_____	____ - _____
_____	_____	____ - _____
_____	_____	____ - _____
_____	_____	____ - _____
_____	_____	____ - _____

APPENDIX F
Spill Prevention Control and Countermeasure Plan

CALUMET

CALUMET SHREVEPORT REFINERY

SHREVEPORT, LOUISIANA

SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN

JULY 2012

PREPARED BY:

C-K ASSOCIATES • LLC
AN EMPLOYEE-OWNED ENVIRONMENTAL & ENGINEERING FIRM
2001 East 70th Street, Suite 503
Shreveport, Louisiana 71105
(318) 797-8636

C-K Associates' Project No. 4716S

GENERAL FACILITY INFORMATION

Owner: Calumet Shreveport Lubricants and Waxes, LLC

Operator: Calumet Shreveport Lubricants and Waxes, LLC

Location: 3333 Midway Street
Shreveport, Caddo Parish, Louisiana 71109

Mailing Address: 3333 Midway Street
Shreveport, Caddo Parish, Louisiana 71109

Telephone: 318-632-4077 (Plant Manager, Tom Germany)
(b) (6) [redacted] (Plant Manager, Tom Germany, cell)

MANAGEMENT APPROVAL

This Spill Prevention, Control and Countermeasures Plan has the full approval of management at a level of authority to commit the necessary resources to fully implement the plan.

Signature: Tom Germany

Date: July 24, 2012

Name: Tom Germany

Title: Refinery Manager

ENGINEER'S CERTIFICATION

I hereby certify that (1) I am familiar with the requirements of the SPCC rules (40 CFR Part 112 and LAC 33:IXi; (2) I have visited and examined the facility; (3) the plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards, and with the requirements of the SPCC rule; (4) the procedures for inspection and testing have been established; and (5) the plan is adequate for the facility.

STATE OF LOUISIANA
GORDON R. MOORE
REG. No. 25202
REGISTERED
PROFESSIONAL ENGINEER
IN
ENVIRONMENTAL ENGINEERING

Gordon R. Moore
Printed Name of Registered Professional Engineer

Signature of Registered Professional Engineer

7/9/12	25202	LA
Date	Registration No.	State

TABLE OF CONTENTS

Section **Page**

1.0 CONFORMANCE WITH 40 CFR 112 *[ref. 40CFR112.7(a)(1)]* **1**

2.0 DEVIATIONS FROM 40CFR112 REQUIREMENTS *[ref. 40CFR112.7(a)(2)]* **3**

3.0 FACILITY DESCRIPTION *[ref. 40CFR112.7(a)(3)]* **3**

3.1 Facility Diagram *[ref. 40CFR112.7(a)(3)]* 4

3.2 Facility Storage *[ref. 40CFR112.7(a)(3)(i)]* 4

3.3 Discharge Prevention Measures *[ref. 40CFR112.7(a)(3)(ii)]* 4

3.4 Discharge and Drainage Controls *[ref. 40CFR112.7(a)(3)(iii)]* 5

3.5 Spill Countermeasures *[ref. 40CFR112.7(a)(3)(iv)]* 7

3.6 Disposal of Recovered Materials *[ref. 40CFR112.7(a)(3)(v)]* 7

3.7 Contact List and Phone Numbers *[ref. 40CFR112.7(a)(3)(vi)]* 8

4.0 CONTINGENCY PLANNING *[ref. 40CFR112.7(a)(4&5)]* **11**

5.0 POTENTIAL SPILL PREDICTION OF VOLUME, RATE, AND DIRECTION *[ref. 40CFR112.7(b)]* **11**

6.0 SECONDARY CONTAINMENT AND DIVERSIONARY CONTROL *[ref. 40CFR112.7(c&d)]* **12**

7.0 INSPECTIONS, TESTS, AND RECORDS *[ref. 40CFR112.7(e)]* **13**

8.0 PERSONNEL TRAINING AND DISCHARGE PREVENTION MEASURES *[ref. 40CFR112.7(f)]* **13**

9.0 SECURITY *[ref. 40CFR112.7(g)]* **15**

10.0 FACILITY TANK TRUCK LOADING/UNLOADING *[ref. 40CFR112.7(h)]* **15**

11.0 EVALUATION OF FIELD-CONSTRUCTED ABOVEGROUND TANKS *[ref. 40CFR112.7(i)]* **16**

12.0 CONFORMANCE WITH OTHER REGULATIONS *[ref. 40CFR112.7(j)]* **16**

12.1 SPC Requirements *[ref. LAC33:IX, CHAPTER 9]* 16

12.2 SPCC Requirements for Onshore Facilities *[ref. 40 CFR 112.8]* 17

12.2.1 Facility Drainage *[ref. 40CFR112.8(b)]* 17

12.2.2 Bulk Storage Containers *[ref. 40CFR112.8(c)]* 18

12.2.3 Facility Transfer Operations *[ref. 40CFR112.8(d)]* 20

TABLE OF CONTENTS
(Continued)

Appendices

A Certification of the Applicability of the Substantial Harm Criteria Checklist

B Facility Diagram

C List of Potential Oil and Hazardous Material Spill Sources

D Spill Notification Form

E Secondary Containment Discharge Documentation Form

F Secondary Containment Calculations

G Plan Review and Update

H Summary of Raley and Associates, Inc. Storage Tank Containment Analysis

1.0 CONFORMANCE WITH 40 CFR 112 *[ref. 40CFR112.7(a)(1)]*

This Spill Prevention Control and Countermeasures (SPCC) Plan has been prepared for the Calumet Shreveport Lubricants and Waxes, LLC, Shreveport Refinery (CSR). The purpose of this SPCC Plan is to demonstrate conformance with Title 40, Code of Federal Regulations, Part 112 (40CFR112).

This SPCC Plan is organized in accordance with the suggested regulatory sequence in 40 CFR 112.7; consequently, no regulatory cross-reference is required. For each major section of this SPCC Plan, the section title references the regulatory citation and requirement addressed by that section. Each section explains how compliance is achieved at the facility.

As required by 40CFR112.20, Calumet has completed the determination of the applicability of substantial harm criteria. As shown in the completed Certification of the Applicability of Substantial Harm Criteria in Appendix A, CSR is a substantial harm facility and is required to prepare a Facility Response Plan.

CSR is in compliance with the entire rules and regulations found in 40 CFR 112, except as otherwise stated in this SPCC Plan. A thorough description of compliance with each applicable requirement of the SPCC rule is provided in each section of this SPCC Plan. The applicable regulatory reference for each requirement is listed in the title of each major section of this plan.

In preparing this SPCC Plan, compliance determinations have been made to identify facility upgrades required to comply with the July 2002 SPCC Rule (ref. Federal Register, July 17, 2002, pp. 47042-47152, Oil Pollution Prevention and Response; Non-Transportation-Related Onshore and Offshore Facilities; Final Rule). As specified in the final rule and subsequent rulemakings, existing facilities must implement facility upgrades to comply with the rule no later than July 1, 2009. Upgrades have been identified and scheduled for implementation based on the results of the Storage Tank Containment Analysis Report that was conducted by Raley and Associates, Inc. in March 2009. A summary of this Report, including a list of the improvements/upgrades, is provided in Appendix H. Additional upgrades are listed in the following table:

Facility Upgrades Required		
No.	**Description**	**Schedule**
1.	The following tanks are not in service. Calumet must choose one of the following options for each of these tanks: (1) the tank must be provided with secondary containment which is adequate to contain the contents of the largest tank plus sufficient freeboard for precipitation, or (2) the tank must be permanently cleaned, closed and disconnected and placarded accordingly. 48 62 65 130 TC5001 WWCC2010 – oily sludge dewatering system slop oil tank WWTAT – wastewater aeration tank Conoco additives tank Horizontal bolted tank near groundwater remediation system	Immediate Implementation
2.	Portable containers such as drums, totes, and other small containers must be located in an area with secondary containment that is adequate to contain the contents of the tank plus sufficient freeboard for precipitation or in an area that drains to the process wastewater treatment system.	Immediate Implementation
3.	Use the Secondary Containment Discharge Documentation Form in Appendix E to document that water drained from the containment area for Tanks 175 and 199 was inspected for oil prior to discharge to Outfall 008.	Immediate Implementation
4.	Increase height of containment around oil tanks RO 150 and RO 320 by 11.5 inches to a total height of 16.5 inches. Seal the drains in the containment wall.	Immediate Implementation
5.	Increase height of containment around Champion Wastewater Treatment Chemical Tanks (C1, C2, C3, C4) by 7.5 inches to a total height of 19.5 inches. Seal the drains in the containment wall.	Immediate Implementation

2.0 DEVIATIONS FROM 40CFR112 REQUIREMENTS *[ref. 40CFR112.7(a)(2)]*

CSR is not proposing any deviation from the requirements listed in 40CFR112.7(c), 40CFR112.8, 40CFR112.9, 40CFR112.10, or 40CFR112.11, other than 40CFR112.8(c)(6). The requirements found in 40CFR112.8(c)(6) require oil tanks be visually inspected for integrity as well as an additional integrity testing technique. CSR will conduct monthly visual inspections of small containers (<30,000 gallons) that do not contact the ground and can be inspected on all sides, but will not conduct any additional integrity testing technique for the following reasons:

- Internal corrosion associated with tanks in oil service poses a minimal risk of failure.
- The tanks are being visually inspected on a monthly basis.

Due to the impractical nature of many of the integrity testing methods with a concrete tank, CSR will instead pump down any concrete sumps and tanks once every five years in order to visually inspect the tanks or sumps for cracks or leaks.

3.0 FACILITY DESCRIPTION *[ref. 40CFR112.7(a)(3)]*

Calumet Shreveport Lubricants and Waxes, LLC owns and operates the Calumet Shreveport Refinery which is located in Shreveport, Caddo Parish, Louisiana.

The physical address of the facility in Shreveport is 3333 Midway Street. It is located in the North one-half of Section 15, T17N, R14W at the intersection of Midway Street and Jewella Street. The Shreveport Refinery occupies approximately 210 acres. The facility is bordered by an industrial area to the west, I-20 and a commercial/residential area to the north, and residential areas to the east and south.

CSR refines crude oil by use of distillation, hydrofinishing, dewaxing/desulfurization, hydrogenation, solvent extraction, hydrotreating, propane deasphalting, and MEK dewaxing. CSR also operates necessary equipment for required utilities such as cooling towers and boilers. Feedstocks and finished products are stored in pressure tanks, floating roof tanks, cone roof tanks, and gas blanketed tanks. Pipelines and tanker trucks are used to receive raw materials, and pipelines, trucks and rail cars are used to deliver finished products to customers.

3.1 Facility Diagram *[ref. 40CFR112.7(a)(3)]*

A diagram of the facility is included as Appendix B. At a minimum, the facility diagram includes the following information:

- the location and content (oil or hazardous material) of each fixed container of 55 gallons or more, and
- oil transfer stations and connecting pipes.

3.2 Facility Storage *[ref. 40CFR112.7(a)(3)(i)]*

The facility uses aboveground tanks for oil storage. All of the storage tanks are constructed using materials compatible with the material stored. For each storage tank the material of construction is consistent and compatible with the operation of the tank. Fail-safe engineering features include Release Prevention Systems (RPS) such as pressure-vacuum conservation vents and remote overfill alarms. Corrosion protection for the tank bottoms is supplied by the plant cathodic protection system or individual cathodic protection systems. The oil container ID, their volume, and their content are listed in Appendix C. Other potential oil spill sources are also listed in Appendix C.

In addition to oil storage, other hazardous materials, regulated under Louisiana Administrative Code 33, Part IX (LAC33: IX), Chapter 9, Spill Prevention and Control, are also listed in Appendix C. Other potential hazardous material spill sources are also listed in Appendix C, if present.

The reference ID number for each tank or spill source in Appendix C is the same number used for reference to locate the containers on the Facility Diagram (Appendix B).

3.3 Discharge Prevention Measures *[ref. 40CFR112.7(a)(3)(ii)]*

CSR has established procedures and protocols to be utilized as standard operating procedures to prevent the discharge of oil and hazardous materials. Incorporated in these procedures are methodologies to perform tasks in a manner that will reduce or prevent potential spills of oil and hazardous materials used and stored at the facility.

Discharge prevention measures for the following activities are described further in the referenced sections of this SPCC Plan:

- Secondary containment and diversionary control (§6.0),
- Inspections (§7.0),
- Personnel training (§8.0),

- Facility security (§9.0),
- Loading/unloading and vehicle fueling (§10.0),
- Brittle fracture prevention (§11.0),
- Secondary containment drainage (§12.2.1), and
- Oil transfer operations (§12.2.3).

3.4 Discharge and Drainage Controls *[ref. 40CFR112.7(a)(3)(iii)]*

Stormwater drainage ditches run along the south and east sides of the refinery (outside of the refinery property). A 52-inch storm drain runs through the refinery and ties into the other stormwater drainage ditches at the refinery wastewater outfall. All three of these stormwater drains are owned by the City of Shreveport. These ditches along with Calumet's effluent wastewater make up the headwaters of Brush Bayou which discharges into Wallace Lake.

Drainage from Diked Areas

Storm water that accumulates in the diked storage areas is retained by manually operated valves and is visually inspected prior to manual discharge. In areas where storm water collects inside the containment, operations personnel visually inspect for the presence of any oil sheen or product on the water's surface. If no evidence of any oil sheen or product is observed, then the water is allowed to discharge from the containment area via manually operated valves. Drainage of stormwater from secondary containment is conducted under responsible supervision. Water that is discharged from these diked areas is treated in the stormwater treatment system prior to discharge through Outfall 001.

Drainage from Undiked Areas

Elevations within the plant grounds are such that drainage from undiked areas goes into a system of storm water drainage ditches. The runoff entering these ditches flows into the process sewer system or the storm water surge area (holding ponds). That portion of the runoff that runs to the southeast area of the plant is pumped via a lift station to the North Holding Pond.

Process area runoff is carried through a treatment system where oil is captured and recovered. The water is then pumped to one of the surge tanks where any oil that might have carried through may be skimmed. The wastewater is then pumped to the inlet of the wastewater treatment plant where it goes through biological treatment and clarification. The treated effluent is normally pumped to the effluent ditch upstream of Outfall 001, but it can be directed to the northwest side of the 2.11-acre

Settling Pond (Final Pond). The water exits the Final Pond under an oil-skimming weir and through a water measurement flume (Outfall 001), then leaves the plant grounds through the concrete-bottomed effluent ditch. Plant effluents discharged into navigable waters are continuously monitored and observed frequently (daily, as a minimum) for indication of possible upsets which may cause an oil spill event.

The aeration tank system is available for standby use, if needed. The wastewater is pumped from one of the surge tanks into the Aeration Tank for treatment. The wastewater is then sent to the No. 1 Aeration Pond. From the weir of the No. 1 Aeration Pond, the water goes to the "U-shaped" No. 2 Aeration Pond, then to the Final Pond.

Stormwater that enters the system is diverted to two underground separators during rain events. The separators discharge water to two holding ponds, North and South Holding Ponds. Oil from the separators is pumped into the plant oil recovery system. The material in the North Holding Pond flows into the South Pond, which flows under a weir, through a measurement flume (Outfall 007), and enters the concrete effluent ditch downstream of Outfall 001.

Drainage from the Remote Area of the Tank Farm

A diked area containing two tanks (Tanks 175 & 199) in the southwest corner of the plant grounds is outside the drainage system described above. Each tank has a closed oily water sewer sump and pump, as well as its own dike and drain pipe equipped with a gate valve. The area around the tank dikes has two intermittent discharge points for which the valves are normally closed. When water collects inside this containment area it will be inspected for oil before the dike valve is opened and the area is drained; see upgrades in Section 1 of this SPCC Plan.

Drainage from Curbed Process Areas

Stormwater runoff from the curbed process areas is routed to oil/water separator systems where free oil is removed from the wastewater prior to pumping to one of the surge tanks. The wastewater pumped to the surge tanks can be skimmed for any additional oil that may have carried through the system. The wastewater is then pumped to the wastewater treatment plant and treated as described in the section for drainage from undiked areas.

3.5 Spill Countermeasures *[ref. 40CFR112.7(a)(3)(iv)]*

Discharge Discovery

Visual inspection is the primary method used for discharge discovery. Calumet personnel walk through the facility daily inspecting for leaks from tanks or other equipment.

Discharge Response

In the event of a spill, the person(s) discovering the spill will make an assessment of the spill and call for medical assistance if an injury has occurred. If the spill is the result of an operation that the spill observer can control safely, then he should take immediate steps to stop the spill. The person discovering the spill should notify the "A" Operator and take any steps deemed necessary to minimize any threat to public health and safety and to reduce the severity of the incident.

If the person discovering the spill has the appropriate training, he should function as the responsible Calumet person in charge until relieved by the "A" operator. The "A" operator will contact the Shift Team Leader who will make further notifications as required. Detailed discharge response procedures are further outlined in Section 3 of the Facility Response Plan (FRP).

Discharge Cleanup

If the release has occurred in an area without secondary containment, absorbent materials or pads will be applied to the spill or the spill will be surrounded by absorbent material or absorbent socks/booms. A vacuum pump may be used to collect the free oil or liquids. The spent absorbent material, pads, and/or socks/booms will be collected and placed in separate containers designated for this use. Any free oil will be placed in separate containers. All contaminated soil is to be removed from the site as soon as possible. The Environmental Manager will perform appropriated sampling to determine RECAP compliance.

In the event of a spill that cannot be contained, controlled and/or removed by on-site personnel and equipment, the spill response contractors listed in Section 3.7 will be called upon to provide assistance. Further details regarding discharge cleanup are outlined in Section 3 of the FRP.

3.6 Disposal of Recovered Materials *[ref. 40CFR112.7(a)(3)(v)]*

The resulting solid waste material will be characterized and disposed of at an approved facility. It will be the responsibility of the Environmental Manager to arrange for the characterization and disposal of the recovered materials. If free oil is present in too large a quantity for plant personnel to handle, an oil removal company will be contacted to come to the facility to collect and remove the oil for proper reclaiming or disposal.

3.7 Contact List and Phone Numbers *[ref. 40CFR112.7(a)(3)(vi)]*

Internal Verbal Notifications

Any person discovering a spill will immediately notify the "A" Operator. The "A" Operator will assess the spill and determine the need to make further internal and external notifications.

External Verbal Notifications

For all reportable quantity releases, the "A" Operator or his/her designee will make immediate verbal notification of the agencies on the Contact List in this Section.

A release is any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing of oil or other hazardous materials in the environment. A release is considered to be reportable to external agencies, if it meets one of the following criteria:

1. causes an injury requiring hospitalization or any fatality; or

2. results in a fire or explosion which could reasonably be expected to affect the public safety beyond the boundaries of the facility; or

3. exceeds the reportable quantity (RQ) during any continuous 24-hour period when that reportable quantity could reasonably be expected to escape beyond the bounds of the facility; or

4. any incident, accident, or cleanup within a facility, which could reasonably be expected to affect public safety beyond the boundaries of the facility; or

5. any incident where the owner or operator knows a protective action beyond the boundaries of the facility has been initiated.

The Spill Notification Form in Appendix D will be used to collect information and document all verbal spill reporting. In no event will the collection of information delay the immediate verbal notification of external agencies. In the event that all of the information listed on the Spill Notification Form is not available immediately, external agency notifications will be made with available information and follow-up notifications will be made to amend the initial immediate notification.

Reportable Quantity (RQ)

For oil, the RQ is 42 gallons or any smaller amount that causes a sheen on the discharge from the facility. For all other hazardous materials, the RQs are specified as follows:

1. any material and its RQ appearing on the most current list of Extremely Hazardous Substances as established by the Environmental Protection Agency (40 CFR Part 355, Appendix A); or

2. any material and its RQ appearing on the most current list of CERCLA Hazardous Substances as established by the Environmental Protection Agency (40 CFR Part 302, Table 302.4); or

3. any material and its RQ appearing on the most current list of Hazardous Substances and Reportable Quantities as established by the Department of Transportation, Research and Special Programs Administration (49 CFR Part 172, Appendix to 172.101); or

4. any material on which maintenance of an MSDS is required under the Occupational Safety and Health Administration's Hazard Communication Standard as found in 29 CFR 1910.1200 et seq., and does not appear on any of the lists found in Paragraphs 1, 2 or 3 above, must be reported if the material released exceeds the RQ of 5000 pounds hereby established by the Louisiana Department of Public Safety and Corrections, except that all compressed or refrigerated flammable gases and all flammable liquids (as defined in 49 CFR 173.120) will have a 100 pound RQ, and all other liquids requiring maintenance of an MSDS will have a 1000 pound RQ.

Contact List and Phone Numbers		
Internal personnel to be immediately notified by person discovering spill		
Name	**Title**	**Telephone**
"A" Operator	"A" Operator	Contact by Radio
Shift Team Leader	Shift Team Leader	Contact by Radio
Tom Germany	Refinery Manager	318-518-9530
Mitch Perdue	Production Manager	318-218-6627
Aubrey Marchand	Operations Manager	318-550-8477
Michael Rhoades	EHS Manager	724-290-9920
John Swanson	Maintenance Manager	901-409-8444

Outside Verbal Notification-Immediate	
Agency	**Telephone**
Caddo Parish LEPC	318-425-5351
Louisiana State Police Hazardous Materials Unit	225-925-6595
National Response Center	800-424-8802
Other Emergency Contacts, As Needed	
Agency	**Telephone**
Ambulance, Police, Other	911
Spill Response Contractors, As Needed	
Company	**Telephone**
Jones Environmental Bossier City, Louisiana	877-345-4534
Anderson Pollution Control Longview, Texas	866-609-6208
SWS Environmental Services	903-984-0001
TAS Environmental Services	888-654-0111

Follow-up Written Reports

Depending on the quantity and impacts associated with the spill, follow-up written reports may be required, typically within five calendar days after

the incident occurs for LEPCs and within seven calendar days of the initial verbal notification for LDEQ. Facility personnel will consult with Calumet corporate level environmental support personnel for assistance in preparing written reports.

4.0 CONTINGENCY PLANNING *[ref. 40CFR112.7(a)(4&5)]*

CSR is required to prepare a Facility Response Plan as described in 40CFR112.20. CSR was evaluated and found to have the potential to cause substantial harm in accordance with 40 CFR 112.20. Documentation and certification of this determination is provided in Appendix A.

Spill response will be implemented in accordance with the procedures described in Sections 3.5 and 3.6 of this SPCC Plan.

5.0 POTENTIAL SPILL PREDICTION OF VOLUME, RATE, AND DIRECTION *[ref. 40CFR112.7(b)]*

Major types of failures or accidents associated with potential spills would be tank, truck, or pipe leaks or ruptures. However, should a major failure occur, adequate containment for the entire contents of the potential spill source has been provided by secondary containment, diversion, or other means. Therefore, there is little risk of oil or hazardous materials being directly discharged into waters because spills are contained on the property.

A discussion of potential spill sources and the spill prevention and control measures for each area is discussed in this section of the SPCC Plan. Secondary containment calculations for each area are provided in the Raley and Associates, Inc. Storage Tank Containment Analysis Report which is summarized in Appendix H. Additional containment calculations are provided in Appendix F.

Bulk Storage Tanks

Bulk storage tanks are located in various tank basins located throughout the facility. Each containment area was evaluated by the engineering firm Raley and Associates in March 2009. Raley and Associates provided a report summarizing the upgrades necessary for each containment basin to provide adequate capacity to contain the largest bulk storage tank in the basin plus sufficient freeboard for the 25-year 24-hour storm event, 8.4 inches. In the event of containment failure, the oil would likely flow to the south and enter the West Canal Boulevard drainage ditch which discharges to Brush Bayou.

Truck Unloading Areas

The areas used for loading and unloading trucks are equipped with dedicated drains (quick drainage system) which drain to a series of oil/water separators where oil is contained and recovered. In the event of containment failure, the oil would likely flow to the south and enter the West Canal Boulevard drainage ditch which discharges to Brush Bayou.

Liquid Transfer Lines

Transfer lines carrying oil products are located throughout the facility. All transfer lines are located in either a contained area or an area that drains to the process wastewater treatment system. In the event of a line failure, the spill volume would vary depending on the time required to shut down the transfer. In the event of containment failure, the oil would likely flow to the south and enter the West Canal Boulevard drainage ditch which discharges to Brush Bayou.

Portable Tanks

Portable tanks such as drums, totes, and other small containers are used throughout the plant. These tanks must be stored in a secondary containment system which provides adequate containment for the tank plus sufficient freeboard for precipitation. Alternatively, the tank may be stored in a location that drains to the process wastewater treatment system. Portable containers were addressed in the upgrade list in Section 1 of this SPCC Plan. In the event of containment failure, the oil would likely flow to the south and enter the West Canal Boulevard drainage ditch which discharges to Brush Bayou.

Transformers

Transformers are located throughout the facility. A list of transformers is provided in Appendix C. Oil released from a transformer would likely be contained by the process wastewater treatment system or the stormwater treatment system. In the event that oil was not contained by one of these treatment units, it would likely flow to the south to the West Canal Boulevard drainage ditch which discharges to Brush Bayou.

6.0 SECONDARY CONTAINMENT AND DIVERSIONARY CONTROL
[ref. 40CFR112.7(c&d)]

Except as otherwise stated in Section 1.0 of this SPCC Plan, all potential spill sources are provided with one of the following approved prevention systems or its equivalent:

- Dikes, berms, or retaining walls sufficiently impervious to contain oil;
- Curbing;
- Culverting, gutters, or other drainage systems;
- Weirs, booms, or other barriers;
- Spill diversion ponds;
- Retention ponds; or
- Sorbent materials.

The prevention and containment systems are constructed so that any discharge from a primary containment system, such as a tank or pipe, will not escape the containment system before cleanup occurs. Appendix C provides a summary of the containment and prevention systems utilized at the facility.

7.0 INSPECTIONS, TESTS, AND RECORDS *[ref. 40CFR112.7(e)]*

The inspection procedures, frequency, and types of records are specified in this Plan. Tank inspection records will be maintained for the life of the tank. Tank inspections are recorded on the Storage Tank Inspection Summary which includes the date of the last internal and external inspection for each tank. All other inspection and test records are maintained for a period of not less than three years.

All inspection and test reports must be signed by the appropriate supervisor or the inspector. Reports must be maintained with the plan. Usual and customary business records may be used. Records may be in electronic or any other format that is readily accessible.

The following inspection procedures, testing, and recordkeeping protocols are described in the following sections in the plan:

- Brittle Fracture Analysis (see §11.0)
- Inspection of Accumulated Stormwater Prior to Discharge (see §12.2.1)
- Tank Inspections (see §12.2.2)
- Valves and Piping Inspection (see 12.2.3)

8.0 PERSONNEL TRAINING AND DISCHARGE PREVENTION MEASURES *[ref. 40CFR112.7(f)]*

Personnel Instruction *[ref. 40CFR112.7(f)(1)]*

CSR provides instruction and training for all personnel who handle oil at the facility. Oil-handling personnel are initially trained and annually trained thereafter in the operation and maintenance of equipment to prevent discharges; discharge

procedures; requirements and regulatory basis of the Plan; facility operations and the contents and requirements of the Plan.

All new hires shall be given basic instruction on spill control and discharge response. In addition, new employees are trained by working with experienced personnel who are already familiar with the particulars of the facility and by instruction by supervisors. Operations and Maintenance Manuals are also available for reference by operations personnel.

Spill Response Team members also receive supplemental computer based training in other general topics pertinent to discharge prevention and spill response. The types and dates of courses taken by response team members are entered into a data tracking system called "Active Learner".

The initial training and refresher training will be documented by recording the date of training and the employees receiving the training. Annual training meetings include a review of the SPCC Plan, spill incidents, equipment failures which could result in discharges, maintenance of pollution control equipment and newly developed spill control methods. Additional training is provided as outlined in the FRP.

Training documentation will be maintained for a period of not less than three years. The records will be maintained with the plan or in a separate, readily-available location, as a part of normal business practices.

Designated Person Accountable for Discharge Prevention *[ref. 40CFR112.7(f)(2)]*

CSR has designated the Plant Manager as the person who is accountable for discharge prevention.

Discharge Prevention Briefings *[ref. 40CFR112.7(f)(3)]*

Discharge prevention briefings for oil-handling personnel shall be conducted at least once per year to assure that the Plan is understood. Specific spill or discharge incidents and prevention system malfunctions or failures and recently developed precautionary measures shall be included. Sign-in sheets with briefing topics shall be used for documentation. Alternately, computer-based training modules may be used for the discharge prevention briefings. Briefing documentation must be kept with the Plan for not less than three years.

9.0 SECURITY *[ref. 40CFR112.7(g)]*

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

[redacted]

10.0 FACILITY TANK TRUCK LOADING/UNLOADING *[ref. 40CFR112.7(h)]*

Secondary Containment *[ref. 40CFR112.7(h)(1)]*

The tank truck loading/unloading system is provided with diversionary containment. Dedicated drains divert any material spilled at the loading/unloading area to the treatment system which consists of a series of oil/water separators where oil is captured and recovered. This treatment system can accommodate the maximum capacity of any single compartment of a tank truck.

Alarm or Warning Systems *[ref. 40CFR112.7(h)(2)]*

Tank truck loading/unloading is conducted 24 hours a day at the facility and operations are periodically monitored to ensure proper procedures are utilized. Truck drivers are instructed in proper unloading procedures. Signage is posted detailing proper loading/unloading procedures at each truck rack. Warning signs are provided in the truck rack area to prevent vehicle departure before disconnecting from transfer lines. Wheel chocks are used to prevent trucks from rolling or moving during transfer operations. Grounding cables are required to be firmly attached before loading pumps can be started.

Vehicles Drain Closure *[ref. 40CFR112.7(h)(3)]*

Lower-most drains or outlets are inspected for leakage prior to filling and truck departure. Any sign of leakage is immediately corrected to prevent discharge while in transit.

11.0 EVALUATION OF FIELD-CONSTRUCTED ABOVEGROUND TANKS *[ref. 40CFR112.7 (i)]*

All field constructed aboveground containers that undergo repair or reconstruction will be evaluated for brittle fracture failure prior to being placed back into service. Tank inspections are conducted in accordance with API Standard 653, "Inspection, Maintenance, Repair, and Reconstruction of Aboveground Storage Tanks." Tank inspections are recorded on the Storage Tank Inspection Summary Report which includes the date of the most recent internal and external inspection for each tank.

12.0 CONFORMANCE WITH OTHER REGULATIONS *[ref. 40CFR112.7(j)]*

12.1 SPC Requirements - LAC33:IX, CHAPTER 9

This SPCC Plan fulfills the requirements of the Spill Prevention and Control (SPC) Plan requirements in Title 33, Louisiana Administrative Code, Part IX, Chapter 9. The SPC Plan requirements are more stringent in the following applicable areas:

- SPC applies to hazardous materials not containing oil.
- SPC containment requirements apply to a single tank capacity of 660 gallons or more for non-oil tanks.
- A review of the SPCC plan must be completed every 3 years, instead of every 5 years as found in the Federal regulation.

- The SPCC plan is to be amended within 90 days of the review, if necessary, instead of within 6 months as found in the Federal regulation.

- Notification to the DPS 24-hour Louisiana Emergency Hazardous Materials Hotline (225-925-6595) is to be made within one hour of the discovery of a reportable discharge.

12.2 SPCC Requirements for Onshore Facilities - 40 CFR 112.8

12.2.1 Facility Drainage *[ref. 40CFR112.8(b)]*

Drainage from Diked Areas *[ref. 40CFR112.8(b)(1&2)]*

Storm water that accumulates in the diked storage areas is retained by the manually operated valves and is visually inspected prior to manual discharge. In areas where storm water collects inside the containment, operations personnel visually inspect for the presence of any oil sheen or product on the water's surface. If no evidence of any oil sheen or product is observed, then the water is allowed to discharge from the containment area via manually operated valves. Water that is discharged from these diked areas is treated in the stormwater treatment system prior to discharge through Outfall 001.

Tanks 175 and 199 are located in diked areas from which a discharge would not go to the stormwater treatment system. Both tanks discharge directly to Outfall 008. CSR personnel inspect any water that collects in either of these diked areas for oil prior to discharge. The drain valves are opened, drained, and closed under responsible supervision. Inspection of the water will be recorded on the Secondary Containment Discharge Documentation Form provided in Appendix E. See the upgrades in Section 1 of this SPCC Plan.

Drainage from Undiked Areas *[ref. 40CFR112.8(b)(3&4)]*

Drainage from undiked process areas is treated in the process wastewater treatment system where oil is contained and recovered. The treatment system includes oil/water separation equipment and containment ponds. Process wastewater is released through Outfall 001 after any oil has been removed.

12.2.2 Bulk Storage Containers *[ref. 40CFR112.8(c)]*

Material Compatibility *[ref. 40CFR112.8(c)(1)]*

All of the bulk storage containers used at the facility for the storage of oil, fuel, or chemicals have been checked to assure that they are compatible with the material stored and conditions of storage such as pressure and temperature. No tanks or containers are used that are not compatible with their intended contents.

Secondary Containment *[ref. 40CFR112.8(c)(2)]*

Except as otherwise stated in §1.0 of this SPCC Plan, all bulk storage container installations with a capacity of 55 gallons or greater (660 gallons under state regulations for non-oil) are provided with secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation. The requirement for freeboard for precipitation is specified as a 25-year 24-hour storm event. Secondary containment dimensions and volumes for each bulk storage container are documented in the SPCC calculations in Appendix F or in the summary report provided by Raley & Associates as summarized in Appendix H. The entire report is incorporated by reference.

Secondary Containment Drainage *[ref. 40CFR112.8(c)(3)]*

The following procedures shall be implemented for the drainage of accumulated stormwater from secondary containment systems:

1. Maintain the storm water discharge valve normally closed;
2. Inspect the retained storm water, prior to discharge, to ensure that no oil or oil sheen is present;
3. Open the storm water discharge valve, drain the containment, and reseal/close the valve following drainage under responsible supervision;

Buried Tanks *[ref. 40CFR112.8(c)(4&5)]*

Two buried tanks are located near the guard shack at the Midway Street entrance. Both tanks store gasoline. One tank has a capacity of 10,000 gallons and the other has a capacity of 12,000 gallons. These tanks are regulated under a Louisiana Department of Environmental Quality (LDEQ) underground

storage tank program that is approved under 40 CFR 281. This program includes a requirement for cathodic protection.

Integrity Testing *[ref. 40CFR112.8(c)(6)]*

Inspections are conducted under the general principles set forth in API Standard 653, "Inspection, Maintenance, Repair, and Reconstruction of Aboveground Storage Tanks." Internal tank inspections consist of visual and ultrasonic thickness inspections of the tank and associated components. External visual inspections, including shell, nozzles, and roof thickness are verified using an ultrasonic thickness-testing machine, and the proper documentation is completed and filed accordingly. Tank inspections are recorded on the Storage Tank Inspection Summary Report which includes the date of the most recent internal and external inspection for each tank.

Monthly visual inspections of the tanks, tank foundations, piping, and secondary containment diked areas are conducted by the pumpers and documented on the Tank In-Service Monthly Checklist.

Control of Leakage Through Internal Heating Coils *[ref. 40CFR112.8(c)(7)]*

Internal heating coils are used to heat multiple tanks throughout the facility. Steam return from the heating coils drains to the process wastewater treatment system. If oil leaks into the steam return lines, it will be captured and recovered in the process wastewater treatment unit.

Container Installation – Good Engineering Practice *[ref. 40CFR112.8(c)(8)]*

Consistent will 40CFR112.8(c)(iv), for tanks with direct vision gauges, CSR personnel will be present to monitor the gauges, overfill alarms, and the overall tank filling procedure to prevent overfills. Tank gauges and overfill alarms will be tested in accordance with manufacturer's specifications.

Consistent with 40CFR112.8(c)(iii), for tanks with no fast response system to determine liquid level, CSR personnel will use the following procedure:

1. Visually inspect and gauge the tank to verify the current level and remaining capacity.
2. Confirm with the pumper on the truck that the volume to be transferred will not exceed the remaining capacity of the tank.
3. Verbally instruct the pumper and manage and monitor the oil transfer from the truck to the tank including the oil level in the tank, the rate of transfer, and total volume transferred.
4. During tank loading activities, maintain direct audible or code signal communication with the pumper.

Effluent Treatment Systems *[ref. 40CFR112.8(c)(9)]*

Visual observation of effluent treatment facilities is conducted frequently enough to detect possible system upsets that could cause a discharge.

Visible Discharges *[ref. 40CFR112.8(c)(10)]*

All aboveground valves and pipelines are examined during daily operating personnel rounds and negative findings are documented in the operating personnel logs. All visible discharges of oil from containers, including but not limited to seams, gaskets, piping, pumps, valves, rivets, and bolts shall be promptly corrected and any oil within the contained area shall be removed.

Portable Tanks *[ref. 40CFR112.8(c)(11)]*

Mobile or portable oil storage tanks will be positioned or located so as to prevent spilled oil from reaching navigable waters. See the upgrade list in Section 1 of this SPCC Plan.

12.2.3 Facility Transfer Operations *[ref. 40CFR112.8(d)]*

Buried Piping *[ref. 40CFR112.8(d)(1)]*

Underground piping installations which carry oil are carbon steel. Some stainless tubing and plastic piping may be used. Buried piping installations are coated and wrapped to reduce corrosion. Buried piping installations are also cathodically protected. In the event that the buried oil piping is uncovered, it will be carefully inspected for corrosion. If corrosion is found, additional investigation and corrective measures shall be implemented.

Terminal Connections *[ref. 40CFR112.8(d)(2)]*

When piping is not in service or is in standby service for an extended time, the terminal connections at transfer points will be capped or blank-flanged and marked as to its origin. Lines that are permanently taken out of service are removed.

Pipe Supports *[ref. 40CFR112.8(d)(3)]*

Pipe supports have been designed and installed in accordance with good engineering practices to minimize abrasion and allow for thermal expansion.

Piping Inspection *[ref. 40CFR112.8(d)(4)]*

Calumet conducts monthly inspections of aboveground valves, piping and appurtenances that are in oil service. Documentation of these inspections is provided to the Environmental Manager. During the inspection the general condition of items, such as flange joints, expansion joints, valve glands and bodies, patch pans, pipeline supports, locking of valves, and metal surfaces are assessed. These inspections are recorded on the Tank In-Service Monthly Checklists.

Calumet will conduct integrity testing and leak testing of buried piping at the time of installation, modification, construction, relocation, or replacement.

Vehicle Clearance *[ref. 40CFR112.8(d)(5)]*

Vehicle operators that are granted entry into the facility are warned verbally or by signage to ensure that the vehicle, because of its size, will not endanger aboveground piping. The facility gates are normally locked and vehicles are not allowed access to the facility without clearance from CSR personnel. Only emergency, maintenance and other authorized vehicles have access to the process area.

Appendix A

Certification of Applicability of Substantial Harm Criteria

Appendix A
Certification of Applicability of Substantial Harm Criteria

CHECKLIST FOR OIL RELATED STORAGE ONLY

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 ☐ No ☑

Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and, within any storage area, 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?

Yes ☑ No ☐

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 Appendix C or a comparable formula) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments?

Yes ☑ No ☐

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 Appendix C or a comparable formula) such that a discharge from the facility would shut down a public drinking water intake?

Yes ☐ No ☑

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 spill in an amount greater than or equal to 10,000 gallons within the last five years?

Yes ☐ 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: _____ Title: Refinery Manager

Name: Tom Germany Date: July 24, 201

Appendix B

Facility Diagram

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

[redacted]

Appendix C

List of Potential Oil and Hazardous Material Spill Sources

Appendix C
List of Potential Oil and Hazardous Material Spill Sources

ID	Description	Volume (gallons)	Spill Rate (gallons)	Containment
10	Heavy oil tank	(b) (7)(F), (b) (3) [redacted]		Basin F1
11	Heavy oil tank			Basin F1
12	Heavy oil tank			Basin F1
13	Heavy oil tank			Basin F1
14	Out of Service			Basin D2
15	Heavy oil tank			Basin D1
16	Heavy oil tank			Basin D1
26	Intermediate Gas Tank			Basin X2
27	Intermediate Gas Tank			Basin X2
28	LPG Tank			Basin X2
29	Intermediate Gas Tank			Basin X1
30	Diesel Tank			Basin W2
31	LPG Tank			Basin W4
32	Intermediate Gas Tank			Basin W1
39	Out of Service Tank			Basin L2
43	Crude Oil Tank			Basin V2
44	Gasoline Tank			Basin S2
45	Gasoline Tank			Basin M1
46	Gasoline Tank			Basin M2
47	Heavy Oil Tank			Basin A1

Appendix C
List of Potential Oil and Hazardous Material Spill Sources

ID	Description	Volume (gallons)	Spill Rate (gallons)	Containment
48	Out of Service Tank	(b) (7)(F), (b) (3) [redacted]	[redacted]	Basin A1
49	Crude Oil Tank	[redacted]	[redacted]	Basin N1
50	Diesel Tank	[redacted]	[redacted]	Basin T2
52	Diesel Tank	[redacted]	[redacted]	Basin R1
53	60VIS	[redacted]	[redacted]	Basin V3
54	Sour Naphtha	[redacted]	[redacted]	Basin V3
55	Diesel Tank	[redacted]	[redacted]	Basin M3
56	Diesel Tank	[redacted]	[redacted]	Basin M4
57	Intermediate Gas Tank	[redacted]	[redacted]	Basin V5
58	Intermediate Gas Tank	[redacted]	[redacted]	Basin V5
59	Refinery Recycle Oil	[redacted]	[redacted]	Basin L1
60	Crude Oil Tank	[redacted]	[redacted]	Basin K1
61	Gasoline Tank	[redacted]	[redacted]	Basin S1
62	Heavy Oil Tank	[redacted]	[redacted]	Basin V1
63	Heavy Oil Tank	[redacted]	[redacted]	Basin V1
64	Heavy Oil Tank	[redacted]	[redacted]	Basin V1
65	Diesel Tank	[redacted]	[redacted]	Basin V1
67	Intermediate Gas Tank	[redacted]	[redacted]	Basin M1
68	Intermediate Gas Tank	[redacted]	[redacted]	Basin M2
69	Refinery Recycle Oil	[redacted]	[redacted]	Basin L1
71	Wax Tank	[redacted]	[redacted]	Basin B3

Appendix C
List of Potential Oil and Hazardous Material Spill Sources

ID	Description	Volume (gallons)	Spill Rate (gallons)	Containment
72	Diesel Tank	(b) (7)(F), (b) (3) [redacted]	[redacted]	Basin L3
73	Diesel Tank	[redacted]	[redacted]	Basin L3
74	Jet A Tank	[redacted]	[redacted]	Basin O1
75	Jet A Tank	[redacted]	[redacted]	Basin P1
76	Gasoline Tank	[redacted]	[redacted]	Basin Q1
77	Crude Oil Tank	[redacted]	[redacted]	Basin T1
79	Process Wastewater	[redacted]	[redacted]	Basin O2
80	Out of Service Tank	[redacted]	[redacted]	Concrete Dike
81	Additive Tank	[redacted]	[redacted]	Concrete Dike
82	Heavy Oil Tank	[redacted]	[redacted]	Basin K1
83	Heavy Oil Tank	[redacted]	[redacted]	Basin E
84	Heavy Oil Tank	[redacted]	[redacted]	Basin E
86	Wax Tank	[redacted]	[redacted]	Basin E
87	Wax Tank	[redacted]	[redacted]	Basin B1
89	Heavy Oil Tank	[redacted]	[redacted]	Basin A1
92	Heavy Oil Tank	[redacted]	[redacted]	Basin I1
93	Heavy Oil Tank	[redacted]	[redacted]	Basin I1
94	Heavy Oil Tank	[redacted]	[redacted]	Basin A2
95	Heavy Oil Tank	[redacted]	[redacted]	Basin A2
96	Heavy Oil Tank	[redacted]	[redacted]	Basin A3
97	Heavy Oil Tank	[redacted]	[redacted]	Basin G1

Appendix C
List of Potential Oil and Hazardous Material Spill Sources

ID	Description	Volume (gallons)	Spill Rate (gallons)	Containment
98	Heavy Oil Tank	(b) (7)(F), (b) (3) [redacted]	[redacted]	Basin K1
99	Wax Tank	[redacted]	[redacted]	Basin B1
100	Heavy Oil Tank	[redacted]	[redacted]	Basin B1
103	Heavy Oil Tank	[redacted]	[redacted]	Basin B2
104	Heavy Oil Tank	[redacted]	[redacted]	Basin B2
105	Heavy Oil Tank	[redacted]	[redacted]	Basin D1
106	Heavy Oil Tank	[redacted]	[redacted]	Basin D1
107	Heavy Oil Tank	[redacted]	[redacted]	Basin D1
108	Heavy Oil Tank	[redacted]	[redacted]	Basin D1
109	Heavy Oil Tank	[redacted]	[redacted]	Basin D1
110	Heavy Oil Tank	[redacted]	[redacted]	Basin D1
111	Wax Tank	[redacted]	[redacted]	Basin A2
112	Heavy Oil Tank	[redacted]	[redacted]	Basin A2
113	Heavy Oil Tank	[redacted]	[redacted]	Basin A3
114	Heavy Oil Tank	[redacted]	[redacted]	Basin B1
115	Heavy Oil Tank	[redacted]	[redacted]	Basin Y1
116	Heavy Oil Tank	[redacted]	[redacted]	Basin Y1
117	Heavy Oil Tank	[redacted]	[redacted]	Basin Y1
140	Wax Tank	[redacted]	[redacted]	Basin B3
141	Heavy Oil Tank	[redacted]	[redacted]	Basin D2
142	Heavy Oil Tank	[redacted]	[redacted]	Basin D2

Appendix C

List of Potential Oil and Hazardous Material Spill Sources

ID	Description	Volume (gallons)	Spill Rate (gallons)	Containment
143	Heavy Oil Tank	(b) (7)(F), (b) (3) [redacted]		Basin D2
144	Heavy Oil Tank			Basin D2
145	Solvent Tank			Basin C1
146	Solvent Tank			Basin C1
147	Solvent Tank			Basin C1
148	Wax Tank			Basin C1
149	Wax Tank			Basin C1
150	Wax Tank			Basin D2
151	Wax Tank			Basin D2
152	Wax Tank			Basin D2
153	Heavy Oil Tank			Basin D2
154	Heavy Oil Tank			Basin D2
155	Wax Tank			Basin H2
156	Wax Tank			Basin H2
157	Wax Tank			Basin H2
158	Wax Tank			Basin H2
159	Heavy Oil Tank			Basin H2
160	Heavy Oil Tank			Basin H2
161	Heavy Oil Tank			Basin G1
162	Heavy Oil Tank			Basin G1

Appendix C
List of Potential Oil and Hazardous Material Spill Sources

ID	Description	Volume (gallons)	Spill Rate (gallons)	Containment
163	Heavy Oil Tank	(b) (7)(F), (b) (3) [redacted]		Basin I1
164	Heavy Oil Tank			Basin I1
165	Heavy Oil Tank			Basin G1
166	Heavy Oil Tank			Basin J1
167	Heavy Oil Tank			Basin J1
168	Heavy Oil Tank			Basin J1
169	Heavy Oil Tank			Basin J1
170	Heavy Oil Tank			Basin J1
171	Wax Tank			Basin G1
172	Wax Tank			Basin G1
173	Wax Tank			Basin G1
174	Heavy Oil Tank			Basin L3
175	Crude Oil Tank			Basin U1
176	Heavy Oil Tank			Basin K1
177	Heavy Oil Tank			Basin H1
178	Heavy Oil Tank			Basin H1
179	Heavy Oil Tank			Basin H1
180	Heavy Oil Tank			Basin K1
181	Heavy Oil Tank			Basin K1
182	Intermediate Gas Tank			Basin V1
183	Wax Tank			Basin G1

Appendix C
List of Potential Oil and Hazardous Material Spill Sources

ID	Description	Volume (gallons)	Spill Rate (gallons)	Containment
184	Heavy Oil Tank	(b) (7)(F), (b) (3) [redacted]		Basin J1
185	Diesel Tank			Basin Q1
186	Heavy Oil Tank			Basin L4
187	Jet A Tank			Basin L4
188	Bypass Aeration Tank			Basin O2
199	Diesel Tank			Basin U2
2001	Wastewater Tank			Basin O2
201	Sour Water Tank			Basin K1
195	Penex Blendstock Tank			Basin W3
1308	Additive Tank			See Section 1 Upgrade List
TC5001	Out of Service Tank			See Section 1 Upgrade List
WWCC 2010	Out of Service Tank			See Section 1 Upgrade List
WWTAT	Out of Service Tank			See Section 1 Upgrade List
3001	Wax Tank			Basin F1
2009	Additive Tank			Basin F1
202	Additive Tank			Basin F1
RO 150	Crankcase Oil			See Section 1 Upgrade List

Appendix C

List of Potential Oil and Hazardous Material Spill Sources

ID	Description	Volume (gallons)	Spill Rate (gallons)	Containment
RO 320	Cylinder Oil	(b) (7)(F), (b) (3) [redacted]		See Section 1 Upgrade List
N/A	Transformers	[redacted]		Diversionary Containment
N/A	Liquid Transfer Lines	[redacted]		Diversionary Containment
N/A	Portable Containers	[redacted]		See Section 1 Upgrade List
N/A	Truck Loading Area	[redacted]		Diversionary Containment
N/A	Lab Hexane Tank	[redacted]		Concrete Containment
PD	Plant Diesel Tank	[redacted]		Concrete Containment
PG	Plant Gasoline Tank	[redacted]		Concrete Containment
198	Caustic Tank	[redacted]		Concrete Containment
C1	Wastewater Treatment Chemical	[redacted]		See Section 1 Upgrade List
C2	Wastewater Treatment Chemical	[redacted]		See Section 1 Upgrade List
C3	Wastewater Treatment Chemical	[redacted]		See Section 1 Upgrade List
C4	Wastewater Treatment Chemical	[redacted]		See Section 1 Upgrade List

Appendix D

Spill Notification Form

Appendix D
Spill Notification Form
(Uniform Hazardous Materials Reporting Form may be substituted)

It is not necessary to collect all information before making immediate notifications

Reporter's Last Name:_____ First _____ M.I. _____
Phone Number: (____) _____ -_____
Company: _____
Organization Type: _____
Position: _____
Address: _____
City: _____ State _____ Zip _____

Suspected responsible party:_____
Organization Type: _____
Phone Number: (____) _____ -_____
Address _____
City: _____ State _____ Zip _____

Were Materials Released _____ (Y / N) Confidential _____ (Y / N)

Meeting Federal Obligations to Report _____ (Y / N) Date Called _____

Calling for Responsible Party _____ (Y / N) Time Called _____

Incident Description

Source and/or Cause of Incident _____

_____

_____

Date _____--_____--_____ Time of Incident _____ AM / PM

Nearest City _____ State _____ County _____ Zip _____

Distance from City _____ Units _____ Direction from City _____

Section _____Township _____ Range _____

Container Type _____ Tank Capacity _____ Units _____

Facility Capacity _____ Units _____

Latitude: _____ Degrees _____ Minutes _____ Seconds

Longitude: _____ Degrees _____ Minutes _____ Seconds

SPILL RESPONSE NOTIFICATION FORM (continued)

Material

CHRIS Code	Released Quantity	Units of Measure	Material Released in Water	Quantity	Units/ Measure

Response Action

Actions Taken to Correct, Control or Mitigate Incident

_____

_____

_____

_____

Impact

Number of Injuries _____ Number of Deaths _____

Were there Evacuations _____ (Y / N) Number Evacuated _____

Was there any Damage _____ (Y / N) Damage in Dollars (approximate) _____

Medium Affected _____

Description _____

More Information about Medium _____

_____

Additional Information

Any information about the incident not recorded elsewhere in the report?

_____

_____

Caller Notifications

EPA _____ (Y / N) USCG _____ (Y / N) State _____ (Y / N)

Other _____ (Y / N) Describe _____

Appendix E

Secondary Containment Discharge Documentation Form

CALUMET

SECONDARY CONTAINMENT DISCHARGE DOCUMENTATION

Employee Conducting Inspection (Name)	Containment Location	Time		Appearance of Water	Operator Signature
		Drain Valve Opened	Drain Valve Closed		

Responsible Supervisor Signature: _____

Appendix F

Secondary Containment Calculations (for tanks not addressed in Raley & Associates, Inc. Storage Tank Containment Analysis)

CALUMET

CALUMET SHREVEPORT REFINERY

SPCC PLAN

CK

SECONDARY CONTAINMENT CALCULATIONS

JOB NO	4716S		
BY	jvm	DATE	3/19/2009
CHECKED	GRM	DATE	3/19/2009
APPROVED	GRM	DATE	3/19/2009
PAGE	1	OF	1

CLIENT: Calumet Shreveport Refinery

DESCRIPTION: Oil Tanks

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

[redacted]

CALUMET

CALUMET SHREVEPORT REFINERY

SPCC PLAN

CK

SECONDARY CONTAINMENT CALCULATIONS

JOB NO	4716S		
BY	jym	DATE	3/19/2009
CHECKED	GRM	DATE	3/19/2009
APPROVED	GRM	DATE	3/19/2009
PAGE	1	OF	1

CLIENT: Calumet Shreveport Refinery

DESCRIPTION: Oil Tanks

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

[redacted]

CALUMET

CALUMET SHREVEPORT REFINERY

SPCC PLAN

CK

SECONDARY CONTAINMENT CALCULATIONS

JOB NO	4716S		
BY	jym	DATE	3/19/2009
CHECKED	GRM	DATE	3/19/2009
APPROVED	GRM	DATE	3/19/2009
PAGE	1	OF	1

CLIENT: Calumet Shreveport Refinery

DESCRIPTION: Plant Fuel Tanks

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

[redacted]

CALUMET

CALUMET SHREVEPORT REFINERY

SPCC PLAN

CK

SECONDARY CONTAINMENT CALCULATIONS

JOB NO	4716S		
BY	jym	DATE	3/19/2009
CHECKED	GRM	DATE	3/19/2009
APPROVED	GRM	DATE	3/19/2009
PAGE	1	OF	1

CLIENT: Calumet Shreveport Refinery

DESCRIPTION: Caustic Tank

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

[redacted]

CALUMET

CALUMET SHREVEPORT REFINERY

SPCC PLAN

CK

SECONDARY CONTAINMENT CALCULATIONS

JOB NO. 4716S
BY jvm DATE 3/19/2009
CHECKED GRM DATE 3/19/2009
APPROVED GRM DATE 3/19/2009
PAGE 1 OF 1

CLIENT: Calumet Shreveport Refinery
DESCRIPTION: Champion Wastewater Treatment Chemicals

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

[redacted]

CALUMET

CALUMET SHREVEPORT REFINERY **SPCC PLAN**

CK

SECONDARY CONTAINMENT CALCULATIONS

JOB NO	4716S		
BY	jym	DATE	3/19/2009
CHECKED	GRM	DATE	3/19/2009
APPROVED	GRM	DATE	3/19/2009
PAGE	1	OF	1

CLIENT: Calumet Shreveport Refinery

DESCRIPTION: Additive Tank

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

[redacted]

Appendix G

Plan Review and Update

Plan Review and Update

Facility Changes

In accordance with 40 CFR 112.5(a), Calumet shall amend this SPCC Plan when there is a change in the facility design, construction, operation, or maintenance that materially affects its potential for a discharge of oil. An amendment made due to a change in the facility's potential for a discharge of oil must be prepared within six months and implemented as soon as possible, but not later than six months after the amendment is prepared.

Plan Review and Update

In accordance with 40 CFR 112.5(b), Calumet shall conduct a review and evaluation of this SPCC Plan at least once every five years and once every three years in accordance with LAC 33:IX.905.F. As a result of this review and evaluation, Calumet will amend the SPCC Plan within six months of the review to include more effective prevention and control technology. The Plan Review and Update Documentation form in this Appendix will be completed and maintained as a record of this procedure.

Professional Engineer Certification of SPCC Plan Amendments

Calumet will have a Professional Engineer certify any technical plan amendments. PE re-certification is not required for non-technical amendments, such as changes to phone numbers and names.

Documentation and Record of Plan Changes

A record of plan changes will be maintained using the forms in this Appendix.

DOCUMENTATION OF PLAN REVIEW AND UPDATE

In accordance with 40 CFR 112.5(b), a review and evaluation of this SPCC Plan is conducted at least once every five years and once every three years in accordance with LAC 33:IX.905.F. As a result of this review and evaluation, Calumet will amend the SPCC Plan within six months of the review to include more effective prevention and control technology if: (1) such technology will significantly reduce the likelihood of a spill event from the facility, and (2) if such technology has been field-proven at the time of review. A Professional Engineer shall certify any amendment to the SPCC Plan within six months after a change in the facility design, construction, operation, or maintenance occur which materially affects the facility's potential for the discharge of oil into or upon the navigable waters of the United States or adjoining shorelines.

Review Dates – Federal Regulations	State Regulations
June 2012	June 2015

CERTIFICATION OF PLAN REVIEW AND UPDATE

After completing each review and evaluation, the following statement shall be completed and maintained with the plan:

"I have completed review and evaluation of the SPCC Plan for the Calumet Shreveport Refinery on (date) and (will/will not) amend the plan as a result."

Signature: _____

Date: July 24, 2012

Name: Tom Germany

Title: Refinery Manager

DOCUMENTATION OF REVISIONS

Date	Action Item	P.E. Certification Required
March 2009	Prepare new SPCC Plan to meet requirements of July 2002 SPCC Rule (ref. 40 CFR 112)	YES
July 2012	Name changes on Contact List Change Tank Description on Tanks 53, 54 & 55	YES

Appendix H

Summary of Raley and Associates, Inc. Storage Tank Containment Analysis

CALUMET LUBRICANTS COMPANY

STORAGE TANK CONTAINMENT ANALYSIS

SHREVEPORT, LA

March 2009

STATE OF LOUISIANA
FRANK J. RALEY
Reg. No. 22631
REGISTERED
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
3-19-09

Analysis By:

Raley and Associates, Inc.

4913 Shed Road

Bossier City, LA 71111

318.752.9023

CALUMET LUBRICANTS COMPANY
STORAGE AREA STUDY
SHREVEPORT, LA
3/18/2009

ANALYSIS SUMMARY

Basin ID	Dike Overflow Elevation (ft)		Capacity (ft^3)			Summary of Improvements (If Needed)
	Existing	Required	Existing	Required	Proposed	
A1	227.07	229.81	27,007	70,772	See "A1-A3"	Combine with Basins A2 and A3
A2	226.39	231.85	20,628	100,603	See "A1-A3"	Combine with Basins A1 and A3
A3	226.38	232.67	24,731	94,680	See "A1-A3"	Combine with Basins A1 and A2
A1-A3	226.38	228.15	72,366	125,690	127,764	25% of perimeter needs to be raised (max fill = 1.77')
B1	223.42	227.80	19,185	101,116	See "B1-B3"	Combine with Basins B2 and B3
B2	223.24	230.15	8,735	94,141	See "B1-B3"	Combine with Basins B1 and B3
B3	223.98	228.47	13,156	64,669	See "B1-B3"	Combine with Basins B1 and B2
B1-B3	223.95	225.93	53,109	119,561	126,520	50% of perimeter needs to be raised (max fill = 1.98')
C1	223.12	227.75	3,508	33,984	34,862	100% of perimeter needs to be raised (max fill = 4.63')
D1	221.95	223.85	155,874	252,666	See "D1-D2"	Combine with Basin D2
D2	222.76	224.62	128,364	223,960	See "D1-D2"	Combine with Basin D1
D1-D2	221.95	223.70	155,874	252,666	271,071	5% of perimeter needs to be raised (max fill = 1.75')
E1	221.58	222.80	121,523	183,339	184,809	20% of perimeter needs to be raised (max fill = 1.22')
F1	224.31	225.20	112,925	130,695	131,934	100% of perimeter needs to be raised (max fill = 0.89')
G1	219.25	222.59	143,414	379,837	397,406	75% of perimeter needs to be raised (max fill = 3.34')
H1	219.28	220.13	6,588	19,575	20,086	30% of perimeter needs to be raised (max fill = 0.85')
H2	219.28	220.94	114,993	179,591	181,586	20% of perimeter needs to be raised (max fill = 1.66')
I1	217.01	220.31	125,608	340,082	363,642	35% of perimeter needs to be raised (max fill = 3.33')
J1	217.66	217.66	199,608	193,416	199,608	None Required
K1	221.93	224.93	195,512	567,897	599,784	50% of perimeter needs to be raised (max fill = 3.00')
L1	223.29	227.23	12,682	31,840	31,867	100% of perimeter needs to be raised (max fill = 3.94')
L2	222.50	225.45	21,676	69,950	See "L2-L3"	Combine with Basin L3
L3	221.56	223.88	67,843	174,957	See "L2-L3"	Combine with Basin L2
L2-L3	221.56	223.30	102,201	201,643	202,664	50% of perimeter needs to be raised (max fill = 1.74')
L4	225.95	227.00	30,999	163,064	250,012	10% of perimeter needs to be raised (max fill = 1.05')
M1	228.58	232.82	43,442	168,842	See "M1-M2"	Combine with Basin M2
M2	226.36	228.48	100,440	168,636	See "M1-M2"	Combine with Basin M1
M1-M2	226.36	228.65	121,563	197,113	203,619	35% of perimeter needs to be raised (max fill = 2.29')
M3	224.44	226.77	97,119	161,754	See "M3-M4"	Combine with Basin M4

ANALYSIS SUMMARY

Basin ID	Dike Overflow Elevation (ft) Existing	Dike Overflow Elevation (ft) Required	Capacity (ft^3) Existing	Capacity (ft^3) Required	Capacity (ft^3) Proposed	Summary of Improvements (If Needed)
M4	222.76	222.91	164,035	169,855	See "M3-M4"	Combine with Basin M3
M3-M4	222.76	222.76	200,034	191,243	200,034	Lower wall separating basins
N1	231.28	233.32	224,638	361,991	367,466	35% of perimeter needs to be raised (max fill = 2.04')
O1	224.14	226.70	198,560	350,717	See "O1-O2"	Combine with Basin O2
O2	222.83	226.35	181,259	501,661	See "O1-O2"	Combine with Basin O1
O1-O2	222.83	224.70	379,819	549,190	580,438	40% of perimeter needs to be raised (max fill = 1.87')
P1	224.23	224.23	391,342	364,917	391,342	None Required
Q1	224.17	224.93	452,648	518,561	521,283	80% of perimeter needs to be raised (max fill = 0.76')
R1	229.44	230.84	263,694	361,156	363,530	20% of perimeter needs to be raised (max fill = 1.40')
S1	236.78	246.81	86,683	480,957	See "S1-S2"	Combine with Basin S2
S2	237.07	239.53	333,429	500,458	See "S1-S2"	Combine with Basin S1
S1-S2	236.78	238.40	420,112	532,247	532,938	30% of perimeter needs to be raised (max fill = 1.62')
T1	235.02	236.74	374,598	503,658	See "T1-T2"	Combine with Basin T2
T2	233.25	233.25	372,609	363,626	See "T1-T2"	Combine with Basin T1
T1-T2	233.25	233.25	578,276	558,481	559,721	Lower wall separating basins
U1	238.65	245.15	157,741	550,309	See "U1-U3"	Combine with Basins U2 and U3
U2	234.31	250.30	13,400	542,399	See "U1-U3"	Combine with Basins U1 and U3
U3	233.51	233.51	319,966	51,603	See "U1-U3"	Combine with Basins U1 and U2
U1-U3	233.51	236.25	319,966	638,997	648,504	30% of perimeter needs to be raised (max fill = 2.74')
V1	238.02	242.91	0	171,055	See "V1-V2"	Combine with Basin V2
V2	238.03	241.33	255,163	506,392	See "V1-V2"	Combine with Basin V1
V1-V2	238.03	241.90	255,163	537,082	542,830	50% of perimeter needs to be raised (max fill = 3.87')
V3	236.09	237.35	119,507	172,181	See "V3-V5"	Combine with Basin V4 and V5
V4	234.82	237.38	27,898	60,304	See "V3-V5"	Combine with Basin V3 and V5
V5	236.67	236.67	215,910	171,750	See "V3-V5"	Combine with Basin V3 and V4
V3-V5	234.82	236.09	325,882	219,861	325,882	Repair 50% of V4 dike for drainage purposes
W1	231.35	233.73	11,426	36,855	See "W1-W4"	Combine with Basins W2, W3, and W4
W2	229.39	231.17	15,944	38,036	See "W1-W4"	Combine with Basins W1, W3, and W4
W3	232.15	237.74	13,781	55,147	See "W1-W4"	Combine with Basins W1, W2, and W4
W4	230.23	233.09	16,193	51,753	See "W1-W4"	Combine with Basins W1, W2, and W3
W1-W4	229.39	231.20	51,114	83,536	86,069	40% of perimeter needs to be raised (max fill = 1.87')
X1	227.31	228.83	19,548	37,422	See "X1-X2"	Combine with Basin X2
X2	226.93	227.64	52,510	73,209	See "X1-X2"	Combine with Basin X1
X1-X2	226.93	227.27	72,058	82,558	82,962	40% of perimeter needs to be raised (max fill = 0.34')
Y1	236.76	237.66	5,400	8,317	9,943	100% of perimeter needs to be raised (max fill = 0.9')

APPENDIX G
GENERIC DISPOSAL PLAN
DISPOSAL STATUS UPDATE

APPENDIX G

GENERIC DISPOSAL PLAN

Date: ___ / ____ / _____ Location: _____

Source of Release: _____ Amount of Release: _____

Weather Conditions: _____

State Agency: _____

Agency Representative responsible for waste management / disposal: _____

_____ Phone: (____) _____ - _____

Inquiry made to obtain variance on: _____

Individual contacted: _____

Disposal Priorities

Step One -- Sample

Oil sample was extracted / sent for analysis on: _____

Sample sent via: _____

Laboratory Name: _____

Step Two -- Options

Identify all disposal options:

	Available	Most Likely
Natural Degradation or Dispersion	[ ]	[ ]
Pit Burial	[ ]	[ ]
Landfill	[ ]	[ ]
Land Farms	[ ]	[ ]
In Situ Burning	[ ]	[ ]
Open Pit Burning	[ ]	[ ]
Portable Incineration	[ ]	[ ]
Air Curtain Incinerators	[ ]	[ ]
Process Incineration	[ ]	[ ]
Reprocessing	[ ]	[ ]
Reclaiming	[ ]	[ ]
Recycling	[ ]	[ ]
Well Injection	[ ]	[ ]

APPENDIX G

Locate resources for disposal options selected (landfill operators, incinerator facilities, etc.):

_____

_____

_____

Step Three -- Information

Generator Name (source of waste): _____

Generator USEPA ID: _____

Generator Address: _____

Technical Contact: _____ Phone: (____) ____ - _____

Properties and Composition: _____

Process Generating Waste: _____

Waste Name: _____

Is this a USEPA hazardous waste (40CFR Part 261)? _____

Identify all USEPA listed and characteristic waste code numbers (D,F,K,P,U):

_____

_____

_____

Codes: _____

Step Four – Waste Storage and Transportation

Proposed shipping method:

_____

_____

_____

Permits that will be required for disposal:

_____

_____

_____

_____

APPENDIX G

Estimated storage capacity needed for disposal:

_____

_____

Type of storage needed (i.e. roll off, tanks, etc)

_____

_____

Estimated quantity of each needed:

_____

_____

Determine local facilities (refineries, terminals, or chemical plants) that have capacity to temporarily store recovered oil:

_____

_____

_____

_____

Required personal protective equipment and procedures:

_____

_____

Signature of User: _____

Phone: (____) ____ - _____

APPENDIX G

DISPOSAL STATUS UPDATE (1 of 2)

Date: ___ / ____ / _____ Location: _____

Source of Release: _____ Amount of Release: _____

Weather Conditions: _____

State Agency: _____

Agency Representative responsible for waste management / disposal: _____

_____ Phone: (____) _____ - _____

Variance Obtained: _____ Yes _____No

Step One -- Sample

Sample analysis was received: _____ / _____/ _____ Analysis is attached

Step Two -- Options

Disposal method is:

_____

_____

Resource for disposal method is:

_____

_____

Disposal applications have been sent to:

_____

_____

Step Three – Interaction with State

_____

_____

_____

_____

APPENDIX G

DISPOSAL STATUS UPDATE (2 of 2)

Step Four -- Information

Additional substance information discovered or needed:

_____

_____

_____

_____

Step Five – Waste Storage and Transportation

Shipping methods / contractor being utilized:

_____

_____

_____

Storage facilities / resources being utilized:

_____

_____

_____

Protective equipment being utilized (see safety and health plan):

_____

_____

_____

_____

_____

Signature of User: _____

Phone: (____) ____ - _____

APPENDIX H
WILDLIFE REHABILITATIONS AND RESCUE INFORMATION

ENDANGERED SPECIES AND WILDLIFE REHABILITATION RESOURCES & CONTACTS

GOVERNMENT AGENCIES

Louisiana Department of Wildlife and Fisheries
P.O. Box 915
Minden, LA 71058
318-676-7594
Jim Taylor or Charlie Hoekne

Louisiana Department of Wildlife and Fisheries
P.O. Box 98000
Baton Rouge, LA 70898-9000
504-765-2800 or 800-442-2511 (24 hr)

Office of Oil Spill Coordinator - Office of Governor
P.O. Box 94095
Baton Rouge, LA 70804
Roland Guidry
504-922-3230

WILDLIFE REHABILITATORS
(Permitted in Louisiana)

John R. Cannon, II
Conoco, Inc.
Route 2, Box 2110
Bayou d'Inde Road
Westlake, LA 70669
318-882-0640
Permit Number R-92-01
Native birds for rehabilitation after oil contamination

Nancy Torcson
Clearwater Wildlife Sanctuary
24 Holly Drive
Covington, LA 70433
504-892-0760
Permit R-92-02
Native birds, mammals and herps

Carlyle A. Rogillio, Director
Helping Hands, Inc.
P.O. Box 7066
Metairie, LA 70010-7066
504-888-5510
Permit Number R-92-03
Native birds

Cecil Howard McCrea, Jr.

A Little Touch of Nature
59363 Thompson Road
Slidell, LA 70460
504-641-3867
Permit Number R-92-04
Native birds and mammals

Jackie R. Duhon
Westlake Bird Sanctuary and Rehabilitation Center
2110 Nichols Road
Westlake, LA 70669
318-433-5955
Permit Number R-92-05
Native birds and mammals

Dr. John R. Wade
Northlake Veterinary Hospital
2480 North Causeway
Mandeville, LA 70448
504-845-7313
Permit Number R-92-06
Native birds, mammals and herps

PERMITTED WILDLIFE REHABILITATORS - 1999

PERMIT NUMBER	SPECIES HANDLED
R-99-01	sea turtles
Dr. Stephen M. Miller Aquarium of the Americas 1 Canal St. New Orleans, LA 70130	
R-99-02	mammals
Patsy Hinton 4493 Hwy. 818 Ruston, LA 71270 (318) 251-1436	
R-99-03	mammals
Joe Leopold 418 Dr. Gorman Dr. Belle Chasse, LA 70037 (504) 394-1448	
R-99-04	mammals
Jamie DiBenedetto 2282 DiBenedetto Lane Port Allen, LA 70767 (225) 343-4922	
R-99-05	herps, birds, mammals
Gina L. Stanton Wildlife in Distress, Inc. P. O. Box 92936 Lafayette, LA 70501 (318) 232-0121	

R-99-06 birds and mammals

Cynthia Bankston
18845 Weinberger Rd.
Ponchatoula, LA 70454-6374
(504) 386-6374

R-99-07 birds and mammals

Wayne Norwood
39329 W. Brickyard Rd.
Springfield, LA 70464
(504) 294-2863

R-99-08 squirrels

Connie and David Dunn
1736 Bellridge Dr.
Baton Rouge, LA 70815
(225) 272-8944

R-99-09 mammals

Alona Waldrop
4228 Hwy. 818
Ruston, LA 71270
(318) 255-5573

R-99-10 mammals

Tandy R. Hayes, RT
1827 Swarthmore St.
Alexandria, LA 71301
(318) 473-9966

R-99-11 birds and mammals

Elizabeth Prest
3502 Eliga St.
Haughton, LA 71037
(318) 949-1596
(318) 676-3964

R-99-12 birds and mammals

Susan Lipoma
9264 Kurt Kundler Rd.
Gonzales, LA 70737
(225) 675-8004

R-99-13 birds and mammals

Larry Raymond, Director
Parish of Caddo, Parks and Recreation
Walter B. Jacobs Memorial Nature Park
8012 Blanchard Furrh Rd.
Shreveport, LA 71107
(318) 929-2806

R-99-14 turtles and tortoises

Martha Ann Messinger and George M. Patton
2022 Gemini Dr.
Bastrop, LA 71220-3467
(318) 281-0113

R-99-15 birds and mammals

Jackie Duhon
Westlake Bird Sanctuary
2110 Nichols Rd.
Westlake, LA 70669
(318) 433-5955

R-99-16 birds

James C. Bragg
6456 Graham Lane
Keithville, LA 71047
(318) 925-2257

R-99-17 birds and mammals
Laura Lanza, Director
Calcasieu Parish Police Jury
Animal Control and Protection Dept.
210 W. Railroad Ave.
Lake Charles, LA 70601
(318) 439-8879

R-99-18 birds and mammals

Leslie Lattimore
20591 Abe Hoover Rd.
Livingston, LA 70754-4404
(225) 698-6259

R-99-19 birds

Karen K. Haddad
P. O. Box 1828
Gray, LA 70359
(504) 873-1095 (Terrebonne Humane Society)

R-99-20 birds and mammals

Valerie Plaisance
232 E. Waguespack St.
Lockport, LA 70374
(504) 532-6905

R-99-21 birds and mammals

Dr. Merry Caplan

R-99-22 birds and mammals

Suzy B. Heck
Heckhaven Wildlife Rehabilitation Center
6927 Starboard Dr.
Lake Charles, LA 70605
(318) 477-6129

R-99-23 birds

Wayne Dubuc
P. O. Box 2028
Morgan City, LA 70381
(504) 385-3232

R-99-24 mammals
Karen Sellars
P. O. Box 1144
Mandeville, LA 70470
(504) 626-5542

R-99-25 birds and mammals

Letitia Butcher
217 Elmwood Dr.
Lafayette, LA 70503
(318) 981-8949

R-99-26 herps, birds and mammals

Jamie Primm

R-99-28 birds

Sarah B. Farrell
416 Hillary St.
New Orleans, LA 70113
(504) 866-7260

R-99-29 mammals

Debbie Fontenot
215 Auburn Dr.
Carencro, LA 70520
(318) 896-0331

R-99-30 birds and mammals

Nancy Torcson
Clearwater Wildlife Sanctuary
P. O. Box 1378
Abita Springs, LA 70420
(504) 892-0760

R-99-31 mammals

David and Shawnia Taylor
120 Canterbury Rd.
Monroe, LA 71203
(318) 343-6062

R-99-32 herps, birds and mammals

Dina Michel

R-99-33 birds

Dr. Jacqueline C. Sloane
1640 Palmer Chapel Rd.
Pineville, LA 71360
(318) 443-4444 (w)
(b) (6) [redacted] (h)

R-99-34 birds and mammals

Noel A. Thistlethwaite
P. O. Box 366
Grand Coteau, LA 70541
(318) 662-1053

R-99-35 birds

Clarence Abadie
17419 Riverside Lane
Tickfaw, LA 70466
(504) 419-8893

R-99-36 birds and mammals

Lisa Reed
290 Gulfway Dr.
Hackberry, LA 70645
(318) 762-3111 ext. 265 (w)
(b) (6) [redacted] (h)

R-99-37 mammals

Scott and Anna Heinrich
P. O. Box 268
Clinton, LA 70722-0268
(504) 683-8004

R-99-38 purple martins

Project Swallow
c/o Carlyle Rogillio
4913 Dreyfous Ave.
Metairie, LA 70010-7056
(504) 888-5510

R-99-39 deer (delivered by LDWF)

Larry Jones
P. O. Box 593
Sterlington, LA 71280
(318) 343-4044 (LDWF Dist. II Office)

R-99-40 herps, birds and mammals

Marcella Lowell
Bayou Wildlife Rescue & Rehabilitation, Inc.
P. O. Box 351
Marrerro, LA 70076
(504) 348-1878

R-99-41 gopher tortoises
Paul Conzelmann

R-99-42 birds and mammals

Guam Pelligrin
410 N. Main Project Rd.
Schriever, LA 70395
(504) 447-1013

R-99-43 bird and mammals

Lydia Fontenot
217 St. Fidelis
Carencro, LA 70520
(318) 896-9187

R-99-44 mammals

Debbie Cole
15 Maryland Dr.
New Orleans, LA 70124
(504) 486-5929

R-99-45 mammals

Cyndi Green
639 Barnes Rd.
Monroe, LA 71203
(318) 343-7466

R-99-46 mammals

Jeff Galpin
6515 Wilson St.
Harahan, LA 70123
(504) 738-0682

R-99-47 birds and mammals

Nikki Williams
3271 Deborah Dr.
Monroe, LA 71201
(b) (6) [redacted] (h)
(318) 387-0773 (w)

R-99-48 birds and mammals

Cecil Howard McCrae
Little Touch of Nature
59363 Thompson Rd.
Slidell, LA 70460
(504) 649-6036

R-99-49 birds

Becky and Wayne Watkins
212 Evanridge Rd.
Alexandria, LA 71302
(318) 483-4065
(318) 449-5705 (pager)

R-99-50 herps, birds, mammals

Kathryn Diaz
240 Girard Park Circle
Lafayette, LA 70503-2043
(318) 237-3427

R-99-51 birds and mammals

Dr. Gia Morgan
P. O. Box 760
Benton, LA 71006
(318) 965-2371

State of Louisiana

James H. Jenkins, Jr.
Secretary

Department of Wildlife & Fisheries
Post Office Box 98000
Baton Rouge, LA 70898-9000
(225) 765-2800

M.J. "Mike" Foster, Jr.
Governor

March 16, 1999

Dear Applicant:

I am writing in reference to the Louisiana Department of Wildlife and Fisheries (LDWF) Wildlife Rehabilitation permitting procedure. To apply for a LDWF Wildlife Rehabilitation Permit you must submit a letter of application to Bill Vermillion, Nongame Biologist, LA Natural Heritage Program, at the above address containing the following information:

* name of applicant, phone number, home address, and address of animal facilities;
* species to be rehabilitated (e.g., native migratory birds, non-migratory birds, native mammals, native raptors);
* a statement of pertinent experience, education , workshops attended, availability of books, manuals, etc.;
* a description of facilities where the animals will be housed during each stage of rehabilitation (i.e., intensive care, recovery, and conditioning) and any ancillary support facilities (e.g., facilities and resources of a veterinary clinic or zoo);
* a letter of recommendation from a rehabilitator or veterinarian familiar with your abilities to care for native wildlife;

PHMSA 000112170

* proof of membership in either the National Wildlife Rehabilitator's Association or the International Wildlife Rehabilitation Council.

A Federal Wildlife Rehabilitation Permit is required in addition to the State Permit in order to care for native bird species. For information on the Federal Permit, telephone (404) 679-7070. Also, if you are housing permanently crippled (non-releasable) native wildlife for education purposes, you will need an additional permit (Special Purpose - Education), similar to the Federal Education Permit. We need to know which species you will be housing, the number of individuals, and a description of the facilities in which they are housed. We do not encourage that animals undergoing rehabilitation be subjected to public observation.

The goal of Louisiana's wildlife rehabilitation and education policy is to maintain of high level of standards and responsibility in the state, thereby protecting our natural resource as well as the public.

As stated above, membership in either the National Wildlife Rehabilitator's Association or the International Wildlife Rehabilitation Council is a requirement for permit issuance. The address for the National Wildlife Rehabilitator's Association is National Wildlife Rehabilitator's Association, 14 North 7 Avenue, St. Cloud, MN, 56303, telephone # (320) 259-4086. The address for the International Wildlife Rehabilitation Council is International Wildlife Rehabilitation Council, 4437 Central Place, Suite B-4, Suisun, CA, 94585, telephone # (707) 864-1761.

Enclosed is a release statement that must be read and signed by anyone who will be issued a permit from the Louisiana Department of Wildlife & Fisheries. I have also enclosed a list of current rehabilitators for your reference and the criteria guidelines for the federal permit. As you can see they are pretty much the same. They require you to have a state permit prior to the issuance of a federal permit. Feel free to contact me at (225) 765-2821 if you have any questions. I look forward to hearing from you.

Sincerely,

Bill Vermillion

Bill Vermillion, Nongame Biologist
LA Natural Heritage Program

WGV:wgv
enclosures

State of Louisiana

James H. Jenkins, Jr.
Secretary

Department of Wildlife & Fisheries
Post Office Box 98000
Baton Rouge, LA 70898-9000
(225) 765-2800

M.J. "Mike" Foster, Jr.
Governor

Please review and concur on the following statement regarding the issuance of permits by the Louisiana Department of Wildlife and Fisheries:

"I have been advised and do understand that by applying for and accepting a permit issued by the Louisiana Department of Wildlife and Fisheries, I am being allowed to engage in an activity which would otherwise be prohibited by law or for which a permit is required. I understand that the permit is not a license and confers no property right upon me. I specifically agree to abide by all State and Federal fish and wildlife laws and regulations, and all State and Federal laws and regulations which relate to this permit or the permitted activity, and by all other terms and conditions of this permit. I understand that the permit for which I am applying may be suspended, canceled or revoked at anytime by the Louisiana Department of Wildlife and Fisheries. I agree to immediately surrender the permit issued to me upon demand made upon me by any authorized employee of the Louisiana Department of Wildlife and Fisheries. I understand that my failure to fully and completely comply with the laws, regulations, terms and conditions referred to herein could result in the immediate suspension, cancellation or revocation of this and other permits issued to me by the Department and that I may be denied future permits as a consequence of my actions. I understand and agree that any permit issued to me by the Louisiana Department of Wildlife and Fisheries is in the nature of a privilege which is being voluntarily extended to me by the Department and the failure on my part to cooperate fully and completely with the Department or its employees can result in the loss of the privilege conferred and the denial of future requests for permits. By accepting this permit, I evidence my agreement to be bound by all conditions and stipulations set forth herein."

Signature Date

FEDERAL REHABILITATOR GUIDELINES

SPECIAL PURPOSE - REHABILITATION PERMIT

The conditions of a Special Purpose - Rehabilitation Permit are specific. They authorize the care of sick, injured, or orphaned migratory birds. Eagles and endangered species received must be reported to the U.S. Fish and Wildlife Service office issuing the permit within 48 hours. Migratory birds may be temporarily possessed up to 90 days until fit for release into the wild. Additional written authorization is required to possess birds for more than 90 days. Possession of nonreleasable or dead birds is prohibited.

Accurate records must be kept in book form listing the numbers and species cared for during the year including the disposition of each (i.e., released to the wild; name of bonafide public scientific or educational institution where deposited). List names and addresses of persons bringing sick/injured birds to permittee and dates of receipt (50 CFR 13.46). An annual report of this information is due by January 31 of each year or any portion thereof. Also, please note that 50 CFR 13.47 authorizes the Service to inspect permittee activities.

The location where the activity may be conducted will be listed on the permit (usually the State in which you reside) and will be valid only with accompanying State authorization, if required. Authorization to rehabilitate in additional States may be requested but must include copies of corresponding authorization. Any change of name or address must be reported in writing within 30 days so amended authorization can be provided.

Please include the following additional information with your application (see 50 CFR 21.27).

1. Describe in detail your experience and training and/or experience as a rehabilitator of migratory birds. List species handled, including raptors and endangered birds, if any.

2. Describe facilities to be used in rehabilitation and include a delineation of the area as well as the approximate number of birds that can be accommodated at any given time.

3. A statement from a migratory bird rehabilitator holding a State, if required, and Federal permit reflecting their knowledge of your training and/or qualifications and their willingness to provide you with assistance, if needed.

4. If the State in which you reside does not require permits for rehabilitation of migratory birds, your local wildlife officer must provide a letter stating (1) there is a need for a migratory bird rehabilitator in your area, and (2) recommending you for issuance of such authorization.

5. A statement from a licensed veterinarian who has agreed to work with you in your rehabilitation efforts by providing any required medical assistance and stating his knowledge, if any, of your training and/or qualification to rehabilitate migrat birds.

6. Name and address of public educational or scientific institution to receive nonreleaseable birds and those which die in captivity.

7. List affiliation with any wildlife or conservation organization(s).

8. The above documents are required in addition to the information requested on the Fish and Wildlife License/Permit Application (Form-3-200) and MUST be included with the application when it is submitted for review.

Animal Housing

Avian Caging

Comments Regarding Avian Caging

Materials for caging vary within the field. Aviaries should have a double door entry system. Solid walls for aviaries can be constructed of wood, fiberglass, or their equivalent. Hardware cloth, chicken wire, and chain-link fencing are not recommended if the birds can come into direct contact with them. If vertical wood lath, fiberglass screening, or netting prevent direct contact, then wire can add extra security. Flooring for aviaries is often pea gravel over sand which should be changed biannually or as needed. Natural flooring is acceptable in very large enclosures but it must be turned and disinfected from time to time. Flooring for small cages includes towels or raised netting over newspaper, newspaper alone, or wood shavings (cut up tree trimmings, not sawdust), depending on the species being housed. Perches can be wood doweling or plastic piping (or equivalent) covered by 1/4" astro-turf, hemp, or indoor/outdoor carpeting. Platforms can be covered with 1/2" astro-turf or indoor/outdoor carpeting. Natural limbs, bow, block, and ring perches are appropriate for certain species of birds.

Categories of Cage Sizes

The sizes and special code information for avian species are divided into the following categories:

Confinement: Designated for initial housing of birds suffering form special problems such as traumatic injuries, post-surgical care, severely debilitating conditions such as shock, toxicity, neurological impairment, or other conditions that require close supervision and management. Confinement cages include incubators, padded cages, open boxes that allow for thermoregulation with heat lamps, etc. These cages should be used when activity must be restricted.

Recovery: designated to encompass all necessary elements of housing during the initial healing period, including "cage rest" situations.

Conditioning: designated to provide an opportunity for recuperated birds to improve their strength, develop stamina and coordination, restore muscle tone, and acclimate to ambient weather conditions by swimming, flying etc., in larger outdoor enclosures.

Considerations in Defining Avian Cage Sizes

Although considerable thought and experience determined the cage sizes listed in this program, it is impossible to consider all possibilities in terms of material, design, or size. Caging will be reviewed, on-site, by experienced rehabilitators who will be concerned with its workability.

Since exterior plywood is available in economical and easy to use 4' x 8' sheets, some caging standards have been calculated, using numbers that are based on material size. Maximum volume is achieved with cubic cages. Cage

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sizes specify minimums, but it is best to give the birds the maximum amount of space. Consequently, cages should be built using the size designed for the species at different times. While the raptor cage information states a minimum rectangular size, it has been found that an L-shaped enclosure will often be better to evaluate angling abilities.

Equivalent substitution is encouraged. Certainly, in most cases, the usual 7" x 10" x 17" cardboard portable pet carrier is an excellent substitute for the 12" x 12" x 12" cage size listed for initial care of small birds. Intelligent substitution of height and ground area requirements is encouraged. While pheasant and egrets are the same size, one requires height and the other needs ground space. Cages are only specified in cubic footage, It would be very difficult to specify ground room for individual species. Additionally, birds cannot be assigned cage sizes by species, due to variations within species, For example, the Canada goose has at least seven races that are identifiable by size. They range from the giant, which has a six foot wingspread and breeds in Missouri, to the small mallard size that breeds near the Arctic Circle and winters in California. For this reason, non raptorial species are housed according to their general size (in this instance, the height of the bird).

Multiple occupancy by compatible species may be not only acceptable but beneficial, particularly in conditioning caging for fledgling birds.

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Codes for Special Caging Requirements

C	Birds such as woodpeckers and nuthatches require angled and/or vertical logs for climbing. Provide suitable materials for clinging birds such as chimney swifts.
D	Birds with this designation require old logs, etc., as drumming materials.
F	Special substrate needed. These species are susceptible to foot problems. Depending on the species, padded flooring, towels, sheeting, carpets, kitty litter, crumpled newspaper covered with toweling, sand, or suspended net flooring may be used.
H	Hides; provide natural vegetative material or man-devised areas for cover. (All birds would benefit from an area of cover.)
P	Requires two or more perches of varied diameter.
Pi	Piling or shelves required for perching.
Q	Quiet and extreme privacy required.
S	Bathing area required; "kiddie pool" size.
Sl	Swimming area required; large pool (deeper than 2'), tank, pond.
Sp	Resting platform in swimming pool.
W	Use waterbed, suspended netting, sheepskin padding, or crumpled newspapers (6"deep minimum) covered with towels.
Z	Although larger conditioning cage sizes are preferred for hummingbirds, great care must be taken to seal off small openings or cracks that can act as traps.

Relationship of Latin and English Names

Gaviiformes	Loons
Podicipediformes	Grebes
Procellariiformes	Petrels, Shearwaters
Pelecaniformes	Pelicans, Gannets, Boobies, Cormorants

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Ciconiiformes	Bitterns, Herons, Egrets
Anseriformes	Swans, Geese, Ducks
Falconiformes	Vultures, Hawks, Ospreys, Falcons
Galliformes	Pheasants, Quail
Gruiformes	Rails, Coots, Cranes
Charadriiformes	Gulls, Terns, Plovers, Sandpipers, Alcids
Columbiformes	Pigeons, Doves
Psittaciformes	Parrots
Cuculiformes	Cuckoos
Caprimulgiformes	Nighthawks, Goatsuckers
Apodiformes	Swifts, Swallows
Trochiliformes	Hummingbirds
Coraciiformes	Kingfishers
Piciformes	Woodpeckers
Passeriformes	Perching and Songbirds
Strigiformes	Owls

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Minimum Housing Guidelines for Non-Raptor Avian Species

Order	Height (inches)	Confinement (W L H)	Recovery (W L H)	Conditioning (WLH)	Codes
Gaviiformes					
	+/- 24	24"x 24"x 30"	4'x4'x8'	Swim Area	Sl, W
Podicipediformes					
	<9	12"x 12"x 12"	18"x 18"x 18"	Swim Area	S, F
	>9	18"x 18"x 18"	18"x 18"x 18"	Swim Area	Sl, W
Procellariiformes					
	<12	12"x 12"x 12"	18"x 18"x 18"	Swim Area	S, P, F
	12-18	18"x 18"x 18"	24"x 24"x 24"	Swim Area	Pi, Sl, Sp, F
	>18	36"x 36"x 36"	4' x 4' x 4'	SwimArea	W,Sl,Sp,F
Pelecaniformes					
	<36	36"x 36"x 36"	4' x 8' x 4'	Swim Area	Pi, Sl, Sp, F
	>36	48"x 36"x 36"	4' x 8' x 8'	Swim Area	Pi, Sl, Sp, F
Ciconiiformes					
	<20	24"x 24"x 24"	24"x 24"x 24"	4'x 4'x 8'	S, P, F, Q
	>20	36"x 36"x 36"	36"x 36"x 36"	4'x 4'x 8'	S, P, F, Q
Anseriformes					
	<20	24"x 24"x 24"	36"x 36"x 36"	Pen/Pool	S, F
	>30	4'x4'x8'	4' x 8' x 8'	Swim Area	Sl, F
Galliformes					
	<20	24"x 24"x 24"	36"x 36"x 36"	4' x 4' x 4'	H
	>20	36"x 36"x 36"	4'x4'x8'	4'x4'x8'	H
Gruiformes					
	<9	12"x 12"x 12"	18"x 18"x 18"	4' x 8' x 8'	H
	>9	18"x 18"x 18"	24"x 24"x 24"	4' x 8' x 8'	H
	>15	36"x 36"x 60"	4'x 8'x 8'	8' x 16' x 8'	H
Charadriiformes					
	<9	12"x 12"x 12"	18"x 18"x 18"	4' x 8' x 8'	H, Pi
	9-15	18"x 18"x 18"	24"x 24"x 24"	4' x 8' x 8'	H,Pi
	15-20	24"x 24"x 24"	36"x 36"x 36"	8' x 8' x 8'	H, S, Pi
	20-30	36"x 36"x 36"	4' x 4' x 4'	16' x 8' x 8'	H, S, Pi
Columbiformes					
	+9	12"x 12"x 12"	12"x 12"x 12"	16' x 8' x 8'	
Cuculiformes					
	<12	18"x 18"x 18"	24"x 24"x 24"	8' x 8' x 8'	
	>12	24"x 24"x 24"	36"x 36"x 36"	16' x 8' x 8'	

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Order	Height (inches)	Confinement (W L H)	Recovery (W L H)	Conditioning (WLH)	Codes
Caprimulgiformes					
	+/- 9	12"x 12"x 12"	12"x 12"x 12"	8' x 8' x 8'	P
Apodiformes & Trochiliformes					
	<9	12"x 12"x 12"	12"x 12"x 12"	4' x 8' x 8'	P, C, Z
Coraciformes					
	<9	12"x 12"x 12"	18"x 18"x 18"	4' x 8' x 8'	S, Pi
Piciformes					
	<9	12"x 12"x 12"	18"x 18"x 18"	4' x 8' x 8'	C, D
	9-15	18"x 18"x 18"	24"x 24"x 24"	8' x 16' x 8'	C, D
Passeriformes					
	<9	12"x 12"x 12"	18"x 18"x 18"	4' x 8' x 8'	P
	9-15	18"x 18"x 18"	24"x 24"x 24"	8' x 8' x 8'	P
	>15	24"x 24"x 24"	36"x 36"x 36"	8' x 16' x 8'	P

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Minimum Housing Guidelines for Raptors

Species	Initial Care	Recovering	Conditioning
	W·L H	W L H	W L H
Turkey Vulture	36"x 36"x 36"	72"x 72"x 48"	20' x 10' x 15'
Northern Goshawk	24"x 16"x 24"	24"x 24"x 24"	20' x 10' x 15'
Cooper's Hawk	18"x 14"x 18"	24"x 18"x 24"	15' x 8' x 8'
Sharp-shinned Hawk	18"x 14"x 18"	24"x 18"x 24"	15' x 8' x 8'
Northern Harrier	18"x 14"x 18"	24"x 18"x 24"	20' x 10' x 15'
Rough-legged Hawk	22"x 16"x 21"	24"x 24"x 24"	20' x 10' x 15'
Ferruginous Hawk	22"x 16"x 21"	24"x 24"x 24"	20' x 10' x 15'
Red-tailed Hawk	22"x 16"x 21"	24"x 24"x 24"	20' x 10' x 15'
Red-shouldered Hk	22"x 16"x 21"	24"x 24"x 24"	20' x 10' x 15'
Swainson's Hawk	22"x 16"x 21"	24"x 24"x 24"	20' x 10' x 15'
Broad-winged Hawk	18"x 14"x 14"	24"x 18"x 24"	15' x 8' x 8'
Harris' Hawk	48"x 48"x 42"	8' x 10' x 8'	20' x 10' x 15'
Golden Eagle	48"x 48"x 42"	8' x 10' x 8'	40' x 20' x 20'
Bald Eagle	36"x 36"x 36"	72"x 72"x 72"	40' x 20' x 20'
Osprey	36"x 36"x 36"	72"x 72"x 48"	40' x 20' x 20'
Gyrfalcon	22"x 16"x 21"	24"x 24"x 24"	20' x 10' x 15'
Prairie Falcon	22"x 16"x 21"	24"x 24"x 24"	20' x 10' x 15'
Peregrine Falcon	22"x 16"x 21"	24"x 24"x 24"	20' x 10' x 15'
Merlin	18"x 14"x 18"	24"x 18"x 24"	15' x 8' x 8'
American Kestrel	17"x 7"x 10"	17"x 17"x 17"	10' x 8' x 8'

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Species	Initial Care	Recovering	Conditioning
	W L H	W L H	W L H
N. Screech Owl	17"x 7"x 10"	17"x 17"x 17"	8' x 8' x 6'
Great Horned Owl	22"x 16"x 21"	24"x 24"x 24"	25' x 10' x 15'
Long-eared Owl	18"x 14"x 18"	24"x 18"x 24"	15' x 8' x 8'
Short-eared Owl	18"x 14"x 18"	24"x 18"x 24"	15' x 8' x 8'
Barn Owl	18"x 14"x 18"	24"x 18"x 24"	15' x 8' x 8'
Snowy Owl	22"x 16"x 21"	24"x 24"x 24"	20' x 10' x 15'
Barred Owl	22"x 16"x 21"	24"x 24"x 24"	20' x 10' x 15'
Spotted Owl	22"x 16"x 21"	24"x 24"x 24"	15' x 8' x 8'
Great Gray Owl	36"x 36"x 36"	72"x 72"x 48"	20' x 10' x 15'
N. Hawk Owl	18"x 14"x 18"	24"x 18"x 24"	15' x 8' x 8'
Burrowing Owl	17"x 7"x 10"	17"x 17"x 17"	8' x 8' x 6'
Boreal Owl	17"x 7"x 10"	17"x 17"x 17"	8' x 8' x 6'
N. Saw-whet Owl	17"x 7"x 10"	17"x 17"x 17"	8' x 8' x 6'
Flammulated Owl	17"x 7"x 10"	17"x 17"x 17"	8' x 8' x 6'
N. Pygmy Owl	17"x 7"x 10"	17"x 17"x 17"	8' x 8' x 6'
Elf Owl	17"x 7"x 10"	17"x 17"x 17"	8' x 8' x 6'

LISTED IN ORDER: Width x Length x Height

Mammal Housing

Comments on Mammal Housing

The following are suggested building materials for outdoor caging. Walls are generally made of chain-link fencing, welded wire, or wood. When wooden cages are used, they should be water-sealed. Welded wire sizes are as follows: 1/2"x 1/2" for small rodents and opossums (100g or less); 1/2"x 1" for squirrels; and 1"x 1-1/2 " for raccoon and larger mammals. Roofing material are the same with a covered area that provides protection from the elements.

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Fiberglass is sometimes used on top of the wire to provide protection. The flooring depends on the species being housed. Larger walk-in mammal cages should have concrete flooring and be sloped for proper drainage. If natural flooring is utilized, wire fencing must be placed under the cage and be covered with a draining gravel (i.e., pea gravel). Tree trimmings can be used if they are changed regularly. All doors should be equipped with a double door system for the protection of the handler and the animal. A den should be provided for the animal: examples would be a wooden box, fiberglass or plastic animal carrier.

SPECIFIC SPECIES REQUIREMENTS

Rodents: Logs for gnawing to curb tooth growth; bark must be edible. Kangaroo Rats require sand for burrowing, but do not require water. Some species may utilize dirt for burying food, dust baths, etc.

Raccoons: Hammocks made of one-inch square wire mesh attached to wall or roof; tree limbs and logs to promote climbing. Provide a wading pool or container applicable to the animal's size to allow bathing and food handling.

Badgers: Be sure the bottom of the cage is secured so that the animal cannot dig out. A metal garbage can turned on its side can be used as a den. Line with tree trimmings or shavings. A large wooden box with at least three feet of pesticide-free soil should be provided for digging.

Bobcat, Mtn. Lion: Large branches and logs (some hollow) should be provided for climbing; high platforms for resting above the cage floor.

Muskrats, Otters, Nutria, Beaver:
Must have water containers that are large enough to swim in and are at least two feet deep. Examples include bathtubs, metal troughs, metal or concrete pools (plastic kiddie pools are not deep enough and will be destroyed by the animal). Container of soil at least one foot deep should be provided for digging.

Hooved Mammals: If chain link is used for the walls, drapes must be hung over the inside of the chain link to avoid injury to the animal and to keep it from climbing out (i.e., blankets tied securely or tarps). General practice is to take deer and pronghorn from injured adult caging to release in an

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effort to prevent cage trauma. Big horn sheep jump high while pronghorn will jump long distances but not as high.

Bear: Den should be made of concrete blocks or bricks (8'x 8'x 6') and attached to the wall of the cage. This will house one adult or two juveniles. Heavy logs and a large indestructible tub for bathing are also necessary.

Marine Mammals: Shall be housed in accordance with APHIS Standards (Animal and Plant Health Inspection Service).

MINIMUM HOUSING GUIDELINES FOR SELECTED MAMMALS

These guidelines are meant to give guidance on minimum housing requirements for the rehabilitation of various species of mammals. All cage sizes are indicated in feet and are in order of length x width x height. Abbreviations are as follows: PP- cardboard portable pet carrier. L-one litter. Gal-size of an aquarium tank. ( )-number of animals per enclosure.

Species	Initial Care	Nursing	Juvenile	Adult
Woodrat	(1) 15 gal.	(1) 15 gal.	(1)4 x 6 x 2	(1)4 x 6 x 2
Kangaroo Rat	(1) 15 gal.	(1)15 gal.	(1)4 x 6 x 2	(1)4 x 6 x 2
Brush Rabbit / Cottontail	(1) PP	(1) PP	(L)4 x 6 x 2	(1)4 x 4 x 2
Jack Rabbit	(1) PP	(1) PP	(L)4 x 6 x 4	(1)4 x 6 x 4
Mice	10 gal. aquarium or lab caging / 1 adult or 1 litter.			
Pocket Gopher	(1) 15 gal.	(L) 15 gal.	(L)15 gal.	(1) 15 gal.
Tree Squirrel	(1) PP	(L) PP	(L)4 x 6 x 4	(1)4 x 6 x 6
Ground Squirrel	(1) PP	(L) 4 x 6 x 2	(1)4 x 6 x 2	(1)4 x 6 x 6
Mojave Grd. Squirrel	(1) 15 gal.	(L) 15 gal.	(L)2 x 2 x 2	(1)2 x 2 x 2
Chipmunk	(1) PP	(L) PP	(L)2 x 2 x 2	(1)2 x 2 x 2
Muskrat	(1) PP	(1) PP	(2)4 x 6 x 2	(1)4 x 6 x 2*
Weasel	(1) PP	(1) PP	(1)3 x 3 x 3	(1)3 x 3 x 3

Species	Nursing Eyes Closed	Weaning	Juvenile	Initial Inj. Adult	Outside Adult
Raccoons	(L) PP	(3)3 x 3 x 3	(4)4 x 6 x 5	(1)2 x 3 x 3	(1)6 x 8 x 6*
Opossum	(L) PP	(L)3 x 3 x 3	(1)4 x 4 x 8	(1)2 x 2 x 2	(1)4 x4x 8
Fox	(L) PP	(L)3 x 3 x 3	(1)4 x 8 x 6	(1)2 x 2 x 2	(2-3)4 x 8 x 6
Badger	(L)3 x 3 x 3	(L)3 x 3 x 3	(1)8 x 8 x 6	(1)3 x 3 x 3	(1) 8 x 8 x 6*
Bobcat	(L) PP	(2)3 x 3 x 3	(1)8 x 8 x 6	(1)3 x 3 x 3	(2) 8 x 8 x6*
River Otter	(L)6 x 8 x 6	(L)6 x 12 x 6	(1)3 x 3 x 3	(1)6 x 12 x 6*	(1)6 x 12 x 6*
Sea Otter	(L)6 x 8 x 6	(L)6 x 12 x 6	(L)6 x 12 x 6	(1)6 x 8 x 6	(1)6 x10 x 6*
Marmot	(L) PP	(L)4 x 2 x 3	(1)6 x 8 x 6	(1)3 x 3 x 3	(2)6 x 8 x 6

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Species	Nursing, Eyes Closed	Weaning	Juvenile	Initial, Injured Adult	Outside Adult
Ringtail cat	(L) PP	(L)3x3x3	(L)4x6x5	(1)2x3x3	(1)6x8x6*
Fisher	(L) PP	(1)3x3x3	(1)6x8x6	(1)4x3x3	(1)6x8x6
Marten	(L) PP	(1)3x3x3	(1)4x8x6	(1)2x2x2	(1)4x8x6
Wolverine	(1) PP	(1)3x3x3	(1)8x12x6	(1)4x3x3	(1)8x12x6
Beaver	(L) PP	(L)3x3x3	(L)8x12x6	(1)4x3x3	(1)8x12x6
Aplodontia	(L) PP	(1)3x3x3	(1)8x8x6	(2)2x2x2	(1)8x8x6
Porcupine	(L) PP	(1)3x3x3	(1)4x8x6	(1)3x3x3	(1)6x8x6
Coyote	(L) PP	(L)3x6x3	(L)10x12x6	(2)4x3x2.5	(2)10x12x6
Bl. bear	(L) PP	(L)3x6x3	(L)8x12x8	(1)8x12x8	(1)20x36x16*
Mtn. lion	(L) PP	(L)3x6x3	(L)6x24x8	(1)4x3x3	(1)6x24x8*
Wild pig	(L)2x2x2	(L)10x15x8	(L)10x15x8	(1)6x8x8	(2-3)10x15x8
Bl.-tld. deer	(1-2)4x4x2	(4)10x15x6	(6)30x50x6	(1)8x8x8	(*) or a barn
h. sheep	(1-2)4x4x2	(4)10x15x6	(6)30x50x6	(1)8x8x8	(*)
Elk	(1-2)6x6x2	(4)12x20x6	(6)30x50x6	(1)8x8x8	(*)
Pronghorn	(1-2)4x4x2	(4)10x15x6	(*)	(1)8x8x8	(*)

*,(*) See specific species requirements.

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APPENDIX I
SITE SPECIFIC SAFETY AND HEALTH PLAN

APPENDIX I

SITE SPECIFIC SAFETY AND HEALTH PLAN

INCIDENT _____

DATE _____ /_____/_____

TIME PREPARED _____: _____ am / pm

VALID UNTIL _____

PREPARD BY _____

APPENDIX I

SITE SPECIFIC SAFETY AND HEALTH PLAN

The purpose of this plan is to inform all personnel who will perform tasks in the spill area during this response of all safety and health hazards, procedures to be followed, and equipment to be used on site.

All response personnel on site will be provided the information in this plan prior to entry into the spill area and will follow all requirements of the plan.

Fill in as much information as possible. If information is not known or not applicable, make note of that fact. Periodic update of this document is often required. As conditions and circumstances change, this plan should reflect the changes.

SITE CONDIITONS

CONTAMINATION (S) ON SITE	CONCENTRATION	PRIMARY HAZARD
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Note: MSDS for the substances involved are attached.

The following additional hazards can be expected on this site: (i.e. slippery ground, uneven terrain, poison ivy, etc.)

_____

_____

_____

_____

APPENDIX I

ON-SITE ORGANIZATION

_____
Plant Manager

_____	_____
Plant Engineer	Environmental & Safety Engineers
_____	_____
Security Officer	Environmental & Safety Health Manager
_____	_____
Product Control Manager	Maintenance Manager / Supervisor

_____
Unit Supervisor

_____	_____
Field Team	Field Team
_____	_____
_____	_____
_____	_____
_____	_____

PRE-ENTRY BRIEFING

All personnel will be informed of the contents of this plan and the cleanup plan via:

_____

TASK / HAZARD INFORMATION

The following contains information regarding hazards / risks associated with particular tasks on site:

TASK / ASSIGNMENT	HAZARD (S)	PER / PROCEDURES
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

APPENDIX I

TRAINING REQUIREMENTS / PERSONAL PROTECTION EQUIPMENT

All personnel performing tasks on site must have the appropriate level of training in accordance with OSHA 29CFR.1910.120. The following levels of training have been established for this project.

RESPONDER CLASSIFICATION	TRAINING REQUIRED

CONTRACTORS – as with all positions, the training shall be commensurate with their response duties. Calumet is not required to perform the training but shall verify that all response personnel have the appropriate training.

PERSONAL PROTECTION EQUIPMENT

Personal Protection Equipment has been selected based upon the hazards present on the site. Definitions of the various levels follow. No equipment other than the listed type or style shall be used.

[ ] LEVEL **A**	[ ] LEVEL **B**	[ ] LEVEL **C**	[ ] LEVEL **D**
Fully Encapsulated Suite	Disposable Coveralls	Appropriate Chemical Resistant Clothing (coveralls, rain suite, etc)	"General work clothing"
SCBA	SCBA	Approved Air Purifying Respirator	
Chemical Resistant Gloves (inner and outer)	Chemical Resistant Gloves (inner and outer)	Chemical Resistant Gloves (inner and outer)	
Chemical Resistant Boots (steel toe / shank)	Chemical Resistant Boots (steel toe / shank)	Chemical Resistant Boots (steel toe / shank)	

APPENDIX I

Note: All users of respiratory protection devices shall be trained in their proper care and use as specified in 29CFR 1910.134. The company requirements and Respiratory Protection Program are located in _____

SITE CLEAN-UP PLANS

The response activities hall be carefully planned to ensure that all personnel are protected from hazards associated with the response and safe work practices are followed. List below the team members and their responsibilities during the cleanup.

NAME	TASK
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

APPENDIX I

SITE CONTROL

The individual, department, or agency responsible for coordinating access and security on site is the _____.

It is required that the response site be divided onto "zones" as specified under 29CFR1910.120. "Hot", "Warm", and "Support" zones shall be established and identified on the site map(s).

MEDICAL SURVEILLANCE

Medical surveillance of responders shall be in accordance with established company procedures, which are located _____.

SITE MONITORING

Initial monitoring shall be performed prior to beginning clean-up operations so that proper personnel protective equipment may be selected. Additional monitoring may be required to ensure the safety of personnel on the site. Listed below are the types of instruments being used on site along with the frequency and type of sampling to be conducted. All instrument maintenance and calibration shall be done in accordance with the manufacturer's instructions and shall only be performed by those familiar with the procedures.

INSTRUMENT TYPE	SAMPLING FREQUENCY
Oxygen Indicator	_____
Combustible Gas Indicator	_____
Calorimetric Tubes	_____
HNU / OVA	_____
Other _____	_____

APPENDIX I

INSTRUMENT TYPE	SAMPLING FREQUENCY
Other _____	_____
_____	_____
_____	_____
_____	_____

PERSONAL MONITORING

Describe all personal monitoring procedures in effect during response. This includes all measures taken such as use of dosimeter badges or tubes, personal sampling pumps, pulse and/or weight measurements, etc.

_____

_____

_____

_____

DECONTAMINATION PROCEDURES

Effective decontamination procedures shall be practiced to ensure that no personnel exposure occurs and no contaminant is removed from the decontamination area. All personnel and equipment exiting the site shall undergo appropriate decontamination in accordance with the following procedures.

Decontamination personnel shall use Level ___ protective equipment.

Decontamination shall include the following steps: (Mark out steps, which are not required)

1. _____	5. _____	9. _____
2. _____	6. _____	10. _____
3. _____	7. _____	11. _____
4. _____	8. _____	12. _____

13. Other _____

_____

_____

APPENDIX I

Special equipment required for above steps. (List any solvents, cleaners, or other procedures necessary)

_____

_____

_____

_____

SPILL CONTAINMENT AND CONTROL

Practices and procedures for spill control are addressed in Section 3.5 of this Plan and shall be followed by all responders.

APPENDIX J
RESPONSE CONTRACTOR EQUIPMENT LISTS AND CONTRACTS

CALUMET

Contract Number
CALSHV-GS-2009-041

CONTRACT FOR SERVICES

THIS AGREEMENT is made on this the 5 day of February, 2009 by and between CALUMET LUBRICANTS CO., LP, hereinafter referred to as OWNER, and Janus Environmental Inc, hereinafter referred to as CONTRACTOR.

WHEREAS CONTRACTOR, as an independent contractor, desires to furnish certain services to OWNER in connection with OWNER'S plant operations and represents that it is a duly qualified contractor for the purposes for which it is hired; and

WHEREAS OWNER desires to utilize the services of CONTRACTOR under the following terms and conditions;

NOW, THEREFORE, in consideration of the above premises and the following mutual obligations, the parties agree as follows:

1. This agreement shall control the legal relationship between the parties hereto for all transactions and relationships entered into between the effective date of this contract and the termination date hereof, notwithstanding anything to the contrary on any purchase order, invoice, delivery ticket or other documentation purporting to address such relationship, even if said documentation contains "notwithstanding" language.

2. Services rendered and equipment provided by CONTRACTOR shall be charged for at rates agreed upon at the time of the work or the furnishing equipment; if the rate is not agreed upon, charges shall be made at rates consistent with rates charged to comparable customers for comparable services.

3. CONTRACTOR shall render to OWNER invoices for services rendered to it hereunder promptly upon the performance of such service.

4. CONTRACTOR, at its cost and expense, shall provide adequate vehicles and equipment for use in the services to be performed hereunder and shall maintain such vehicles and equipment in good and sufficient condition, as to operation, safety and appearance. CONTRACTOR, at its sole cost and expense, shall employ responsible and adequately trained personnel, shall procure and maintain such licenses and permits as are required by local, state and federal authorities with respect to such services and shall comply with all laws and regulations applicable thereto.

5. CONTRACTOR shall be an independent contractor and shall have exclusive control and direction of the persons providing services. CONTRACTOR agrees that such persons are its employees and assumes full responsibility for the payment of wages, salaries, local, state and federal payroll taxes or contributions, and taxes for unemployment insurance, old age pensions, workers' compensation, social security or other similar protection with respect to the persons engaged in the performance of such services, and CONTRACTOR further agrees to comply with applicable rules and regulations promulgated under such laws.

6. CONTRACTOR shall procure and maintain, at its own expense, liability insurance with a reputable and financially responsible insurance carrier or carriers properly insuring CONTRACTOR against liability and claims (a) for injuries to persons (including injuries resulting in death), and (b) for damage to property, in an amount not less than $1,000,000 for bodily injury and $500,000 for property damages. Such liability insurance shall include a contractual liability endorsement, and to the extent allowed by law, CONTRACTOR SHALL CAUSE OWNER TO BE NAMED AS AN "ADDITIONAL INSURED" UNDER THE SAID LIABILITY POLICY. CONTRACTOR shall also carry workers' compensation insurance in such amounts as are required by applicable law, and all insurers of CONTRACTOR, to the extent allowed by law, shall agree to waive subrogation against OWNER. CONTRACTOR agrees to furnish to OWNER written certificates from such insurance carrier or carriers showing that such insurance has been procured and is being properly maintained, that the premiums therefor are paid, and specifying the name of the insurance carrier, the policy number or numbers and the expiration date or dates. Such insurance certificate shall provide that in the event of cancellation written notice shall be given OWNER at least ten (10) days prior to cancellation. CONTRACTOR understands that OWNER may refuse to accept services or allow work to begin unless and until such certificate has been furnished. Furthermore, CONTRACTOR, to the full extent allowed by law, agrees to assume full responsibility for and shall protect, defend, indemnify and save OWNER and its joint owners, if any, harmless from and against, all claims, demands and causes of action of every kind and character which may be brought by or against OWNER or OWNER's joint owners and employees (including, but not limited to, those brought by CONTRACTOR's employees or agents or employees of CONTRACTOR's subcontractors) for or on account of bodily injury, illness, disease, death, damage to property, pollution damage or remediation costs associated therewith which is incident to, arises out of, is in connection with or results from the performance of this contract or the operations, services or work contemplated hereby, even if occasioned by or caused in whole or in part by the negligence or fault (strict liability) of OWNER, its joint owners, agents, directors, officers, employees, servants

or subcontractors, or otherwise, or from the condition of any equipment, furnished, operated or controlled by OWNER.

7. OWNER and CONTRACTOR acknowledge and agree, for the purpose of the exclusive remedy provisions of the Louisiana Workers' Compensation Law, that it is their mutual intent that OWNER is and shall be recognized as a "statutory employer" of CONTRACTOR's employees.

8. This agreement shall not be assigned or transferred by CONTRACTOR without the written consent of OWNER.

9. This agreement shall become effective on the date hereof and shall continue in effect unless and until terminated by either party by not less than thirty (30) days prior written notice to the other party via registered mail at the following addresses:

CONTRACTOR:

Jones Environmental, Inc.
Attention: William J. Jones
708 Milam St.
Suite 100
Shreveport, LA 71101

CALUMET LUBRICANTS CO., LP:

Calumet Lubricants Co., LP
Attention: Purchasing Department
P.O. Box 3099
Shreveport, LA 71133-3099

10. This Agreement shall be governed by and construed under the laws of the State of Louisiana.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed as of the day and year first above written.

CALUMET LUBRICANTS CO., LP

By: _____
Clayton Long, Purchasing Manager

CONTRACTOR:

By: _____

William J. Jones
[Print or Type Name]

Vendors

Vendor ID	202644
Name	JONES ENVIRONMENTAL INC
Vendor's Address 1	P O BOX 5039
Vendor's Address 2	
City	BOSSIER CITY
State	LA
Postal Code	71111
Country	US
Representative	
Telephone No.	226-8444
Extension	
Fax No.	226-0381
Payment Terms	
Freight Terms	
Ship Via	
Shipping Terms	
Minimum Order Amount	$0.00
Vendor Branch	202644
Vendor Type	Supplier
Tax Code	000795
Tax Type	Sales
Notes (will print on purchase orders)	
Date Last Received	
Freight Carrier	
Federal Tax ID No.	
Class	GranFr
Customer ID	
Preferred Order Method	
Total Open	
Total Received	
Vendor's Address 3	
Currency	USD
Email	
Pager No.	

JONES COMPANIES

HAZMAT/OILSPILL
EMERGENCY SPILL RESPONSE

Rate Sheet & Authorization Form

JONES ENVIRONMENTAL, INC.
708 Milam Street, Suite 100
Shreveport, LA 71101
(318) 226-8444 Ofc
(318) 226-0381 Fax

NAVARRE SERVICES GROUP, INC.
4100 Meadow Lane
Bossier City, LA 71111
(318) 741-3495 Ofc
(318) 741-3459 Fax

JONES BROTHERS COMPANY
4100 Meadow Lane
Bossier City, LA 71111
(318) 746-5735 Ofc
(318) 746-4395 Fax

Revised April 11, 2010

SPILL RESPONSE AUTHORIZATION

Company:_____

Name:_____ **Title:**_____

Billing Address_____

City/State/Zipcode_____

Office number(___)_____ **Fax number(___)**_____

Cell Number ( )_____

This is an authorization form giving Jones Companies (Jones Brothers Company, Inc. (JBC), Jones Environmental, Inc. (JEI) and Navarre Services Group Inc. (NSG)) written consent to proceed with the clean up of this spill. In signing this form, you the customer have agreed to the rates attached that will be charged for the clean up and disposal, if necessary, of this incident. The customer will be charged at the appropriate rate, according to whether spill response involves hazardous or non-hazardous material. We will proceed with clean up in accordance with the state and local authorities in charge of site, and the cleanup will be done in a professional and timely manner.

Please sign below your consent and sign your initials in the space provided on each page of the Jones rate sheets attached. If you have any questions, please call (318) 226-8444 or fax information to (318) 226-0381.

_____ _____
Jones Companies Representative Date

_____ _____
Customer Representative Date

NOTE: Please, sign and initial all pages and return to our Jones Company's Office ASAP.

PERSONNEL

Experienced emergency response personnel are available for complete spill clean-up operations, 24 hours a day, 7 days a week. Normal hours of operation are from 0800 through 1600 daily, Monday through Friday. All labor charges will be in accordance with Jones Companies' service receipts. Overtime for personnel will be charged at time and a half between 1600 through 0800 Monday through Friday, weekends from 1600 Friday through 0800 Monday, and all National Holidays. Double time rates will be charged for Christmas Day. Per Diem of $90.00 per day, per man will be charged for all work-performed 50 miles outside Jones Companies' home offices. There will be a 4-hour minimum service charge on all labor call outs.

AUTOMOTIVE EQUIPMENT

A mileage charge of $0.60 per mile will be charged for each piece of automotive equipment.

STAND-BY-RATES

Stand-by rates will be charged to the customer/ party responsible for the stand-by.

TAXES

All federal, state, and municipal taxes, except income taxes and advalorem taxes, now and hereinafter imposed with respect to services rendered; to rental equipment; to the processing, manufacture, repair, delivery, transportation of equipment and supplies shall be added to and become part of the total price payable by the client.

TERMS

All equipment not listed in this rate schedule, whether requested by the contracting company or needed to complete work in progress, will be ordered to complete task. A 20% handling charge will be added to the cost of any equipment rented or subcontracted, which is or is not listed in this rate schedule.

REPLACEMENT OF DAMAGED EQUIPMENT

All equipment and supplies are subject to a replacement charge at Jones Companies' cost + 12.5% if damaged beyond repair or if decontamination is impossible.

I hereby acknowledge these rates and give consent to proceed with cleanup.

Initials:_____ Date:_____

DECONTAMINATION OF EQUIPMENT

A mutually agreed price for cleaning contaminated containment boom shall be decided upon and can vary depending on the degree of contamination. The charges for cleaning all other equipment is 1/2 the daily rental rate, plus applicable labor charges.

INVOICES

Invoices will be rendered either on a daily basis or at the completion of the job, depending on the duration of the job. Invoices will contain all applicable Federal, State and, Local taxes. All charges are payable NET CASH within thirty (30) days from the date of invoice. Finance charges will be applied to invoices with an unpaid balance beginning thirty-one (31) days from the date of invoice. Finance charges are computed at the periodic rate of 1.5% per month (18% per annum).

ATTORNEY FEES

If accounts are not paid in full, customer will be responsible for attorney fees and court costs.

I hereby acknowledge these rates and give consent to proceed with cleanup.

Initials:_____ Date:_____

Personnel Spill Response – Hazardous & Non-hazardous

	Straight Time	OT
CIH/Chemist	$ 93.50 /hr	$ 140.25 /hr
Project Manager/ Consultant	$ 93.50 /hr	$ 140.25 /hr
Supervisor	$ 66.00 /hr	$ 99.00 /hr
Safety Officer	$ 60.50 /hr	$ 90.75 /hr
Logistics Administrator	$ 60.50 /hr	$ 90.75 /hr
Transportation/ Disposal Coordinator	$ 60.50 /hr	$ 90.75 /hr
Haz Mat Technician	$ 60.50 /hr	$ 90.75 /hr
Equipment Operator	$ 60.50 /hr	$ 90.75 /hr
Field Clerk/ Admin.	$ 41.80 /hr	$ 62.70 /hr

Personnel (Hazmat)

CIH/ Chemist	$ 106.60 /hr	$ 159.90 /hr
Project Manager/ Consultant	$ 106.60 /hr	$ 159.90 /hr
Supervisor	$ 75.25 /hr	$ 112.88 /hr
Safety Office	$ 68.97 /hr	$ 103.46 /hr
Logistics Administrator	$ 68.97 /hr	$ 103.46 /hr
Transportation/ Disposal Coordinator	$ 68.97 /hr	$ 103.46 /hr
Haz Mat Technician	$ 68.97 /hr	$ 103.46 /hr
Equipment Operator	$ 68.97 /hr	$ 103.46 /hr
Field Clerk/Admin.	$ 47.66 /hr	$ 71.49 /hr

Response Vehicles

Vehicles are charged at 1/2 day and 1 day rates (mileage @ $.65 mile portal to portal outside of 50 mile radius from office.)

Pick Up Truck -1/2-3/4 ton		$ 100.00 p/day
Personnel Van/ 1 Ton pick up		$ 150.00 p/day
Equipment Vehicle		$ 150.00 p/day
4 x 4 Pick up		$ 200.00 p/day
4 x 4 ATV w/Trailer		$ 250.00 p/day
Command Post		$ 475.00 p/day
Dump Trucks w/ Driver (0-12 yds)	$ 70.00 p/hr	$ 105.00 p/hr
Dump Trucks w/ Driver (12-24 yds)	$ 95.00 p/hr	$ 142.50 p/hr
Mack Truck Flat Trailer/Lowboy w/ Driver	$ 85.00 p/hr	$ 127.50 p/hr

VACUUM TRUCKS

1,000 Gallon Gooseneck w/ operator	$ 85.00 p/hr	$127.50 p/hr
70-85 Barrel, w/ operator (Bobtail)	$ 85.00 p/hr	$ 127.50 p/hr
120-130 Barrel, w/ operator	$ 95.00 p/hr	$ 142.50 p/hr

All Rates will be overtime rate for work performed after 4:00 p.m. during weekdays (Monday-Friday). Overtime applies for work exceeding eight (8) continuous hours per day. Overtime rate apply for weekends (Saturday and Sunday) and Holidays. Overtime rates are 1.5 times standard rates. I hereby acknowledge these rates and give consent proceed with clean up.

Initials _____ ***Date:*** _____

EQUIPMENT

MiniTrackhoe Excavator (B. Kobelco / B. Linkbelt)	$ 450.00 p/day
Trackhoe Excavator (790, Quantum)	$ 675.00 p/day
Bobcat w/implements	$ 650.00 p/day
Skytrack/Forklift/Ingersoil	$ 625.00 p/day
Trackhoe 60' long reach (Longstick)	$ 900.00 p/day
Rubber Tired Excavation (Backhoe)	$ 450.00 p/day
Mobilization of Equipment (with in 100 mile radius)	$ 175.00 each.
Demobilization of Equipment (with in 100 mile radius)	$ 175.00 each.
Dozer (with in 100 mile radius)	$ 500.00 p/day
All Permits	Cost plus 20%

TRAILERS

8'-12' Utility Trailers	$ 65.00 p/day
12'-20' Trailers	$ 85.00 p/day
20' Gooseneck Trailers	$ 100.00 p/day
Equipment Trailer	$ 100.00 p/day
Absorbent Spill Trailer	$ 75.00 p/day
Spill Trailer 20'-24'	$ 150.00 p/day
Water Recovery Trailer (280 gallon trailer)	$ 150.00 p/day
Office Trailer	$ 200.00 p/day
DOT Water Trailer (1,000 gallon trailer)	$ 180.00 p/day
Small Drum Trailer	$ 50.00 p/day
Large Drum Trailer	$ 93.75 p/day
Box Trailer	$ 93.75 p/day

MARINE EQUIPMENT

Fuel for all boats/vessels will be charged at cost plus 20% mark up. Vessels are equipped with personal floatation devices, paddles, etc.

10'-16' Response Boat w/motor	$ 200.00 p/day
18' Response Boat w/ motor	$ 225.00 p/day
20' Response Boat w/ Motor	$ 250.00 p/day
12'-14' Response Boat w/ motor	$ 150.00 p/day
12'-14' Response Boat w/o motor	$ 100.00 p/day
Pirogue	$ 75.00 p/day

I here by acknowledge these rates and give consent to proceed with clean up

Initials: _____ ***Date:*** _____

ROLL-OFF EQUIPMENT AND RENTALS

Roll-off Truck (Reg) (Transportation 4 hr min)	$ 95.00 p/hr
Roll-off Truck (OT) (Transportation after hrs 4 hr min)	$ 142.50 p/hr
Roll-Off liners	$ 42.00 /ea
Container Maintenance (Non Haz)	$ 15.00 /box/day
Container Maintenance (Haz)	$ 30.00 /box/day

PERSONAL PROTECTIVE EQUIPMENT

Tyves Suits	$ 8.00 /ea
Disposable Slicker Suits	$ 20.00 /ea
Level B Acid Suits	$ 75.00 /ea
Tychem-Polycoated Suits	$ 10.00 /ea
Saranex Suits (Yellow Suits)	$ 20.15 /ea.
Bunker Suits	$ 50.00 /ea
Nomex Coveralls	$ 25.00 /ea
Chest Waders	$ 55.00 /day
Rubber Boots	$ 25.00 /ea
Rubber Boots Cover	$ 6.00 /ea
Hip Boots	$ 30.00 /day
Chemical Resistant Boots (Steel Toe) Replacement Charge	$ 50.00 /ea
Nitrile Gloves	$ 3.50 /ea
PVC Rubber Gloves	$ 10.00 /ea
Latex Gloves	$ 10.00 p/box
Safety Glasses	$ 11.50 p/pr.
Safety Harness	$ 20.00 /ea.
Respirators	$ 48.00 /ea
Scott MPC642 Cartridges	$17.00 p/pr
Vapor Cartridges	$17.00 p/pr
Mercury Chlorine Cartridges	$17.00 p/pr
Multi-chem Cartridges	$17.00 p/pr
Cascade System (Includes 4 bottles)	$ 450.00 p/day
Bottle Refill	$ 15.00 p/refill
SCBA (Scott Air Packs) Up to (2) Bottles	$ 90.00 /ea
Bottle Refill	$ 15.00 p/refill
5 Minute Escape Pack	$ 65.00 /ea

I here by acknowledge these rates and give consent to proceed with clean up

Initials _____ ***Date*** _____

SPILL CONTROL EQUIPMENT / MATERIALS

4" Containment Boom	$ .50 /foot/day
5" Sorbent Boom (40' /bale)	$ 155.00 /bag
8" Sorbent Boom (40' /bale)	$ 185.00 /bag
8" Containment Boom	$ .75 /foot/day
18" River Boom	$ 1.25 /foot/day
Sorbent Pad (100 / bale)	$ 75.00 /bale
Sorbent Pad (50/ bale)	$ 60.00 /bale
Sorbent Roll (100' x 38')	$ 125.00 /roll
10 LB Anchor	$ 65.00 /job
22 LB Anchor	$ 120.00 /job
Boom Lights (Small)	$ 15.00 /day
Chemical Boom Lights	$ 10.00 /day
Boom Stakes	$ 6.00 /ea.
Wash Down Pump	$ 200.00 /day/ea.
Skimmer	$ 250.00 /day/ea.
Mercury Spill Kit	$ 75.00 /ea.
Hydro/ Chemical Gap Seal	$ 50.00 /ea.
Sample Jars	$ 1.60 /ea.
Drum Liners	$ 15.35 /ea
Floor Dry (40 lb)	$ 16.00 /bag
Bio Sorb	$ 110.00 /bag
Bio Matrix (16lb bag)	$ 24.00 /bag
Bio Matrix (55lb bag)	$ 72.00 /bag
Soda Ash	$ 18.00 /bag
Lime	$ 18.00 /bag
Safe Step	$ 25.00 /bag
Oil Dry (Bulk Sorbent 25#)	$ 7.50 /bag
Oil Gator	$ 22.00 /bag
Simple Green	$ 12.00 /gal
Micro Blaze (5 gallons)	$ 189.28 p/gal
Sphag Sorb 2 cu.ft. Bag	$ 27.43 p/bag
Reflector Flagging Post (20)	$ 120.00 set
Dirt/Sand	$ 3.50 p/yard

I here by acknowledge these rates and give consent to proceed with cleanup.

Initials _____ ***Date:*** _____

SPILL CONTROL EQUIPMENT/ MATERIALS CONTINUE

Pitch Fork/ Rakes/Shovels/Squeegee	$ 10.00 /ea.
Keyway Stakes (12")	$ .45 /ea.
Scrub Brush	$ 8.00 /day
Rope, 1/4" x 500' (roll)	$ 75.00 /roll
Rope, 1/2" x 500' (roll)	$ 85.00 /roll
Pollution Net	$ 12.00 /day/ea.
Pollution Bag (50 roll)	$ 80.00 /ea/roll
Pollution Cans	$ 8.00 /day/ea
Visqueen (Poly 20/6mil x 100')	$ 106.25 /ea/roll
Visqueen (Poly 40/6mil x 100')	$ 287.50 /ea/roll
Duct Tape	$ 7.00 /ea/roll
Barricade Tape	$ 10.00 /roll
Decon Sprayer	$ 8.00 /day/ea
Hand Cleaner	$ 10.00 /ea
Rags / Wipes (Box)	$ 10.00 p/box
Barricades	$ 3.00 /day/ea
Draeger Pump	$ 25.00 /ea./day
PH Meter	$ 25.00 /ea./day
PH Indicators	$ 10.00 /ea
Chemical Tubes	$ 15.00 /ea /use
TVA	$ 75.00 /day
Gastech LCL/O2 Meter	$ 50.00 /day
Hot Taps	$ 500.00 /ea
Cold Taps	$ 500.00 / ea
Fire Extinguishers (replacement cost)	$ 293.75 / ea
Explosion Meter	$ 28.00 /ea
Eagle Portable Gas Detector	$ 50.00 /day
GC	$ 180.00 /ea
Negative Air Machine	$ 125.00 /day

COMMUNICATION EQUIPMENT

Cellular Phone	$ 35.00 /day
Cellular Air Time	$ .50 /min
Motorola Radio	$ 10.00 /day
Laptop Computer with printer	$ 60.00 /day
Digital Camera (includes 1 copy of photos on disk)	$ 40.00 /day
Additional Copies	$ .35 /ea
Disposable Camera	$ 11.50 /ea
Photo Copies	Cost plus 20%

I hereby acknowledge these rates and give consent to proceed with cleanup

Initials _____ ***Date:*** _____

RENTAL OF SUPPORT EQUIPMENT

Multi-Purpose Saw	$ 60.00 p/day
Air Compressor	$ 170.00 p/day
Generated Light Plant	$ 200.00 /day
Generator	$ 60.00 /day
Pressure Washer (Portable)	$ 50.00 /day
Power Washer	$ 150.00 /day
Steam Cleaner	$ 150.00 /day
Weed eater	$ 25.00 /day
Air Blower	$ 65.00 /day
Chain Saw	$ 25.00 /day
Wheelbarrow	$ 15.00 /day
Disposable Decon Pool	$ 25.00 /day
Pneumatic Tools	$ 50.00 /day
Drum Dolly	$ 48.00 /ea
Drum Sling	$ 20.00 /ea
Pallet Puller	$ 18.00 /ea
Hepa Vac	$ 150.00 /day
Grounding Equipment	$ 27.00 /day
Five Gallon Bucket	$ 10.50 /ea
1" Diaphragm Pump (Gas or Air)	$ 45.00 /day
2" Diaphragm Pump (Gas or Air)	$ 45.00 /day
3" Diaphragm Pump (Gas or Air)	$ 45.00 /day
1" Suction / Discharge Hose	$ .50 /ft/day
2" Suction / Discharge Hose	$ .50 /ft/day
3" Suction / Discharge Hose	$ .50 /ft/ day
4" Suction / Discharge Hose	$ .50 /ft/day
5" Suction / Discharge Hose	$ 1.25 /ft/day
6" Suction / Discharge Hose	$ 1.25 /ft/day
2" Chemical Pump	$ 225.00 /day/rebuild
2" Chemical Hoses	$ 1.00 /day/ft
Chemical Handpumps	$ 30.00 /ea

Drums

95 gallon poly over-pak	$ 220.00 /ea
85 gallon over-pak drum	$ 200.00 /ea
55 gallon 17E open-head drum	$ 50.00 /ea
55 gallon 17C open-head drum	$ 50.00 /ea
35 gallon plastic drum	$ 40.00 /ea
20 gallon fiber drum	$ 20.00 /ea

I hereby acknowledge these rates and give consent to proceed with cleanup.

Initials: _____ ***Date:*** _____

STORAGE OF WASTE AWAITING DISPOSAL OR TREATMENT FEES

Drum Storage (Non-Hazardous)	$ 3.00 /drum/day
Drum Storage (Hazardous)	$ 6.00 /drum/day
Bulk Solid Materials (Non-Hazardous)	$ 1.80 /cu.yd/day
Bulk Solid Materials (Hazardous)	$ 3.60 /cu.yd/day
Bulk liquid Materials (Non-Hazardous)	$ .18/ gal/day
Bulk liquid Materials (Hazardous)	$ .30 /gal/day
Light End Waters (Fluid Recycle/Reuse)	$ .45 /gal
Heavy Waters/Emulsions (Recycle/Reuse)	$.45 p/gal plus Surcharge
Note Surcharge per gallon for waters/solids that have a solid count (Sludge)	
Roll off box (Non-Hazardous)	$ 42.00 /box/day
Roll off box (Hazardous)	$ 66.00 /box/day
Truck Wash	$ 216.00 /veh/ea
Vehicle Storage	$ 60.00 /veh/day

These prices do not include cost or approved container, transportation to or from site, or handling/loading.

Prior approval must be obtained on all hazardous storage and/or any quantity over 100 cubic yards or 1,000 gallons

We reserve the right to refuse any and all shipments.

MISC REPORT

Spill Report to the Following Reporting Facilities Unauthorized Discharge Notification LSP (Louisiana State Police)-5 Day Letter DEQ (Department of Environmental Quality Baton Rouge and Regional Offices) Waste Disposition Report	$250.00
Profiling of Waste	$300.00
Analytical or Laboratory Fees	Cost plus 12.5%

I hereby acknowledge these rates and give consent to proceed with cleanup.

Initials _____ ***Date:*** _____

JONES COMPANIES

Jones Environmental, Inc.

Navarre Services Group

Jones Brothers Company, Inc.

I _____, A REPRESENTATIVE FOR _____DO HEREBY ON THIS DATE _____ AUTHORIZE CAMERON JONES, GARDNER JONES OR ANDY BOZEMAN TO SIGN AS AGENT FOR MY COMPANY FOR GENERATOR ON PROFILE SHEETS AND MANIFESTS FOR THE PURPOSE OF DISPOSAL OF CONTAMINATED MATERIAL.

SIGNATURE_____

Contract Number
CAISHV-GS-2009-006

CONTRACT FOR SERVICES

THIS AGREEMENT is made on this the 9 day of December, 2008 by and between CALUMET LUBRICANTS CO., LP, hereinafter referred to as OWNER, and Anderson Pollution Control Inc hereinafter referred to as CONTRACTOR.

WHEREAS CONTRACTOR, as an independent contractor, desires to furnish certain services to OWNER in connection with OWNER'S plant operations and represents that it is a duly qualified contractor for the purposes for which it is hired; and

WHEREAS OWNER desires to utilize the services of CONTRACTOR under the following terms and conditions;

NOW, THEREFORE, in consideration of the above premises and the following mutual obligations, the parties agree as follows:

1. This agreement shall control the legal relationship between the parties hereto for all transactions and relationships entered into between the effective date of this contract and the termination date hereof, notwithstanding anything to the contrary on any purchase order, invoice, delivery ticket or other documentation purporting to address such relationship, even if said documentation contains "notwithstanding" language.

2. Services rendered and equipment provided by CONTRACTOR shall be charged for at rates agreed upon at the time of the work or the furnishing equipment; if the rate is not agreed upon, charges shall be made at rates consistent with rates charged to comparable customers for comparable services.

3. CONTRACTOR shall render to OWNER invoices for services rendered to it hereunder promptly upon the performance of such service.

4. CONTRACTOR, at its cost and expense, shall provide adequate vehicles and equipment for use in the services to be performed hereunder and shall maintain such vehicles and equipment in good and sufficient condition, as to operation, safety and appearance. CONTRACTOR, at its sole cost and expense, shall employ responsible and adequately trained personnel, shall procure and maintain such licenses and permits as are required by local, state and federal authorities with respect to such services and shall comply with all laws and regulations applicable thereto.

5. CONTRACTOR shall be an independent contractor and shall have exclusive control and direction of the persons providing services. CONTRACTOR agrees that such persons are its employees and assumes full responsibility for the payment of wages, salaries, local, state and federal payroll taxes or contributions, and taxes for unemployment insurance, old age pensions, workers' compensation, social security or other similar protection with respect to the persons engaged in the performance of such services, and CONTRACTOR further agrees to comply with applicable rules and regulations promulgated under such laws.

6. CONTRACTOR shall procure and maintain, at its own expense, liability insurance with a reputable and financially responsible insurance carrier or carriers properly insuring CONTRACTOR against liability and claims (a) for injuries to persons (including injuries resulting in death), and (b) for damage to property, in an amount not less than $1,000,000 for bodily injury and $500,000 for property damages. Such liability insurance shall include a contractual liability endorsement, and to the extent allowed by law, CONTRACTOR SHALL CAUSE OWNER TO BE NAMED AS AN "ADDITIONAL INSURED" UNDER THE SAID LIABILITY POLICY. CONTRACTOR shall also carry workers' compensation insurance in such amounts as are required by applicable law, and all insurers of CONTRACTOR, to the extent allowed by law, shall agree to waive subrogation against OWNER. CONTRACTOR agrees to furnish to OWNER written certificates from such insurance carrier or carriers showing that such insurance has been procured and is being properly maintained, that the premiums therefor are paid, and specifying the name of the insurance carrier, the policy number or numbers and the expiration date or dates. Such insurance certificate shall provide that in the event of cancellation written notice shall be given OWNER at least ten (10) days prior to cancellation. CONTRACTOR understands that OWNER may refuse to accept services or allow work to begin unless and until such certificate has been furnished. Furthermore, CONTRACTOR, to the full extent allowed by law, agrees to assume full responsibility for and shall protect, defend, indemnify and save OWNER and its joint owners, if any, harmless from and against, all claims, demands and causes of action of every kind and character which may be brought by or against OWNER or OWNER's joint owners and employees (including, but not limited to, those brought by CONTRACTOR's employees or agents or employees of CONTRACTOR's subcontractors) for or on account of bodily injury, illness, disease, death, damage to property, pollution damage or remediation costs associated therewith which is incident to, arises out of, is in connection with or results from the performance of this contract or the operations, services or work contemplated hereby, even if occasioned by or caused in whole or in part by the negligence or fault (strict liability) of OWNER, its joint owners, agents, directors, officers, employees, servants

or subcontractors, or otherwise, or from the condition of any equipment, furnished, operated or controlled by OWNER.

7. OWNER and CONTRACTOR acknowledge and agree, for the purpose of the exclusive remedy provisions of the Louisiana Workers' Compensation Law, that it is their mutual intent that OWNER is and shall be recognized as a "statutory employer" of CONTRACTOR's employees.

8. This agreement shall not be assigned or transferred by CONTRACTOR without the written consent of OWNER.

9. This agreement shall become effective on the date hereof and shall continue in effect unless and until terminated by either party by not less than thirty (30) days prior written notice to the other party via registered mail at the following addresses:

CONTRACTOR:

Anderson Pollution Control
Attention: Thomas Anderson
1011 West Lewis Ste A
Conroe, Texas 77301

CALUMET LUBRICANTS CO., LP:

Calumet Lubricants Co., LP
Attention: Purchasing Department
P.O. Box 3099
Shreveport, LA 71133-3099

10. This Agreement shall be governed by and construed under the laws of the State of Louisiana.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed as of the day and year first above written.

CALUMET LUBRICANTS CO., LP

By: _____
Clayton Long, Purchasing Manager

CONTRACTOR:

Anderson Pollution Control Inc

By: Thomas Anderson

Thomas Anderson
[Print or Type Name]
Sect / Treasurer

U.S. Department of Homeland Security
United States Coast Guard

Commander
United States Coast Guard
Sector Houston-Galveston

9640 Clinton Drive
Houston, TX 77029
Staff Symbol: sp
Phone: (713) 671-5105
Fax: (713) 671-5134

16610
June 17, 2008

Anderson Pollution Control, Inc.
Attn: Mr. Tommy Anderson
1011-A West Lewis
Conroe, Texas 77301

Subj: ANDERSON POLLUTION CONTROL, INC.; MOBILE OPERATIONS MANUAL, APPROVAL

I have received your letter, dated March 13, 2008, forwarding your facility's Operations Manual for approval. Upon review, I have found that your Operations Manual meets the requirements of Title 33, Code of Federal Regulations (CFR), Parts 154 and 156. The manual has been stamped "Examined by the Coast Guard" to show that it meets federal requirements. The stamped manual has been returned to you with this letter, and a stamped copy of the manual will be kept on file at this office as a reference to your facility's operational procedures. Only those sections of your manual required by Title 33, CFR, Part 154.310 have been reviewed.

Per Title 33, CFR, Part 154.320, any changes or revisions to any part of your Operations Manual must be submitted to this office for review not less than 30 days before the requested effective date of the proposed change or revision. If you have any questions or concerns regarding this letter, please contact the Waterfront Facilities and Security Branch at (713) 671-5105.

Sincerely,

G. J. PAITL
Commander, U.S. Coast Guard
Chief, Prevention Department
By direction of the Captain of the Port

TEXAS GENERAL LAND OFFICE

JERRY PATTERSON, COMMISSIONER

June 1, 2012

Anderson Pollution Control, Inc.
Mr. Tommy Anderson
1011-A West Lewis
Conroe, TX 77301-2219

RE: Discharge Cleanup Organization (DCO) Certification

Dear Mr. Anderson:

Enclosed is your updated DCO certificate. It is valid for three years from the date shown as long as your company continues to meet minimum certification requirements. Those requirements include, among other things, notifying the General Land Office of any change of ownership or of any major change in equipment or personnel.

We thank you for your participation in this important program and look forward to working with you in the future.

Sincerely,

Robert L. Rivera
DCO Program Administrator

Enclosure: (3 Copies)

Stephen F. Austin Building • 1700 North Congress Avenue • Austin, Texas 78701-1495
Post Office Box 12873 • Austin, Texas 78711-2873
512-463-5001 • 800-998-4GLO
www.glo.state.tx.us

Date: June 1, 2013

DCO # 04-002

Discharge Cleanup Organization Certificate

Anderson Pollution Control, Inc.

Pasadena, Texas

This certificate carries with it the need to maintain a high level of response preparedness, to respond in a timely, professional manner, and to notify the Texas General Land Office of any change in the Holder's ability to accomplish this mission. Certification is for three years from the above date.

Commissioner
Texas General Land Office

Deputy Commissioner
Texas General Land Office

ANDERSON
POLLUTION CONTROL, INC.

2012 Emergency Response Rate Schedule

1011-A WEST LEWIS • CONROE, TEXAS 77301-2219
CORPORATE OFFICE: 936-441-2225 • FAX: 936-539-2099

ANDERSON POLLUTION CONTROL, INC.

TABLE OF CONTENTS: 2012 EMERGENCY RESPONSE RATE SCHEDULE

SECTION I: RATE SCHEDULE
Pages 2-15
Personnel - Non Hazardous Materials Page 2
Personnel - Hazardous Materials Page 3
Automotive Equipment Page 4
Marine Equipment Page 5
Personnel Protective Equipment Pages 6-7
Pumps / Hoses / Washing Equipment Pages 7-8
Sorbents Page 9
Hazmat Equipment Page 10
Drums / Containers Page 11
Miscellaneous Equipment Page 12-13
Communications Equipment Page 14
Chemical and Neutralizers Page 14

SECTION II: ATTACHMENT "A"
Page 15 - Fuel Surcharge Letter

SECTION III: ATTACHMENT "B"
Page 16-18 - Explanation / Clarification to Emergency Response Rate Schedule

Class	Code	NON-HAZARDOUS MATERIALS (OIL SPILL)	UOM	ST Rate	OT Rate
PERS	ER-NH-001	Senior Project Manager - Company Officer	hr	$95.00	$142.50
PERS	ER-NH-002	Project Manager	hr	$80.00	$120.00
PERS	ER-NH-003	Certified Industrial Hygienist	hr	$95.00	$142.50
PERS	ER-NH-004	Certified Safety Professional	hr	$95.00	$142.50
PERS	ER-NH-005	Chemist, Biologist, Geologist	hr	$95.00	$142.50
PERS	ER-NH-006	Health and Safety Manager	hr	$60.00	$90.00
PERS	ER-NH-007	Rescue Supervisor	hr	$55.00	$82.50
PERS	ER-NH-008	Rescue Tech	hr	$40.00	$60.00
PERS	ER-NH-009	Supervisor	hr	$55.00	$82.50
PERS	ER-NH-010	Foreman	hr	$45.00	$67.50
PERS	ER-NH-011	Transportation and Disposal Coordinator	hr	$45.00	$67.50
PERS	ER-NH-012	Logistics Coordinator	hr	$45.00	$67.50
PERS	ER-NH-013	Heavy Equipment Operator (Dozer, Excavator, etc.)	hr	$45.00	$67.50
PERS	ER-NH-014	Boat Operator / Response Equipment	hr	$42.00	$63.00
PERS	ER-NH-015	Truck Operator (roll off / vac truck)	hr	$35.00	$52.50
PERS	ER-NH-016	Mechanic	hr	$50.00	$75.00
PERS	ER-NH-017	Welder	hr	$50.00	$75.00
PERS	ER-NH-018	Recovery Technician	hr	$35.00	$52.50
PERS	ER-NH-020	Field Clerk	hr	$35.00	$52.50
PERS	ER-NH-021	CDL Truck Driver (Supplies, Deliveries, etc.)	hr	$35.00	$52.50
PERS	ER-NH-022	Waste Disposal Coordinator	hr	$45.00	$67.50

Class	Code	HAZARDOUS MATERIALS (HAZMAT) Personnel	UOM	ST Rate	OT Rate
PERS	ER-HAZ-002	Project Manager	hr	$110.00	$142.50
PERS	ER-HAZ-003	Certified Industrial Hygienist	hr	$95.00	$142.50
PERS	ER-HAZ-004	Certified Safety Professional	hr	$95.00	$142.50
PERS	ER-HAZ-005	Chemist, Biologist, Geologist	hr	$95.00	$112.50
PERS	ER-HAZ-006	Health and Safety Manager	hr	$75.00	$112.50
PERS	ER-HAZ-007	Rescue Supervisor	hr	$75.00	$90.00
PERS	ER-HAZ-008	Rescue Tech	hr	$60.00	$97.50
PERS	ER-HAZ-009	Supervisor	hr	$65.00	$82.50
PERS	ER-HAZ-010	Foreman	hr	$55.00	$75.00
PERS	ER-HAZ-011	Transportation and Disposal Coordinator	hr	$50.00	$75.00
PERS	ER-HAZ-012	Logistics Coordinator	hr	$50.00	$82.50
PERS	ER-HAZ-013	Heavy Equipment Operator (Dozer, Excavator,	hr	$55.00	$75.00
PERS	ER-HAZ-014	Boat Operator / Response Equipment	hr	$50.00	$63.00
PERS	ER-HAZ-015	Truck Operator (roll off / vac truck)	hr	$42.00	$75.00
PERS	ER-HAZ-016	Mechanic	hr	$50.00	$75.00
PERS	ER-HAZ-017	Welder	hr	$50.00	$63.00
PERS	ER-HAZ-018	Recovery Technician	hr	$42.00	$52.50
PERS	ER-HAZ-019	Field Clerk	hr	$35.00	$52.50
PERS	ER-HAZ-020	CDL Truck Driver (Supplies, Deliveries, etc.)	hr	$35.00	$52.50

Class	Code	Automotive Equipment	UOM	ST Rate	Add'l
AUTO	ER-1-010	Truck, Pickup (1/2 ton) 2-WD	day	$100.00	
AUTO	ER-1-011	Truck, Pickup (1/2 ton) 4-WD	day	$150.00	
AUTO	ER-1-012	Truck, Pickup (3/4 - 1 ton) 2-WD	day	$125.00	
AUTO	ER-1-013	Truck, Pickup (3/4 - 1 ton) 4-WD	day	$195.00	
AUTO	ER-1-014	Truck, Response - Fully Equipped	day	$195.00	
AUTO	ER-1-015	Truck, Roll Off (Double Haul Trailer) 80,000 #	hr	$50.00	+ op
AUTO	ER-1-016	Truck, Roll Off (Bobtail) 65,000 #	hr	$40.00	+ op
AUTO	ER-1-017	Truck, Roll Off (Tractor) 80,000 #	hr	$45.00	+ op
AUTO	ER-1-018	Truck, Vacuum - 130 bbl (Carbon Steel)	hr	$50.00	+ op
AUTO	ER-1-018A	Truck, Vacuum - 130 bbl (Stainless Steel)	hr	$65.00	+ op
AUTO	ER-1-019	Truck, Vacuum - 70 bbl (Carbon Steel)	hr	$40.00	+ op
AUTO	ER-1-020	Truck, Vacuum - 70 bbl (Stainless Steel)	hr	$55.00	+ op
AUTO	ER-1-021	Truck, Stake Bed (1 ton) w/ Liftgate	hr	$50.00	+ op
AUTO	ER-1-022	ATV - 4x4	day	$350.00	
AUTO	ER-1-023	ATV - 6x6	day	$425.00	
AUTO	ER-1-024	ATV - Mule	day	$400.00	
AUTO	ER-1-025	Automobile - Passenger Car	day	$100.00	
AUTO	ER-1-026	Backhoe (Case 580 or equiv.) 2 - WD	day	$450.00	+ op
AUTO	ER-1-027	Backhoe (Case 580 or equiv.) 4 - WD	day	$500.00	+ op
AUTO	ER-1-028	Bobcat / Skid steer	day	$390.00	+ op
AUTO	ER-1-029	Bull Dozer - Cat D6E (155 hp)	day	$1,300.00	+ op
AUTO	ER-1-030	Drum Crusher - Hydraulic	day	$450.00	
AUTO	ER-1-031	Excavator - Komatsu PC300LC	day	$1,600.00	+ op
AUTO	ER-1-032	Excavator - Mini	day	$450.00	+ op
AUTO	ER-1-033	Super-Vac, Air Machine - 28" Hg	hr	$145.00	+ op
AUTO	ER-1-034	Super-Vac, Air Machine - with Cyclone	hr	$155.00	+ op
AUTO	ER-1-035	Super-Vac, Air Machine - Standard	hr	$125.00	+ op
AUTO	ER-1-036	Super-Vac, Hydro-Excavator - 28' @ 40 gpm	hr	$145.00	+ op
AUTO	ER-1-037	Tractor & End Dump Trailer (80,000 #)	hr	$60.00	+ op
AUTO	ER-1-038	Trailer - ATV	day	$75.00	
AUTO	ER-1-039	Trailer, 16' Lowboy - 7,000 #	day	$90.00	
AUTO	ER-1-040	Trailer, 20' Gooseneck Lowboy - 14,000 #	day	$150.00	
AUTO	ER-1-041	Trailer, Response - 16'	day	$250.00	
AUTO	ER-1-042	Trailer, Response - 28'-32'	day	$325.00	
AUTO	ER-1-043	Trailer, Mobile Command Unit	day	$2000.00	
AUTO	ER-1-044	Trailer, Dry Van 53'	day	$175.00	
AUTO	ER-1-045	Trailer, Travel 32' Personnel	day	$400.00	
AUTO	ER-1-046	Van, 15 passenger	day	$200.00	
AUTO	ER-1-047	Tractor, Farm w/ Front Loader & Tiller	day	$375.00	

Class	Code	Marine Equipment	UOM	ST Rate	Add'l
MAR	ER-2-010	Boat, 28'-32' - powered w/ GPS & Radio	day	$1,200.00	+ fuel
MAR	ER-2-010.5	Boat, Recovery Barge - 120 bbl	day	$600.00	+ fuel
MAR	ER-2-011	Boat, 24'-28' Fast Response Boat w/ GPS & Radio	day	$900.00	+ fuel
MAR	ER-2-012	Boat, 32' or larger	day	cost + 20%	+ fuel
MAR	ER-2-014	Boat, 19' - 24' Fast Response w/ GPS & Radio	day	$700.00	+ fuel
MAR	ER-2-016	Vessel Of Opportunity (VOO)	day	cost + 20%	+ fuel
MAR	ER-2-017	Boat, 14' - 18' Flat	day	$250.00	
MAR	ER-2-018	Boat, Pirogue (or equivalent)	day	$125.00	
MAR	ER-2-019	Air Compressor - 12 cfm	day	$110.00	
MAR	ER-2-020	Air Compressor - 20 cfm	day	$180.00	
MAR	ER-2-021	Anchor 22 #	job	$65.00	
MAR	ER-2-022	Anchor 40 #	job	$150.00	
MAR	ER-2-023	Anchor 65 #	job	$210.00	
MAR	ER-2-024	Anchor 85 #	job	$275.00	
MAR	ER-2-025	Anchor Buoys	day	$10.00	
MAR	ER-2-026	Boom - 10" Containment	ft/day	$1.20	
MAR	ER-2-027	Boom - 18" Containment	ft/day	$1.40	
MAR	ER-2-028	Boom - 6" Containment	job	$1.00	
MAR	ER-2-029	Boom Container (Roll-Off Skid Mounted) 20"	day	$100.00	
MAR	ER-2-030	Boom Lights (chemical)	ea	$15.00	
MAR	ER-2-031	Boom Lights (strobe)	day	$30.00	
MAR	ER-2-032	Skimmer - Drum (25-35 gpm) Pneumatic	day	$400.00	
MAR	ER-2-033	Skimmer - Drum (50-70 gpm) Pneumatic	day	$600.00	
MAR	ER-2-034	Skimmer - Duck Bill - Vaccum Truck Operated	day	$50.00	
MAR	ER-2-035	Skimmer - Belt 36" Hydraulic (incl. power pack	day	$4,500.00	+ fuel
MAR	ER-2-036	Trailer, Boom - 16'-20' Lowboy	day	$110.00	
MAR	ER-2-037	Trailer, Boom - 20 - 30' Gooseneck	day	$150.00	
MAR	ER-2-038	Trailer, Boom - 53' Dry Van	day	$175.00	
MAR	ER-2-039	Vacuum Unit, Portable Self Contained - 8 bbl cap.	day	$650.00	

Class	Code	Personnel Protective Equipment	UOM	Rate	Add'l
PPE	ER-3-010	Level A - Full Encapsulated (responder)	ea	$1,800.00	
PPE	ER-3-011	Level B - (CPF III)	ea	$125.00	
PPE	ER-3-012	Level B - (CPF IV)	ea	$175.00	
PPE	ER-3-013	Level C - (CPF I)	ea	$55.00	
PPE	ER-3-014	Level C - (CPF II)	ea	$70.00	
PPE	ER-3-015	Level C - (CPF III)	ea	$90.00	
PPE	ER-3-016	Level D - (FRC, hardhat, boots, eyewear)	day	$35.00	
PPE	ER-3-017	Acid Suit - 2 piece	ea	$110.00	
PPE	ER-3-018	Boot Covers - HazMat (Chicken Booties)	pair	$5.00	
PPE	ER-3-019	Boot Covers - Latex	pair	$8.50	
PPE	ER-3-020	Boot Covers - Silver Shield	pair	$15.00	
PPE	ER-3-021	Boots - Rubber - Steel Toe/Shank	day	$18.00	
PPE	ER-3-022	Boots - Nitrile - Steel Toe/Shank	day	$45.00	
PPE	ER-3-023	Breathing Air Hose 50' (high pressure)	day	$25.00	
PPE	ER-3-024	Breathing Air Hose 50' (low pressure)	day	$15.00	
PPE	ER-3-025	Breathing Air Manifold	day	$35.00	
PPE	ER-3-026	Breathing Air Regulator	day	$25.00	
PPE	ER-3-027	Breathing Air Trailer	day	$350.00	
PPE	ER-3-028	Bunker Gear - includes pant/boots/gloves/helmet/FRC	day	$250.00	
PPE	ER-3-029	Drager Hand Pump	day	$55.00	
PPE	ER-3-030	Drager Tubes - Colorimetric	ea	cost+20%	
PPE	ER-3-031	Ear Muffs	pair	$11.50	
PPE	ER-3-032	Ear Plugs (box of 100 pair)	ea	$49.00	
PPE	ER-3-033	Eyewash, Emergency Portable	day	$50.00	
PPE	ER-3-034	Face shield w / Bracket - Headgear	ea	$22.00	
PPE	ER-3-035	First Aid Kit (Personel)	ea	cost+20%	
PPE	ER-3-036	Glove - Nitrile/Latex Inner Glove	box	$26.00	
PPE	ER-3-037	Gloves - Cotton String	pair	$1.50	
PPE	ER-3-038	Gloves - Cotton String w / latex Tips	pair	$3.00	
PPE	ER-3-039	Gloves - Kevlar (all-in-one) Hazmat	pair	$110.00	
PPE	ER-3-040	Gloves - Leather	pair	$9.00	
PPE	ER-3-041	Gloves - Nitrile	pair	$5.50	
PPE	ER-3-042	Gloves - PVC	pair	$5.00	
PPE	ER-3-043	Gloves - Silver Shield	pair	$15.00	
PPE	ER-3-044	Gloves - Viton w / Liner	pair	$75.00	
PPE	ER-3-045	Goggles - Chemical Splash	pair	$9.50	
PPE	ER-3-046	Harness - Full Body	day	$20.00	
PPE	ER-3-047	Lanyard 6'	day	$20.00	
PPE	ER-3-048	Lifeline (rope) 50'	day	$25.00	
PPE	ER-3-049	Metatarsal - Foot Protection	day	$25.00	
PPE	ER-3-050	Monitor - 4 gas (LEL, H2S, CO, 02)	day	$125.00	
PPE	ER-3-051	Monitor - Benzene (PID)	day	$195.00	
PPE	ER-3-052	Monitor - Jerome 431 -X- (Hg)	day	$225.00	

Class	Code	Personnel Protective Equipment	UOM	Rate	Add'l
PPE	ER-3-053	Monitor - Personal H2S	day	$35.00	
PPE	ER-3-054	Monitor - VOC	day	$125.00	
PPE	ER-3-055	Rescue Kit	day	$125.00	
PPE	ER-3-056	Respirator - 1/2 Face Disposable (OV, AG)	ea	$25.00	
PPE	ER-3-057	Respirator - 1/2 Face Disposable Dust Mask	ea	$5.00	
PPE	ER-3-058	Respirator - Full Face Cartridge (excludes	day	$40.00	
PPE	ER-3-059	Respirator - Supplied Air	day	$30.00	
PPE	ER-3-060	Respirator - Supplied Air (5 minute escape pack)	day	$35.00	
PPE	ER-3-061	Respirator Cartridges (pair) AG	pair	$16.50	
PPE	ER-3-062	Respirator Cartridges (pair) HEPA	pair	$12.00	
PPE	ER-3-063	Respirator Cartridges (pair) Hg	pair	$42.00	
PPE	ER-3-064	Respirator Cartridges (pair) OV	pair	$16.50	
PPE	ER-3-065	Respirator Cartridges (pair) OV-AG	pair	$21.00	
PPE	ER-3-066	Rope Ladder	day	$60.00	
PPE	ER-3-067	SCBA - 30 minute - NFPA Approved	day	$200.00	
PPE	ER-3-068	SCBA - cylinder refill - 30 minute	ea	$20.00	
PPE	ER-3-069	SCBA - spare cylinder - 30 minute	day	$15.00	
PPE	ER-3-070	Signal Air Horn	ea	$15.00	
PPE	ER-3-071	Slicker Suit - Rain Gear - 2 pc.	ea	$20.00	
PPE	ER-3-072	Tripod w / Retrieval Winch	day	$150.00	
PPE	ER-3-073	Tyvek - Coveralls	ea	$15.00	
PPE	ER-3-074	Tyvek - Coveralls - Poly Coated	ea	$20.00	
PPE	ER-3-075	Tyvek - Coveralls - FRC Rated	ea	$22.00	
PPE	ER-3-075	Vest - Fluorescent Traffic Safety	day	$5.00	
PPE	ER-3-076	Waders, Chest	day	$40.00	
PPE	ER-3-077	Waders, Hip	day	$30.00	

Class	Code	Pumps / Hoses / Washing Equipment	UOM	Rate	Add'l
WASH	ER-4-010	Extended Wand 12' - 4,000 psi	day	$95.00	
WASH	ER-4-011	Foot Pedal -10k	day	$45.00	
WASH	ER-4-012	Hose, ADS 4" X 100'	roll	$150.00	
WASH	ER-4-013	Hose, ADS 6" x 100'	roll	$210.00	
WASH	ER-4-014	Hose, Air - 3/8" x 50'	day	$15.00	
WASH	ER-4-015	Hose, Air / Water - 3/4" x 50' (Chicago)	day	$15.00	
WASH	ER-4-016	Hose, Chemical Resistant - 2" x 25'	day	$45.00	
WASH	ER-4-017	Hose, Chemical Resistant - 3" x 25'	day	$55.00	

Class	Code	Pumps / Hoses / Washing Equipment	UOM	Rate	Add'l
WASH	ER-4-018	Hose, Fire 1-1/2" x 100'	day	$25.00	
WASH	ER-4-019	Hose, Fire 2-1/2" x 100'	day	$40.00	
WASH	ER-4-020	Hose, Fittings and Adapters (Misc.)	ea / day	$5.00	
WASH	ER-4-021	Hose, Hydroblast - 10,000 psi x 25'	day	$40.00	
WASH	ER-4-022	Hose, Hydroblast - 20,000 psi x 25'	day	$70.00	
WASH	ER-4-023	Hose, Pressure Washer - 5,000 psi x 50'	day	$25.00	
WASH	ER-4-024	Hose, PVC -1" x 10'	day	$10.00	
WASH	ER-4-025	Hose, Vaccum Truck - 2" x 25'	day	$25.00	
WASH	ER-4-026	Hose, Vacuum Truck - 2" x 10'	day	$10.00	
WASH	ER-4-027	Hose, Vacuum Truck - 3" x 25'	day	$30.00	
WASH	ER-4-028	Hose, Wash Pump Discharge - 1-1/2" x 10 - 25'	day	$15.00	
WASH	ER-4-029	Hose, Wash Pump Discharge (Layflat)1-1/2" x 50'	day	$20.00	
WASH	ER-4-030	Hose, Wash Pump Suction - 2" x 10'	day	$8.00	
WASH	ER-4-031	Hydro blaster - 10,000 psi (10K)	day	$595.00	
WASH	ER-4-032	Hydro blaster - 20,000 psi (20K)	day	$950.00	
WASH	ER-4-033	Metatarsal Foot Protection	day	$25.00	
WASH	ER-4-034	Miscellaneous Tips / Fittings		cost+20%	
WASH	ER-4-035	Pressure Washer - 3,000 psi (gas engine)	day	$150.00	
WASH	ER-4-036	Pressure Washer - 3,500 - 5,000 psi (hot water)	day	$325.00	
WASH	ER-4-037	Pressure Washer Trailer Mounted (hot water)	day	$325.00	
WASH	ER-4-038	Pump Diaphragm - 2" Aluminum	day	$90.00	
WASH	ER-4-039	Pump, Diaphragm 2" Poly	day	$175.00	
WASH	ER-4-040	Pump, Diaphragm 2" Stainless Steel	day	$250.00	
WASH	ER-4-041	Pump, Diaphragm 3" Poly	day	$210.00	
WASH	ER-4-042	Pump, Diaphragm 3" Stainless Steel	day	$310.00	
WASH	ER-4-043	Pump, Double Diaphragm 1" Poly	ea	$155.00	
WASH	ER-4-044	Pump, Single Diaphragm 2" - engine (mud hen)	day	$110.00	
WASH	ER-4-045	Pump, Disposable Drum	ea	$21.00	
WASH	ER-4-046	Pump, Rotary Petrolaum Fuel - Manual	day	$25.00	
WASH	ER-4-047	Roto - Nozzle 10k	day	$95.00	
WASH	ER-4-048	Shotgun 10k	day	$50.00	
WASH	ER-4-049	Steam Cleaner - Self Contained	day	$425.00	
WASH	ER-4-050	Surface Cleaner - 3,000 psi	day	$175.00	
WASH	ER-4-051	Wash Pump 2" - diesel powered	day	$110.00	
WASH	ER-4-052	Wash Pump 2" - gasoline powered	day	$90.00	
WASH	ER-4-053	Wash Pump 3" - diesel powered	day	$140.00	
WASH	ER-4-054	Wash Pump 3" - gasoline powered	day	$125.00	

Class	Code	Sorbents	UOM	Rate	Add'l
SORB	ER-5-011	Floor Gator - 50# bag	ea	$25.00	
SORB	ER-5-012	Kitty Litter	ea	$15.00	
SORB	ER-5-013	Mortar Mix, 40# bag	ea	$18.00	
SORB	ER-5-014	Oil Avenger - Granular - 50# bag	ea	$28.00	
SORB	ER-5-015	Oil Gator - 30# bag	ea	$43.00	
SORB	ER-5-016	Oil Sponge - General Purpose - 30# bag	ea	$33.00	
SORB	ER-5-017	Oil-Dri - Granular - 50# bag	ea	$25.00	
SORB	ER-5-018	Peat Moss - 2 cu. ft.	ea	$37.00	
SORB	ER-5-019	Snare Boom, Viscous Oil - 50' on Rope	ea	$90.00	
SORB	ER-5-020	Snare, Viscous Oil 30 / bag	ea	$75.00	
SORB	ER-5-021	Sorbent, Boom 5" x 10' - 4 / bale (petro)	bale	$119.00	
SORB	ER-5-022	Sorbent, Boom 5" x 10' - 4 / bale (univ)	bale	$135.00	
SORB	ER-5-023	Sorbent, Boom 8" x 10' - 4 / bale (petro)	bale	$175.00	
SORB	ER-5-024	Sorbent, Boom 8" x 10' - 4 / bale (univ)	bale	$200.00	
SORB	ER-5-025	Sorbent, Industrial Rug 36" x 300'	ea	$255.00	
SORB	ER-5-026	Sorbent, Pads - 100 / bale (chem)	bale	$70.00	
SORB	ER-5-027	Sorbent, Pads - 100 / bale (petro)	bale	$62.00	
SORB	ER-5-028	Sorbent, Pads - 100 / bale (univ)	bale	$105.00	
SORB	ER-5-029	Sorbent, Roll - 144' x 38" x 3/8" (petro)	ea	$155.00	
SORB	ER-5-030	Sorbent, Sweep - 100' x 17" x 1/4"	ea	$125.00	
SORB	ER-5-031	Sphag Sorb - 2 cu. ft.	ea	$43.00	
SORB	ER-5-032	Vermiculite - 2 cu. ft.	ea	$30.00	
SORB	ER-5-033	Zorbent, Absorbent material - 50# bag	ea	$60.00	

Class	Code	Haz-Mat Equipment	UOM	Rate	Add'l
HAZ	ER-6-010	Betz" Emergency Offloading Valve	day	$500.00	
HAZ	ER-6-011	Chlorine "A" Kit	day	$500.00	
HAZ	ER-6-012	Chlorine "B" Kit	day	$750.00	
HAZ	ER-6-013	Chlorine "C" Kit	day	$1,000.00	
HAZ	ER-6-014	Coliwasa, Disposable Glass Tubing	ea.	$20.00	
HAZ	ER-6-015	Compressor, Corken 2"	day	$1,750.00	
HAZ	ER-6-016	Drill, Pneumatic	day	$100.00	
HAZ	ER-6-017	HAZ-MAT Test Kit	day	$125.00	+ $ 30.00 / test
HAZ	ER-6-018	Laboratory Analysis		cost+20%	
HAZ	ER-6-019	Nitrogen, Gas Cylinder Refill	ea	$35.00	
HAZ	ER-6-020	Nitrogen, Liquid Purge		cost+20%	
HAZ	ER-6-021	pH Meter	day	$50.00	
HAZ	ER-6-022	pH Pen	day	$25.00	
HAZ	ER-6-023	Safety Shower, Emergency - (portable)	day	$125.00	
HAZ	ER-6-024	Sample Kit - Stainless Steel	day	$25.00	
HAZ	ER-6-025	Sample Tubing - Tygon 1/4"	ft	$3.00	
HAZ	ER-6-026	Sample, Soil Auger - Stainless Steel	day	$75.00	
HAZ	ER-6-027	Stinger, 1-1/2" x 60" - PVC	day	$25.00	
HAZ	ER-6-028	Stinger, 1-1/2" x 60" - Stainless Steel	day	$50.00	
HAZ	ER-6-029	Tedlar Bag	ea	$60.00	
HAZ	ER-6-030	Thermometer, Infrared	day	$75.00	

Class	Code	Drums and Containers	UOM	Rate	Add'l
CONT	ER-7-010	Drum Dolly	day	$40.00	
CONT	ER-7-011	Drum Labels	ea	$3.00	
CONT	ER-7-012	Drum Lift - Forklift Attachment	day	$40.00	
CONT	ER-7-013	Drum Liner, 6 ml	ea	$2.00	
CONT	ER-7-013.5	Drum Liner, 6 ml (Roll) 50/roll	ea	$90.00	
CONT	ER-7-014	Drum Patch Kit	ea	$75.00	
CONT	ER-7-015	Drum Sling	day	$20.00	
CONT	ER-7-016	Drum Wrench - Brass (Bung Wrench)	day	$15.00	
CONT	ER-7-017	Drum, 55 Gallons CT - Poly	ea	$65.00	
CONT	ER-7-018	Drum, 55 Gallons CT - Steel	ea	$65.00	
CONT	ER-7-019	Drum, 55 Gallons OT - Poly	ea	$65.00	
CONT	ER-7-020	Drum, 55 Gallons OT - Steel	ea	$65.00	
CONT	ER-7-021	Drum, 85 Gallons Salvage - Steel	ea	$165.00	
CONT	ER-7-022	Drum, 95 Gallon Over Pack - Poly	ea	$310.00	
CONT	ER-7-023	Frac Tank - 250 bbl capacity (mini)	day	$55.00	
CONT	ER-7-024	Frac Tank - 500 bbl capacity	day	$75.00	
CONT	ER-7-025	Frac Tank - 500 bbl capacity (Stainless)	day	$175.00	
CONT	ER-7-026	Lab Pack, 10 Gallon	ea	$50.00	
CONT	ER-7-027	Lab Pack, 5 Gallon	ea	$40.00	
CONT	ER-7-028	Poly Tanks 1,000 - 8,000 Gallons	day	cost+20%	
CONT	ER-7-029	Roll Off Box, 20 - 30 cu. yd. (wt) Roll Top	day	$75.00	
CONT	ER-7-030	Roll Off Box, 20 - 30 cu. yd. (wt) Tarped	day	$25.00	
CONT	ER-7-031	Secondary Containment (Frac Tank)	day	$55.00	
CONT	ER-7-032	Tank Trailer - 150 bbl capacity	day	$200.00	
CONT	ER-7-033	Tote - Poly - 325 Gallons	day	$75.00	
CONT	ER-7-034	Vacuum Box, 25 cu. yd.	day	$65.00	

Class	Code	Miscellaneous Equipment	UOM	Rate	Add'l
MISC	ER-8-010	Air Compressor 12 cfm - Gasoline	day	$90.00	
MISC	ER-8-011	Air Compressor 185 cfm - Diesel	day	$250.00	
MISC	ER-8-012	Air Compressor 20 cfm - Gasoline	day	$180.00	
MISC	ER-8-013	Air Compressor 375 cfm - Diesel	day	$325.00	
MISC	ER-8-014	Barrier Tape	roll	$29.00	
MISC	ER-8-015	Bill Of Lading	ea	$2.00	
MISC	ER-8-016	Binoculars	day	$10.00	
MISC	ER-8-017	Blower, Air Horn - Confined Space	day	$50.00	
MISC	ER-8-018	Blower, Coppus - Confined Space	day	$90.00	
MISC	ER-8-019	Chain 25' Tow	day	$20.00	
MISC	ER-8-020	Chain Saw	day	$125.00	
MISC	ER-8-021	Decon Pool, Equipment 20' x 100'	day	$250.00	
MISC	ER-8-022	Decon Pool, Equipment 20' x 60'	day	$210.00	
MISC	ER-8-023	Decon Pool, Equipment 20' x 50'	day	$200.00	
MISC	ER-8-024	Drill, Pneumatic	day	$100.00	
MISC	ER-8-025	Drop Light, Explosion Proof / Electric	day	$90.00	
MISC	ER-8-026	Epoxy Stick	ea	$12.00	
MISC	ER-8-027	Extension Cord - 100'	day	$20.00	
MISC	ER-8-028	Fence - Safety Orange	roll	$75.00	
MISC	ER-8-029	Flashlight	day	$15.00	
MISC	ER-8-030	Generator 4 - 5 kw	day	$175.00	+ fuel
MISC	ER-8-031	Generator 6 - 8 kw	day	$250.00	+ fuel
MISC	ER-8-032	Generator 8 - 12 kw	day	$325.00	+ fuel
MISC	ER-8-033	Grounding / Bonding Cables - Rods	day	$25.00	
MISC	ER-8-034	Hand Cleaner	ea	$15.00	
MISC	ER-8-035	Hand Tools (shovel, rake, net...)	day	$15.00	
MISC	ER-8-036	Hand Tools (wrenches, sockets)	day	$15.00	
MISC	ER-8-037	Heat Stress	man/day	$10.00	
MISC	ER-8-038	Hole Saw - 2 - 1/2"	ea	$25.00	
MISC	ER-8-039	Lockout - Tagout Kit	day	$50.00	
MISC	ER-8-040	Manifest - Waste	ea	$5.00	
MISC	ER-8-041	Mercon Wipes	ea	$1.25	
MISC	ER-8-042	Mercury Indicator Powder - 250 grams	ea	$62.50	
MISC	ER-8-043	Mercury Vacuum, Stainless Steel	day	$225.00	
MISC	ER-8-044	Oxy - Acetylene Cutting Outfit	day	$210.00	
MISC	ER-8-045	Paint, Ground Marking	can	$12.00	
MISC	ER-8-046	Pallet Grabber	day	$40.00	
MISC	ER-8-047	Pallet Jack	day	$75.00	
MISC	ER-8-048	Personel Decontamination Brush	ea	$8.00	
MISC	ER-8-049	Personel Decontamination Pool	ea	$45.00	
MISC	ER-8-050	pH Strips (Box)	box	$15.00	
MISC	ER-8-051	Pipeline Probe	day	$15.00	
MISC	ER-8-052	Plug - N - Dike	can	$21.00	

Class	Code	Miscellaneous Equipment	UOM	Rate	Add'l
MISC	ER-8-053	Pollution Bags - 6 ml - (100 / roll)	roll	$120.00	
MISC	ER-8-054	Pollution Can - 20 Gallon	ea	$25.00	
MISC	ER-8-055	Pool, Personnel Decontamination	ea	$22.00	
MISC	ER-8-056	Portable Lighting - Electric Halogen	day	$70.00	
MISC	ER-8-057	Portable Lighting - Light Tower 6k W - 4 lamp	day	$150.00	+ fuel
MISC	ER-8-058	Roll off Box Liner	ea	$50.00	
MISC	ER-8-059	Rope 1/2" Poly x 600'	roll	$75.00	
MISC	ER-8-060	Rope 1/4" Poly x 600'	roll	$45.00	
MISC	ER-8-061	Rope 3/4" Poly x 600'	roll	$85.00	
MISC	ER-8-062	Rope 3/8" Poly x 600'	roll	$65.00	
MISC	ER-8-063	Sample Jar - 1/2 pint	ea	$2.00	
MISC	ER-8-064	Sample Jar - pint	ea	$2.00	
MISC	ER-8-065	Sample Jar - Quart	ea	$2.00	
MISC	ER-8-066	Scare Cannon - Propane Operated (automatic)	day	$200.00	
MISC	ER-8-067	Shop Vac - Wet / Dry	day	$90.00	
MISC	ER-8-068	Stake, Wooden Survey	ea	$2.00	
MISC	ER-8-069	T - Post 5' - Steel	ea	$12.00	
MISC	ER-8-070	T- Post Driver	day	$25.00	
MISC	ER-8-071	Tape, Chemical (PPE)	roll	$33.00	
MISC	ER-8-072	Tape, Duct	roll	$12.00	
MISC	ER-8-073	Tape, Flagging (fluorescent)	roll	$9.50	
MISC	ER-8-074	Tape, Teflon	roll	$5.00	
MISC	ER-8-075	Tiller, Gas Operated	day	$115.00	
MISC	ER-8-076	Visqueen 20' x 100'	roll	$90.00	
MISC	ER-8-077	Visqueen 40' x 100'	roll	$140.00	
MISC	ER-8-078	Weed Eater (2 cycle)	day	$90.00	
MISC	ER-8-079	Welding Machine	day	$225.00	
MISC	ER-8-080	Welding Supplies	ea	cost 20%	
MISC	ER-8-081	Wheel - Measuring / Roller	day	$20.00	
MISC	ER-8-082	Wheelbarrow	day	$25.00	

Class	Code	Communications Equipment	UOM	Rate	Add'l
COMM	ER-9-010	Cellular Phone	day	$25.00	
COMM	ER-9-011	Computer and Printer	day	$75.00	
COMM	ER-9-012	Copier	day	$90.00	
COMM	ER-9-013	Digital Camera	day	$25.00	
COMM	ER-9-014	Facsimile Machine	day	$50.00	
COMM	ER-9-015	Global Positioning System	day	$40.00	
COMM	ER-9-016	Photos - Prints - Digital Copies		cost+20%	
COMM	ER-9-017	Radio, 2 way Hand Held	day	$25.00	
COMM	ER-9-018	Radio, 2 way Hand Held - UL approved	day	$50.00	
COMM	ER-9-019	Satellite Telephone		cost+20%	
COMM	ER-9-020	Video Camera	day	$75.00	
COMM	ER-9-021	Trailer, Mobile Command Unit	day	$2,000.00	

Class	Code	Chemicals and Neutralizers	UOM	Rate	Add'l
CHEM	ER-10-010	Acetic Acid - 5 gallon pail	ea	$85.00	
CHEM	ER-10-011	Acetic Acid - 55 gallon drum	ea	$925.00	
CHEM	ER-10-012	Ammonia - Household	gal	$8.00	
CHEM	ER-10-013	Bleach, Household 5% - 1 gallon	ea	$5.00	
CHEM	ER-10-014	Citric Acid - 50# bag	ea	$72.00	
CHEM	ER-10-015	D-Limonator - 5 gallon pail	ea	$152.50	
CHEM	ER-10-016	D-Limonator - 55 gallon drum	ea	$1,655.00	
CHEM	ER-10-017	Ecosorb - Mercapthan Neutralizer	gal	$79.50	
CHEM	ER-10-018	Hydrochloric Acid - 30% solution	gal	$8.50	
CHEM	ER-10-019	Hydrogen Peroxide - 55 gallon drum	ea	$520.00	
CHEM	ER-10-020	Micro-Blaze - 5 gallon	ea	$195.00	
CHEM	ER-10-021	Petro-Clean - 5 gallon	ea	$182.50	
CHEM	ER-10-022	Petro-Clean 55 gallon	ea	$1,750.00	
CHEM	ER-10-023	PS-51, Degreaser - 55 gallon drum		cost+20%	
CHEM	ER-10-024	Soda ASH - 50# bag	ea	$21.00	
CHEM	ER-10-025	Sodium Bicarbonate - 50# bag	ea	$36.00	
CHEM	ER-10-026	Sodium Carbonate (fly ash)		cost+20%	
CHEM	ER-10-027	Sodium Hydroxide - 50% solution	gal	$50.00	
CHEM	ER-10-028	Sodium Hypochlorite - 10% solution	gal	$7.50	
CHEM	ER-10-029	Vapor Scrub	gal	$25.00	

Attachment "A" - 2012 Emergency Response Price Schedule
Fuel Surcharge Letter / Schedule

At Anderson Pollution Control, Inc., we work diligently to provide you the best possible services at rates, which are highly competitive. Regrettably, due to the dramatic rise in the price for diesel fuel, we must ask that you accept a temporary increase in rates in the form of a fuel surcharge.

We ill implement a fuel surcharge for all equipment such as (but not limited to) DOT trucks, pickup trucks, and / or any fuel burning equipment which is not noted as a "plus fuel" item on the preceeding price schedule. The surcharge will be determined in the following fashion taken from the the USDOE (United States Department of Energy) national average of diesel fuel pricing.

National Avg. Price / Gal		Surcharge Percent Applied to Hourly / Daily Rate of Equipment
$2.10	$2.19	14%
$2.20	$2.29	15%
$2.30	$2.39	16%
$2.40	$2.49	17%
$2.50	$2.59	18%
$2.60	$2.69	19%
$2.70	$2.79	20%
$2.80	$2.89	21%
$2.90	$2.99	22%
$3.00	$3.09	23%
$3.10	$3.19	24%
$3.20	$3.29	2%
$3.30	$3.39	26%
$3.40	$3.49	27%
$3.50	$3.59	28%
$3.60	$3.69	29%
$3.70	$3.79	30%
$3.80	$3.89	31%
$3.90	$3.99	32%
$4.00	$4.09	33%
$4.10	$4.19	34%
$4.20	$4.29	35%

Attachment "B" - 2012 Emergency Response Price Schedule
Explanation / Clarification to Emergency Response Rate Schedule

Personnel:

Experienced supervisory, technical, and equipment operating personnel are available for emergency spill response and spill cleanup operations, 24 hours per day, 365 days per year. Normal hours of operation are from 0700 hours (7:00 a.m.) to 1600 hours (4:00 p.m.) Monday through Friday. All labor charges will be in accordance with Anderson Pollution Control, Inc. service receipts. Charges for personnel are portal to portal. Anderson Pollution Control, Inc. will invoice customer for personnel and the time required to mobilize, service, repair, and restock all vehicles and response equipment used in the performance of services. **Overtime Rates** for personnel will be charged at a rate of time and one half between 1600 hours (4:00 p.m.) and 0700 hours (7:00 a.m.) Monday through Thursday, and between the hours of 1600 hours and 0700 hours on Friday through 0700 hours on Monday. **Doubletime Rates** will be applied to the following National Holidays: New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. **A 4-hour minimum call-out charge will apply to all labor / equipment call-outs.**

In the event that Anderson Pollution Control, Inc. responds to a request from a governmental agency and/or third party and/or customer and/or on behalf of customer for record gathering and/or litigation support, including but not limited to any proceeding, deposition, hearing, or trial, and whether during the performance of services or any time after; Customer hereby agrees to and will pay to Anderson Pollution Control, Inc. the charges for the personnel provided and/or requested and/or required in the amount corresponding to the personnel designation in this rate sheet and will further reimburse Anderson Pollution Control, Inc. for reasonable expenses incurred as a result including transportation, parking and/or lodging if necessary.

Travel, Lodging, and Per Diem:

For all Anderson Pollution Control, Inc. employees and designees who do not reside in the local commuting area from the work site, a minimum Per Diem charge of $ 125.00 per day per employee will be invoiced to the customer for such expenses incurred. Furthermore, any expenses for commercial transportation will be invoiced back to the customer at a rate of cost plus 20%.

Automotive Equipment:

All automotive equipment rate charges are portal to portal. A 4 hour minimum times will be charged on all call-out services. A mileage charge of $ 0.50 per mile after the first 50 miles wil be added to all automotive equipment. A fuel and insurance surcharge will be assessed on all autos and equipment. (See Attachment "A" for surcharge schedule). Fuel and insurance Surcharges are calculated on the hourly or daily rate of equipment / autos times the percentage applied based on National Diesel Fuel Price Average according to the USDOE.

Equipment Decontamination:

Spill control equipment is billed on a time and material basis from portal to portal, and will continue until decontamination or washout services are complete. Third party washout facility's charges will be billed at a rate of cost plus 20%.

Damaged or Contaminated Equipment Replacement:

If, during performance of a service and/or services for a customer, equipment sustains damage which renders the equipment beyond repair or renders decontamination impossible, said equipment will be subject to a replacement charge at Anderson Pollution Control, Inc.'s cost plus 20% unless said damage was sustained as a result of misuse by an Anderson Pollution Control, Inc. employee.

Fuel Surcharge:

A fuel surcharge will be assessed on all hourly/daily equipment /vehicle rate will be charged on all motorized equipment. The fuel surcharge calculation Anderson Pollution Control, Inc. is listed as "Attachment A" of this document. Charges will be assessed on equipment only. Further explanation of fuel surcharge calculations are also mentioned in the "Automotive Equipment" Section of this document.

Insurance:

The rates in the rate schedule include insurance coverage for Worker's Compensation, General Liability, Pollution and Automobile Liability. A Certificate of insurance will be forwarded upon request. These rates do **NOT** include work performed under the U.S. Longshoremen's and Harbor Workers Act (33 USC ss 9010950). For work performed under this statute, an additional 69% surcharge per $ 100.00 of wages will be assessed on labor ONLY.

Attachment "B" - 2012 Emergency Response Price Schedule (continued)
Explanation / Clarification to Emergency Response Rate Schedule

Stand-By Rates:

Stand-by rate will be equal to the daily rates in this schedule unless otherwise agreed to in writing on a case-by-case basis. Full rates will apply for personnel and per diem, while equipment will be billed at half the daily or hourly rate until utilized or released. A minimum daily charge of eight (8) hours per day will be billed for standby work done outside of 150-mile radius of employee's home office.

Place of Performance:

the procurement of Anderson Pollution Control, Inc.'s services may not be in the same county as the work-site area. Customer is obligated to make payment to Anderson Pollution control, Inc. in Montgomery County, Texas for services provided. Because this agreement has been procured and/or managed and administered by Anderson Pollution Control, Inc.'s corporate office in Montgomery County, Texas. The validity, interpretation, and performance of the services and payment and the contents herein are to be interpreted and enforced pursuant to the laws **of the State of Texas and any suit in connection herewith will be filed in Mongomery County, Texas**

Subcontract Services / Third Party Services:

A 20% handling charge will apply and be invoiced for all shipping and transportation of equipment, materials, and goods regardless of whether such equipment, materials, and goods appear on Anderson Pollution Control, Inc.'s rate schedule. This includes but is not limited to personnel, equipment, materials or goods, laboratory services, damage waivers and/or other services. Cost, as used herein, is defined as the amount invoiced to Anderson Pollution Control, Inc. by a third party supplier of materials, goods, personnel, equipment, and/or services.

Taxes:

All domestic, federal, state, and municipal taxes, except income taxes and ad-valorem taxes, now and hereinafter imposed with respect to services rendered, to rental equipment, to the processing, manufacture, repair, and to the delivery and transportation of equipment and supplies will be added to become part of the total price payable by the customer. If a customer claims an exemption from payment of Texas Sales and Use Tax, the customer will be required to render an exemption certificate or a Resale Certification to Anderson Pollution Control, Inc. for said exemption to apply to the services rendered. If for any reason the services rendered result in the assessment of foreign income taxes, excise taxes, or other fees alleged as owing to a foreign state or government, the customer will pay directly the amount of any assessment or fee. In the event Anderson Pollution Control, Inc. pays any such foreign tax or fee directly, customer will promptly reimburse Anderson Pollution Control, Inc. for such amount.

Terms:

The term of payment for all invoices is Net 15 days upon receipt of invoice in US Dollars (USD) (US$). The balance of any invoice not timely paid will accrue a finance charge computed at the periodic rate of one and one half percent (1.5 %) per month beginning on the first day of the first month folling any delinquency. Customer is obligated to make payment to Anderson Pollution Control, Inc. at it's principal office at 1011 West Lewis - Suite A -- Conroe, Texas 77301-2219 in Montgomery County, Texas.

ANDERSON
POLLUTION CONTROL, INC.

2012 Industrial Services Rate Schedule

1011-A WEST LEWIS • CONROE, TEXAS 77301-2219
CORPORATE OFFICE: 936-441-2225 • FAX: 936-539-2099

ANDERSON POLLUTION CONTROL, INC.

TABLE OF CONTENTS: 2012 INDUSTRIAL SERVICE RATE SCHEDULE

SECTION I: RATE SCHEDULE
Pages 2-13

Personnel	Page	2
Automotive Equipment	Page	3
Marine Equipment	Page	4
Personnel Protective Equipment	Page	5 - 6
Pumps / Hoses / Washing Equipment	Page	7 - 8
Sorbents	Page	8
Hazmat Equipment	Page	9
Drums / Containers	Page	10
Miscellaneous Equipment	Page	11 - 12
Communications Equipment	Page	13
Chemical and Neutralizers	Page	13

SECTION II: ATTACHMENT "A"
Page 14 - Fuel Surcharge Letter

ANDERSON POLLUTION CONTROL, INC.

INDUSTRIAL SERVICE RATES

Class	Code	Personnel	UOM	ST. Rate	OT Rate
PERS	IND-001	Senior Project Manager- Company Officer	hr	$75.00	$112.50
PERS	IND-002	Project Manager	hr	$55.00	$82.50
PERS	IND-003	Certified Industrial Hygienist	hr	$65.00	$97.50
PERS	IND-004	Certified Safety Professional	hr	$65.00	$97.50
PERS	IND-005	Chemist, Biologist, Geologist	hr	$65.00	$97.50
PERS	IND-006	Health and Safety Manager	hr	$45.00	$67.50
PERS	IND-007	Rescue Supervisor	hr	$45.00	$67.50
PERS	IND-008	Rescue Tech	hr	$35.00	$52.50
PERS	IND-009	Supervisor	hr	$45.00	$67.50
PERS	IND-010	Foreman	hr	$38.00	$57.00
PERS	IND-011	Transportation and Disposal Coordinator	hr	$35.00	$52.50
PERS	IND-012	Logistics Coordinator	hr	$35.00	$52.50
PERS	IND-013	Heavy Equipment Operator (Dozer, Excavator, etc.)	hr	$38.00	$57.00
PERS	IND-014	Boat Operator / Response Equipment	hr	$31.00	$46.50
PERS	IND-015	Truck Operator (roll off / vac truck)	hr	$31.00	$46.50
PERS	IND-016	Mechanic	hr	$40.00	$60.00
PERS	IND-017	Welder	hr	$40.00	$60.00
PERS	IND-018	Recovery Technician	hr	$30.00	$45.00
PERS	IND-019	Pollution Laborer / Flagger/ Spotter	hr	$28.00	$42.00
PERS	IND-020	Field Clerk	hr	$30.00	$45.00
PERS	IND-021	CDL Truck Driver (Supplies, Deliveries, etc.)	hr	$30.00	$45.00
PERS	IND-022	Waste Disposal Co-Ordinator	hr	$45.00	$67.50

ANDERSON POLLUTION CONTROL, INC.

Class	Code - 1	Automotive Equipment	UOM	ST. Rate	Add'l
AUTO	IND-1-010	Truck, Pickup (1/2 ton) 2-WD	day	$75.00	
AUTO	IND-1-011	Truck, Pickup (1/2 ton) 4-WD	day	$90.00	
AUTO	IND-1-012	Truck, Pickup (3/4 - 1 ton) 2-WD	day	$95.00	
AUTO	IND-1-013	Truck, Pickup (3/4 - 1 ton) 4-WD	day	$115.00	
AUTO	IND-1-014	Truck, Response - Fully Equipped	day	$195.00	
AUTO	IND-1-015	Truck, Roll Off (Double Haul Trailer) 80,000 #	hr	$40.00	+ op
AUTO	IND-1-016	Truck, Roll Off (Bobtail) 65,000 #	hr	$35.00	+ op
AUTO	IND-1-017	Truck, Roll Off (Tractor) 80,000 #	hr	$40.00	+ op
AUTO	IND-1-018	Truck, Vacuum - 130 bbl (Carbon Steel)	hr	$40.00	+ op
AUTO	IND-1-019	Truck, Vacuum - 70 bbl (Carbon Steel)	hr	$35.00	+ op
AUTO	IND-1-020	Truck, Vacuum - 70 bbl (Stainless Steel)	hr	$55.00	+ op
AUTO	IND-1-021	Truck, Supply Van w/ Liftgate	hr	$30.00	+ op
AUTO	IND-1-022	ATV - 4x4	day	$350.00	
AUTO	IND-1-023	ATV - 6x6	day	$425.00	
AUTO	IND-1-024	ATV - Mule	day	$400.00	
AUTO	IND-1-025	Automobile - Passenger Car	day	$75.00	
AUTO	IND-1-026	Backhoe (Case 580 or equiv.) 2 - WD	day	$350.00	+ op
AUTO	IND-1-027	Backhoe (Case 580 or equiv.) 4 - WD	day	$375.00	+ op
AUTO	IND-1-028	Bobcat / Skid Steer	day	$300.00	+ op
AUTO	IND-1-029	Bull Dozer - Cat D6E (155 hp)	day	$1,150.00	+ op
AUTO	IND-1-030	Drum Crusher- Hydraulic	day	$350.00	
AUTO	IND-1-031	Excavator - Komatsu PC300LC	day	$1,300.00	+ op
AUTO	IND-1-032	Excavator - Mini	day	$390.00	+ op
AUTO	IND-1-033	Super-Vac, Air Machine - 28" Hg	hr	$125.00	+ op
AUTO	IND-1-034	Super-Vac, Air Machine - with Cyclone	hr	$130.00	+ op
AUTO	IND-1-035	Super-Vac, Air Machine - Standard	hr	$110.00	+ op
AUTO	IND-1-036	Super-Vac, Hydro-Excavator - 28' @ 40 gpm	hr	$125.00	+ op
AUTO	IND-1-037	Tractor & End Dump TrailIND (80,000 #)	hr	$45.00	+ op
AUTO	IND-1-038	Trailer - ATV	day	$75.00	
AUTO	IND-1-039	Trailer, 16' Lowboy - 7,000 #	day	$50.00	
AUTO	IND-1-040	Trailer, 20' Gooseneck Lowboy - 14,000 #	day	$90.00	
AUTO	IND-1-041	Trailer, Response - 16'	day	$250.00	
AUTO	IND-1-042	Trailer, Response - 28'-32'	day	$325.00	
AUTO	IND-1-043	Van, 15 Passanger	day	$150.00	

ANDERSON POLLUTION CONTROL, INC.

Class	Code - 2	Marine Equipment	UOM	ST. Rate	Add'l
MAR	IND-2-010	Boat, 30' Barge Boat w/ twin < 150hp	day	$800.00	+ fuel
MAR	IND-2-011	Boat, 26' Fast Response Boat w / twin 150 hp	day	$600.00	+ fuel
MAR	IND-2-012	Boat, 26' Deep "V" w/ Cabin & Radar < 150 hp	day	$750.00	+ fuel
MAR	IND-2-013	Boat, 24' Work Barge		$350.00	
MAR	IND-2-014	Boat, 18' Flat Boat w/ 25 hp Motor	day	$200.00	
MAR	IND-2-015	Boat, 18' - 25' Fast Response Boat > 200 hp		$450.00	+ fuel
MAR	IND-2-016	Boat, 14' - 16' Flat Boat w/ out Motor	day	$100.00	
MAR	IND-2-017	Boat, 14' - 16' Flat Boat w/ 25 hp	day	$190.00	
MAR	IND-2-018	Boat, Pirogue (or equivalent)	day	$090.00	
MAR	IND-2-019	Air Compressor - 12 cfm	day	$075.00	
MAR	IND-2-020	Air Compressor - 20 cfm	day	$120.00	
MAR	IND-2-021	Anchor 22 #	day	$65.00	
MAR	IND-2-022	Anchor 40 #	day	$150.00	
MAR	IND-2-023	Anchor 65 #	job	$210.00	
MAR	IND-2-024	Anchor 85 #	job	$275.00	
MAR	IND-2-025	Anchor Buoys	job	$10.00	
MAR	IND-2-026	Boom - 10" Containment	job	$1.20	
MAR	IND-2-027	Boom - 18" Containment	day	$1.40	
MAR	IND-2-028	Boom - 6" Containment	ft/day	$1.00	
MAR	IND-2-029	Boom Container (Roll-Off Skid Mounted)	ft/day	$100.00	
MAR	IND-2-030	Boom Lights (chemical)	ft/day	$15.00	
MAR	IND-2-031	Boom Lights (strobe)	day	$30.00	
MAR	IND-2-032	Skimmer - Drum (25-34 gpm) Pneumatic	ea	$400.00	
MAR	IND-2-033	Skimmer - Drum (50-70 gpm) Pneumatic	day	$600.00	
MAR	IND-2-034	Skimmer Duck Bill - Vaccum Truck Operated	day	$50.00	
MAR	IND-2-035	Skimmer - Weir	day	$150.00	
MAR	IND-2-036	Trailer, Boom - 16'-20' Lowboy	day	$110.00	
MAR	IND-2-037	Trailer, Boom - 20 - 30' Gooseneck	day	$150.00	

ANDERSON POLLUTION CONTROL, INC.

Class	Code - 3	Personnel Protective Equipment	UOM	ST. Rate	Add'l
PPE	IND-3-010	Level A - Full Encapsulated (responder)	ea	$1,800.00	
PPE	IND-3-011	Level B - (CPF III)	ea	$125.00	
PPE	IND-3-012	Level B - (CPF IV)	ea	$175.00	
PPE	IND-3-013	Level C - (CPF I)	ea	$55.00	
PPE	IND-3-014	Level C - (CPF II)	ea	$70.00	
PPE	IND-3-015	Level C - (CPF III)	ea	$90.00	
PPE	IND-3-016	Level D - (FRC, hardhat, boots, eyewear)	day	$35.00	
PPE	IND-3-017	Acid Suit - 2 piece	ea	$110.00	
PPE	IND-3-018	Boot Covers - HazMat (Chicken Booties)	pair	$5.00	
PPE	IND-3-019	Boot Covers - Latex	pair	$8.50	
PPE	IND-3-020	Boot Covers - Silver Shield	pair	$15.00	
PPE	IND-3-021	Boots - Rubber - Steel Toe/Shank	day	$18.00	
PPE	IND-3-022	Boots - Nitrile - Steel Toe/Shank	day	$45.00	
PPE	IND-3-023	Breathing Air Hose 50' (high pressure)	day	$25.00	
PPE	IND-3-024	Breathing Air Hose 50' (low pressure)	day	$15.00	
PPE	IND-3-025	Breathing Air Manifold	day	$35.00	
PPE	IND-3-026	Breathing Air Regulator	day	$25.00	
PPE	IND-3-027	Breathing Air Trailer	day	$350.00	
PPE	IND-3-028	Bunker Gear - includes pant/boots/gloves/helmet/FRC	day	$250.00	
PPE	IND-3-029	Drager Hand Pump	day	$55.00	
PPE	IND-3-030	Drager Tubes - Colorimetric	ea	cost+20%	
PPE	IND-3-031	Ear Muffs	pair	$11.50	
PPE	IND-3-032	Ear Plugs (box of 100 pair)	ea	$49.00	
PPE	IND-3-033	Eyewash, Emergency Portable	day	$50.00	
PPE	IND-3-034	Face shield w / Bracket - Headgear	ea	$22.00	
PPE	IND-3-035	Glove - Nitrile/Latex Inner Glove	box	$26.00	
PPE	IND-3-036	Gloves - Cotton String	pair	$1.00	
PPE	IND-3-037	Gloves - Cotton String w / latex Tips	pair	$1.50	
PPE	IND-3-038	Gloves - Kevlar (all-in-one) Hazmat	pair	$90.00	
PPE	IND-3-039	Gloves - Leather	pair	$9.00	
PPE	IND-3-040	Gloves - Nitrile	pair	$3.00	
PPE	IND-3-041	Gloves - PVC	pair	$3.00	
PPE	IND-3-042	Gloves - Silver Shield	pair	$15.00	

ANDERSON POLLUTION CONTROL, INC.

Class	Code - 3	Personnel Protective Equipment (continued)	UOM	ST. Rate	Add'l
PPE	IND-3-043	Gloves - Viton w / Liner	pair	$60.00	
PPE	IND-3-044	Goggles - Chemical Splash	pair	$7.50	
PPE	IND-3-045	Harness - Full Body	day	$8.00	
PPE	IND-3-046	Lanyard 6'	day	$8.00	
PPE	IND-3-047	Lifeline (rope) 50'	day	$15.00	
PPE	IND-3-048	Metatarsal - Foot Protection	day	$25.00	
PPE	IND-3-049	Monitor - 4 gas (LEL, H2S, CO, 02)	day	$75.00	
PPE	IND-3-050	Monitor - Benzene (PID)	day	$195.00	
PPE	IND-3-051	Monitor - Jerome 431 -X- (Hg)	day	$200.00	
PPE	IND-3-052	Monitor - Personal H2S	day	$25.00	
PPE	IND-3-053	Monitor - VOC	day	$75.00	
PPE	IND-3-054	Rescue Kit	day	$75.00	
PPE	IND-3-055	Respirator - 1/2 Face Disposable (OV, AG)	ea	$19.00	
PPE	IND-3-056	Respirator - 1/2 Face Disposable Dust Mask	ea	$5.00	
PPE	IND-3-057	Respirator - Full Face Cartridge (excludes cartridges)	day	$20.00	
PPE	IND-3-058	Respirator - Supplied Air	day	$20.00	
PPE	IND-3-059	Respirator - Supplied Air (5 minute escape pack)	day	$25.00	
PPE	IND-3-060	Respirator Cartridges (pair) AG	pair	$14.00	
PPE	IND-3-061	Respirator Cartridges (pair) HEPA	pair	$10.00	
PPE	IND-3-062	Respirator Cartridges (pair) Hg	pair	$35.00	
PPE	IND-3-063	Respirator Cartridges (pair) OV	pair	$12.50	
PPE	IND-3-064	Respirator Cartridges (pair) OV-AG	pair	$18.00	
PPE	IND-3-065	Rope Ladder	day	$35.00	
PPE	IND-3-066	SCBA - 30 minute - NFPA Approved	day	$75.00	
PPE	IND-3-067	SCBA - cylinder refill - 30 minute	ea	$20.00	
PPE	IND-3-068	SCBA - spare cylinder - 30 minute	day	$7.00	
PPE	IND-3-069	Signal Air Horn	ea	$8.00	
PPE	IND-3-070	Slicker Suit - Rain Gear - 2 pc.	ea	$15.00	
PPE	IND-3-071	Tripod w / Retrieval Winch	day	$125.00	
PPE	IND-3-072	Tyvek - Coveralls	ea	$9.00	
PPE	IND-3-073	Tyvek - Coveralls - Poly Coated	ea	$14.00	
PPE	IND-3-074	Vest - Fluorescent Traffic Safety	day	$3.00	
PPE	IND-3-075	Waders, Chest	day	$40.00	
PPE	IND-3-076	Waders, Hip	day	$30.00	

ANDERSON POLLUTION CONTROL, INC.

Class	Code - 4	Pumps / Hoses / Washing Euipment	UOM	ST. Rate	Add'l
WASH	IND-4-010	Extended Wand 12' - 4,000 psi	day	$75.00	
WASH	IND-4-011	Foot Pedal -10k	day	$35.00	
WASH	IND-4-012	Hose, ADS 4" X 100'	roll	$150.00	
WASH	IND-4-013	Hose, ADS 6" x 100'	roll	$210.00	
WASH	IND-4-014	Hose, Air - 3/8" x 50'	day	$8.00	
WASH	IND-4-015	Hose, Air / WatIND - 3/4" x 50' (Chicago)	day	$8.00	
WASH	IND-4-016	Hose, Chemical Resistant - 2" x 25'	day	$30.00	
WASH	IND-4-017	Hose, Chemical Resistant - 3" x 25'	day	$35.00	
WASH	IND-4-018	Hose, Fire 1-1/2" x 100'	day	$20.00	
WASH	IND-4-019	Hose, Fire 2-1/2" x 100'	day	$30.00	
WASH	IND-4-020	Hose, Fittings and Adapters (Misc.)	ea / day	$5.00	
WASH	IND-4-021	Hose, Hydroblast - 10,000 psi x 25'	day	$40.00	
WASH	IND-4-022	Hose, Hydroblast - 20,000 psi x 25'	day	$70.00	
WASH	IND-4-023	Hose, Pressure Washer 5,000 psi x 50'	day	$25.00	
WASH	IND-4-024	Hose, PVC -1" x 10'	day	$10.00	
WASH	IND-4-025	Hose, Vaccum Truck - 2" x 25'	day	$15.00	
WASH	IND-4-026	Hose, Vacuum Truck - 2" x 10'	day	$10.00	
WASH	IND-4-027	Hose, Vacuum Truck - 3" x 25'	day	$25.00	
WASH	IND-4-028	Hose, Wash Pump Discharge - 1-1/2" x 10 - 25'	day	$10.00	
WASH	IND-4-029	Hose, Wash Pump Discharge (Layflat)1-1/2" x 50'	day	$15.00	
WASH	IND-4-030	Hose, Wash Pump Suction - 2" x 10'	day	$8.00	
WASH	IND-4-031	Hydro blaster - 10,000 psi (10K)	day	$450.00	+ fuel
WASH	IND-4-032	Hydro blaster - 20,000 psi (20K)	day	$800.00	+ fuel
WASH	IND-4-033	Metatarsal Foot Protection	day	$25.00	
WASH	IND-4-034	Miscellaneous Tips / Fittings		cost+20%	
WASH	IND-4-035	Pressure Washer - 3,000 psi (gas engine)	day	$125.00	
WASH	IND-4-036	Pressure Washer- 3,500 - 5,000 psi (hot watler)	day	$250.00	
WASH	IND-4-037	Pressure Washer Trailer Mounted (hot water)	day	$250.00	
WASH	IND-4-038	Pump Double Diaphragm - 2" Aluminum	day	$70.00	
WASH	IND-4-039	Pump Double Diaphragm 2" Poly	day	$140.00	
WASH	IND-4-040	Pump Double Diaphragm 2" Stainless Steel	day	$180.00	
WASH	IND-4-041	Pump Double Diaphragm 3" Poly	day	$175.00	
WASH	IND-4-042	Pump Double diaphragm 3" Stainless Steel	day	$190.00	
WASH	IND-4-043	Pump, Disposable Drum	ea	$21.00	
WASH	IND-4-044	Pump, Rotary Petroleum Fuel - Manuel	day	$25.00	

ANDERSON POLLUTION CONTROL, INC.

Class	Code - 5	Pumps / Hoses / Washing Equipment (cont.)	UOM	ST. Rate	Add'l
WASH	IND-4-045	Roto - Nozzle 10k	day	$75.00	
WASH	IND-4-046	Shotgun 10k	day	$40.00	
WASH	IND-4-047	Steam Cleaner - Self Contained	day	$350.00	
WASH	IND-4-048	Surface Cleaner - 3,000 psi	day	$100.00	
WASH	IND-4-049	Wash Pump 2" - diesel powered	day	$90.00	
WASH	IND-4-050	Wash Pump 2" - gasoline powered	day	$75.00	
WASH	IND-4-051	Wash Pump 3" - diesel powered	day	$95.00	
WASH	IND-4-052	Wash Pump 3" - gasoline powered	day	$80.00	

Class	Code - 5	Sorbents	UOM	ST. Rate	Add'l
SORB	IND-5-011	Floor Gator - 50# bag	ea	$25.00	
SORB	IND-5-012	Kitty Litter	ea	$15.00	
SORB	IND-5-013	Mortar Mix, 40# bag	ea	$18.00	
SORB	IND-5-014	Oil Avenger - Granular - 50# bag	ea	$28.00	
SORB	IND-5-015	Oil Gator - 30# bag	ea	$43.00	
SORB	IND-5-016	Oil Sponge - General Purpose - 30# bag	ea	$33.00	
SORB	IND-5-017	Oil-Dri - Granular - 50# bag	ea	$25.00	
SORB	IND-5-018	Peat Moss - 2 cu. ft.	ea	$37.00	
SORB	IND-5-019	Snare Boom, Viscous Oil - 50' on Rope	ea	$80.00	
SORB	IND-5-020	Snare, Viscous Oil 30 / bag	ea	$69.00	
SORB	IND-5-021	Sorbent, Boom 5" x 10' - 4 / bale (petro)	bale	$99.00	
SORB	IND-5-022	Sorbent, Boom 5" x 10' - 4 / bale (univ)	bale	$135.00	
SORB	IND-5-023	Sorbent, Boom 8" x 10' - 4 / bale (petro)	bale	$175.00	
SORB	IND-5-024	Sorbent, Boom 8" x 10' - 4 / bale (univ)	bale	$200.00	
SORB	IND-5-025	Sorbent, Industrial Rug 36" x 300'	ea	$255.00	
SORB	IND-5-026	Sorbent, Pads - 100 / bale (chem)	bale	$70.00	
SORB	IND-5-027	Sorbent, Pads - 100 / bale (petro)	bale	$62.00	
SORB	IND-5-028	Sorbent, Pads - 100 / bale (univ)	bale	$105.00	
SORB	IND-5-029	Sorbent, Roll - 144' x 38" x 3/8" (petro)	ea	$155.00	
SORB	IND-5-030	Sorbent, Sweep - 100' x 17" x 1/4"	ea	$125.00	
SORB	IND-5-031	Sphag Sorb - 2 cu. ft.	ea	$43.00	
SORB	IND-5-032	Vermiculite - 2 cu. ft.	ea	$30.00	
SORB	IND-5-033	Zorbent, Absorbent material - 50# bag	ea	$60.00	

ANDERSON POLLUTION CONTROL, INC.

Class	Code - 6	Haz-Mat Equipment	UOM	ST. Rate	Add'l
HAZ	IND-6-010	Betz" Emergency Offloading Valve	day	$500.00	
HAZ	IND-6-011	Chlorine "A" Kit	day	$500.00	
HAZ	IND-6-012	Chlorine "B" Kit	day	$750.00	
HAZ	IND-6-013	Chlorine "C" Kit	day	$1,000.00	
HAZ	IND-6-014	Coliwasa, Disposable Glass Tubing	ea.	$20.00	
HAZ	IND-6-015	Compressor, Corken 2"	day	$1,750.00	
HAZ	IND-6-016	Drill, Pneumatic	day	$100.00	
HAZ	IND-6-017	HAZ-MAT Test Kit	day	$125.00	+ $ 30.00 / test
HAZ	IND-6-018	Laboratory Analysis		cost+20%	
HAZ	IND-6-019	Nitrogen, Gas Cylinder Refill	ea	$35.00	
HAZ	IND-6-020	Nitrogen, Liquid Purge		cost+20%	
HAZ	IND-6-021	pH Meter	day	$50.00	
HAZ	IND-6-022	pH Pen	day	$25.00	
HAZ	IND-6-023	Safety Shower, Emergency - (portable)	day	$125.00	
HAZ	IND-6-024	Sample Kit - Stainless Steel	day	$25.00	
HAZ	IND-6-025	Sample Tubing - Tygon 1/4"	ft	$3.00	
HAZ	IND-6-026	Sample, Soil Auger - Stainless Steel	day	$75.00	
HAZ	IND-6-027	Stinger, 1-1/2" x 60" - PVC	day	$25.00	
HAZ	IND-6-028	Stinger, 1-1/2" x 60" - Stainless Steel	day	$50.00	
HAZ	IND-6-029	Tedlar Bag	ea	$60.00	
HAZ	IND-6-030	Thermometer, Infrared	day	$75.00	

ANDERSON POLLUTION CONTROL, INC.

Class	Code - 7	Drums and Containers	UOM	ST. Rate	Add'l
CONT	IND-7-010	Drum Dolly	day	$25.00	
CONT	IND-7-011	Drum Labels	ea	$2.00	
CONT	IND-7-012	Drum Lift - Forklift Attachment	day	$25.00	
CONT	IND-7-013	Drum Liner 6 ml	ea	$1.50	
CONT	IND-7-014	Drum Patch Kit	ea	$75.00	
CONT	IND-7-015	Drum Sling	day	$20.00	
CONT	IND-7-016	Drum Wrench - Brass (Bung Wrench)	day	$10.00	
CONT	IND-7-017	Drum, 55 Gallons CT - Poly	ea	$55.00	
CONT	IND-7-018	Drum, 55 Gallons CT - Steel	ea	$55.00	
CONT	IND-7-019	Drum, 55 Gallons OT - Poly	ea	$55.00	
CONT	IND-7-020	Drum, 55 Gallons OT - Steel	ea	$55.00	
CONT	IND-7-021	Drum, 85 Gallons Salvage - Steel	ea	$150.00	
CONT	IND-7-022	Drum, 95 Gallon Over Pack - Poly	ea	$280.00	
CONT	IND-7-023	Frac Tank - 250 bbl capacity (mini)	day	$55.00	
CONT	IND-7-024	Frac Tank - 500 bbl capacity	day	$75.00	
CONT	IND-7-025	Frac Tank - 500 bbl capacity (Stainless)	day	$175.00	
CONT	IND-7-026	Lab Pack, 10 Gallon	ea	$50.00	
CONT	IND-7-027	Lab Pack, 5 Gallon	ea	$40.00	
CONT	IND-7-028	Poly Tanks 1,000 - 8,000 Gallons	day	cost+20%	
CONT	IND-7-029	Roll Off Box, 20 - 30 cu. yd. (wt) Roll Top	day	$68.00	
CONT	IND-7-030	Roll Off Box, 20 - 30 cu. yd. (wt) Tarped	day	$18.00	
CONT	IND-7-031	Secondary Containment (Frac Tank)	day	$48.00	
CONT	IND-7-032	Tank Trailer - 150 bbl capacity	day	$150.00	
CONT	IND-7-033	Tote - Poly - 325 Gallons	day	$50.00	
CONT	IND-7-034	Vacuum Box, 25 cu. yd.	day	$50.00	

ANDERSON POLLUTION CONTROL, INC.

Class	Code - 8	Miscellaneous Equipment	UOM	ST. Rate	Add'l
MISC	IND-8-010	Air Compressor 12 cfm - Gasoline	day	$75.00	
MISC	IND-8-011	Air Compressor 185 cfm - Diesel	day	$125.00	
MISC	IND-8-012	Air Compressor 20 cfm - Gasoline	day	$120.00	
MISC	IND-8-013	Air Compressor 375 cfm - Diesel	day	$250.00	
MISC	IND-8-014	BarriIND Tape	roll	$19.00	
MISC	IND-8-015	Bill Of Lading	ea	$2.00	
MISC	IND-8-016	Binoculars	day	$10.00	
MISC	IND-8-017	BlowIND, Air Horn - Confined Space	day	$40.00	
MISC	IND-8-018	BlowIND, Coppus - Confined Space	day	$75.00	
MISC	IND-8-019	Chain 25' Tow	day	$20.00	
MISC	IND-8-020	Chain Saw	day	$125.00	
MISC	IND-8-021	Drill, Pneumatic	day	$100.00	
MISC	IND-8-022	Drop Light, Explosion Proof / Electric	day	$75.00	
MISC	IND-8-023	Epoxy Stick	ea	$10.00	
MISC	IND-8-024	Extension Cord - 100'	day	$10.00	
MISC	IND-8-025	Fence - Safety Orange	roll	$75.00	
MISC	IND-8-026	Flashlight	day	$10.00	
MISC	IND-8-027	GenINDator 4 - 5 kw	day	$150.00	+ fuel
MISC	IND-8-028	GenINDator 6 - 8 kw	day	$195.00	+ fuel
MISC	IND-8-029	GenINDator 8 - 12 kw	day	$250.00	+ fuel
MISC	IND-8-030	Grounding / Bonding Cables - Rods	day	$10.00	
MISC	IND-8-031	Hand CleanIND	ea	$10.00	
MISC	IND-8-032	Hand Tools (shovel, rake, net...)	day	$10.00	
MISC	IND-8-033	Hand Tools (wrenches, sockets)	day	$10.00	
MISC	IND-8-034	Heat Stress	man/day	$10.00	
MISC	IND-8-035	Hole Saw - 2 - 1/2"	ea	$25.00	
MISC	IND-8-036	Lockout - Tagout Kit	day	$25.00	
MISC	IND-8-037	Manifest - Waste	ea	$2.00	
MISC	IND-8-038	MINDcon Wipes	ea	$1.25	
MISC	IND-8-039	MINDcury Indicator PowdIND - 250 grams	ea	$62.50	
MISC	IND-8-040	MINDcury Vacuum, Stainless Steel	day	$225.00	
MISC	IND-8-041	Oxy - Acetylene Cutting Outfit	day	$150.00	
MISC	IND-8-042	Paint, Ground Marking	can	$10.00	
MISC	IND-8-043	Pallet Grabber	day	$25.00	
MISC	IND-8-044	Pallet Jack	day	$75.00	

ANDERSON POLLUTION CONTROL, INC.

Class	Code - 8	Miscellaneous Equipment (continued)	UOM	ST. Rate	Add'l
MISC	IND-8-045	Personal Decontamination Brush	ea	$5.00	
MISC	IND-8-046	pH Strips (Box)	box	$15.00	
MISC	IND-8-047	Pipeline Probe	day	$10.00	
MISC	IND-8-048	Plug - N - Dike	can	$21.00	
MISC	IND-8-049	Pollution Bags - 6 ml - (100 / roll)	roll	$120.00	
MISC	IND-8-050	Pollution Can - 20 Gallon	ea	$25.00	
MISC	IND-8-051	Pool, Personnel Decontamination	ea	$15.00	
MISC	IND-8-052	Portable Lighting - Electric Halogen	day	$55.00	
MISC	IND-8-053	Roll of Box Liner	ea	$40.00	
MISC	IND-8-054	Rope 1/2" Poly x 600'	roll	$55.00	
MISC	IND-8-055	Rope 1/4" Poly x 600'	roll	$50.00	
MISC	IND-8-056	Rope 3/4" Poly x 600'	roll	$75.00	
MISC	IND-8-057	Rope 3/8" Poly x 600'	roll	$55.00	
MISC	IND-8-058	Sample Jar - 1/2 pint	ea	$1.00	
MISC	IND-8-059	Sample Jar - pint	ea	$1.00	
MISC	IND-8-060	Sample Jar - Quart	ea	$1.00	
MISC	IND-8-061	Scare Cannon - Propane Operated (automatic)	day	$200.00	
MISC	IND-8-062	Shop Vac - Wet / Dry	day	$75.00	
MISC	IND-8-063	Stake, Wooden Survey	ea	$1.00	
MISC	IND-8-064	T - Post 5' - Steel	ea	$10.00	
MISC	IND-8-065	T- Post Driver	day	$10.00	
MISC	IND-8-066	Tape, Chemical (PPE)	roll	$25.00	
MISC	IND-8-067	Tape, Duct	roll	$9.00	
MISC	IND-8-068	Tape, Flagging (fluorescent)	roll	$8.00	
MISC	IND-8-069	Tape, Teflon	roll	$5.00	
MISC	IND-8-070	Tiller, Gas Operated	day	$95.00	
MISC	IND-8-071	Visqueen 20' x 100'	roll	$75.00	
MISC	IND-8-072	Visqueen 40' x 100'	roll	$125.00	
MISC	IND-8-073	Weed Eater (2 cycle)	day	$75.00	
MISC	IND-8-074	Welding Machine	day	$190.00	
MISC	IND-8-075	Welding Supplies	ea	cost 20%	
MISC	IND-8-076	Wheel - Measuring / Roller	day	$10.00	
MISC	IND-8-077	Wheelbarrow	day	$10.00	

ANDERSON POLLUTION CONTROL, INC.

Class	Code - 9	Communications Equipment	UOM	ST. Rate	Add'l
COMM	IND-9-010	Cellular Phone	day	$15.00	
COMM	IND-9-011	Computer and Printer	day	$50.00	
COMM	IND-9-012	Copier	day	$50.00	
COMM	IND-9-013	Digital Camera	day	$15.00	
COMM	IND-9-014	Facsimile Machine	day	$30.00	
COMM	IND-9-015	Global Positioning System	day	$25.00	
COMM	IND-9-016	Photos - Prints - Digital Copies		cost+20%	
COMM	IND-9-017	Radio, 2 way Hand Held	day	$10.00	
COMM	IND-9-018	Radio, 2 way Hand Held - UL approved	day	$15.00	
COMM	IND-9-019	Satellite Telephone		cost+20%	
COMM	IND-9-020	Video Camera	day	$55.00	

Class	Code - 10	Chemicals and Neutralizers	UOM	ST. Rate	Add'l
CHEM	IND-10-010	Acetic Acid - 5 gallon pail	ea	$85.00	
CHEM	IND-10-011	Acetic Acid - 55 gallon drum	ea	$925.00	
CHEM	IND-10-012	Ammonia - Household	gal	$8.00	
CHEM	IND-10-013	Bleach, Household 5% - 1 gallon	ea	$5.00	
CHEM	IND-10-014	Citric Acid - 50# bag	ea	$72.00	
CHEM	IND-10-015	D-Limonator - 5 gallon pail	ea	$152.50	
CHEM	IND-10-016	D-Limonator - 55 gallon drum	ea	$1,655.00	
CHEM	IND-10-017	Ecosorb - Mercapthan Neutralizer	gal	$79.50	
CHEM	IND-10-018	Hydrochloric Acid - 30% solution	gal	$8.50	
CHEM	IND-10-019	Hydrogen Peroxide - 55 gallon drum	ea	$520.00	
CHEM	IND-10-020	Micro-Blaze - 5 gallon	ea	$195.00	
CHEM	IND-10-021	Petro-Clean - 5 gallon	ea	$182.50	
CHEM	IND-10-022	Petro-Clean 55 gallon	ea	$1,750.00	
CHEM	IND-10-023	PS-51, Degreaser - 55 gallon drum		cost+20%	
CHEM	IND-10-024	Soda ASH - 50# bag	ea	$21.00	
CHEM	IND-10-025	Sodium Bicarbonate - 50# bag	ea	$36.00	
CHEM	IND-10-026	Sodium Carbonate (fly ash)		cost+20%	
CHEM	IND-10-027	Sodium Hydroxide - 50% solution	gal	$50.00	
CHEM	IND-10-028	Sodium Hypochlorite - 10% solution	gal	$7.50	

ANDERSON POLLUTION CONTROL, INC.

Attachment "A" - 2012 Emerency Response Price Schedule
Fuel Surcharge Letter Schedule

At Anderson Pollution Control, Inc., we work deligently to provide you the best possible services at rates, which are highly competitive. Regrettably, due to the dramatic rise in the price for diesel fuel, we must ask that you accept a temporary increase in rates in the form of a fuel surcharge.

We will implement a fuel surcharge a fuel surcharge for all equipment such as (but not limited to) DOT trucks, pickup trucks and/ or any fuel burning equipment which is not noted as a "plus fuel" item on the preceeding price schedule. The surcharge will be determined in teh following fashion taken from the USDOE (United States Department of Energy) national average of diesel fuel pricing.

National Avg.	Price/Gal	Surcharge Percent Applied to hourly / Daily Rate of Equipment
$2.10	$2.19	14%
$2.20	$2.29	15%
$2.30	$2.39	16%
$2.40	$2.49	17%
$2.50	$2.59	18%
$2.60	$2.69	19%
$2.70	$2.79	20%
$2.80	$2.89	21%
$2.90	$2.99	22%
$3.00	$3.09	23%
$3.10	$3.19	24%
$3.20	$3.29	25%
$3.30	**$3.39**	**26%**
$3.40	$3.49	27%
$3.50	$3.59	28%
$3.60	$3.69	29%
$3.70	$3.79	30%
$3.80	$3.89	31%
$3.90	$3.99	32%
$4.00	$4.09	33%
$4.10	$4.19	34%
$4.20	$4.29	35%

Contract Number
CALSHV-GS-2009-028

CALUMET

CONTRACT FOR SERVICES

THIS AGREEMENT is made on this the 26th day of November, 2008 by and between CALUMET LUBRICANTS CO., LP, hereinafter referred to as OWNER, and Eagle Construction & Environmental Services, LLC, hereinafter referred to as CONTRACTOR.

WHEREAS CONTRACTOR, as an independent contractor, desires to furnish certain services to OWNER in connection with OWNER'S plant operations and represents that it is a duly qualified contractor for the purposes for which it is hired; and

WHEREAS OWNER desires to utilize the services of CONTRACTOR under the following terms and conditions;

NOW, THEREFORE, in consideration of the above premises and the following mutual obligations, the parties agree as follows:

1. This agreement shall control the legal relationship between the parties hereto for all transactions and relationships entered into between the effective date of this contract and the termination date hereof, notwithstanding anything to the contrary on any purchase order, invoice, delivery ticket or other documentation purporting to address such relationship, even if said documentation contains "notwithstanding" language.

2. Services rendered and equipment provided by CONTRACTOR shall be charged for at rates agreed upon at the time of the work or the furnishing equipment; if the rate is not agreed upon, charges shall be made at rates consistent with rates charged to comparable customers for comparable services.

3. CONTRACTOR shall render to OWNER invoices for services rendered to it hereunder promptly upon the performance of such service.

4. CONTRACTOR, at its cost and expense, shall provide adequate vehicles and equipment for use in the services to be performed hereunder and shall maintain such vehicles and equipment in good and sufficient condition, as to operation, safety and appearance. CONTRACTOR, at its sole cost and expense, shall employ responsible and adequately trained personnel, shall procure and maintain such licenses and permits as are required by local, state and federal authorities with respect to such services and shall comply with all laws and regulations applicable thereto.

5. CONTRACTOR shall be an independent contractor and shall have exclusive control and direction of the persons providing services. CONTRACTOR agrees that such persons are its employees and assumes full responsibility for the payment of wages, salaries, local, state and federal payroll taxes or contributions, and taxes for unemployment insurance, old age pensions, workers' compensation, social security or other similar protection with respect to the persons engaged in the performance of such services, and CONTRACTOR further agrees to comply with applicable rules and regulations promulgated under such laws.

6. CONTRACTOR shall procure and maintain, at its own expense, liability insurance with a reputable and financially responsible insurance carrier or carriers properly insuring CONTRACTOR against liability and claims (a) for injuries to persons (including injuries resulting in death), and (b) for damage to property, in an amount not less than $1,000,000 for bodily injury and $500,000 for property damages. Such liability insurance shall include a contractual liability endorsement, and to the extent allowed by law, CONTRACTOR SHALL CAUSE OWNER TO BE NAMED AS AN "ADDITIONAL INSURED" UNDER THE SAID LIABILITY POLICY. CONTRACTOR shall also carry workers' compensation insurance in such amounts as are required by applicable law, and all insurers of CONTRACTOR, to the extent allowed by law, shall agree to waive subrogation against OWNER. CONTRACTOR agrees to furnish to OWNER written certificates from such insurance carrier or carriers showing that such insurance has been procured and is being properly maintained, that the premiums therefor are paid, and specifying the name of the insurance carrier, the policy number or numbers and the expiration date or dates. Such insurance certificate shall provide that in the event of cancellation written notice shall be given OWNER at least ten (10) days prior to cancellation. CONTRACTOR understands that OWNER may refuse to accept services or allow work to begin unless and until such certificate has been furnished. Furthermore, CONTRACTOR, to the full extent allowed by law, agrees to assume full responsibility for and shall protect, defend, indemnify and save OWNER and its joint owners, if any, harmless from and against, all claims, demands and causes of action of every kind and character which may be brought by or against OWNER or OWNER's joint owners and employees (including, but not limited to, those brought by CONTRACTOR's employees or agents or employees of CONTRACTOR's subcontractors) for or on account of bodily injury, illness, disease, death, damage to property, pollution damage or remediation costs associated therewith which is incident to, arises out of, is in connection with or results from the performance of this contract or the operations, services or work contemplated hereby, even if occasioned by or caused in whole or in part by the negligence or fault (strict liability) of OWNER, its joint owners, agents, directors, officers, employees, servants

or subcontractors, or otherwise, or from the condition of any equipment, furnished, operated or controlled by OWNER.

7. OWNER and CONTRACTOR acknowledge and agree, for the purpose of the exclusive remedy provisions of the Louisiana Workers' Compensation Law, that it is their mutual intent that OWNER is and shall be recognized as a "statutory employer" of CONTRACTOR's employees.

8. This agreement shall not be assigned or transferred by CONTRACTOR without the written consent of OWNER.

9. This agreement shall become effective on the date hereof and shall continue in effect unless and until terminated by either party by not less than thirty (30) days prior written notice to the other party via registered mail at the following addresses:

CONTRACTOR:

Eagle Construction & Environmental Services, LLC
Attention: Marc Walraven
9701 I-20 East
Eastland, TX 76448
254-629-1718

CALUMET LUBRICANTS CO., LP:

Calumet Lubricants Co., LP
Attention: Purchasing Department
P.O. Box 3099
Shreveport, LA 71133-3099

10. This Agreement shall be governed by and construed under the laws of the State of Louisiana.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed as of the day and year first above written.

CALUMET LUBRICANTS CO., LP

By: _____
Clayton Long, Purchasing Manager

CONTRACTOR:
Eagle Construction & Environmental Services, LLC

By: _____

Marc Walraven - President
[Print or Type Name]

SWS ENVIRONMENTAL SERVICES

Emergency Response
Remediation
Field Services
Waste Services

1509 State Highway 135 North
Kilgore, Texas 75662
Phone: 903 984 0001
Fax: 903 984 0019
www.swsenvironmental.com

June 27, 2012

Lyndon Johnson
Calumet Shreveport Lubricants & Waxes, LLC
3333 Midway Avenue
Shreveport, Louisiana 71109

Re: OPA-90 Compliance and Response for Calumet Shreveport Lubricants & Waxes, LLC

Mr. Johnson,

SWS Environmental Services (SWS) certifies that our records are current and in compliance with OPA-90 regulations pertaining to Oil Spill Removal Organizations (OSRO) within the operating environments of the Calumet Shreveport Lubricants & Waxes, LLC facility located at 3333 Midway Avenue in Shreveport, Louisiana. SWS (OSRO #247) facilitates emergency responses, including mobile transfer operations, from our corporate headquarters located at 600 Grand Panama Boulevard in Panama City Beach, Florida. Upon request, SWS can immediately dispatch responders, in accordance with the terms of the emergency response agreement between SWS and Calumet Shreveport Lubricants & Waxes, LLC, to the before-mentioned facility 24-hours per day, seven (7) days per week, 365 days per year.

If you have any questions or would like to request services from SWS, please contact our corporate headquarters at **1-877-742-4215** or the local Kilgore, Texas Service Center at **903-984-0001**.

For an overview of services and capabilities provided by SWS, please visit the company website at www.swsenvironmental.com.

Respectfully Submitted,
SWS Environmental Services

Kim McWhirter
Kilgore, Texas Service Center Manager

OIL SPILL REMOVAL ORGANIZATION

SWS ENVIRONMENTAL SERVICES

OSRO NO. 247

SWS ENVIRONMENTAL SERVICES
(CORPORATE)

600 GRAND PANAMA BOULEVARD (SUITE 200)

PANAMA CITY BEACH, FLORIDA 32407

24 HOUR CONTACT – 1-877-742-4215

www.swsenvironmental.com

Dear Valued Client,

SWS Environmental Services (SWS) prides itself on being one of the premier *Emergency Response* contractors in the United States with Service Centers strategically located throughout multiple Marine Safety Office (MSO) / Captain of the Port (COTP) sectors. SWS Service Centers are equipped with state-of-the-art Oil Spill Removal Organization (OSRO) equipment that can be immediately dispatched to any accessible location required. Response coverage is also available throughout the following MSO/COTP sectors:

- Key West, Florida
- Miami, Florida
- Tampa, Florida
- Jacksonville, Florida
- Savannah, Georgia
- Atlanta, Georgia
- Mobile, Alabama
- Paducah, Kentucky
- Lower Mississippi (Formally MSO/COTP Memphis)
- Ohio Valley (Formally MSO/COTP Louisville
- Corpus Christi
- Houston
- Port Arthur

Sub-ports:

- Jacksonville (Port Canaveral, Florida)
- Mobile (Port of Panama City, Florida)
- Miami (Port of Everglades, Florida)
- Tampa (Port Manatee, Florida)

SWS has met all criteria to qualify as a responder for all classifications (MMPD, WCD1, WCD2, and WCD3) for the River/Canal and Inland categories within the Coast Guard OSRO classification guidelines dated April 27, 2001.

- MMPD = Maximum Most Probable Discharge
- WCD = Worst Case Discharge
- Tiers 1, 2, and 3 = The combination of response resources and the times within which the resources must be capable of arriving on-scene to meet WCD resource requirements as defined in 33 CFR 154.1020 and 33 CFR 155.1025.

The attached documentation will provide a comprehensive overview of SWS and our capabilities for responding 24 hours a day, 7 days a week, 365 days a year. For additional information, please contact us at 1-877-742-4215 or you can visit our website at www.swsenvironmental.com.

Respectfully Submitted,
SWS Environmental Services

USCG CLASSIFICATION MATRIX

SWS Environmental Services - OSRO Number 247
USCG Classification Matrix

COTP Zone:	Operating Environment	Facility MMPD	Facility WCD1	Facility WCD2	Facility WCD3	Vessel MMPD	Vessel WCD1	Vessel WCD2	Vessel WCD3
Jacksonville - DISTRICT 7	River or Canal	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Jacksonville - DISTRICT 7	Inland	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Jacksonville(Port Canaveral, FL) - DISTRICT 7	River or Canal	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Jacksonville(Port Canaveral, FL) - DISTRICT 7	Inland	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Key West - DISTRICT 7	River or Canal	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Key West - DISTRICT 7	Inland	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Lower Mississippi - DISTRICT 8	River or Canal	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Lower Mississippi - DISTRICT 8	Inland	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Miami - DISTRICT 7	River or Canal	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Miami - DISTRICT 7	Inland	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mobile - DISTRICT 8	River or Canal	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mobile - DISTRICT 8	Inland	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mobile(Panama City, FL) - DISTRICT 8	River or Canal	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mobile(Panama City, FL) - DISTRICT 8	Inland	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ohio Valley - DISTRICT 8	River or Canal	Yes	~	Yes	Yes	Yes	Yes	Yes	Yes
Ohio Valley - DISTRICT 8	Inland	Yes	~	Yes	Yes	Yes	Yes	Yes	Yes
Paducah - DISTRICT 8	River or Canal	Yes	~	Yes	Yes	Yes	Yes	Yes	Yes
Paducah - DISTRICT 8	Inland	Yes	~	Yes	Yes	Yes	Yes	Yes	Yes
Savannah - DISTRICT 7	River or Canal	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Savannah - DISTRICT 7	Inland	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
St. Petersburg - DISTRICT 7	River or Canal	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
St. Petersburg - DISTRICT 7	Inland	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Corpus Christi - DISTRICT 8	River or Canal	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Houston - DISTRICT 8	River or Canal	~	~	Yes	Yes	Yes	Yes	Yes	Yes
Port Arthur - DISTRICT 8	River or Canal	~	~	Yes	Yes	Yes	Yes	Yes	Yes

SERVICE CENTER LOCATION(S)

SWS ENVIRONMENTAL SERVICES

Alabama
Birmingham
Decatur
Montgomery

Florida
Ft. Lauderdale
Ft. Myers
Jacksonville
Lake Wales
Orlando
Panama City Beach
Pensacola
St. Petersburg
Tampa

Georgia
Atlanta
Savannah
Waycross

Illinois
Chicago

Kentucky
Paducah

Louisiana
Baton Rouge

North Carolina
Greensboro

Ohio
Findlay
Cincinnati

Tennessee
Knoxville
Memphis
Nashville

Texas
Austin
Dallas
Ft. Worth
Houston
San Antonio
Kilgore

On The Web ▼ www.swsenvironmental.com

On The Phone ▼ 1-877-742-4215

Via Email ▼ info@swsenvironmental.com

EQUIPMENT DEPLOYMENT REPORT(S)

SWS ENVIRONMENTAL SERVICES

EQUIPMENT DEPLOYMENT REPORT

Documentation of SWS Environmental Services equipment used during spill response, drills or training.

PLEASE PROVIDE THE FOLLOWING INFORMATION UPON COMPLETION OF THE PROJECT

PROJECT DATE(S): 3/19/2012 SWS JOB#: FC3-203-1360

NAME OF SUPERVISOR: Kelly Halbert PHONE/FAX: 813-241-0202

RESPONSIBLE PARTY: Kinder Morgan Pipeline SERVICE CENTER Tampa

MSO/COTP ZONE Tampa

ENVIRONMENT (CIRCLE ONE)

PROTECTED SHELTERED UNSHELTERED

GEOGRAPHICAL DESCRIPTION (FACILITY, BODY OF WATER, MILES OFFSHORE)

Port Tampa "Cut D" Channel

EQUIPMENT DEPLOYED [Types of boom, boats, temporary storage devices, Command/Communications Center.

1,000 ft 18" hard containment boom, 1-26' boat

PERSONNEL: [List by category]

Kelly Halbert - Supervisor, Mike Gonzalez - Boat operator, Anthony Foster - Deck Hand, Derrick Smiley - Technician

ADDITIONAL REMARKS:

I certify that: 1) The equipment is in good working order and was properly operated in the environment indicated;
2) Involved personnel demonstrated competency in deployment and operation of the equipment.

3/22/2012 — DATE

Mike Bevacqua — PRINT NAME OF SUPERVISOR

SUPERVISOR SIGNATURE

This report is used for crediting SWS's client response plan holders for OSRO equipment deployment under the Preparedness Response Exercise Program (PREP), all deployments, wether during actual spill response, training or exercise / drills must be Properly documented. SWS must certify that: 1) Response equipment is operational; 2) Personnel are capable of deploying and Operating the equipment in a spill response; and 3) Response resources participate in annual deployment drills.

EQUIPMENT DEPLOYMENT REPORT

Documentation of SWS equipment used during spill response, drills or training

RESPONSIBLE PARTY: Marathon **RP CONTACT**: Mike Easterday

RP PHONE #: 615-394-2721 **RP FAX #**: N/A

SWS SUPERVISOR: Shawn Jones **SWS JOB #**: NS2-204-1188

START DATE OF PROJECT: 4/11/12 **SWS SERVICE CENTER**: NSH-220

SWS PHONE #: 800-852-8878 **MSO / COTP SECTOR**: Paducah

ENVIRONMENT (CHECK ONE) - Unsheltered

PROTECTED SHELTERED UNSHELTERED

GEOGRAPHICAL DESCRIPTION (Facility, Body of Water, Miles of Shore)
Cumberland River 1,000 feet of shoreline

EQUIPMENT DEPLOYED:1,000 feet of 18 inch river boom, vacuum truck, skimmer, 3 work boats

SWS PERSONNEL: List by category (supervisor, foreman, equipment operator, technician, etc.)

Sup. Shawn Jones, Operators- DJ Skaggs, Richard Kell, Doug Fredrick, T/2- Dustin Tomes, Royce Zoycheck, Mike Makey, Steve Bacon , SWS IC-Rob weber, Benny G. Howell

ADDITIONAL REMARKS: SWS deployed 1,000 feet of boom on the Cumberland River for the Marathon spill drill. Agency's involved were; TEMA, TDOT, USEPA, US Coast Guard, Metro Fire, Metro Police

SWS CERTIFIES THAT: 1) The equipment is in good working order and was properly operated in the environment indicated;
2) Involved personnel demonstrated competency in deployment and operation of the equipment.

4/11/12	Benny G Howell	SIGNATURE ON FILE
DATE	**SWS SUPERVISOR**	**SUPERVISOR SIGNATURE**

This report is used for crediting SWS's client response plan holders for OSRO equipment deployment under the Preparedness exercise Program (PREP), all deployments, whether during actual spill response, training or exercise / drills must be properly documented.

Corporate Headquarters
600 Grand Panama Boulevard (Suite 200)
Panama City Beach, Florida 32407

SWS ENVIRONMENTAL SERVICES

EQUIPMENT DEPLOYMENT REPORT

Documentation of SWS Environmental Services equipment used during spill response, drills or training.

PLEASE PROVIDE THE FOLLOWING INFORMATION UPON COMPLETION OF THE PROJECT

PROJECT DATE(S): 11/8/2011 – 2-16-2012 SWS JOB#: FC1-111-1169

NAME OF SUPERVISOR: Mike Bevacqua PHONE/FAX: (813) 241-0282

RESPONSIBLE PARTY: CSXT SERVICE CENTER Tampa

MSO/COTP ZONE McKay Bay at CSX Rockport pier

ENVIRONMENT (CIRCLE ONE)

{PROTECTED} SHELTERED UNSHELTERED

GEOGRAPHICAL DESCRIPTION (FACILITY, BODY OF WATER, MILES OFFSHORE)

EQUIPMENT DEPLOYED [Types of boom, boats, temporary storage devices, Command/Communications Center.
1-28' work boat & 1000' of 18" containment boom

PERSONNEL: [List by category]
1-Supervisor, 1- Boat Operator & 5- Technicians

ADDITIONAL REMARKS:
Boom deployed around collapsed loading crane as an environmental precaution.

I certify that: 1) The equipment is in good working order and was properly operated in the environment indicated;
2) Involved personnel demonstrated competency in deployment and operation of the equipment.

2-28-2012	Mike Bevacqua	Michael Bevacqua
DATE	PRINT NAME OF SUPERVISOR	SUPERVISOR SIGNATURE

This report is used for crediting SWS's client response plan holders for OSRO equipment deployment under the Preparedness Response Exercise Program (PREP), all deployments, wether during actual spill response, training or exercise / drills must be Properly documented. SWS must certify that: 1) Response equipment is operational; 2) Personnel are capable of deploying and Operating the equipment in a spill response; and 3) Response resources participate in annual deployment drills.

ENVIRONMENTAL SERVICES

EQUIPMENT DEPLOYMENT REPORT

Documentation of Eagle-SWS equipment used during spill response, drills or training.

PLEASE PROVIDE THE FOLLOWING INFORMATION UPON COMPLETION OF THE PROJECT

PROJECT DATE(S): 9-1-11 To 9-25-11 Eagle-SWS JOB#: PNH-109-1000 / COH-109-1055

NAME OF SUPERVISOR: Rob Sauce PHONE/FAX: 850-969-0092

RESPONSIBLE PARTY: Gulf Coast Asphalt Co. SERVICE CENTER Pensacola / Corp.

MSO/COTP ZONE Mobile, AL.

ENVIRONMENT (CIRCLE ONE)

(PROTECTED) SHELTERED UNSHELTERED

GEOGRAPHICAL DESCRIPTION (FACILITY, BODY OF WATER, MILES OFFSHORE)

Gulf Coast Asphalt Co, Mobile River, Mobile, AL.

EQUIPMENT DEPLOYED [Types of boom, boats, temporary storage devices, Command/Communications Center.

20,500' OF 18" River Boom, 17- Response Boats Ranging From 16'-23', 1-20,000 gallon Frac Tank.

PERSONNEL: [List by category]

3- EL Response Managers/Sup., 17- Boat Operators, 3-Vac Truck Operators, 2-Safety Officers, 63 -Trained Response Technicians.

ADDITIONAL REMARKS:

Equipment → 3- 70BBL Vac Trucks, 8-36" Drum Skimmers, and 3- Skid Mounted Vac Systems.

I certify that: 1) The equipment is in good working order and was properly operated in the environment indicated;
2) Involved personnel demonstrated competency in deployment and operation of the equipment.

9-25-11	Robert Sauce	
DATE	PRINT NAME OF SUPERVISOR	SUPERVISOR SIGNATURE

This report is used for crediting Eagle-SWS's client response plan holders for OSRO equipment deployment under the Response Exercise Program (PREP), all deployments, wether during actual spill response, training or exercise / drills must be Properly documented. Eagle-SWS must certify that: 1) Response equipment is operational; 2) Personnel are capable of Operating the equipment in a spill response; and 3) Response resources participate in annual deployment drills.

SWS ENVIRONMENTAL SERVICES

EQUIPMENT DEPLOYMENT REPORT

Documentation of SWS Environmental Services equipment used during spill response, drills or training.

PLEASE PROVIDE THE FOLLOWING INFORMATION UPON COMPLETION OF THE PROJECT

PROJECT DATE(S): 4/25/11 SWS JOB#: FC3104322

NAME OF SUPERVISOR: Mike Bevacqua PHONE/FAX: 813-241-0282 / 813-241-6765

RESPONSIBLE PARTY: Marathon Petroleum SERVICE CENTER Tampa

MSO/COTP ZONE Tampa

ENVIRONMENT (CIRCLE ONE)

PROTECTED SHELTERED UNSHELTERED

GEOGRAPHICAL DESCRIPTION (FACILITY, BODY OF WATER, MILES OFFSHORE)
Ybor Channel

EQUIPMENT DEPLOYED [Types of boom, boats, temporary storage devices, Command/Communications Center.
1000' 18" containment boom, 1-25' workboat

PERSONNEL: [List by category]
1-Marine Operator, 3-technicians,

ADDITIONAL REMARKS:
Spill Drill deployed 1000' of !8" containment boom

I certify that: 1) The equipment is in good working order and was properly operated in the environment indicated;
2) Involved personnel demonstrated competency in deployment and operation of the equipment.

5-3-11 Michael Bevacqua

DATE PRINT NAME OF SUPERVISOR SUPERVISOR SIGNATURE

This report is used for crediting SWS's client response plan holders for OSRO equipment deployment under the Preparedness Response Exercise Program (PREP), all deployments, wether during actual spill response, training or exercise / drills must be Properly documented. SWS must certify that: 1) Response equipment is operational; 2) Personnel are capable of deploying and Operating the equipment in a spill response; and 3) Response resources participate in annual deployment drills.

SWS ENVIRONMENTAL SERVICES

EQUIPMENT DEPLOYMENT REPORT

Documentation of SWS Environmental Services equipment used during spill response, drills or training.

PLEASE PROVIDE THE FOLLOWING INFORMATION UPON COMPLETION OF THE PROJECT

PROJECT DATE(S): 7/2211 – 8/25/11 SWS JOB#: FC11070520

NAME OF SUPERVISOR: Mike Bevacqua PHONE/FAX: 813-241-0282 / 813-241-6765

RESPONSIBLE PARTY: Kinder Morgan SERVICE CENTER Tampa

MSO/COTP ZONE Tampa

ENVIRONMENT (CIRCLE ONE)

PROTECTED SHELTERED UNSHELTERED

GEOGRAPHICAL DESCRIPTION (FACILITY, BODY OF WATER, MILES OFFSHORE)
Canal

EQUIPMENT DEPLOYED [Types of boom, boats, temporary storage devices, Command/Communications Center.
3400' 18" containment boom, 7-12' john boats, 1-72" drum skimmer, 4-36" drum skimmer, 5-frac tanks, 5,640' of 5" absorbent boom, 2,040' of 8" absorbent boom

PERSONNEL: [List by category]
3-Supvervisors, 10-foreman, 77-technicians, 1-logistics coordinator, 1-field clerk

ADDITIONAL REMARKS:

I certify that: 1) The equipment is in good working order and was properly operated in the environment indicated;
2) Involved personnel demonstrated competency in deployment and operation of the equipment.

9. 15. 11 — DATE

Mike Bevacqua — PRINT NAME OF SUPERVISOR

SUPERVISOR SIGNATURE

This report is used for crediting SWS's client response plan holders for OSRO equipment deployment under the Preparedness Response Exercise Program (PREP), all deployments, wether during actual spill response, training or exercise / drills must be Properly documented. SWS must certify that: 1) Response equipment is operational; 2) Personnel are capable of deploying and Operating the equipment in a spill response; and 3) Response resources participate in annual deployment drills.

SWS ENVIRONMENTAL SERVICES

EQUIPMENT DEPLOYMENT REPORT

Documentation of SWS Environmental Services equipment used during spill response, drills or training.

PLEASE PROVIDE THE FOLLOWING INFORMATION UPON COMPLETION OF THE PROJECT

PROJECT DATE(S): 6/8/11 –6/24/11 SWS JOB#: FC11060215

NAME OF SUPERVISOR: Mike Bevacqua PHONE/FAX: 813-241-0282 / 813-241-6765

RESPONSIBLE PARTY: Kinder Morgan SERVICE CENTER Tampa

MSO/COTP ZONE Tampa

ENVIRONMENT (CIRCLE ONE)

PROTECTED SHELTERED UNSHELTERED

GEOGRAPHICAL DESCRIPTION (FACILITY, BODY OF WATER, MILES OFFSHORE)
Tampa Bay

EQUIPMENT DEPLOYED [Types of boom, boats, temporary storage devices, Command/Communications Center.
1300' 18" containment boom, 1-25' work boat, 1-12' john boat, 2-36" drum skimmer, 1-frac tanks, 560' of 5" absorbent boom, 760' of 8" absorbent boom

PERSONNEL: [List by category]
1-Incident Commander, 1-Project Manager, 1-Supvervisor, 7-technicians, 2-Marine operators, 3 Equipment operators

ADDITIONAL REMARKS:

I certify that: 1) The equipment is in good working order and was properly operated in the environment indicated;
2) Involved personnel demonstrated competency in deployment and operation of the equipment.

6.30.11	Mike Bevacqua	
DATE	PRINT NAME OF SUPERVISOR	SUPERVISOR SIGNATURE

This report is used for crediting SWS's client response plan holders for OSRO equipment deployment under the Preparedness Response Exercise Program (PREP), all deployments, wether during actual spill response, training or exercise / drills must be Properly documented. SWS must certify that: 1) Response equipment is operational; 2) Personnel are capable of deploying and Operating the equipment in a spill response; and 3) Response resources participate in annual deployment drills.

SWS ENVIRONMENTAL SERVICES

	Ft. Lauderdale, FL	Ft. Myers, FL	Jacksonville, FL	Lake Wales, FL	Orlando, FL	Panama City Beach, FL	Pensacola, FL	St. Petersburg, FL	Tampa, FL	Baton Rouge, LA	Austin, TX	Dallas, TX	Ft. Worth, TX	Houston, TX	San Antonio, TX	Kilgore, TX	Atlanta, GA	Savannah, GA	Waycross, GA	Birmingham, AL	Decatur, AL	Montgomery, AL	Greensboro, NC	Knoxville, TN	Memphis, TN	Nashville, TN	Paducah, KY	Findlay, OH	Cincinnati, OH	Chicago, IL	TOTAL
Vacuum Equipment																															
3,300-Gallon Liquid Truck	2			1	2	2	1	3	1	1	1		3	3		2	3	1	1				1		1	1	1	2	1	1	**35**
3,300-Gallon High Dump Industrial Loader	1				2				1										1							1				1	**7**
Industrial Loader			1	1				3									1							1				2			**9**
Liquid Ring Vacuum Truck									1												1							1			**3**
2,000-Gallon Quickload Vacuum Truck		1																	1												**2**
2,300- Gallon Combina ion Machine						1														1											**2**
2,500-Gallon Liquid Vacuum Truck			2			1						1			1									1							**6**
4,000-Gallon Liquid Vacuum Truck						3																									**3**
4,500-Gallon Liquid Vacuum Truck															1																**1**
5,000-Gallon Liquid Vacuum Truck														2																	**2**
6,000-Gallon Liquid Vacuum Truck													1		1																**2**
Airmover / Jet Rod Combo Unit														1																	**1**
Airmover														1																	**1**
High Pressure Water Equipment																															
2,000 psi Pressure Washer			2	1	1	1			1	1				2	1		1	1		1				1	2	1			1		**18**
3,000 psi Pressure Washer	2																														**2**
4,000 psi Pressure Washer														1									1								**2**
2,000 psi High Volume Line Jetter	1																														**1**
3,000 psi High Volume Line Jetter																		1	1												**2**
4,000 psi High Volume Line Jetter																1												3			**4**
3,000 psi Pressure Washer (Hotsy)						1	1																								**2**
3,500 psi Pressure Washer (Hotsy)												1	3																	1	**5**
20,000 psi Hydroblaster														1																	**1**
Response Vehicles																															
24 ft. Emergency Response Truck (ERT)														1				1								1		1			**4**
20 ft. Emergency Response Van																	1		1							1					**3**
Haz-Mat Response Unit (Ambulance Type)	1																														**1**
30 ft. Oil Spill Equipped Trailer																												1			**1**
Transfer Trailer Semi																												2			**2**
F-150	1	1	1	2	3	3	2	5	2						1		2		1	2	1			1			1		1		**30**
F-250	3	1	3	3	3	3	4	2	3	1	1	2		6		3	3	3	1	2	2	1	2	1	3	2	3	7	2	1	**71**
F-350			1			1		1		4			4	4	9	1	1		1	1				1				3	1	2	**35**
F-450 (Stake Bed)	1	1	1	1	1	1	2	1	1	1			1		1	1	1	1		1			1	1		1	2	1	1	1	**25**
F-550																										1					**1**
Dodge 3500 (Stake Bed)															1																**1**
Emergency Response Trailer	2	1	2	3	1	2	1	1	2	2	1	1	3	2	1	1	3	1	1	2	2	1	2	3	2	1	1	1	1	2	**49**
Roll-off Equipment																															
70,000 lb. Roll-off Truck	1		2	1	3	1	1	5					2	2		1	3	1		1					1	1	2	2	1		**31**
64,000 lb. Roll-off Truck		1										1																			**2**
Bobtail Roll-off Truck															2																**2**
Double Bottom Roll-Off Trailer													3	1	1																**5**
Semi Tractors															4													1			**5**
Winch Truck																												1			**1**
20 yd. Debris Box	8		3		2	4	6	2					23															6			**54**
25 yd. Debris Box													24	13																	**37**
30 yd. Debris Box													29	13	7												25				**74**
40 yd. Debris Box													1	8	3																**12**

SWS ENVIRONMENTAL SERVICES

	Ft. Lauderdale, FL	Ft. Myers, FL	Jacksonville, FL	Lake Wales, FL	Orlando, FL	Panama City Beach, FL	Pensacola, FL	St. Petersburg, FL	Tampa, FL	Baton Rouge, LA	Austin, TX	Dallas, TX	Ft. Worth, TX	Houston, TX	San Antonio, TX	Kilgore, TX	Atlanta, GA	Savannah, GA	Waycross, GA	Birmingham, AL	Decatur, AL	Montgomery, AL	Greensboro, NC	Knoxville, TN	Memphis, TN	Nashville, TN	Paducah, KY	Findlay, OH	Cincinnati, OH	Chicago, IL	TOTAL
Roll-off Equipment Cont.																															
10 yd. Soil Box																		2													**2**
20 yd. Soil Box			2	6				6						10	5	11	9	2		2						4					**57**
25 yd. Soil Box															5										1						**6**
20 yd. Gasket Box		1	5		4			8									2			4							26		4		**54**
25 yd. Gasket Box																											6				**6**
20 yd. Vacuum Box	1			6	8			13						4			2														**34**
25 yd. Vacuum Box													10																		**10**
20 yd. Dewatering Box																1															**1**
Skid Mounted Flatbeds						1	1																								**2**
Skid Mounted 2,800-Gallon Tank							1																								**1**
Skid Mounted 4,000-Gallon Tank						1																									**1**
Containment Boom																															
10-inch (Quantity Indicated is Feet)													600						1,000						800	400	400	2,500			**5700**
12-inch (Quantity Indicated is Feet)																											500				**500**
18-inch (Quantity Indicated is Feet)	2,500	800	1,300	150	1,000	12,000	2,500	13,000	1,700	1,000	1,000	1,000	2,000	10,000	1,400	1,000		1,400					1,200	1,000		2,000	2,800			1,000	**61750**
22-inch (Quantity Indicated is Feet)																	600														**600**
24-inch (Quantity Indicated is Feet)																				1,000	1,000	1,000							1,000		**4000**
Skimming Equipment																															
TDS 118 Drum Skimmer																				1								1			**2**
TDS 136 Drum Skimmer						1							1				1	1													**4**
GT 185 Drum Skimmer						1		1																				1			**3**
36-inch Drum Skimmer	1		1			1	2		1					1	1								1			1	1				**11**
Weir Skim Pack							2		1				1		1																**5**
Foilex Skimmer													1																		**1**
Pumping Equipment																															
2-inch Peristalic - Petroleum						4		1	1														1								**7**
2-inch Peristalic - Chemical																	1						1			1					**3**
1" Double Diaphram Pump	1								1	2			3			1					1						1				**10**
2" Double Diaphram Pump	2				1	1	1	1	1	2			4	3	5	1	1	1		1	2			2			1	3	2	1	**36**
3" Double Diaphram Pump			2		2	1	1						1					1	1						2	1	1	1			**14**
3" Peristaltic Pump												1																			**1**
3" Submersable - Pneumatic	1																														**1**
3" Diaphram																											1				**1**
2" Gear Pump																												2			**2**
2" Transfer Pump																												4	2		**6**
3" Transfer Pump																												3		1	**4**
4" Transfer Pump																												1			**1**
2" Trash Pump																												1			**1**
3" Trash Pump																												4			**4**
2" Cintriffical Pump														6																	**6**
Marine Response Boats / Vessels																															
16 to 25 Feet	2	1	1	1	1	2	3											1		1		1							1	1	**16**
25 to 42 Feet			1			1		1	1	1				1										1	1	1	1				**10**
Jon Boat								1		1			2	2	2	1	1	1					1		1			5	2		**20**

Contract Number
CALSHV-GS-2009-062

CALUMET

CONTRACT FOR SERVICES

THIS AGREEMENT is made on this the 19th day of May, 2009 by and between CALUMET LUBRICANTS CO., LP, hereinafter referred to as OWNER, and TAS Environmental Services, hereinafter referred to as CONTRACTOR.

WHEREAS CONTRACTOR, as an independent contractor, desires to furnish certain services to OWNER in connection with OWNER'S plant operations and represents that it is a duly qualified contractor for the purposes for which it is hired; and

WHEREAS OWNER desires to utilize the services of CONTRACTOR under the following terms and conditions;

NOW, THEREFORE, in consideration of the above premises and the following mutual obligations, the parties agree as follows:

1. This agreement shall control the legal relationship between the parties hereto for all transactions and relationships entered into between the effective date of this contract and the termination date hereof, notwithstanding anything to the contrary on any purchase order, invoice, delivery ticket or other documentation purporting to address such relationship, even if said documentation contains "notwithstanding" language.

2. Services rendered and equipment provided by CONTRACTOR shall be charged for at rates agreed upon at the time of the work or the furnishing equipment; if the rate is not agreed upon, charges shall be made at rates consistent with rates charged to comparable customers for comparable services.

3. CONTRACTOR shall render to OWNER invoices for services rendered to it hereunder promptly upon the performance of such service.

4. CONTRACTOR, at its cost and expense, shall provide adequate vehicles and equipment for use in the services to be performed hereunder and shall maintain such vehicles and equipment in good and sufficient condition, as to operation, safety and appearance. CONTRACTOR, at its sole cost and expense, shall employ responsible and adequately trained personnel, shall procure and maintain such licenses and permits as are required by local, state and federal authorities with respect to such services and shall comply with all laws and regulations applicable thereto.

5. CONTRACTOR shall be an independent contractor and shall have exclusive control and direction of the persons providing services. CONTRACTOR agrees that such persons are its employees and assumes full responsibility for the payment of wages, salaries, local, state and federal payroll taxes or contributions, and taxes for unemployment insurance, old age pensions, workers' compensation, social security or other similar protection with respect to the persons engaged in the performance of such services, and CONTRACTOR further agrees to comply with applicable rules and regulations promulgated under such laws.

6. CONTRACTOR shall procure and maintain, at its own expense, liability insurance with a reputable and financially responsible insurance carrier or carriers properly insuring CONTRACTOR against liability and claims (a) for injuries to persons (including injuries resulting in death), and (b) for damage to property, in an amount not less than $1,000,000 for bodily injury and $500,000 for property damages. Such liability insurance shall include a contractual liability endorsement, and to the extent allowed by law, CONTRACTOR SHALL CAUSE OWNER TO BE NAMED AS AN "ADDITIONAL INSURED" UNDER THE SAID LIABILITY POLICY. CONTRACTOR shall also carry workers' compensation insurance in such amounts as are required by applicable law, and all insurers of CONTRACTOR, to the extent allowed by law, shall agree to waive subrogation against OWNER. CONTRACTOR agrees to furnish to OWNER written certificates from such insurance carrier or carriers showing that such insurance has been procured and is being properly maintained, that the premiums therefor are paid, and specifying the name of the insurance carrier, the policy number or numbers and the expiration date or dates. Such insurance certificate shall provide that in the event of cancellation written notice shall be given OWNER at least ten (10) days prior to cancellation. CONTRACTOR understands that OWNER may refuse to accept services or allow work to begin unless and until such certificate has been furnished. Furthermore, CONTRACTOR, to the full extent allowed by law, agrees to assume full responsibility for and shall protect, defend, indemnify and save OWNER and its joint owners, if any, harmless from and against, all claims, demands and causes of action of every kind and character which may be brought by or against OWNER or OWNER's joint owners and employees (including, but not limited to, those brought by CONTRACTOR's employees or agents or employees of CONTRACTOR's subcontractors) for or on account of bodily injury, illness, disease, death, damage to property, pollution damage or remediation costs associated therewith which is incident to, arises out of, is in connection with or results from the performance of this contract or the operations, services or work contemplated hereby, even if occasioned by or caused in whole or in part by the negligence or fault (strict liability) of OWNER, its joint owners, agents, directors, officers, employees, servants

or subcontractors, or otherwise, or from the condition of any equipment, furnished, operated or controlled by OWNER.

7. OWNER and CONTRACTOR acknowledge and agree, for the purpose of the exclusive remedy provisions of the Louisiana Workers' Compensation Law, that it is their mutual intent that OWNER is and shall be recognized as a "statutory employer" of CONTRACTOR's employees.

8. This agreement shall not be assigned or transferred by CONTRACTOR without the written consent of OWNER.

9. This agreement shall become effective on the date hereof and shall continue in effect unless and until terminated by either party by not less than thirty (30) days prior written notice to the other party via registered mail at the following addresses:

CONTRACTOR:

TAS Environmental Services, L.P.
Attention: J Salzer
3929 California Parkway E
Fort Worth, Texas 76119

CALUMET LUBRICANTS CO., LP:

Calumet Lubricants Co., LP
Attention: Purchasing Department
P.O. Box 3099
Shreveport, LA 71133-3099

10. This Agreement shall be governed by and construed under the laws of the State of Louisiana.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed as of the day and year first above written.

CALUMET LUBRICANTS CO., LP

By: _____
Clayton Long, Purchasing Manager

CONTRACTOR: TAS Environmental Services L.P.

By: _____

J Salzer
_____
[Print or Type Name]

Vendors

Calumet Lubricants

Vendor ID	227655
Name	TAS ENVIRONMENTAL SERVICES L.P.
Vendor's Address 1	3929 E California Parkway
Vendor's Address 2	
City	Fort Worth
State	TX
Postal Code	76119
Country	USA
Representative	J Salzer -
Telephone No.	817-535-7222
Extension	
Fax No.	817-535-8187
Payment Terms	net 30
Freight Terms	
Ship Via	
Shipping Terms	
Minimum Order Amount	
Vendor Branch	227655
Vendor Type	Contractor
Tax Code	
Tax Type	Sales
Notes (will print on purchase orders)	24HR RESPONSE LINE 1888-654-0111
Date Last Received	
Freight Carrier	
Federal Tax ID No.	
Class	ComPrc
Customer ID	
Preferred Order Method	
Total Open	
Total Received	
Vendor's Address 3	
Currency	USD
Email	
Pager No.	

TAS Equipment/Response List

Responding From 4808 Hazel Jones Bossier City 71111

Estimated response time of 20 minutes

- **1- Bobtail delivery box type truck equipped for Emergency Response**
- **1-Chrevrolet dual wheeled truck with a 32 ft. trailer equipped for Emergency Response**
- **1-Kenworth Vacuum 2800 gal. capacity truck**
- **1-500 gal. capacity vacuum Vac-tron trailer**
- **1- Emergency Response Trailer equipped with Confined space entry and breathing air,[supplied and pack mounted], capabilities**
- **2-Trailers with heavy earth moving equipment,[frontend loader & skid steer], loaded and ready**
- **2-Trailer mounted power washing units**
- **1-Forklift**
- **Associated Supervisors and workers**
- **Multiple service trucks with manpower**
- **Handheld 4 gas monitors where required and H2S monitors where needed**
- **Warehouse -15,000 sq. Ft. with fluid absorbing/skimming/trapping material**

Prepared by Dale Britt Safety/HSE for TAS Environmental 318-747-2662

TAS
Environmental Services L.P.

3929 California Parkway E.
Fort Worth, TX 76119
(817) 535.7222 or (888) 654.0111
f (817) 535.8187

RESPONSE RATE SCHEDULE
DOMESTIC
2012

TAS Environmental	Response Rate Schedule Domestic	Schedule
		Rev. January 2012

TABLE OF CONTENTS

SPILL PERSONNEL PHONE LIST iii

Automotive Equipment iv

Fuel Surcharge iv

Equipment Decontamination / Washout iv

Haz-Mat Rates iv

Insurance iv

Personnel iv

Replacement of Damaged or Contaminated Equipment iv

Roll-Off Boxes iv

Stand-By Rates v

Subcontract Services / Third-Party Services v

Taxes v

Terms v

Place of Performance v

Travel, Lodging and Per Diem v

PERSONNEL 1

EQUIPMENT 1
- Automotive Equipment 1
- Communications Equipment 2
- Containment Boom 2
- Haz-Mat Equipment 2
- Marine Equipment 2
- Miscellaneous Equipment 2
- Monitoring Equipment 3
- Personal Protective Equipment 3
  - Boots 3
  - Gloves 4
  - Respiratory Protection 4
- Pumps and Hoses 4
- Sampling and Testing Equipment and Supplies 4
- Skimmers 5
- Storage 5

MATERIAL 5
- Chemicals 5
- Miscellaneous Material 5
- Sorbent Material 6

TAS Environmental	Response Rate Schedule Domestic	Schedule
		Rev. January 2012

SPILL PERSONNEL PHONE LIST

FORT WORTH

Phone: (817) 535-7222 / (888) 654-0111 **Fax: (817) 535-8187**

MOBILE

(b) (6)

Robert Briggs
Ray Markle
Jason Wright

DALLAS

Phone: (972) 638-9700 **Fax: (972) 638-9702**

Tracy Butts

SAN ANTONIO

Phone: (210) 496-5310 **Fax: (210) 496-5312**

Greg Grimes

AUSTIN

Phone: (512) 990-9903 **Fax: (512) 990-0033**

Greg Grimes

LONGVIEW

Phone: (903) 643-7901 **Fax: (903) 643-9848**

Keith Cochran

TEXARKANA

Phone: (903) 838-2182 **Fax: (903) 838-2184**

Bennie Cornelius

Bossier City, LA

Phone: (318) 747-2662 **Fax: (318) 747-2663**

Mickey Hunt

Little Rock, AR

Phone: (501) 847-7200 **Fax: (501) 445-9202**

Mark Hays

TAS Environmental	Response Rate Schedule Domestic	Schedule
		Rev. January 2012

Automotive Equipment

Automotive Equipment Hourly Rates charges are portal to portal. A four (4) hour minimum time will be charged on all call-outs. A mileage charge of $0.50 will be added for all automotive equipment, automobiles, pick-up trucks and trucks.

Fuel Surcharge

Due to the continual rise and fall of fuel costs, the Fuel Surcharge Guideline will be applied to all transportation invoice items. The weekly Retail On-Highway Diesel Prices published by the Energy Information Administration will be utilized to determine the fuel surcharge for the specific date of service (website http://tonto.eia.doe.gov/oog/info/wohdp/diesel_detail_report_combined.asp). If your invoice must be processed prior to the close of that week, the prior weekly published fuel cost rate will be utilized. A fuel surcharge will apply only after the first 100 miles.

Equipment Decontamination / Washout

Time and Material charges are portal to portal and will continue through decontamination and/or washout of any and all equipment used on the job.

Haz-Mat Rates

Haz-Mat rates will be charged when the material being dealt with has a hazard rating of two or greater on the NFPA 704 labeling system or hazardous material identifying system, or if a job requires the use of respiratory protection.

Insurance

The rates in this RATE SCHEDULE include insurance coverage for Worker's Compensation, General Liability, Pollution and Automobile Liability. A Certificate of Insurance will be forwarded upon request. These rates do not include work performed under the U.S. Longshoremen's and Harbor Workers Act (33 USC ss 901-950).

Personnel

Experienced consulting, supervisory, technical instructor and equipment operating personnel are available for complete emergency spill response and spill cleanup operations and vacuum service, 24 hours a day, 7 days a week. Normal hours of operation are from 0730 (7:30 a.m.) through 1600 (4:00 p.m.) daily, Monday through Friday.

All labor charges will be in accordance with TAS Environmental Services L.P. service receipts. Charges for personnel are portal-to-portal plus time through decontamination and/or washout of equipment used on job. TAS will invoice for personnel and the time required to mobilize, service, repair, and restock all vehicles and equipment used in the performance of the services for customer. Overtime for personnel will be charged at time and a half between 1600 (4:00 pm) through 0730 (7:30 am) Monday through Thursday and for weekends from 1600 (4:00 p.m.) Friday through 0730 (7:30 am) Monday. **DOUBLE TIME RATES** will be charged for all National Holidays. **4-Hour Minimum Service Charge On All Labor Call-Outs, 10% Labor Surcharge for all Emergency Responses.**

If TAS responds to a request from Customer and/or on behalf of Customer for record gathering and/or litigation support services, Customer will pay for personnel provided and/or requested in the amount corresponding to the personnel designation in the rate sheet, plus travel, lodging, and per diem.

Replacement of Damaged or Contaminated Equipment

If, during performance of a service and/or services for a customer, equipment and/or material sustain damage which renders the equipment and/or material beyond repair or renders decontamination impossible, equipment and/or material will be subject to a replacement charge at TAS cost plus 20% unless the damage was sustained as a result of misuse by TAS personnel.

Roll-Off Boxes

Roll-Off Box delivery and pickup charges vary according to the distance from the site location. The cost for roll-off box liners is $55.00 each. Box liners are not mandatory, but if the roll-off box requires cleaning at the end of the rental period, the customer will incur the cleaning charges.

TAS Environmental	Response Rate Schedule Domestic	Schedule
		Rev. January 2012

Stand-By Rates

Stand-By Rates will be equal to the daily rates in this schedule unless otherwise agreed to in writing on a case-by-case basis. Full rates will apply for personnel and per diem.

Subcontract Services / Third-Party Services

When TAS equipment is available, TAS will use and bill Customer for the equipment at rates published in the rate schedule. For any item that is identified on TAS rate sheet and which TAS acquires through or from a third party vendor or supplier, Customer will pay TAS the higher of TAS rate or cost plus a 20% handling charge.

A 20% handling charge will apply and be invoiced for all shipping and transportation of equipment, materials and goods regardless of whether such equipment, materials and goods appear on TAS rate schedule. In addition, for all items not listed on TAS rate schedule, including but not limited to personnel, equipment, materials and goods, laboratory services, testing services, damage waivers and/or other services, said items will be billed at TAS cost plus a 20% handling charge.

Cost, as used herein, is defined as the amount invoiced to TAS by a third-party supplier of material and/or goods and/or labor and/or equipment and/or services.

Taxes

All domestic federal, state and municipal taxes now and hereinafter imposed with respect to each item invoiced by TAS will be added to and become part of the total price payable by the Customer. If a Customer claims an exemption from payment of Texas Sales and Use Tax, the Customer will be required to render an Exemption Certificate or a Resale Certificate to TAS for said exemption to apply. If for any reason the invoiced items result in the assessment of foreign income taxes, excise taxes, or other fees alleged as owing to a foreign state or government, the Customer will pay directly the such amount. If TAS pays any such foreign tax or fee directly, Customer will promptly reimburse TAS for same.

Terms

The term of payment for all invoices is *Net Payment Due 30 days after date of invoice in United States Dollars (US $).* The balance of any invoice not timely paid will accrue a finance charge computed at the periodic rate of one and one-half percent (1.5%) per month (18% per annum) beginning on the first day of the first month following any delinquency. Customer is obligated to make payment to TAS at its principal office at 3929 California Parkway E., Fort Worth, TX 76119, in Tarrant County, Texas.

Place of Performance

The procurement of TAS services may not be in the same county as the work site area. Customer is obligated to make payment to TAS in Tarrant County, Texas for services provided. Because this agreement has been procured in Tarrant County, Texas and is being managed and administered from TAS central office in Tarrant County, Texas, this agreement is being performed in Tarrant County, Texas. The validity, interpretation and performance of the services and payment and the contents herein are to be interpreted and enforced pursuant to the laws of the State of Texas and any suit in connection herewith will be filed in Tarrant County, Texas.

Travel, Lodging and Per Diem

For all employees who do not reside in the local commuting area for the work site, TAS will be reimbursed for costs incurred for employee travel to and from the work site on the basis of TAS incurred costs plus 20% for all commercial transportation. A Per Diem charge will be charged for all employees who do not reside in the local commuting area of the work site for each day such employee is present in the locale of the work site. The daily Per Diem charge published by the General Services Administration (website http://www.gsa.gov then see Travel Resources, Per Diem Rates) will be utilized to determine the Per Diem for a specific geographical location.

TAS Environmental	Response Rate Schedule Domestic	Schedule Rev. January 2012

FORT WORTH – SAN ANTONIO – DALLAS – AUSTIN– LONGVIEW – TEXARKANA– BOSSIER CITY –LITTLE ROCK

PERSONNEL

		Hourly Rate Regular	Hourly Rate Overtime
PERS-1001	Project/Operations Manager	130.00	195.00
PERS-1002	Health & Safety Manager	105.00	157.50
PERS-1003	Site Manager/Superintendent	75.00	112.50
PERS-1004	Site Safety Officer	75.00	112.50
PERS-1005	Supervisor	70.00	105.00
PERS-1007	Foreman	55.00	82.50
PERS-1009	Industrial Hygiene Technician	50.00	75.00
PERS-1012	Rescue Technician	55.00	82.50
PERS-1013	Resource Coordinator	55.00	82.50
PERS-1014	Operator, Heavy Equipment	50.00	75.00
PERS-1015	Operator, Response Equipment	45.00	67.50
PERS-1016	Technician	40.00	60.00
PERS-1017	Field Clerk	35.00	52.50
PERS-1019	Disposal Coordinator	45.00	67.50
PERS-1020	Project Accountant	70.00	105.00
PERS-1006	Driver	30.00	45.00

Labor rates are subject to a 10% surcharge for Emergency Response

EQUIPMENT

Automotive Equipment

All Automotive Equipment is subject to a Fuel Surcharge

		Hourly Rate
AUTO-1001	Super Sucker, 80 bbl Capacity (plus driver)	225.00
AUTO-1001K	King Vac (plus driver)	200.00
AUTO-1001C	Cyclone (daily)	100.00
AUTO-1002	Vacuum Truck, 80bbl Stainless (plus driver)	105.00
AUTO-1004	Vacuum Truck, 80 bbl Capacity (plus driver)	60.00
AUTO-1005	Vacuum Truck, 130 bbl Capacity (plus driver)	65.00
AUTO-1009	Roll-Off Truck, Bobtail (plus driver)	60.00
AUTO-1008	Roll-Off Truck, Transport (plus driver)	65.00

		Daily Rate
AUTO-1010	ATV, 4-Wheel	230.00
AUTO-1011	ATV Utility Trailer	80.00
AUTO-1013	Backhoe	450.00
AUTO-1017	Pick-Up Truck, 2 ton, Equipment Hauler	350.00
AUTO-1018	Pick-Up Truck, 1 ton or smaller	200.00
AUTO-1019	1 ton, Haz-Mat Quick-Response Unit	300.00
AUTO-1020	Quick Response Unit	200.00
AUTO-1023	Pick-Up Truck, 1 ton, 4 x 4	275.00
AUTO-1024	Skid-Steer Loader	375.00
AUTO-1024-B	Skid-Steer Loader, Broom Attachment	150.00
AUTO-1024-G	Skid-Steer Loader, Grabbler	200.00
AUTO-1024-P	Skid-Steer Loader, Asphalt Cold Planer	250.00
AUTO-1028	Trailer, Haz-Mat Response/Command	600.00
AUTO-1025	Trailer, Boom	300.00
AUTO-1026	Trailer, Equipment Hauler, Gooseneck	125.00
AUTO-1027	Trailer, Confined Space Equipment	200.00
AUTO-1029	Trailer, Haz-Mat Response	400.00

All rates listed in this schedule are subject to change without notice.

TAS Environmental	Response Rate Schedule Domestic	Schedule Rev. January 2012

Automotive Equipment (Cont)

AUTO-1033	Trailer, Haz-Mat Transfer	500.00
AUTO-1021	Trailer, Response	250.00
AUTO-1031	Trailer, Pressure Washer, Heated	300.00
AUTO-1032	Trailer, Utility	100.00
AUTO-1034	Truck, Bobtail	400.00
AUTO-1036	Mini-Excavator	400.00
AUTO-1039	Vactron	85.00
AUTO-1042	Trailer, Jetter	200.00
AUTO-1045	Trailer, Breathing Air (plus air equipment)	200.00

Communications Equipment

		Daily Rate
COMM-1001	Cellular Telephone (Each)	30.00
COMM-1002	Computer, Laptop/Desktop w/Printer	130.00
COMM-1004	GPS, Hand Held	30.00
COMM-1007	Radio Portable	30.00
COMM-1011	Satellite Phone, (plus usage fees)	125.00

Containment Boom

		Daily Rate
CBM-1001	Containment Boom, 48” Offshore	11.00 ft/day
CBM-1003	Containment Boom, 36”	8.00 ft/day
CBM-1004	Containment Boom, 18”	1.50 ft/day
CBM-1005	Mini-Boom	1.00 ft/day
CBM-1006	Containment Boom, 12”	1.25 ft/day
CBMA-18	Boom Anchor, 18 lb.	23.00/day
CBMA-22	Boom Anchor, 22 lb.	27.00/day

Haz-Mat Equipment

		Daily Rate
MSE-1005	Betz Emergency Off-Loading Valve	505.00/day
HMS-1003	Chlorine Emergency Kit “A”	505.00/day
HMS-1004	Chlorine Emergency Kit “B”	755.00/day
HMS-1005	Chlorine Emergency Kit “C”	1,005.00/day
MSE-1014	Transfer Equipment	505.00/day
HME-1005	Vacuum Cleaner, Mercury	255.00/day
MSE-1018	Decontamination Kit (Personnel, Pool, Brush, Bucket, Degreaser), Each	75.00/each

Marine Equipment

		Daily Rate
MAR-1001	Airboat	750.00
MAR-1002	Deck Barge, 30’, w/twin 150hp engines, radar	805.00
MAR-1004	Flat Boat, w/o motor	120.00
MAR-1005	Flat Boat, 14’ to 16’ w/motor	230.00
MAR-1006	Piroque	35.00
MAR-1008	Work Boat, 24’	505.00

Miscellaneous Equipment

		Daily Rate
MSE-1006	Camera, Digital	55.00
MSE-1007	Camera, Video, Event Recording	255.00
MSE-1008	Cargo Lights	25.00
MSE-1009	Chain Saw	80.00
MSE-1049	Compressor, Air, 90 psi portable	90.00

All rates listed in this schedule are subject to change without notice.

TAS Environmental	Response Rate Schedule Domestic	Schedule Rev. January 2012

Miscellaneous Equipment (Cont)

MSE-1011	Compressor, Air, 180 cfm	225.00
MSE-1012	Confined Space Rescue Kit	150.00
MSE-1045	Coppus Blower, Small	55.00
MSE-1048	Coppus Blower, Large	250.00
MSE-1013	Drum Dolly	30.00
MSE-1015	Drum Gripper, Forklift	105.00
MSE-1036	Drum Head Vacuum	75.00
MSE-1036-P	Drum Head Vacuum, Pneumatic	100.00
MSE-1016	Drum Pump, Poly	30.00
MSE-1017	Drum Sling	30.00
MSE-1054	Traffic Control	100.00
MSE-1019	Generator w/work lights	125.00
MSE-1020	Generator, 4 kw	105.00
MSE-1021	Grounding and Bonding Equipment	150.00
MSE-1046	Hand Tool (Pitch Fork, Rake, Shovel, Squeegee, etc)	22.00
MSE-1024	Pressure Washer, portable	275.00
MSE-1026	Saw, Air Powered	80.00
MSE-1027	Saw, Portable	80.00
MSE-1028	Saw, Reciprocating	75.00
MSE-1029	Sewer Plug	105.00
MSE-1002	Butyl Basin Tubs	15.00
MSE-1030	Sprayer, Pump, Hand-Held	35.00
MSE-1032	Vacuum Cleaner, Wet/Dry	55.00
MSE-1033	Vapor Lights, High Intensity	70.00
MSE-1034	Weed Eater	50.00
MSE-1035	Wheelbarrow	30.00
MSE-1025	Plasma Cutter	250.00
MSE-1010	Cutting Torch	150.00

Monitoring Equipment

		Daily Rate
MTE-1001	4-Gas Meters	150.00
MTE-1002	H2S Monitors	20.00
MTE-1006	Black Light, Mercury Detection	45.00
MTE-1007	5 gas Meter	200.00
MTE-1008	Drager CMS Unit (plus chips)	305.00
MTE-1015	Drager Pump	35.00
MTE-1034	FID Detector, Handheld	300.00
MTE-1009	Infrared Sensor	30.00
MTE-1003	Jerome Mercury Vapor Analyzer	300.00
MTE-1011	pH Meter	35.00
MTE-1012	Photoionization Detector (PID), MiniRae	150.00
MTE-1010	Radiation Monitor	80.00
MTE-1037	FID Detector Hydrogen Refill	30.00

Personal Protective Equipment

		Daily Rate
PPE-1005	Bunker Gear (Pants, Coat, Gloves, Helmet, Boots)	200.00
PPE-1006	Chest Waders	30.00
PPE-1020	Harness, Safety, w/lanyard	30.00
PPE-1030	Safety Lifeline	20.00
		Unit Rate
PPE-1008	Coveralls, Poly-Coated Tyvek Hood and Boots, Each	20.00
PPE-1035	Coveralls, Nomex, Each	35.00
PPE-1010	Coveralls, Tyvek, Each	12.00
PPE-1021	Level A, Responder, Each	1200.00

All rates listed in this schedule are subject to change without notice.

TAS Environmental	Response Rate Schedule Domestic	Schedule Rev. January 2012

Personal Protective Equipment (Cont)

PPE-1022	Level B, Fully-Encapsulated (CPF 4), Each	510.00
PPE-1023	Level B, Encapsulated (CPF 3), Each	310.00
PPE-1024	Level C, Hood, Boot, Splash Guard (CPF 2), Each, (Tape Seam)	90.00
PPE-1026	Level C, Hood, Boot (CPF 2), Each, (Sewn Seam)	50.00
PPE-1027	Level C, Hood, Boot (CPF 1), Each	25.00
PPE-1034	Level D, PPE, Each	35.00
PPE-1033	Slicker Suit, Rain, Each	25.00

Boots

		Unit Rate
PPE-1002	Boot, Chemical, NFPA Approved, Pair	105.00
PPE-1003	Boot, Rubber, Steel-toe, Pair	75.00
PPE-1004	Booties, Latex, Pair	10.00

Gloves

		Unit Rate
PPE-1011	Glove, Latex, Sample, Pair	1.50
PPE-1012	Glove, Leather, Pair	10.00
PPE-1013	Glove, Neoprene, Pair	6.25
PPE-1029	Glove, Nitrile, Inner, Pair	1.50
PPE-1015	Glove, Nitrile, Outer, Pair	4.00
PPE-1016	Glove, Petroflex, Pair	4.00
PPE-1018	Glove, *"Silver Shield"*, Pair	8.50
PPE-1019	Glove Liner, Cotton, Pair	1.50

Respiratory Protection

		Unit Rate
HME-1002	Breathing Air Cylinder	15.00/day
HME-1013	Breathing Air Compressor	505.00/day
HME-1012	Breathing Air Compressor Cool Pack	55.00/day
HME-1011	Breathing Air Hose, 50' Section	20.00/day
HME-1004	Escape Pack	150.00/day
HME-1007	Full-Face Respirator	30.00/day
HME-1009	Self-Contained Breathing Apparatus (SCBA)	300.00/day
HME-1008	Organic Mask, Disposable, Each	30.00
PPE-1036	Dust Mask (N-95 Mask), Each	2.50
PPE-1028	Respirator Cartridge, HEPA, Each	18.50
PPE-1031	Respirator Cartridge, HEPA/OV/AG, Pair	35.00
PPE-1032	Respirator Cartridge, Mercury Vapor, Pair	65.00

Pumps and Hoses

		Daily Rate
PUMP-1001	Pump, 1" Diaphragm	105.00
PUMP-1004	Pump, 2" water	95.00
PUMP-1007	Pump, 2" Acme Mdl 39-G4 Floating Wash Pump	155.00
PUMP-1003	Pump, 2" Diaphragm, Carbon	95.00
PUMP-1005	Pump, 2" Diaphragm, Poly	150.00
PUMP-1006	Pump, 2" Diaphragm, Stainless Steel	255.00
PUMP-1010	Pump, 3" water	125.00
PUMP-1009	Pump, 3" Diaphragm	200.00
PUMP-1012	Pump, 4" water	175.00
PUMP-1011	Rebuild Kit, Diaphragm Pump	400.00
		Unit Rate
MSE-1038	Hose, Chemical Resistant, 2" x 20'	25.00
MSE-1039	Hose, Chemical Resistant 1" x 10'	20.00

All rates listed in this schedule are subject to change without notice.

TAS Environmental	Response Rate Schedule Domestic	Schedule Rev. January 2012

Pumps and Hoses (Cont)

MSE-1040	Hose, Fire, 50' section, cotton jacket	55.00
MSE-1041	Hose, Suction/Discharge, 1" x 20'	11.00
MSE-1043	Hose, Suction/Discharge, 2" x 20'	13.00
MSE-1044	Hose, Suction/Discharge, 3" x 20'	15.00
MSE-1050	Hose, Suction/Discharge, 4" x 20'	20.00
MSE-1047	Hose, 6" ADS, per foot	3.00
MSE-1051	Hose, Air, 50'	15.00
MSE-1052	Hose, Pressure Washer, 50'	25.00

Sampling and Testing Equipment and Supplies

		Unit Rate
MTE-1023	Chemical Classification Strips	30.00
ST-1003	Drum Thief Sampling Tubes	21.00
ST-1004	Haz-Cat Sampling Kit, per test	40.00
ST-1007	Mercury Test Kit	230.00
ST-1009	Personal Sampling Pump	55.00
ST-1010	Pipettes, Glass	7.00
ST-1011	pH Paper (Roll or Box)	25.00
ST-1014	Sample Jars	10.00
ST-1016	Soil Sampling Kit	40.00
ST-1018	Auger/Split Spoon Sampler	150.00/day

Skimmers

		Daily Rate
SKIM-1001	DiscOil Skimmer, w/Power Pack	2,255.00
SKIM-1002-70	Drum Skimmer, 70 gpm	605.00
SKIM-1003-20	Drum Skimmer, 20 gpm	455.00
SKIM-1005	Skimmer, Acme Mdl 39-TG4, Gasoline Powered	205.00
SKIM-1006	Skimmer, Acme Mdl 39-T, Vacuum / or Douglas Engineering Skim Pak	155.00

Storage

		Daily Rate
STR-1008	Frac Tank, 10,000 gl (Company Owned)	45.00
STR-1010	Frac Tank, spill guard, 10K	25.00
STR-1003	Roll-Off Box, Open Top	15.00
STR-1004	Roll-Off Box, Roll Top	35.00
STR-1005	Vacuum Box	60.00
STR-1006	Storage Tank, Poly, 500 gl capacity	35.00
STR-1007	Tarp, Roll-Off Box	13.00
STR-1009	Tote, Poly, 250 gl	20.00

MATERIAL

Chemicals

		Unit Rate
MSS-CITRIC50B	Citric Acid, 50%, Grade B, 575 lb drum	1,053.40
TAS-MRED	Degreaser, 1 gl	14.20
MSS-1004-A	Kolar Safe, Acid, 1 gl	37.00
MSS-1004-C	Kolar Safe, Caustic, 1 gl	40.00
TAS-MAGOXI-50	Magnesium Oxide (50 lb bag)	50.00
TAS-MBELSC1	Micro-Blaze, Emergency Liquid Spill Control, 1 gl	31.50
TAS-MBOL5	Micro-Blaze Out, Firefighting Agent, 5 gl	220.15
TAS-SA50D	Soda Ash, Dense, 50 lb bag	27.80
MSS-SB50	Sodium Bicarbonate, 50 lb bag	41.20
TAS-SODHCH	Sodium Hypochlorite, Liquid, 1 gl	7.10

All rates listed in this schedule are subject to change without notice.

TAS Environmental	Response Rate Schedule Domestic	Schedule Rev. January 2012

Miscellaneous Material

		Unit Rate
DECON	Decon Pool	20.00
MSS-1002	Barricade Tape	28.10
MSS-1008	Box Liner, Roll-Off Box	55.00
MSS-1022	Super Sack, each	50.00
MSS-1013	Cubic Yard/Gaylord Box	175.00
TAS-FD30	Drum, Fiber, 30 gl.	40.00
TAS-FD55	Drum, Fiber, 55 gl.	45.00
MSS-1011	Drum Liner, Plastic Bag, 55 gl x 6 ml, 50 per roll	100.00
MSS-1012	Drum Liner, Plastic Bag, 55 gl x 6 ml, each	2.00
TAS-LP5	Drum, Poly, 5 gl, w/lid	20.00
TAS-PD30	Drum, Poly, 30 gl, w/lid	65.00
TAS-PDOH55	Drum, Poly, O/H, R/C, w/fittings, 55 gl	70.00
TAS-PDTH55	Drum, Poly, T/H, w/bungs, 55 gl	70.00
TAS-OP95	Drum, Poly, Overpack, 95 gl	235.00
TAS-OP110	Drum, Poly, Overpack, 110 gl	400.00
TAS-CTSD55	Drum, Steel, T/H, 55 gl	70.00
MSS-OTSD30	Drum, Steel, OT 30 gl	70.00
TAS-OTSD55	Drum, Steel, O/H, R/C, 55 gl	70.00
TAS-SOP85	Drum, Steel, Overpack, 85 gl	200.00
TAS-SOP110	Drum, Steel, Overpack, 110 gl	675.30
MSS-1001	Duct Tape, 2” x 60 yd	12.60
MSS-1009	Epoxy Stick, Sealant	14.45
MSS-1015	Grass Mat, roll	125.00
MSS-1010	Heat Relief Supplies	15.00
MSS-1003	Rags/Wipes	57.50
MSS-1014	Rope, Cotton, 1/4” x 100’	27.50
MSS-1006	Rope, Polypro, 1/2” x 600’	228.00
MSS-1007	Rope, Polypro, 1/4” x 600’	68.00
MSS-1005	Visquine Sheeting, 20’ x 100’ x 6 ml	125.00
MSS-1021	Visquine Sheeting, 40’ x 100’ x 6 ml	225.00
MSS-1016	HEPA Filter, vacuum	40.00
MSS-1017	Placards	3.00
MSS-1018	Shrink Wrap, roll	22.00
MSS-1020	Water, per gallon	.05
MSS-MARKERS	Wooden Stakes, Flags, Marking Paint or marking items	30.00
FENCE	Fencing, orange plastic with T-posts, per foot	2.50

Sorbent Material

		Unit Rate
TAS-BMC	BMC Absorb-N-Dry Absorbent	10.00
TAS-B510	Boom, Sorbent, 5” x 10’, 4 boom bale	112.00
TAS-B810	Boom, Sorbent, 8” x 10’, 4 boom bale	198.00
TAS-UB510	Boom, Sorbent, Universal, 5” x 10’, 4 boom bale	147.00
TAS-GS-25	Gator Sorb, 20 lb bag	35.00
TAS-P100	Pad, Sorbent, 17” x 19” x 3/8”, 100 pad bale	79.20
TAS-P200	Pad, Sorbent, 17” x 19” x 3/16”, 200 pad bale	83.60
TAS-UQ100	Pad, Sorbent, Universal, gray, 100 pad bale	115.00
TAS-PIL10	Pillow, Sorbent, gray, 14” x 25”, 10 pillow bale	112.09
TAS-R144	Roll, Sorbent, 38” x 144’ x 3/8”, 1 roll bale	158.73
TAS-SPHAGSORB2	Sphag Sorb, 2 cf x 24 lb bag	46.50
TAS-SW100	Sweep, Sorbent, 17” x 100’, 1 sweep bale	121.66

All rates listed in this schedule are subject to change without notice.

CALUMET

SHREVEPORT REFINERY	STANDARD OPERATING PROCEDURE
Procedure Name: Emergency Operating Procedure	**Document Number: 00-H-0025**
Unit: Plantwide	**Document System: Safety & Health**
	Document Owner: Safety Manager

PURPOSE

To establish a management system to respond to a variety of plant emergencies in a refinery. Such emergencies include, but are not limited to, physical plant emergencies and personal medical emergencies.

This procedure provides written guidance to respond to and bring under control unexpected occurrences demanding immediate action.

POLICY

This Procedure applies to Calumet Shreveport Lubricants and Waxes employees, contractors/vendors, and visitors.

MATERIAL AND EQUIPMENT

The major part of the fire equipment is a piping system served by:

- 3,000 gpm electric pump
- 3,000 gpm diesel pump
- Three city water storage tanks (5,000, 10,000, and 25,000 BPD) along with the refinery pond water
- **1500 gpm** Servo Command foam pumper with **1000 gallons of foam concentrate**
- 1,000 lb. Dry Chemical Truck
- Environmental Van and trailer containing absorbent materials.

TRAINING AND KNOWLEDGE

Training shall be at initial employment, after significant **process and personnel** changes, and at least annually. Drills are conducted at least annually to test the system. Responses sometimes require containment and clean up. Such work is and will continue to be done generating the least amount of waste necessary.

QUALITY

At the conclusion of emergency response incidents and drills, a timely critique will be scheduled for personnel involved. The critique will be objective and will cover the positive and negative aspects of the response. Areas that require attention will be listed

and the Environmental, Health, and Safety department (EHS) shall be responsible for follow-up.

SAFETY AND HEALTH

When personal and physical emergencies happen, they require a coordinated effort to provide the appropriate response to regain control. In no case shall employees with known heart disease, epilepsy, or emphysema be permitted to participate in strenuous firefighting activities unless a physician's certificate of the employee's fitness to participate in these activities is provided.

OUTLINE

1. INTRODUCTION 3

2 EMERGENCY ALARM PROCEDURE & FOLLOWUP 6

3. EMERGENCY ALARM 6

4. SECURITY 8

5. EMERGENCY RESPONSE 9

6. SPECIFIC AREAS OF RESPONSE 11

7. ENVIRONMENTAL RESPONSE 13

8. RESCUE 14

9. POWER FAILURE 15

10. SERVERE WEATHER -TORNADOES 15

11. PUBLIC DEMONSTRATIONS, CIVIL DISORDERS, RIOTS, AND TERRORIST THREATS 16

12. BOMB THREAT 16

13. TRAINING AND DRILLS OF EMERGENCY RESPONSE 18

14. INDUSTRIAL FIREFIGHTING EQUIPMENT AND PPE 18

PROCEDURE:

1. INTRODUCTION

The Plant Manager and other key personnel shall staff the emergency operating center. The emergency on site centers have equipment to communicate with field operations, appropriate Calumet Lubricants Co. contacts and governmental agencies, media representatives, suppliers, and other support functions. The emergency centers include:

- North Wing Conference Room as the primary emergency center extension 4213, 4087, or 4359
- South Wing Conference Room is the alternate extension 4199, 4273, or 4246
- Off-site center is the Shreveport Fire Department Mobile Incident Command Center, cell (b) (6) [redacted]

EMERGENCY MANAGEMENT COORDINATION TEAM

1.1 Incident Command

- **Incident Commander (EOC)** Tom Germany (Kevin Farley – Alternate)
    - Executive overall control
    - Structure uniform command with responding agencies
    - Assess incident - contact with Indianapolis, Princeton, and/or Cotton Valley
    - Legal contacts
    - External relations - agencies and community
    - Coordination of Mutual Aid Support
- **Operation Command –** Lyndon B Johnson or Rick Williams (Ken Brown – Alternate)
    - Overall Control of Emergency Response Operations
    - Coordination of Mutual Aid Response
    - Plan Response with Incident Commander
    - Form uniform command with responding agencies
    - Request support and supplies through EOC
- **Finance and Security -** Clayton Long, Telesa Mitchell - Alternate
    - Finance Support
    - Set-up Risk Management - Establish claim center, Establish system to track claims
    - Directs Security to - Maintain access log, Control perimeter
- **Planning (EOC)** – Aubrey Marchand and Mitch Perdue (Dan McKibben and

James Kelly- Alternate)

- Consulting with Incident Commander about Production and Storage issues
- Maintain control of areas not involved
- Make decisions to run or shutdown
- Provide support from process view in incident area
- Information specialist (MSDS, Equipment data, plot plans, PFDs, P&IDs, process technical information)

- **Process Control –** Mike Hall, Vidal Clay, Greg Sepulvado, or Bobby Parks
  - Initiate Initial Control
  - Works under the control of the Operations Commander

- **Logistics (EOC) Todd Dunn** (Greg McConnell-Alternate)
  - Manage movement of materials from vendors and in the refinery
  - Provide procurement and placement of materials for emergency response teams (foam, water, food, hoses, spill response equipment, PPE, lights, communication equipment etc)
  - Provide inventory control and reorder
  - Support storage and movement of materials in and out of staging area
- **Liaison Officer (EOC)** Rick Williams or Lyndon Johnson - Alternate
  - Coordination with Agencies on site
  - Provide support in Regulatory Issues
  - Estimates spill volumes, emissions, releases, etc.
  - Assist Public Information Officer on details of the incident and background information
- **Documentation (EOC)** Michael Vaughan or Michelle Carroll- Alternate
  - Records events in chronological order.
  - Assigns individual for head count of personnel in maintenance lunchroom
  - Assigns individual to log external responders coming into EOC
  - Scribes all events relating to incident (milestones, incident action plan, incident organization chart, etc)
- **Public Information Officer (EOC) Derek Daniel** (Kevin Farley-Alternate)
  - All information must be approved by Incident Commander before issuing to media

- Provides timely information to the news media
- Establishes a media area for incident updates

1.20 Safety Officer Jimmie Allen or **Contract Safety**

- Provide information to the operation command and incident commander on the safety of the emergency response team and threats to the safety response team.
- Performs/coordinates air monitoring at site and perimeter of the plant
- Establishes hot, warm, decon and cold zones

1.21 Staging Officer - Union Safety Representative

- Logs personnel to and from staging area

1.22 Medical Liaison - Bob Thomas, Steve Rinaudo - Alternate

- Coordinate SFD EMS at scene
- Rehab responders return to staging
- Ensure injured gets treatment

1.23 **Unit Operations -** Unit Supervisors and Process Engineers

- Works under the direction of Planning
- Directs ongoing unit operations during the emergency event, keeps Incident Commander informed of impacts from or to emergency events, coordinates controlled shutdown of existing units under the direction of the Incident Commander
- Follows Incident Commander orders on extra personnel to handle the emergency

1.24 **SPD (EOC) Shreveport Police Officer**

- Coordination of Road Closures

1.25 **SFD (EOC) Shreveport Fire Dept. Officer**

- Respond per EOM & pre-plan
- Serve as Advisor
- Mutual Aid Support
- Calumet Individuals assigned to the EOC (Major Event)
- Incident Commander
- Planning
- Logistics
- Liaison Officer
- Documentation
- Public Information Officer

2. EMERGENCY ALARM PROCEDURE & FOLLOW-UP

SHREVEPORT REFINERY PLANT EMERGENCY ALARMS - THREE PHASE

NOTE: The decision of which Phase Alarm is needed initially is to be the responsibility of the person or persons to first observe the situation. However, if there is any question in their mind, the alarm would be at least a **Phase II**

- **Phase I -** ***Can be quickly controlled with resources at site***
- **Phase II -** ***Unsure of control help needed (Can Keep in Plant)***
- **Phase III -** ***Unsure of control help needed (May affect off site)***

3. EMERGENCY ALARM

3.1 Emergency Incidents are to be radioed or phoned into the Control Room to the LOHT console operator, Channel #1 (Phone 4000 or 4219). The operator will activate the alarm system. There are pull boxes in the three office buildings that will activate the alarms in the offices.

The siren alarm signals will be as follows:

- Sirens will be used to indicate an in plant emergency.
- Should the sirens fail to sound, the steam whistle will be sounded for two minutes (long blast), then repeated another two minutes.

NOTE: Any time an emergency alarm sounds, vehicle traffic *shall pull off the road and evacuees shall walk out of the refinery via evacuation routes* and communication traffic (phone and radio) should be kept to a minimum and directed toward control of the emergency.

3.2 Radios – During Plant Emergencies

- Channel #1 will be utilized by Operations
- **Channel #2 will be used for emergencies and response requirements**
- Channel #3 will remain in regular service unless otherwise directed.
- Channel #4 will serve as auxiliary backup

3.3 Horn Alarms - all three wings of the Main Building (North, South and East) will be as follows:

- An **intermittent sounding of the alarm horn** will indicate a problem in the plant. Persons are to assemble at the designated place *as* outlined in the evacuation plan.
- A **long steady sounding of the alarm horn** will indicate a problem in one of the main buildings. Persons are to assemble at their designated place outside the buildings as directed in the evacuation plan.

3.4 Phase I (Does not require response of emergency teams)

- Sound verbal alarm on radio - Channels 1, 2, 3, and 4.
  - Give specific location
  - Give specific problem

NOTE: Radio contact directed to Security should be on channel 3.

Notify Safety immediately of all fires and injuries day or night.

3.5 Phase II and Phase III

- Give verbal alarm on radio Channel #1 or call **4000 or 4219** to LOHT Console Operator. Precede the transmission with the word (**EMERGENCY**) other radio communication traffic shall yield.
  - **Fire**
  - **Spill**
  - **Rescue needed**
  - **Give specific location**
  - **Plant or Area Evacuation Needed**
- LOHT Console Operator will set off siren or contact Fuels Console Operator for the steam whistle.
- Notify Security at Extension **4151 or 4022**
  - Give specific location
  - Give specific problem

3.6 Phase III

- In the event notifications need to be made to the community, **the First Call Network Inc**. is to be activated by the EOC and the appropriate message shall be telephoned to the affected neighborhood.
- Evacuation outside of the refinery should be completed using the most appropriate of four routes from the community. Those routes are **East/West either I-20 or Hollywood Ave**. and **North/South either Jewella or Hearne Ave. Persons outside the plant will be advised to:**
  - Shelter in place.
  - Evacuate using the main routes noted above.
- Emergency Call Outs
  - When an emergency occurs, outside assistance shall be secured by the security personnel at the request of Calumet's supervision.
    Shreveport Fire Department ----------911 / 675-2144
    Ambulance---------- -911 / 675-2144
    Police---------- 911 / 673-7300
- When calling outside emergency support agencies, the following information should be given in a clear voice and in a concise manner: (<u>The person reporting an emergency should never hang up first</u>.)

  Employee's name
  Company
  Location
  Nature of emergency

  - If the Mobile Incident Command Center is activated it shall be spotted as directed at one of the following locations.

1. West Truck Dock
2. Gate # 2 Midway Street
3. East Truck Dock
4. TEPPCO Area Calumet side
5. Jewella Gate
6. Confirmed off-site location

- When calling Calumet employees for an emergency, the caller will give his/her name, nature of emergency, and location for employees to respond (i.e., gate or location, etc.)
- The Incident Commander shall contact the appropriate Calumet Senior Management and regulatory agencies as required at the earliest feasible time into the incident.

4. SECURITY

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

[redacted]

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

[redacted]

5. EMERGENCY RESPONSE

5.1 The **Shift Supervisor** shall attempt to contain the emergency until the Shreveport Fire Department support arrives.

5.2 *Operations personnel shall :*

- take action to contain the emergency in their areas until help arrives.
- provide logistic support to the SFD. This is to include any initial extinguishment and unit isolation.

5.3 All employees shall be responsible for knowing the location of all fire suppression equipment within their departments.

5.4 All appropriate plant employees will be trained in the use of portable fire extinguishers on incipient stage fires.

5.5 The person in charge shall ensure site security and control is set up as the situation dictates. The site shall be set up in three zones**, hot, warm and support (cold)**.

WARNING: Persons will not be allowed to enter beyond the support (cold) zone without proper personal protection as the situation may dictate.

5.6 Evacuation

- Personnel Accountability - All non-operating personnel not directly involved with the emergency will go to their predetermined assembly area as indicated below:

Department/Area	Primary Evacuation	Alternate Evacuation
Maintenance	Maintenance Lunchroom	Parking Lot West of South Wing
Laboratory	Maintenance Lunchroom	Parking Lot West of South Wing
Office Personnel	Maintenance Lunchroom	Parking Lot West of South Wing
Operations – Maintain control of their units. Evacuation to be determined by Supervision	Maintenance Workshop	Parking Lot West of South Wing
Loading – Dispatcher will control the gate unless there is a reason to evacuate	Maintenance Workshop	Parking Lot West of South Wing
Contractors	Gate of Entry	Nearest Gate and advise security
Janitors/Vendors/Visitors	Main Lobby – Sign out in lobby log book	Parking Lot West of North Wing

5.7 After having assembled in their designated area, each Department Head (as appropriate) will conduct a roll call to determine if all personnel are accounted for. (They will ensure that their employees are trained in evacuation and routes and that assistance is provided to any employee, contractor, visitor or vender requiring same). The **Administrative Assistant** will account for all Office Personnel.

5.8 A report shall be made to Security of all personnel accounting even if everyone is accounted for, if all personnel are not present and/or accounted for, Security will notify the Emergency Operations Center who will initiate search and/or rescue efforts as appropriate.

5.9 Once evacuation has been completed, all personnel *to include contractors* will remain in their assembly areas. When the emergency has passed, the Emergency Operations Center will announce an "ALL CLEAR" by means of a radio announcement, which shall then be relayed at all levels by word of mouth.

CONTRACTORS

5.10 Contractor's supervisors shall be responsible to ensure all his employees sign in and out at their gate of entry every time they enter and depart.

5.11 Security shall be responsible for signing in all contract personnel. Contractor's employees will exit the Plant in all Phase III emergencies per the Refinery **Evacuation Plan.** The primary evacuation point for contractors will be their gate of entry or the gate nearest them if the incident is between them and their gate of entry. However, if employees cannot assemble at their primary point, they are to exit at the nearest gate and meet at one of the two noted evacuation points. **The**

contractor parking lot at Midway Gate 2 or the parking lot at Jewella Gate. If Gate 2 is not in use they shall meet near Midway Main Gate.

5.12 In the event of an emergency the supervisor shall conduct a roll call of his crew at the assembly area and report the results immediately to the Security at their normal gate of entry or the nearest security post.

- If all contract personnel are not accounted for, Security will contact the **Emergency Operations Center**. The EOC will notify On Scene Command who will set in action search and rescue. The search shall be conducted under refinery supervision

6. SPECIFIC AREAS OF RESPONSE

6.1 The diesel and electric fire pumps are to be started immediately by Operations personnel. The EOC is to send a relief person to monitor the pump and fuel level as soon as possible. The SFD pumpers are to be placed at booster stations. There are three (3) locations where SFD will hook up:

- Jewella Gate
- 175 Tank Area
- Hudson Street

6.2 All loading and unloading operations shall be halted. Trucks should be directed out of the refinery limits as the situation may dictate. Consideration must be given whether to hold the trucks and keep the streets clear if they are in a safe zone or to send them out if safety needs require.

6.3 Operating personnel will continue control of the units per management's direction using either normal procedures or emergency procedures depending on the severity of the problem and the involvement of their respective unit.

6.4 Trained personnel shall ensure the fire equipment responds to the scene. Offensive action shall only be taken after Incident Command is in place and proper plans are in place.

- Foam Pumper (1st to scene)
- Dry Chem. Equip. Truck (2nd to scene)
- Environmental Truck (3rd to scene)
- (However, in a spill incident the environmental truck will be #1 priority, the Environmental Trailer #2, and the Foam Pumper #3.) The exception to this would be if the spill required foaming and then the Foam Pumper would respond first.

NOTE: As requested by the Operation Commander, the Logistics is to coordinate manpower to transport containers of foam along with the wye hook up, located in the old fire house to the scene. Movement of the Son of a Gun wheeled monitor may also be included.

6.5 The Shreveport Fire Department will be requested to respond to fire emergencies at the Shreveport Refinery as follows:

- SFD is to be called on all Phase II & III incidents. The first truck and one district chief car will respond to Midway Gate south of the Security bldg. Operational personnel not affected by the incident shall escort these units to the scene and the Calumet person in charge shall coordinate their service as needs

dictate. Also one medic unit shall enter to set up rehab and/or triage.

- SFD Pumper trucks will be brought to booster stations and connected, and water will be pumped from city mains into the refinery system to maintain sufficient volumes and pressures as needs may dictate for fire control operations. (If ever the need occurs, the Shreveport Fire Dept. can draft from our final pond and charge into the header at the Waukesha pump.) The refinery shall provide the hard suction.
- Other Shreveport Fire Department Crews will stage at Jewella and Greenwood and/or the Fair Grounds or at a point SW of the refinery near Jewella and Hollywood streets and be available on request of the *Incident Commander* or his designee to work with refinery personnel in emergency control operations.
- SFD EMS responding to a request for medical assistance or to transport the injured to a medical facility should be escorted to the scene of the incident by Security or first available company vehicle.
- Security patrol will also insure the prompt departure of all equipment and personnel at the termination of the emergency.

6.6 Triage (Emergency Medical Assistance)

- The emergency medical disposition of incident victims according to the nature or degree of injury in order to insure prompt medical treatment of victims as well as maximize the number of survivors in all emergency situations. **Notification should be made to the appropriate hospitals of any incident which has or may cause mass injuries to employees or the community. The primary hospitals for the facility are Willis Knighton and LSU.**
- Triage shall be set up in an area adjacent to the incident in a safe zone as prescribed by the SFD EMS.

Medical Treatment

6.7 Medical treatment will be the responsibility of the Shreveport Fire Department EMS.

- Primary immediate care/treatment center - Willis-Knighton Emergency Room on Hearne Avenue.
- Alternate medical facility - LSU Medical Center at 1501 Kings Highway.
- All burns will be sent directly to LSU Burn Center.
- The Medical Liaison will be responsible for providing all available information to the Emergency Room or medical facility so as to assist them in the proper diagnosis and treatment of the injured parties. The Medical Liaison is to coordinate medical information between the emergency scene and medical assistance wherever such assistance takes place.
- Personnel trained in First Aid and CPR are listed in **First Aid and CPR Trained Employees.**

7. ENVIRONMENTAL RESPONSE

7.1 Emergency Alarms and Response

- Alarms

- Any employee detecting a release of a hazardous material or a potentially imminent release will notify his supervisor or the Responsible Shift Person immediately.
- Notification shall be done by radio, telephone, or messenger.
- In the event a release is considered of the magnitude to require evacuation of the facility, the emergency alarms will be used. Also if considered a threat to the community the First Call system will be activated by the appropriate persons.

- Response
  - Responses to releases shall be handled with the same urgency as a fire or other emergencies.
  - Responses to incidental releases of hazardous substances, where the substances can be absorbed, neutralized, or otherwise controlled at the time of the release shall be performed by the employees in the immediate area or by HAZWOPER trained maintenance personnel.
  - Responses to releases of substances where there is no potential safety or health hazard (i.e., fire, explosion, chemical exposure, or environmental damage) are not considered to be an emergency response.
  - Responses to any release of hazardous material that cannot be readily handled as in section 2 above by area and maintenance personnel and require specific technical support and/or have potential for fire, explosion, or chemical exposure, will require activating personnel trained for such response. (HAZWOPER) This will include activation of our **Oil Spill Response Plan**, **16-N-0001**.
  - These personnel will be called by phone, radio, or beeper as defined in the SECURITY section of this document, additional calls shall be made as required by the Incident Commander under the Spill Response Plan.

7.2 Security

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

[redacted]

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

[redacted]

8. RESCUE

Alarms and Levels of Rescue

8.1 Alarms can range from a decision to perform self-rescue, a decision by the attendant to require evacuation, external rescue to the full call for trained personnel to perform internal rescue.

- **Self-rescue** will be the result of a decision by entrants in a Permit Required Confined Space (PRCS) to withdraw due to a change in conditions.
- **External rescue** will be the result of a decision by the attendant that conditions either in the Permit Required Confined Space or outside require evacuation. Such rescue may be as simple as the entrants exiting or it may require the attendant to use the retrieval lines to extract personnel.

  WARNING: The Attendant is not to enter the PRCS but is to sound the alarm by horn or radio for help.
- **Internal rescue** shall be done by trained professionals. The attendant or (hole watch) of the confined space shall contact Security on Channel 3 using the refinery radio system and state that rescue help is needed. Security will contact the Shreveport Fire Department and Calumet Safety.

8.2 Response Plan – See details of rescue response in **Confined Space Entry, 00-H-0010 and Safe Descent onto Floating Roof Tanks, 00-H-0140**

9. POWER FAILURE

9.1 Telephone System

- In the event of a power failure, the in-plant telephone system may be inoperable

NOTE: During the power failure mode the power phones do not require a 9 Dial to get outside. The Power Failure phones are **red**.

- Only the phone locations and numbers listed below can be used for incoming and outgoing calls when power fails:

Location	Extension	Incoming Phone
Front Desk	4097	636-2711
South Wing Conference Room	4273	636-2713
South Wing Conference Room (SPLIT)	4199	636-2758
North Wing Conference Room	4087	636-2718

North Wing Conference Room	4213	636-2716
Safety Manager Office	4273	636-2756
Plant Manager Office	4018	636-2758
Maintenance Manager's Office	4064	
Jewella Gate	4022	636-2714
Midway Gate	4035	636-2712
Midway Gate (RED PHONE)	4218	636-2707
Control Room	4194	636-2715
Control Room	4101	636-2717
Control Room	4000	636-2719
3 ONE / WAY OUT TRUNKS		
East Truck Dock	4081	
West Dock	4170	

Note: If the Main Switchboard is busy, an incoming call will rotate to the next number as listed above (in sequence only).

9.2 Emergency Plant Procedures

- Specific actions pertaining to power failures affecting key process and/or operational units will be the sole responsibility of Refinery Management.

10. SERVERE WEATHER -TORNADOES

10.1 Weather reports from Security personnel will be provided via radio communication. Upon receiving notification of severe disastrous weather, management will determine the extent of preparedness necessary.

10.2 Tornado Response:

- The steam whistle will be used as a warning devise for **tornado warnings** which indicate we are potentially in the path of a tornado. The steam whistle will be blown four short bursts three times repeatedly.
- Any process personnel not needed in the Lube Control Room should stand by in the south wing hallway.
- Maintenance personnel will go to the east wing, brick building interior hallway.
- Office and Lab personnel will move to the center areas or most secure areas of their respective buildings.
- Security personnel will secure their gates and secure themselves in the nearest strong structure. Security is to stay alert and ready to open gates for emergency equipment.
- Contractor personnel will go to the central area of the most secure structure or other safe zone (low place; be alert for flooding) in their work area, excluding the control room.
- An all clear will be announced via radio by the Emergency Operations Center when the danger has passed. After the initial all clear radios and word of mouth will be used to complete the process.

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13. TRAINING AND DRILLS OF EMERGENCY RESPONSE

13.1 Response Functions

NOTE: Operations persons will provide initial response within the limitation of their training to fires and other emergencies as deemed necessary. Their response shall be defensive.

13.2 Training and Education

- Appropriate Calumet Lubricants Shreveport Refinery employees are to be trained in the use of portable fire extinguishers annually.
- The operations personnel are to be trained to include effective use of permanent fire fighting equipment such as monitors, foam eductors and sprinkler systems.

13.3 Training Drill

- Before the pre-planned drill, all persons involved will discuss actions to be taken before the actual event and then set out to perform those happenings.
- The drill will be held within the Refinery with the cooperation of local agencies.

14. INDUSTRIAL FIREFIGHTING EQUIPMENT AND PPE

Fire Fighting Equipment

14.1 Weekly

- Fire alarm sirens and the steam whistle are to be tested every Thursday at 12 noon. Any defects are to be corrected by the end of the shift.
- Firewater pumps test run

14.2 Monthly

- Emergency response vehicles visual inspection and function test.
- Monitors shall be checked monthly.
- Each supervisor or responsible shift person is responsible for replacement of discharged or defective extinguishers in their areas.

14.3 Annually

- Hand fire extinguishers shall be inspected.
- Firewater pumps shall be checked for flow.
- Fire hoses shall to be tested.
- A random sampling of foam shall be tested annually.
- Foam pumper shall be tested for foam making capability.
- Automated sprinkler systems throughout the plant shall be inspected annually.

PPE

14.4 Protective Clothing

- Full body protective equipment including bunker coats and pants, fire retardant gloves, Nomex hoods and helmets with face shields.

14.5 Respiratory Protection

- SCBA's are provided with an alarm system for low air warning and shall be worn in oxygen deficient and/or IDLH areas. SCBA's are to be used in all response incidents where there is any question as to the breathable atmosphere and in Offensive Firefighting Attack.
- SCBA's are to be inspected after each use, monthly and detailed inspection annually.

APPLICABLE DOCUMENTS

29 CFR 1910.38 - Employee Emergency Plans and Fire Prevention Plans

29 CFR 1910.120 - HAZWOPER

29 CFR 1910.146 - Permit Required Confined Space (Rescue)

HAZWOPER - Calumet - Shreveport Refinery

Fire Prevention Plan – Calumet - Shreveport Refinery

Calumet - Shreveport Refinery Oil Spill Response Plan

PROCEDURES REFERENCED

00-h-0028.doc Entry Authorization Log

16-N-0001.pdf Oil Spill Response Plan

00-h-0041.doc EOM Phone list

00-h-0068.doc HAZWOPER

00-h-0010.doc Plant wide Confined Space Entry Procedure

00-h-0140.doc Safe Descent onto External Floating Roof Tanks

00-h-0030.doc Emergency Phone list

00-h-0029.doc Telephone Threat Checklist

END OF PROCEDURE