U.S. Department
of Transportation
**Pipeline and Hazardous
Materials Safety Administration**

1200 New Jersey Avenue, S.E.
Washington, D.C. 20590

The following Oil Spill Response Plan has been submitted to the Department of Transportation (DOT) Pipeline Hazardous Materials Safety Administration (PHMSA) in HyperText Markup Language (HTML) format, and has since been converted to Portable Document Format (PDF) form. Any hyperlink included in the PDF file is NOT functional, and materials referenced in the links have been attached as an addendum at the end of the document.


Enterprise Products Operating, L.P.
Enterprise Products Operating, L.P.
Northern Zone
OPA-90 Facility Response Plan
Developed by:


Enterprise Products Operating, L.P., Northern Zone
OPA-90 Facility Response Plan


Enterprise Products Operating, L.P.
Enterprise Products Operating, L.P.
Northern Zone
OPA-90 Facility Response Plan
Developed By:


Developed by:
TRP
TECHNICAL RESPONSE PLANNING
CORPORATION
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Enterprise Products Operating, L.P.

Northern Zone

Oil Spill Response Plan
Terminals

Developed by:

TECHNICAL RESPONSE PLANNING
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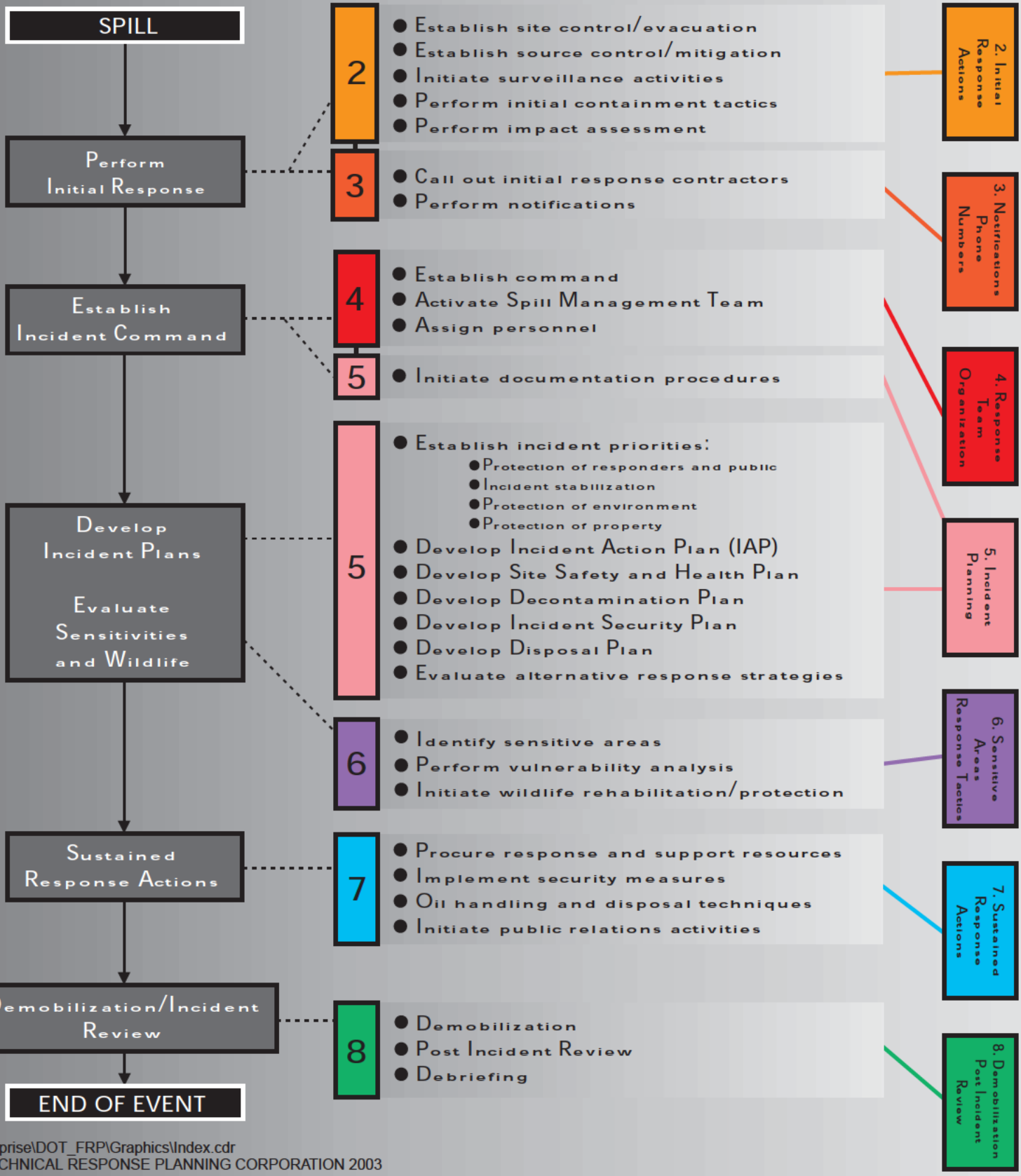
Response Procedures Flow Chart



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INTRODUCTION

FIGURE 1-1 - RECORD OF CHANGES

Changes to this Plan will be documented through the EPOLP change request form, filed at the Area Office, and submitted to the Senior Compliance Administrator for entry into the system. Plan review and modifications will be initiated and coordinated by the Environmental, Health, Safety, and Training Department (EHS&T) in conjunction with the Supervisor/Area Manager.

CHANGE NUMBER	DATE OF CHANGE	DESCRIPTION OF CHANGE	PAGE NUMBER
1	3/8/2004	DOT temporary approval letter inserted into Section 1.5	Section 1 - Page 15
2	10/28/2004	Added WCD to Figure 1-3, Updated Section 1.2, Revised Figure 2-1, Removed Figure 2-2, Revised Figure 3.1-1, Revised Figure 3.1-2, Revised Figure 4.2, Updated Section 4.5, Section 4.6 added Finance Section Chief	Section 1 ? Pages 5 and 9, Section 2 - all pages, Section 3 ? pages 3 and 4, Section 4 ? Pages 3, 5, 6, and 15, Section 5 ? Page 8
3	1/10/2005	Updated Section 1.1, Updated OSRO's in Section 3, 7 and Appendix B, Added Alternate Response Strategies to Section 6, Added Threatened and Endangered Species habitats to Section 6	TOC - pages 1-3, Section 1 - Page 8, Section 3 - Page 22, Section 6 - Page 1 and pages 12 through end of Section, Section 7 - Page 2, Appendix B - Pages 2 and 4
4	2/25/2005	DOT five year approval letter inserted into Section 1.5	Section 1 - Page 16
5	8/25/2005	Updated Section 1.2, Updated Figure 2-1, Updated Section 4.4, Updated Figure 7.1-1, Updated Appendix B	Section 1 - Pages 2 and 9, Section 2 - Page 2, Section 4 - Page 3, Section 7 - Page 2, Appendix B - Page 2
6	1/18/2006	Updated Record of Changes, Addition of Clint Pierce as an additional QI and deletion of David Anderson for the Northern Zone, Revised Figure 3.1-4, Added contractors equipment maintenance procedure	Section 1 - Pages 2 and 4, Section 3 - Pages 13 and 14, Section 7 - Page 3
7	2/14/2006	Updated Record of Changes in Figure 1-1, Changed RSPA references to PHMSA in Sections 1.1, 1.2, 3 (TOC), 3.1; Appendices C.4, C.5, D, and E.1	Section 1 - Page 2, Section 3 - Page 1 and 2, Appendix C - Pages 8 and 10, Appendix D - Pages 1-5, Appendix E - Page 3
8	12/21/2009	1 - PHMSA | 3 - Notifications / Telephone Numbers | 3.1 Emergency Information and Notification Procedures | Figure 3.1-4 - Notifications and Telephone Numbers | Company Personnel	
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16	2/17/2010	1 - PHMSA | 1 - Introduction | Figure 1-3 - Information Summary	
17	10/6/2010	1 - PHMSA | 1 - Introduction | Figure 1-3 - Information Summary | Line Sections	
18	10/25/2010	1 - PHMSA | 3 - Notifications / Telephone Numbers | 3.1 Emergency Information and Notification Procedures | Figure 3.1-4 - Notifications and Telephone Numbers | Company Personnel	
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FIGURE 1-2 - DISTRIBUTION LIST

PLAN HOLDER	ADDRESS	NUMBER OF PAPER COPIES	**NUMBER OF ELECTRONIC COPIES**

FIGURE 1-3 - Northern Zone INFORMATION SUMMARY

Owner:	Enterprise Products Operating LLC 1100 Louisiana Houston, TX 77002
Operator:	Enterprise Products Operating LLC 1100 Louisiana Houston, TX 77002
Zone Name:	Northern Zone
Facility Mailing Address:	PO Box 4324 Houston, TX 77210

Zone Telephone/FAX:	Phone: Fax:	
PHMSA Sequence #:	1636	
Qualified Individuals:	Tim Schutt Northern Region Manager (319) 351-1234 (Office) (b) (6) (319) 330-4705 (Mobile)	5354 American Legion Road SE Iowa City, IA 52240
	Russell Edwards Greenwood Area Supervisor (402) 789-3350 (Office) (b) (6) (402) 499-7861 (Mobile)	18805 Highway 6, P.O. Box 100 Greenwood, Nebraska 68366
	Todd Morrison Pine Bend Area Supervisor (651) 455-6373 (Office) (b) (6) (651) 402-2158 (Mobile)	10825 Courthouse Blvd East Inver Grove Heights, MN 55077
	Jerry Munoz Kearney Area Supervisor (816) 628-5080 (Office) (b) (6) (816) 728-3662 (Mobile)	1015 North Jefferson Keaney, MO 64060
	Donnie Johnson Greenwood Area Maintenance Coordinator (402) 789-3350 (Office) (b) (6) (402) 499-7862 (Mobile)	18805 Highway 6, P.O. Box 100 Greenwood, Nebraska 68366
	Jim Rohrs Greenwood Area Maintenance Coordinator (712) 729-3277 (Office) (b) (6) (712) 260-2229 (Mobile)	3220 Silver Ave Sanborn, Iowa 51248
	Darrell Baker Kearney Area Maintenance Coordinator (816) 628-5080 (Office) (b) (6) (660) 621-0533 (Mobile)	1015 N. Jefferson Kearney, Missouri 64060
	Nick Nicholson Pine Bend Area Maintenance Coordinator 651-455-6373 (Office) (b) (6) 651-295-0960 (Mobile)	10825 Courthouse Blvd East Inver Grove Heights, MN 55077
Description of Zone:	The Pipeline carries petroleum products (including: Natural gasoline, Naphtha) in the areas shown in **FIGURE 1-4** and **FIGURE 1-5**.	
Response Zone Consists of the Following Counties:	Cherokee, Dickinson, Monona, O'Brien, Osceola, Plymouth, Woodbury (Iowa); Clay, Dickinson, Ottawa, Washington (Kansas); Blue Earth, Dakota, Jackson, Le Sueur, Martin, Rice, Scott, Watonwan	

	(Minnesota); Burt, Cass, Dodge, Douglas, Gage, Lancaster, Saunders, Washington (Nebraska)

FIGURE 1-3 - Northern Zone INFORMATION SUMMARY, CONTINUED

Line Sections/Products Handled: (Refer to Product Characteristic and Hazards, FIGURE C.6-1)	SECTION	DIAMETER	PRODUCT
	Clay Center ? Linn	8-5/8? O.D. x .156 W.T. API 5LX52	Natural Gasoline and Naphtha
	Linn ? Beatrice	8-5/8? O.D. x .156 W.T. API 5LX52	Natural Gasoline and Naphtha
	Beatrice ? Greenwood	8-5/8? O.D. x .156 W.T. API 5LX52	Natural Gasoline and Naphtha
	Greenwood ? Valley	8-5/8? O.D. x .156 W.T. API 5LX52	Natural Gasoline and Naphtha
	Valley ? Herman	8-5/8? O.D. x .188 W.T. API 5LX52	Natural Gasoline and Naphtha
	Herman ? Whiting	8-5/8? O.D. x .188 W.T. API 5LX52	Natural Gasoline and Naphtha
	Whiting ? Moville	8-5/8? O.D. x .188 W.T. API 5LX52	Natural Gasoline and Naphtha
	Moville ? Marcus	8-5/8? O.D. x .188 W.T. API 5LX52	Natural Gasoline and Naphtha
	Marcus ? Sanborn	8-5/8? O.D. x .188 W.T. API 5LX52	Natural Gasoline and Naphtha
	Sanborn ? Jackson County Suburban Gas	8-5/8? O.D. x .172 W.T. API 5LX65	Natural Gasoline and Naphtha
	Jackson County Suburban Gas ? Mankato	8-5/8? O.D. x .172 W.T. API 5LX65 & .172 W.T. API 5LX60 & .172 W.T. API 5LX56	Natural Gasoline and Naphtha
	Mankato ? Pine Bend	8-5/8? O.D. x .219 W.T. API 5LX52	Natural Gasoline and Naphtha
Worse Case Discharge (bbls):	(b) (7)(F)		
Alignment Maps (Piping, Plan Profiles):	Maintained at: Data Resources in Houston, TX		
Spill Detection and Mitigation Procedures:	Refer to **SECTION 2** and **APPENDIX C**.		

Statement of Significant and Substantial Harm:	The response zones in this system all contain pipelines greater than 6 5/8 inches and are longer than ten miles. At least one section of pipeline in each response zone crosses a major waterway or comes within five miles of a public drinking water intake. Therefore, in accordance with 49 CFR 194.103(c), each entire response zone described in this Plan will be treated as if expected to cause significant and substantial harm.
Date Prepared:	July 2003

The information contained in this Plan is intended to be used as guidelines for the spill responder. Actual circumstances will vary and will dictate the procedures to be followed, some of which may not be included in this manual.

NOTE: For further information on the Qualified Individuals' training and qualifications, refer to **SECTION 4.5** and **APPENDIX A.2** in this Plan.

FIGURE 1-4 PIPELINE SYSTEM OVERVIEW MAP

Click to view/print System Overview

FIGURE 1-5 NORTHERN ZONE MAP

Click to view/print Zone Map

1.1 PURPOSE/SCOPE OF PLAN

The purpose of this Spill Response Plan (Plan) is to provide guidelines to quickly, safely, and effectively respond to a spill from the Northern Zone. The pipelines within this zone are owned by Enterprise Products Operating LLC and operated by Enterprise Products Operating LLC.

This Plan is intended to satisfy the requirements of the Oil Pollution Act of 1990 (OPA 90), and has been prepared in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) and applicable Area Contingency Plans (ACP), EPA Region V Regional Integrated Contingency Plan and its Minneapolis/St. Paul Sub-Area Plan, EPA Region VII Integrated Contingency Plan and its Omaha/Council Bluffs Sub-Area Plan. Specifically, this Plan is intended to satisfy:

- Pipeline Hazardous Material Safety Administration (PHMSA), U.S. Department of Transportation requirements for an OPA 90 Plan (49 CFR 194)

1.2 PLAN REVIEW AND UPDATE PROCEDURE

In accordance with 49 CFR Part 194.121, this Plan will be reviewed annually and modified to address new or different operating conditions or information included in the Plan. Upon review of the response plan for each five-year period from the latest date of approval, the plan will be submitted to PHMSA. Company internal policy states that the Plan will be reviewed annually,

modified as appropriate, and address improvements identified during drills. In the event the Company experiences a Worst Case Discharge, the effectiveness of the plan will be evaluated and updated as necessary. If a new or different operating condition or information would substantially effect the implementation of the Plan, the Company will modify the Plan to address such a change and, within 30 days of making such a change, submit the change to PHMSA. Examples of changes in operating conditions that would cause a significant change to the Plan include:

CONDITIONS REQUIRING REVISIONS & SUBMISSIONS
Relocation or replacement of the transportation system in a way that substantially effects the information included in the Plan, such as a change to the Worst Case Discharge volume.
A change in the type of oil handled, stored, or transferred that materially alters the required response resources.
A change in response procedures.
A change in key personnel Qualified Individuals (QI).
A change in the name of the Oil Spill Removal Organization (OSRO).
Any other changes that materially affect the implementation of the Plan.
A change in the NCP or ACP that has significant impact on the equipment appropriate for response activities.

All requests for changes must be made through the Senior Compliance Administrator and will be submitted to PHMSA by the Environmental Manager, Safety/PSM Coordinator, Area Supervisor and the Area Manager.

1.3 CERTIFICATION OF ADEQUATE RESOURCES

CERTIFICATION
Pursuant to the Clean Water Act Section 311(j)(5)(F)

Enterprise Products Operating LLC, Northern Zone

The undersigned, the owner or operator of the above referenced pipeline who is authorized to sign this certification on behalf of the Company, hereby certifies that the above referenced pipeline has prepared a response plan which will be implemented in the event of a worst case discharge of oil. I also certify that the Plan is in effect for this pipeline and that Operator personnel are trained in the implementation of this Plan.

I further certify that the availability of private personnel and equipment necessary to respond, to the maximum extent practicable, to a worst case discharge or a substantial threat of a discharge is ensured by contract or other approved means.

Also, I certify that this Plan meets the applicable requirements of Research and Special Programs Administration, U.S. Department of Transportation (49 CFR 194).

Enterprise Products Operating LLC, Operator of the Enterprise Products Operating LLC by Enterprise Products GP, LLC, its General Partner.

Terry L. Hurlburt
Vice President & General Manager - Operations

1.4 MANAGEMENT OF CHANGE REQUEST FORM

FIGURE 1.4-1 - MANAGEMENT OF CHANGE REQUEST FORM

Asset Name:			**Change Request Number: CR-**		
Asset Location:			Originator:		
Proposed Date of Change			Date of Origination:		
Associated Work Order Number:			Process Area:		
☐ Permanent	☐ Temporary	Expiration Date if Temporary Change:			
Line No:		Drwg. No:		Equipment No.	
Description of Change (Scope):					
Technical Basis for Change (Justification):					
Nature of the Change:					
Change affects:	☐ Safety	☐ Operations	☐ Environmental	☐ Maintenance	☐ Other
Type of Change:					
☐ Equipment	☐ Process	☐ Instrumentation	☐ Piping	☐ Other	
☐ Material	☐ Procedure	☐ Chemical	☐ Controls/Setpoint		
Conceptual Approval	Supervisor: Manager:		Date: Date:		

Pre-Modification Checklist (tasks):	**Required?**	**Assigned Responsibility**	**Due Date**	**Date Completed**
Elect. Area Classification Drwg. Review	☐ Yes ☐ NA			
Electrical/Controls Design Review	☐ Yes ☐ NA			
Environmental Review	☐ Yes ☐ NA			
Mechanical Design Review	☐ Yes ☐ NA			

P&ID Changes (Conceptual)	☐ Yes ☐ NA			
PFD Changes (Conceptual)	☐ Yes ☐ NA			
Pipeline Integrity Review	☐ Yes ☐ NA			
Facility Integrity Review	☐ Yes ☐ NA			
Process Design Review	☐ Yes ☐ NA			
Process Hazard Analysis - **Required**	☐ Yes ☐ NA			
PSM Considerations	☐ Yes ☐ NA			
RMP Considerations	☐ Yes ☐ NA			
Job Plan	☐ Yes ☐ NA			
Operating Procedures	☐ Yes ☐ NA			
Maintenance Procedures	☐ Yes ☐ NA			

Pre-modification Approvals (Ready for construction)	**Name Approved**	**Approval Date**	**Signature Approval**
Originator			
Field Engineer (Required Approval)			
Pipeline Supervisor (Required Approval)			
Safety/PSM Coordinator (Required Approval)			
Manager (Required Approval)			

FIGURE 1.4-1 - MANAGEMENT OF CHANGE REQUEST FORM, CONTINUED

Pre-Startup Checklist	**Required?**	**Assigned Responsibility**	**Due Date**	**Date Completed**
Affected personnel informed	☐ Yes			
Contractor Requirements changed	☐ Yes ☐ NA			
Emergency Procedure changes	☐ Yes ☐ NA			
Maintenance Procedure	☐ ☐			

completed	Yes NA			
Operating Procedures completed	☐ Yes ☐ NA			
Operations Control Procedures completed	☐ Yes ☐ NA			
Personnel Trained on Procedure (documented)	☐ Yes ☐ NA			
Chemical Inventory List update	☐ Yes ☐ NA			
Environmental Permit Confirmation - filed	☐ Yes ☐ NA			
Cathodic Protection completed	☐ Yes ☐ NA			
Cause & Effect Matrix updated (P&ID)	☐ Yes ☐ NA			
Electrical/Instrument Drawing updated	☐ Yes ☐ NA			
Equipment File update completed	☐ Yes ☐ NA			
Valve and Equipment Tagging	☐ Yes ☐ NA			
Surge Analysis revision	☐ Yes ☐ NA			
MOP/MAOP changes	☐ Yes ☐ NA			
Maintenance Report completed	☐ Yes ☐ NA			
Process Description (Job Books onsite)	☐ Yes ☐ NA			
P&ID Changes (Redline)	☐ Yes ☐ NA			
PFD Changes (Redline)	☐ Yes ☐ NA			
Map (Redline)	☐ Yes ☐ NA			
Visitor Orientation update	☐ Yes ☐ NA			
Workplace Hazard Assessment revision	☐ Yes ☐ NA			
PHA Recommendations completed	☐ Yes ☐ NA			
PSSR (Pre-Startup Safety Review)	☐ Yes ☐ NA			
Is there an exceptions list for this PSSR?				
Other	☐ ☐			

	Yes NA			
Pre-Startup Approvals (Ready for startup)		**Name Approved**	**Approval Date**	**Signature Approved**
Originator				
Pipeline Operations Supervisor (required)				
Engineering				
Maintenance Coordinator				
Manager				
Safety / PSM Coordinator (required)				

NOTE: ALL DOCUMENTATION MUST BE WITH THE CHANGE REQUEST FOR VERFICATION PRIOR TO THE PSSR.

1.5 AGENCY SUBMITTAL/APPROVAL LETTERS

Click to view/print PHMSA letter March 2, 2004

1.5 AGENCY SUBMITTAL/APPROVAL LETTERS, CONTINUED

Click to view/print PHMSA Letter February 15, 2005

1.5 AGENCY SUBMITTAL/APPROVAL LETTERS, CONTINUED

Click to view/print PHMSA NIIMS and NCP Letter

1.5 AGENCY SUBMITTAL/APPROVAL LETTERS, CONTINUED

Click to view/print PHMSA Approval letter November 15, 2005

1.5 AGENCY SUBMITTAL/APPROVAL LETTERS, CONTINUED

Click to view/print PHMSA Re-Submittal Letter 09/29/2008

SECTION 2 Last Revised: October 2008

INITIAL RESPONSE ACTIONS

FIGURE 2-1 - INITIAL RESPONSE ACTION GUIDELINES

RESPONSE ACTION
First Person to Discover Spill
Immediately notify Pipeline Control who will contact the appropriate Local Emergency Responder. Take appropriate action to protect life and ensure safety of personnel.
Secure the scene. Isolate the area and assure the safety of people and the environment. Keep people away from the scene and outside the safety perimeter.
If safe to do so, attempt to contain leading edge of land base spills with earth moving equipment (shovels etc).
If safe to do so, erect berm large enough to maintain containment until the arrival of designated spill contractors.
Pipeline Control (Liquid Control)
Remotely controlled motor operated valves will be operated by Pipeline Control as soon as a leak is detected.
Contact Technician on call.
Notify appropriate regulatory agencies (**FIGURE 3.1-4**). • National Response Center (NRC) • State Emergency Response Commission (SERC) • Local Emergency Planning Committee (LEPC) (if applicable)
Notify Local Emergency Responders.
Qualified Individual
Assume role of Incident Commander until relieved.
Conduct preliminary assessment of health and safety hazards.
Evacuate non-essential personnel, notify emergency response agencies to provide security, and evacuate surrounding area (if necessary).
Call out spill response contractors (**FIGURE 3.1-4**).
If safe to do so, direct responders to shut down potential ignition sources in the vicinity of the spill, including motors, electrical pumps, electrical power, etc.
If safe to do so, direct responders to shut down and control the source of the spill. Be aware of potential hazards associated with product and ensure that lower explosive limits (LELs) are within safe levels before sending personnel into the spill area.
If safe to do so, direct responders to stabilize and contain the situation. This may include berming or deployment of containment and/or sorbent boom.
For low flash oil ($<100^{o}F$); consider applying foam over the oil, using water spray to reduce vapors, grounding all equipment handling the oil, and using non-sparking tools.
If there is a potential to impact shorelines, consider lining shoreline with sorbent or diversion boom to reduce impact.
Obtain the information necessary to complete the Preliminary Incident Report Form (**FIGURE 3.1-2**) and phone this information to Pipeline Control.
Incident Commander/Qualified Individual
Activate all or a portion of Spill Management Team (SMT) (as necessary).
Ensure the SMT has mobilized spill response contractors (if necessary). It is much better to demobilize equipment and personnel, if not needed, than to delay contacting them if they are

needed.
Document all response actions taken, including notifications, agency/media meetings, equipment and personnel mobilization and deployment, and area impacted.
Initiate spill tracking and surveillance operations. Determine extent of pollution via surveillance aircraft or vehicle. Estimate volume of spill utilizing information in **SECTION 2.2** and **SECTION 2.3**. Send photographer/videographer if safe.
SECONDARY RESPONSE ACTIONS (Refer to SMT job descriptions in **SECTION 4.6** for detailed checklists of responsibilities.)
FACILITY SPECIFIC RESPONSE CONSIDERATIONS (Refer to **SECTION 6** for maps and sensitivity locations.)

2.1 SPILL DETECTION AND MITIGATION PROCEDURES

See **APPENDIX C.1** for spill detection protocols.

Each spill mitigation situation is unique and must be treated according to the circumstance present. In every situation, however, personnel safety must be assessed as the first priority. The potential for ignition and/or toxic exposure must be promptly evaluated. Spill mitigation procedures are listed in FIGURE 2.1-1. Worst case discharge volume calculations and discussion are provided in **APPENDIX C**.

FIGURE 2.1-1 - SPILL MITIGATION PROCEDURES

TYPE	MITIGATION PROCEDURE
Failure of Transfer Equipment	1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at high risk. 2. Terminate transfer operations and close block valves. 3. Drain product into containment areas if possible. 4. Eliminate sources of vapor cloud ignition by shutting down all engines and motors.
Tank/Cavern Overfill/Failure	1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at high risk. 2. Shut down or divert source of incoming flow to tank. 3. Transfer fluid to another tank with adequate storage capacity (if possible). 4. Shut down source of vapor cloud ignition by shutting down all engines and motors. 5. Ensure that dike discharge valves are closed. 6. Monitor diked containment area for leaks and potential capacity limitations. 7. Begin transferring spilled product to another tank as soon as possible.
Piping Rupture/Leak (under pressure and no pressure)	1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at high risk. 2. Follow the procedures outlined in the O&M Manual-Abnormal or Emergency Operations.

Fire/Explosion	1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at risk of injury. 2. Notify local fire and police departments. 3. Attempt to extinguish fire if it is in incipient (early) stage. 4. Shut down transfer or pumping operation. Attempt to divert or stop flow of product to the hazardous area (if it can be done safely). 5. Eliminate sources of vapor cloud ignition by shutting down all engines and motors. 6. Control fire before taking steps to contain spill.
Manifold Failure	1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at high risk. 2. Terminate transfer operations immediately. 3. Isolate the damaged area by closing block valves on both sides of the leak/rupture. 4. Shut down source of vapor cloud ignition by shutting down all engines and motors. 5. Drain fluids back into containment areas (if possible).

2.2 SPILL SURVEILLANCE GUIDELINES

- Surveillance of an oil spill should begin as soon as possible following discovery to enable response personnel to assess spill size, movement, and potential impact locations
- Dispatch observers to crossings downstream or down gradient to determine the spills maximum reach
- Clouds, shadows, sediment, floating organic matter, submerged sand banks or wind-induced patterns on the water may resemble an oil slick if viewed from a distance
- Use surface vessels to confirm the presence of any suspected oil slicks (if safe to do so); consider directing the vessels and photographing the vessels from the air, the latter to show their position and size relative to the slick
- It is difficult to adequately observe oil on the water surface from a boat, dock, or shoreline
- Spill surveillance is best accomplished through the use of helicopters or small planes; helicopters are preferred due to their superior visibility and maneuverability
- If fixed-wing planes are to be used, high-wing types provide better visibility than low-wing types
- All observations should be documented in writing and with photographs and/or videotapes
- Describe the approximate dimensions of the oil slick based on available reference points (i.e. vessel, shoreline features, facilities); use the aircraft or vessel to traverse the length

and width of the slick while timing each pass; calculate the approximate size and area of the slick by multiplying speed and time

- Record aerial observations on detailed maps, such as topographic maps
- In the event of reduced visibility, such as dense fog or cloud cover, boats may have to be used to patrol the area and document the location and movements of the spill; however, this method may not be safe if the spill involves a highly flammable product
- Surveillance is also required during spill response operations to gauge the effectiveness of response operations; to assist in locating skimmers; and assess the spill's size, movement, and impact
- An Oil Spill Surveillance Checklist is provided in **FIGURE 2.2-1**.

FIGURE 2.2-1 - OIL SPILL SURVEILLANCE CHECKLIST

Record your observations of spilled oil either in a notebook or directly on a chart of the area under observation. This checklist is an aid for organizing your observations. File used forms with local area office to retain for five years.

General Information	
Date:	Tidal or river stage (flood, ebb, slack, low water):
Time:	On-scene weather (wind, sea state, visibility):
Incident name:	Platform (helicopter, fixed-wing aircraft, boat):
Observer?s name:	Flight path/trackline:
Observer's affiliation:	Altitude where observation taken:
Location of source (if known):	Areas not observed (i.e. foggy locations, restricted air spaces, shallow water areas):
Oil Observations	
Slick location(s):	Color and appearance (i.e. rainbow, dull or silver sheen, black or brown in color or mousse):
Slick dimensions:	Percent coverage:
Orientation of slick(s):	Is oil recoverable (Y/N)?:
Distribution of oil (i.e. windrows, streamers, pancakes or patches):	
Considerations	
• During surveillance flights, travel beyond known impacted areas to check for additional oil spill sites • Include the name and phone number of the person making the observations	

- Clearly describe the locations where oil is observed and the areas where no oil has been seen

Other Observations
Response Operations
Equipment deployment (general locations where equipment is working and whether they are working in the heaviest concentration of oil):
Boom deployment (general locations of boom, whether the boom contains oil, and whether the oil entrains under the boom):
Environmental Observations
Locations of convergence lines, terrain, and sediment plumes:
Locations of debris and other features that could be mistaken for oil:
Wildlife present in area (locations and approximate numbers):

2.3 SPILL VOLUME ESTIMATING

Early in a spill response, estimation of spill volume is required in order to:

- Report to agencies
- Determine liquid recovery requirements
- Determine personnel and equipment requirements
- Estimate disposal and interim storage requirements

Some rapid methods to estimate spill size are:

- Transfer operations: Multiply the pumping rate by the elapsed time that the leak was in progress, plus the drainage volume of the line between the two closest valves or isolation points (volume loss = pump rate [bbls/min] x elapsed time [min] + line contents [bbl])
- Tank overfills: Elapsed time multiplied by the pumping rate
- Visual assessment of the surface area and thickness (**FIGURE 2.3-1**); the method may yield unreliable results because:

- Interpretation of sheen color varies with different observers
- Appearance of a slick varies depending upon amount of available sunlight, sea-state, and viewing angle
- Different products may behave differently, depending upon their properties

FIGURE 2.3-1 - SPILL ESTIMATION FACTORS

OIL THICKNESS ESTIMATIONS				
Standard Form	Approx. Film Thickness		Approx. Quantity of Oil in Film	
	inches	mm		
Barely Visible	0.0000015	0.00004	25 gals/mile^2	44 liters/km^2
Silvery	0.000003	0.00008	50 gals/mile^2	88 liters/km^2
Slightly colored	0.000006	0.00015	100 gals/mile^2	179 liters/km^2
Brightly colored	0.000012	0.0003	200 gals/mile^2	351 liters/km^2
Dull	0.00004	0.001	666 gals/mile^2	1,167 liters/km^2
Dark	0.00008	0.002	1,332 gals/mile^2	2,237 liters/km^2
Thickness of light oils: 0.0010 inches to 0.00010 inches				
Thickness of heavy oils: 0.10 inches to 0.010 inches				

2.3.1 Estimating Spill Trajectories

In some cases, oil spill trajectories should be estimated in order to predict direction and speed of the slick movement. Trajectory calculations provide an estimate of where oil slicks may impact shorelines and other sensitive areas, and also provide an estimate of the most effective location in which to mobilize spill response resources for protection, containment, and recovery.

Oil spill trajectories can be estimated using vector addition or with computer programs such as CAMEO. Hand calculations typically utilize the following assumptions:

- Oil moves at approximately the same direction and speed as the water currents, unless the winds are strong
- Wind speed can be multiplied by 0.034 to determine the effect of winds on speed and direction of spill movement
- The combined effects of winds and currents can be added to estimate spill movement speed and direction

More sophisticated predictions can be obtained from computer programs. Oil spill trajectory services can be obtained from:

- National Oceanic and Atmospheric Administration (NOAA) through the Federal On-

Scene Commander (FOSC)

- Private consulting firms

2.4 INITIAL CONTAINMENT ACTIONS

Initial containment actions will focus on utilizing containment on site in the most effective manner to:

- Prevent the oil from impacting water, thereby reduce the surface area and the shoreline to be cleaned.
- Concentrate the oil (when safe to do so), making physical recovery more efficient.
- Limit the environmental impact to the immediate spill area.

2.4 INITIAL CONTAINMENT ACTIONS, CONTINUED

Selection of the appropriate location and method will depend upon:

- Length of time spill occurs before being noticed
- Amount of spill
- Area of coverage
- Environmental factors such as wind speed and direction
- Oil's characteristics

2.4.1 Safety Considerations

- Containment actions should not be conducted during inclement weather or unsafe conditions, such as high winds, fast currents, or unstable terrain.
- Eliminate all ignition sources.
- Avoid contact with the spilled product.
- Use respiratory protection (if applicable).
- Ensure that the area remains secure to air traffic.

SECTION 3 Last Revised: August 2011

NOTIFICATIONS/TELEPHONE NUMBERS

3.1 EMERGENCY INFORMATION AND NOTIFICATION PROCEDURES

The notification sequence for a spill is as follows:

- Pipeline personnel will identify and control the source of a spill, if safe to do so, then immediately notify Pipeline Control then notify the Qualified Individual.
- Once the Qualified Individual arrives on scene they may assume the role as Incident Commander. The Incident Commander will conduct notifications as illustrated in the Notification Flow Chart **FIGURE 3.1-1**.

The priority of actions and response procedures will depend upon actual circumstances and will be determined by the Incident Commander.

This section also contains the following:

- FIGURE 3.1-2 provides a External/Spill Report Form. This form is utilized for initial and follow-up notifications. Follow-up notifications are the responsibility of the Liaison Officer.
- FIGURE 3.1-3 is the required DOT/PHMSA Accident Report Form to be submitted to the agency within 30 days.
- FIGURE 3.1-4 provides a notification summary and documentation form to assist in documenting notifications.

FIGURE 3.1-1 - EMERGENCY NOTIFICATION FLOW CHART

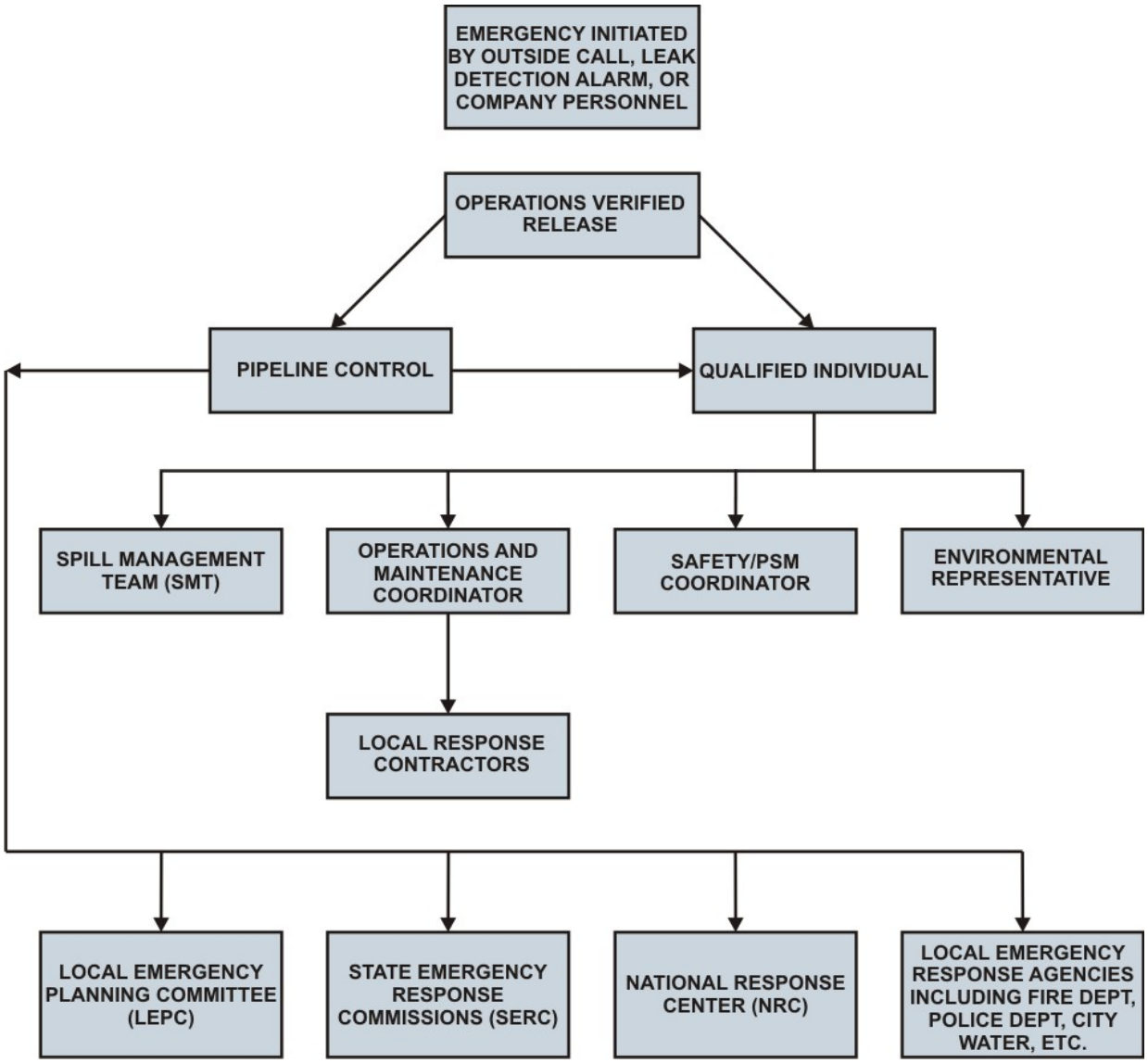


FIGURE 3.1-2 - PRELIMINARY INCIDENT REPORT FORM

The Enterprise Products Operating LLC Preliminary Incident Report may be found by accessing the ECIRTS system via the company?s internal website.

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty not to exceed $25,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed $500,000 as provided in 49 USC 60122

Form Approved OMB No. 2137-0047

U.S. Department of Transportation
Research and Special Programs Administration

FIGURE 3.1-3 - ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE SYSTEMS

Report Date
No. _____
(DOT Use Only)

INSTRUCTIONS

Important: *Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions, you can obtain one from the Office Of Pipeline Safety Web Page at http://ops.dot.gov.*

PART A - GENERAL REPORT INFORMATION

Check: ☐ **Original Report** ☐ **Supplemental Report** ☐ **Final Report**

1. a. Operator's OPS 5-digit Identification Number (if known) / / / / / /
   b. If Operator does not own the pipeline, enter Owner's OPS 5-digit Identification Number (if known) / / / / / /
   c. Name of Operator _____
   d. Operator street address _____
   e. Operator address _____
   City, County, State and Zip Code

IMPORTANT: IF THE SPILL IS SMALL, THAT IS, THE AMOUNT IS AT LEAST 5 GALLONS BUT IS LESS THAN 5 BARRELS, COMPLETE THIS PAGE ONLY, UNLESS THE SPILL IS TO WATER AS DESCRIBED IN 49 CFR §195.52(A)(4) OR IS OTHERWISE REPORTABLE UNDER §195.50 AS REVISED IN CY 2001.

2. Time and date of the accident
   / / / / / (hr.) / / / / / / / (month day year)

3. Location of accident
   (If offshore, do not complete a through d. See Part C.1)
   a. Latitude: Longitude: _____
   (if not available, see instructions for how to provide specific location)
   b. _____ City, and County or Parish
   c. _____ State and Zip Code
   d. Mile post/valve station ◉ or survey station no. ○
   (whichever gives more accurate location)
   _____

4. Telephone report
   / / / / / / (NRC Report Number) / / / / / / / (month day year)

5. Losses *(Estimated)*

Public/Community Losses reimbursed by operator:
Public/private property damage $_____
Cost of emergency response phase $_____
Cost of environmental remediation $_____
Other Costs $_____
(describe) _____

Operator Losses:
Value of product lost $_____
Value of operator property damage $_____
Other Costs $_____
(describe) _____

Total Costs $_____

6. Commodity Spilled ○ Yes ○ No
   (If Yes, complete Parts a through c where

c. **Estimated amount of commodity involved:**

applicable)

a. Name of commodity spilled

b. Classification of commodity spilled:

- ○ HVLs /other flammable or toxic fluid which is a gas at ambient conditions
- ○ CO_2 or other non-flammable, non-toxic fluid which is a gas at ambient conditions
- ○ Gasoline, diesel, fuel oil or other petroleum product which is a liquid at ambient conditions
- ○ Crude oil

- ◉ **Barrels**
- ○ **Gallons (check only if spill is less than one barrel)**

Amounts:

Spilled: _____

Recovered: _____

CAUSES FOR SMALL SPILLS ONLY (5 gallons to under 5 barrels) :

(For large spills [5 barrels or greater] see Part H)

- ○ **Corrosion**
- ○ **Natural Forces**
- ○ **Excavation Damage**
- ○ **Other Outside Force Damage**
- ○ **Material and/or Weld Failures**
- ○ **Equipment**
- ○ **Incorrect Operation**
- ○ **Other**

PART B - PREPARER AND AUTHORIZED SIGNATURE

(type or print) Preparer's Name and Title

Area Code and Telephone Number

Preparer's E-mail Address

Area Code and Facsimile Number

Authorized Signature

(type or print) Name and Title

Date

Area Code and Telephone Number

PART C - ORIGIN OF THE ACCIDENT (Check all that apply)

1. Additional location information

a. Line segment name or ID

Accident on Federal land other than

b. Outer Continental Shelf

○ Yes ○ No

c. Is pipeline interstate? ○ Yes ○ No

Offshore: ○ Yes ○ No *(complete d if offshore)*

d. Area _____ Block # _____

State / / / or Outer Continental Shelf ☐

2. Location of system involved (check all that apply)

- ☐ Operator?s Property
- ☐ Pipeline Right of Way
- ☐ High Consequence Area (HCA)?

Describe HCA

3. Part of system involved in accident

- ○ Above Ground Storage Tank
- ○ Cavern or other below ground storage

a. Type of leak or rupture

Leak: ○ Pinhole ○ Connection Failure *(complete sec. H5)* ○ Puncture, diameter *(inches)* _____

Rupture: ○ Circumferential - Separation ○ Longitudinal - Tear/Crack, length *(inches)* _____

Propagation Length, total, both sides *(feet)* ____

facility
◉ Pump/meter station; terminal/tank farm piping and equipment, including sumps
○ Other S*pecify:* _____
○ Onshore **pipeline**, including valve sites
○ Offshore **pipeline** including platforms

*If failure occurred on **Pipeline**, complete items a - g:*

4. Failure occurred on
○ Body of Pipe ○ Pipe Seam ○ Scraper Trap
○ Pump ○ Sump ○ Joint
○ Component ○ Valve ○ Metering Facility
○ Repair Sleeve ○ Welded Fitting ○ Bolted Fitting
○ Girth Weld
Other *(specify)* _____
Year the component that failed was installed: / / / /

5. Maximum operating pressure *(MOP)*
a. Estimated pressure at point and time of accident:
_____*PSIG*
b. MOP at time of accident:
_____*PSIG*
c. Did an overpressurization occur relating to the accident?
○ Yes ○ No

○ N/A ○ Other _____
b. Type of block valve used for isolation of immediate section:
Upstream: ☐ Manual ☐ Automatic ☐ Remote Control ☐ Check Valve
Downstream: ☐ Manual ☐ Automatic ☐ Remote Control ☐ Check Valve
c. Length of segment isolated ____ ft
d. Distance between valves ____ ft
e. Is segment configured for internal inspection tools? ○ Yes ○ No
f. Had there been an in-line inspection device run at the point of failure?
○ Yes ○ No ○ Don?t Know
○ Not Possible due to physical constraints in the system
g. If *Yes*, type of device run (*check all that apply*)
☐ High Resolution Magnetic Flux tool Year run:
☐ Low Resolution Magnetic Flux tool Year run:
☐ UT tool Year run:
☐ Geometry tool Year run:
☐ Caliper tool Year run:
☐ Crack tool Year run:
☐ Hard Spot tool Year run:
☐ Other tool Year run:

PART D - MATERIAL SPECIFICATION

1. Nominal pipe size *(NPS)* / / / / / in.
2. Wall thickness / / / / / in.
3. Specification SMYS / / / / / /
4. Seam type _____
5. Valve type _____
6. Manufactured by in year / / / / /

PART E - ENVIRONMENT

1. Area of accident
○ In open ditch ○ Under pavement ○ Above ground ○ Underground ○ Under water ○ Inside/under building ○ Other _____
2. Depth of cover: _____ inches

PART F - CONSEQUENCES

1. Consequences *(check and complete all that apply)*

a.	Fatalities	Injuries
Number of operator employees:	_____	_____

c. Product ignited ○ Yes ○ No d. Explosion ○ Yes ○ No
e. ☐ Evacuation *(general public only)* / / / / / people

Contractor employees working for operator: _____ _____
General public: _____ _____
Totals: _____ _____

b. Was pipeline/segment shutdown due to leak? ○ Yes ○ No
If Yes, how long? ____ days ____ hours ____ minutes

Reason for Evacuation:
○ Precautionary by company
○ Evacuation required or initiated by public official

f. Elapsed time until area was made safe:
/ / / hr. / / / min.

2. Environmental Impact

a. Wildlife Impact:
Fish/aquatic ○ Yes ○ No
Birds ○ Yes ○ No
Terrestrial ○ Yes ○ No

b. Soil Contamination ○ Yes ○ No
If Yes, estimated number of cubic yards:

c. Long term impact assessment performed: ○ Yes ○ No

d. Anticipated remediation ○ Yes ○ No

Water Contamination: ○ Yes ○ No *(If e. Yes, provide the following)*
Amount in water _____ barrels

Ocean/Seawater	○ No	○ Yes
Surface	○ No	○ Yes
Groundwater	○ No	○ Yes
Drinking Water	○ No	○ Yes *(If Yes, check below)*

○ Private well ○ Public water intake

If Yes, check all that apply: ☐ Surface water ☐ Groundwater ☐ Soil ☐ Vegetation ☐ Wildlife

PART G - LEAK DETECTION INFORMATION

1. Computer based leak detection capability in place? Yes ○ No ○
2. Was the release initially detected by? (check one):
○ CPM/SCADA-based system with leak detection
○ Static shut-in test or other pressure or leak test
○ Local operating personnel, procedures or equipment
○ Remote operating personnel, including controllers
○ Air patrol or ground surveillance
◉ A third party ○ Other (specify) _____
3. Estimated leak duration: days ____ hours ____

PART H - APPARENT CAUSE

Important: *There are 25 numbered causes in this Part H. Check the box corresponding to the primary cause of the accident. Check one circle in each of the supplemental categories corresponding to the cause you indicate. See the instructions for guidance.*

H1 - CORROSION

(Complete items a - e where applicable.)

1. ☐ External Corrosion
2. ☐ Internal Corrosion

a. Pipe Coating: ◉ Bare ○ Coated

b. Visual Examination: ○ Localized Pitting ○ General Corrosion ○ Other _____

c. Cause of Corrosion: ○ Selective Seam Corrosion ○ Galvanic ○ Stray Current ○ Atmospheric ○ Cathodic Protection Disrupted ○ Microbiological ○ Stress Corrosion Cracking ○ Other _____

d. Was corroded part of pipeline considered to be under cathodic protection prior to discovering accident?
○ No ○ Yes, Year Protection Started: / / / /

e. Was pipe previously damaged in the area of corrosion?
○ No ○ Yes ⇒ Estimated time prior to accident: / / / years / / / months *Unknown* ☐

H2 - NATURAL FORCES

3. ☐ Earth Movement ⇒ ○ Earthquake ○ Subsidence ○ Landslide ○ Other _____
4. ☐ Lightning
5. ☐ Heavy Rains/Floods ⇒ ○ Washouts ○ Flotation ○ Mudslide ○ Scouring ○ Other
6. ☐ Temperature ⇒ ○ Thermal Stress ○ Frost Heave ○ Frozen Components ○ Other
7. ☐ High Winds

H3 - EXCAVATION DAMAGE

8. ☐ Operator Excavation Damage (including their contractors/Not Third Party)
9. ☐ Third Party *(complete a - f)*

a. Excavator group: ○ General Public ○ Government ○ Excavator other than Operator/subcontractor

b. Type: ○ Road Work ○ Pipeline ○ Water ○ Electric ○ Sewer ○ Phone/Cable ○ Landowner-not farming related ○ Farming ○ Railroad ○ Other liquid or gas transmission pipeline operator or their contractor ○ Nautical Operations ○ Other _____

c. Excavation was: ○ Open Trench ○ Sub-strata (boring, directional drilling, etc?)

d. Excavation was an ongoing activity (Month or longer) ○ Yes ○ No If Yes, Date of last contact /___/___/___/

e. Did operator get prior notification of excavation activity?
○ Yes; Date received: / / / mo. / / / day / / / / / yr. ○ No

Notification received from: ○ One Call System ○ Excavator ○ Contractor ○ Landowner

f. Was pipeline marked as result of location request for excavation? ○ No ○ Yes *(If Yes, check applicable items i - iv)*

○

i. Temporary markings: ◉ Flags Stakes ○ Paint

ii. Permanent markings: ○

○

iii. Marks were (check one): Accurate ○ Not Accurate

iv. Were marks made within required time? ○ Yes ○ No

H4 - OTHER OUTSIDE FORCE DAMAGE

10. ☐ Fire/Explosion as primary cause of failure ⇒ Fire/Explosion cause: ○ Man made ○ Natural

11. ☐ Car, truck or other vehicle not relating to excavation activity damaging pipe

12. ☐ Rupture of Previously Damaged Pipe

13. ☐ Vandalism

H5 - MATERIAL AND/OR WELD FAILURES

Material

14. ☐ Body of Pipe ⇒ ○ Dent ○ Gouge ○ Bend ○ Arc Burn ○ Other

15. ☐ Component ⇒ ○ Valve ○ Fitting ○ Vessel ○ Extruded Outlet ○ Other

16. ☐ Joint ⇒ ○ Gasket ○ O-Ring ○ Threads ○ Other

Weld

17. ☐ Butt ⇒ ○ Pipe ○ Fabrication ○ Other

18. ☐ Fillet ⇒ ○ Branch ○ Hot Tap ○ Fitting ○ Repair Sleeve ○ Other

19. ☐ Pipe Seam ⇒ ○ LF ERW ○ DSAW ○ Seamless ○ Flash Weld

○ HF ERW ○ SAW ○ Spiral _____ ○ Other

*Complete a-g if you indicate **any** cause in part H5.*

a. Type of failure:

○ Construction Defect ⇒ ○ Poor Workmanship ○ Procedure not followed ○ Poor Construction Procedures

○ Material Defect

b. Was failure due to pipe damage sustained in transportation to the construction or fabrication site? ○ Yes ○ No

c. Was part which leaked pressure tested before accident occurred? ○ Yes, *complete d - g* ○ No

d. Date of test: /////yr. ///mo. ///day

e. Test medium: ○ Water ○ Inert Gas ○ Other _____

f. Time held at test pressure: ///hr.

g. Estimated test pressure at point of accident: _____ *PSIG*

H6 - EQUIPMENT

20. ☐	Malfunction of Control/Relief Equipment	⇒	◉ Control valve	○ Instrumentation	○ SCADA	○ Communications
			○ Block valve	○ Relief valve	○ Power failure	○ Other _____
21. ☐	Threads Stripped, Broken Pipe Coupling	⇒	○ Nipples	○ Valve Threads	○ Dresser Couplings	○ Other _____
22. ☐	Seal Failure	⇒	○ Gasket	○ O-Ring	○ Seal/Pump Packing	○ Other _____

H7 - INCORRECT OPERATION

23. ☐ Incorrect Operation

a. Type: ○ Inadequate Procedures ○ Inadequate Safety Practices ○ Failure to Follow Procedures ○ Other _____

b. Number of employees involved who failed a post-accident test: drug test: /___/___/___/___/ alcohol test: /___/___/___/___/

H8 - OTHER

24. ☐ Miscellaneous, *describe:* _____

25. ☐ Unknown

○ Investigation Complete ○ Still Under Investigation *(submit a supplemental report when investigation is complete)*

PART I - NARRATIVE DESCRIPTION OF FACTORS CONTRIBUTING TO THE EVENT *(Attach additional sheets as necessary)*

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS

***Represents after-hours telephone numbers**

AFFILIATION	CONTACT NUMBERS	TIME
Company Personnel		
Northern Region Management		
Schutt, Tim Northern Region Manager **Qualified Individual**	(319) 351-1234 (Office) (319) 330-4705 (Mobile) (b) (6)	
Edwards, Russell Greenwood Area Supervisor **Qualified Individual**	(402) 789-3350 (Office) (402) 499-7861 (Mobile) (b) (6)	
Morrison, Todd Pine Bend Area Supervisor **Qualified Individual**	(651) 455-6373 (Office) (651) 402-2158 (Mobile) (b) (6)	
Munoz, Jerry Kearney Area Supervisor **Qualified Individual**	(816) 628-5080 (Office) (816) 728-3662 (Mobile) (b) (6)	
Environmental and Safety Contacts		
Breitenbach, Marlene Director, Technical Services	(713) 381-5439 (Office) (713) 306-0935 (Mobile) (b) (6)	
Marra, Matt Director, Field Environmental	(713) 381-6684 (Office) (281) 605-9289 (Mobile)	
Lee, Stephen Manager, Environmental Compliance	918-270-6809 (Office) 918-530-0404 (Mobile) 713-803-1317 (Fax)	
Kelly, Sean Safety/PSM Coordinator	(620) 834-2023 (Office) (620) 755-6665 (Mobile)	
DeMeyer, Chris Safety Coordinator	(319)351-1234 (Office) (319)330-3751 (Mobile) (b) (6)	

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS , CONTINUED

***Represents after-hours telephone numbers**

AFFILIATION	CONTACT NUMBERS	TIME
Company Personnel		
Northern Region Maintenance Personnel		
Johnson, Donnie Greenwood Area Maintenance Coordinator **Qualified Individual**	(402) 789-3350 (Office) (402) 499-7862 (Mobile) (b) (6)	
Rohrs, Jim Greenwood Area Maintenance Coordinator **Qualified Individual**	(712) 729-3277 (Office) (712) 260-2229 (Mobile) (b) (6)	

Baker, Darrell Kearney Area Maintenance Coordinator **Qualified Individual**	(816) 628-5080 (Office) (660) 621-0533 (Mobile)	
Nicholson, Nick Pine Bend Area Maintenance Coordinator **Qualified Individual**	651-455-6373 (Office) 651-295-0960 (Mobile) (b) (6)	

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED
Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Initial		
National Response Center (NRC)	(800) 424-8802* (202) 267-2675	
Recommended		
Federal Agencies		
Environmental Protection Agency, Region V	(312) 353-2318*	
Environmental Protection Agency, Region VII	(913) 281-0991*	
U.S. Fish & Wildlife, Region 3	(612) 713-5360	
U.S. Fish & Wildlife, Region 6	(303) 236-7905	
State Agencies - Iowa		
Iowa Department of Natural Resources	(515) 281-8694	
Iowa Department of Public Safety, State Fire Marshal Division	(515) 725-6145	
Iowa Department of Transportation, District Office 4	(712) 243-3355 (800) 289-4368	
Iowa Homeland Security & Emergency Management	(515) 725-3231	
County Agencies - Iowa		
Cherokee County		
Cherokee Co. Emergency Management Agency	(712) 225-6721	
Cherokee Co. Sheriff Department	(712) 225-6728	

Marcus Fire Department	(712) 376-2700	
Marcus Police Department	(712) 376-4715	
Region 4 LEPC	(712) 876-2212	

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED
Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Recommended , Continued		
County Agencies - Iowa		
Dickinson County		
Dickinson Co. Emergency Communications Center	(712) 336-2525	
Dickinson Co. Emergency Management	(712) 336-3987	
Dickinson Co. Sheriff Department	(712) 336-2793	
Region 3 LEPC	(712) 737-4010	
Monona County		
Monona Co. Emergency Management Agency	(712) 433-1294	
Monona Co. Sheriff Department	(712) 423-1414	
Onawa Police Department	(712) 423-2525	
Onawa Vol Fire Department	(712) 433-1511	
Region 4 LEPC	(712) 876-2212	
O'Brien County		
O'Brien Co. Emergency Management	(712) 757-4305	
O'Brien Co. Sheriff Department	(712) 757-3415	
Region 3 LEPC	(712) 737-4010	

Sanborn Fire Department	(712) 930-3842	
Sanborn Police Department	(712) 729-3407	

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED
Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Recommended , Continued		
County Agencies - Iowa		
Osceola County		
Osceola Co. Emergency Management Agency	(712) 754-2381	
Osceola Co. Sheriff Department	(712) 754-2556	
Region 3 LEPC	(712) 737-4010	
Plymouth County		
Kingsley Police Department	(712) 378-3601	
Plymouth Co. Emergency Management	(712) 546-8101	
Plymouth Co. Sheriff Department	(712) 546-8191	
Region 4 LEPC	(712) 876-2212	
Remsen Fire and Rescue Department	(712) 786-2441	
Remsen Police Department	(712) 786-2136	
Woodbury County		
Region 4 LEPC	(712) 876-2212	
Woodbury Co. Emergency Management Agency	(712) 876-2212	
Woodbury Co. Sheriff Department	(712) 279-6010	
State Agencies - Kansas		
County		
Kansas Department of Health and	(785) 296-1679	

Environment	(785) 296-1500	
Kansas Division of Emergency Management	(785) 296-3176 (785) 274-1409 (785) 296-8013	

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED
Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Recommended , Continued		
State Agencies - Kansas		
Kansas State Fire Marshal	(785) 296-3401	
County Agencies - Kansas		
Clay County		
Clay Center Fire Department	(785) 635-5606	
Clay Center Police Department	(785) 632-2121	
Clay Co. Emergency Management	(785) 632-2166	
Clay Co. LEPC	(785) 632-2166	
Clay Co. Sheriff Department	(785) 632-5601	
Dickinson County		
Dickinson Co. Emergency Management	(785) 263-3608	
Dickinson Co. LEPC	(785) 263-1121	
Dickinson Co. Sheriff Department	(785) 263-4081	
Ottawa County		
Ottawa Co. Emergency Management	(785) 392-3600	
Ottawa Co. LEPC	(785) 392-3600	
Ottawa Co. Sheriff Department	(785) 392-2157	
Washington County		

Washington Co. Emergency Preparedness	(785) 325-2134	
Washington Co. LEPC	(785) 325-2134	

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED
Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Recommended , Continued		
County Agencies - Kansas		
Washington County		
Washington Co. Sheriff Department	(785) 325-2293	
State Agencies - Minnesota		
Minnesota Department of Natural Resources	(651) 296-6157 (651) 296-0777	
Minnesota Homeland Security & Emergency Management	(651) 201-7400 (651) 296-2233 (800) 422-0798	
Minnesota Pollution Control Agency	(651) 649-5451 (800) 422-0798	
Minnesota State Fire Marshal	(651) 201-7200	
County Agencies - Minnesota		
Blue Earth County		
Blue Earth Co. Emergency Management	(507) 304-4808	
Blue Earth Co. Sheriff Department	(507) 387-8710	
District 1 LEPC	(651) 619-6115	
Eagle Lake Police Department	(507) 257-3110	
Eagle Lake Vol Fire Department	(507) 257-3218	
North Mankato FIre Department	(507) 625-5378	

North Mankato Police Department	(507) 625-4141	
Dakota County		
Dakota Co. Emergency Management	(651) 438-4703	
Dakota Co. Sheriff Department	(651) 437-4211	

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED
Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Recommended , Continued		
County Agencies - Minnesota		
Dakota County		
District 1 LEPC	(651) 619-6115	
Farmington Fire Department	(651) 463-4771	
Farmington Police Department	(651) 463-3333	
Rosemount Fire Department	(651) 423-3444	
Rosemount Police Department	(651) 423-4491	
Jackson County		
District 5 LEPC	(651) 247-6393	
Jackson Co. Emergency Management	(507) 847-4774	
Jackson Co. Sheriff Department	(507) 847-4420	
Jackson Fire Department	(507) 847-3121	
Jackson Police Department	(507) 847-2442	
Le Sueur County		
District 1 LEPC	(651) 619-6115	
Le Sueur Co. Emergency Management	(507) 380-0048	

Le Sueur Co. Sheriff Department	(505) 357-4440	
Montgomery Fire Department	(507) 364-5701	

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED
Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Recommended , Continued		
County Agencies - Minnesota		
Le Sueur County		
Montgomery Police Department	(507) 364-7700	
Martin County		
District 5 LEPC	(651) 247-6393	
Martin Co. Emergency Management	(507) 238-3166	
Martin Co. Sheriff Department	(507) 238-4481	
Sherburn Fire Department	(507) 764-6501	
Sherburn Police Department	(507) 764-4221	
Truman Fire Department	(507) 776-7951	
Truman Police Department	(507) 776-8211	
Rice County		
District 1 LEPC	(651) 619-6115	
Londale Dispatch Number	(866) 727-5299	
Londale Vol Fire & Rescue Department	(507) 744-2021	
Lonsdale Police Department	(507) 744-2300	
Rice Co. Emergency Management	(507) 332-6119	
Rice Co. Sheriff Department	(507) 332-6012	

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED
Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Recommended , Continued		
County Agencies - Minnesota		
Scott County		
District 7 LEPC	(651) 779-5641	
Scott Co. Emergency Management	(952) 496-8381	
Scott Co. Sheriff Department	(952) 496-8300	
Washington County		
District 6 LEPC	(651) 779-5641	
Washington Co. Emergency Management	(651) 430-7621	
Washington Co. Sheriff Department	(651) 430-7600	
Watonwan County		
District 5 LEPC	(651) 247-6393	
Watonwan Co. Emergency Management	(507) 375-5841	
Watonwan Co. Sheriff Department	(507) 375-3121	
State Agencies - Nebraska		
Nebraska Emergency State Patrol (SERC)	(402) 471-4545*	
Nebraska Emergency Management Agency	(402) 471-7421*	
Nebraska Department of Natural Resources	(402) 471-2363 (612) 296-0777	
Nebraska State Fire Marshal	(402) 471-2027 (402) 471-9596 - Arson#	
County Agencies - Nebraska		

Burt County		
Burt Co. Emergency Manager	(402) 727-2785	

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED
Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Recommended , Continued		
County Agencies - Nebraska		
Burt County		
Burt Co. Sheriff Department	(402) 374-2900	
Decatur Police Department	(402) 349-5546	
Decatur Rural Vol Fire Department	(402) 349-5168	
Region 5-6 LEPC	(402) 727-2785	
Tekamah Fire and Rescue Assn	(402) 374-1444	
Tekamah Police Department	(402) 374-1500	
Cass County		
Cass Co. Emergency Manager	(402) 267-6765	
Cass Co. LEPC	(402) 267-6765	
Cass Co. Sheriff Department	(402) 296-9370	
Dodge County		
Dodge Co. Emergency Manager	(402) 727-2785	
Dodge Co. Sheriff Department	(402) 727-2702	
Region 5-6 LEPC	(402) 727-2785	
Douglas County		
Douglas Co. Emergency Management Agency	(402) 504-6842	
Douglas Co. LEPC	(402) 444-4639	

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED
Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Recommended , Continued		
County Agencies - Nebraska		
Douglas County		
Douglas Co. Sheriff Department	(402) 444-6641	
Valley Fire & Rescue Department	(402) 359-5552	
Valley Police Department	(402) 359-2251	
Gage County		
Beatrice Fire Department	(402) 228-5246	
Beatrice Police Department	(402) 223-4080	
Gage Co. Emergency Manager	(402) 223-1305	
Gage Co. LEPC	(402) 223-1305	
Gage Co. Sheriff Department	(402) 223-1382	
Lancaster County		
Lancaster Co. Emergency Manager	(402) 441-7441	
Lancaster Co. LEPC	(402) 441-7441	
Lancaster Co. Sheriff Department	(402) 441-6500	
Saunders County		
Saunders Co. Emergency Manager	(402) 443-5645 (402) 432-6598	
Saunders Co. LEPC	(402) 443-5645	
Saunders Co. Sheriff Department	(402) 443-3718	

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED
Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Recommended , Continued		
County Agencies - Nebraska		
Saunders County		
Yutan Police Department	(402) 625-2468	
Yutan Vol Fire Department	(402) 625-2273	
Washington County		
Region 5-6 LEPC	(402) 727-2785	
Washington Co. Emergency Manager	(402) 727-2785	
Washington Co. Sheriff Department	(402) 426-6866	

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED
Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Recommended, Continued		
USCG Classified OSRO's		
Garner Environmental Services Houston, Texas	(800) 424-1716*	
Haz-Mat Response, Inc Wichita, KS	(800) 229-5252*	
Haz-Mat Response, Inc Great Bend, KS	(800) 229-5252	
Haz-Mat Response, Inc North Platte, NE	(800) 229-5252	
Haz-Mat Response, Inc. Olathe, Kansas	(800) 229-5252*	
Non-Classified OSRO's		

Clean Harbors Cannon Falls, MN	1-800-645-8265 1-800-483-3718 1-507-263-0200	

SECTION 4 Last Revised: April 2008

RESPONSE TEAM ORGANIZATION

4.1 SPILL MANAGEMENT TEAM (SMT) DESCRIPTION

The Company has developed its oil spill response organization around the Incident Command System (ICS), which provides the structure for effective management of spill resources. The ICS would be activated and mobilized in accordance with the size and complexity of the Incident. Members of the SMT are listed in **FIGURE 3.1-4**. Job descriptions for each SMT member are provided in **SECTION 4.6**. The SMT will train by participating in exercises as noted in **APPENDIX A**.

4.2 ACTIVATION PROCEDURES

Activation of the SMT may be accomplished in stages as illustrated in **FIGURE 4.1** and described below:

- First Responder discovers the spill and notifies Pipeline Control.
- Pipeline Control notifies the Qualified Individual.
- Qualified Individual determines whether to activate SMT.
- QI goes to Command Post and assumes IC.
- IC notifies the SMT Section Chiefs and Command Staff.
- Section Chiefs and Command Staff notify necessary personnel.
- IC briefs SMT upon arrival at Command Post.
- IC and Section Chiefs continually assess staffing needs.
- IC activates additional SMT personnel, if needed.
- IC de-activates SMT personnel that are not needed.

4.3 TEAM MEMBER RESPONSE TIMES

The Incident Commander and SMT will mobilize to the Command Post initially. The SMT's maximum expected arrival time during off hours is 1-3 hours.

4.4 UNIFIED COMMAND SYSTEM

The Unified Command System (UCS) is the accepted method for organizing key spill management entities within the Incident Command System. The primary entities include:

- Federal On-Scene Coordinator
- State On-Scene Coordinator
- Company Incident Commander

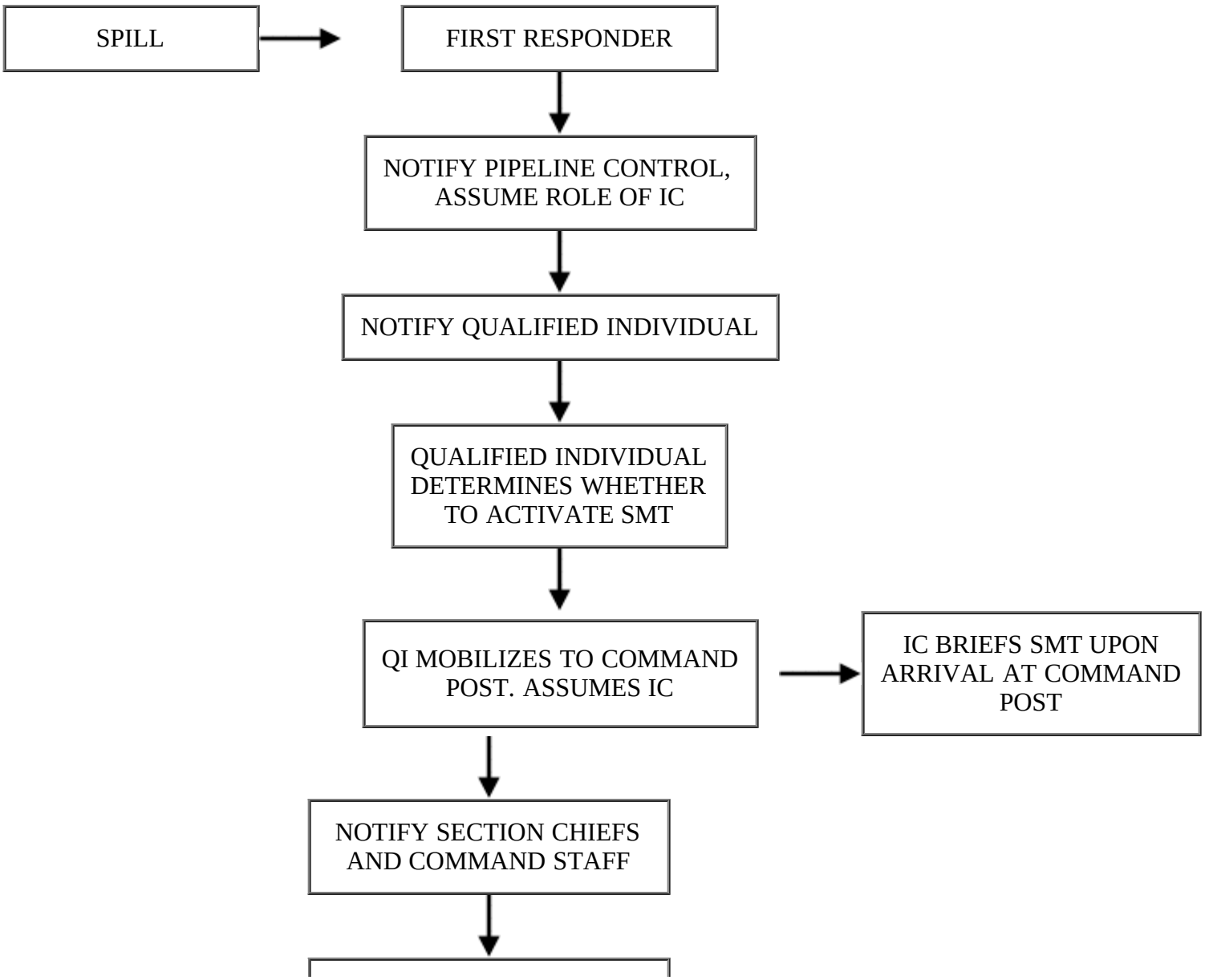
These three persons share decision-making authority within the Incident Command System and are each responsible for coordinating other Federal, State and Company personnel to form an effective and integrated Unified Command System (UCS).

4.5 QUALIFIED INDIVIDUAL (QI)

The QI has the following responsibilities and authorities as required by the Oil Pollution Act of 1990 (40 CFR Parts 9 and 112):

- Activate internal alarms and hazard communication systems to notify all appropriate personnel
- Notify all response personnel as needed
- Identify character, exact source, amount and extent of the release and other necessary items needed for notifications
- Notify and provide information to appropriate Federal, State and Local authorities
- Assess the interaction of the spilled substance with water and/or other substances stored at the Facility and notify on-scene response personnel of assessment
- Assess possible hazards to human health and the environment
- Coordinate rescue and response actions
- Assess and implement prompt removal actions
- Authority to obligate funds required to carry out all required and directed oil spill response activities
- Direct cleanup activities until properly relieved of responsibility or incident is terminated

FIGURE 4.1 - SPILL MANAGEMENT TEAM (SMT) ACTIVATION PROCEDURE



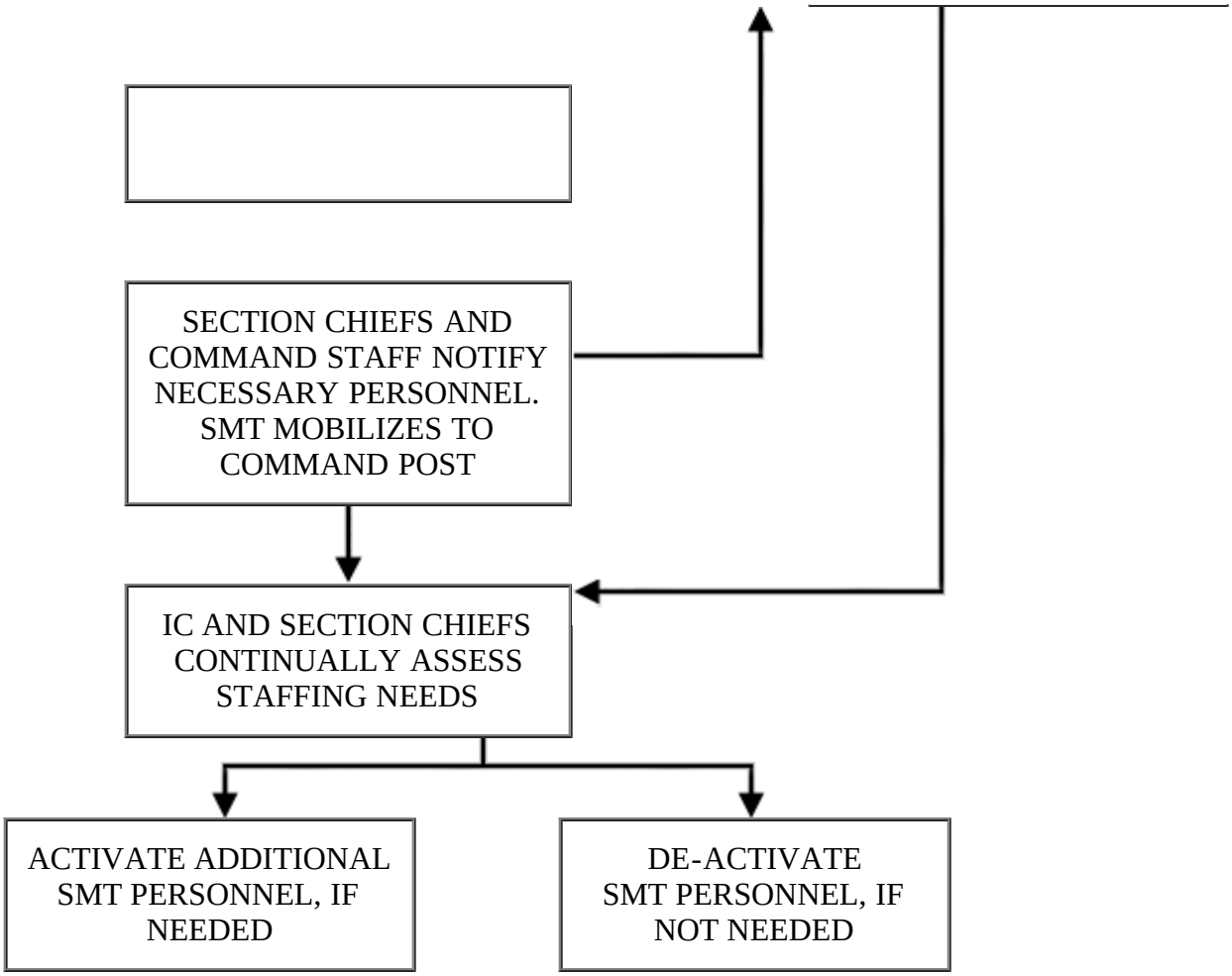
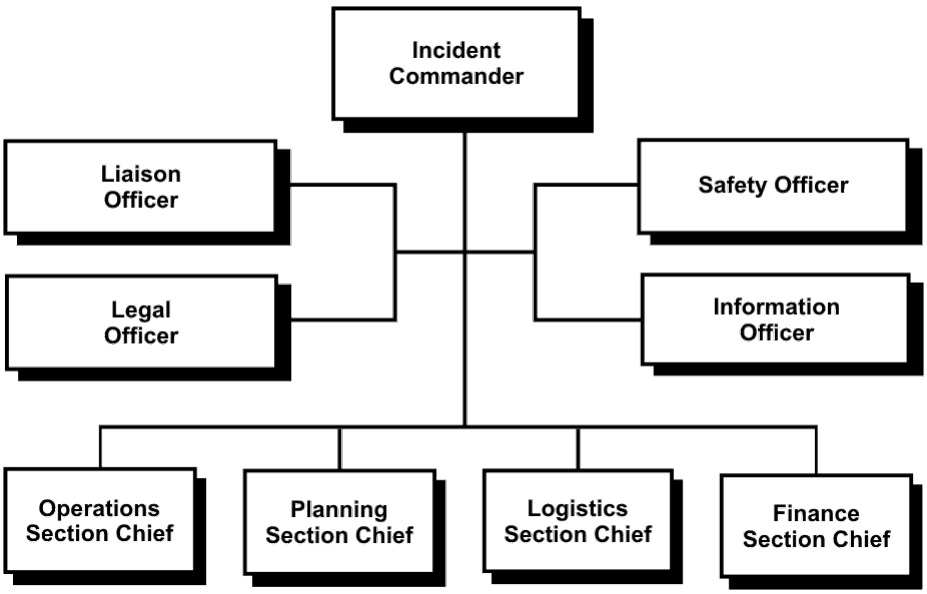


FIGURE 4.2 - SPILL MANAGEMENT TEAM (SMT) ORGANIZATIONAL CHART



Note: Refer to **FIGURE 3.1-4** for SMT Team Members.

4.6 SPILL MANAGEMENT TEAM (SMT) JOB DESCRIPTION CHECKLISTS

The following job description checklists are intended to be used as a tool to assist SMT members in their particular positions within the Incident Command System (ICS). The position descriptions and checklists were derived from the Field Operations Guide (FOG).

- Incident Commander
- Information Officer
- Safety Officer
- Liaison Officer
- Legal Officer
- Operations Section Chief
- Planning Section Chief
- Logistics Section Chief
- Finance Section Chief

Incident Commanders for oil discharges will be organized within the Unified Command structure which includes, but is not limited to:

- The predesignated Federal On Scene Coordinator (FOSC) acting under the authority of the National Contingency Plan (NCP)
- The predesignated State On Scene Coordinator (SOSC) representing state and local response agencies
- The representation of the Responsible Party (RP)

The Unified Command is responsible for the overall management of the incident. The Unified Command directs incident activities including the development and implementation of strategic decisions and approves the ordering and releasing of resources. The Unified Command may activate Deputy Incident Commanders to assist in carrying out Incident Command responsibilities.

The primary goal of this system is to establish and maintain control of the emergency response. If the emergency involves a multi-jurisdictional response (Federal and State), the Unified Command Structure (UCS) should be established. **Realize that the Federal On-Scene Coordinator (FOSC) does have the authority to override the Incident Commander and assume control of the response**. Every effort should be made to establish a collaborative relationship to manage the incident site with the appropriate responding agencies.

As soon as possible but not later than one (1) week following an incident, the Incident Commander shall conduct a critique of the response and follow-up of action items. Participants shall include Operations Control personnel, Company supervisors, and employees and outside agencies involved in the response. An Incident Debriefing Form is provided in **SECTION 8.3**.

INCIDENT COMMANDER	INITIALS	DATE & TIME
Review Common Responsibilities.		
Assess the situation and/or obtain incident briefing from prior Incident Commander.		
Determine Incident Objectives and Strategies in accordance with		

Area Contingency Plan(s) (ACP).		
Establish the immediate priorities.		
Establish an Incident Command Post.		
Establish an appropriate organization.		
Brief Command Staff and Section Chiefs.		
Ensure Planning Meetings are scheduled as required.		
Approve and authorize the implementation of an Incident Action Plan.		
Determine information needs and advise Command and General Staff.		
Coordinate activity for all Command and General Staff.		
Manage incident operations.		
Approve requests for additional resources and requests for release of resources.		
Approve the use of trainees, volunteers and auxiliary personnel.		
Authorize release of information to news media.		
Ensure incident funding is available.		
Notify Natural Resource Damage Assessment (NRDA) and coordinate NRDA Team.		
Coordinate incident investigation responsibilities.		
Seek appropriate legal counsel.		
Order demobilization of the incident when appropriate.		
Complete Final Spill Cleanup Report.		

The Information Officer, a member of the Command Staff, is responsible for developing and releasing information about the incident to the news media, to incident personnel and to other appropriate agencies and organizations.

Only one Information Officer will be assigned for each incident, including incidents operating within Unified Command or multi-jurisdictional incidents. The Information Officer may have assistants as necessary and the assistants may also represent assisting agencies or jurisdictions if warranted.

INFORMATION OFFICER	INITIALS	DATE & TIME
Review Common Responsibilities.		
Determine from the Incident Commander if there are any limits on information release.		
Develop material for use in media briefings.		
Obtain Incident Commander approval for media releases.		

Inform media and conduct media briefings.		
Arrange for tours and other interviews or briefings that may be required.		
Obtain media information that may be useful to incident planning.		
Maintain current information summaries and/or displays of the incident and provide information on the status of the incident to incident personnel.		

The Safety Officer, a member of the Command Staff, is responsible for monitoring and assessing hazardous and unsafe situations and developing measures for assuring personnel safety. The Safety Officer will correct unsafe acts or conditions through the regular line of authority, although the Officer may exercise emergency authority to stop or prevent unsafe acts when immediate actions is required. The Safety Officer maintains awareness of active and developing situations, ensures the preparation and implementation of the Site Safety Plan and includes safety messages in each Incident Action Plan.

SAFETY OFFICER	INITIALS	DATE & TIME
Review Common Responsibilities.		
Identify hazardous or unsafe situations associated with the incident by ensuring the performance of preliminary and continuous site characterization and analysis which shall include the identification of all actual or potential physical, biological and chemical hazards known or expected to be present on site.		
Participate in Planning Meetings to identify any health and safety concerns inherent in the operations daily workplan.		
Review the Incident Action Plan for safety implications.		
Exercise emergency authority to stop and prevent unsafe acts.		
Investigate accidents that have occurred within the incident areas.		
Ensure the preparation and implementation of the Site Specific Health and Safety Plan (HASP) in accordance with the Area Contingency Plan (ACP) and State and Federal OSHA regulations. The HASP shall at minimum address, include or contain the following elements: • Health and Safety hazard analysis for each site task or operation • Comprehensive operations work plan • Personnel training requirements • PPE selection criteria • Site specific occupational medical monitoring requirements • Air monitoring plan: area/personal • Site control measures • Confined space entry procedures ?only if needed? • Pre-entry briefings (tailgate meetings) initial and as needed • Pre-operations health and safety conference for all incident participants		

• Quality assurance of HASP effectiveness		
Assign assistants and manage the incident safety organization.		
Review and approve the Medical Plan.		

Incidents that are multi-jurisdiction, or have several agencies involved, may require the establishment of the Liaison Officer position on the Command Staff.

LIAISON OFFICER	INITIALS	DATE & TIME
Review Common Responsibilities.		
Provide a point of contact for assisting and cooperating Agency Representatives.		
Identify Agency Representatives from each agency including communications link and location.		
Maintain a list of assisting and coordinating interagency contacts.		
Assist in establishing and coordinating interagency contacts.		
Keep agencies supporting incident aware of incident status.		
Monitor incident operations to identify current or potential inter-organizational issues and advise Incident Commander as appropriate.		
Participate in Planning Meetings, provide current resource status information, including limitations and capabilities of assisting agency resources.		

The Technical Specialists are advisors with special skills needed to support the incident. Technical Specialists may be assigned anywhere in the ICS Organization. If necessary, Technical Specialists may be formed into a separate Unit. The Planning Section will maintain a list of available Specialists and will assign them where needed. The following are example positions for Technical Specialists that might be utilized during an oil spill response:

- Legal Specialists
- Scientific Support Coordinator Specialists
- Sampling Specialist
- Disposal (Waste Management) Specialists
- Alternative Response Technologies (ART) Specialist

The Legal Specialists will act in an advisory capacity during an oil spill response.

LEGAL OFFICER	INITIALS	DATE & TIME
Review Common Responsibilities.		
Participate in Planning Meetings if requested.		
Advise Unified Command on legal issues relating to in-situ burning,		

use of dispersants and other alternative response technology.		
Advise Unified Command on legal issues relating to Natural Resource Damage Assessment (NRDA).		
Advise Unified Command on legal issues relating to investigation.		
Advise Unified Command on legal issues relating to finance and claims.		
Advise Unified Command on response related issues.		

The Operations Section Chief, a member of the General Staff, is responsible for the management of all operations directly applicable to the primary mission. The Operations Section Chief activates and supervises elements in accordance with the Incident Action Plan and directs its execution; activates and executes the Site Safety Plan; directs the preparation of Unit operational plans, requests or releases resources, makes expedient changes to the Incident Action Plan as necessary and reports such to the Incident Commander.

OPERATIONS SECTION CHIEF	INITIALS	DATE & TIME
Review Common Responsibilities.		
Develop operations portion of Incident Action Plan.		
Brief and assign operations personnel in accordance with Incident Action Plan.		
Supervise the execution of the Incident Action Plan for Operations.		
Request resources needed to implement the Operations tactics as part of the Incident Action Plan development (ICS 215).		
Ensure safe tactical operations.		
Make or approve expedient changes to the Incident Action Plan during operational period as necessary.		
Approve suggested list of resources to be released from assigned status (not released from the incident).		
Assemble and disassemble Strike Teams/Task Forces assigned to Operations Section.		
Report information about changes in the implementation of the IAP, special activities, events and occurrences to Incident Commander as well as to Planning Section Chief and Information Officer.		

The Planning Section Chief, a member of the General Staff, is responsible for the collection, evaluation, dissemination and use of information about the development of the incident and status of resources. Information is needed to:

- Understand the current situation
- Predict probable course of incident events
- Prepare alternative strategies for the incident

PLANNING SECTION CHIEF	INITIALS	DATE & TIME
Review Common Responsibilities.		
Activate Planning Section Units.		
Assign available personnel already on site to ICS organizational positions as appropriate.		
Collect and process situation information about the incident.		
Supervise preparation of the Incident Action Plan.		
Provide input to the Incident Command and Operations Sections Chief in preparing the Incident Action Plan.		
Participate in planning and other meetings as required.		
Establish information requirements and reporting schedules for all ICS organizational elements for use in preparing the Incident Action Plan.		
Determine need for any specialized resources in support of the incident.		
Provide Resources Unit with the Planning Section?s organizational structure including names and locations of assigned personnel.		
Assign Technical Specialists where needed.		
Assemble information on alternative strategies.		
Assemble and disassemble Strike Teams and Task Forces as necessary.		
Provide periodic predictions on incident potential.		
Compile and display Incident Status Summary information.		
Provide status reports to appropriate requesters.		
Advise General Staff of any significant changes in incident status.		
Incorporate the incident Traffic Plan (from Ground Support Unit), Vessel Routing Plan (from Vessel Support Unit) and other supporting plans into the Incident Action Plan.		
Instruct Planning Section Units in distribution and routing of incident information.		
Prepare recommendations for release of resources for submission to members of Incident Command.		
Maintain Section record.		

The Logistics Section Chief, a member of the General Staff, is responsible for providing facilities, services, material, etc. in support of the incident. The Logistics Section Chief participates in development and implementation of the Incident Action Plan and activates and supervises Branches and Units within the Logistics Section.

LOGISTICS SECTION CHIEF	INITIALS	DATE & TIME
Review Common Responsibilities.		

Plan organization of Logistics Section.		
Assign work locations and preliminary work tasks to Section personnel.		
Notify Resources Unit of Logistics Section Units activated including names and locations of assigned personnel.		
Assemble and brief Branch Directors and Unit Leaders.		
Participate in preparation of Incident Action Plan.		
Identify service and support requirements for planned and expected operations.		
Provide input to and review Communications Plan, Medical Plan, Traffic Plan and Vessel Routing Plan.		
Coordinate and process requests for additional resources.		
Review Incident Action Plan and estimate Section needs for next operational period.		
Advise on current service and support elements of the Incident Action Plan.		
Prepare service and support elements of the Incident Action Plan.		
Estimate future service and support requirements.		
Receive Demobilization Plan from Planning Section.		
Recommend release of Unit resources in conformance with Demobilization Plan.		
Ensure general welfare and safety of Logistics Section personnel.		

The **Finance Section Chief**, a member of the General Staff, is responsible for all financial and cost analysis aspects of the incident and for supervising members of the Finance Section.

FINANCE SECTION CHIEF	INITIALS	DATE & TIME
Review Common Responsibilities.		
Attend briefing with responsible agency to gather information.		
Attend Planning Meeting to gather information on overall strategy.		
Determine resource needs.		
Develop an operating plan for Finance function on incident.		
Prepare work objectives for subordinates, brief staff, making assignments and evaluate performance.		
Inform members of the Unified Command and General Staff when Section is fully operational.		
Meet with assisting and cooperating Agency Representatives as required.		
Provide input in all planning sessions on financial and cost analysis matters.		

Maintain daily contact with agency(s) administrative headquarters on finance matters.		
Ensure that all personnel time records transmitted to home agencies according to policy.		
Participate in all demobilizing planning.		
Ensure that all obligation documents initiated at the incident are properly prepared and completed.		
Brief agency administration personnel on all incident related business management issues needing attention and follow-up to leaving incident.		

SECTION 5 Last Revised: April 2008

INCIDENT PLANNING

5.1 DOCUMENTATION PROCEDURES

Documentation of a spill response provides a historical record, keeps management informed, serves as a legal instrument, and is a means to account for the clean-up costs.

Documentation should begin immediately upon spill notification and continue until termination of all operations. Documentation should include the following:

- Spill origin and characteristics
- Sampling surveys
- Photographic surveys
- Climatological data
- Labor and equipment accounting
- Copies of all logs, contracts, contacts, and plans prepared for incident

5.2 ICS FORMS

ICS compatible forms are also available on the EHS&T Portal. SF49-Emergency Response Site Safety and Action Plan is preferred and is NIMS/ICS 201/202/205/206/208/215/215A compatible.

The forms can be accessed at the following location:

EHS&T Portal Page/Emergency Response & Preparedness/Lists/Safety Forms.

- **INCIDENT BRIEFING FORM - ICS 201 (Initial Report Only)**

  For use by the Command Staff to gather information on the Spill Management Team?s efforts to implement applicable response plans. Prepared by the initial Incident Commander (IC) for providing documentation of the initial response.

- **OPERATIONAL PLANNING MEETING**

  Creates the blue print for tactical deployment during the next operational period.

  The following ICS forms can be used:

  - **OPERATIONAL PLANNING WORKSHEET - ICS 215**

    This form communicates to the Resources Unit the resources needed as a result of decisions made during the Tactics and Planning meetings.

  - **RADIO REQUIREMENTS WORKSHEET - ICS 216**

    Used to develop the total number of personal portable radios required for each Division/Group and Branch. It provides a listing of all units assigned to each

Division, and thus depicts the total incident radio needs.

- **RADIO FREQUENCY WORKSHEET - ICS 217**

  Used by the Communications Unit Leader to assist in determining frequency allocations.

- **INCIDENT ACTION PLAN**

For use by the Planning Section to plan each day?s response actions. This plan consists of the portions identified on the IAP cover page and must be approved by the Incident Commander, FOSC, and SOSC.

The IAP consists of the following ICS forms:

- **INCIDENT ACTION PLAN (IAP) COVER PAGE**

  For use in presenting initial information, signature approval, and table of contents of forms contained in the IAP.

- **INCIDENT OBJECTIVES - ICS 202**

  Describes the basic incident strategy, control objectives, and provides weather, tide and current information, and safety considerations for use during the next operational period.

5.2 ICS FORMS, CONTINUED

- **ORGANIZATION ASSIGNMENT LIST - ICS 203**

  Provides ICS personnel with information on the units that are currently activated and the names of personnel staffing each position/unit.

- **ASSIGNMENT LIST - ICS 204**

  Submits assignments at the level of Division and Groups.

- **ASSIGNMENT LIST ATTACHMENT- ICS 204a**

  This form is an optional attachment, which can be used in conjunction with the Assignment List, ICS form 204-OS. The ICS 204-OS is used to give assignments to Divisions and Groups; the ICS form 204-a-OS provides more specific assignment information, when needed.

- **COMMUNICATIONS PLAN - 205**

  Is used to provide, in the location, information on all radio frequency assignments down to the Division/Group level for each operational period.

- **COMMUNICATIONS LIST - ICS 205a**

  This option form is used in conjunction with the Incident Radio Communications Plan, ICS form 205OS. ICS form 250a-OS, lists methods of contact for personnel assigned to the incident (radio frequencies, phone numbers, pager numbers, etc.), and functions as an incident directory.

- **MEDICAL PLAN - ICS 206**

  Provides information on incident medical aid stations, transportation services, hospitals, and medical emergency procedures.

- **RESOURCES AT RISK - ICS 232**

  Provides information about sites in the incident area which are sensitive due to environmental, archaeo-cultural, or socio-economic resources at risk, and identifies incident-specific priorities and issues.

- **EXECUTIVE SUMMARY**

The Executive Summary communicates significant response issues during the current operational period, summarizing the daily activities for all sections in a brief format to Senior Managers, Administrators, Senior Agency Staff, and Civic Leaders.

- **INCIDENT STATUS SUMMARY - ICS 209**

  Used to inform personnel about the status of response efforts.

- **AIR OPERATIONS SUMMARY - ICS 220**

  Provides the Air Operations Branch with the number, type, location, and specific assignments of aircraft.

5.2 ICS FORMS, CONTINUED

- **MEETING SCHEDULE - ICS 230**

  Records information about the daily scheduled meeting activities.

- **MEETING SUMMARY - ICS 231**

  Provides more detailed information concerning the attendees and notes from a particular meeting.

- **GENERAL PLAN**

  Displays the progress and planned start and end dates for various incident response activities**.**

- **RESOURCE TRACKING**

- **STATUS CHANGE - ICS 210**

  Used to record status change information received on resources assigned to the incident.

- **CHECK-IN LIST EQUIPMENT - ICS 211e**

This form is used for equipment check-in-only. Equipment arriving at the incident can check in at various incident locations.

- **CHECK-IN LIST PERSONNEL - ICS 211p**

  This for is used for personnel check-in-only. Personnel arriving at the incident can be checked in at various incident locations.

- **SUPPORT VEHICLE INVENTORY - ICS 218**

  Provides an inventory of all transportation and support vehicles assigned to the incident.

- **T-CARDS - ICS 219**

  T-Cards are used by the Resources Unit to record status and location information on resources, transportation, and support vehicles and personnel.

- **DEMOBILIZATION CHECK-OUT - ICS 221**

  Form provides the Planning Section information on resource releases from the incident.

In addition, these Incident Command System (ICS) forms may be found on the U. S. Coast Guard web page: http://www.uscg.mil/pacarea/pm/icsforms/ics.htm.

1. Incident Name	2. Prepared By: (Name) Date: Time:	INCIDENT BRIEFING ICS 201-OS
3. Map / Sketch (Include maps drawn here or attached, showing the total area of operations, the incident site/area, overflight results, trajectories, impacted shorelines or other graphics depicting situational and response status)		

INCIDENT BRIEFING	March, 2000	ICS 201-OS (pg 1 of 4)

1. Incident Name	2. Prepared By: (Name) Date: Time:	INCIDENT BRIEFING ICS 201-OS

4. Initial Incident Objectives

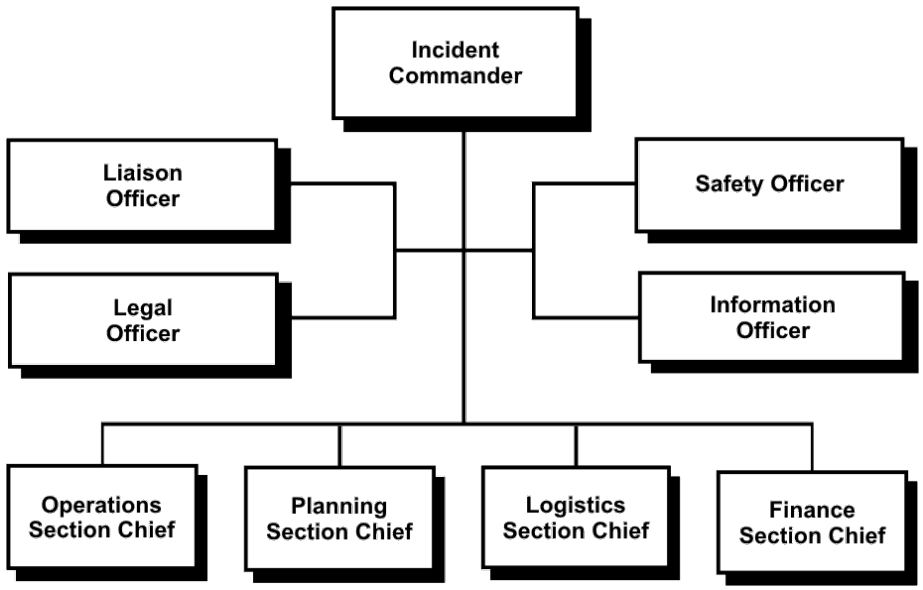
5. Summary of Current Actions

Time	Action/Note

INCIDENT BRIEFING	March, 2000	ICS 201-OS (pg 2 of 4)

1. Incident Name	2. Prepared By: (Name) Date: Time:	INCIDENT BRIEFING ICS 201-OS

6. Current Organization



INCIDENT BRIEFING	March, 2000	ICS 201-OS (pg 3 of 4)

1. Incident Name	2. Prepared By: (Name) Date: Time:	INCIDENT BRIEFING ICS 201-OS

7. Resources Summary

Resources Needed	Time Ordered	Resource Identifier	ETA	On Scene? (X)	Notes: (Location/Assignment/Status)

INCIDENT BRIEFING		March, 2000			ICS 201-OS (pg 4 of 4)

1. Incident Name		**2. Operational Period (Date/Time)** **From:**					OPERATIONAL PLANNING WORKSHEET ICS 215OS			
3. Division/ Group or Location	4. Work Assignments	5. Resource/Equipment					6. Notes/ Remarks	**7. Reporting Location**	**8. Requested Arrival Time**	9. "X" here if 204a Needed
		Resource								
		Req.								☐
		Have								
		Need								
		Req.								☐
		Have								
		Need								
		Req.								☐
		Have								

		Need								
		Req.								
		Have								☐
		Need								
		Req.								
		Have								☐
		Need								
		Req.								
		Have								☐
		Need								
		Req.								
		Have								☐
		Need								
		Req.								
		Have								☐
		Need								
		10. Total Resources Required								
		11. Total Resources On Hand								
		12. Total Resources Needed								
13. Prepared By:							Date:		Time:	
OPERATIONAL PLANNING WORKSHEET							June, 2000		ICS 215OS	

RADIO REQUIREMENTS WORKSHEET				1. Incident Name			2. Date			3. Time	
4. Branch			5. Agency			6. Operational Period			7. Tactical Frequency		
8. Division/Group ____ Agency ____			Division/Group ____ Agency ____			Division/Group ____ Agency ____			Division/Group ____ Agency ____		
9. Agency	ID NO.	Radio Rqmts.	Agency	ID NO.	Radio Rqmts.	Agency	ID NO.	Radio Rqmts.	Agency	ID NO.	Radio Rqmts.

216 ICS 3-82			Page			10. Prepared By: (Communication Unit)					

1. INCIDENT NAME	2. DATE	3. OPERATIONAL PERIOD (DATE/TIME)	**RADIO FREQUENCY ASSIGNMENT WORKSHEET ICS 217**

4. INCIDENT ORGANIZATION

	SOURCE	FUNCTION	CH#	FREQUENCY	TOTAL BY REQ.
INCIDENT COMMANDER					
SAFETY OFFICER					

OPERATIONS SECTION CHIEF					
AIR OPERATIONS					
AIR TACTICAL SUPERVISOR					
PLANNING SECTION CHIEF					
GROUND SUPPORT UNIT					
BASE UNIT					
COM CENTER					

BRANCH					
DIVISION					
DIVISION					
BRANCH					
DIVISION					
DIVISION					
BRANCH					
DIVISION					
DIVISION					

5. RADIO DATA				6. AGENCY				
ID								

ICS 217	Page	7. Prepared By:

1. Incident Name	2. Operational Period to be covered by IAP (Date/Time)	IAP COVER SHEET

	From:	To:	

3. Approved By:

FOSC

SOSC

IC

INCIDENT ACTION PLAN

The items checked below are included in this Incident Action Plan:

- ☐ ICS 202-OS (Response Objectives)
- ☐ ICS 203-OS (Organization List)
- ☐ ICS 204-OS (Assignment Lists)
- ☐ ICS 204a-OS (Assignment Lists Attachment)
- ☐ ICS 205OS (Communications Plan)
- ☐ ICS 205a-OS (Communications List)
- ☐ ICS 206-OS (Medical Plan)
- ☐ ICS 232-OS (Resources at Risk)
- ☐
- ☐
- ☐
- ☐

4. Prepared By: (Planning Section Chief)	Date/Time

IAP COVER SHEET March, 2000

1. Incident Name	2. Operational Period (Date/Time) **From:** **To:**	INCIDENT OBJECTIVES ICS 202-OS

3. Overall Incident Objective(s)
4. Objectives for Specified Operational Period
5. Safety Message for Specified Operational Period Approved Site Safety Plan Located at:
6. Weather: See Attached Weather Sheet
7. Tides/Currents: See Attached Tide/Current Data

8. Time of Sunrise:	Time of Sunset:

9. Attachments: (check if attached)

☐ Organization List (ICS 203-OS) ☐ Assignment List (ICS 204-OS) ☐ Communications Plan (ICS 205OS)

☐ Medical Plan (ICS 206-OS) ☐ Weather

10. Prepared By: (Planning Section Chief)	Date/Time

INCIDENT OBJECTIVES March, 2000 ICS 202-OS

1. Incident Name	2. Operational Period (Date/Time) From: To:	ORGANIZATION ASSIGNMENT LIST ICS 203-OS

3. Incident Commander and Staff

	Primary	Deputy
Federal:		
State:		

7. Operations Section

Chief	
Deputy	
a. Branch I - Division/Groups	

IC:

Safety Officer :

Information Officer:

Liaison Officer:

4. Agency Representatives

Agency	Name

5. Planning Section

Chief
Deputy
Resources Unit
Situation Unit
Environmental Unit
Documentation Unit
Demobilization Unit
Technical Specialists

6. Logistics Section

Chief
Deputy
Time Unit
Procurement Unit
Compensation Unit
Cost Unit

a. Support Branch

Director
Supply Unit
Facilities Unit
Transportation Unit
Vessel Support Unit
Ground Support Unit

b. Service Branch

Director
Communications Unit
Medical Unit
Food Unit

Branch Director
Deputy
Division / Group
Division / Group
Division / Group
Division / Group
Division / Group

b. Branch II - Division/Groups

Branch Director
Deputy
Division / Group
Division / Group
Division / Group
Division / Group
Division / Group

c. Branch III - Division/Groups

Branch Director
Deputy
Division / Group
Division / Group
Division / Group
Division / Group
Division / Group

d. Air Operations Branch

Air Operations Br. Dir.
Air Tactical Supervisor
Air Support Supervisor
Helicopter Coordinator
Fixed-wing Coordinator

8. Finance Section

Chief
Deputy
Time Unit
Procurement Unit
Compensation Unit
Cost Unit

9. Prepared By: (Resources Unit) Date/Time

ORGANIZATION ASSIGNMENT LIST	March, 2000	ICS 203-OS

1. Incident Name	2. Operational Period (Date/Time) From: To :	ASSIGNMENT LIST ICS 204-OS

3. Branch	4. Division/Group

5. Operations Personnel	Name	Affiliation	Contact # (s)
Operations Section Chief:			
Branch Director:			
Division/Group Supervisor:			

6. Resources Assigned This Period	**?X? indicates 204a attachment with special instructions**			
Strike Team/Task Force/ Resource Identifier	**Leader**	**Contact Info. #**	**# of Persons**	**Notes/Remarks**

7. Assignments

8. Special Instruction for Division/Group

9. Communications (radio and / or phone contact numbers needed for this assignment)

Name/Function	Radio: Freq./System/ Channel	Phone	Pager

Emergency Communications

Medical:	Evacuation:	Other:	
10. Prepared By: (Resources Unit Leader)	**Date/Time**	**11. Approved By:** (Planning Section Chief)	**Date/Time**
ASSIGNMENT LIST	June, 2000		ISC 204-OS

1. Incident Name	2. Operational Period (Date/Time) From:	ASSIGNMENT LIST ATTACHMENT ICS 204a-OS
3. Branch	4. Division/Group	
5. Strike Team/Task Force/ Resource Identifier	6. Leader	7. Assignment Location
8. Work Assignment Special Instructions (if any)		[Ops]
9. Special Equipment/Supplies Needed for Assignment (if any)		[Ops]
10. Special Environmental Considerations (if any)		[P.S.C.]
11. Special Site-Specific Safety Considerations (if any)		[S.O.]
12. Other Attachments (as needed)		

☐ Map	☐ Shoreline Cleanup Assessment Team Report	☐
☐ Weather Forecast	☐ Tides	☐

13. Prepared By: (Resources Unit Leader)	Date/Time

ASSIGNMENT LIST ATTACHMENT June, 2000 ICS 204a-OS

1. Incident Name	2. Operational Period (Date/Time) From: To:	COMMUNICATIONS PLAN ICS 205OS

3. Basic Radio Channel Use

System / Cache	Channel	Function	Frequency	Assignment	Remarks

4. Prepared By: (Communications Unit)	Date/Time

COMMUNICATIONS PLAN March, 2000 ICS 205OS

1. Incident Name	**2. Operational Period (Date/Time)** From: To:	COMMUNICATIONS LIST ICS 205a-OS

3. Basic Local Communications Information

Assignment	Name	Method(s) of contact (radio frequency, phone, pager, cell #(s), etc.)

4. Prepared By: (Communications Unit)	Date/Time

COMMUNICATIONS LIST June, 2000 ICS 205a-OS

1. Incident Name	2. Operational Period (Date/Time) From: To:	MEDICAL PLAN ICS 206-OS

3. Medical Aid Stations

Name	Location	Contact #	Paramedics On Site (Y/N)

4. Transportation

Ambulance Service	Address	Contact #	Paramedics On Board (Y/N)

5. Hospitals

Hospital Name	Address	Contact #	Travel Time		Burn Ctr?	Heli-Pad?
			Air	Ground		

6. Special Medical Emergency Procedures

7. Prepared By: (Medical Unit Leader)	Date/Time	8. Reviewed By: (Safety Officer)	Date/Time

MEDICAL PLAN March, 2000 ICS 206-OS

1. Incident Name	2. Operational Period (Date/Time) From: To:	RESOURCES AT RISK SUMMARY ICS 232-OS

3. Environmentally Sensitive Areas and Wildlife Issues

Site #	Priority	Site Name and/or Physical Location	Site Issues

Narrative:

4. Archaeo-cultural and Socio-economic Issues

Site #	Priority	Site Name and/or Physical Location	Site Issues

Narrative:

5. Prepared By: (Environmental Unit Leader) Date/Time

RESOURCES AT RISK SUMMARY June, 2000 ICS 232-OS

1. Incident Name	2. Operational Period (Date/Time) From: To:	EXECUTIVE SUMMARY

3. Operations:

4. Environmental:
5. Planning:
6. Other:
Prepared By: (Situation Unit Leader) Date/Time
EXECUTIVE SUMMARY June, 2000

1. Incident Name	2. Period Covered By Report From: To:	Time of Report	INCIDENT STATUS SUMMARY ICS 209-OS

3. Spill Status (Estimated, in Barrels)			**[OPS/EUL/SSC]**
Source Status:	Remaining Potential (bbl):		
	Rate of Spillage (bbl/hr):		
Secured	☐	Unsecured	☐

7. Safety Status	[Safety Officer]
Since Last Report	Total
Responder Injury	
Public Injury	

Volume Spilled	Since Last Report	Total
Mass Balance/Oil Budget		
Recovered Oil		
Evaporation		
Natural Dispersion		
Chemical Dispersion		
Burned		
Floating, Contained		
Floating, Uncontained		
Onshore		
Total Spilled Oil Accounted For:		

4. Waste Management (Estimated)			[OPS/Disposal]
	Recovered	**Stored**	**Disposed**
Oil (bbl)			
Oily Liquids (bbl)			
Liquids (bbl)			
Oily Solids (tons)			
Solids (tons)			

5. Shoreline Impacts (Estimated, in miles)			**[PSC/EUL/SSC]**
Degree of Oiling	**Affected**	**Cleaned**	**To Be Cleaned**
Light			
Medium			
Heavy			
Total			

6. Wildlife Impacts						[OPS/Wildlife Br.]
Numbers in ( ) indicate subtotal that are threatened / endangered species.						Died in Facility
	Captured	**Cleaned**	**Released**	**DOA**	**Euth.**	**Other**
Birds						
Mammals						
Reptiles						
Fish						
Total						

8. Equipment Resources				[RUL]
Description	**Ordered**	**Available / Staged**	**Assigned**	**Out of Service**
Spill Resp. Vsls				
Fishing Vessels				
Tugs				
Barges				
Other Vessels				
Skimmers				
Boom (ft.)				
Sbnt/Snr Bm. (ft.)				
Vacuum Trucks				
Helicopters				
Fixed Wing				

9. Personnel Resources			[RUL]
Description	**People in Cmd. Post**	**People in the Field**	**Total People On Scene**
Federal			
State			
Local			
RP			
Contract Personnel			
Volunteers			
Total Response Personnel From All Organizations:			

10. Special Notes

11. Prepared By: (Situation Unit Leader) Date/Time

1. Incident Name	2. Operational Period (Date/Time) From: To:	AIR OPERATIONS SUMMARY ICS 220-OS

3. Distribution	
☐ Fixed-Wing Bases	☐ Helibase

4. Personnel and Communications

	Air Operations Director	Air/ Air Frequency	Air/ Ground Frequency	5. Remarks (Spec. Instructions, Safety Notes, Hazards, Priorities)
Air Operations Director				
Air Tactical Supervisor				
Air Support Supervisor				
Helicopter Coordinator				
Fixed-Wing Coordinator				

6. Location/ Function	7. Assignment	8. Fixed Width		9. Helicopter		10. Time		11. Aircraft Assigned	12. Operating Base
		NO.	TYPE	NO.	TYPE	Available	Commence		

	13. Totals								

14. Air Operation Support Equipment	15. Prepared By:	Date/Time
AIR OPERATIONS SUMMARY	June, 2000	ICS 220-OS

1. Incident Name	2. Operational Period (Date/Time) From: To:	DAILY MEETING SCHEDULE ICS 230-OS

3. Meeting Schedule (Commonly-held meetings are included)

Date/Time	Meeting Name	Purpose	Attendees	Location
	Tactics Meeting	Develop primary and alternate Strategies to meet Incident Objectives for the next operational period.	PSC, OPS, LSC, EUL, RUL & SUL	
	Planning Meeting	Review status and finalize strategies and assignments to meet incident objectives for the next operational period.	Determined by the IC / UC	
			IC / US,	

	Operations Briefing	Present IAP and assignments to the Supervisors/Leaders for the next operational period.	Command Staff, General Staff, Branch Directors, Div. Sups., Task Force / Strike Team Leaders and Unit Leaders	
	Unified Command Objectives Meeting	Review/identify objectives for the next operational period.	Unified Command members	
4. Prepared By: (Situation Unit Leader)			Date/Time:	
DAILY MEETING SCHEDULE		March, 2000		ICS 230-OS

1. Incident Name	2. Meeting Date/Time	MEETING SUMMARY ICS 231-OS
3. Meeting Name		
4. Meeting Location		
5. Facilitator		
6. Attendees		

7. Notes (with summary of decisions and action items)
8. Prepared By: Date/Time
MEETING SUMMARY March, 2000 ICS 231-OS

1. Incident Name		**GENERAL PLAN**
2. Prepared By	**Date/Time Prepared**	3. Operational Period (Date/Time) From: To:
4. Notification (Date and time completed)		**5. Response Initiation (Date and time completed)**
6. Plan Item	Timeframe== > (Enter days or weeks)	
Site Characterization, Forecasts, and Analysis		
Site Safety		
Site Security		
Source Stabilization, Salvage, and Lightering		
Surveillance		

On Water Containment and Recovery	
Sensitive Areas/Resources at Risk	
Alternative Response Technology	
Shoreline Protection and Recovery	
Wildlife Protection and Rehabilitation	
Logistics Support	
Response Organization	
Communications	
Public Information	
Financial Management and Cost Documentation	
NRDA and Claims	
Training	
Information Management	
Restoration/Mitigation	
Waste Management	
Demobilization	

1. Incident Name	2. Operational Period (Date/Time) From: To:	STATUS CHANGE ICS 210-S

3. Personnel/Resource Name or I.D.

4. New Status

☐ Available/Staged ☐ Assigned ☐ Out of Service

5. From: Location or Status	6. To: Location or Status

7. Time of Location/Status Change
8. Comments

9. Prepared By:	Date/Time
10. Processed By: (Resources Unit)	Date/Time

STATUS CHANGE June, 2000 ICS 210-OS

1. Incident Name	**2. Operational Period (Date/Time)**		**3. Check-In Location**		**CHECK-IN LIST (Equipment)**
			☐ Command Post	☐ Other	
	From:	**To:**	☐ Staging Area		**ICS 211e-OS**
Equipment Check-In Information			**9. Initial Incident Check-In?**		**10. Time**

4. Equipment Description	**5. Equipment Identifier**	**6. Supplier/ Owner**	**7. Assignment**	**8. Contact Information**	Y/N	In	Out
					☐	☐	☐
					☐	☐	☐
					☐	☐	☐
					☐	☐	☐
					☐	☐	☐
					☐	☐	☐
					☐	☐	☐

					☐	☐	☐
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					☐	☐	☐
					☐	☐	☐
11. Prepared By:		**Date/Time**		**12. Date/Time Sent to Resource Unit**			

CHECK-IN LIST (Equipment) March, 2000 ICS 211e-OS

1. Incident Name	**2. Operational Period (Date / Time)**		**3. Check-In Location**		**CHECK-IN LIST (Personnel)**
			☐ Command Post	☐ Other	
	From:	**To:**	☐ Staging Area		**ICS 211p-OS**

Personnel Check-In Information				**8. Initial Incident Check-In?**		**9. Time**
4. Name	**5. Company/Agency**	**6. ICS Section/Assignment/Quals.**	**7. Contact Information**	Y/N	In	Out

10. Prepared by	Date / Time	11. Date / Time Sent to Resource Unit

CHECK-IN LIST (Personnel) March, 2000 ICS 211p-OS

(USE SEPARATE SHEET FOR EACH VEHICLE CATEGORY)	1. INCIDENT NAME	2. DATE PREPARED	3. TIME PREPARED

VEHICLE INFORMATION

a. TYPE	b. MAKE	c. CAPACITY/SIZE	d. AGENCY/OWNER	e. ID. NO.	f. LOCATION	g. RELEASE TIME

218 ICS 8-78	**PAGE**	5. PREPARED BY: (GROUP SUPPORT UNIT)

T-CARD ICS 219-OS

AGENCY	TYPE	MANUFACTURER NAME/NO.	ID. NO.

ORDER/REQUEST NO.	DATE/TIME CHECK IN
HOME BASE	
DEPARTURE POINT	
PILOT NAME	
DESTINATION POINT	ETA

AGENCY	TYPE	MANUFACTURER	ID. NO.

INCIDENT LOCATION	TIME
STATUS ETR	
NOTE	
INCIDENT LOCATION	TIME
STATUS	

REMARKS	
INCIDENT LOCATION	TIME
STATUS ETR	
NOTE	
INCIDENT LOCATION	TIME
STATUS ETR	
NOTE	

ETR	
NOTE	
INCIDENT LOCATION	TIME
STATUS ETR	
NOTE	
INCIDENT LOCATION	TIME
STATUS ETR	
NOTE	

1. Incident Name	2. Operational Period (Date / Time)		DEMOB. CHECK-OUT ICS 221-OS
	From:	To:	

3. Unit / Personnel Released	4. Release Date / Time

5. Unit / Personnel	
You and your resources have been released, subject to signoff from the following: Demobilization Unit Leader; "X" appropriate box (es)	
Logistics Section	
☐ Supply Unit	
☐ Communications Unit	
☐ Facilities Unit	
☐ Ground Unit	
Planning Section	
☐ Documentation Unit	
Finance / Admin. Section	

☐ Time Unit	
Other	
☐	
☐	
☐	

6. Remarks

7. Prepared By:	**Date / Time**

DEMOB. CHECK-OUT	June, 2000	ICS 221-OS

5.3 SITE SAFETY AND HEALTH PLAN

PLAN REVIEW:		
Incident Safety Officer:		
APPROVALS:		
Incident Commander:		
Operations Officer:		
Haz Mat Division Officer:		
PLAN PREPARED:	DATE:	TIME:
Incident Location:		
Incident Number:		
HAZARDOUS SITUATION:	(Known or suspected, contaminated media, type storage container, type occupancy, obvious leaks, spills or breaches, physical damage)	

RESPONDING AGENCIES:	
Agency:	Name:
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	

All government and contractor personnel who enter the exclusion zones or use air purifying respirators must be enrolled in a medical monitoring program.

GENERAL SAFETY RULES AND EQUIPMENT:

1. There will be no eating, drinking, or smoking in the exclusion zone or the contamination reduction zone.

2. All personnel must pass through the contamination reduction zone to enter or exit the exclusion zone (hot zone).
3. As a minimum, Decontamination Team members must be in one (1) level of protection lower than that of the entry teams.
4. All decontamination equipment and systems must be in place before an entry can be made.
5. Entry team will consist of a minimum of two members with the same number of personnel assigned to a backup team. All entry personnel will adhere to the buddy system.
6. At the end of the incident, or directly after a possible exposure, each entry team member will take a full body shower and launder any personal clothing used at the scene.
7. All breathing air shall be certified as Grade D or better.
8. Where practical, all tools shall be of the nonsparking type.
9. Fire equipment shall be on hand when the situation warrants such support. At a minimum, fire extinguishers shall be available on scene.
10. Since incident evacuation may be necessary if an explosion, fire, or other event occurs; an individual shall be assigned to sound, alert, and notify the responsible command personnel and public officials (if required). The evacuation signal shall be four short blasts on an air horn every 30 seconds until all personnel are known to be evacuated.

11. An adequately stocked Emergency Medical Services (EMS) Unit shall be on site at all times.

12. The location and telephone number of the nearest medical facility shall be posted and known to all personnel.

GENERAL SAFETY BRIEFING:

Before any incident actions are taken, a briefing from the Command Staff will be accomplished with all personnel present. Personnel will sign a log sheet, attesting to being present at the briefing. Topics discussed should include known and suspected hazards along with the operation's goals and objectives.

EMERGENCY ACTION CONDITIONS:

Code Green All conditions are normal and incident work may continue.

Code Red All or specific work activities must cease at once due to one of the following:

- Indications of emissions from the incident such as CGI readings of 25% or greater, less than 19.5% oxygen, or one Mr/Hr of ionizing radiation are present
- Current or projected meteorological data indicates that a probable impact on working conditions could occur
- If background readings obtained during cessation of activities worsen, reassessment of the findings should be confirmed; actions to lower levels of contaminant or contingencies for further incident monitoring must take place

- If this condition exists, incident personnel will immediately notify command staff

Officials making evacuation/public health decisions will address the need for a public health advisory to potentially effected areas. This is because incident control methods may or may not reduce the source of contamination or threat to the general public.

If needed, a temporary sheltering or evacuation plan should be considered until levels of contamination are reduced or contained to levels deemed safe by all responsible authorities. Confirmation of these levels will be done by generally approved monitoring methods agreed to by the authorities in charge.

SHELTERING/EVACUATION PLAN:
ORDERED BY:

LIST OF ACCESS AUTHORIZED PERSONNEL (Outside Agencies):

SPECIALIZED TASK ASSIGNMENTS:

LEVELS OF PROTECTION SELECTED:				
Initial Site Survey:	A	B	C	D
Entry Team:	A	B	C	D
Backup Team:	A	B	C	D
Decon Team:	A	B	C	D

SKETCH OR ATTACH PLOT PLAN HERE:

RESPONSE SAFETY CHECK-OFF SHEET

TYPE OF RESPONSE:	
Highway	Industrial
Railway	Marine
Residential	Other
Specify:	
TYPE OF SAFETY PLAN:	
Federal	State
Local	Other
Specify:	
SUSPECTED CHEMICALS INVOLVED:	
1.	2.
3.	4.
5.	6.
7.	8.
9.	10.

INITIAL LEVEL OF PROTECTION: (If level D you must justify)			
A	B	C	D

INITIAL MEDICAL SCREENING COMPLETE: ☐ Yes ☐ No
If no, justify:
In the event of fire or explosion:
In the event of potential or actual ionizing radiation exposure:

In the event of spread of contamination beyond the boundaries of the incident:
EMERGENCY SERVICES:
Emergency medical facility:
Ambulance service:
Poison Control Center:
Chemical manufacturer?s representative:
EMERGENCY PROCEDURES (in the event of personnel exposure):
EMERGENCY PROCEDURES (in the event of personnel injury):

HAZARD ASSESSMENT:
Attach Hazardous Materials Safety Data Sheets (MSDS), or other reference materials, for chemicals involved to this document.
MONITORING PROCEDURES:
Monitoring the incident to identify concentration of contaminants in all media. List the instruments to be used and what areas to be monitored.
Hot Zone (Exclusion Zone):
Warm Zone (Contamination Reduction Zone):
Cold Zone (Support Zone):

MEDICAL MONITORING: (What procedures to be used to monitor personnel for evidence of personal exposure.)
PERSONNEL POTENTIALLY EXPOSED TO HAZARDOUS MATERIALS:

NAME	POSITION	DATE/TIME

DECONTAMINATION PROCEDURES: (Contaminated personnel, surfaces, materials, instruments, other equipment.)

DECONTAMINATION SOLUTIONS USED:
DISPOSAL PROCEDURES:
AUTHORIZED BY:

POST RESPONSE:
Level of protection used:
A B C D
Justify:
EQUIPMENT DECONTAMINATION:

	Clothing	SCBA/Resp.	Monitoring
Disposed:			
Cleaned:			
No Action:			

Specify:

TOTAL APPROXIMATE TIME IN HOT ZONE:	Days	Hours

DATE PREPARED:	PREPARED BY:
REVIEWED BY:	
Assistance in preparing this safety plan can be obtained from Haz Mat personnel.	

HEALTH AND SAFETY/RESPONSE PLAN

APPLIES TO SITE:					
DATE:					
PRODUCTS:					(ATTACH MSDS)
SITE CHARACTERIZATION:		☐ Marine vessel	☐ Pipeline	☐ Storage facility	
		☐ Truck/Rail car	☐ Other		
Water	☐ Shoreline	☐ Wetlands	☐ Other		
	☐ Rocky	☐ Sandy	☐ Muddy	☐ Other	
	☐ River	☐ Creek	☐ Canal	☐ Bay	☐ Ocean
Land	☐ Mountains	☐ Hills	☐ Brushland	☐ Forest	☐ Grassland
	☐ Other				
Use	☐ Public	☐ Government	☐ Residential	☐ Commercial	
	☐ Recreational	☐ Industrial	☐ Farmland	☐ Other	
Weather	☐ Temp _____?F	☐ Wind/Dir. _____ mph		☐ Rain	
	☐ Snow	☐ Ice		☐ Other	
Pathways for Dispersion		☐ Air	☐ Water	☐ Land	☐ Other

Site Hazards

☐ Chemical Hazards	☐ Boats
☐ Slips, trips, falls	☐ Helicopters
☐ Heat stress	☐ Noise
☐ Cold stress	☐ Pumps, hoses
☐ Weather	☐ Steam, hot water
☐ Drowning	☐ Fire/Explosion
☐ Heavy equipment	☐ Poor visibility
☐ Drum handling	☐ Motor vehicles
☐ Wildlife/plants	☐ Confined spaces (see attachment/appendix)
☐ Hand/power tools	☐ Ionizing radiation
☐ Lifting	☐ Other

Air Monitoring			
% LEL	% O_2	PPM Benzene	PPM H_2S
☐ Other (specify)			
☐ See attachment - Monitoring Results/Methods			

CONTROL MEASURES:
Engineering Controls

☐ Source of release secured ☐ Valve(s) closed ☐ Facility shut down
☐ Site secured
☐ Other

Personal Protective Equipment (PPE) HAZWOPER Coordination with OSRO

☐ PVC suits	☐ PE/TYVEK suits	☐ Respirator
☐ Site secured	☐ PVC gloves	☐ Other
☐ Other	☐ Hard hats	☐ Eye protection

HEALTH AND SAFETY/RESPONSE PLAN

CONTROL MEASURES (cont'd):
Decontamination

☐ Stations established (see site map)

Sanitation

☐ Facilities provided per OSHA 1910.120(n)

Illumination

☐ Facilities provided per OSHA 1910.120(m)

Medical Surveillance

☐ Facilities provided per OSHA 1910.120(f)

WORK PLAN: (buddy system must be used.)

☐ Booming	☐ Skimmers	☐ Vac. trucks	☐ Pumping	☐ Excavation
☐ Heavy equipment	☐ Sorbent pads	☐ Patching	☐ Hot work	☐ Shoring

☐ Appropriate permits issued
☐ Other (describe):

TRAINING (HAZWOPER training program):
☐ Verified site workers trained per OSHA 1910.120

ORGANIZATION (See Incident Command System chart.):

EMERGENCY PLAN (See site map and Daily Medical Plan - ICS 206.):

SITE SECURITY:

- ☐ Pre-entry briefing
- ☐ Security level Low Medium High
- ☐ Other topics

DATE/TIME/PLAN COMPLETED: By:

SITE DIAGRAM

GENERAL DIAGRAM INSTRUCTIONS

1. Site Diagram should include the following:

    a. Sketch with major feature locations (buildings, drainage paths, roads, etc.)
    b. Hazardous substance location
    c. Work zones (exclusion, contamination reduction, support)
    d. Command center and decontamination area
    e. Access and access restrictions
    f. Routes of entry
    g. Wind direction
    h. Emergency evacuation routes
    i. Assembly points
    j. First aid locations
    k. Communication system

5.4 DECONTAMINATION PLAN

Incident Name:	Location:
Effective Date of Plan:	Effective Time Period of Plan:
Spill Location:	Plan Prepared By:

- Work Zones:

    - Support (cold) zone
    - Contamination reduction (warm) zone
    - Exclusion (hot) zone

    These zones are identified by signs, barrier tape or other means. Decontamination is performed in the contamination reduction zone. When responders exit the exclusion zone they must be decontaminated.

    Crews are available to assist in decontamination procedures as needed. The crews must wear appropriate personal protective equipment (PPE), and are responsible for packaging and labeling of contaminated PPE.

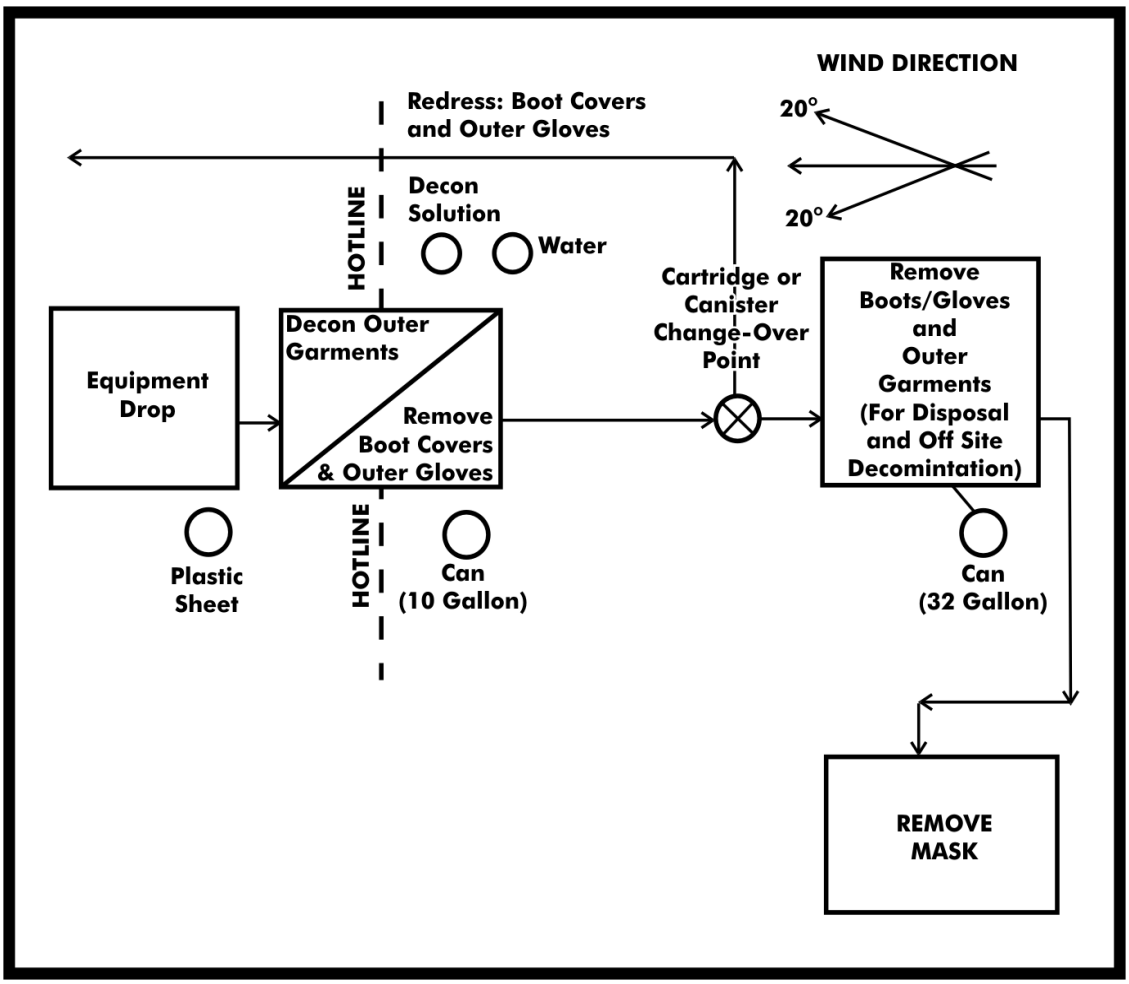
- Decontamination Stations:

    Decontamination is performed within the contamination reduction zone, which is appropriately lined to prevent the spread of contaminants. Dikes are installed under the lining to contain runoff.

MINIMUM MEASURES FOR DECONTAMINATION		
STATION 1	Equipment drop	Deposit equipment used on site (tools, sampling devices and containers, monitoring instruments, radios, clipboards, etc.) on plastic drop cloths. Segregation at the drop reduces the probability of cross contamination. During hot weather operations, a cool down station may be set up within this area.
STATION 2	Outer garment, boots	Scrub outer boots, outer gloves, and splash suit

	and gloves wash, and rinse	with decontamination solution or detergent and water. Rinse off using copious amounts of water.
STATION 3	Outer boot and glove removal	Remove outer boots and gloves. Deposit in container with plastic liner.
STATION 4	Canister or mask change	If worker leaves exclusion zone to change canister (or mask) or this is the last step in the decontamination procedures; worker's canister is exchanged, new outer gloves and boot covers are donned, joints are taped, the worker returns to duty.
STATION 5	Boot, gloves, and outer garment removal	Boots, chemical-resistant splash suit, inner gloves removed and deposited in separate containers lined with plastic.
STATION 6	Face piece removal	Face piece is removed. Avoid touching face with fingers. Face piece deposited on plastic sheet.
STATION 7	Field wash	Hands and face are thoroughly washed. Shower as soon as possible.

DECONTAMINATION PROCEDURES, MINIMUM DECONTAMINATION LAYOUT

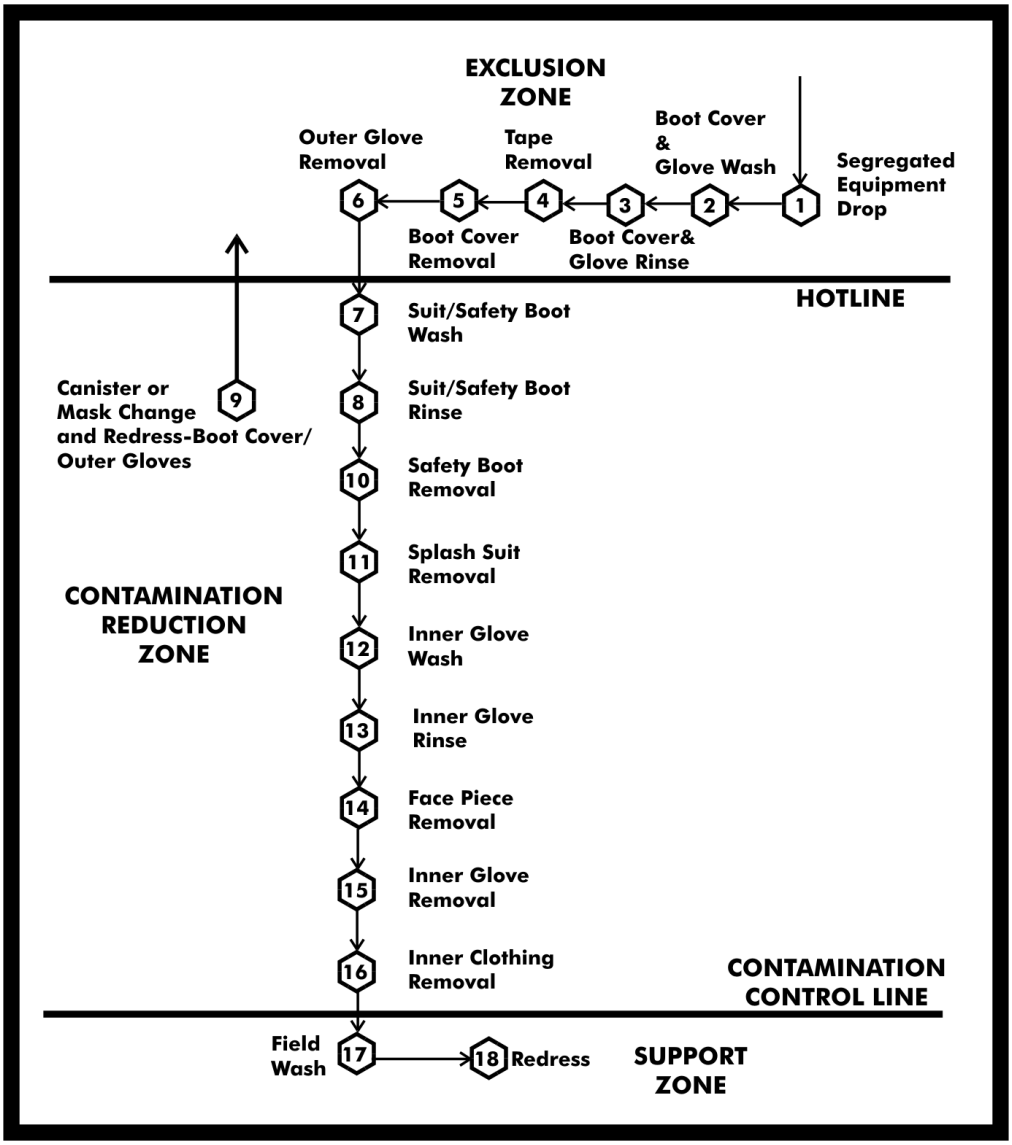


Procedures for these stations are as follows:

MAXIMUM MEASURES FOR DECONTAMINATION		
STATION 1	Segregated equipment drop	Deposit equipment used on site (tools, sampling devices and containers, monitoring instruments, radios, clipboards, etc.) on plastic drop cloths or in different containers with plastic liners. Segregation at the drop reduces the probability of cross contamination. During hot weather operations, a cool down station may be set up within this area.
STATION 2	Boot cover and glove wash	Scrub outer boot cover and gloves with decontamination solution or detergent and water.
STATION 3	Boot cover and glove rinse	Rinse off decontamination solution from Station 2 using copious amounts of water.
STATION 4	Tape removal	Remove tape around boots and gloves and deposit in container with plastic liner.
STATION 5	Boot cover removal	Remove boot covers and deposit in containers with plastic liner.
STATION 6	Outer glove removal	Remove outer gloves and deposit in container with plastic liner.
STATION 7	Suit and boot wash	Wash splash suit, gloves, and safety boots. Scrub with long-handled scrub brush and decontamination solution.
STATION 8	Suit and boot and glove rinse	Rinse off decontamination solution using water. Repeat as many times as necessary.
STATION 9	Canister or mask change	If worker leaves exclusion zone to change canister or this is the last step in the decontamination procedure; worker?s canister is exchanged, new outer gloves and boot covers are donned, joints are taped, and the worker returns to duty.
STATION 10	Safety boot removal	Remove safety boots and deposit in container with plastic liner.
STATION 11	Splash suit removal	With assistance of helper, remove splash suit. Deposit in container with plastic liner.
STATION 12	Inner glove wash	Wash inner gloves with decontamination solution.
STATION 13	Inner glove rinse	Rinse inner gloves with water.
STATION 14	Face piece removal	Remove face piece. Deposit in container with plastic liner. Avoid touching face with fingers.
STATION 15	Inner glove removal	Remove inner gloves and deposit in lined container.
STATION 16	Inner clothing removal	Remove clothing soaked with perspiration and place in lined container. Do not wear inner clothing off-site since there is a possibility that small amounts of contamination might have been transferred in removing the protective suit.
STATION 17	Field wash	Shower if highly toxic, skin-corrosive or skin-

		absorbable materials are known or suspected to be present. Wash hands and face if shower is not available.
STATION 18	Re-dress	Put on clean clothes.

DECONTAMINATION PROCEDURES, MAXIMUM DECONTAMINATION LAYOUT



5.5 DISPOSAL PLAN

Date:	Location:
Source of release:	
Amount of release:	
Incident name:	

State On-Scene Coordinator:
Federal On-Scene Coordinator:
Time required for temporary storage:
Proposed storage method:

Disposal priorities:

Sample date:	Sample ID:
Analysis required (type):	
Laboratory performing analysis:	

Disposal options:

	Available	Likely	Possible	Unlikely
Landfill:				
In situ/ bio-remediation:				
In situ burn:				
Pit burning:				
Hydrocyclone:				
Off site incineration:				
Reclaim:				
Recycle:				

Resources required for disposal options:

General information:

Generator name:	US EPA ID#:
Waste properties:	Waste name:
US EPA waste code:	State waste code:
EPA hazardous waste:	
Waste storage and transportation:	
Proposed storage method:	
Proposed transportation method:	

Permits required for storage:

Permits required for transportation:
Estimated storage capacity:
Number and type of storage required:
Local storage available for temporary storage of recovered oil:

PPE required for waste handling:	
Waste Coordinator:	Date:

Resources required for disposal options:

Incident name:	
Sample number:	Date sent:
Source of sample:	
Date sample data received:	
Waste hazardous:	Non-hazardous:
Permits/variances requested:	
Approval received on waste profile:	
Date disposal can begin:	
Disposal facilities:	
Profile number:	
Storage contractors:	
Waste transporters:	
PPE designated and agrees with Site Safety and Health Plan:	

Additional information:
Waste Coordinator:

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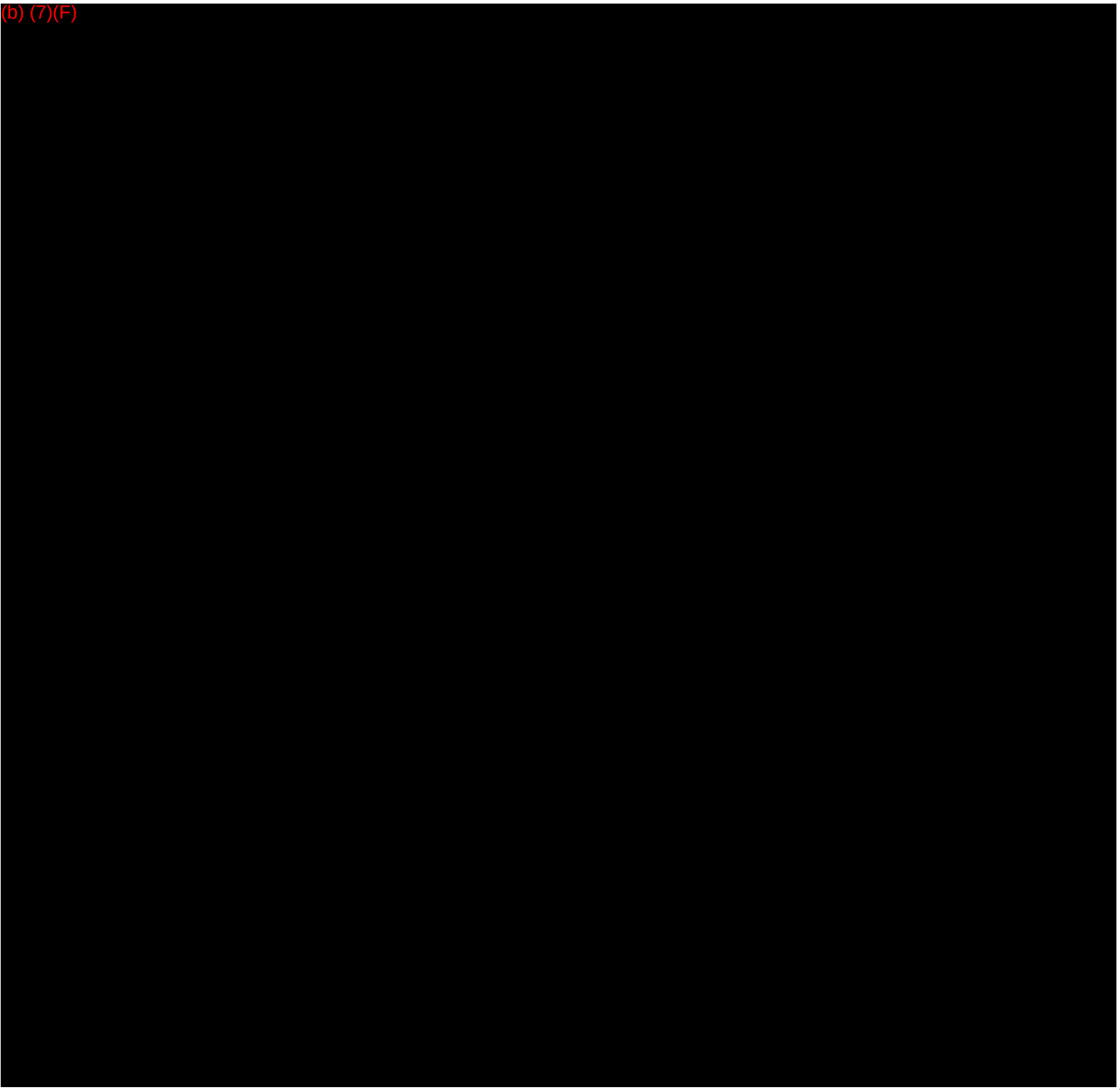

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5.7 DEMOBILIZATION PLAN

Incident name:	Location:
Effective date of plan:	Effective time period of plan:
Spill location:	Plan prepared by:

Demobilization procedures:

- Operations Section will determine which resources are ready for release from a specific collection site.
- The Planning Section will provide guidance on release priorities and demobilization recommendations.
- Information maintained by the Planning Section will be utilized to assist in the prioritization.
- Each incident will require a Decontamination Area.
- Decontaminated equipment will be returned to appropriate staging area for release or re-deployment.
- Transports for equipment will be required if remote from staging area.
- The Planning Section will document all demobilization and decontamination activities.
- Equipment designated for re-assignment will be mobilized to the appropriate staging area.
- The Division Supervisor will ensure a log is maintained documenting that proper decontamination procedures are performed for each piece of equipment.
- The Operations Section will ensure that redeployed personnel receive proper rest prior to returning to duty.
- The Planning Section Chief will monitor personnel redeployment activities to ensure number of hours worked is within acceptable guidelines.
- The Operations Section Chief must approve the Demobilization Plan before decontamination, release, or redeployment of any resources.

SECTION 6 Last Revised: April 2008

SENSITIVE AREAS / RESPONSE TACTICS

6.1 AREA DESCRIPTION

Description of shoreline types and specific shoreline protection and clean-up techniques are presented in **FIGURE 6.2-1 and FIGURE 6.3-2.** The strategies and response examples are guidelines and must be evaluated during the response to ensure that the selected response methods are appropriate for the situation.

Sensitivity maps are provided in **SECTION 6.7**.

6.2 SPILL CONTAINMENT/RECOVERY

Containment and recovery refer to techniques that can be employed to contain and recover terrestrial and aquatic petroleum spills.

Terrestrial spills typically result from pipeline or tank leaks. The Company is equipped with secondary containment systems for areas with non-pressurized breakout tanks. Spills occurring within the secondary containment area or along the pipeline areas should be contained at or near their source to minimize the size of the cleanup area and quantity of soil affected.

Containment is most effective when conducted near the source of the spill, where the oil has not spread over a large area and the contained oil is of sufficient thickness to allow effective recovery and/or cleanup. The feasibility of effectively implementing containment and recovery techniques is generally dependent upon the size of the spill, available logistical resources, implementation time, and environmental conditions or nature of the terrain in the spill area.

For terrestrial spills, trenches and earthen berms or other dams are most often used to contain oil migration on the ground surface. Recovery of free oil is best achieved by using pumps, vacuum sources, and/or sorbents.

Spills that reach water spread faster than those on land. They also have greater potential to contaminate water supplies, to affect wildlife and populated areas, and to impact manmade structures and human activities. Responses on water should therefore emphasize stopping the spill, containing the oil near its source, and protecting sensitive areas before they are impacted.

Sorbents are used to remove minor on water spills. For larger spills, booming is used to protect sensitive areas and to position oil so it can be removed with skimmers or vacuum trucks.

Due to entrainment, booming is not effective when the water moves faster than one knot or waves exceed 1.5 feet in height. Angling a boom will minimize entrainment. Using multiple, parallel booms will also improve recovery in adverse conditions. Given below is a summary of booming techniques.

Containment/Diversion Berming	• Berms are constructed ahead of advancing surface spills to contain spill or divert spill to a containment area • My cause disturbance of soils and some increased soil penetration
Blocking/Flow-	• Construct dam in drainage course/stream bed to block and

Through Dams	contain flow of spill. Cover with plastic sheeting. If water is flowing install inclined pipes during dam construction to pass water underneath dam • May increase soil penetration
Culvert Blocking	• Block culvert with plywood, sandbags, sediments, etc. to prevent oil from entering culvert
Interception Trench	• Excavate ahead of advancing surface spill to contain spill and prevent further advancement; cover bottom and gradients with plastic • May cause disturbance of soils and increased soil penetration
Containment booming	• Boom is deployed around free oil • Boom may be anchored or left to move with the oil
Diversion booming	• Boom is deployed at an angle to the approaching oil • Oil is diverted to a less sensitive area • Diverted oil may cause heavy oil contamination to the shoreline downwind and down current • Anchor points may cause minor disturbance to the environment
Exclusion booming	• Boom is placed around a sensitive area or across an inlet, a river mouth, a creek mouth, or a small bay • Approaching oil is contained or deflected (diverted) by the boom • Anchor points may cause minor disturbance to the environment

Sorbent booming	• Used only on quiet water with minor oil contamination • Boom is anchored along a shoreline or used in a manner described above

- May use boom made of sorbent material or may pack sorbent material between multiple booms placed parallel to each other

Other cleanup methods include: natural recovery, manual removal/scraping, low-pressure flushing, warm water washing, and burning. Berms and dams are also used in shallow waterways to protect areas.

Cleanup methods are provided in the appropriate Area Contingency Plan (ACP), NOAA's "Shoreline Assessment Manual," and NOAA's "Options for Minimizing Environmental Impacts of Freshwater Spill Response." (See http://response.restoration.noaa.gov for the latter two.)

FIGURE 6.2-1 - RESPONSE TACTICS FOR VARIOUS SHORELINES

TYPES	DESCRIPTION	PREDICTED OIL IMPACT	RECOMMENDED CLEANUP ACTIVITY
Developed/ Unforested land	• This class includes towns, cities, farms, pastures, fields, reclaimed wetlands, and other altered areas • Organisms and algae may be common in riprap structures and on pilings	• Oil would percolate easily between the gravel and boulders of riprap structures • Oil would coat the intertidal areas of solid structures • Biota would be damaged or killed under heavy accumulations	• May require high pressure spraying: ◦ To remove oil ◦ To prepare substrate for recolonization of barnacle and oyster communities ◦ For aesthetic reasons
Freshwater Flat	• Mud or organic deposits located along the shore or in shallow portions of nontidal freshwater lakes and ponds • They are exposed to low wave and current energy • They are often areas of heavy bird use	• Oil is expected to be deposited along the shoreline • Penetration of spilled oil into the water-saturated sediments of the flat will not occur • When sediments are contaminated, oil may persist for years	• These areas require high priority for protection against oil contamination • Cleanup of freshwater flats is nearly impossible because of soft substrate • Cleanup is usually not even considered because of the likelihood of mixing oil deeper into the sediments during the cleanup effort • Passive efforts, such as sorbent boom can be used to retain oil as it is naturally removed
Fresh Marsh	• Found along freshwater ponds and lakes	• Small amounts of oil will contaminate the outer marsh fringe	• Marshes require the highest priority for shoreline protection

	• These marshes have various types of vegetative cover, including floating aquatic mats, vascular submerged vegetation, needle and broad-leaved deciduous scrubs and shrubs, and broad-leaved evergreen scrubs and shrubs • Birds and mammals extensively use fresh marshes for feeding and breeding purposes	only; natural removal by wave action can occur within months • Large spills will cover more area and may persist for decades • Oil, particularly the heavy fuel oils, tends to adhere readily to marsh grasses	• Natural recovery is recommended when: ◦ A small extent of marsh is affected ◦ A small amount of oil impacts the marsh fringe • The preferred cleanup method is a combination of low-pressure flushing, sorption, and vacuum pumping performed from boats • Any cleanup activities should be supervised closely to avoid excessive disturbances of the marsh surface or roots • Oil wrack and other debris may be removed by hand
Swamp	• Swamps are freshwater wetlands having varying water depths with vegetation types ranging from shrubs and scrubs to poorly drained forested wetlands. Major vegetative types include: scrubs, shrubs, evergreen trees, and hardwood forested woodlands • Birds and mammals use swamps during feeding and breeding activities	• Even small amounts of spilled oil can spread through the swamp • Large spills will cover more area and may persist for decades since water-flushing rates are low • Oil, particularly the heavy fuel oils, will adhere to swamp vegetation • Unlike mangroves, the roots of swamp forest trees are not exposed; thus, little damage to trees is expected. Any underbrush vegetation, however, would be severely impacted	• No cleanup recommended under light conditions • Under moderate to heavy accumulations, to prevent chronic oil pollution of surrounding areas placement of sorbent along fringe swamp forest (to absorb oil as it is slowly released) may be effective under close scientific supervision • Proper strategic boom placement may be highly effective in trapping large quantities of oil, thus reducing oil impact to interior swamp forests • Oil trapped by boom can be reclaimed through the use of skimmers and

			vacuums

FIGURE 6.2-1 - RESPONSE TACTICS FOR VARIOUS SHORELINES, CONTINUED

TYPES	DESCRIPTION	PREDICTED OIL IMPACT	RECOMMENDED CLEANUP ACTIVITY
Open water	• Have ocean like waves and currents • Weather changes effect on-water conditions • River mouths present problems • Thermal stratification occurs	• Most organisms are mobile enough to move out of the spill area • Aquatic birds are vulnerable to oiling • Human usage (such as transportation, water intakes, and recreational activities) may be restricted	• Booming, skimming, vacuuming, and natural recovery are the preferred cleanup methods • Should not use sorbents, containment booming, skimming, and vacuuming on gasoline spills • Cleanup options include physical herding, sorbents, and debris/vegetation removal
Large rivers	• May have varying salinities, meandering channels, and high flow rates • May include manmade structures (such as dams and locks) • Water levels vary seasonally • Floods generate high suspended sediment and debris loads	• Fish and migratory birds are of great concern • Under flood conditions, may impact highly sensitive areas in floodplains • Human usage may be high • When sediments are contaminated, oil may persist for years	• Booming, skimming, and vacuuming are the preferred cleanup methods • Should not use sorbents, containment booming, skimming, and vacuuming on gasoline spills • Cleanup options include natural recovery, physical herding, sorbents, and debris/vegetation removal
Small lakes and ponds	• Water surface can be choppy • Water levels can fluctuate widely • May completely freeze in winter • Bottom sediments near the shore can be soft and muddy • Surrounding area may include wet meadows and	• Wildlife and socioeconomic areas likely to be impacted • Wind will control the oil's distribution	• Booming, skimming, vacuuming, and sorbents are the preferred cleanup methods • Should not use containment booming, vacuuming, sorbents, and skimming on gasoline spills • Cleanup options

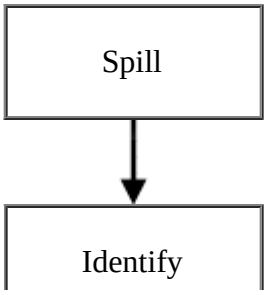
	marshes		include physical herding, sorbents, and debris/vegetation removal
Small rivers and streams	• Wide range of water bodies - fast flowing streams to slow moving bayous with low muddy banks and fringed with vegetation • May include waterfalls, rapids, log jams, mid-channel bars, and islands • Weathering rates may be slower because spreading and evaporation are restricted	• Usually contaminate both banks and the water column, exposing a large number of biota to being oiled • Water intakes for drinking water, irrigation, and industrial use likely to be impacted	• Booming, skimming, vacuuming, sorbents, barriers, and berms are the preferred cleanup methods • Should not use containment booming, sorbents, vacuuming, and skimming on gasoline spills • Cleanup options include physical herding, natural recovery, debris removal, vegetation removal, and in-situ burn

6.3 SENSITIVE AREA PROTECTION

Protection refers to the implementation of techniques or methods to prevent oil from making contact with a shoreline or aquatic area that is determined to be sensitive for environmental, economic, cultural, or human use reasons. Implementation of sensitive area protection techniques must consider a number of factors such as sensitive features, priorities for areas to be protected, and potential degree of impact.
In the event a product spill reaches a major area waterway, it may be necessary to protect downstream sensitive areas if it appears that local containment and recovery efforts will not be sufficient to control the entire spill. Major waterways and specific sensitive areas located downstream of the pipeline are provided in SECTION 6.7.

Site-specific protection strategies may be included in the appropriate Area Contingency Plan (ACP) as Geographic Response Plans (GRP).

FIGURE 6.3-1 - SENSITIVE AREA PROTECTION IMPLEMENT SEQUENCE



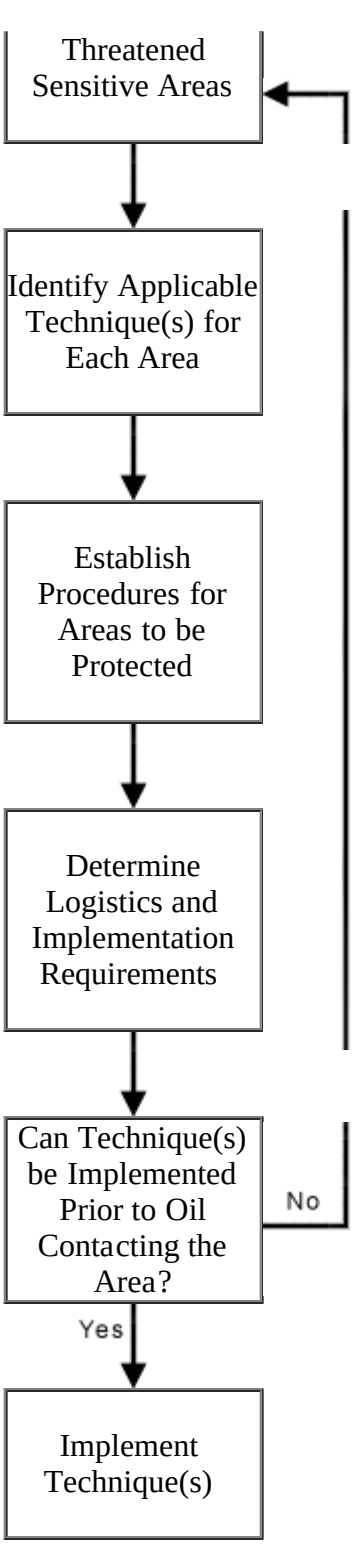


FIGURE 6.3-2 - SUMMARY OF SHORELINE AND TERRESTRIAL CLEANUP TECHNIQUES

TECHNIQUE	DESCRIPTION	RECOMMENDED EQUIPMENT	APPLICABILITY	POTENTIAL ENVIRONMENTAL EFFECTS
Removal				
1. Manual	Hand tool	Equipment	• Can be used	• Sediment

Removal	(scrapers, wire brushes, shovels, cutting tools, wheel barrows, etc.) are used to scrape oil off surfaces or recover oiled sediments, vegetation, or debris where oil conditions are light or sporadic and/or access is limited.	misc. hand tools Personnel 10-20 workers	on all habitat types • Light to moderate oiling conditions for stranded oil or heavy oils that have formed semi-solid to solid masses • In areas where roosting or birthing animals cannot or should not be disturbed	disturbance and erosion potential
2. Mechanical Removal	Mechanical earthmoving equipment is used to remove oiled sediments and debris from heavily impacted areas with suitable access.	Equipment motor grader, backhoe, dump truck elevating scrapers Personnel 2-4 workers plus equipment operators	• On land, wherever surface sediments are accessible to heavy equipment • Large amounts of oiled materials	• Removes upper 2 to 12 inches of sediments
3. Sorbent Use	Sorbents are applied manually to oil accumulations, coatings, sheens, etc. to remove and recover the oil.	Equipment misc. hand tools misc. sorbents Personnel 2-10 workers	• Can be used on all habitat types • Free-floating oil close to shore or stranded on shore, secondary treatment method after gross oil removal • Sensitive areas where access is restricted	• Sediment disturbance and erosion potential • Trampling of vegetation and organisms • Foot traffic can work oil deeper into soft sediments
4. Vacuum/Pumps/	Pumps, vacuum trucks, skimmers	Equipment 1-2 50- to 100-bbl	• Can be used on all habitat	• Typically does not remove all

Skimmers	are used to remove oil accumulations from land or relatively thick floating layers from the water.	vacuum trucks w/hoses 1-2 nozzle screens or skimmer heads Personnel 2-6 workers plus truck operators	types • Stranded oil on the substrate • Shoreline access points	oil • Can remove some surface organisms, sediments, and vegetation
Washing				
5. Flooding	High volumes of water at low pressure are used to flood the oiled area to float oil off and out of sediments and back into the water or to a containment area where it can be recovered.? Frequently used with flushing.	Equipment 1-5 100- to 200-gpm pumping systems 1 100-ft perforated header hose per system 1-2 200-ft containment booms per system 1 oil recovery device per system Personnel 6-8 workers per system	• All shoreline types except steep intertidal areas • Heavily oiled areas where the oil is still fluid and adheres loosely to the substrate • Where oil has penetrated into gravel sediments • Used with other washing techniques	• Can impact clean downgradient areas • Can displace some surface organisms if present • Sediments transported into water can affect water quality

FIGURE 6.3-2 - SUMMARY OF SHORELINE AND TERRESTRIAL CLEANUP TECHNIQUES, CONTINUED

TECHNIQUE	DESCRIPTION	RECOMMENDED EQUIPMENT	APPLICABILITY	POTENTIAL ENVIRONMENTAL EFFECTS
Washing, Continued				
6. Flushing	Water streams at low to moderate pressure, and possibly elevated temperatures, are used to remove oil from surface or near-surface sediments through agitation and direct	Equipment 1-5 50- to 100-gpm/ 100-psi pumping systems with manifold 1-4 100-ft hoses and nozzles per system 1-2 200-ft containment booms per system	• Substrates, riprap, and solid man-made structures • Oil stranded onshore • Floating oil on shallow intertidal areas	• Can impact clean downgradient areas • Will displace many surface organisms if present • Sediments transported into water can affect

	contact.? Oil is flushed back into the water or a collection point for subsequent recovery.? May also be used to flush out oil trapped by shoreline or aquatic vegetation.	1 oil recovery device per system Personnel 8-10 workers per system		water quality • Hot water can be lethal to many organisms • Can increase oil penetration depth
7. Spot (High Pressure Washing)	High pressure water streams are used to remove oil coatings from hard surfaces in small areas where flushing is ineffective.? Oil is directed back into water or collection point for subsequent recovery.	Equipment 1-5 1,200- to 4,000-psi units with hose and spray wand 1-2 100-ft containment booms per unit 1 oil recovery device per unit Personnel 2-4 workers per unit	• Bedrock, man-made structures, and gravel substrates • When low-pressure flushing is not effective • Directed water jet can remove oil from hard to reach sites	• Will remove most organisms if present • Can damage surface being cleaned • Can affect clean downgradient or nearby areas
In Situ				
8. Passive Collection	Sorbent/snare booms or other sorbent materials are anchored at the waterline adjacent to heavily oiled areas to contain and recover oil as it leaches from the sediments.	Equipment 1,000-2,000 ft sorbent/snare boom 200-400 stakes or anchor systems Personnel 4-10 workers	• All shoreline types • Calm wave action • Slow removal process	• Significant amounts of oil can remain on the shoreline for extended periods of time
9. Sediment Tilling	Mechanical equipment or hand tools are used to till lightly to moderately oiled surface sediments to maximize natural degradation processes.	Equipment 1 tractor fitted with tines, dicer, ripper blades, etc. or 1-4 rototillers or 1 set of hand tools Personnel 2-10 workers	• Any sedimentary substrate that can support heavy equipment • Sand and gravel beaches with subsurface oil • Where	• Significant amounts of oil can remain on the shoreline for extended periods of time • Disturbs surface sediments and organisms

			• sediment is stained or lightly oiled • Were oil is stranded above normal high waterline	

FIGURE 6.3-2 - SUMMARY OF SHORELINE AND TERRESTRIAL CLEANUP TECHNIQUES, CONTINUED

TECHNIQUE	DESCRIPTION	RECOMMENDED EQUIPMENT	APPLICABILITY	POTENTIAL ENVIRONMENTAL EFFECTS
In Situ, Continued				
10. In Situ Bioremediation	Fertilizer is applied to lightly to moderately oiled areas to enhance microbial growth and subsequent biodegradation of oil.	Equipment 1-2 fertilizer applicators 1 tilling device if required Personnel 2-4 workers	• Any shoreline habitat type where nutrients are deficient Moderate to heavily oiled substrates After other techniques have been used to remove free product on lightly oiled shorelines Where other techniques are destructive or ineffective	• Significant amounts of oil can remain on the shoreline for extended periods of time • Can disturb surface sediments and organisms
11. Log/Debris?? Burning	Oiled logs, driftwood, vegetation, and debris are burned to minimize material handling and disposal requirements.?	Equipment 1 set of fire control equipment 2-4 fans 1 supply of combustion promoter Personnel 2-4 workers	• On most habitats except dry muddy substrates where heat may impact the biological productivity of the habitat	• Heat may impact local near-surface organisms • Substantial smoke may be generated • Heat may impact adjacent vegetation

	Material should be stacked in tall piles and fans used to ensure a hot, clean burn.		• Where heavily oiled items are difficult or impossible to move • Many potential applications on ice	
12. Natural Recovery	No action is taken and oil is allowed to degrade naturally.	None required	• All habitat types • When natural removal rates are fast • Degree of oiling is light • Access is severely restricted or dangerous to cleanup crews • When cleanup actions will do more harm than natural removal	• Oil may persist for significant periods of time • Remobilized oil or sheens may impact other areas • Higher probability of impacting wildlife
13. Dispersants	Dispersants are used to reduce the oil/water interfacial tension thereby decreasing the energy needed for the slick to break into small particles and mix into the water column. ? Specially formulated products containing surface-active agents are sprayed from aircraft or boats	Dispersants Boat or aircraft	• Water bodies with sufficient depth and volume for mixing and dilution • When the impact of the floating oil has been determined to be greater than the impact of dispersed oil on the water-column community	• Use in shallow water could affect benthic resources • May adversely impact organisms in the upper 30 feet of the water column • Some water-surface and shoreline impacts could occur

	onto the slick.			
1 - Per 1000 feet of shoreline or oiled area				

Cleanup methods are provided in the appropriate Area Contingency Plan (ACP), NOAA's "Shoreline Assessment Manual," and NOAA's "Options for Minimizing Environmental Impacts of Freshwater Spill Response." (See http://response.restoration.noaa.gov for the latter two.)

6.4 ALTERNATIVE RESPONSE STRATEGIES

Non-mechanical methods for cleanup operations could involve the use of chemical cleaning products or appropriate bioremediation products. A checklist for evaluating differenct alternate strategies is present in **FIGURE 6.4-1**.

6.4.1 Dispersants

While physical removal is the most common method for eliminating spilled oil from the environment, mechanical removal may be limited by equipment capability, weather, sea conditions, and spill magnitude. An alternative strategy for reducing impacts from oil spills is to disperse the oil into the water by breaking it into small droplets and suspending them in the water. This process occurs naturally very slowly but can be accelerated by the application of a dispersant.

A dispersant is an agent (surfactant) which reduces the surface tension of the oil and water and allows them to mix more readily. In the presence of sufficient mixing energy supplied by waves, wind, or man-made turbulence, the oil can remain suspended in the water column resisting resurfacing and recoalescing. Dispersants may be effective in area where environmental or logistical considerations do not allow the deployment of cleanup equipment and personnel, and may reduce the overall level of effort and manpower requirement and personnel necessary for responding to major spills.

The Company will not use dispersants without the concurrence of the FOSC. Dispersants will not be used without concurrence of the EPA and the state with jurisdiction over the affected waters. Refer to the NCP for dispersant use policies and procedures.

6.4.2 Bioremediation

Bioremediation is the process of stimulating the growth and activity of microorganisms such as bacteria and fungi that naturally feed on hydrocarbons. It is conducted as a means of accelerating the natural biodegradation rates of stranded or floating oil. Biodegradation is a natural process by which the above microorganism, in the presence of nutrients an oxygen, chemically breakdown hydrocarbons and other substances and produce by-products including carbon dioxide, water, biomass, and partially oxidized products.

Biodegradation, together with physical processes such as evaporation and dispersion, are the primary natural mechanisms for the removal of hydrocarbons (oil spills) from the environment. This process generally occurs at a very low rate but can often be enhanced by the application of nutrients such as nitrogen, phosphorus, potassium, and others.

There are, however, instances on open seas or shorelines where standard recovery or cleanup techniques are not practical or will result in significant environmental or physical impacts. In these cases, bioremediation may be a viable response option and should be considered for use. **FIGURE 6.4-2** provides a federal decision guide for bioremediation consideration.

6.4.3 In-Situ Burn

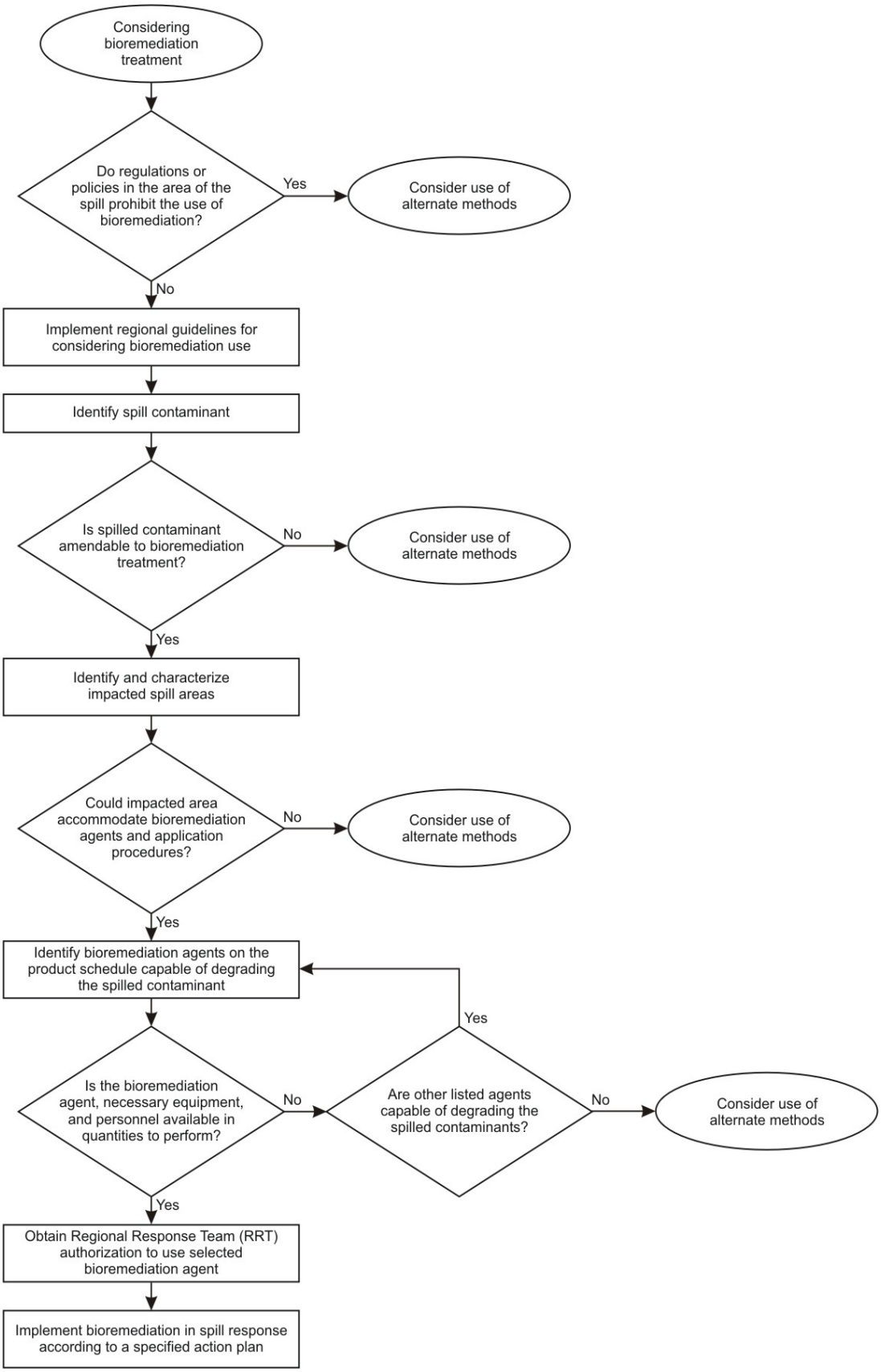
"In-Situ" burning has been successfully used as a viable technique for mitigating oil spills off shore and in a marsh type environment. This is especially true of areas that have mostly grassy vegetation with little or no woody vegetation. In a grassy marshland environment, an "In-Situ" burn may produce less long-term damage to the environment than traditional mechanical cleanup methods.

The company will not use In-Situ Burn without the concurrence of the FOSC and the Regional Response Team (RRT).

FIGURE 6.4-1 - ALTERNATE STRATEGIES CHECKLIST

Evaluate Alternate Strategies (oil spills only)	**Initials**	**Date & Time Started**	**Date & Time Completed**
No response			
In-situ burning			
Flood and flush			
Bioremediation/nutrient application			
Dispersants/surfactants			
Gelling/solidifying agents			
Sorbents			
Mechanical recovery			

FIGURE 6.4-2 - DECISION GUIDE FOR THE FEDERAL BIOREMEDIATION APPROVAL PROCESS



6.5 WILDLIFE PROTECTION AND REHABILITATION

- The Company will support wildlife protection and rehabilitation efforts during the

response, but will not typically directly manage these efforts.

- Company personnel will not attempt to rescue or clean affected wildlife, because such actions may cause harm to the individuals or may place the animals at further risk.
- Federal and state agencies responsible for wildlife capture and rehabilitation will typically coordinate capturing and rehabilitating oiled wildlife; a list of these agencies are included in **FIGURE 3.1-4**.
- Wildlife rehabilitation specialists may be utilized to assist in capturing and rehabilitating oiled animals as well as deterring unaffected animals away from the spill site.
- U.S. Fish & Wildlife is to be notified and consulted in establishing incident-specific priorities for the protection of the resources provided. Sensitive resources identified include environmentally sensitive lands, freshwater environments, and areas of economic significance.

6.6 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Bat, Indiana	*Myotis sodalis*	Caves, mines, upland forests	E	Iowa
Bush-clover, prairie	*Lespedeza leptostachya*	Dry to mesic praries with gravelly soil	T	Iowa
Higgins eye (pearlymussel)	*Lampsilis higginsii*	Substrates of mud with a mixture of gravel and stones	E	Iowa
Milkweed, Mead's	*Asclepias meadii*	Dry or mesic prairies and igneous glades with rocky outcrops	T	Iowa
Monkshood, northern wild	*Aconitum noveboracense*	Cold stream beds, mossy banks, cliffs, slopes, and cold woods	T	Iowa
Orchid, eastern prairie fringed	*Platanthera leucophaea*	Mesic to wet praries	T	Iowa
Orchid, western prairie fringed	*Platanthera praeclara*	Mesic to wet praries	T	Iowa
Plover, piping except Great Lakes watershed	*Charadrius melodus*	Sandy beaches, islands	T	Iowa
Shiner, Topeka	*Notropis topeka (=tristis)*	Streams	E	Iowa
Snail, Iowa Pleistocene	*Discus macclintocki*	Aquatic environment	E	Iowa

Sturgeon, pallid	*Scaphirhynchus albus*	Free-flowing riverine	E	Iowa
Tern, least interior pop.	*Sterna antillarum*	Open sandy or gravelly beach, dredge spoil and other open shoreline areas	E	Iowa
Bat, gray	*Myotis grisescens*	Caves and mines; rivers adjacent to forests	E	Kansas
Beetle, American burying	*Nicrophorus americanus*	Cropland/hedgerow	E	Kansas
Crane, whooping except where EXPN	*Grus americana*	Freshwater marshes and wet prairies	E	Kansas
Curlew, Eskimo	*Numenius borealis*	Cropland/hedgerow, grassland/herbaceous, tundra	E	Kansas
Ferret, black-footed entire population, except where EXPN	*Mustela nigripes*	Grasslands, steppe, and shrub steppe	E	Kansas
Madtom, Neosho	*Noturus placidus*	Large, medium-gradient streams	T	Kansas

T - Threatened
E - Endangered

6.6 ENDANGERED AND THREATENED SPECIES BY STATE , CONTINUED

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Milkweed, Mead's	*Asclepias meadii*	Dry or mesic prairies and igneous glades with rocky outcrops	T	Kansas
Orchid, western prairie fringed	*Platanthera praeclara*	Mesic to wet praries	T	Kansas
Plover, piping except Great Lakes watershed	*Charadrius melodus*	Lakeshore beaches	T	Kansas
Shiner, Arkansas River Arkansas R. Basin	*Notropis girardi*	Benthopelagic; freshwater	T	Kansas
Shiner, Topeka	*Notropis topeka (=tristis)*	Streams	E	Kansas
Sturgeon, pallid	*Scaphirhynchus albus*	Free-flowing riverine	E	Kansas
Tern, least	*Sterna antillarum*	Open sandy or gravelly beach, dredge spoil and	E	Kansas

interior pop.		other open shoreline areas		
Bush-clover, prairie	*Lespedeza leptostachya*	Gravelly soil in dry to mesic praries	T	Minnesota
Butterfly, Karner blue	*Lycaeides melissa samuelis*	Pine barrens and oak savannas on sandy soils	E	Minnesota
Higgins eye (pearlymussel)	*Lampsilis higginsii*	Substrates of mud with a mixture of gravel and stones	E	Minnesota
Lily, Minnesota dwarf trout	*Erythronium propullans*	North facing slopes and floodplains	E	Minnesota
Lynx, Canada (Contiguous U.S. DPS)	*Lynx canadensis*	Mature forests with dense undergrowth	T	Minnesota
Mapleleaf, winged Entire; except where listed as experimental populations	*Quadrula fragosa*	Big River, high gradient, medium river, moderate gradient, riffle	E	Minnesota
Orchid, western prairie fringed	*Platanthera praeclara*	Wet praries and sedge meadows	T	Minnesota
Plover, piping Great Lakes watershed	*Charadrius melodus*	Sandy beaches, islands	T	Minnesota
Plover, piping Great Lakes watershed	*Charadrius melodus*	Great Lakes watershed	E	Minnesota
Roseroot, Leedy's	*Sedum integrifolium ssp., leedy*	Cool, wet ground-fed limestone cliffs	T	Minnesota
Shiner, Topeka	*Notropis topeka (=tristis)*	Prarie rivers and streams	E	Minnesota

T - Threatened
E - Endangered

6.6 ENDANGERED AND THREATENED SPECIES BY STATE , CONTINUED

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Wolf, gray MN	*Canis lupus*	Mixed, grassland/herbaceous	T	Minnesota
Beetle, American burying	*Nicrophorus americanus*	Cropland/hedgerow	E	Nebraska

Butterfly plant, Colorado	*Gaura neomexicana var. coloradensis*	Moist areas of floodplains	T	Nebraska
Crane, whooping except where EXPN	*Grus americana*	Cropland/hedgerow, grassland/herbaceous	E	Nebraska
Curlew, Eskimo	*Numenius borealis*	Cropland/hedgerow, grassland/herbaceous, tundra	E	Nebraska
Ferret, black-footed entire population, except where EXPN	*Mustela nigripes*	Grasslands, steppe, and shrub steppe	E	Nebraska
Ladies'-tresses, Ute	*Spiranthes diluvialis*	Moist to very wet meadows along streams	T	Nebraska
Orchid, western prairie fringed	*Platanthera praeclara*	Wet praries and sedge meadows	T	Nebraska
Penstemon, blowout	*Penstemon haydenii*	Sand dune blowouts	E	Nebraska
Plover, piping except Great Lakes watershed	*Charadrius melodus*	Sandy beaches, islands	T	Nebraska
Shiner, Topeka	*Notropis topeka (=tristis)*	Streams	E	Nebraska
Sturgeon, pallid	*Scaphirhynchus albus*	Free-flowing riverine	E	Nebraska
Tern, least interior pop.	*Sterna antillarum*	Open sandy or gravelly beach, dredge spoil and other open shoreline areas	E	Nebraska
Tiger beetle, Salt Creek	*Cicindela nevadica lincolniana*	Arbor Lake and along the banks of Salt Creek and its tributaries and in the mud flats of saline marshes of northern Lancaster County	E	Nebraska

T - Threatened
E - Endangered

6.7 MAP FEATURE INDEX

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Maps and figures have been redacted in accordance with the FOIA Exemption 7(F).

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6.8 DOT SENSITIVITY STUDY, CONTINUED

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6.8 DOT SENSITIVITY STUDY, CONTINUED

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6.8 DOT SENSITIVITY STUDY, CONTINUED

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6.8 DOT SENSITIVITY STUDY, CONTINUED

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Northern Zone **Page 6 - 159**

6.8 DOT SENSITIVITY STUDY, CONTINUED

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6.8 DOT SENSITIVITY STUDY, CONTINUED

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6.8 DOT SENSITIVITY STUDY, CONTINUED

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6.8 DOT SENSITIVITY STUDY, CONTINUED

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6.8 DOT SENSITIVITY STUDY, CONTINUED

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6.8 DOT SENSITIVITY STUDY, CONTINUED

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6.8 DOT SENSITIVITY STUDY, CONTINUED

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6.8 DOT SENSITIVITY STUDY, CONTINUED

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6.8 DOT SENSITIVITY STUDY, CONTINUED

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6.8 DOT SENSITIVITY STUDY, CONTINUED

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6.8 DOT SENSITIVITY STUDY, CONTINUED

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6.8 DOT SENSITIVITY STUDY, CONTINUED

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6.8 DOT SENSITIVITY STUDY, CONTINUED

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6.8 DOT SENSITIVITY STUDY, CONTINUED

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6.8 DOT SENSITIVITY STUDY, CONTINUED

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6.8 DOT SENSITIVITY STUDY, CONTINUED

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6.8 DOT SENSITIVITY STUDY, CONTINUED

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6.8 DOT SENSITIVITY STUDY, CONTINUED

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6.8 DOT SENSITIVITY STUDY, CONTINUED

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6.8 DOT SENSITIVITY STUDY, CONTINUED

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6.8 DOT SENSITIVITY STUDY, CONTINUED

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6.8 DOT SENSITIVITY STUDY, CONTINUED

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6.8 DOT SENSITIVITY STUDY, CONTINUED

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6.8 DOT SENSITIVITY STUDY, CONTINUED

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6.8 DOT SENSITIVITY STUDY, CONTINUED

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6.8 DOT SENSITIVITY STUDY, CONTINUED

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6.8 DOT SENSITIVITY STUDY, CONTINUED

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6.8 DOT SENSITIVITY STUDY, CONTINUED

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6.8 DOT SENSITIVITY STUDY, CONTINUED

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SECTION 7 Last Revised: April 2008

SUSTAINED RESPONSE ACTIONS

7.1 RESPONSE RESOURCES

7.1.1 Response Equipment

Company and Contractor response equipment is provided in **FIGURE 7.1-1**.

FIGURE 7.1-1 - REGIONAL COMPANY AND RESPONSE CONTRACTOR'S EQUIPMENT LIST/RESPONSE TIME

* USCG Classified OSRO

COMPANY/CONTRACTOR	EQUIPMENT	RESPONSE TIME
Clean Harbors Cannon Falls, MN		hour(s)
*Garner Environmental Services Houston, Texas	Full complement of response equipment and clean-up personnel	Varies hour(s)
*Haz-Mat Response, Inc Wichita, KS	Full Response Capabilities	3-5 hour(s)
*Haz-Mat Response, Inc Great Bend, KS	Full response capabilities	3-5 hour(s)
*Haz-Mat Response, Inc North Platte, NE	Full response capabilities	3-5 hour(s)
*Haz-Mat Response, Inc. Olathe, Kansas	Full Response Capabilities	3-5 hour(s)

7.1.2 Response Equipment Inspection and Maintenance

Currently the Company owns no response equipment.

7.1.3 Contractors, Contractor Equipment, and Labor

- The Company's primary response contractors' names and phone numbers, as well as other companies who can provide spill response services are provided in **SECTION 3**.
- The Company has ensured by contract the availability of private personnel and equipment necessary to respond, to the maximum extent practicable, to the worst case discharge or the substantial threat of such discharge.
- Contractors without USCG classification deploy and inspect boom to meet PREP guidelines. Company requires that these exercises are completed annually.
- **APPENDIX B** contains evidence of contracts for the Company's primary response contractors.

7.1.4 Command Post

In the event of a major spill, both an off-site Emergency Operations Center (EOC) and a Unified Command Post would be established. For a minor spill, only a Command Post would be established. Refer to **FIGURE 7.1-2** for guidelines in establishing a Command Post.

FIGURE 7.1-2 - COMMAND POST CHECKLIST

COMMAND POST CHECKLIST	INITIALS	DATE/TIME STARTED	DATE/TIME COMPLETED
Ensure adequate space for size of staff.			
Ensure 24 hour accessibility.			
Ensure personal hygiene facilities.			
Ensure suitability of existing communications resources (phone/fax/radio).			
Ensure suitability of private conference and briefing rooms.			
Identify Command Post security requirements, safe location.			
Notify other parties of Command Post location; provide maps/driving directions.			
Determine staging areas and incident base locations.			
Identify future need to move, upgrade facilities.			

7.1.5 Staging Area

In a major spill response, numerous staging areas may be required to support containment and clean-up operations.

In selecting a suitable staging area, the following criteria should be considered:

- Accessibility to impacted areas;
- Proximity to secure parking, airports, docks, pier, or boat launches; and
- Accessibility to large trucks and trailers which may be used to transfer equipment.

In addition, the staging area should:

- Be in a large open area in order to provide storage for equipment and not interfere with equipment loading and offloading operations.
- Have a dock/pier on site for deploying equipment.
- Have moorage available for vessels to aid the loading/offloading of personnel.

7.1.6 Communications Plan

Company owned communications equipment and quantities commonly used to address

response communications are listed below:

- 4 Land-line telephones
- 32 Cellular phones
- 9 Radios
- 12 Fax
- 32 Computers

Normal Company communications to each facility are conducted via telephone lines, cellular telephones, two way radios, e-mail, and fax machines.

Additional communications equipment (VHF portable radios with chargers and accessories, command post with UHF, VHF, single sideband, marine, aeronautical, telephone, and hard-line capability) may be provided by the Company or leased from a communications company in the area. Communications with government agencies, state police, and contractors can be conducted on portable radios. Refer to **FIGURE 7.1-3** for guidelines to setup communications.

It is the responsibility of the Qualified Individual to provide an adequate communications system.
The Communications Plan, written at the time of an incident, will identify telephone numbers and radio frequencies used by responders. This may also involve activation of multiple types of communications equipment and coordination among multiple responding agencies and contractors.

FIGURE 7.1-3 - COMMUNICATIONS CHECKLIST

COMMUNICATIONS CHECKLIST	INITIALS	DATE/TIME STARTED	DATE/TIME COMPLETED
Develop a Communications Plan.			
Ensure adequate phone lines per staff element - contact local provider.			
Ensure adequate fax lines - contact local provider.			
Internet access necessary?			
Ensure recharging stations for cellular phones.			
VHF radio communications: • Establish frequencies • Assign call signs • Distribute radios • Establish communications schedule			
Ensure recharging stations for VHF radios.			
Determine need for VHF repeaters.			
Ensure copy machine available.			
Ensure communications resource accountability.			
Ensure responders have capability to communicate with aircraft.			

Note: Actions on this checklist may not be applicable or may be continuous activities.

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[redacted]

7.3 WASTE MANAGEMENT

Initial oil handling and disposal needs may be overlooked in the emergency phase of a response, which could result in delays and interruptions of cleanup operations. Initially, waste management concerns should address:

- Equipment capacity,
- Periodic recovery of contained oil, and
- Adequate supply of temporary storage capacity and materials.

The following action items should be conducted during a spill response:

- Development of a Site Safety and Health Plan (**SECTION 5.3**) addressing the proper PPE and waste handling procedures.
- Development of a Disposal Plan (**SECTION 5.5**) in accordance with any federal, state, and/or local regulations.
- Continuous tracking of oil disposition in order to better estimate amount of waste that could be generated over the short and long-term.
- Organization of waste collection, segregation, storage, transportation, and proper disposal.
- Minimization of risk of any additional pollution.
- Regulatory review of applicable laws to ensure compliance and (if appropriate) obtain permits.
- Documentation of all waste handling and disposal activities.
- Disposal of all waste in a safe and approved manner.

Good hazardous waste management includes:

- Reusing materials when possible,
- Recycling or reclaiming waste, and
- Treating waste to reduce hazards or reducing amount of waste generated.

The management of the wastes generated in cleanup and recovery activities must be conducted with the overall objective of ensuring:

- Worker safety,
- Waste minimization,

- Cost effectiveness,
- Minimization of environmental impacts,

7.3 WASTE MANAGEMENT, CONTINUED

- Proper disposal, and
- Minimization of present and future environmental liability.

Solid wastes such as sorbents, PPE, debris, and equipment will typically be transported from the collection site to a designated facility for:

- Storage
- Waste segregation
- Packaging
- Transportation

Once this process is complete, the waste will be shipped off-site to an approved facility for required disposal.

A general flow chart for waste management guidelines is provided in **FIGURE 7.3-1**. An overall checklist for containment and disposal is provided in **FIGURE 7.3-2**.

FIGURE 7.3-1 - WASTE MANAGEMENT FLOW CHART

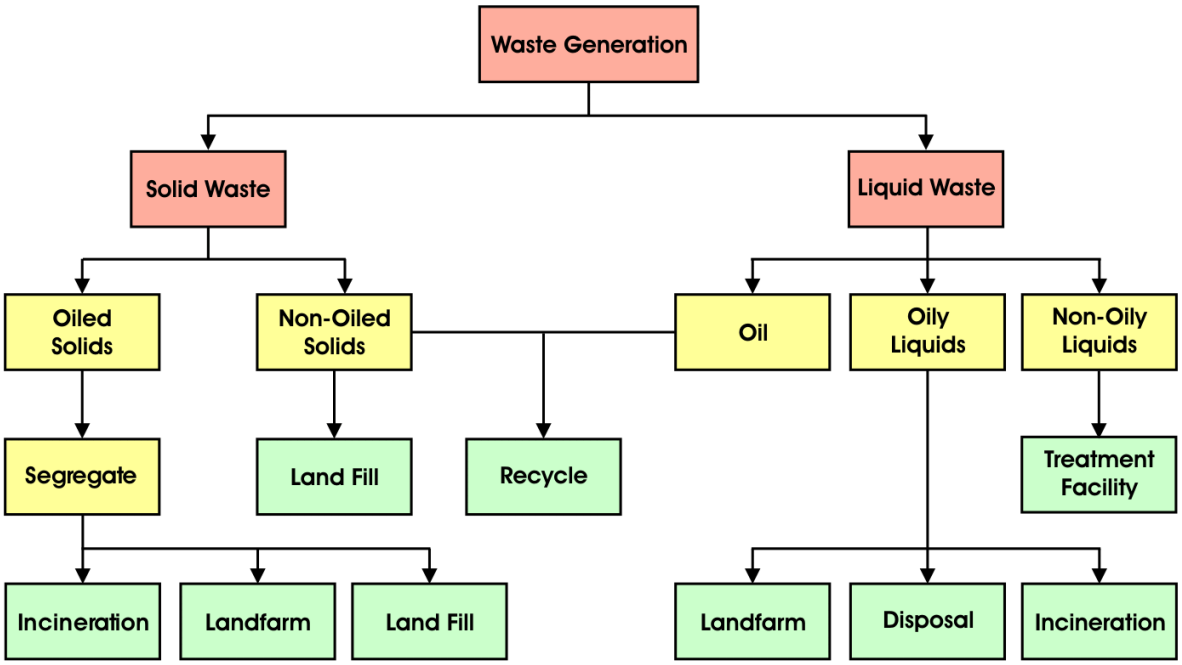

FIGURE 7.3-2 - GENERAL WASTE CONTAINMENT AND DISPOSAL CHECKLIST

CONSIDERATION	YES/NO/NA
Is the material being recovered a waste or reusable product?	
Has all recovered waste been containerized and secured so there is no potential for further leakage while the material is being stored?	
Has each of the discrete waste streams been identified?	
Has a representative sample of each waste stream been collected?	
Has the sample been sent to an approved laboratory for the appropriate analysis, (i.e. hazardous waste determination)?	
Has the appropriate waste classification and waste code number(s) for the individual waste streams been received?	
Has a temporary EPA identification number and generator number(s) been received, if they are not already registered with EPA?	
Have the services of a registered hazardous waste transporter been contracted, if waste is hazardous?	
If the waste is nonhazardous, is the transporter registered?	
Is the waste being taken to an approved disposal site?	
Is the waste hazardous or Class I nonhazardous?	
If the waste is hazardous or Class I nonhazardous, is a manifest being used?	
Is the manifest properly completed?	
Are all federal, state, and local laws/regulations being followed?	
Are all necessary permits being obtained?	
Has a Disposal Plan been submitted for approval/review?	
Has PPE and waste-handling procedures been included in the Site Safety and Health Plan to protect the health and safety of waste handling personnel?	

7.3.1 Storage

During an oil spill, the volume of oil that can be recovered depends on the storage capacity available. Typical short-term (temporary) storage methods are provided in FIGURE 7.3-3. If storage containers such as bags or drums are used, the container should be clearly marked and/or color-coded to indicate the type of material or waste contained and/or the ultimate disposal option.

FIGURE 7.3-3 - TEMPORARY STORAGE METHODS

CONTAINMENT	PRODUCT						
	OIL	OIL/WATER	OIL/SOIL	OIL/DEBRIS (Small)	OIL/DEBRIS (Medium)	OIL/DEBRIS (Large)	CAPACITY
Drums	X	X	X				3

							0.2-0.5 yd
Bags		X	X	X			1.0-2.0 yd^3
Boxes		X	X	X			1-5 yd^3
Open top rolloff	X	X	X	X	X	X	8-40 yd^3
Roll top rolloff	X	X	X	X	X	X	15-25 yd^3
Vacuum box	X	X					15-25 yd^3
Frac tank	X	X					500-20,000 gal
Poly tank	X	X					200-4,000 gal
Vacuum truck	X	X	X				2,000-5,000 gal
Tank trailer	X	X					2,000-4,000 gal
Barge	X	X					3,000+gal
Berm, 4 ft		X	X	X	X	X	1 yd^3
Bladders	X	X					25 gal-1,500 gal

7.4 PUBLIC AFFAIRS

This section contains guidelines for dealing with the media during an emergency. The Incident Commander will play a key role in providing the initial public assessment and taking the first steps to provide the Company's public response. Information in this section includes:

- Guidelines for dealing with the media
- Media Incident Fact Sheet (**FIGURE 7.4-1**)

GUIDELINES FOR DEALING WITH THE MEDIA

- You as a Company Manager are the most logical person for reporters to seek out for information
- Reporters will look elsewhere to find out what happened if you do not answer their questions; however, if you do not have this information or are not prepared to answer a particular question, say so then say when they can expect the answers to their questions (such as one hour)
- It is important to be courteous to all media representatives and to provide a safe place for them to wait until a company representative can meet them; you may need to provide an initial statement

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Provide

- A brief, general description of what happened.
- Steps being taken to handle the emergency.

Don't provide	• Names of deceased or seriously injured employees until the next of kin have been notified. • Speculation about the cause of the emergency. • Any statement implying personal or Company negligence. • Number of injured or killed, if known. • Cost estimates of damage
Other considerations	• Safety considerations should always receive priority in determining access to company property • Anticipate likely questions. • There are only six questions that can be asked about any subject: who, what, when, where, why, and how. • Keep answers short and understandable. • Answer only the question that is asked by the reporter. • Give the most important facts first. • Talk to the public's concern about the incident such as whether these were deaths, injuries, any threat to the public, or danger of explosion or fire. • If you don't know the answer to a question, don't be afraid to say "I don't know"; make note of the question and tell the reporter that you will try to get the answer for him - then do it. • Don't be defensive.

Other considerations, continued:	• There is no such thing as "Talking off the record"; assume that anything and everything you say to a reporter is going to be printed and/or used in the story. • Avoid "What If?" or speculative questions; these questions should be answered with a restatement of the problem and what is being done to control it. • Don't speculate about the cause of the incident. • Don't minimize the situation.

FIGURE 7.4-1 - MEDIA INCIDENT FACT SHEET

What occurred:
When (time):
Where (location):
What are the hazards:
How is the situation being handled:
What agencies have been notified: **All necessary agencies have been notified.**
Has outside help been requested: **All necessary assistance has been requested.**
Is there danger to the plant:
Is there danger to the community:
What:
Is there an environmental hazard:
What is the environmental hazard:
What is being done to minimize environmental threat: **All appropriate actions to protect the environment are being taken.**
Is there a need for evacuation:

SECTION 8 Last Revised: April 2008

DEMOBILIZATION / POST-INCIDENT REVIEW

8.1 TERMINATING THE RESPONSE

- A team of federal, state, and company personnel must certify that each area is clean before halting cleanup operations.
- Demobilize equipment and personnel at the first opportunity in order to reduce cost.
- Consider which resources should be demobilized first; for example, berthing expenses can be saved by demobilizing out-of-area contractors before local ones.
- Equipment may need both maintenance and decontamination before being demobilized.
- All facilities (staging area, Command Post, etc.) should be returned to their pre-spill condition before terminating operations.
- Determine what documentation should be maintained, where, and for how long.
- Contract personnel may be more susceptible to "suffering" injuries as they approach termination.
- Some activities will continue after the cleanup ends; examples include incident debriefing, bioremediation, NRDA studies, claims, and legal actions.
- Consider expressing gratitude to the community, police department, fire department, and emergency crews for their work during the response.

8.2 DEMOBILIZATION

The Company can reduce costs considerably by developing a Demobilization Plan (**SECTION 5.7**). Therefore, emphasis must be placed on establishing efficient demobilization procedures. A Demobilization Checklist is provided in **FIGURE 8.2-1**.

FIGURE 8.2-1 - DEMOBILIZATION CHECKLIST

DEMOBILIZATION CHECKLIST	INITIALS	DATE/TIME STARTED	DATE/TIME COMPLETED
Assign personnel to identify surplus resources and probable release times.			
Establish demobilization priorities.			
Develop decontamination procedures.			
Initiate equipment repair and maintenance.			
Develop a Disposal Plan.			
Identify shipping needs.			
Identify personnel travel needs.			
Develop impact assessment and statements.			
Obtain concurrence of Planning and Operations			

Group Leaders before release of personnel or equipment.			

8.3 POST INCIDENT REVIEW

All facility personnel involved in the incident shall be debriefed (by the Company) within 24 hours after termination of operations. The primary purpose of the post-incident review is to identify actual or potential deficiencies in the Plan and determine the changes required to correct the deficiencies. The post-incident review is also intended to identify which response procedures, equipment, and techniques were effective and which were not and the reason(s) why. This type of information is very helpful in the development of a functional Plan by eliminating or modifying those response procedures that are less effective and emphasizing those that are highly effective. This process should also be used for evaluating training drills or exercises. Key agency personnel that were involved in the response will be invited to attend the post-incident review. An Emergency Response or Drill Form is provided in **FIGURE 8.3-1**.

FIGURE 8.3-1 - EMERGENCY RESPONSE OR DRILL FORM

LOCATION NUMBER:	**LOCATION/FACILITY NAME:**		
PIPELINE LOCATION:		**COUNTY/PARISH:**	
DATE:	**ATTENDANCE:**	**DRILL LENGTH:**	
TYPE OF EXERCISE			
☐ ACTUAL	☐ ANNOUNCED	☐ UNANNOUNCED	
☐ DEPLOYMENT ☐ NOTIFICATION	☐ TABLETOP ☐ FUNCTIONAL	☐ FULL SCALE	
FREQUENCY OF EXERCISE			
☐ QUARTER ☐ 1ST	☐ 2ND	☐ 3RD	☐ 4TH
☐ ANNUAL DRILL	☐ SEMI-ANNUAL DRILL		
PARTICIPANTS			
COMPANY/AGENCY	**CONTACT PERSON**	**TIME**	**PHONE**
(IF MORE AGENCIES INVOLVED ATTACH LIST)			
EXPLANATION OF SCENARIO:			

LESSONS LEARNED:		
ANY DEFICIENCIES IDENTIFIED (Page 2)	☐ **YES**	☐ **NO**
IF YES, CHANGES IMPLEMENTED?	☐ **YES**	☐ **NO**
IF NO, ARE ACTION ITEMS ENTERED IN ONLINE ACTION ITEM TRACKING DATABASE FOR FOLLOW UP?		

SIGNATURE, INCIDENT COMMANDER/PREPARER

FIGURE 8.3-1 - EMERGENCY RESPONSE OR DRILL FORM, CONTINUED

YES	NO	NA	
☐	☐	☐	Notification - Were notification procedures followed and adequate?
☐	☐	☐	Safety Respond - Was the scene approached properly?
☐	☐	☐	Isolate and Deny Entry - Were zones, corridors, and evacuation routes used properly?
☐	☐	☐	Command - Was incident command established and used properly?
☐	☐	☐	Identification of Material - Was material identified in an appropriate time and manner?
☐	☐	☐	Assessment/Action Plan - Was written action plan developed and followed?
☐	☐	☐	Protective Equipment - Was PPE identified and used properly?
☐	☐	☐	Control - Were control techniques applied appropriately?
☐	☐	☐	Protective Actions - Were protective actions applied appropriately?
☐	☐	☐	Decontamination - Waste material(s) disposed of properly?
☐	☐	☐	Disposal - Waste material(s) disposed of properly?
☐	☐	☐	Termination - Was the incident terminated at the appropriate time, and all de-briefed?

☐ ☐ ☐ Medical - Was medical and/or first aid available and used properly?

☐ ☐ ☐ Documentation - Was all documentation gathered?

SIGNATURE, INCIDENT COMMANDER/PREPARER

8.3.1 Final Spill Cleanup Report

A final, comprehensive report shall be prepared by the Incident Commander or his designee after completion of spill cleanup activities for internal use. It should be written in the narrative form and include the information listed below (as appropriate):

- Time, location, and date of discharge.
- Type of material discharged.
- Quantity discharged (indicate volume, color, length and width of slick, and rate of release if continuous).
- Source of spill (tank, flowline, etc.) in which the oil was originally contained, path of discharge, and impact area.
- Detailed description of what actually caused the discharge and actions taken to control or stop the discharge.
- Description of damage to the environment.
- Steps taken to clean up the spilled oil along with dates and times steps were taken.
- The equipment used to remove the spilled oil, dates, and number of hours equipment was used.
- The number of persons employed in the removal of oil from each location, including their identity, employer, and the number of hours worked at that location.
- Actions by the Company or contractors to mitigate damage to the environment.
- Measures taken by the Company or contractors to prevent future spills.
- The federal and state agencies to which the Company or contractors reported the discharge; show the agency, its location, the date and time of notification, and the official contacted.
- Description of the effectiveness of equipment and cleanup techniques and recommendations for improvement.
- The names, addresses, and titles of people who played a major role in responding to the

event.

- A section identifying problems and deficiencies noted during the response event; a follow-up section should include recommended procedure modifications to make a future response more effective and efficient.

- All other relative information.

Northern Zone

APPENDICES

A. **TRAINING / EXERCISES**

B. **CONTRACTOR RESPONSE EQUIPMENT**

C. **HAZARD EVALUATION AND RISK ANALYSIS**

D. **CROSS REFERENCE**

E. **ACRONYMS AND DEFINITIONS**

APPENDIX A Last Revised: August 2011

TRAINING / EXERCISES

A.1 EXERCISE REQUIREMENTS AND SCHEDULES

- The Company participates in the National Preparedness for Response Exercise Program (PREP).
- During each triennial cycle, all components of the Plan (**FIGURE A.1-1**) must be exercised at least once.
- The Area Manager is responsible for the following aspects:
    - Scheduling
    - Maintaining records
    - Implementing
    - Evaluation of the Company's training and exercise program
    - Post-drill evaluation improvements
- FIGURE A.1-2 provides descriptions of exercise requirements. FIGURE A.1-3 provides an Emergency Response or Drill Form.

FIGURE A.1-1 - PREP RESPONSE PLAN CORE COMPONENTS

CORE COMPONENTS	DESCRIPTION
1. Notifications	Test the notifications procedures identified in the Area Contingency Plan (ACP) and the Spill Response Plan.
2. Staff mobilization	Demonstrate the ability to assemble the spill response organization identified in the ACP and the Spill Response Plan.
3. Ability to operate within the response management system described in the Plan:	
• Unified Command	Demonstrate the ability of the spill response organization to work within a unified command.
• Response management system	Demonstrate the ability of the response organization to operate within the framework of the response management system identified in their respective plans.
4. Discharge control	Demonstrate the ability of the spill response organization to control and stop the discharge at the source.
5. Assessment	Demonstrate the ability of the spill response organization to provide initial assessment of the discharge and provide continuing assessments of the effectiveness of the tactical operations.
6. Containment	Demonstrate the ability of the spill response organization to contain the discharge at the source or in various locations for recovery operations.
7. Recovery	Demonstrate the ability of the spill response organization to recover the discharged product.

8. Protection	Demonstrate the ability of the spill response organization to protect the environmentally and economically sensitive areas identified in the ACP and the respective industry response plan.
9. Disposal	Demonstrate the ability of the spill response organization to dispose of the recovered material and contaminated debris.
10. Communications	Demonstrate the ability to establish an effective communications system for the spill response organization.
11. Transportation	Demonstrate the ability to establish multi-mode transportation both for execution of the discharge and support functions.
12. Personnel support	Demonstrate the ability to provide the necessary support of all personnel associated with response.
13. Equipment maintenance and support	Demonstrate the ability to maintain and support all equipment associated with the response.
14. Procurement	Demonstrate the ability to establish and effective procurement system.
15. Documentation	Demonstrate the ability of the spill response organization to document all operational and support aspects of the response and provide detailed records of decisions and actions taken.

FIGURE A.1-2 - EXERCISE REQUIREMENTS

EXERCISE TYPE	EXERCISE CHARACTERISTICS
Facility/QI notification	• Conducted quarterly. • Safety/PSM Coordinator initiates mock spill notification to QI. • Safety/PSM Coordinator documents time/date of notification, name, and phone number of individual. contacted. • Document in accordance with form in FIGURE A.1-3.
Equipment deployment	• Conducted semiannually if company owns equipment. • Response contractors listed in the plan must participate in annual deployment exercise. • Document in accordance with form in FIGURE A.1-3.
SMT tabletop	• Conducted annually. • Tests SMT?s response activities/responsibilities. • Documents Plan?s effectiveness. • Must exercise worst case discharge scenario once every three years. • Must test all Plan components at least once every three years. • Document in accordance with form in FIGURE

	A.1-3.
Unannounced	• Company will either participate in unannounced tabletop exercise or equipment deployment exercise on an annual basis, if selected. • Company may take credit for participation in government initiated unannounced drill in lieu of drill required by PREP guidelines. • Plan holders who have participated in a PREP government-initiated unannounced exercise will not be required to participate in another one for at least 36 months from the date of the exercise.
Area	• An industry plan holder that participates in an Area Exercise would not be required to participate in another Area Exercise for a minimum of six years.
OTHER EXERCISE CONSIDERATIONS	
Drill program evaluation procedures	• Company conducts post-exercise meetings to discuss positive items, areas for improvement, and to develop action item checklist to be implemented later.
Records of drills	• Company will maintain exercise records for five years following completion of each exercise. • Records will be made available to applicable agencies upon request. • Company will verify appropriate records are kept for each spill response contractor listed in Plan as required by PREP guidelines (annual equipment deployment drill, triennial unannounced drill, etc.).

FIGURE A.1-3 - EMERGENCY RESPONSE OR DRILL FORM

LOCATION NUMBER:	**LOCATION/FACILITY NAME:**	
PIPELINE LOCATION:		**COUNTY/PARISH:**
DATE:	**ATTENDANCE:**	**DRILL LENGTH:**

TYPE OF EXERCISE

☐ ACTUAL ☐ ANNOUNCED ☐ UNANNOUNCED

☐ DEPLOYMENT ☐ NOTIFICATION ☐ TABLETOP ☐ FUNCTIONAL ☐ FULL SCALE

FREQUENCY OF EXERCISE

☐ QUARTER ☐ 1ST ☐ 2ND ☐ 3RD ☐ 4TH

☐ ANNUAL DRILL ☐ SEMI-ANNUAL DRILL

PARTICIPANTS

COMPANY/AGENCY	CONTACT PERSON	TIME	PHONE

(IF MORE AGENCIES INVOLVED ATTACH LIST)

EXPLANATION OF SCENARIO:

LESSONS LEARNED:

ANY DEFICIENCIES IDENTIFIED (Page 2) ☐ **YES** ☐ **NO**

IF YES, CHANGES IMPLEMENTED? ☐ **YES** ☐ **NO**

IF NO, ARE ACTION ITEMS ENTERED IN ONLINE ACTION ITEM TRACKING DATABASE FOR FOLLOW UP?

SIGNATURE, INCIDENT COMMANDER/PREPARER

FIGURE A.1-3 - EMERGENCY RESPONSE OR DRILL FORM, CONTINUED

YES	NO	NA	
☐	☐	☐	Notification - Were notification procedures followed and adequate?
☐	☐	☐	Safety Respond - Was the scene approached properly?
☐	☐	☐	Isolate and Deny Entry - Were zones, corridors, and evacuation routes used properly?
☐	☐	☐	Command - Was incident command established and used properly?

- ☐ ☐ ☐ Identification of Material - Was material identified in an appropriate time and manner?
- ☐ ☐ ☐ Assessment/Action Plan - Was written action plan developed and followed?
- ☐ ☐ ☐ Protective Equipment - Was PPE identified and used properly?
- ☐ ☐ ☐ Control - Were control techniques applied appropriately?
- ☐ ☐ ☐ Protective Actions - Were protective actions applied appropriately?
- ☐ ☐ ☐ Decontamination - Waste material(s) disposed of properly?
- ☐ ☐ ☐ Disposal - Waste material(s) disposed of properly?
- ☐ ☐ ☐ Termination - Was the incident terminated at the appropriate time, and all de-briefed?
- ☐ ☐ ☐ Medical - Was medical and/or first aid available and used properly?
- ☐ ☐ ☐ Documentation - Was all documentation gathered?

SIGNATURE, INCIDENT COMMANDER/PREPARER

A.2 TRAINING PROGRAM

FIGURE A.2-1 provides training requirements for spill responders. **FIGURE A.2-2** provides the program matrix. **FIGURE A.2-3** provides a personnel response training log.

FIGURE A.2-1 - TRAINING REQUIREMENTS

TRAINING TYPE	TRAINING CHARACTERISTICS
Training in use of spill response plan	• All field personnel will be trained to properly report/monitor spills. • Plan will be reviewed annually with all employees and contract personnel. • The Personnel Response Training Log is located in **FIGURE A.2-3**.
OSHA training requirements	• All Company responders designated in Plan must have 24 hours of initial spill response training. • Laborers having potential for minimal exposure must have 24 hours of initial oil spill response instruction and eight hours of actual field experience. • Spill responders having potential exposure to hazardous substances at levels exceeding permissible exposure limits must have 40 hours of initial training off-site and 24 hours of actual field experience.

	• On-site management/supervisors required to receive same training as equipment operators/general laborers plus eight hours of specialized hazardous waste management training. • Managers/employees require eight hours of annual refresher training.
Spill Management Team personnel training	• See recommended PREP Training Progam Matrix (FIGURE A.2-2).
Training for casual laborers or volunteers	• Company will not use casual laborers/volunteers for operations requiring HAZWOPER training.
Wildlife	• Only trained personnel approved by USFWS and appropriate state agency will be used to treat oiled wildlife.
Training documentation and record maintenance	• Training activity records will be retained five years for all personnel following completion of training. • Company will retain training records indefinitely for individuals assigned specific duties in the Plan. • Training records will be retained at each facility or pipeline office; Supervisor/Area Manager will document all applicable training.

FIGURE A.2-2 - PREP TRAINING PROGRAM MATRIX

TRAINING ELEMENT	QUALIFIED INDIVIDUAL (QI)	SPILL MANAGEMENT TEAM (SMT)	PIPELINE PERSONNEL
Captain of the Port (COTP) Zones or Environmental Protection Agency (EPA) Regions in which the facility is located.	x	x	x
Notification procedures and requirements for facility owners or operators; internal response organizations; federal and state agencies; and contracted oil spill removal organizations (OSROs) and the information required for those organizations.	x	x	x
Communication system used for the notifications	x	x	x
Information on the products stored, used, or transferred by the facility, including familiarity with the material safety data	x	x	x

sheets (MSDS), special handling procedures, health and safety hazards, spill and fire fighting procedures.			
Procedures the facility personnel may use to mitigate or prevent any discharge or a substantial threat of a discharge of oil resulting from facility operational activities associated with internal or external cargo transfers, storage, or use.	x		
Facility personnel responsibilities and procedures for use of facility equipment which may be available to mitigate or prevent an oil discharge.	x	x	x
Operational capabilities of the contracted OSRO?s to respond small, medium, and large discharges.	x	x	x
Responsibilities and authority of the Qualified Individual (QI) as described in the Spill Response Plan and Company response organization.	x	x	x
The organization structure that will be used to manage the response actions including: • Command and control • Public information • Safety • Liaison with government agencies • Spill response operations • Planning • Logistics support • Finance	x	x	x
The responsibilities and duties of each Spill Management Team (SMT) within the organization structure.	x	x	
The drill and exercise program to meet federal and state regulations as required under Oil Pollution Act of 1990 (OPA 90).	x	x	x
The role of the QI in the post discharge review of the Plan to evaluate and validate its effectiveness.	x		

FIGURE A.2-2 - PREP TRAINING PROGRAM MATRIX, CONTINUED

TRAINING ELEMENT	QUALIFIED INDIVIDUAL (QI)	SPILL MANAGEMENT TEAM (SMT)	PIPELINE PERSONNEL
The Area Contingency Plan (ACP) for the	x	x	x

area in which the facility is located.			
The National Contingency Plan (NCP).	x	x	x
Roles and responsibilities of federal and state agencies in pollution response.	x	x	x
Available response resources identified in the Plan.	x	x	
Contracting and ordering procedures to acquire OSRO resources identified in the Plan.	x	x	
OSHA requirements for worker health and safety (29 CFR 1910.120).	x	x	x
Incident Command System/Unified Command System.	x	x	
Public affairs.	x	x	
Crisis management.	x	x	
Procedures for obtaining approval for dispersant use or in-situ burning of the spill.	x		
Oil spill trajectory analyses.	x		
Sensitive biological areas.	x	x	
This training procedure as described in the Plan for members of the SMT.		x	
Procedures for the post discharge review of the plan to evaluate and validate its effectiveness.		x	
Basic information on spill operations and oil spill clean-up technology including: • Oil containment • Oil recovery methods and devices • Equipment limitations and uses • Shoreline cleanup and protection • Spill trajectory analysis • Use of dispersants, in-situ burning, bioremediation • Waste storage and disposal considerations		x	
Hazard recognition and evaluation.		x	
Site safety and security procedures.		x	
Personnel management, as applicable to designated job responsibilities.		x	

FIGURE A.2-2 - PREP TRAINING PROGRAM MATRIX, CONTINUED

TRAINING ELEMENT	**QUALIFIED INDIVIDUAL** (QI)	**SPILL MANAGEMENT TEAM** (SMT)	**PIPELINE PERSONNEL**
Procedures for directing the deployment and use of spill response equipment, as		x	x

applicable to designated job responsibilities.			
Specific procedures to shut down affected operations.			x
Procedures to follow in the event of discharge, potential discharge, or emergency involving the following equipment or scenarios: • Tank overfill • Tank rupture • Piping or pipeline rupture • Piping or pipeline leak, both under pressure or not under pressure, if applicable • Explosion or fire • Equipment failure • Failure of secondary containment system			x
QI's name and how to contact him or her.			x

FIGURE A.2-3 - PERSONNEL RESPONSE TRAINING LOG

NAME	RESPONSE TRAINING/DATE AND NUMBER OF HOURS	PREVENTION TRAINING/DATE AND NUMBER OF HOURS

APPENDIX B Last Revised: April 2008

CONTRACTOR RESPONSE EQUIPMENT

B.1 COOPERATIVES AND CONTRACTORS

The Company has contracted with additional Oil Spill Removal Organizations (OSROs) to provide personnel and equipment in the event of a spill. The classification, response capabilities, and equipment are described below.

In the event of a discharge, which is beyond the initial response capabilities of the Local Response Team, contract manpower and equipment resources can be obtained through Oil Spill Removal Organization(s) (OSRO). These OSROs can provide manpower and containment/clean-up equipment for the response operation.

The resources will be secured from a Company approved contractor. Area Management will typically handle notification/implementation of these resources. **FIGURE 3.1-4** provides a quick reference to the Oil Spill Removal Organizations and details their response capability and estimated response times. Telephone reference is provided in **FIGURE 3.1-4**.

B.1.1 OSRO Classification

The OSRO classification process was developed by the U.S. Coast Guard (USCG) to provide guidelines to enable USCG and plan preparers to evaluate an OSRO?s potential to respond to oil spills. Plan holders that utilize USCG classified OSRO services are not required to list response resources in their plans.

USCG CLASSIFICATION DEFINITIONS	
• MM - Maximum Most Probable Discharge (MMPD) Classification	Only resources located at equipment sites capable of being mobilized and enroute to the scene of a spill within 2 hours of notification are counted toward M and W1 classifications.
• W1 - Worst Case Discharge Tier 1 Classification	
• W2 - Worst Case Discharge Tier 2 Classification	Any type resource, owned or contracted, dedicated or non-dedicated, is allowed for W2 and W3 classification.
• W3 - Worst Case Discharge Tier 3 Classification	

The following is a listing of the USCG classified and unclassified OSROs within this Zone that may respond to incidents covered by this Plan. For a detailed listing of USCG classified OSROs and other contractors, refer to **FIGURE 3.1-4**.

OSRO	APPLICABLE COTP ZONE(S)	USCG CLASSIFICATIONS								RESPONSE TIME
			Facilities				Vessels				
			MM	W1	W2	W3	MM	W1	W2	W3	
Clean Harbors 211 Holiday Ave Cannon Falls MN 55009		River/Canal									hour(s)
		Inland									
		Open Ocean									
		Offshore									
		Nearshore									

		Great Lakes									
*Garner Environmental Services 1717 W. 13th Street Houston Texas	Houston		Facilities				Vessels				Varies hour(s)
			MM	W1	W2	W3	MM	W1	W2	W3	
		River/Canal	✓	✓	✓	✓	✓	✓	✓	✓	
		Inland	✓	✓	✓	✓	✓	✓	✓	✓	
		Open Ocean			✓	✓			✓	✓	
		Offshore			✓	✓			✓	✓	
		Nearshore			✓	✓			✓	✓	
		Great Lakes									
*Haz-Mat Response, Inc 8925 Maple Wichita KS 67209	Saint Louis		Facilities				Vessels				3-5 hour(s)
			MM	W1	W2	W3	MM	W1	W2	W3	
		River/Canal	✓	✓	✓	✓	✓	✓	✓	✓	
		Inland		✓	✓	✓	✓	✓	✓		
		Open Ocean									
		Offshore									
		Nearshore									
		Great Lakes									
*Haz-Mat Response, Inc 731 B Street Great Bend KS 67530	Saint Louis		Facilities				Vessels				3-5 hour(s)
			MM	W1	W2	W3	MM	W1	W2	W3	
		River/Canal	✓	✓	✓	✓	✓	✓	✓	✓	
		Inland	✓	✓	✓		✓	✓	✓		
		Open Ocean									
		Offshore									
		Nearshore									
		Great Lakes									

* - Classified OSRO

The following is a listing of the USCG classified and unclassified OSROs within this Zone that may respond to incidents covered by this Plan. For a detailed listing of USCG classified OSROs and other contractors, refer to **FIGURE 3.1-4**.

OSRO	APPLICABLE COTP ZONE(S)	USCG CLASSIFICATIONS								RESPONSE TIME
*Haz-Mat Response, Inc 4501 Rodeo Road North Platte NE 59101	Saint Louis		Facilities				Vessels				3-5 hour(s)
			MM	W1	W2	W3	MM	W1	W2	W3	
		River/Canal	✓	✓	✓	✓	✓	✓	✓	✓	
		Inland	✓	✓	✓		✓	✓	✓		
		Open Ocean									
		Offshore									

		Nearshore								
		Great Lakes								
*Haz-Mat Response, Inc. 1203 South Parker Street Olathe Kansas 66061	Saint Louis		Facilities				Vessels			3-5 hour(s)
			MM	W1	W2	W3	MM	W1	W2	W3
		River/Canal	✓	✓	✓	✓	✓	✓	✓	✓
		Inland	✓	✓	✓		✓	✓	✓	
		Open Ocean								
		Offshore								
		Nearshore								
		Great Lakes								

* - Classified OSRO

FIGURE B.1-1 - EVIDENCE OF CONTRACTS

- Clean Harbors - Contract
- Garner Environmental Services - Contract
- Haz-Mat Response, Inc - Contract
- Haz-Mat Response, Inc - Contract
- Haz-Mat Response, Inc - Contract
- Haz-Mat Response, Inc. - Contract

APPENDIX C Last Revised: April 2008

HAZARD EVALUATION AND RISK ANALYSIS

C.1 SPILL DETECTION

Detection

Detection of a discharge from the Company system may occur in a number of ways including:

- Automated detection by the Supervisory Control and Data Acquisition (SCADA) system
- Visual detection by Company personnel
- Visual detection by the public

AVAILABILITY - ALL TANKS

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

[redacted]

- [redacted]
- [redacted]
- [redacted]

[redacted]

- [redacted]
- [redacted]

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

- [redacted]

[redacted]

[redacted]

- [redacted]

[redacted]

[redacted]

- [redacted]

[redacted]

[redacted]

- [redacted]

[redacted]

C.1 SPILL DETECTION, CONTINUED

Visual detection by Company personnel

Aerial patrol flights will be made 26 times a year not to exceed 21 days apart. If unable to fly area personnel will walk or drive the right-of-way. The intent of the patrol is to observe the area directly over the pipeline right-of-way for leaks, exposed pipes, washes, missing markers

and other unusual conditions. Construction on either side of the pipeline right-of-way is also monitored.

Discharges to the land or surface waters may also be detected by Company personnel during regular operations and inspections. Should a leak be detected, the appropriate actions are taken including but not limited to:

- Notifications as per **SECTION 3**.
- A preliminary assessment of the incident area.
- If appropriate, initiate initial response actions per SECTION 2.

FIGURE 2-1 provides a checklist for initial response actions.

Visual detection by the public

Right-of-way marker signs are installed and maintained at road crossing and other noticeable points and provide an Operations Control 24-hour number for reporting emergency situations. The Company also participates in the ?call before you dig? or ?One Call? utility notification services which can be contacted to report a leak and determine the owner/operator of the pipeline. If the notification is made to a local office or pump station, the Company representative receiving the call will generally implement the following actions:

- Notify the Pipeline Control and region/designated office.
- Dispatch Company field personnel to the site to confirm discharge and conduct preliminary assessment.
- Notify their immediate supervisor and provide assessment results.

Pipeline shutdown

If any of these situations are outside the expected values, abnormal conditions are considered to exist. If abnormal conditions exist, Pipeline Control will take the appropriate actions to ensure that a release does not occur. If a discharge has occurred, Pipeline Control will take actions to limit the magnitude. In either case, appropriate actions taken by Company personnel could include, but are not limited to:

- Shut down affected line segment if there is an indication of a leak.
- Isolate line segment.
- Depressurize line.
- Start internal and external notifications.
- Mobilize additional personnel, as required.

C.2 WORST CASE DISCHARGE SCENARIO

The equipment and personnel to respond to a spill are available from several sources and are

provided with the equipment and contractors in **SECTION 7** and **APPENDIX B**. The following sections are discussions of these scenarios.

APPENDIX C.4 provides worst case discharge calculations. Discussion of this scenario is as follows:

C.2 WORST CASE DISCHARGE SCENARIO, CONTINUED

Upon discovery of a spill, the following procedures would be followed:

1. The First Responder would notify the Pipeline Control and notifications would be initiated in accordance with **FIGURE 2-1**. Pipeline Control will contact the Qualified Individual.

2. The Qualified Individual would assume the role of Incident Commander until relieved and would initiate response actions and notifications in accordance with **SECTION 2**. If this were a small spill, the local/company personnel may handle all aspects of the response. Among those actions would be to:

    - Conduct safety assessment in accordance with **FIGURE 2-1** and evacuate personnel as needed in accordance with **SECTION 2**.
    - Direct pipeline responders to shut down ignition sources.
    - Direct pipeline personnel to position resources in accordance with **SECTION 2.4**.
    - Complete Preliminary Incident Report Form in accordance with **SECTION 3**.
    - Ensure regulatory agencies are notified.

3. If this were a small or medium spill, the Qualified Individual/Incident Commander may elect for the First Responder to remain the Incident Commander or to activate selected portions of the Spill Management Team. However, for a large spill, the Qualified Individual would assume the role of Incident Commander and would activate the entire Spill Management Team in accordance with activation procedures described in **SECTION 4.2**.

4. The Incident Commander would then initiate spill assessment procedures including surveillance operations, trajectory calculations, and spill volume estimating in accordance with **SECTION 2.3**.

5. The Incident Commander would then utilize checklists in SECTION 4 as a reminder of issues to address. The primary focus would be to establish incident priorities and objectives and to brief staff accordingly.

6. The Spill Management Team would develop the following plans, as appropriate (some of these plans may not be required during a small or medium spill):

    - Site Safety and Health
    - Incident Action

- Disposal
- Site Security
- Decontamination
- Demobilization

Plan templates are included in **SECTION 5**.

7. The response would continue until an appropriate level of cleanup is obtained.

C.3 PLANNING VOLUME CALCULATIONS

Once the worst case discharge volume has been calculated, response resources must be identified to meet the requirements of 49 CFR 194.105(b). Calculations to determine sufficient amount of response equipment necessary to respond to a worst case discharge is described below. A demonstration of the planning volume calculations is provided below.

C.4 SPILL VOLUME CALCULATIONS

DOT/PHMSA portion of pipeline/facilities

The worst case discharge (WCD) for the DOT portion of the pipeline and facilities, as defined in 49 CFR 194.105(b), as the largest volume of the following:

1. The pipeline?s maximum shut-down response time in hours (based on historic discharge data or in the absence of such data, the operators best estimate), multiplied by the maximum flow rate expressed in barrels per hour (based on the maximum daily capacity of the pipeline), plus the largest drainage volume after shutdown of the line section(s) in the response zone expressed in barrels; or

2. The largest foreseeable discharge for the line section(s) within a response zone, expressed in barrels (cubic meters), based on the maximum historic discharge, if one exists, adjusted for any subsequent corrective or preventative action taken; or

3. If the response zone contains one or more breakout tanks, the capacity of the single largest tank or battery of tanks within a single secondary containment system, adjusted for the capacity or size of the secondary containment system, expressed in barrels.

Under PHMSA?s current policy, operators are allowed to reduce the worst case discharge volume derived from 49 CFR 194.105(b)(3) by no more than 75% if an operator is taking certain spill prevention measures for their breakout tanks and presents supporting information in the response plan. An operator can reduce the worst case discharge volume based on breakout tanks in the response zones as follows:

SPILL PREVENTION MEASURES	PERCENT REDUCTION ALLOWED
Secondary containment capacity greater than 100% capacity of tank and designed according to NFPA 30	50%

Tank built, rebuilt, and repaired according to API Std 620/650/653	10%
Automatic high-level alarms/shutdowns designed according to NFPA/API RP 2350	5%
Testing/cathodic protection designed according to API Std 650/651/653	5%
Tertiary containment/drainage/treatment per NFPA 30	5%*
Maximum allowable credit or reduction	75%

* Note: The facilities do not have tertiary containment.

The worst case discharge for each response zone was based on the largest volume of the three criteria given above.

The line sections with the highest throughput and largest drainage volume between block valves on pump stations were chosen to calculate the pipeline worst case discharge. Although the entire discharge volume of each line was used for the worst case discharge, in an actual spill event, it would take days to drain the line completely. The line would be sealed early in the response effort.

The maximum historic discharge is not applicable for WCD covered by this plan. There are no breakout tanks associated with this pipeline; therefore, breakout tank calculations for WCD are also not applicable for this plan

The worst case discharge for the Northern Zone is calculated at Mankato - Pine Bend. The worst case discharge volume is as follows:

(b) (7)(F)

C.5 PIPELINE - ABNORMAL CONDITIONS

Because PHMSA considers the ?substantial threat? term in 49 CFR Part 194.115(a) equivalent to the ?abnormal conditions? term under 49 CFR Part 195.402(d), procedures to identify events

and conditions that can pose a threat of worst case discharge, and actions to take for preventing and mitigating such events and conditions are described in the System Integrity Plan.

C.6 PRODUCT CHARACTERISTICS AND HAZARDS

Pipeline systems described in this plan may transport various types of commodities including but not limited to:

- Natural gasoline
- Naphtha

The key chemical and physical characteristics of each of these oils and/or other small quantity products/chemicals are identified in MSDS. MSDS can be obtained by the facility via fax from the MSDS Hotline (**FIGURE 3.1-4**). Telephone information concerning the potential hazards can also be obtained from the hotline.

FIGURE C.6-1 describes primary oils handled.

FIGURE C.6-1 - SUMMARY OF COMMODITY CHARACTERISTICS

COMMON NAME	MSDS NAME	HEALTH HAZARD	FLASH POINT	SPECIAL HAZARD	REACTIVITY	HEALTH HAZARD WARNING STATEMENT
Natural gasoline	Appropriate product name	1	3	C	0	Long term, repeated exposure may cause cancer, blood, kidney and nervous system damage, and contains benzene.
Naphtha	Appropriate product name	1	3	NA	0	May cause nerve or kidney damage.

Health Hazard	4 = Extremely Hazardous 3 = Hazardous 2 = Warning 1 = Slightly Hazardous 0 = No Unusual Hazard	Fire Hazard (Flash Point)	4 = Below 73? F, 22? C 3 = Below 100? F, 37? C 2 = Below 200? F, 93? C 1 = Above 200? F, 93? C 0 = Will not burn
Special Hazard	A = Asphyxiant C = Contains Carcinogen W = Reacts with Water Y = Radiation Hazard COR = Corrosive OX = Oxidizer	Reactivity Hazard	4 = May Detonate at Room Temperature 3 = May Detonate with Heat or Shock 2 = Violent Chemical Change with High

H_2S = Hydrogen Sulfide P = Contents under Pressure T = Hot Material	Temperature and Pressure 1 = Not Stable if Heated 0 = Stable

APPENDIX D Last Revised: April 2008

CROSS REFERENCE

DOT/PHMSA Cross Reference

DOT/PHMSA CROSS REFERENCE

OPA 90 REQUIREMENTS (49 CFR 194)	LOCATION*
Information Summary	
• For the core plan:	
◦ Name and address of operator	Figure 1-3
◦ For each Response Zone which contains one or more line sections that meet the criteria for determining significant and substantial harm (?194.103), listing and description of Response Zones, including county(s) and state(s)	Figure 1-3
• For each Response Zone appendix:	
◦ Information summary for core plan	Section 1
◦ QI names and telephone numbers, available on 24-hr basis	Figures 1-3
◦ Description of Response Zone, including county(s) and state(s) in which a worst case discharge could cause substantial harm to the environment	Section 1
◦ List of line sections contained in Response Zone, identified by milepost or survey station or other operator designation	Figure 1-3
◦ Basis for operator?s determination of significant and substantial harm	Figure 1-3
◦ The type of oil and volume of the worst case discharge	Appendix C
• Certification that the operator has obtained, through contract or other approved means, the necessary private personnel and equipment to respond, to the maximum extent practicable, to a worst case discharge or threat of such discharge	Section 1.3, Appendix B
Notification Procedures	
• Notification requirements that apply in each area of operation of pipelines covered by the plan, including applicable state or local requirements	Section 3
• Checklist of notifications the operator or Qualified Individual is required to make under the response plan, listed in the order of priority	Section 3.1

• Name of persons (individuals or organizations) to be notified of discharge, indicating whether notification is to be performed by operating personnel or other personnel	Section 3.1, Figure 3.1-4
• Procedures for notifying Qualified Individuals	Figure 3.1-1, Figure 4.5-1, Section 4.5
• Primary and secondary communication methods by which notifications can be made	Section 7.1.6

DOT/PHMSA CROSS REFERENCE, CONTINUED

OPA 90 REQUIREMENTS (49 CFR 194)	LOCATION
• Information to be provided in the initial and each follow-up notification, including the following: ◦ Name of pipeline ◦ Time of discharge ◦ Location of discharge ◦ Name of oil recovered ◦ Reason for discharge (e.g. material failure, excavation damage, corrosion) ◦ Estimated volume of oil discharged ◦ Weather conditions on scene ◦ Actions taken or planned by persons on scene	Figure 3.1-2
Spill Detection and On-Scene Spill Mitigation Procedures	
• Methods of initial discharge detection	Appendix C.1
• Procedures, listed in order of priority, that personnel are required to follow in responding to a pipeline emergency to mitigate or prevent any discharge from the pipeline	Section 2
• List of equipment that may be needed in response activities based on land and navigable waters including: ◦ Transfer hoses and pumps ◦ Portable pumps and ancillary equipment ◦ Facilities available to transport and receive oil from a leaking pipeline	Section 7.1.1, Appendix B
• Identification of the availability, location, and contact phone numbers to obtain equipment for response activities on a 24-hour basis	Figure 3.1-4, Appendix B
• Identification of personnel and their location, telephone numbers, and responsibilities for use of equipment in response activities on	Figure 3.1-4, Appendix B

a 24-hour basis	
Response Activities	
• Responsibilities of, and actions to be taken by, operating personnel to initiate and supervise response actions pending the arrival of the Qualified Individual or other response resources identified in the response plan	Section 2, Section 4.5, Appendix B
• Qualified Individual?s responsibilities and authority, including notification of the response resources identified in the response plan	Section 4.5
• Procedures for coordinating the actions of the operator or Qualified Individual with the action of the OSC responsible for monitoring or directing those actions	Section 4.4, Section 4.5
• Oil spill response organizations (OSRO) available through contract or other approved means, to respond to a worst case discharge to the maximum extent practicable	Appendix B
• For each organization identified under paragraph (d), a listing of: ◦ Equipment and supplies available ◦ Trained personnel necessary to continue operation of the equipment and staff the oil spill removal organization for the first seven days of the response	Appendix B

DOT/PHMSA CROSS REFERENCE, CONTINUED

OPA 90 REQUIREMENTS (49 CFR 194)	LOCATION
List of Contacts	
• List of persons the Plan requires the operator to contact	Figure 3.1-1
• Qualified individuals for the operator?s areas of operation	Figure 1-3
• Applicable insurance representatives or surveyors for the operator?s areas of operation	Figure 3.1-1
• Persons or organizations to notify for activation of response resources	Figure 3.1-1
Training Procedures	
• Description of training procedures and programs of the operations	Appendix A.2
Drill Procedures	

• Announced and unannounced drills	Appendix A.1
• Types of drills and their frequencies; for example: ◦ Manned pipeline emergency procedures and qualified individual notification drills conducted quarterly ◦ Drills involving emergency actions by assigned operating or maintenance personnel and notification of qualified individual on pipeline facilities which are normally unmanned, conducted quarterly ◦ Shore-based Spill Management Team (SMT) tabletop drills conducted yearly ◦ Oil spill removal organization field equipment deployment drills conducted yearly ◦ A drill that exercises entire response plan for each Response Zone, would be conducted at least once every three years	Appendix A.1
Response Plan review and update procedures	
• Procedures to meet ?194.121	Section 1.2
• Procedures to review plan after a worst case discharge and to evaluate and record the plan?s effectiveness	Section 1.2, Appendix C
Response zone appendices	
Each response zone appendix would provide the following information:	
• Name and telephone number of the qualified individual	Figure 1-3
• Notification procedures	Section 3
• Spill detection and mitigation procedures	Section 2.1, Appendix C
• Name, address, and telephone number of oil spill response organization	Figure 3.1-4, Appendix B
• Response activities and response resources including: ◦ Equipment and supplies necessary to meet ?194.115 ◦ Trained personnel necessary to sustain operation of the equipment and to staff the oil spill response organization and spill management team for the first seven days of the response	Appendix A, Appendix B

DOT/PHMSA CROSS REFERENCE, CONTINUED

OPA 90 REQUIREMENTS (49 CFR 194)	LOCATION
• Names and telephone numbers of federal, state, and local agencies which the operator expects to assume pollution response	Figure 3.1-4

responsibilities	
• Worst case discharge volume	Appendix C
• Method used to determine the worst case discharge volume, with calculations	Appendix C
• A map that clearly shows: ◦ Location of worst case discharge ◦ Distance between each line section in the Response Zone: ▪ Each potentially affected public drinking water intake, lake, river, and stream within a radius of five miles of the line section ▪ Each potentially affected environmentally sensitive area within a radius of one mile of the line section	Section 6
• Piping diagram and plan-profile drawing of each line section; may be kept separate from the response plan if the location is identified	Figure 1-3, Figure 1-4, Figure 1-5
• For every oil transported by each pipeline in the response zone, emergency response data that: ◦ Include name, description, physical and chemical characteristics, health and safety hazards, and initial spill-handling and firefighting methods ◦ Meet 29 CFR 1910.1200 or 49 CFR 172.602	Appendix C

APPENDIX E Last Revised: April 2008

ACRONYMS AND DEFINITIONS

E.1 ACRONYMS

ACP	Area Contingency Plan
AFFF	Aqueous Film Forming Foam
API	American Petroleum Institute
ASCII	American Standard Code for Information Interchange
ASTM	American Society of Testing Materials
BBL	Barrel(s)
BLM	Bureau of Land Management (USDOI)
BPD	Barrels Per Day
BPH	Barrels Per Hour
CERCLA	Comprehensive Environmental Response, Compensation & Liability Act of 1980, as amended
CFR	Code of Federal Regulations
CO_2	Carbon Dioxide
COTP	Captain of the Port (USCG)
CRZ	Contamination Reduction Zone
CWA	Clean Water Act of 1977 (Federal)
DOT	Department of Transportation
EAP	Emergency Action Plan
EMS	Emergency Medical Services
EOC	Emergency Operations Center
EPA	U. S. Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
ERAP	Emergency Response Action Plan
ERP	Emergency Response Plan
ERT	Emergency Response Team
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FOSC	Federal On-Scene Coordinator
FR	Federal Registration
FRP	Facility Response Plan
FRT	Facility Response Team
FWPCA	Federal Water Pollution Control Act of 1972
GAL	Gallons
GIS	Geographic Information System
GPM	Gallons Per Minute

HAZMAT	Hazardous Materials
HMIS	Hazardous Material Information System
IC	Incident Commander

ICS	Incident Command System
JIC	Joint Information Center
LEL	Lower Explosive Limit
LEPC	Local Emergency Planning Committee
LEPD	Local Emergency Planning District
LNG	Liquid Natural Gas
LPG	Liquefied Petroleum Gas
MSDS	Material Safety Data Sheets
MTR	Marine Transportation Related
N/A	Not Applicable
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NIIMS	National Interagency Incident Management System
NM	Nautical Miles
NOAA	National Oceanic and Atmospheric Administration
NPMS	National Pipeline Mapping System
NRC	National Response Center
NRDA	National Resource Damage Assessment
NRT	National Response Team
NSF	National Strike Force
OBA	Oxygen Breathing Apparatus
OPA	Oil Pollution Act of 1990
OPS	Office of Pipeline Safety, U.S. Department of Transportation
OSC	On-Scene Coordinator/Commander
OSHA	Occupational Safety and Health Administration (USDL)
PHMSA	Pipeline Hazardous Material Safety Administration, U.S. Department of Transportation
PPE	Personal Protective Equipment
PREP	(National) Preparedness for Response Exercise Program
QI	Qualified Individual
RCRA	Resource Conservation and Recovery Act of 1976
ROW	Right of Way
RQ	Reportable Quantity

RRC	Regional Response Centers
RRT	Regional Response Team
SARA	Superfund Amendments and Reauthorization Act
SCADA	Supervisory Control and Data Acquisition (System)
SCBA	Self Contained Breathing Apparatus
SDWA	Safe Drinking Water Act of 1986
SERC	State Emergency Response Commission
SETS	Safety Environment and Training Services

SI	Surface Impoundment
SIC	Standard Industrial Classification (Code)
SMT	Spill Management Team
SOSC	State On-Scene Coordinator
SPCC	Spill Prevention, Control, and Countermeasures (Plan)
SSC	Scientific Support Coordinator (NOAA)
UCS	Unified Command System
UEL	Upper Explosive Limit
USACOE	U. S. Army Corps of Engineers
USCG	U. S. Coast Guard
USDOD	U. S. Department of Defense
USDL	U. S. Department of Labor
USDOE	U. S. Department of Energy
USDOI	U. S. Department of the Interior
USDOJ	U. S. Department of Justice
USDOT	U. S. Department of Transportation
USFWS	U. S. Fish and Wildlife Service (USDOI)
USGS	U. S. Geological Survey (USDOI)

E.2 DEFINITIONS

Abandoned Pipeline
A pipeline that is no longer connected to the system and is no longer maintained. The pipeline can be abandoned in place, by removal, or sold.

Adverse Weather
The weather conditions considered by the operator in identifying the response systems and equipment to be deployed in accordance with a response plan, including wave height, ice, temperature, visibility, and currents within the inland or Coastal Response Zone (defined in the

National Contingency Plan (40 CFR part 300)) in which those systems or equipment are intended to function.

Alignment Sheet
A general purpose drawing designed to be used by company personnel during the operation and maintenance of the pipeline.

Barrel
Measure of space occupied by 42 U. S. gallons at 60 degrees Fahrenheit.

Breakout tank means a tank used to:

(1) Relieve surges in an oil pipeline system or

(2) Receive and store oil transported by a pipeline for reinjection and continued transportation by pipeline.

Coastal Zone
All United States waters subject to the tide, United States waters of the Great Lakes and Lake Champlain, specified ports and harbors on inland rivers, waters of the contiguous zone, other waters of the high seas subject to the National Contingency Plan, and the land surface or land substrate, ground waters, and ambient air proximal to those waters. (The term "coastal zone" delineates an area of federal responsibility for response action. Precise boundaries are determined by agreements between the Environmental Protection Agency (EPA) and the U.S. Coast Guard (USCG), and are identified in Federal Regional Contingency Plans and Area Contingency Plans.)

Cold (Support) Zone
An area free of contaminants so that Personal Protection Equipment (PPE) is not required for personnel working in this area. Command functions and supporting operations are carried out here.

Command Post
A site located at a safe distance from the spill site where response decisions are made, equipment and manpower deployed, and communications handled. The Incident Commander and the On-Scene Coordinators may direct the on-scene response from this location.

Communication Equipment
Equipment that will be utilized during response operations to maintain communication between employees, contractors, federal/state/local agencies.

Containment Boom
A flotation/freeboard device, made with a skirt/curtain, longitudinal strength member, and ballast unit/weight designed to entrap and contain the product for recovery.

Contamination Reduction Zone
Same as the warm zone, a buffer between the hot and cold zones. Decontamination activities take place there. Equipment needed to support the primary response operation may be staged in the warm zone.

Contingency Plan
A document used by: (1) federal, state, and local agencies to guide planning and response procedures regarding spill of oil, hazardous substances, or other emergencies; (2) a document used by industry as a response plan to spills of oil, hazardous substances, or other emergencies occurring upon their vessels or at their facilities.

Contract or other Approved Means
Includes:

- A written contract or other legally binding agreement between the operator and a response contractor or other spill response organization identifying and ensuring the availability of the specified personnel and equipment within stipulated response times for a specified geographic area;
- Certification that specified equipment is owned or operated by the pipeline operator, and operator personnel and equipment are available within stipulated response times for a specified geographic area; or
- Active membership in a local or regional oil spill removal organization that has identified specified personnel and equipment to be available within stipulated response times for a specified geographic area.
- For a facility that could reasonably be expected to cause substantial harm to the environment, with the consent of the response contractor or oil spill removal organization, the identification of a response contractor or oil spill removal organization with specified equipment and personnel which are available within stipulated response times in specific geographic areas.

Crude Oil
Liquid petroleum out of the ground, as distinguished from refined oils manufactured from crude oil.

Dispersants
Those chemical agents that emulsify, disperse, or solublize oil into the water column or promote the surface spreading of oil slicks to facilitate dispersal of the oil into the water column.

Diversion Boom
A flotation/freeboard device, made with a skirt/curtain, longitudinal strength member, and ballast unit/weight designed to deflect or divert the product towards a pick up point, or away from certain areas.

Environmentally Sensitive Areas
An area of environmental importance which is in or adjacent to navigable waters.

Exclusion Zone
Same as hot zone, the area where a hazard exists. This is the hazardous location on site, therefore entry requires personal protective equipment (PPE). It must be big enough for both mitigation activities and protection of personnel in the warm zone should an explosion, fire, change of wind direction, or an unexpected release occur during response activities.

Explosive Range
Flammable range; the range of the mixture of air and flammable gas or flammable vapor of liquids that must be present in the proper proportions for the mixture to be ignited. The range has upper and lower limits; any mixture above the upper explosive limit or below the lower explosive limit will not burn.

Facilities
Parts of the pipeline system, such as the pipe, valves, compressor stations, etc.

Federal Fund
The oil spill liability trust fund established under OPA.

First Responders, First Response Agency

A public health or safety agency (i.e., fire service or police department) charged with responding to a spill during the emergency phase and alleviating immediate danger to human life, health, safety, or property.

Flash Point
The temperature at which a liquid fuel gives off sufficient vapor to form an ignitable mixture near its surface.

Foam
A blanket of bubbles that extinguishes fire mainly by smothering. The blanket prevents flammable vapors from leaving the surface of the fire and prevents oxygen from reaching the fuel. The water in the foam also has a cooling effect.

Hazardous Material
Any nonradioactive solid, liquid, or gaseous substance which, when uncontrolled, may be harmful to humans, animals, or the environment. Including but not limited to substances otherwise defined as hazardous wastes, dangerous wastes, extremely hazardous wastes, oil, or pollutants.

Hazardous Substance
Any substance designed as such by the Administrator of EPA pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act; regulated pursuant to Section 311 of the Federal Water Pollution Control Act.

Hazardous Waste
Any solid waste identified or listed as a hazardous waste by the Administrator of the EPA pursuant to the federal Solid Waste Disposal Act, as amended by the Resources Conservation and Recovery Act (RCRA), 42 U.S.C., Section 6901, et seq as amended. The EPA Administrator has identified the characteristics of hazardous wastes and listed certain wastes as hazardous in Title 40 of the Code of Federal Regulations, Part 261, Subparts C and D respectively.

High Volume Area
An area which an oil pipeline having a nominal outside diameter of 20 inches (508 millimeters) or more crosses a major river or other navigable waters, which, because of the velocity of the river flow and vessel traffic on the river, would require a more rapid response in case of a worst case discharge or substantial threat of such a discharge. Appendix B to this part contains a list of some of the high volume areas in the United States.

Hot (Exclusion) Zone
The area where a hazard exists. This is the hazardous location on site, therefore entry requires personal protective equipment (PPE). It must be big enough for both mitigation activities and protection of personnel in the warm zone should an explosion, fire, change of wind direction, or an unexpected release occur during response activities.

Hyperthermia
A dangerously high fever that can damage nerve centers. This condition can result from exposure to excessive heat over an extended period of time.

Ignition Temperature
The lowest temperature at which a fuel will burn without continued application of an ignition source.

Inactive/Idle Pipeline
The pipeline is maintained and can be brought back into service.

Incident Commander (IC)
The one individual in charge at any given time of an incident. The Incident Commander will be responsible for establishing a unified command with all on-scene coordinators.

Incident Command System
A method by which the response to an extraordinary event, including a spill, is categorized into functional components and responsibility for each component assigned to the appropriate individual or agency.

Inland Area
The area shoreward of the boundary lines defined in 46 CFR part 7, except that in the Gulf of Mexico, it means the area shoreward of the lines of demarcation (COLREG lines) defined in 33 CFR 80.740-80.850. The inland area does not include the Great Lakes.

Inland Zone
The environment inland of the coastal zone excluding the Great Lakes, Lake Champlain, and specified ports and harbors on inland rivers. (The term inland zone delineates an area of federal responsibilities for response actions. Precise boundaries are determined by agreements between the EPA and the USCG and are identified in Federal Regional Contingency Plans.)

In-Service Pipeline
A pipeline that transports natural gas or hazardous liquid, or is not currently transporting products but is maintained and can be brought back into service.

Interim Storage Site
A site used to temporarily store recovered oil or oily waste until the recovered oil or oily waste is disposed of at a permanent disposal site. Interim storage sites include trucks, barges, and other vehicles, used to store waste until the transport begins.

Interstate Pipeline
A pipeline or part of a pipeline that is used in the transportation of natural gas, hazardous liquid, or carbon dioxide in interstate or foreign commerce across state boundaries.

Lead Agency
The government agency that assumes the lead for directing the spill response.

Lead Federal Agency
The agency which coordinates the federal response to incidents on navigable waters. The lead Federal agencies are:

- **U. S. Coast Guard (USCG):** Oil and chemically hazardous materials incidents on navigable waters
- **Environmental Protection Agency (EPA):** Oil and chemically hazardous materials incidents on most inland waters and in the inland zone

Lead State Agency
The agency which coordinates state support to Federal and/or Local governments or assumes the lead in the absence of a Federal spill response.

Line Section
A continuous run of pipe that is contained between adjacent pressure pump stations, between a pressure pump station and a terminal or breakout tank, between a pressure pump station and a block valve, or between adjacent block valves.

Lower Flammable Limit
Minimum flammable concentration of a particular gas in the air.

Major River
A river that, because of its velocity and vessel traffic, would require a more rapid response in case of a worst case discharge. For a list of rivers see "*Rolling Rivers, An Encyclopedia of America's Rivers,"* Richard A. Bartlett, Editor, McGraw-Hill Book Company, 1984.

Maximum Extent Practicable
The limits of available technology and the practical and technical limits on a pipeline operator in planning the response resources required to provide the on-water recovery capability and the shoreline protection and cleanup capability to conduct response activities for a worst case discharge from a pipeline in adverse weather.

National Contingency Plan
The plan prepared under the Federal Water Pollution Control Act (33 United States Code '1321 et seq) and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 United State Code '9601 et seq), as revised from time to time.

Navigable Waters
The waters of the United States, including the territorial sea and such waters as lakes, rivers, streams; waters which are used for recreation; and waters from which fish or shellfish are taken and sold in interstate or foreign commerce.

Non-Persistent or Group I Oil
A petroleum-based oil that, at the time of shipment, consists of hydrocarbon fractions:

- At least 50% of which by volume, distill at a temperature of 340EC (645EF)
- At least 95% of which volume, distill at a temperature of 370EC (700EF)

Non-Petroleum Oil
Oil of any kind that is not petroleum-based. It includes, but is not limited to, animal and vegetable oils.

Oil
Oil of any kind or in any form, including, but not limited to, petroleum, fuel oil, vegetable oil, animal oil, sludge, oil refuse, oil mixed with wastes other than dredged spoil.

Oil or Oils
Naturally occurring liquid hydrocarbons at atmospheric temperature and pressure coming from the earth, including condensate and natural gasoline, and any fractionation thereof, including, but not limited to, crude oil, petroleum gasoline, fuel oil, diesel oil, oil sludge, oil refuse, and oil mixed with wastes other than dredged spoil. Oil does not include any substance listed in Table 302.4 of 40 CFR Part 302 adopted August 14, 1989, under Section 101(14) of the Federal Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as

amended by P.L. 99-499.

Oil Spill Removal Organization (OSRO)
An entity that provides response resources.

One-Call
Service to notify underground utilities of planned excavations.

On-Scene Coordinator (OSC)
The federal official designated by the Administrator of the EPA or by the Commandant of the USCG to coordinate and direct federal response under subpart D of the National Contingency Plan (40 CFR part 300).

Onshore Oil Pipeline Facilities
New and existing pipe, rights-of-way and any equipment, facility, or building used in the transportation of oil located in, on, or under, any land within the United States other than submerged land.

Operator
A person or firm who operates a pipeline system and engages in the transportation of gas or hazardous liquid. The operator may or may not also be the owner of the pipeline system.

Operating Area
The rivers and canals, inland, nearshore, Great Lakes, or offshore geographic location(s) in which a facility is handling, storing, or transporting oil.

Operating Environment
Rivers and canals, inland, Great Lakes, or ocean. These terms are used to define the conditions in which response equipment is designed to function.

Owner or Operator
Any person, individual, partnership, corporation, association, governmental unit, or public or private organization of any character.

Persistent Oil
A petroleum-based oil that does not meet the distillation criteria for a non-persistent oil. For the purposes of this Appendix, persistent oils are further classified based on specific gravity as follows:

- Group II - specific gravity less than .85
- Group III - specific gravity between .85 and less than .95
- Group IV - specific gravity .95 to and including 1.0
- Group V - specific gravity greater than 1.0

Petroleum
Crude oil, condensate, natural gasoline, natural gas liquids, and liquefied petroleum gas.

Petroleum Product
Flammable, toxic, or corrosive products obtained from distilling and processing crude oil, unfinished oils, natural gas liquids, blend stocks, and other miscellaneous hydrocarbon

compounds.

Pipeline
All parts of an onshore pipeline facility through which oil moves including, but not limited to, line pipe, valves, and other appurtenances connected to line pipe, pumping units, fabricated assemblies associated with pumping units, metering and delivery stations and fabricated assemblies therein, and breakout tanks.

Pipeline Corridor
A linear area where two or more pipelines (either part of the same or different pipeline systems) are closely grouped in a single right-of-way. Pipeline corridors pose a cartographic challenge, and NPMS handles them differently on hard-copy and digital maps. On hard-copy maps, a single line with multiple annotations may represent pipeline corridors. In digital files, multiple lines are required, and operators should separate them into individual layers or files.

Pipeline Crossing
A point where two or more pipelines cross, but where there is no physical connection between the pipelines. Pipeline segments should not be broken at pipeline crossings.

Pipeline Intersection
A point where a physical connection between two pipelines occurs. A commodity from one pipeline can flow into another pipeline(s), either a branch within a pipeline system or a connection between two pipeline systems.

Pipeline Segment
A linear feature representing part or all of a pipeline system on a digital or hard-copy map. A pipeline segment must have only two ends. No branches are allowed. A pipeline segment may be a straight line or may have any number of vertices. Each pipeline segment must be uniquely identified. The number of pipeline segments should be kept to the minimum needed to represent a pipeline system and its associated attributes. When submitting hard-copy maps, the beginning and ending points of each pipeline segment should be marked with a clear, visible dot. When submitting digital geospatial data, a unique line segment in the computer-aided drafting (CAD) or GIS data set should represent each pipeline segment

Pipeline System
All parts of a major natural gas transmission line or hazardous liquid trunkline through which gas or hazardous liquid is transported. By definition, only one firm can operate a pipeline system. Operators should assign unique names to each of their pipeline systems. A pipeline system may have an unlimited number of branches. Each pipeline system must be represented by one or more pipeline segments.

Primary Response Contractor(s)
An individual, company, or cooperative that has contracted directly with the plan holder to provide equipment and/or personnel for the containment or cleanup of spilled oil.

Qualified Individual(s)
An English-speaking representative of an operator, located in the United States, available on a 24-hour basis, with full authority to: activate and contract with required oil spill removal organization(s); activate personnel and equipment maintained by the operator; act as liaison with the OSC; and obligate any funds required to carry out all required or directed oil response activities. This includes:

Activating and engaging in contracting with identified oil spill removal organization(s)

- Acting as a liaison with the predesignated of Federal On-Scene Coordinator (FOCS)
- Obligating, either directly or through prearranged contracts, funds required to carry out all necessary or directed response activities

Regional Response Team
The Federal Response Organization (consisting of representatives from selected Federal and State agencies) which acts as a regional body responsible for planning and preparedness before an oil spill occurs and providing advice to the FOSC in the event of a major or substantial spill.

Response Activities
The containment and removal of oil from the water and shorelines, the temporary storage and disposal of recovered oil, or the taking of other actions as necessary to minimize or mitigate damage to the environment.

Response Area
The inland zone or coastal zone, as defined in the National Contingency Plan (40 CFR part 300), in which the response activity is occurring.

Responsible Party
Any person, owner/operator, or facility that has control over an oil or hazardous substance immediately before entry of the oil or hazardous substance into the atmosphere or in or upon the water, surface, or subsurface land of the state.

Response Plan
The operator's core plan and the response zone appendices for responding, to the maximum extent practicable, to a worse case discharge of oil, or the substantial threat of such a discharge.

Response Resources
The personnel, equipment, supplies, and other resources necessary to conduct response activities.

Response Zone
A geographic area either along a length of pipeline or including multiple pipelines, containing one or more adjacent line sections, for which the operator must plan for the deployment of, and provide, spill response capabilities. The size of the zone is determined by the operator after considering available capability, resources, and geographic characteristics.

Retired Pipeline
A pipeline that is still connected to the system but has been taken out of service and is no longer maintained. The operator plans to abandon the pipeline and is waiting for approval.

Right-of-Way
a section of land designated for use by a pipeline. The NPMS refers to ROWs as pipeline corridors.

Rivers and Canals
A body of water confined within the inland area that has a projected depth of 12 feet or less, including the Intracoastal Waterway and other waterways artificially created for navigation.

Skimmers
Mechanical devices used to skim the surface of the water and recover floating oil. Skimmers fall into four basic categories (suction heads, floating weirs, oleophilic surface units, and hydrodynamic devices) which vary in efficiency depending on the type of oil and size of spill.

Sorbents
Materials ranging from natural products to synthetic polymeric foams placed in confined areas to soak up small quantities of oil. Sorbents are very effective in protecting walkways, boat decks, working areas, and previously uncontaminated or cleaned areas.

Specified Minimum Yield Strength
The minimum yield strength, expressed in pounds per square inch, prescribed by the specification under which the material is purchased from the manufacturer.

Spill Management Team
The personnel identified to staff the organizational structure identified in a response plan to manage response plan implementation.

Spontaneous Ignition
A fire that occurs without a flame, spark, hot surface, or other outside source of ignition.

Staging Areas
Designated areas near the spill site accessible for gathering and deploying equipment and/or personnel.

State Emergency Response Commission (SERC)
A group of officials appointed by the Governor to implement the provisions of Title III of the Federal Superfund Amendments and Reauthorization Act of 1986 (SARA). The SERC approves the State Oil and Hazardous Substance Discharge Prevention and Contingency Plan and Local Emergency Response Plans.

Static Electricity
Charges of electricity accumulated on opposing and usually moving surfaces having negative and positive charges, respectively. A hazard exists where the static potential is sufficient to discharge a spark in the presence of flammable vapors or combustible dusts.

Stress Level
The level of tangential or hoop stress, usually expressed as a percentage of specified minimum yield strength.

Support Zone
Same as cold zone, an area free of contaminants so that personal protection equipment (PPE) is not required for personnel working in this area. Command functions and supporting operations are carried out here.

Unified Command
The method by which local, state, and federal agencies will work with the Incident Commander to:

- Determine their roles and responsibilities for a given incident
- Determine their overall objectives for management of an incident
- Select a strategy to achieve agreed upon objectives
- Deploy resources to achieve agreed-upon objectives

Warm (Contamination Reduction) Zone
A buffer between the hot and cold zones. Decontamination activities take place there. Equipment needed to support the primary response operation may be staged in the warm zone.

Waste
Oil or contaminated soil, debris, and other substances removed from coastal waters and adjacent waters, shorelines, estuaries, tidal flats, beaches, or marshes in response to an unauthorized discharge. Waste means any solid, liquid, or other material intended to be disposed of or discarded and generated as a result of an unauthorized discharge of oil. Waste does not include substances intended to be recycled if they are in fact recycled within 90 days of their generation or if they are brought to a recycling facility within that time.

Wildlife Rescue
Efforts made in conjunction with federal and state agencies to retrieve, clean, and rehabilitate birds and wildlife affected by an oil spill.

Worst Case Discharge
The largest foreseeable discharge of oil, including a discharge from fire or explosion, in adverse weather conditions. This volume will be determined by each pipeline operator for each response zone and is calculated according to ? 194.105.

LINK FILES

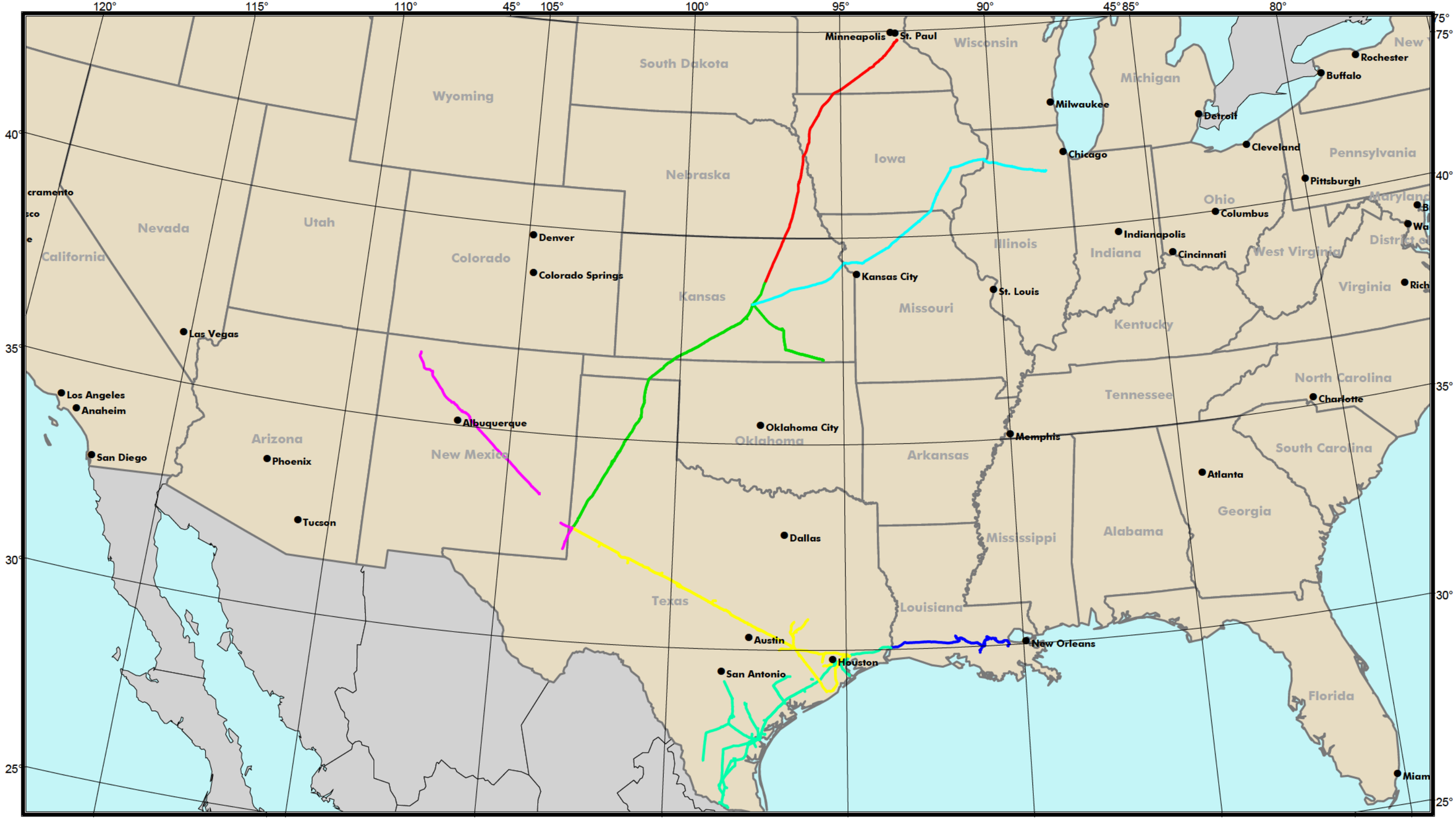


FIGURE 1-4 - Pipeline System Overview Map

TECHNICAL RESPONSE PLANNING CORPORATION
www.trpcorp.com | (281) 955-6600

100 0 100 Miles

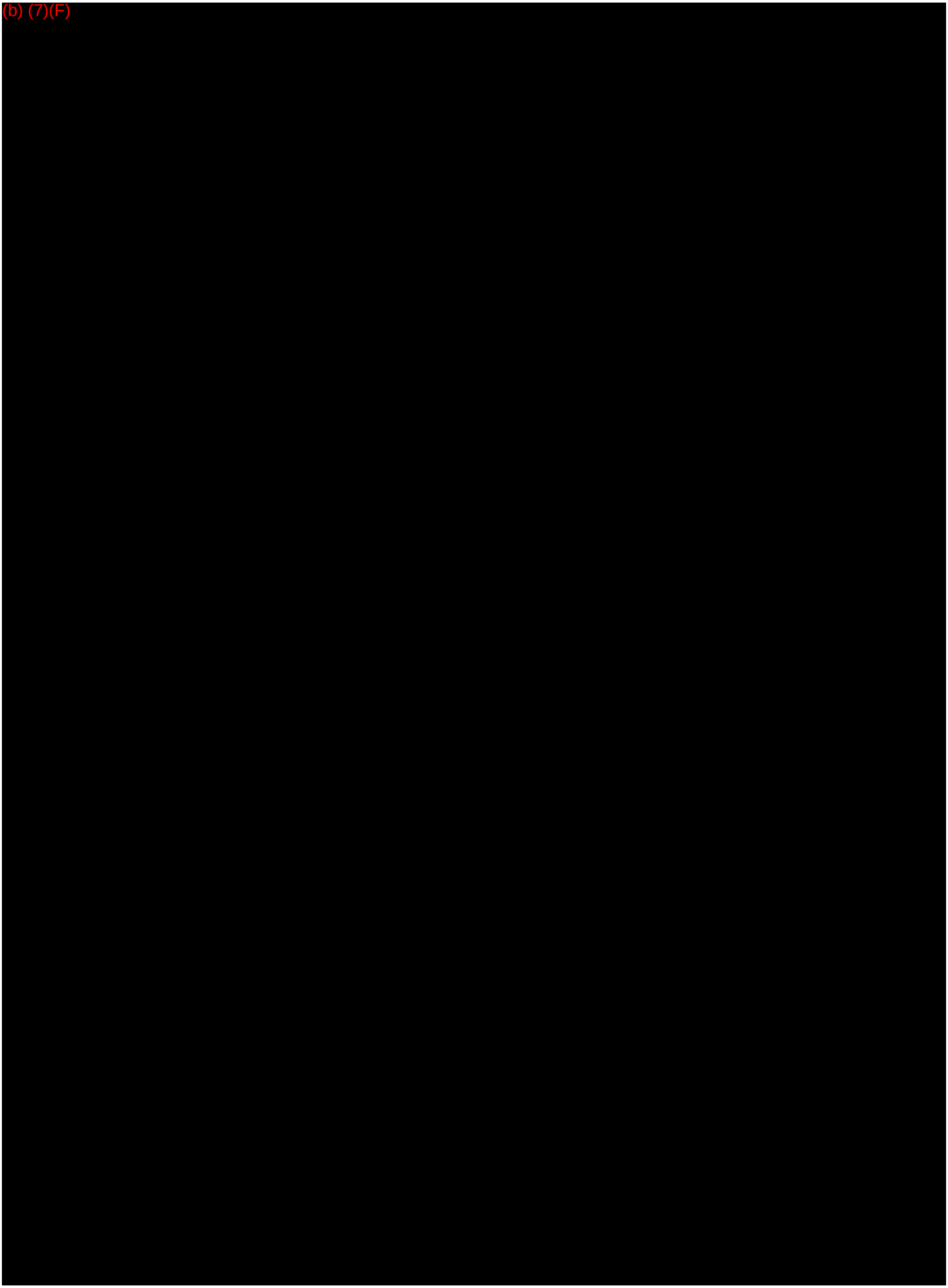
LEGEND

- Northern Zone
- Central Zone
- Rocky Mountain Zone
- Texas Zone
- Louisiana Zone
- Seminole Zone
- East Leg Zone

Enterprise.apr

August 2008

(b) (7)(F)



U.S. Department
of Transportation
**Research and
Special Programs
Administration**

400 Seventh St., S.W.
Washington, D.C. 20590

March 2, 2004

Certified Mail –7002 0510 0002 0439 6564-Return Receipt Requested

Mr. Alvaro J. Parro, PH.D
Environmental Manager
Enterprise Products Operating L.P.
2727 North Loop West
P.O. Box 4324
Houston, TX 77210-4324

Re: RSPA Plan Sequence Number 1636 (Northern Response Zone)

Dear Mr. Parro,

The Research and Special Programs Administration (RSPA) has received your Facility Response Plan (FRP) dated July 2003 with your February 16, 2004 letter. We have assigned the plan sequence number referenced above to your plan. You have determined that spills from the pipeline facility can be expected to cause significant and substantial harm. We will review the plan to determine whether it fully satisfies the planning standards established by 49 CFR Part 194, *Response Plans for Onshore Oil Pipelines.* After we complete the review, we will notify you of any deficiencies for you to correct to bring the plan into full compliance. When we determine that the plan is minimally adequate for complying with the regulation, we will approve the plan for five years.

Based on your certification of response resource capabilities in the submitted plan materials, this letter provides temporary approval for the plan referenced above. This temporary approval allows Enterprise Products Operating L.P. to operate the onshore pipeline facility covered by the response plan while we review the plan to determine whether it is minimally adequate for complying with all the requirements of 49 CFR 194.

If we determine that the plan does not fully comply with the regulation, RSPA will inform you of all the deficiencies and provide you the opportunity to respond to or correct the identified deficiencies. We will issue final approval when the plan is minimally adequate for complying with the regulation.

Please refer to the "RSPA Plan Sequence Number" listed above in all plan-related correspondence, including e-mails. E-mail is the preferred method for submitting inquiries, questions and comments to me at le.herrick@rspa.dot.gov. You can also telephone me at (202) 366-5523 or fax me at (202) 366-4566. Thank you for your cooperation.

Sincerely,

L. E. Herrick
Response Plans Officer

U.S. Department
of Transportation
**Research and
Special Programs
Administration**

400 Seventh St., S.W.
Washington, D.C. 20590

February 15, 2005

Certified Mail –7003 3110 0003 2602 9009-Return Receipt Requested

Mr. Alvaro J. Parro, Ph.D
Environmental Manager
Enterprise Products Operating, L.P.
2727 North Loop West
P.O. Box 4324
Houston, TX 77210-4324

Re: RSPA Sequence Number 1636 (Northern Response Zone)

Dear Mr. Parro,

The Research and Special Programs Administration (RSPA) has received the January 10, 2005 revision of your Facility Response Plan (FRP) referenced above with your letter dated February 4, 2005. You submitted this revision to address the findings in our review (RSPA letter dated November 9, 2004). We will review the revision to determine whether the revised plan fully satisfy the planning standards established by 49 CFR Part 194, *Response Plans for Onshore Oil Pipelines*.

After we complete the review, we will notify you of any remaining deficiencies for you to correct to bring the plan into full compliance. If there are no deficiencies, we will approve the plan for five years.

Please refer to the "RSPA Plan Sequence Number" listed above in all plan-related correspondence, including e-mails. E-mail is the preferred method for submitting inquiries, questions and comments to me at le.herrick@rspa.dot.gov. You can also telephone me at (202) 366-5523 or fax me at (202) 366-4566. Thank you for your cooperation.

Sincerely,

L. E. Herrick
Response Plans Officer

U.S. Department
of Transportation

400 Seventh St. S.W.
Washington, D.C. 20590

**Pipeline and
Hazardous Materials
Safety Administration**

MAR 16 2005

TO ALL OPERATORS OF ONSHORE OIL PIPELINES

Re: Response Management Systems

This letter is to clarify the National Incident Management System (NIMS) and the response management systems required in pipeline Facility Response Plans (FRPs). The Office of Pipeline Safety (OPS) published the Final Rule amending Part 194 of Title 49 of the Code of Federal Regulations, Response Plans for Onshore Oil Pipelines on February 23, 2005 (70 FR 8734). The Final Rule made a number of clarifications, one of which was on the response management system described in the plans required by the rule.

Prior to publication of the Final Rule, OPS required operators to establish response management systems in their FRPs that were consistent with the Incident Command System (ICS) in the applicable Area Committee Plans (ACPs). The preamble to the Final Rule states that one aspect of being consistent with the National Contingency Plan (NCP) and the ACPs, is the use of an incident command system, including unified command system procedures for spill response.

Also, as stated in the preamble, OPS endorses the National Interagency Incident Management System (NIIMS). Following the events of 9-11-01, NIIMS has been extensively revised for adoption by all federal, state and local agencies and is now called the NIMS.

Operators do not have to adopt the NIMS or modify their response management system to be consistent with the NIMS to comply with the Final Rule. OPS will continue to accept response management systems that adequately address the finance, logistics, operations, planning and command functions consistent with the ICS in the applicable ACPs.

If there are any questions, please contact me at le.herrick@dot.gov, by telephone at 202-366-5523, or fax at 202-366-4566.

Sincerely,

L. E. Herrick
Response Plans Officer

TECHNICAL RESPONSE PLANNING CORPORATION

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September 29, 2008

Ms. Barber
Response Plans Officer, Pipeline and Hazardous Material Safety
U.S. Department of Transportation
1200 New Jersey Avenue SE - Room E22-210
Washington, D.C. 20590

RE: RSPA Sequence Number 1637 Central Zone Spill Response Plan
1636 Northern Zone Spill Response Plan

Dear Ms. Barber:

Enclosed are two revised CD's for each of the approved aforementioned plans. The revisions include updates to the Qualified Individual's. If you have any questions regarding the enclosed, please contact Randy Davis, Field Environmental Scientist, at (816) 628-5080, or Enterprise Products Operating, LCC 2727 North Loop West, Houston, TX 77210.

Sincerely,
TECHNICAL RESPONSE PLANNING CORPORATION

Greg Desmond
Senior Project Manager

Enclosures
Federal Express

cc: Randy Davis