

Developed by:



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**Dearborn  
Facility  
Response Plan**

**8503 South Inkster Road  
Taylor, MI 48180**

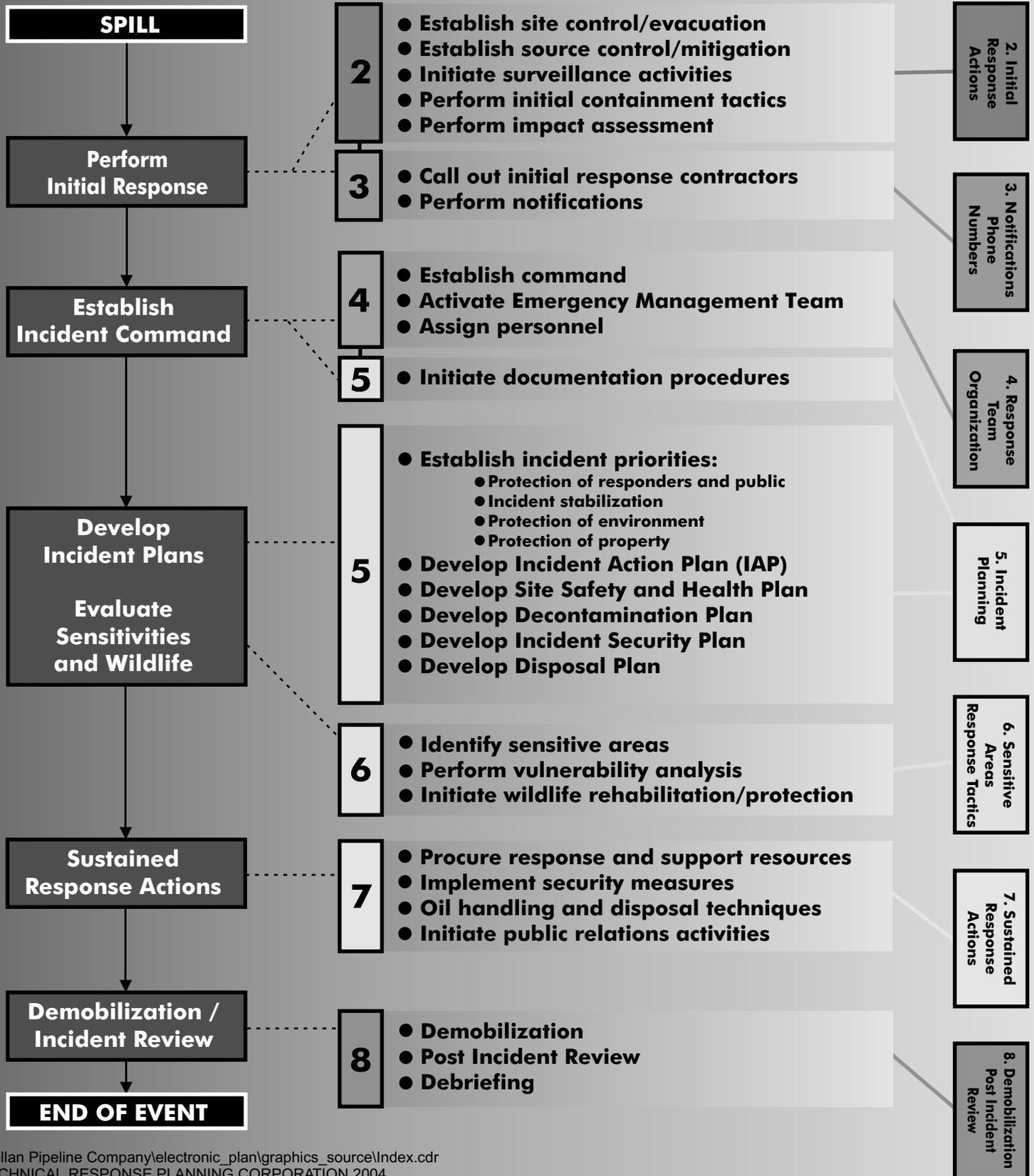
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*TECHNICAL RESPONSE PLANNING*  
CORPORATION

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# Response Procedures Flow Chart



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## Dearborn

### RECORD OF CHANGES

Changes to this Plan will be documented on this page. Plan review and modifications will be initiated and coordinated by the District Health, Safety, and Environmental Coordinator.

CHANGE NUMBER	DATE OF CHANGE	DESCRIPTION OF CHANGE	PAGE NUMBER
0			

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## SECTION 1

Last Revised: May 12, 2008

**INTRODUCTION**

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FIGURE 1-1 - DISTRIBUTION LIST

PLAN HOLDER	ADDRESS	NUMBER OF PAPER COPIES	NUMBER OF ELECTRONIC COPIES
BP Products North America, Inc., River Rouge Terminal, Attn: Bill Fenton	205 Marion Street, P.O. Box 18057 River Rouge, MI 48218	1	0
Alan Pyne, Terminal Manager, Dearborn Terminal	8503 S. Inkster Road Taylor, MI 48180	1	0
BP Products North America, Inc., Attn.: Ron Bozarth, U.S. Logistics, HSSE	28100 Torch Parkway Warrenville, IL 60555	1	0
Kristen Hancock, U.S. Pipelines and Logistics, HSSE Advisor, BP Products North America, Inc.	28100 Torch Parkway Warrenville, IL 60555	1	0
Alexander C. Tzallas, U.S. EPA ? Region V	77 W. Jackson Boulevard (SE-5J) Chicago, IL 60604	1	0
Ms. L. E. Herrick, Response Plan Officer, U.S. DOT Office of Pipeline Safety	400 7th St. SW Room 2103 Washington, DC 20590	0	2
Response Management Associates, Inc.	6620 Cypresswood Drive, Suite 200 Spring, TX 77379	1	0
Jeff Schimmel - Michigan Area Manager US Pipeline & Logistics	150 West Warrenville Road Naperville, IL 60563	0	1

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FIGURE 1-2 - DEARBORN INFORMATION SUMMARY

<b>Owner/Operator:</b>	BP Products North America Inc., U.S. Logistics 28100 Torch Parkway Warrenville, IL 60555
<b>Owner Telephone:</b>	(630) 836-6230
<b>Facility Name:</b>	Dearborn
(b) (7)(F)	

<b>Latitude/Longitude:</b>	
<b>Facility Telephone/Fax:</b>	(313) 291-3670 / (313) 291-3486
<b>EPA FRP #:</b>	MI0049277718
<b>PHMSA FRP #:</b>	
<b>Description of Facility:</b>	<p>The sole petroleum product stored on site is Jet-A fuel. Products are delivered to the Terminal via interstate pipelines controlled by Company Pipeline operations in Tulsa, Oklahoma, Wolverine Pipeline operations and Sun Pipeline. At the terminal, products are loaded into tank trucks for local distribution and transferred via a dedicated pipeline to the Detroit Metropolitan Airport.</p> <p>Current staff consists of 4 operators. The Terminal Manager/QI is not based at the Terminal. Product is distributed to designated Terminal bulk storage tanks. Product is pumped from storage to gasoline and oil-tank-trucks through the Facility's one (1) loading racks and two (2) loading spots. Additives are received via truck and are injected at the load rack as trucks load product.</p> <p>Truck loading operations involve dispensing of product from the rack area into bottom loading tanker trucks. The loading process is controlled by the truck driver who observes from a Kiosk at the rack. These procedures have been developed to minimize potential for releases during these operations. Product is also distributed via the outgoing pipeline to the Detroit Metropolitan Airport. Loading Rate: 600 gpm (maximum). Truck Capacity: 9,000 gallons (maximum). "Dead Man" control switches are installed at all loading facilities. These switches will stop product flow if the operator releases contact with the transfer equipment, thus preventing the operator from walking away from a loading bay during product transfer operations.</p> <p><b>DATES AND TYPES OF SUBSTANTIAL EXPANSIONS (SEE APPENDIX C, FIGURE C-1)</b></p> <p>The Western portion of the terminal, consisting of non-operational property and warehouse buildings was divided and sold to others prior to 1990.</p> <p>1982 - Vapor Recovery Unit (VRU) installed  1992 - Distribution Piping was upgraded to aboveground  1996 - V.R.U. inactivated due to a conversion of the Terminal to solely a Jet-A facility  1996 - Constructed a dike drainage system and dike capacity upgrade</p>

## Dearborn

**FIGURE 1-2 - DEARBORN INFORMATION SUMMARY, CONTINUED**

Qualified Individuals: (Refer to APPENDIX A, FIGURE A.2-3 for QI Training Records)	Facility		
	Name and Contact Information	Work Address	Home Address
	Mike Liebman	150 W. Warrenville	

District Manager (630) 420-5625 (Office) (b) (6) (630) 217-4057 (Mobile)	Rd Naperville, IL 60563	205 White Oak Dr. Wheaton, IL 60187
	Alan Pyne Dearborn Terminal Manager (313) 291-3670 (Office) (b) (6) (313) 515-2423 (Mobile)	8503 South Inkster Road Taylor, MI 48180
<b>Business Unit</b>		
<b>Name and Contact Information</b>	<b>Work Address</b>	<b>Home Address</b>

## Dearborn

**FIGURE 1-2 - DEARBORN INFORMATION SUMMARY, CONTINUED**

<b>Line Sections/ Products Handled:</b> (Refer to Product Characteristic and Hazards, FIGURE D.9-1)	SECTION		PRODUCTS		
	N/A		N/A		
<b>Facility Data:</b> (See APPENDIX C for date and type of substantial expansion)	<b>Location (Address and County)</b>	<b>Hours of Operations/ Manning</b>	<b>Throughput</b>	<b>Date of Startup</b>	<b>Wellhead Protection Area</b>
	(b) (7)(F) r, Wayne County, MI 48180	Truck loading activities continue 24/7. The Terminal is manned 24/7.	28,000,000 gal/month	1954	No
	<b>Current Operations</b>				
NAICS Code 424710. The Dearborn Terminal serves as a Jet-A fuel storage and distribution center.					
<b>Description of Zone:</b>	The pipeline carries refined oil (including Jet Fuel ) in the areas shown in <b>FIGURE 1-3</b> and <b>FIGURE 1-4</b>				
<b>Response Zone Consists of the Following Counties:</b>	Wayne				
<b>Alignment Maps (Piping, Plan Profiles):</b>	Maintained at: Not Applicable				
<b>Worst Case Discharge:</b>	(b) (7)(F)				
<b>Statement of Significant and Substantial Harm:</b>	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.
<b>Spill Detection and Mitigation Procedures:</b>	Refer to <b><u>SECTION 2.1.1</u></b> , <b><u>APPENDIX D.2.1</u></b> and <b><u>APPENDIX D.3</u></b> .
<b>Date Prepared:</b>	

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.

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**FIGURE 1-3 - FACILITY AREA MAP**



**Dearborn**

**FIGURE 1-4 - FACILITY PHOTOGRAPH**



**Dearborn**

### **FIGURE 1-5 - FACILITY SITE PLAN**

[Click here to view site plan - Facility Diagram.pdf.](#)

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### **FIGURE 1-6 - PIPELINE OVERVIEW**

No Pipeline Overview Map Uploaded

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#### **1.1 PURPOSE / SCOPE OF PLAN**

The purpose of this Emergency Response Plan (Plan) is to provide guidelines to quickly, safely, and effectively respond to a spill. The Facility is owned and operated by BP Products North America Inc., U.S. Logistics, herein referred to as "Company." This Plan contains prioritized procedures for Facility personnel to mitigate or prevent any discharge resulting from in-facility (terminal) operations, including hazardous waste.

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 Contingency Plan. Specifically, this Plan is intended to satisfy:

- U.S. Environmental Protection Agency (EPA) requirements for an OPA 90 Plan (40 CFR

112.20)

- Pipeline and Hazardous Materials Safety Administration (PHMSA), U.S. Department of Transportation requirements for an OPA 90 Plan (49 CFR 194)
- Occupational Safety and Health Administration (OSHA) requirements for Emergency Response Plan (ERP) (29 CFR 1910.120) (1)(2)) and Emergency Action Plan (EAP) (29 CFR 1910.38 (a)(2)).

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### 1.2 PLAN REVIEW AND UPDATE PROCEDURE

In accordance with 40 CFR 112.20, this Plan will be reviewed annually and modified to address new or different operating conditions or information included in the Plan. Company internal policy states that the Plan will be reviewed at least annually and modified as appropriate. 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 affect the implementation of the Plan, the Company will modify the Plan to address such a change and, within 60 days of making such a change, submit the change to EPA.

Upon review of the response plan for each five-year period, revisions will be submitted to PHMSA provided that changes to the current plan are needed, or a letter stating will be submitted to PHMSA stating that the plan is still current.

If new information or different operating conditions would substantially affect 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. EPA must receive the changes within 60 days.

Examples of changes in operating conditions that would cause a significant change to the Plan include:

CONDITIONS REQUIRING REVISIONS AND SUBMISSIONS	EPA	PHMSA
Relocation or replacement of the transportation system in a way that substantially affects the information included in the Plan, such as a change to the Worst Case Discharge volume.	X	X
A change in the Facility's configuration that materially alters the information included in the Plan.	X	
A change in the type of oil handled, stored, or transferred that materially alters the required response resources.	X	X
A change in key personnel (Qualified Individuals).	X	X
Material change in capabilities of the Oil Spill Removal Organization(s) (OSROs) that provide equipment and personnel.	X	X
Material change in the Facility's spill prevention and response equipment or emergency response procedures.	X	
Any other changes that materially affect the implementation of the Plan.	X	X
A change in the NCP or ACP that has significant impact on the equipment appropriate for response activities.		X

All requests for changes must be made through the Terminal Manager.

The most current version of the plan is always the electronic copy. Revisions to the site-specific information are made through the password protected maintenance interface. The date at the beginning of each Section indicates the last date that Section was revised. Any revisions made after that date should be reprinted and inserted into the paper copy of the plan.

## Dearborn

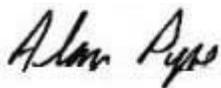
### 1.3 CERTIFICATION OF ADEQUATE RESOURCES

# CERTIFICATION

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

BP Products North America Inc., U.S. Logistics

The BP Products North America Inc., U.S. Logistics, hereby certify to the Research and Special Programs Administration of the Department of Transportation that they have 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 a substantial threat of such a discharge.



Alan Pyne  
Terminal Manager

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### 1.4 AGENCY SUBMITTAL / APPROVAL LETTERS

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## SECTION 2

Last revised: September 2006

## INITIAL RESPONSE ACTIONS

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Figure 2-1 - Initial Response Action Guidelines

**2.1 Spill Response**

**Figure 2.1-1 - Spill Response Action Checklist**

**2.1.1 Spill Detection and Mitigation Procedures**

**Figure 2.1-2 - Spill Mitigation Procedures**

**2.1.2 Spill Surveillance Guidelines**

Figure 2.1-3 - Oil Spill Surveillance Checklist

2.1.3 Spill Volume Estimating

Figure 2.1-4 - Spill Estimation Factors

2.1.4 Estimating Spill Trajectories

**2.1.5 Initial Containment Actions**

**2.1.6 Safety Considerations**

**2.2 Fire / Explosion / Vapor Release**

**2.2.1 Fire, Explosion, and Vapor Release Response Actions**

**2.2.2 Fire Fighting Tactics**

**2.2.3 BLEVE - Boiling Liquid Expanding Vapor Explosion**

**2.3 Medical Emergency / Personal Injury**

**2.3.1 Medical Emergency / Personal Injury Checklist**

**2.4 Natural Disasters / Severe Weather**

**2.4.1 Earthquake Procedure**

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## SECTION 2

## INITIAL RESPONSE ACTIONS, CONTINUED

**2.4.2 Flooding Procedure****2.4.3 Hurricane Procedure****2.4.4 Tornado Checklist****2.5 Security Related Incidents****2.5.1 Threats to Personnel and Facilities****2.5.2 Criminal Acts / Workplace Violence****2.5.3 Sabotage / Bomb Threat / Suspicious Package****2.5.4 Threat Receipt Precautions**

Figure 2.5-1 - Threat Documentation Report Form

**2.6 Evacuation****2.6.1 Evacuation Checklist****2.6.2 Evacuation Factors****2.7 Fire Pre Plans**

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FIGURE 2-1 - INITIAL RESPONSE ACTION GUIDELINES

RESPONSE ACTION	PERSON TAKING ACTION (INITIALS)	DATE/TIME ACTION TAKEN
<b>First Responder (Designated Person in Charge)</b>		
Identify and control source of spill, if safe to do so. Be aware of potential hazards associated with the crude oil/condensate, and ensure lower explosive limits (LELs) are within safe levels before entering spill area.		
Activate Tactical Response Team (TRT).		
Designate On-Scene Commander (OSC).		
Isolate Area.		
<ul style="list-style-type: none"> <li>• Evacuate Personnel From Isolated Area, if necessary.</li> <li>• Identify hazards.</li> <li>• Establish hazard control, if necessary.</li> <li>• Identify PPE requirements.</li> <li>• Conduct Safety Briefing.</li> <li>• Institute personnel accountability procedures.</li> <li>• Establish decontamination area.</li> </ul>		
Conduct Site Characterization.		
If safe to do so, shut down potential ignition sources, including motors, electrical pumps, electrical power, boats, etc.		
Ensure shutdown and control of the source of the spill.		
For minor or incidental releases which are contained on the Facility (by curbs, gutters, skidpans, etc.), initiate immediate cleanup operations utilizing trained field personnel.		
Complete Spill Report and e-mail/fax to Health, Safety and Environment Team (HSE).		
Notify Operations Team Leader.		
<b>Operations Team Leader</b>		
Notify Responsible Manager and Business Unit Line Management.		
Notify HSE Team duty personnel on weekly duty roster.		
Ensure BP Spill Report Form is prepared for HSE Team/Designated Reporting Leader.		
Initiate spill tracking and surveillance operations by activating surveillance aircraft and/or watercraft. Estimate trajectory of spill utilizing information in <b>SECTION 2.1.4</b> . Send photographer/videographer, if safe.		
<b>HSE Team</b>		
Notify appropriate agencies (refer to <b>FIGURE 3.1-4</b> ) <ul style="list-style-type: none"> <li>• National Response Corporation</li> <li>• State Emergency Response Commission (SERC)</li> <li>• Local Emergency Planning Committee (LEPC), if</li> </ul>		

applicable		
<b>Business Unit Line Manager</b>		
Notify appropriate Crisis Center (Incident Commander).		
Notify Business Unit Leader.		
Ensure Spill Report Form is prepared/updated for Incident Commander.		

## Dearborn

**FIGURE 2-1 - INITIAL RESPONSE ACTION GUIDELINES, CONTINUED**

RESPONSE ACTION	PERSON TAKING ACTION (INITIALS)	DATE/TIME ACTION TAKEN
<b>Incident Commander (IC)</b>		
Call out OSROs as needed. It is much better to demobilize equipment and personnel if not needed, than to delay contacting contractors if they are needed. Refer to <b>FIGURE 3.1-4</b> for OSROs.		
Contact Incident Management Team (IMT) and Business Support Team (BST); Evaluate incident potential and level of response.		
Activate teams as necessary.		
If no response is warranted, the IC will ensure that appropriate regulatory notifications have been made and no further action is taken.		
Obtain weather forecasts.		
Obtain an accurate report from Business Unit Leader.		
Ensure response contractors have been mobilized.		
<b>Business Unit Leader</b>		
Notify the Group Vice President.		
<b>Incident Management Team</b>		
Activate Incident Command Post (ICP).		
Establish Communications Network.		
Prepare Strategic Objectives and Response Priorities.		
Set up information center.		
Activate appropriate shorebase.		
Obtain updated spill trajectory (2-hour updates). ( <b>SECTION 2.1.4</b> )		
Prepare/Update Spill Report Form and the HSE Incident Report Form.		
Initiate documentation procedures. Document all response actions taken, including notifications, agency/media		

meetings, equipment and personnel mobilization and deployment, and are impacted.		
Assist in completion of regulatory agency notifications, if needed.		
Assist in obtaining dispersant use approval if not already secured by Field Operations.		
Identify environmentally sensitive areas at risk and recommended protection based on trajectory. Utilize Near-shore Response Guides, Technical Spill Consultants, USF&WS, local representatives from parks and refuges and available maps for resources.		
Prepare an initial Incident Action Plan for Federal On-Scene Coordinator (FOSC) within 6 to 12 hours of receipt of notification of spill.		
Begin completion of Site Specific Spill Response Plans in anticipation of FOSC request.		
Begin preparations for media relations.		

## Dearborn

### 2.1 SPILL RESPONSE

**FIGURE 2.1-1 - SPILL RESPONSE ACTION CHECKLIST**

SPECIFIC RESPONSE ACTIONS	COMMENT
<b>Line Break or Leak</b>	
Shut down source/pumping equipment.	
Close upstream and downstream valves.	
Utilize Combustible Gas Indicator, O <sub>2</sub> meter, proper colorimetric indicator and other air sampling measurements (as applicable) to assure that areas are safe to enter for continued response operations.	
Mitigate spreading of the product as the situation demands. Potential containment strategies include: <ul style="list-style-type: none"> <li>• Deployment of boom (Reference ACP for potential strategies);</li> <li>• Diking, trenching, and/or diversion;</li> <li>• Spreading sorbent material over the spill; and</li> <li>• Prevent the spill from entering water to the greatest extent possible.</li> </ul>	
Determine the direction and expected duration of spill movement. Refer to <b>SECTION 2.1.2</b> .	
Drain the line section, as the situation demands.	
Request local authorities to establish scene security and traffic control in the area, as the situation demands.	

Make all necessary repairs.	
Return the line/rack to service when repairs are complete.	
Clean up spilled product to eliminate any possible environmental problems. Be alert for underground cables.	
If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in <b>SECTION 6</b> . Determine which of these may be threatened by the spill and direct the response operation to these locations. Initiate protection and recovery actions.	
Inform local utilities, telephone company, railway, etc., as necessary.	
Complete follow-up and written reporting, as the situation demands.	
<b>Storage Tank Leak</b>	
Shutdown all tank product movement operations and isolate the tank.	
Initiate Confined Space Entry procedures, as applicable.	
Insure that the containment area drainage valve(s) is closed.	
If leak is near tank bottom, create and maintain a 'water bottom' to suspend the discharge of product.	
Utilize Combustible Gas Indicator, O <sub>2</sub> meter, proper colorimetric indicator and other air sampling measurements (as applicable) to assure that areas are safe to enter for continued response operations.	
Block drainage of spilled material from traveling off-site.	
Stop all traffic in hazardous area (inside and outside of property boundaries), as the situation demands.	
Remove product from containment (at a sump or in a low area) with an explosion proof pump, oil skimmer, and/or vacuum truck w/skimmer attachments.	

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FIGURE 2.1-1 - SPILL RESPONSE ACTION CHECKLIST, CONTINUED

SPECIFIC RESPONSE ACTIONS	COMMENT
<b>Storage Tank Leak, Continued</b>	
If applicable, process remaining product through a separator system.	
Determine the direction and expected duration of spill movement. Refer to <b>SECTION 2.1.2</b> .	
Request that local authorities establish scene security and traffic control in the area, as necessary.	

Empty tank as soon as possible.	
Make all necessary repairs. Return the line/tank to service when repairs and integrity testing are completed.	
Clean up product spill to eliminate any possible environmental problems. Be alert for underground cables, conduits, etc.	
If necessary, call an approved waste removal company to handle the remaining sludge and residue from the containment area.	
If the spill escapes the containment area, review the location of socioeconomic and environmentally sensitive areas identified in <b>SECTION 6</b> and the ACP. Determine which of these may be threatened by the spill and direct the response to these locations. Initiate protection and recovery actions.	
Inform local operators such as utilities, telephone company, railway, as necessary.	
Complete follow-up and written reporting, as the situation demands.	
<b>Leak or Spill at Truck Rack</b>	
Evacuate personnel from the truck rack area, as the situation demands.	
Shutdown all loading operations, pump motors and loading valves.	
Guard against all sources of ignition.	
Secure the area. Stop all traffic from entering rack or hazardous area.	
If a line leak is involved, close off riser valves and/or tank valves.	
Clean area with sorbent material, flush (with water) all remaining product into a separator system.	
Resume truck loading operations as directed by Terminal Management.	
<b>Truck Leaks/Spills Outside Terminal</b>	
<i>Note: This type of spill will rarely be the responsibility of Terminal personnel.</i>	
Notify local fire and police departments.	
Secure the area. Keep all traffic away from the scene.	
Notify Terminal Management of the incident with the following information: <ul style="list-style-type: none"> <li>• Location of spill.</li> <li>• Size of spill.</li> <li>• Product type.</li> <li>• Present situation.</li> <li>• If assistance/equipment is required for cleanup.</li> <li>• If product spills on a highway or other impervious</li> </ul>	

surface, clean area with sorbent materials, vacuum truck, or other cleanup equipment as available or necessary. If product has entered sewer system, advise the local Fire Department.	
Consider the need to evacuate area residents. Request assistance from local authorities (fire, police departments) as necessary.	
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**FIGURE 2.1-1 - SPILL RESPONSE ACTION CHECKLIST, CONTINUED**

<b>SPECIFIC RESPONSE ACTIONS</b>	<b>COMMENT</b>
<b>Marine Operation Spills/Leaks</b>	
Shut down all engines/motors.	
Close all line and vessel manifold discharge valves.	
If hose rupture is involved, drain line into vessel, drums, or buckets and blank line to stop spill into water.	
Initiate Confined Space Entry procedures, as applicable.	
Utilize Combustible Gas Indicator, O <sub>2</sub> meter, proper colorimetric indicator and other air sampling measurements (as applicable) to assure that areas are safe to enter for continued response operations.	
If other than hose rupture, determine source of leak and stop discharge.	
Prevent discharge from entering the water if at all possible by: <ul style="list-style-type: none"> <li>• Pumping from sump or deck drainage system into drums, tanks, containment area, or other storage facility.</li> <li>• Directing the flow into a containment or collection area away from the water, if feasible.</li> <li>• Placing containment boom or sorbent material around area (provided that a safe operating environment exists).</li> </ul>	
If product enters the water and a safe operating environment exists, try to contain by: <ul style="list-style-type: none"> <li>• Deploying spill response equipment (facility and/or contract) to prevent/mitigate spill impact (spreading of spill).</li> </ul>	
Attempting to divert/contain the spill: <ul style="list-style-type: none"> <li>• In quiet area or low current areas of the water.</li> <li>• Away from strong winds or in areas that could be</li> </ul>	

<p>affected by change in wind direction.</p> <ul style="list-style-type: none"> <li>• Away from areas of hazard to public, property improvements, marinas, water intakes, or any environmentally sensitive areas.</li> </ul>	
Make all necessary repairs.	
Return the line/vessel to service when repairs are complete.	
Clean up spilled product to eliminate any possible environmental problems. Be alert for underground cables, etc.	
If the spill escapes the containment area, review the location of socioeconomic and environmentally sensitive areas identified in <b>SECTION 6</b> and the ACP. Determine which of these may be threatened by the spill and direct the response operation to these locations. Initiate protection and recovery actions.	
Request local authorities (USCG, Port Authority, etc.) to establish traffic control in the area, as the situation demands.	
Inform local operators such as utilities, telephone company, railway, as necessary.	
Complete follow-up and written reporting, as the situation demands.	

## Dearborn

### 2.1.1 Spill Detection and Mitigation Procedures

**APPENDIX D** 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 2.1-2**. Worst case discharge volume calculations and discussion are provided in **APPENDIX D**.

**FIGURE 2.1-2 - SPILL MITIGATION PROCEDURES**

TYPE	MITIGATION PROCEDURE
Failure of Transfer Equipment	<ol style="list-style-type: none"> <li>1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at high risk.</li> <li>2. Terminate transfer operations and close all affected valves.</li> <li>3. Drain product into containment areas if possible.</li> <li>4. Eliminate sources of vapor cloud ignition by shutting down all engines and motors.</li> </ol>
Tank/Overfill/Failure	<ol style="list-style-type: none"> <li>1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at high risk.</li> <li>2. Shut down or divert source of incoming flow to tank.</li> <li>3. Transfer fluid to another tank with adequate storage capacity</li> </ol>

	<p>(if possible).</p> <ol style="list-style-type: none"> <li>4. Shut down source of vapor cloud ignition by shutting down all engines and motors.</li> <li>5. Ensure that dike discharge valves are closed.</li> <li>6. Monitor diked containment area for leaks and potential capacity limitations.</li> <li>7. Begin transferring spilled product to another tank as soon as possible.</li> </ol>
Piping Rupture/Leak (under pressure or not)	<ol style="list-style-type: none"> <li>1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at high risk.</li> <li>2. Shut down pumps. Close the closest valves on each side of the rupture.</li> <li>3. Drain the line back into contained areas (if possible). Alert nearby personnel of potential safety hazards.</li> <li>4. Shut down source of vapor cloud ignition by shutting down all engines and motors.</li> <li>5. If piping is leaking and under pressure, then relieve pressure by draining into a containment area or back to a tank (if possible). Then repair line according to established procedures.</li> </ol>
Fire/Explosion	<ol style="list-style-type: none"> <li>1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at risk of injury.</li> <li>2. Notify local fire and police departments.</li> <li>3. Attempt to extinguish fire if it is in incipient (early) stage.</li> <li>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).</li> <li>5. Eliminate sources of vapor cloud ignition by shutting down all engines and motors.</li> <li>6. Control fire before taking steps to contain spill.</li> </ol>
Manifold Failure	<ol style="list-style-type: none"> <li>1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at high risk.</li> <li>2. Terminate transfer operations immediately.</li> <li>3. Isolate the damaged area by closing block valves on both sides of the leak/rupture.</li> <li>4. Shut down source of vapor cloud ignition by shutting down all engines and motors.</li> <li>5. Drain fluids back into containment areas (if possible).</li> </ol>

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### 2.1.2 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 2.1-3**.

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FIGURE 2.1-3 - 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 the 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):
<b>Oil Observations</b>	
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):	
<b>Considerations</b>	
<ul style="list-style-type: none"> <li>• During surveillance flights, travel beyond known impacted areas to check for additional oil spill sites</li> <li>• Include the name and phone number of the person making the observations</li> <li>• Clearly describe the locations where oil is observed and the areas where no oil has been seen</li> </ul>	
<b>Other Observations</b>	
<b>Response Operations</b>	
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):	
<b>Environmental Observations</b>	
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):	

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### 2.1.3 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, and
- 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 2.1-4**); 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, and
  - Different products may behave differently, depending upon their properties.

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FIGURE 2.1-4 - 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 <sup>2</sup>	44 liters/km <sup>2</sup>
Silvery	0.000003	0.00008	50 gals/mile <sup>2</sup>	88 liters/km <sup>2</sup>
Slightly colored	0.000006	0.00015	100 gals/mile <sup>2</sup>	179 liters/km <sup>2</sup>
Brightly colored	0.000012	0.0003	200 gals/mile <sup>2</sup>	351 liters/km <sup>2</sup>
Dull	0.00004	0.001	666 gals/mile <sup>2</sup>	1,167 liters/km <sup>2</sup>
Dark	0.00008	0.002	1,332 gals/mile <sup>2</sup>	2,237 liters/km <sup>2</sup>
Thickness of light oils: 0.0010 inches to 0.00010 inches				
Thickness of heavy oils: 0.10 inches to 0.010 inches				

### 2.1.4 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), and
- Private consulting firms.

### 2.1.5 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 reducing the surface area and the shoreline to be cleaned,
- Concentrate the oil (when safe to do so), making physical recovery more efficient, and
- Limit the environmental impact to the immediate spill area.

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### 2.1.5 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, and
- Oil's characteristics.

### 2.1.6 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.

## Dearborn

### 2.2 FIRE / EXPLOSION / VAPOR RELEASE

#### 2.2.1 Fire, Explosion, and Vapor Release Response Actions

SPECIFIC RESPONSE ACTIONS	COMMENT
<b>FIRE / EXPLOSION</b>	
1. Discontinue all tasks in progress (hot work, truck loading, maintenance, etc.)	
2. Sound local fire alarm, if available.	
3. Attempt to extinguish incipient stage fires, if trained to do so.	
4. Report the condition to Management and take further defensive actions as instructed.	
5. Engage emergency shutdown systems and/or manually (from a safe distance) isolate fuel sources and shut down engines and heaters.	
6. Evacuate personnel to designated assembly areas.	
7. Account for personnel.	
8. Initiate rescue activities as necessary, if properly trained.	
9. Make appropriate notifications to local fire and EMS. Make other internal management contacts as appropriate. ( <b>SECTION 3</b> )	
10. Establish a secure perimeter around the area to prevent unauthorized entry.	
11. Initiate Site Security Plan. ( <b>SECTION 5</b> )	
12. Continue measures to contain the fire; apply water from a safe distance to protect adjacent equipment, if necessary.	

13. Recognize fire conditions which present BLEVE hazards and protect personnel and the public appropriately. ( <b><u>SECTION 2.2.3</u></b> )	
14. Contain spilled material and runoff. Dike far ahead of the release, as necessary.	
15. Make appropriate government agency notifications. ( <b><u>SECTION 3</u></b> )	
16. Conduct post-incident activities. ( <b><u>SECTION 8</u></b> )	
<b>VAPOR RELEASE</b>	
1. Report the release to Manager.	
2. Sound the facility alarm.	
3. Do not assume vapors or gases are harmless because of lack of odor - <b>Harmful vapors or gases may be odorless.</b>	
4. Evacuate personnel from the immediate area to the designated assembly area or to a location upwind of the release.	
5. Account for personnel.	
6. Engage emergency shutdown systems and/or manually isolate release from a safe distance.	
7. Isolate all sources of potential ignition.	
8. Establish a secure perimeter around the area to prevent unauthorized entry.	
9. Complete internal and external notifications, as appropriate.	
10. Assess the threat to the public and notify public officials as appropriate.	
11. Initiate evacuation of surrounding homes, businesses, etc., with assistance from local law enforcement officials, as necessary.	
12. Conduct post-incident activities. ( <b><u>SECTION 8</u></b> )	

## Dearborn

### 2.2.2 Fire Fighting Tactics

**Upon discovering a fire:**

- Attempt to extinguish incipient stages of fire, only if trained to do so.
- Block in the fuel source by tripping the ESD or manually from a safe distance.
- Protect the surrounding exposed areas and cool the burn area to control the fire.
- Withdraw personnel and notify local fire department.

**Safety Guidelines:**

- Any efforts made to rescue personnel and protect property or the environment must be weighed against the possibility that you could become part of the problem.
- Evacuate and account for personnel as necessary.
- Continually reassess the situation and modify the response accordingly.
- **Do not walk into or touch spilled materials.**
- Do not assume vapors are harmless because of a lack of odor - **Harmful gases or vapors may be odorless.**

**2.2.3 BLEVE - Boiling Liquid Expanding Vapor Explosion****BLEVE occurs when:**

- Sealed containers of liquefied gases are accidentally exposed and enveloped by fire.
- Vapor is generated and internal pressure rapidly rises.
- The container wall temperature rises in the outage or unfilled area.
- Wall strength deteriorates and the stress applied by the increased pressure exceeds the reduced strength of the wall.
- The container ruptures and super-heated liquid is released, expands and vaporizes in seconds resulting in catastrophic damage from the spread of ignited vapors. The ruptured vessel or tank could propel dangerous shrapnel significant distances. It is important that:
  - Vessels or tanks are kept cool and
  - External fires are extinguished quickly.

**Fire Fighters should do the following:**

- Fight fire from the maximum distance possible or use unmanned hose holders or monitor nozzles.
- Cool containers by flooding them with large amounts of water until well after the fire is out.
- Do not direct water at the source of leak or at safety devices; icing may occur.
- Leave the area immediately if you hear a rising sound from venting safety devices or see discoloration of the tank.
- For massive fires, use unmanned hose holders or monitor nozzles; if this is impossible, leave the area and let the fire burn.
- Be aware that when a BLEVE occurs, sections of the tank can fly in any direction. Just avoiding the ends of the tank should not be considered a safe operating procedure.

Always consider your own safety and the safety of people in the immediate area first.

**Dearborn****2.3 MEDICAL EMERGENCY / PERSONAL INJURY****2.3.1 Medical Emergency / Personal Injury Checklist**

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SPECIFIC RESPONSE ACTIONS	COMMENT
<b>General</b>	
<p>Medical emergencies may involve and/or be categorized as follows:</p> <p>a. <b>First Aid</b> - One or more patients with minor injuries which can be effectively managed with the application of routine First Aid. This type of injury does not require medical transport to a hospital, but may require follow-up with a Physician.</p> <p>b. <b>Serious</b> - One or more patients with moderate to serious injuries, requiring response by local Emergency Medical Services (EMS) and may include transport to a hospital for advanced care and treatment.</p> <p>c. <b>Life-Threatening</b> - One or more patients with serious or life-threatening injuries, requiring response by local Emergency Medical Services (EMS) and includes transport to a hospital for advanced care and treatment.</p>	
Assess the scene; protect yourself.	
Summon local Emergency Medical Services (EMS) to the scene; provide information on the nature of injuries and number of injured persons ( <b>SECTION 3</b> ).	
If trained, provide First Aid/CPR as necessary, until EMS arrives at the scene; injured personnel should not be moved unless the situation is life threatening.	
Initiate Medical Evacuation (via air or ground transport) as recommended by EMS personnel.	
Establish a secure perimeter around the area to prevent unauthorized entry. Initiate the Site Security Plan, as necessary ( <b>SECTION 5</b> ).	
Notify Manager and make appropriate notifications to local emergency agencies if necessary. Make other internal management contacts as appropriate ( <b>SECTION 3</b> ).	
<p>In case of a fatality:</p> <ul style="list-style-type: none"> <li>• Do not move the victim.</li> <li>• Do not release name of victim(s).</li> <li>• Contact local law enforcement.</li> <li>• Contact local medical authority.</li> <li>• Preserve the accident site.</li> <li>• Restrict all communications concerning the incident (do not release names of victims unless authorized).</li> </ul>	
Conduct post-incident activities ( <b>SECTION 8</b> ).	

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### 2.4 NATURAL DISASTER / SEVERE WEATHER

## 2.4.1 Earthquake Procedure

SPECIFIC RESPONSE ACTIONS	COMMENT
1. Activate the emergency alarm, if available.	
2. Evacuate personnel from the immediate area to the designated assembly area.	
3. Account for personnel.	
4. Evaluate the extent of the emergency.	
5. If time permits, engage emergency shutdown systems and/or manually isolate processes and equipment.	
6. Notify the Manager and make other internal notifications, as appropriate. ( <b>SECTION 3</b> )	
7. Conduct an inspection for residual safety hazards, such as: <ul style="list-style-type: none"> <li>• Process safety/integrity;</li> <li>• Structural damage;</li> <li>• Downed power lines; and</li> <li>• Leaking natural gas, water, and sewer lines.</li> </ul>	
8. Arrange for necessary repairs.	
9. Conduct post-incident activities. ( <b>SECTION 8</b> )	

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## 2.4.2 Flooding Procedure

SPECIFIC RESPONSE ACTIONS	COMMENT
1. Account for personnel.	
2. Notify Manager and make other internal notifications, as appropriate. ( <b>SECTION 3</b> )	
3. Evaluate the extent of the emergency.	
4. Prepare an evacuation plan based upon flood crest and weather forecast.	
5. Maintain tank levels, as appropriate (consider filling tanks that might float with water).	

6. Secure all loose items in the area that could do harm to other equipment (pipe, tools).	
7. Engage emergency shutdown systems and/or manually isolate processes and equipment, if necessary.	
8. Evacuate personnel, as necessary.	
9. Conduct an inspection for residual safety hazards, such as: <ul style="list-style-type: none"> <li>• Structural damage;</li> <li>• Downed power lines;</li> <li>• Leaking natural gas, water, and sewer lines;</li> <li>• Poisonous snakes and other wildlife sheltering in structures, vehicles, and furniture; and</li> <li>• Avoid direct contact with flood water, mud, and animal carcasses.</li> </ul>	
10. Arrange for necessary repairs.	
11. Conduct post-incident activities. ( <b>SECTION 8</b> )	

## Dearborn

### 2.4.3 Hurricane Procedure

SPECIFIC RESPONSE ACTIONS	COMMENT
<b>Prior to Hurricane Season</b>	
1. Conduct hurricane awareness training, which includes evacuation routes and asset hurricane procedures.	
2. Coordinate activities with local and state agencies involved in hurricane preparation (Emergency Access Cards, etc.).	
3. Communicate recommended Community Evacuation routes.	
4. Determine disposition of Company vehicles during evacuation.	
5. Each location should maintain current photographs of facilities.	
<b>June 1st to November of Hurricane Season</b>	
1. Verify the availability of and procure emergency supplies, as necessary: <ul style="list-style-type: none"> <li>• Portable radios</li> <li>• Plywood, lumber, plastic sheeting, or covering</li> <li>• Drinking water</li> </ul>	

<ul style="list-style-type: none"> <li>• First Aid Kits</li> <li>• Flashlight and batteries</li> <li>• Tools</li> <li>• Emergency non-perishable food item</li> </ul>	
2. Ensure emergency generators and portable equipment is in good working order and sufficient fuel is available.	
<b>Hurricane entering Gulf of Mexico or Approaching East Coast</b>	
1. Implement hurricane procedures.	
2. Identify employees who may volunteer to implement hurricane procedures.	
<b>72 hours prior to hurricane's eye reaching landfall</b>	
1. Cancel all training and meetings requiring travel to affected areas.	
2. Designate location for temporary Communication Center.	
3. Verify contractor contacts and availability.	
4. All employees shall provide to their supervisor an evacuation location and contact number.	
5. Each location shall identify a radio frequency which broadcasts emergency weather information.	
6. Report facility status to Corporate Management.	

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### 2.4.3 Hurricane Procedure, Continued

SPECIFIC RESPONSE ACTIONS	COMMENT
<b>48 hours prior to hurricane's eye reaching landfall</b>	
1. Implement flex-shift to allow employees to secure personal property.	
2. Ensure all storage tanks are stabilized.	
3. Ensure all below ground sumps have been pumped dry.	
4. Secure all critical documents including electronic data.	
5. Elevate electrical equipment, sensitive office equipment and	

documents in the event of high water.	
6. Report facility status to Corporate Management.	
<b>36 hours prior to hurricane's eye reaching landfall</b>	
1. Communicate with suppliers and affected customers.	
2. Report facility status to Corporate Management.	
<b>24 hours prior to hurricane's eye reaching landfall</b>	
1. Begin shutdown operations.	
2. Release non-essential personnel.	
3. Report facility status to Corporate Management.	
<b>12 hours prior to hurricane's eye reaching landfall</b>	
1. Man Communications Center continuously.	
2. Report facility status to Corporate Management.	
<b>Post Storm Recovery Procedure</b>	
1. Initiate facility damage assessment.	
2. Report facility status to Corporate Management.	
3. Once access has been granted, the following processes should be surveyed for operational reliability prior to startup: <ul style="list-style-type: none"> <li>• Electrical panels and motors,</li> <li>• Instrument air system,</li> <li>• Emergency Shutdown System,</li> <li>• Tank and Vessel foundation and support (possible washouts), and</li> <li>• Check for dangerous wildlife and reptiles.</li> </ul>	

## Dearborn

### 2.4.4 Tornado Checklist

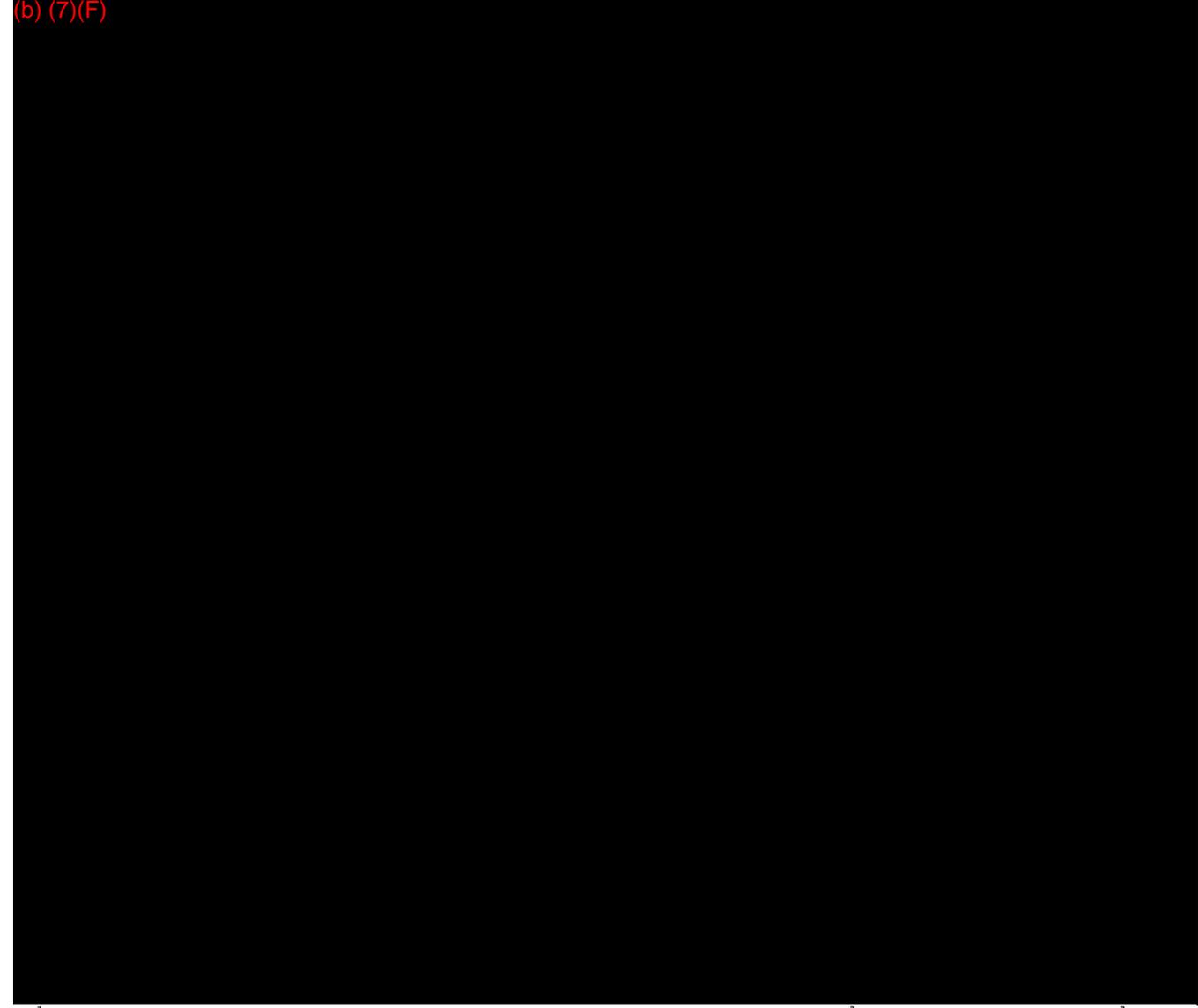
SPECIFIC RESPONSE ACTIONS	COMMENT
1. Activate the emergency alarm, if available, to alert all personnel.	
2. Notify and establish communications with the Manager.	

3. If time permits, engage emergency shutdown systems and/or manually isolate processes and equipment.	
4. Initiate evacuation procedures, if necessary ( <b>SECTION 2.6</b> ), to designated storm shelter.	
5. Account for personnel.	
6. Make appropriate internal notifications. ( <b>SECTION 3</b> )	
7. Conduct an inspection for residual safety hazards, such as: <ul style="list-style-type: none"><li>• Process safety/integrity, as necessary;</li><li>• Structural damage;</li><li>• Downed power lines; and</li><li>• Leaking natural gas, water and sewer lines.</li></ul>	
8. Conduct post-critique activities. ( <b>SECTION 8</b> )	

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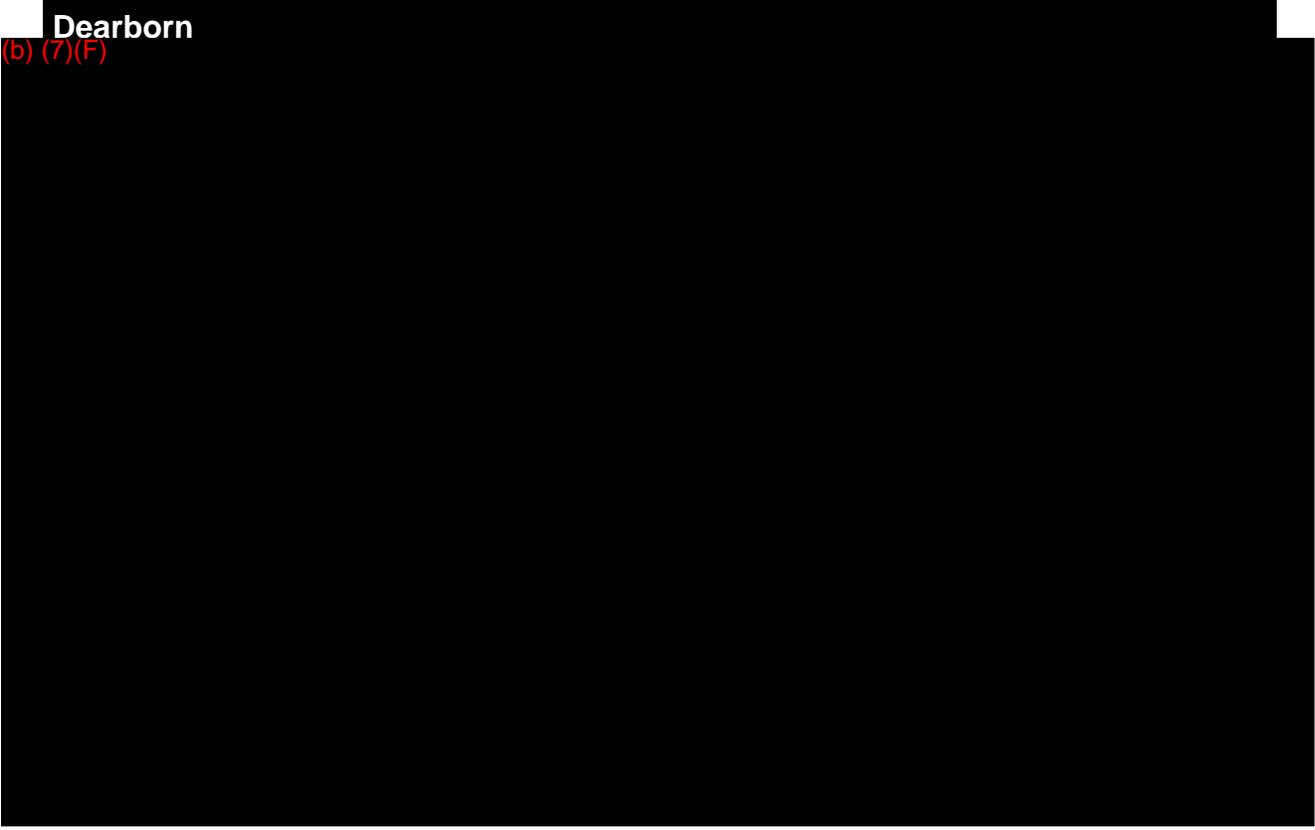
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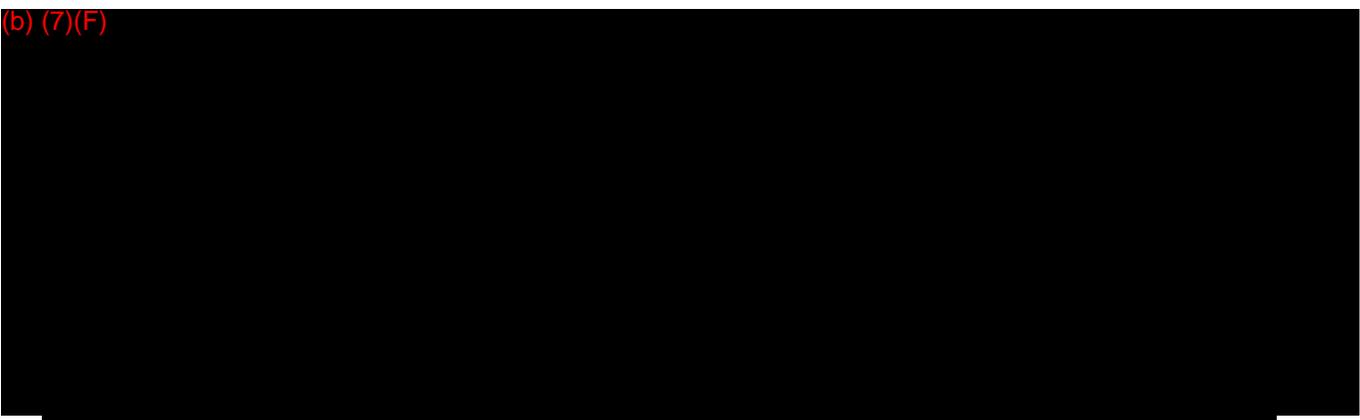


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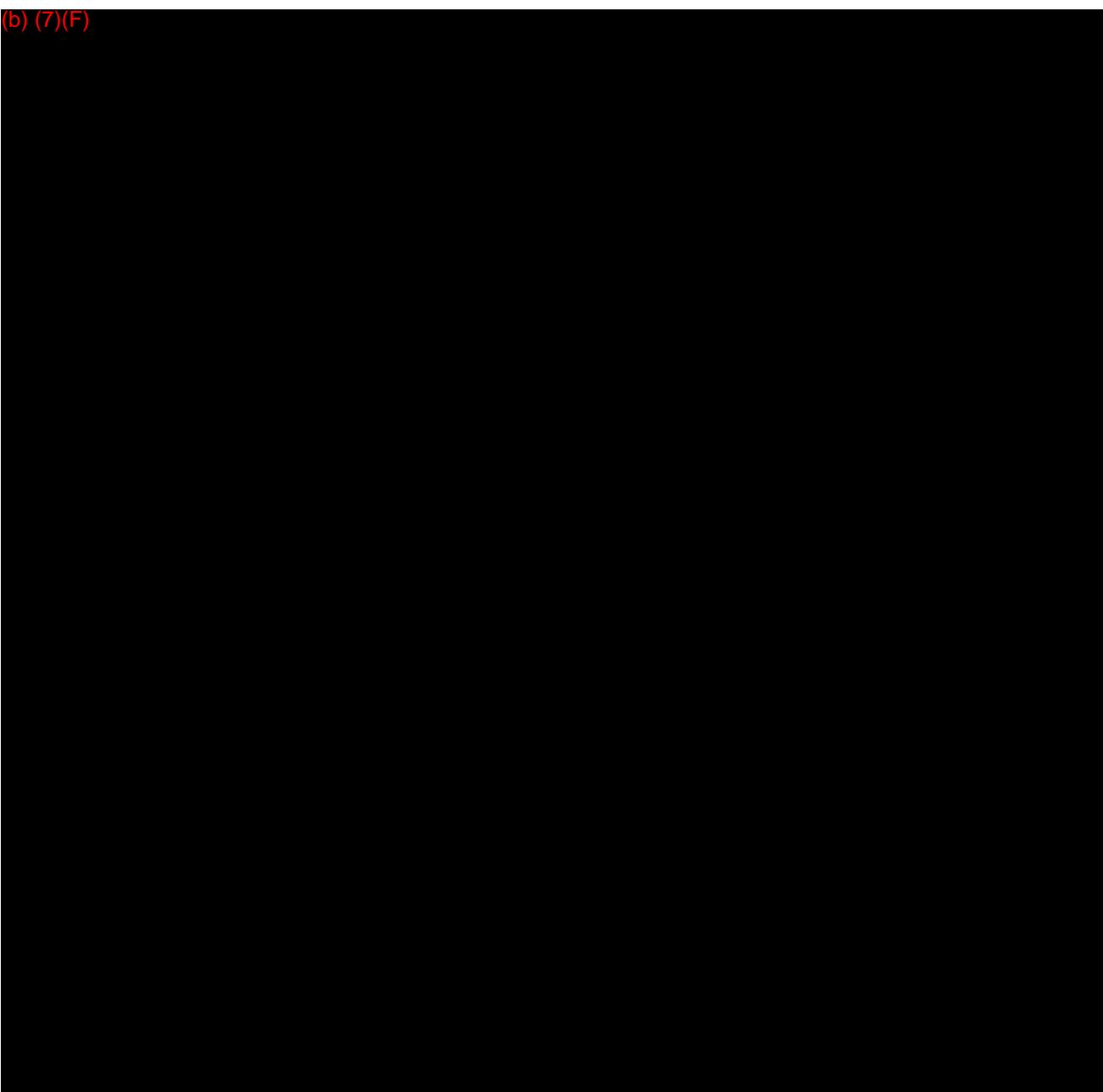


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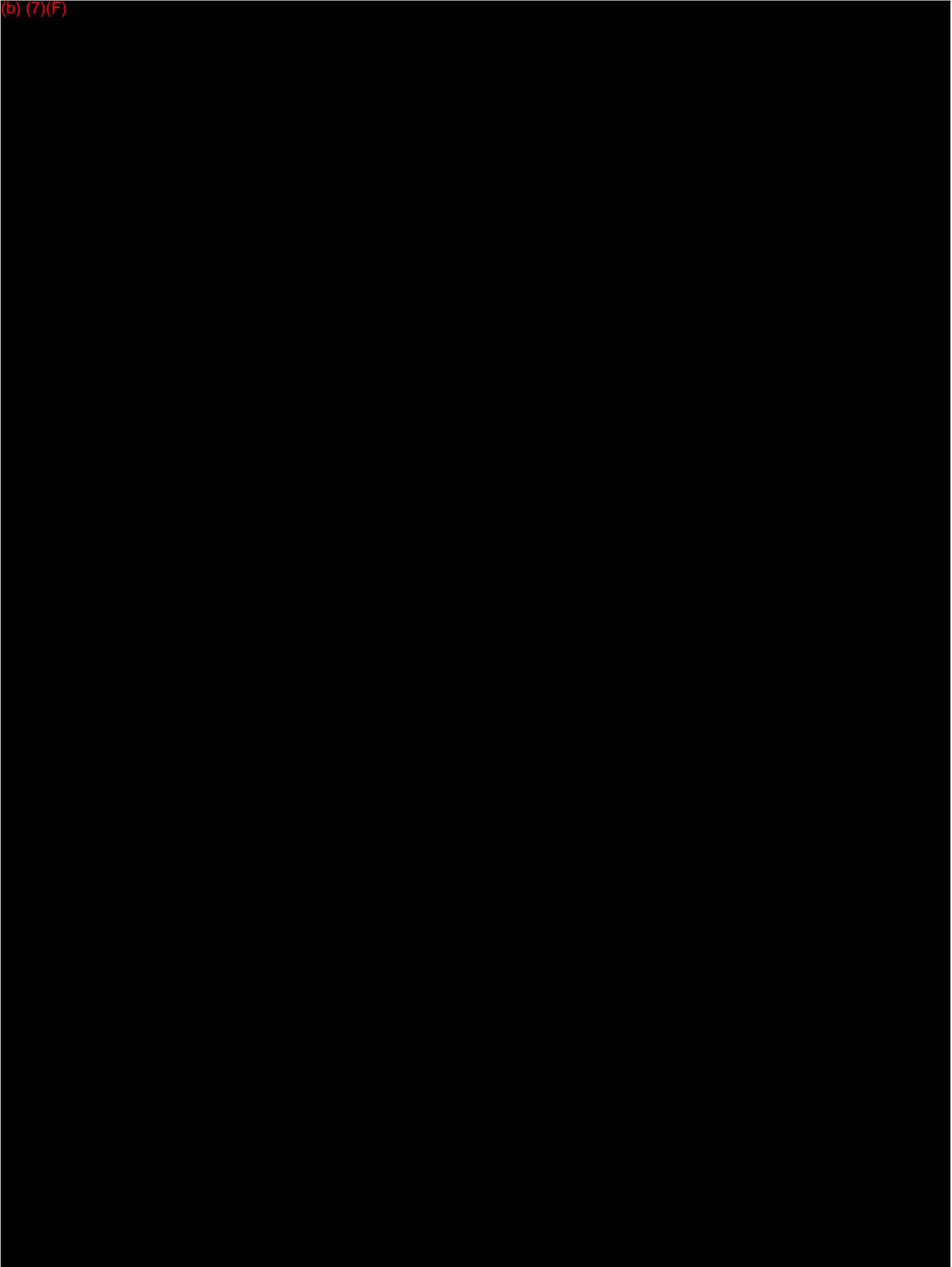


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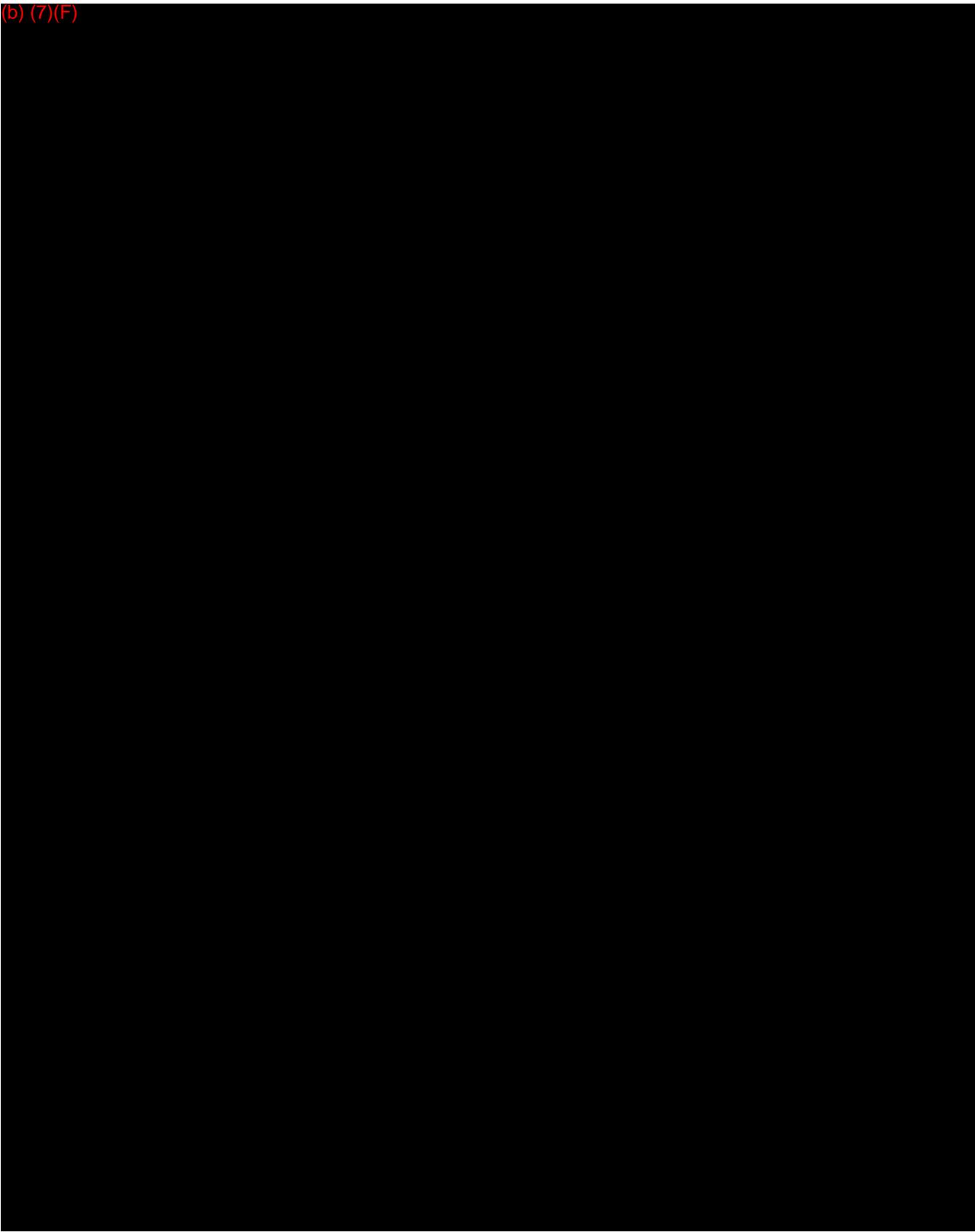
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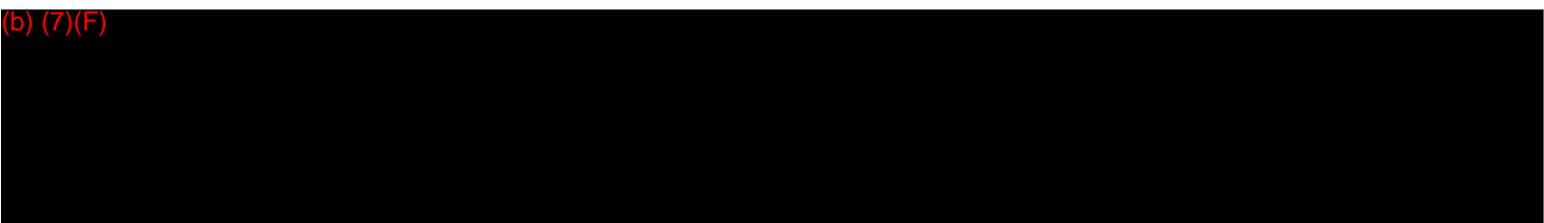
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**Dearborn**



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**Dearborn**

**2.6 EVACUATION**

**2.6.1 Evacuation Checklist**

SPECIFIC RESPONSE ACTIONS	COMMENTS
Request assistance from off-site agencies; convey Command Post's location.	
Assemble personnel at predetermined safe location: upwind/up gradient of release (regrouping area).	
Account for Company and contractor personnel.	

Assess casualties (number/type/location).	
Determine probable location of missing personnel.	
Secure site, establish re-entry point and check-in/check-out procedures.	
Develop list of known hazards (confined spaces, electrical hazards, physical hazards, vapors, oxygen deficiency, fire/explosion, etc.).	
Monitor situation (weather, vapors, product migration) for significant changes.	
Assist in developing a Rescue Plan, if necessary.	

## Dearborn

### 2.6.2 Evacuation Factors

EVACUATION FACTORS	
FACTOR	DESCRIPTION
Stored material location	<ul style="list-style-type: none"> <li>• Located in oil storage area.</li> <li>• Identified in Facility Plot Plan. (<b>FIGURE 1-5</b>)</li> </ul>
Spilled material hazards	<ul style="list-style-type: none"> <li>• Hazard is fire/explosion.</li> </ul>
Water currents, tides or wave conditions	<ul style="list-style-type: none"> <li>• Not Applicable</li> </ul>
Evacuation routes	<ul style="list-style-type: none"> <li>• Routes are summarized on Evacuation Plan Diagram. (<b>FIGURE C-3</b>)</li> <li>• Criteria for determining safest evacuation routes from facility may include: wind direction, potential exposure to toxins and carcinogens, intense heat, potential for explosion/fire, and blockage of planned route by fire, debris, or released liquid.</li> </ul>
Alternate evacuation routes	<ul style="list-style-type: none"> <li>• Alternate routes may exist; refer to Evacuation Plan Diagram. (<b>FIGURE C-3</b>)</li> </ul>
Injured personnel transportation	<ul style="list-style-type: none"> <li>• Emergency services can be mobilized to the Facility. (<b>FIGURE 3.1-4</b>)</li> </ul>
Alarm/Notification system location	<ul style="list-style-type: none"> <li>• Emergency Shut-Down Buttons and Fire Alarms: Emergency shut-down buttons are located on the office building and at the loading rack.</li> </ul>
Community evacuation plans	<ul style="list-style-type: none"> <li>• Company may request local police, county sheriff and/or state police assistance (<b>FIGURE 3.1-4</b>). Community evacuations are the responsibility of these agencies.</li> </ul>

Spill flow direction	<ul style="list-style-type: none"> <li>Northwest</li> <li>Identified in Facility drainage diagram. (<b>FIGURE C-2</b>)</li> </ul>
Prevailing wind direction and speed	<ul style="list-style-type: none"> <li>The prevailing wind direction is from the southwest.</li> <li>Because wind direction varies with weather conditions, consideration for evacuation routing will depend in part on wind direction.</li> </ul>
Emergency personnel/response equipment arrival route	<ul style="list-style-type: none"> <li>The primary arrival route for emergency response personnel / equipment and evacuation route is through its principle entrance/exit on Apollo Street. There are no alternate arrival routes at the Facility.</li> <li>Directions to nearest medical facility provided below.</li> </ul>

## Dearborn

### 2.6.2 Evacuation Factors, Continued

EVACUATION FACTORS	
FACTOR	DESCRIPTION
Centralized check-in area (Personnel assembly area)	<ul style="list-style-type: none"> <li>If evacuation of the terminal is required, all personnel will be directed to proceed to this main entrance gate on Inkster Street.</li> <li>Supervisor/Senior employee is responsible for head count.</li> </ul>
Mitigation Command Center location	<ul style="list-style-type: none"> <li>Initial Command Center located at The location of shelter is at the main office area. The location of the Mitigation Command Center, should the Terminal Office be inaccessible, would be the Facility storage pole barn.</li> <li>Mobile Command Posts may be established as necessary.</li> </ul>
Facility Shelter Location	<ul style="list-style-type: none"> <li>The location of shelter is at the main office area.</li> <li>Not a safe harbor from fires, explosions, vapor clouds, or other significant emergencies; however, may be used for temporary shelter from inclement weather.</li> </ul>
Directions to nearest medical facility	<p>Directions to The nearest hospital is Oakwood Hospital located at 18101 Oakwood Blvd., Dearborn, MI 48124 :</p> <ul style="list-style-type: none"> <li>From Inkster turn right on Ecorse Rd. Take I-94 East and exit 204. Turn left on Pelham Rd. Bear right on Rotunda Dr. Bear right on Oakwood Blvd. Turn right on Snow Ct.</li> </ul>

## Dearborn

**2.7 FIRE PRE PLANS**

<b>Name:</b>	Dearborn
(b) (7)(F)	Taylor MI 48180
(b) (7)(F)	
<b>Phone / Fax:</b>	(313) 291-3670 / (313) 291-3486
<b>DESCRIPTION:</b>	
<p>The sole petroleum product stored on site is Jet-A fuel. Products are delivered to the Terminal via interstate pipelines controlled by Company Pipeline operations in Tulsa, Oklahoma, Wolverine Pipeline operations and Sun Pipeline. At the terminal, products are loaded into tank trucks for local distribution and transferred via a dedicated pipeline to the Detroit Metropolitan Airport.</p> <p>Current staff consists of 4 operators. The Terminal Manager/QI is not based at the Terminal. Product is distributed to designated Terminal bulk storage tanks. Product is pumped from storage to gasoline and oil-tank-trucks through the Facility's one (1) loading racks and two (2) loading spots. Additives are received via truck and are injected at the load rack as trucks load product.</p> <p>Truck loading operations involve dispensing of product from the rack area into bottom loading tanker trucks. The loading process is controlled by the truck driver who observes from a Kiosk at the rack. These procedures have been developed to minimize potential for releases during these operations. Product is also distributed via the outgoing pipeline to the Detroit Metropolitan Airport. Loading Rate: 600 gpm (maximum). Truck Capacity: 9,000 gallons (maximum). "Dead Man" control switches are installed at all loading facilities. These switches will stop product flow if the operator releases contact with the transfer equipment, thus preventing the operator from walking away from a loading bay during product transfer operations.</p>	
<b>DATES AND TYPES OF SUBSTANTIAL EXPANSIONS (SEE APPENDIX C, FIGURE C-1)</b>	
<p>The Western portion of the terminal, consisting of non-operational property and warehouse buildings was divided and sold to others prior to 1990.</p> <p>1982 - Vapor Recovery Unit (VRU) installed</p> <p>1992 - Distribution Piping was upgraded to aboveground</p> <p>1996 - V.R.U. inactivated due to a conversion of the Terminal to solely a Jet-A facility</p> <p>1996 - Constructed a dike drainage system and dike capacity upgrade</p>	
<b>DRIVING DIRECTIONS:</b>	
<p>The terminal is just south of the Interstate 94 Ecorse Road exit. Go west on Ecorse Road approximately 0.25 mile to Inkster Road. Go south on Inkster 0.5 mile. The terminal driveway is on the west side just south of the railroad crossing.</p>	
<b>DISTANCE / DIRECTION TO NAVIGABLE WATER:</b>	
<p>There is no water in the immediate vicinity of the terminal. The Ecorse River is located approximately .5 mile north west of the terminal. The Ecorse flows approximately 10 miles east to the Detroit River. It is then about 15 miles to the entrance to Lake Erie.</p>	
<b>EVACUATION:</b>	
<p>The terminal is in a suburban industrial park area. There is good spacing around the terminal. The nearest residential areas are at least 0.5 mile distant.</p>	

**Dearborn****2.7 FIRE PRE PLANS, CONTINUED**

<b>NOTIFICATIONS:</b>		
<b>Affiliation</b>	<b>Phone Number</b>	<b>Time Contacted</b>
<b>Company Personnel</b>		
Corporate Security	(630) 420-4400* (Office)	
BP Tulsa Pipeline Control Center Resources	888-885-7222, ext 4457 (Office) (918) 491-3509 (Office) (800) 548-6482 (Office)	
Whiting Refinery Resources	(219) 473-7700 (Office)	
Quality & Tech Services - Hotline - Business Hours	(800) 841-5255 (Office) (800) 237-9436 Non-Business Hours (Office)	
BP Notification Center (BPNC)	(800) 321-8642* (Office) (630) 961-6965 (Fax) (630) 961-6200* (Office)	
Ron Bozarth Emergency Response Coordinator - Emergency Preparedness Crisis & Management Advisor ? Business Support Team	(630) 836-6245 (Office) (b) (6) (630) 386-5105 (Mobile)	
Wayne Carr Fleet HSE Team Lead	(630) 836-6242 (Office) (b) (6) (219) 617-4829 (Mobile)	
Marc Devine Human Resources	(630) 836-6286 (Office) (b) (6) (630) 240-2007 (Mobile)	
Ron Dix HSSE Advisor (DOT)	(262) 367-7148 (Office) (b) (6) (262) 337-0024 (Mobile)	
Al Fauley HSSE Advisor - (BST - DOT)	(630) 836-5466 (Office) (b) (6) (630) 853-2776 (Mobile) (800) 652-9760 (Pager)	
Gary Franzen Eng/ROW Director, Alternate	(630) 434-6559 (249) (Office) (b) (6) (630) 247-2951 (Mobile)	

Kristen Hancock HSSE Advisor (Environmental)	(630) 836-5861, (630) 836-5871 (Office) (b) (6) (216) 390-0314 (Mobile)	
Margaret Laney Government & Public Affairs (GPA)	(630) 821-3203 (Office) (b) (6) (630) 542-0255 (Mobile) (800) 652-9760 (Pager)	
Jeff Schimmel Michigan Area Manager	(630) 420-5517 (Office) (b) (6) (630) 815-4138 (Mobile)	
Debbie Schmitz Health Services Manager	(630) 836-5467 (Office) (b) (6) (815) 546-0915 (Mobile) (877) 402-0072 (Pager)	

**Dearborn****2.7 FIRE PRE PLANS, CONTINUED**

NOTIFICATIONS:		
Affiliation	Phone Number	Time Contacted
<b>Company Personnel</b>		
Tom Tetlak Claims Attorney	(630) 821-2401 (Office) (b) (6) (800) 759-8888 PIN# 9305622 (Pager)	
W.R. (Bill) Watts Safety	(708) 749-5074 (Office) (b) (6) (312) 218-8119 (Mobile)	
Mike Liebman District Manager	(630) 420-5625 (Office) (b) (6) (630) 217-4057 (Mobile)	
Alan Pyne Dearborn Terminal Manager	(313) 291-3670 (Office) (b) (6) (313) 515-2423 (Mobile)	
William F. (Bill) Fenton Fleet Manager Response Personnel	(419) 537-9540 x211 (Office) (b) (6) (419) 356-4545 (Mobile)	

**Dearborn****2.7 FIRE PRE PLANS, CONTINUED**

NOTIFICATIONS

<b>Initial</b>		
National Response Center (NRC)	(800) 424-8802 (202) 267-2675 (202) 267-1322 Fax	
<b>Recommended</b>		
<b>Federal Agencies</b>		
Occupational Safety And Health Administration (OSHA) - San Diego	(800) 321-6742 (619) 767-2280	
U.S. Army Corps of Engineers Detroit, MI	(313) 226-6413	
U.S. Coast Guard - Sector Detroit	(313) 568-9580	
U.S. Dept. of Transportation (DOT) Office of Pipeline Safety (Notified via NRC)	(800) 424-8802	
U.S. EPA Region V (IL, IN, MI, MN, OH, WI) 77 W. Jackson Blvd Chicago, IL, 60604	800-621-8431 (within region) (312) 353-2000 (312) 353-2318*	
U.S. Fish and Wildlife Service	(413) 253-8200	
U.S. Fish and Wildlife Service - Fort Snelling, MN	(612) 713-5335 (612) 713-5336 (612) 854-5900	
<b>State Agencies</b>		
Michigan Department of Environmental Quality - Environmental Response Division (SERC)	(734) 953-8905 (734) 953-0243	
Michigan State Fire Marshall	(248) 280-1020	
Michigan State Police	(248) 584-5740	
<b>Local Agencies</b>		
Wayne County (LEPC)	(734) 942-5289	
<b>Police Departments</b>		
Taylor Police Department	734-287-6611	
<b>Fire Departments</b>		
Taylor Fire Department	911 (734) 374-1355	

Emergency Medical Services		
Ambulance	911 (734) 374-1355	

<b>Dearborn</b>		
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## 2.7 FIRE PRE PLANS, CONTINUED

NOTIFICATIONS		
<b>Recommended</b>		
Emergency Medical Services		
Heritage Hospital	(313) 295-5000	
USCG Classified OSRO's		
Marine Pollution Control Corporation Detroit, MI	(313) 849-2333* (800) 521-8232 (313) 849-1623 FAX	
Non-Classified OSRO's		
Inland Waters, Inc.	(800) 992-9118* (313) 841-5800	
Service Providers		
BP Pipeline Office	(313) 291-7610	
BP Tulsa Control Center	(918) 660-4456	
Buckeye Pipeline	(484) 232-4336	
CHEMTREC - Washington, D.C.	(800) 424-9300	
Sun Pipeline	(610) 678-5986	
Wolverine Pipeline	(303) 946-7171	
Radio Stations		
WWJ Local Radio	(248) 945-9950	
Television Stations		
Local TV Station (TV 50) 62	(248) 350-5050	
Weather		
National Weather Service (Recorded Forecasts)	(517) 321-7576	
Waste Management		

Green America (Hannibal, MO)	(573) 221-1740	
Heritage Environmental - Indianapolis, IN	(317) 243-0811	
Heritage Environmental Service - Covanta (Indianapolis, IN)	(973) 882-7229	

### Dearborn

## 2.7 FIRE PRE PLANS, CONTINUED

NOTIFICATIONS		
<b>Recommended</b>		
<b>Waste Management</b>		
Heritage Environmental Service (Roachdale)	(765) 435-2704	
Heritage Environmental Service/WTI (East Liverpool, OH)	(330) 385-7335	
Usher (Detroit, MI)	(313) 834-7055	
<b>Wildlife Rehabilitation</b>		
International Bird Rescue - Fairfield, CA	(707) 207-0380	
<b>Water Intakes</b>		
Detroit Water Board Security	(313) 224-1933 (313) 267-7401	
Taylor, MI Water & Sewer Dept.	(734) 287-6611	

### Dearborn

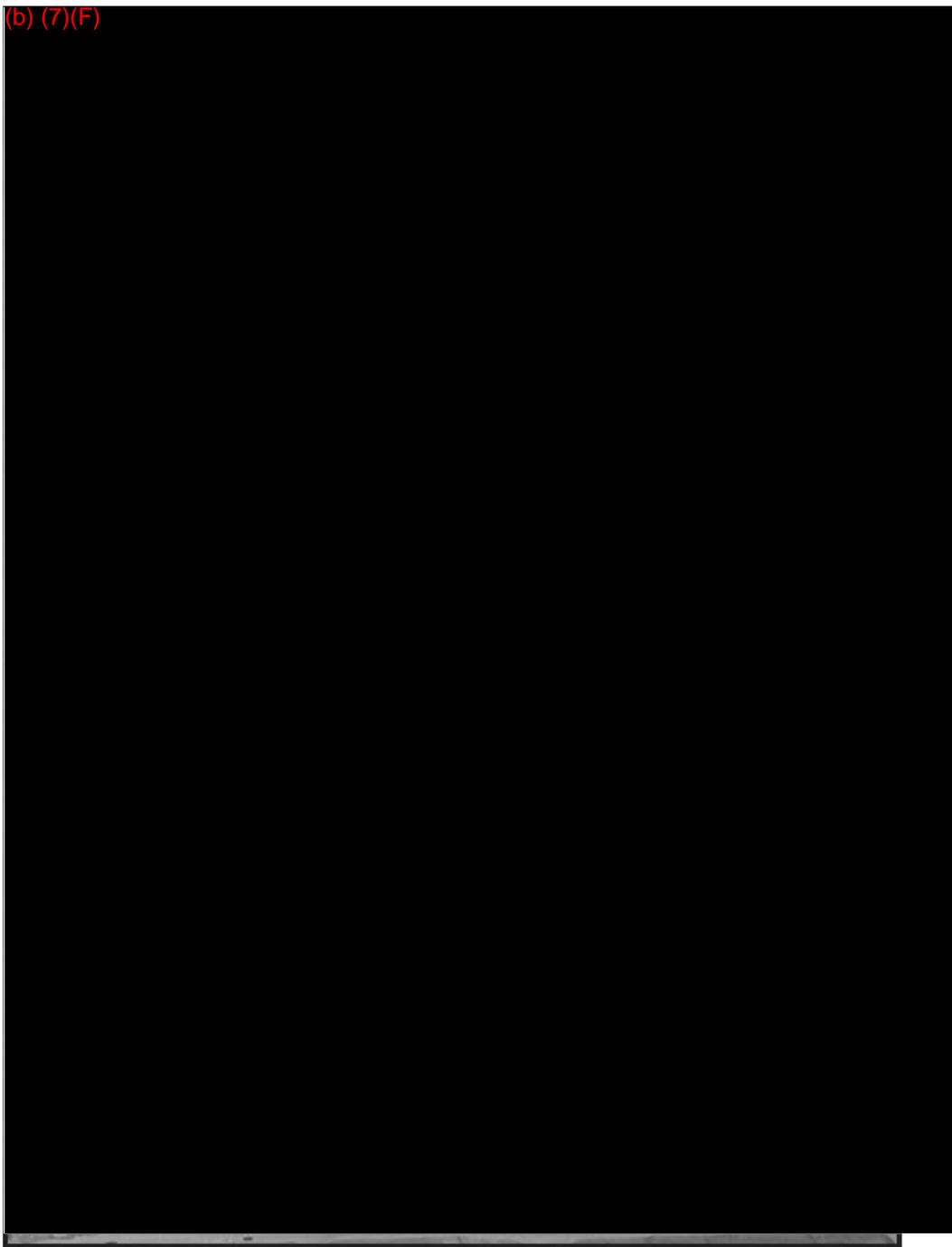
## 2.7 FIRE PRE PLANS, CONTINUED

Area Firefighting Resources		
Company	Phone Number	Equipment
BP Toledo OH (Oregon) Refinery Oregon, OH	(419)698-6310 (419)698-6200 (419)698-6451 (419)698-6600	Part of the Northwest Ohio and Michigan Mutual Aid District. Includes BP and Sunoco area refineries. Available equipment includes 2-7000 gallon foam trailers, 6000 gal. of Universal Gold, several 1000-4000 gpm nozzles, 1-3000 gpm engine BP REFINERY EQUIPMENT includes 2-6000 gal. foam trailers, 3 engines, 750 gal AFFF 3% on trucks; SUNOCO REFINERY FOAM - 275 gal. Universal Gold 3% (on hydrocarbonpolar solvents); 90 gal. Aer-OFoam

		gold 3% regular protein; 100 gal. 6% HAZMAT (acid); 9,850 gal. XL-3Fluorprotein 3% (1,000 gal.; 100 gal. HAZMAT (alkaline) on trailer); 25 gal Ansilite 3x3 AR-AFFF 3%(on hydro-carbons); 5 gal. Ansul 6% regular protein; 50 gal. Light Water ATC 3/6%
Taylor MI Fire Department Taylor, MI	734-374-1355	The city of Taylor, Michigan has 3 stations and 63 firefighters. Station 2 covers this area. All three would be dispatched in a major incident. The three stations each have a 1500 gpm pumper plus there is one backup. Fire department has a 100 foot aerial with a 2000 gpm pump. The fire department carries 125 gal. on the pumper trucks. The fire department also has a 500 gallon trailer of AFFF.
Williams Fire and Hazard Control Mauriceville, TX	(409) 727- 2347 (281) 999- 0276	Williams specializes in petroleum and tank farm fire fighting and as a fire equipment / foam vendor has access to a large amount of foam and the equipment needed to deliver it to the tank surface.
<b>Dearborn</b>		

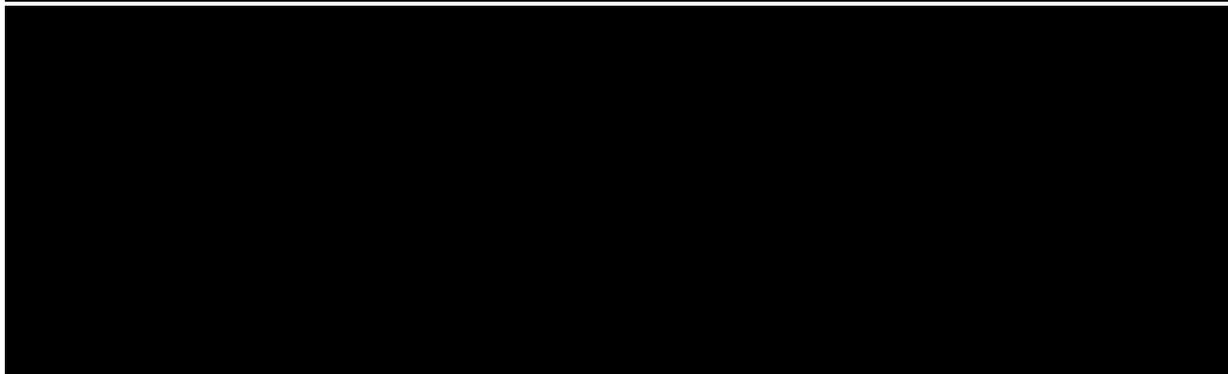
**2.7 FIRE PRE PLANS, CONTINUED**

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**FIRE PRE - PLAN**

Truck Rack





### Operational Description

This is a standard product loading rack with 2 bays. It is used 24/7 365 days by approved drivers with card key access. (b) (7)(F)

Since the site only handles Jet A fuel the VRU has been permanently idled.

### Fire Protection System / Equipment

Portable and wheeled fire extinguishers are the only protection available. Public water is available. It supplies several hydrants at the terminal.

### Electrical Shutdown Procedure

Emergency shutdown switches are provided at the rack and operations building. These shut down the rack and pumps but do not provide a local alarm. Power to the entire terminal can also be shut off at the main power supply if necessary. This is addressed by site emergency procedures.

### Description of Drainage

The loading rack area is curbed and is provided with containment for an entire truck compartment. The system is connected to an oil water separator with a 9000 gallon holding capacity.



### Fire Fighting Tactics

There is no fire protection for the loading rack. (The VRU unit is idle and no longer used.) Upon discovery of a fire employees should immediately notify the public fire department, activate the emergency shutdown, and ensure all fuels and power are shut off. Using the public water supply, pumper trucks, terminal and fire department foam supplies, the local fire department's resources should be adequate for a truck rack fire.

### Other

The VRU is permanently idled.



**FIRE PRE - PLAN**

Tank 6

**PRODUCT INFORMATION**

Product Name	Jet Fuel
NFPA Classification	Class II liquid
Vapor Pressure	0.029 psia @ 100°F
Flash Point	100-150°F
Upper Explosive Limit	5.0%
Lower Explosive Limit	1.7%
Vapor Density	Not available
IDLH ppm.	
Auto Ignition Temp	410°F
Water Solubility	Negligible
API Gravity	
Physical State	liquid
Storage Temperature	
Specific Gravity	0.75-0.84 at 15 deg C (water = 1)

**FOAM REQUIREMENTS**

Parameters	Full Surface Fire
Foam System	Manual ?
Foam Type	AFFF ?
Foam Percentage	3 ?
Foam Solution Application Rate (Gallons Per Minute)	0.16
Minimum Application Duration (Minutes)	50

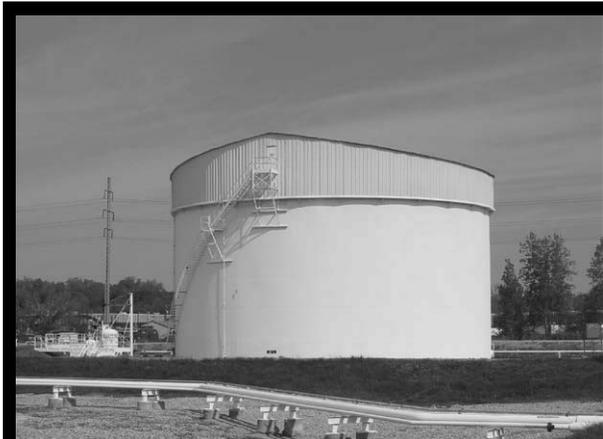
**SITE CONSIDERATIONS**

Other

Tanks are well spaced. There is good access to the site.

Foam/Water Solution Flow Rate (Gallons Per Minute)	1521
Foam Concentrate Flow Rate (Gallons Per Minute)	46
Total Foam Concentrate Required (Gallons)	2281
Total Water Required (Gallons)	73755

 <b>FIRE PRE - PLAN</b>	Tanks 1 and 2
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**PRODUCT INFORMATION****SITE CONSIDERATIONS**

Product Name	Jet Fuel
NFPA Classification	Class II liquid
Vapor Pressure	0.029 psia @ 100°F
Flash Point	100-150°F
Upper Explosive Limit	5.0%
Lower Explosive Limit	1.7%
Vapor Density	Not available
IDLH ppm.	
Auto Ignition Temp	410°F
Water Solubility	Negligible
API Gravity	
Physical State	liquid
Storage Temperature	
Specific Gravity	0.75-0.84 at 15 deg C (water = 1)

**Other**

Tanks are well spaced. There is good access to the site.

FOAM REQUIREMENTS	
Parameters	Full Surface Fire
Foam System	Manual ?
Foam Type	AFFF ?
Foam Percentage	3 ?
Foam Solution Application Rate (Gallons Per Minute)	0.16
Minimum Application Duration (Minutes)	50
Foam/Water Solution Flow Rate (Gallons Per Minute)	1018
Foam Concentrate Flow Rate (Gallons Per Minute)	31
Total Foam Concentrate Required (Gallons)	1527
Total Water Required (Gallons)	49373

 <b>FIRE PRE - PLAN</b>		Tank 3
		
PRODUCT INFORMATION		SITE CONSIDERATIONS
Product Name	Jet Fuel	Other
NFPA Classification	Class II liquid	Tanks are well spaced. There is good access to the site.
Vapor Pressure	0.029 psia @ 100°F	
Flash Point	100-150°F	
Upper Explosive Limit	5.0%	

Lower Explosive Limit	1.7%
Vapor Density	Not available
IDLH ppm.	
Auto Ignition Temp	410°F
Water Solubility	Neglibible
API Gravity	
Physical State	liquid
Storage Temperature	
Specific Gravity	0.75-0.84 at 15 deg C (water = 1)

**FOAM REQUIREMENTS**

Parameters	Full Surface Fire
Foam System	? Manual
Foam Type	? AFFF
Foam Percentage	? 3
Foam Solution Application Rate (Gallons Per Minute)	0.16
Minimum Application Duration (Minutes)	50
Foam/Water Solution Flow Rate (Gallons Per Minute)	616
Foam Concentrate Flow Rate (Gallons Per Minute)	18
Total Foam Concentrate Required (Gallons)	924
Total Water Required (Gallons)	29868

**FIRE PRE - PLAN**

Tank 4

**PRODUCT INFORMATION**

Product Name	Jet Fuel
NFPA Classification	Class II liquid
Vapor Pressure	0.029 psia @ 100°F
Flash Point	100-150°F
Upper Explosive Limit	5.0%
Lower Explosive Limit	1.7%
Vapor Density	Not available
IDLH ppm.	
Auto Ignition Temp	410°F
Water Solubility	Negligible
API Gravity	
Physical State	liquid
Storage Temperature	
Specific Gravity	0.75-0.84 at 15 deg C (water = 1)

**FOAM REQUIREMENTS**

Parameters	Full Surface Fire
Foam System	Manual
Foam Type	AFFF
Foam Percentage	3
Foam Solution Application Rate (Gallons Per Minute)	0.16
Minimum Application Duration (Minutes)	50

**SITE CONSIDERATIONS**

Other

Tanks are well spaced. There is good access to the site.

Foam/Water Solution Flow Rate (Gallons Per Minute)	616
Foam Concentrate Flow Rate (Gallons Per Minute)	18
Total Foam Concentrate Required (Gallons)	924
Total Water Required (Gallons)	29868

 <b>FIRE PRE - PLAN</b>	Dearborn
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### FIRE FIGHTING TACTICS

#### Full Surface Fire

- Local resources are not adequate for a full surface fire. Contact Williams Fire and Hazard Control. Inform them of tank size, contents, and available fire-fighting equipment. Williams will need to determine what additional equipment they will need to bring.
- Request that local officials request a response from the local mutual aid group and all available foam in the area. Although the local fire departments are not prepared to fight a full surface fire they can provide support service until Williams Hazard and Control arrives.
- Have fire department apply water to the shell of exposed tanks. Cooling water should be used judiciously as described in the NFPA video Fighting Petroleum Storage Fires. Cooling water for the burning tank is not recommended - uneven cooling can distort the tank. Excessive use of cooling water can also flood the dikes and deplete water supplies.

#### Rim Seal Fire

- There are no tanks with floating roofs that are exposed. All are internal floaters in a cone roof tank or have weather covers. ?

#### Sunken External Floating Roof Non-Fire

- There are no external floating roof tanks without covers.

#### Dike Fire

- It is unlikely existing fire department equipment and foam is adequate for a dike fire at this facility. Per the BP Tank Fire Response Guidelines for a dike fire, apply foam at a rate capable of providing a density of .10gpm/ft<sup>2</sup> for 60 minutes. The largest dike is approximately 250 x 300 ft. Assuming the fire covers 25% of the dike area (minus the tank area), the fire area would be 16,000 ft<sup>2</sup> - requiring a foam/water solution flow rate of approx 1600 gpm and 2900 gallons of 3% foam concentrate. ?
- Recommend that the fire department position monitor nozzles to apply water to the shell of the exposed tank(s) as necessary. Cooling water should be used judiciously as described in the NFPA video Fighting Petroleum Storage Fires. ?
- Recommend that the fire department utilize monitor nozzles and mutual aid foam supply to attack a small dike fire. The 625 gallons of 3% concentrate available would be adequate for a 3500 square foot spill. ?
- Have the fire department attack any grass fires that may be touched off by the dike fire to prevent them from spreading. ?

#### Notification Procedures and Common Firefighting Tactics

- Notify the City of Taylor, MI Fire Department. Initiate internal and external BP notifications, including the pipeline delivery companies and the Tulsa Control Center. Verify tank contents and obtain current MSDS sheets. Have the pipeline company discontinue all pumping of products into and out of terminal unless otherwise instructed. ?

Contact Williams Fire and Hazard Control. Inform them of tank size, contents, and available fire-fighting equipment. Williams will need to determine what additional equipment they will need to bring to aid in the fire fighting effort. ?

- Contact the BP Toledo, OH refinery fire department. Inform them of tank size, contents, and available fire-fighting equipment. ?

- Ensure that local BP personnel are available to support emergency personnel as needed. ?



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**FIRE PRE - PLAN**

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**TANK / RACK INFORMATION****Water Source Description (Firefighting/Cooling)**

- Public water is available. There is an 8 inch connection to the public water system supplying several hydrants located throughout the terminal and tank farm. Details of the line sizes, valve locations, and overall arrangement are not available. Nearby water test data indicates the local water pressure is 55-60 psi. This drops to 40-45 psi while flowing 1500-2500 gpm, depending on the test location. This would be adequate for fire department pumper trucks to supply semi-fixed foam systems and exposure protection.

**External Exposures**

- There are no significant exposures to the terminal. The site is in a light industrial park. The closest facility is vacant. ?



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SECTION 3

Last Revised: May 12, 2008

**NOTIFICATIONS / TELEPHONE NUMBERS**

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3.1 Emergency Information and Notification Procedures**Figure 3.1-1 - Emergency Notification Flow Chart**Figure 3.1-2 - Spill / Incident Telephonic NoticeFigure 3.1-3 - Internal Notifications and Telephone NumbersFigure 3.1-4 - External Notifications and Telephone NumbersFigure 3.1-5 - Reporting Requirements**Dearborn**

### 3.1 EMERGENCY INFORMATION AND NOTIFICATION PROCEDURES

The notification sequence for a spill is as follows:

- Facility personnel will identify and control the source of a spill, if safe to do so, then will notify the Supervisory Personnel.
- The Qualified Individual will conduct notifications as illustrated in the Emergency Notification Flow Chart (**FIGURE 3.1-1**).

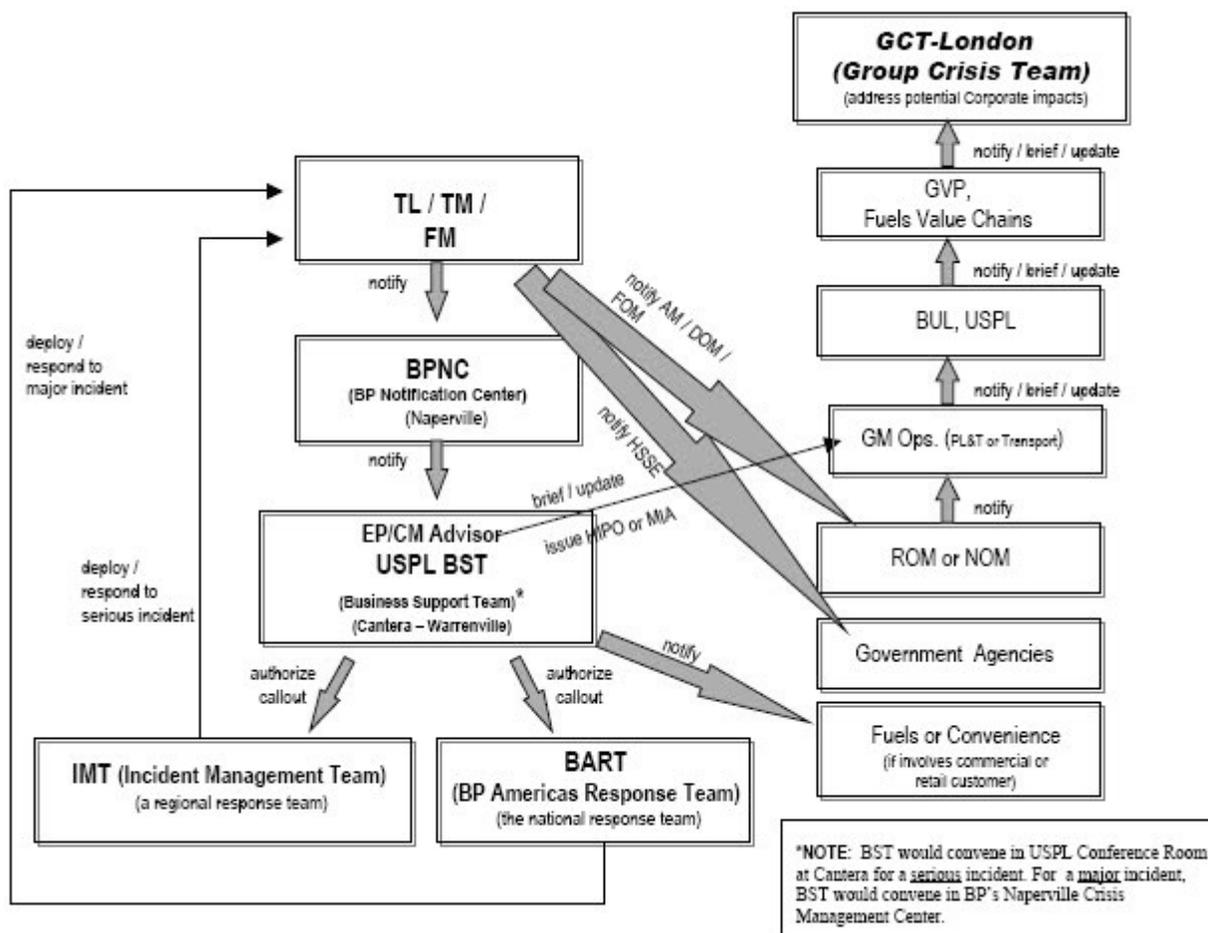
The priority of actions and response procedures will depend upon actual circumstances and will be determined by the Incident Commander.

This section also contains the following:

- **FIGURE 3.1-2** provides a notification summary and documentation form to assist in documenting notifications.
- **FIGURE 3.1-3** provides the Internal Notifications and Telephone Numbers list.
- **FIGURE 3.1-4** provides the External Notifications and Telephone Numbers list.

## Dearborn

FIGURE 3.1-1 - EMERGENCY NOTIFICATION FLOW CHART



**Dearborn****FIGURE 3.1-2 - SPILL / INCIDENT TELEPHONIC NOTICE****SPILL / INCIDENT TELEPHONIC NOTICE**

**National Response Center - 1-800-424-8802**  
**California Office of Emergency Services 1-800-852-7550**

**USCG 33 CFR 153.203**

**BP Report No.** \_\_\_\_\_

**EPA 40 CFR Part 110.10**  
**DOT 49 CFR Part 171.15**

Report received from: \_\_\_\_\_ Time/date received: \_\_\_\_\_  am  pm Date \_\_\_\_\_

**NOTE: IT IS NOT NECESSARY TO WAIT FOR ALL INFORMATION BEFORE CALLING NRC. FIRST CALL MUST BE MADE AT THE EARLIEST PRACTICABLE MOMENT FOLLOWING THE DISCOVERY OF THE RELEASE.**

**CONDITIONS** (yes to any requires notification)

Sheen on water  yes  no Fire  yes  no Explosions  yes  no  
 Hospitalization or death  yes  no \$50,000 or more  yes  no \$50,000 includes property damage (company and private), value of lost product, repairs, cleanup and remediation \$ \_\_\_\_\_

**INFORMATION TO REPORT**

Company: <b>BP Pipeline (North America) Inc.</b>	1300 Pier B St.
	Long Beach, CA 90813
	562/499-2200
Reporter:	
Telephone Number (24 Hour):	
Leak Location: (pipeline name/number)	
(address or distance from town, directions	
from major intersections, latitude, longitude,	
mile post or river mile, section,	
township, range, etc.)	
Land Owner (Name and Address):	
	County:
	State:
Name of body of water, river it flows to:	
Product spilled:	_____ Amount _____ bbls
Amount of Product:	Lost: _____ Recovered: _____ bbls

Quantity in water:	
Storage Tank Container Type:	<input type="checkbox"/> DOT <input type="checkbox"/> Intrastate <input type="checkbox"/> Gathering <input type="checkbox"/> EPA <input type="checkbox"/> USCG
Tank/Line Size:	Above Ground _____ Below Ground _____
Time Leak Discovered:	
Cause of Leak: (Do not give unless absolutely sure)	_____ <input type="checkbox"/> am <input type="checkbox"/> pm Date: _____
Actions taken to Correct or Mitigate Incident:	
Status of cleanup:	
Agencies notified:	
(See Checklist for Response Zone)	
(EPA, State, USCG, Other, or Desc.)	

**IMPACT**

Number of:                      Fatalities \_\_\_\_\_ Were there                       yes  no      No. of evacuations  
Injuries \_\_\_\_\_                      evacuations?                      \_\_\_\_\_  
Was there any                       yes  no      Damage in \$                      Items Damaged: \_\_\_\_\_  
damage?                      \_\_\_\_\_

**WEATHER CONDITIONS**

Temperature \_\_\_\_\_ Humidity \_\_\_\_\_ Wind Direction \_\_\_\_\_ Wind Speed \_\_\_\_\_  
Soil Type-for liquids only                       Sand  Silt  Clay Depth of Soil Contamination:  
(Check one)

**INFORMATION TO OBTAIN FROM NRC**

Comments or questions:	
Name of agency personnel reported to:	Report no.:
(Date)	(Signed)

**Dearborn**

FIGURE 3.1-3 - INTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS

\*24 Hour Number

FACILITY RESPONSE TEAM		
NAME/TITLE	PHONE NUMBER	RESPONSE TIME (hours)
Mike Liebman District Manager <b>Qualified Individual</b>	(630) 420-5625 (Office) (b) (6) (630) 217-4057 *(Mobile)	6
Alan Pyne Dearborn Terminal Manager <b>Qualified Individual</b>	(313) 291-3670 (Office) (b) (6) (313) 515-2423 *(Mobile)	0.50
William F. (Bill) Fenton Fleet Manager	(419) 537-9540 x211 (Office) (b) (6) (419) 356-4545 *(Mobile)	1

Refer to **APPENDIX A, FIGURE A.2-3** for personnel training records**Dearborn**FIGURE 3.1-3 - INTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS,  
CONTINUED

\*24 Hour Number

EMERGENCY RESPONSE PERSONNEL AND BUSINESS UNIT NOTIFICATIONS						
NAME/TITLE	PHONE NUMBER	RESPONSE TIME (hours)	ICS POSITION	RESPONSE TRAINING TYPE <sup>1</sup>		
				1	2	3
Ron Bozarth ?	(630) 836-6245 (Office) (b) (6) (Home) (630) 386-5105 *(Mobile)		Emergency Response Coordinator - Emergency Preparedness Crisis & Management Advisor ? Business Support Team			
Jeff Schimmel Michigan Area Manager ?	(630) 420-5517 (Office) (b) (6) (Home) (630) 815-4138 *(Mobile)					
Tom Tetlak Claims Attorney ?	(630) 821-2401 (Office) (b) (6) (Home) (800) 759-8888 PIN# 9305622 (Pager)					
Wayne Carr Fleet HSE Team Lead ?	(630) 836-6242 (Office) (b) (6) (Home) (219) 617-4829 *(Mobile)					
Kristen Hancock HSSE Advisor (Environmental) ?	(630) 836-5861, (630) 836-5871 (Office) (b) (6) (216) 390-0314 *(Mobile)			x		x

W.R. (Bill) Watts Safety ?	(708) 749-5074 (Office) (b) (6) (Home) (312) 218-8119 *(Mobile)				
Ron Dix HSSE Advisor (DOT) ?	(262) 367-7148 (Office) (b) (6) (Home) (262) 337-0024 *(Mobile)				

### EMERGENCY RESPONSE TRAINING TYPE<sup>1</sup>

There are three different types of training described below including HAZWOPER, OPA, and Qualified Individual/Incident Command Training. An "x" has been placed in the applicable columns (type 1, 2, or 3) in the table above for the type of training completed by each individual.

TYPE <sup>1</sup>	DESCRIPTION
1	29 CFR 1910.120 HAZWOPER
2	OPA (Training Reference for Oil Spill Response) All Facility Personnel, SMT, QI Components
3	Qualified Individual/Incident Command Training

NOTE: Refer to **APPENDIX A** for training dates.

### Dearborn

FIGURE 3.1-3 - INTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS,  
CONTINUED

\*24 Hour Number

EMERGENCY RESPONSE PERSONNEL AND BUSINESS UNIT NOTIFICATIONS						
NAME/TITLE	PHONE NUMBER	RESPONSE TIME (hours)	ICS POSITION	RESPONSE TRAINING TYPE <sup>1</sup>		
				1	2	3
Al Fauley HSSE Advisor - (BST - DOT) ?	(630) 836-5466 (Office) (b) (6) (630) 853-2776 *(Mobile) (800) 652-9760 (Pager)					
	(630) 836-5467 (Office)					

Debbie Schmitz Health Services Manager ?	(b) (6) (Home) (815) 546-0915 *(Mobile) (877) 402-0072 (Pager)				
Marc Devine Human Resources ?	(630) 836-6286 (Office) (b) (6) (Home) (630) 240-2007 *(Mobile)				
Gary Franzen ?	(630) 434-6559 (249) (Office) (b) (6) (Home) (630) 247-2951 *(Mobile)		Eng/ROW Director, Alternate		
Corporate Security ?	(630) 420-4400* (Office)				
Margaret Laney Government & Public Affairs (GPA) ?	(630) 821-3203 (Office) (b) (6) (Home) (630) 542-0255 *(Mobile) (800) 652-9760 (Pager)				
BP Tulsa Pipeline Control Center ?	888-885-7222, ext 4457 (Office) (918) 491-3509 (Office) (800) 548-6482 (Office)		Resources		

### EMERGENCY RESPONSE TRAINING TYPE<sup>1</sup>

There are three different types of training described below including HAZWOPER, OPA, and Qualified Individual/Incident Command Training. An "x" has been placed in the applicable columns (type 1, 2, or 3) in the table above for the type of training completed by each individual.

TYPE <sup>1</sup>	DESCRIPTION
1	29 CFR 1910.120 HAZWOPER
2	OPA (Training Reference for Oil Spill Response) All Facility Personnel, SMT, QI Components
3	Qualified Individual/Incident Command Training

NOTE: Refer to **APPENDIX A** for training dates.**Dearborn**FIGURE 3.1-3 - INTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS,  
CONTINUED

\*24 Hour Number

EMERGENCY RESPONSE PERSONNEL AND BUSINESS UNIT NOTIFICATIONS						
NAME/TITLE	PHONE NUMBER	RESPONSE TIME (hours)	ICS POSITION	RESPONSE TRAINING TYPE <sup>1</sup>		
				1	2	3
Whiting Refinery ?	(219) 473-7700 (Office)		Resources			
Quality & Tech Services - Hotline - Business Hours ?	(800) 841-5255 (Office) (800) 237-9436 Non-Business Hours (Office)					
BP Notification Center (BPNC) ?	(800) 321-8642* (Office) (630) 961-6965 (Fax) (630) 961-6200* (Office)					
EMERGENCY RESPONSE TRAINING TYPE <sup>1</sup>						
There are three different types of training described below including HAZWOPER, OPA, and Qualified Individual/Incident Command Training. An "x" has been placed in the applicable columns (type 1, 2, or 3) in the table above for the type of training completed by each individual.						
TYPE <sup>1</sup>	DESCRIPTION					
1	29 CFR 1910.120 HAZWOPER					
2	OPA (Training Reference for Oil Spill Response) All Facility Personnel, SMT, QI Components					
3	Qualified Individual/Incident Command Training					

NOTE: Refer to **APPENDIX A** for training dates.**Dearborn**FIGURE 3.1-3 - INTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS,  
CONTINUED

\*24 Hour Number

EMERGENCY RESPONSE CONTRACTORS						

NAME/TITLE	PHONE NUMBER	RESPONSE TIME (hours)	RESPONSIBILITY DURING RESPONSE ACTION	RESPONSE TRAINING TYPE <sup>1</sup>		
				1	2	3
Marine Pollution Control Corporation	(313) 849-2333* (800) 521-8232 (313) 849-1623 FAX	1				
Inland Waters, Inc.	(800) 992-9118* (313) 841-5800	1				
<b>EMERGENCY RESPONSE TRAINING TYPE<sup>1</sup></b>						
There are three different types of training described below including HAZWOPER, OPA, and Qualified Individual/Incident Command Training. An "x" has been placed in the applicable columns (type 1, 2, or 3) in the table above for the type of training completed by each individual.						
TYPE <sup>1</sup>	DESCRIPTION					
1	29 CFR 1910.120 HAZWOPER					
2	OPA (Training Reference for Oil Spill Response) All Facility Personnel, SMT, QI Components					
3	Qualified Individual/Incident Command Training					

NOTE: Refer to **APPENDIX A** for training dates.

## Dearborn

### FIGURE 3.1-4 - EXTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS

\*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
<b>Initial</b>		
National Response Center (NRC)	(800) 424-8802 (202) 267-2675 (202) 267-1322 Fax	
<b>Recommended</b>		
<b>Federal Agencies</b>		
Occupational Safety And Health Administration (OSHA) - San Diego	(800) 321-6742 (619) 767-2280	
U.S. Army Corps of Engineers Detroit, MI	(313) 226-6413	
U.S. Coast Guard - Sector Detroit	(313) 568-9580	

U.S. Dept. of Transportation (DOT) Office of Pipeline Safety (Notified via NRC)	(800) 424-8802	
U.S. EPA Region V (IL, IN, MI, MN, OH, WI) 77 W. Jackson Blvd Chicago, IL, 60604	800-621-8431 (within region) (312) 353-2000 (312) 353-2318*	
U.S. Fish and Wildlife Service	(413) 253-8200	
U.S. Fish and Wildlife Service - Fort Snelling, MN	(612) 713-5335 (612) 713-5336 (612) 854-5900	
<b>State Agencies</b>		
Michigan Department of Environmental Quality - Environmental Response Division (SERC)	(734) 953-8905 (734) 953-0243	
Michigan State Fire Marshall	(248) 280-1020	
Michigan State Police	(248) 584-5740	
<b>Local Agencies</b>		
Wayne County (LEPC)	(734) 942-5289	
<b>Police Departments</b>		
Taylor Police Department	734-287-6611	
<b>Fire Departments</b>		
Taylor Fire Department	911 (734) 374-1355	
<b>Emergency Medical Services</b>		
Ambulance	911 (734) 374-1355	

## Dearborn

**FIGURE 3.1-4 - EXTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS ,  
CONTINUED**

\*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
<b>Recommended</b>		

<b>Emergency Medical Services</b>		
Heritage Hospital	(313) 295-5000	
<b>USCG Classified OSRO's</b>		
Marine Pollution Control Corporation Detroit, MI	(313) 849-2333* (800) 521-8232 (313) 849-1623 FAX	
<b>Non-Classified OSRO's</b>		
Inland Waters, Inc.	(800) 992-9118* (313) 841-5800	
<b>Service Providers</b>		
BP Pipeline Office	(313) 291-7610	
BP Tulsa Control Center	(918) 660-4456	
Buckeye Pipeline	(484) 232-4336	
CHEMTREC - Washington, D.C.	(800) 424-9300	
Sun Pipeline	(610) 678-5986	
Wolverine Pipeline	(303) 946-7171	
<b>Radio Stations</b>		
WWJ Local Radio	(248) 945-9950	
<b>Television Stations</b>		
Local TV Station (TV 50) 62	(248) 350-5050	
<b>Weather</b>		
National Weather Service (Recorded Forecasts)	(517) 321-7576	
<b>Waste Management</b>		
Green America (Hannibal, MO)	(573) 221-1740	
Heritage Environmental - Indianapolis, IN	(317) 243-0811	
Heritage Environmental Service - Covanta (Indianapolis, IN)	(973) 882-7229	

**Dearborn**

**FIGURE 3.1-4 - EXTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS ,**

**CONTINUED**

\*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
<b>Recommended</b>		
<b>Waste Management</b>		
Heritage Environmental Service (Roachdale)	(765) 435-2704	
Heritage Environmental Service/WTI (East Liverpool, OH)	(330) 385-7335	
Usher (Detroit, MI)	(313) 834-7055	
<b>Wildlife Rehabilitation</b>		
International Bird Rescue - Fairfield, CA	(707) 207-0380	
<b>Water Intakes</b>		
Detroit Water Board Security	(313) 224-1933 (313) 267-7401	
Taylor, MI Water & Sewer Dept.	(734) 287-6611	

**Dearborn****FIGURE 3.1-5 - REPORTING REQUIREMENTS**

Agency / Address	Reporting Requirement
------------------	-----------------------

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## SECTION 4

Last revised: September 2006

**RESPONSE TEAM ORGANIZATION**

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4.1 Description4.1.1 Facility Response Team4.1.2 Incident Management Team (IMT) / BP Americas  
Response Team (BART)4.1.3 Business Support Team (BST)4.2 Activation Procedures4.3 Team Member Response Times4.4 Incident Command System / Unified Command4.5 Qualified Individual (QI)Figure 4.5-1 - Incident Management Team Activation  
ProcedureFigure 4.5-2 - Incident Management Team Organization4.6 Incident Management Team (IMT) Job Description Checklists**Dearborn**

## 4.1 DESCRIPTION

The Company's Incident Response Organization consists of the following teams:

- Facility Response Team (Local Response Team)
- Incident Management Team (IMT)
- BP Americas Response Team (BART)
- Business Support Team (BST)

The teams are organized and act in a manner consistent with the Incident Command System (ICS). These teams are comprised of personnel at Houston, Chicago, and local facilities. These teams will work in cooperation to:

- Manage the incident,
- Develop strategies and priorities for a response,
- Supervise contractors,
- Handle safety and security matters, and
- Provide logistical support for contractor personnel

### 4.1.1 Facility Response Team

The first BP person on-scene will function as the Incident Commander and person-in-charge until relieved by an authorized supervisor who will then assume the position of Incident Commander (IC). Transfer of command will take place as more senior management respond to the incident. For response operations within the control of the Facility Response Team, the role of IC will typically be assumed and retained by Terminal Management.

The number of positions/personnel required to staff the Facility Response Team will depend on the size and complexity of the incident. The duties of each position may be performed by the IC directly or delegated as the situation demands. The IC is always responsible for directing the response activities and will assume the duties of all the primary positions until the duties can be delegated to other qualified personnel.

The Facility Response Team organization is shown in **FIGURE 4.5-2**. Telephone reference is provided in **FIGURE 3.1-3**. Detailed job descriptions of the primary response team positions are provided in **SECTION 4.6**.

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### 4.1.2 Incident Management Team (IMT) / BP Americas Response Team (BART)

The regional Incident Management Team (IMT) and the national BP Americas Response Team (BART), once fully staffed, are designed to cover all aspects of a comprehensive and prolonged incident response. During a prolonged response, additional personnel may be cascaded in, and more than one level within the Team may be involved to sustain 24-hour operations.

Both teams (IMT and BART) are organized according to Incident Command System principles. Led by an Incident Commander, the team is composed of the following principal components:

- Command
- Planning

- Finance
- Operations
- Logistics

### **Incident Management Team (IMT)**

A regional response team of approximately 30 US Pipelines & Logistics, Air BP, Retail, RM and Lubes (Castrol) personnel located in a particular geographic area. (There are five of these teams organized across the country.) All or part of an IMT can be deployed to the field location to provide manpower and expertise, to help respond to an incident, and manage it. These teams function by using the Incident Command System.

### **BP Americas Response Team (BART)**

The national response team made up of approximately 250 employees from all of the BUs within North America. All or any part of the BART can be deployed to the field location to provide manpower and expertise, to help respond to an incident, and manage it. This team also functions using the Incident Command System.

The primary roles of the IMT / BART are to:

- Provide strategic direction to emergency response operations.
- Support tactical responders.
- Address tactical and/or crisis issues and concerns best handled at the IMT / BART level.
- Interface with and provide information to external parties.

The functions carried out by an IMT or the BART include:

- Sizing up the incident and the nature and status of tactical response operations.
- Developing strategic objectives and response priorities.
- Gathering information on the nature and location of tactical response operations and the resources being used to carry out the operations.
- Securing the resources necessary to support tactical response operations.
- Working with the Facility Response Team to develop Incident Action Plans describing field assignments for the next operational period.
- Securing the resources necessary to implement Incident Action Plans.
- Preparing a General Plan that scopes emergency response operations from initial notification to the completion of demobilization operations.
- Securing the resources necessary to implement the General Plan.
- Instituting and enforcing appropriate financial controls.
- Continuously assessing incident potential to determine an incident's capacity to grow into a crisis situation.

## **Dearborn**

**BP Americas Response Team (BART), continued**

**FIGURE 4.5-2** provides an organizational chart for the IMT. **FIGURE 3.1-3** presents a roster of all involved personnel with job titles. Job descriptions for each team member are included in **SECTION 4.6**.

### **4.1.3 Business Support Team BST**

A small team made up primarily of US Pipelines & Logistics (USPL) personnel located in the Cantera Office that provides business support to the field location during an incident. This team does not manage the field response but it ensures that the field location has the resources and support it needs to successfully deal with the incident. The BST also addresses business related issues that grow out of the incident that could adversely impact USPL or the Company. Facilitation of communication/information sharing is another responsibility of the BST.

When activated, the BST determines what, if anything, must be done to support Facility Response Team / IMT response efforts; and it works to identify, evaluate and proactively address the implications of the incident and response operations on the Company. The mission of the BST is to avoid crisis, whenever possible, and to mitigate crisis situations that cannot be avoided, to the maximum extent possible.

### **Notification of BST Emergency Manager (EM)**

All incidents that involve injuries, fatalities or the implementation of tactical response equipment should be reported to the BST Emergency Manager (EM), as soon as possible. This can be accomplished through the process outlined in **SECTION 4.2** below. The Terminal Manager / Incident Commander (TM / IC) should provide a brief account of the incident facts, initial response efforts, agency and media involvement and Facility Response Team / IMT / BART support needs. A more detailed briefing can be provided to the BST later

### **Activation of BST**

The BST Emergency Manager (EM) will assess the situation, and decide on the most appropriate course of action. If the incident is minor, requires no assistance from the BST and poses little threat to escalate to a crisis, the EM can elect to simply monitor the situation.

Whenever the EM determines that a potential or actual crisis exists, the BST Aide de Camp will be instructed to activate the full or partial BST.

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### **4.2 ACTIVATION PROCEDURES**

Activation of appropriate Company response teams may be accomplished in stages. If an incident has been discovered and it is determined by the Terminal Manager / Incident Commander (TM / IC) that a response is warranted, team activation proceeds as follows (see **FIGURE 3.1-1**):

- The Terminal Manager (TM / IC) is notified.
- TM / IC notifies the Area Manager (AM) or District Operations Manager (DOM) and the BP Notification Center (BPNC).
- The AM or DOM continues the upward notification process (through appropriate levels of US Pipelines & Logistics management).
- The BPNC contacts the Emergency Preparedness / Crisis Management (EP/CM) Advisor.
- The EP/CM Advisor notifies the BST Emergency Manager (EM) and they assess the need to activate / convene the BST and activate / deploy the IMT and/or BART.
- If activation of any of these teams is necessary, the EP/CM Advisor (who is also the BST Aide de Camp) accomplishes this through the BPNC, via the BP Communicator

System (autodialer).

- If activated, the BST convenes in the Cantera 1 office building.
- If activated, all or any part of the IMT and/or BART may be deployed to the Incident Command Post (ICP).
- TM / IC briefs all IMT / BART members, upon arrival at ICP.
- IC and Section Chiefs continually assess staffing needs.
- IC requests additional IMT / BART personnel, if needed, through the BST. (BST Aide de Camp handles activation.)
- IC de-activates IMT / BART personnel that are not needed.

#### 4.3 TEAM MEMBER RESPONSE TIMES

The Incident Commander and IMT will likely mobilize to the Naperville or Houston Crisis Center (HCC) initially. The IMT's maximum expected arrival time during off hours is 1-2 hours. The ICP may be relocated closer to the spill location within the first 24 to 48 hours of the response.

#### 4.4 INCIDENT COMMAND SYSTEM / UNIFIED COMMAND

The Incident Command System (ICS) will be used as a method of integrating federal, state and local agencies into the IMT. The purpose of this system is to organize diverse responding agencies into one unified team.

The ICS includes a Unified Command Structure consisting of three key On-Scene Coordinators: Federal On-Scene Coordinator (FOSC), State On-Scene Coordinator (SOSC) and the Responsible Party Incident Commander (RP). These three entities will share decision-making authority as Incident Commanders and will consult with each other regarding spill response management issues.

The FOSC will coordinate all federal agencies involved in the response. The SOSC will coordinate all state and local agencies involved in the response activities. The Responsible Party Incident Commander will coordinate all company activities.

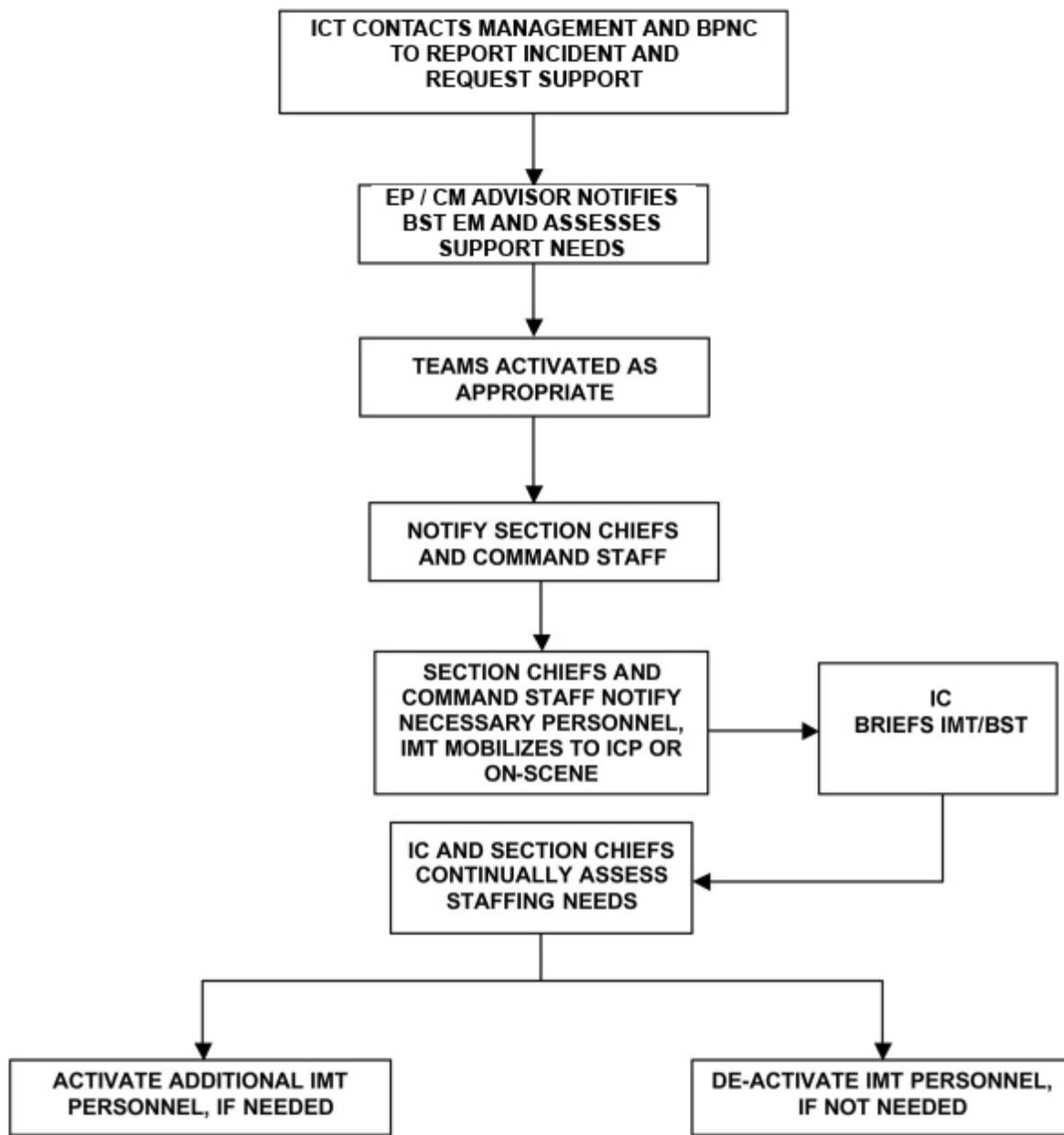
Depending upon the size and complexity of the incident, additional federal and state agency personnel may integrate into the other functions of the IMT.

#### 4.5 QUALIFIED INDIVIDUAL (QI)

The Qualified Individual (QI) is an English-speaking representative of the Company, located in the United States, available on a 24-hour basis, with full authority to obligate funds, implement response actions and immediately notify the appropriate Federal officials and response organizations. The designated Company QIs are listed in **FIGURE 3.1-3**. A description of QI training is provided in **APPENDIX A**.

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#### FIGURE 4.5-1 - INCIDENT MANAGEMENT TEAM ACTIVATION PROCEDURE

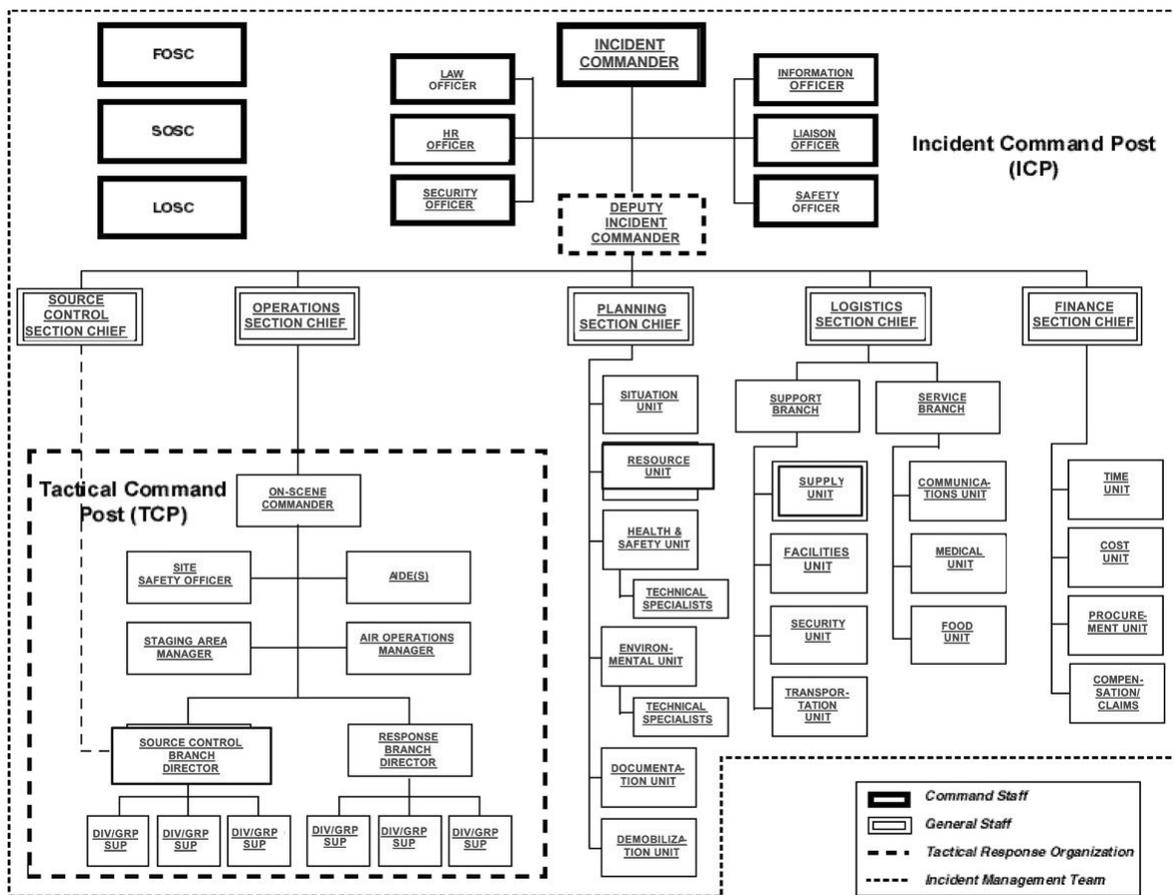


\*BP Corp., 2000

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**FIGURE 4.5-2 - INCIDENT MANAGEMENT TEAM ORGANIZATION**

**TYPICAL IMT ORGANIZATION**

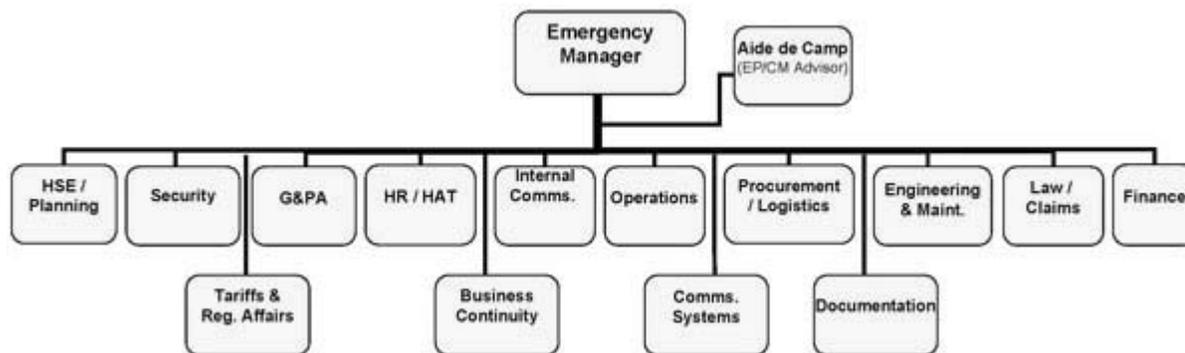


Note: Refer to **FIGURE 3.1-4** for IMT Members.

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FIGURE 4.5-2 - INCIDENT MANAGEMENT TEAM ORGANIZATION, CONTINUED

### USPL BUSINESS SUPPORT TEAM



Core Team

## Dearborn

### 4.6 INCIDENT MANAGEMENT TEAM (IMT) JOB DESCRIPTION CHECKLISTS

The following job description checklists are intended to be used as a tool to assist IMT 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

## Dearborn

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.

<b>INCIDENT COMMANDER</b>	<b>INITIALS</b>	<b>DATE &amp; TIME</b>
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.		

## **Dearborn**

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.

<b>INFORMATION OFFICER</b>	<b>INITIALS</b>	<b>DATE &amp; TIME</b>
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.		

## Dearborn

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.

<b>SAFETY OFFICER</b>	<b>INITIALS</b>	<b>DATE &amp; TIME</b>
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:		

<ul style="list-style-type: none"> <li>• Health and Safety hazard analysis for each site task or operation,</li> <li>• Comprehensive operations work plan,</li> <li>• Personnel training requirements,</li> <li>• PPE selection criteria,</li> <li>• Site specific occupational medical monitoring requirements,</li> <li>• Air monitoring plan: area/personal,</li> <li>• Site control measures,</li> <li>• Confined space entry procedures "only if needed",</li> <li>• Pre-entry briefings (tailgate meetings) initial and as needed,</li> <li>• Pre-operations health and safety conference for all incident participants, and</li> <li>• Quality assurance of HASP effectiveness.</li> </ul>		
Assign assistants and manage the incident safety organization.		
Review and approve the Medical Plan.		

## Dearborn

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.		

## Dearborn

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.

<b>LEGAL OFFICER</b>	<b>INITIALS</b>	<b>DATE &amp; TIME</b>
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.		

## Dearborn

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.

<b>OPERATIONS SECTION CHIEF</b>	<b>INITIALS</b>	<b>DATE &amp; TIME</b>
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.		
---	--	--

## Dearborn

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.

<b>PLANNING SECTION CHIEF</b>	<b>INITIALS</b>	<b>DATE &amp; TIME</b>
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.		

## Dearborn

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.		

## Dearborn

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.		

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## SECTION 5

Last revised: September 2006

**INCIDENT PLANNING**

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5.1 Documentation Procedures5.2 ICS Forms5.2.1 Incident Briefing Form - ICS 201 (Initial Report Only)5.2.2 BP Initial Plan of Action (IPA)5.2.3 Incident Action Plan (IAP) Table of Contents5.2.4 Incident Action Plan (IAP) Cover Sheet5.2.5 Incident Action Plan (IAP) Executive Summary5.2.6 Objectives For General Plan5.2.7 Objectives - ICS 2025.2.8 Organization Assignment List - ICS 2035.2.9 Field Assignment Change Sheet - ICS 2045.2.10 Field Assignment - ICS 204a5.2.11 Communications Plan - ICS 2055.2.12 Medical Plan - ICS 2065.2.13 Check-In List (Equipment / Personnel) - ICS 2115.3 Site Safety and Health Plan5.4 Decontamination Plan5.5 Disposal Plan5.6 Incident Security Plan5.7 Demobilization Plan**Dearborn**

## 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; and
- Copies of all logs, contracts, contacts, and plans prepared for the incident.

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## 5.2 ICS 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.

- **BP INITIAL PLAN OF ACTION (IPA)**

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 IPA consists of the following ICS forms:

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

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

- **INCIDENT ACTION PLAN (IAP) 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.

- **OBJECTIVES FOR GENERAL PLAN**

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

activities.

- **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.

- **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.

- **FIELD ASSIGNMENT CHANGE SHEET - ICS 204**

Submits assignments at the level of Division and Groups.

- **FIELD ASSIGNMENT - 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.

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## 5.2 ICS FORMS, CONTINUED

- **COMMUNICATIONS PLAN - ICS 205**

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

- **MEDICAL PLAN - ICS 206**

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

- **CHECK-IN LIST (EQUIPMENT / PERSONNEL) - ICS 211**

This form is used for equipment and personnel check in only. Equipment arriving at the incident can be checked in at various incident locations. Personnel arriving at the incident can check in at various incident locations.

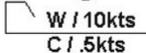
In addition, these Incident Command System (ICS) forms may be found on the U.S. Coast Guard web page: [http://www.uscg.mil/ccs/cit/cim/forms1/form\\_ics.html](http://www.uscg.mil/ccs/cit/cim/forms1/form_ics.html).

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### 5.2.1 Incident Briefing Form - ICS 201 (Initial Report Only)

**1.? Incident Name:****2.? Date / Time Prepared / Updated:****3.? Map Sketch**

	Source		Boundary of Isolation Perimeter		First Aid Station
	Tactical Command Post		Boundary of Hot Zone		Task
	Staging Area(s)		Location of Warm Zone		Wind and Current Speed and Direction

Staging Area (s)	Tasks		Weather
S1	T1	T6	
S2	T2	T7	
S3	T3	T8	
S4	T4	T9	
S5	T5	T10	

<b>Prepared by:</b>	<b>Contact No.:</b>	<b>Phone</b>
		<b>Radio</b>

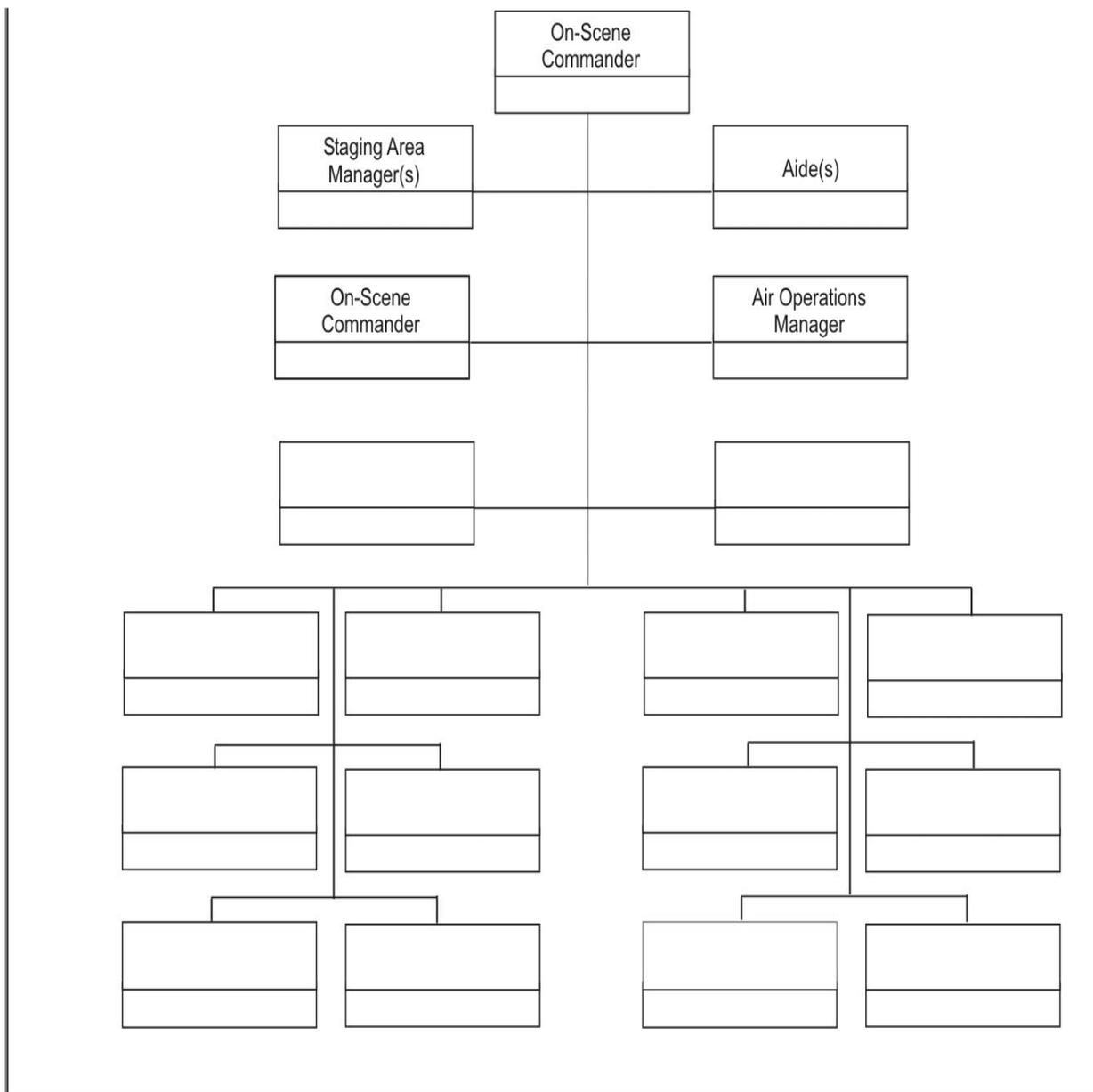
**Dearborn****5.2.1 Incident Briefing Form - ICS 201 (Initial Report Only), Continued****Date / Time Prepared / Updated:**

<b>4.? Description of Incident and Summary of Current Actions</b>	
Incident	
Date / Time:	Location:
Source:	Status: ? <input type="checkbox"/> Controlled ? <input type="checkbox"/> Uncontrolled
Status of People:	
? Accounted for ? <input type="checkbox"/> Missing / No. _____ <input type="checkbox"/> ? Injured / No. _____ <input type="checkbox"/> Dead / No. _____	
Type / Quantity Of Materials Spilled / Emitted:	
Material Status: <input type="checkbox"/> Contained <input type="checkbox"/> Uncontained	
Response: ? Safety	
Hazards Characterized?? ? <input type="checkbox"/> Yes <input type="checkbox"/> No	Hazards:
Personnel Accountability Procedures Implemented <input type="checkbox"/> Yes <input type="checkbox"/> No	
PPE Requirements Defined <input type="checkbox"/> Yes <input type="checkbox"/> No	
Decon Requirements Defined <input type="checkbox"/> Yes <input type="checkbox"/> No	
Response: ? General	
<b>Problems</b>	<b>Solutions</b>
Impact On / Threat To Public:	
Impact On / Threat To Environment:	
Impact On / Threat To Property:	
Assistance Needed:	
?	

**Dearborn**

### 5.2.1 Incident Briefing Form - ICS 201 (Initial Report Only), Continued

<b>Date / Time Prepared / Updated:</b>
<b>5.? Tactical Response Organization</b>
<b>Located At The Tactical Command Post (TCP)</b>



**Dearborn**

**5.2.1 Incident Briefing Form - ICS 201 (Initial Report Only), Continued**

<b>Date / Time Prepared / Updated:</b>					
<b>6.? Resources Summary (continue on back if necessary)</b>					
Resources	Have			Need	Destination / Location / Assignment
	En Route (ETA)	Staged/ Available	Assigned		

????????????					

The responses indicated on this worksheet reflect the preliminary views of the person filling out the worksheet based on the information available and known to that person as of the date and time shown and, as such, are subject to modification as additional information is obtained.

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### 5.2.2 BP Initial Plan of Action (IPA)

General Information			
<b>Incident Name:</b>		<b>Incident Date / Time:</b>	
<b>Prepared by:</b>	<b>Phone:</b>	<b>Date / Time Prepared:</b>	
<b>Incident location:</b>	<b>Area/block:</b>	<b>Lat.</b>	<b>Long.</b>
<b>Description of Incident:</b>			
<b>Status of Source:</b>			

**Status of Source Control Operations (including relief well planning, material procurement, and rig availability):**

**Spilled/Emitted Material (what, how much, location, predicted landfall - where, when):**

**On-scene Atmospheric and Oceanic Conditions:**

Wind Speed:	Wind Direction from:	Air temp:	Visibility:	Precipitation:
Sea Height:	Current Speed:	Current Direction:	Water Temp.:	Other:

**Status of People (deaths, injuries, missing, evacuated, etc.):**

**Safety Considerations:**

**Locations of IMT EOC, TRT ICP, etc.:**

**Status of Unified Command (including integration of other responding organizations into IMT):**

## Dearborn

### 5.2.2 BP Initial Plan of Action (IPA), Continued

Status of Notifications			
Agency	Contacted by	Time	Name of agency contact person
National Response Center			
EPA			





<b>Water Temperature:</b>		<b>River Stage:</b>				
<b>Narrative Description of Weather Forecast:?</b>						
<b>6.?? Tides, Sunrise, Sunset</b>						
	<b>Time</b>	<b>Level</b>	<b>Time</b>	<b>Level</b>		<b>Time</b>
<b>High Tide(s)</b>		( ? )		( ? )	<b>Sunrise:</b>	
<b>Low Tide(s)</b>		( ? )		( ? )	<b>Sunset:</b>	

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### 5.2.5 Incident Action Plan (IAP) Executive Summary

<b>1.?? Incident Name:</b>	
<b>2.?? Operational Period:</b>	
<b>State Time/Date:</b>	<b>End Time/Date:</b>
<b>3.? Incident Commander(s) for NOP:</b>	
<b>4.?? Objectives for the NOP</b>	
<b>Objective Nos.</b>	<b>How IAP Addresses Objectives</b>
<b>5.?? Summary of Major Changes for the NOP</b>	



**Dearborn****5.2.7 Objectives - ICS 202**

<b>1. Incident Name:</b>	
<b>2. Operational Period:</b>	
<b>Start Time/Date:</b>	<b>End Time/Date:</b>
<b>3. Objectives</b>	
<b>No.</b>	<b>Objectives</b>
<b>4. Approved by:</b>	

# Dearborn



## 5.2.8 Organization Assignment List - ICS 203

<b>1.? Incident Name:</b>			
<b>2.? Operational Period Covered by Plan:</b>			
<b>???? Start Time/Date:</b>		<b>End Time/Date:</b>	
<b>3.???? Command Section:</b>		<b>4.???? Operations Section:</b>	
Incident Commander	Chief		
Unified Commanders	On-scene Commander		
Deputy	Site Safety Officer		
Safety Officer	Staging Area Manager		
Information Officer	Air Operations Manager		
Liaison Officer	Aide		
Law Officer	<b>a.??? Branch I:</b>		
Human Resources Officer	Director		
Security Officer	Division/Group		
<b>5.???? Planning Section:</b>	Division/Group		
Chief	Division/Group		
Resource Unit	Division/Group		
Situation Unit	<b>b.??? Branch II:</b>		
Documentation Unit	Director		
Demobilization Unit	Division/Group		
Health & Safety Unit	Division/Group		
Environmental Unit	Division/Group		
Technical Specialists	Division/Group		
<b>6.???? Logistics Section:</b>	<b>c.?? Branch III:</b>		
Chief	Director		
Service Branch	Division/Group		
Communications Unit	Division/Group		
Medical Unit	Division/Group		
Food Unit	Division/Group		
Support Branch	<b>d.??? Branch IV:</b>		
Supply Unit	Division/Group		
Facilities Unit	Division/Group		
Security Unit	Division/Group		

Transportation Unit	Division/Group		
<b>7.???? Finance Section:</b>	Division/Group		
Chief	<b>e.??? Branch V:</b>		
Time Unit	Director		
Procurement Unit	Division/Group		
Compensation/Claims Unit	Division/Group		
Cost Unit	Division/Group		
	Division/Group		

## Dearborn



### 5.2.9 Field Assignment Change Sheet - ICS 204

<b>1.?? Incident Name:</b>		<b>2.?? Field Assignment No.</b>	
<b>3.?? Change Number:</b>		<b>Change Date:</b>	<b>Change Time:</b>
<b>4.?? Status of Change:</b>	<b>Draft</b>	<b>Final</b>	
<b>5.?? Contact Person:</b>		<b>Position:</b>	
<b>6.?? Portion(s) of Assignment Changed</b>			
? <input type="checkbox"/> Operational Period		? <input type="checkbox"/> Team Leader	
? <input type="checkbox"/> Task		? <input type="checkbox"/> Number of Personnel	
? <input type="checkbox"/> Division or Group Designation		? <input type="checkbox"/> Schedule	
? <input type="checkbox"/> Objective		? <input type="checkbox"/> Safety Message	
? <input type="checkbox"/> Description of Work		? <input type="checkbox"/> Environmental Message	
? <input type="checkbox"/> Management		? <input type="checkbox"/> Diagram or Map	
? <input type="checkbox"/> Equipment			
Description of Change(s)			

7.?? Approved by:

Time/Date:

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## 5.2.10 Field Assignment - ICS 204a

<b>1.? Incident Name:</b>		<b>2.? Field Assignment No.:</b>	
<b>3.? Status of Assignment:</b>	Draft	Final	
<b>4.? Operational Period:</b>	Current	Next	
<b>???? Start Time/Date</b>		<b>End Time/Date</b>	
<b>5.? Task:</b>		<b>6.? Division/Group:</b>	
<b>7.? Objective:</b>			
<b>8.? Description of Work:</b>			
		<b>9.? Diagram:?</b> <input type="checkbox"/> Yes ? <input type="checkbox"/> No	
<b>10.? Management</b>			
<b>Position</b>	<b>Person</b>	<b>Communications</b>	
Section Chief			
Branch Director			
Division/Group Supervisor			
Task Leader			
<b>11.? Resources</b>			
<b>Qty.</b>	<b>Single Resource/Strike Team/Task Force</b>	<b>Leader</b>	<b>No. of Personnel</b>

12.? Schedule:		Start Time:	Finish Time:
13.? Attachments:	<input type="checkbox"/> Change Sheet	<input type="checkbox"/> Environmental Message	
	<input type="checkbox"/> Safety Message	<input type="checkbox"/> Other (Specify)	
14.? Approved by:			Time/Date:

## Dearborn



### 5.2.11 Communications Plan - ICS 205

1.?? Incident Name:				
2.?? Operational Period Covered by Plan:				
Start Time/Date:			End Time/Date:	
3.?? Command Network				
Source	Frequency	Channel	Phone/Fax No.	Assignment
4.?? Tactical Network				
Source	Frequency	Channel	Phone/Fax No.	Assignment
5.?? Supply Network				
Source	Frequency	Channel	Phone/Fax No.	Assignment
6.?? Other Networks (e.g., Source Control, Crisis, etc.)				
Source	Frequency	Channel	Phone/Fax No.	Assignment


7.?? Approved by:??  
 ???

Time/Date:

**Dearborn**



5.2.12 Medical Plan - ICS 206

**1.?? Incident Name:**

**2.?? Operational Period Covered by Plan:**

**Start Time/Date:**

**End Time/Date:**

**3.?? First Aid Station(s)**

Location	Division/Group(s) Served	Radio/Phone

**4.?? Ground Ambulance Service(s)**

Location	Division/Group(s) Served	Radio/Phone

**5.?? Air Ambulance Service(s)**

Location	Division/Group(s) Served	Radio/Phone

**6.?? Hospitals and Treatment Facilities**

Location	Division/Group(s) Served	Radio/Phone




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### 5.3 SITE SAFETY AND HEALTH PLAN

1. PROJECT OBJECTIVE			
Prepared by:		Date:	
Overall Objective of Project:			
2. SITE DESCRIPTION			
Date:		Sector:	
Business Unit:			
Name of Facility:			
Location (Road, City):			
Potential Hazards (Y / N):			
		Excavations, Trenches, and/or Confined Spaces	
		Hazardous Vapors and Gases	
		Direct Exposure to Hazardous Material	
		Dust and Particulates	
		Environmental Hazards (Rain, Snow, Cold, Heat)	
		Equipment Hazards	
		Other:	
		Other:	
		Other:	
Area Affected: (Describe the area including approximate dimensions.? Attach Site Map)			

Surrounding Population (Y/N):

	Urban	
	Suburban	
	Rural	
	Industrial	
Distance to Nearest Population:		

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### 5.3 SITE SAFETY AND HEALTH PLAN, CONTINUED

Topography: (Describe terrain)					
sandy beach	rocky	cliffs	marshes	docks	other (explain)
Climate/Weather Conditions:					
	Present	Anticipated			
Winds					
Temp ?F					
Humidity					
% Rain					
Seas					
Comments					

### 3. BACKGROUND INFORMATION

Background information:? (Include date, range of site use, source of contamination, estimated extent of contamination, known and suspected contaminants, etc.)

--

### 4. ENTRY OBJECTIVES

Entry Objectives:? (Fully describe the purpose of site visit(s).? If multiple visits, indicate the objectives of each entry.? The number and types of samples should be included if sampling is to be performed).? All work shall be conducted in accordance with procedures established

during pre-entry briefings and attached work plans.? A work plan is attached as Item 10.

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### 5.3 SITE SAFETY AND HEALTH PLAN, CONTINUED

5. PERSONNEL ROLES		
BP Pipelines, N.A. Personnel:		
Key Personnel	Title / Responsibilities	
	<i>On-Scene Commander (OSC)</i>	
	<i>Site Safety &amp; Health Plan Officer (SSO)</i>	
	<i>Contractor Supervisor (CS)</i>	
	<i>GPA</i>	
Federal Agency Representatives:		
Name	Agency	Phone
State Agency Representatives:		
Name	Agency	Phone

Local Agency Representatives:		
Name	Agency	Phone

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### 5.3 SITE SAFETY AND HEALTH PLAN, CONTINUED

6. SITE SECURITY AND CONTROL		
On-site Control and Security Coordinators:		
BP Pipelines, N.A.:		
Contractor:		
Control Boundaries:		
Map / Sketch attached (Y/N):		
Site Secured (Y/N):		
A Safe perimeter has been established as:		
<b><u>NO UNAUTHORIZED PERSON SHOULD BE WITHIN THIS AREA</u></b>		
Control boundaries have been established and the Exclusion Zone and Clean Zone have been identified and designated as follows (i.e., cones, barrier tape):		
NOTE: See attached Site Map.		

Spill Containment Procedures:	

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### 5.3 SITE SAFETY AND HEALTH PLAN, CONTINUED

#### 7. HAZARD EVALUATION

The following substance(s) are known to be on-site. The primary hazards of each are identified.

Product	Physical State <sup>1</sup>	Waste Characteristics <sub>2</sub>	Primary Hazard <sup>3</sup>

1. Liquid, solid, sludge, gas/vapor, other.

2. Corrosive, flammable, toxic, volatile, reactive, radioactive, carcinogen, other.

3. Toxic on inhalation or ingestion absorbed through skin, irritant to eyes, irritant to respiratory tract, irritant to skin, other.

Anticipated concentration and allowable exposure limits

Product	Anticipated Concentration	Full-Shift Exposure Limit	Short-Term Exposure Limit

NOTE: Include institution that establishes limit (e.g., OSHA, ACGIH, etc.).

Other Site Hazards (Y / N):

		Heat	
		Cold	
		Confined Spaces	
		Heavy Equipment	
		Overhead / Underground Utilities	
		Bloodborne Pathogens	

	Poison Ivy	
	Insects:	
	Rodents:	
	Snakes:	
	Lighting:	
	Work Near Water:	
	Electrical Hazards:	
	Helicopters:	
	ATV's:	
	Others:	
	Others:	
	Others:	

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### 5.3 SITE SAFETY AND HEALTH PLAN, CONTINUED

#### 8. PERSONAL PROTECTIVE EQUIPMENT

Based on evaluation of potential hazards, the following levels of personal protection have been designated for the applicable work areas and tasks.? See Health Hazard Information section on MSDS of product.

Location	Job Function	Level of Protection

**NOTE:** Air monitoring equipment will be used to determine the need for appropriate PPE.

PPE - Levels of protection:

Level A: To be selected when the greatest level of skin, respiratory, and eye protection is required.

Level B: The highest level of respiratory protection is necessary, but a lesser level of skin protection is needed.

Level C: The concentration(s) and type(s) of airborne substance(s) is known and the criteria for using air purifying respirators are met.

Level D: A work uniform affording minimal protection, used for nuisance contamination only.

Specific protective equipment for each level of protection is as follows:

**NOTE:** No changes to the specified levels of protection shall be made without the approval of the Clean-Up Leader and Site Safety Officer.

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### 5.3 SITE SAFETY AND HEALTH PLAN, CONTINUED

#### 9. ENVIRONMENTAL MONITORING

A direct reading instrument will be used to monitor organic vapor concentration. The instrument will be on while the workers approach the work area and readings will be taken during the following conditions:

- Possibility of IDLH or flammable atmosphere has developed.
- Indication that exposures may have risen over limits since prior monitoring.
- Work begins on different portion of site.
- Contaminants other than those previously identified are being handled.
- Different type of operation is initiated.
- Employees are handling leaking drums or containers.
- Employees are working in areas with obvious liquid contamination.

If at any time a measurement of \_\_\_\_ ppm or more above concentration is observed, the workers will retreat to a safe area and upgrade the level of protection to level \_\_\_\_.  
Monitoring will be continuous during times of respirator usage. If at any time the concentration approaches \_\_\_\_ ppm greater than background, the work area will be evacuated immediately.

Combustible Gas Monitoring will be conducted by:

Instrument(s) used will be:	
Calibration Frequency:	
Frequency of Monitoring:	
Location of Monitoring:	
Benzene/Xylene/Toluene monitoring will be conducted by:	
Instrument(s) used will be:	
Calibration Frequency:	
Frequency of Monitoring:	
Location of Monitoring:	
Other monitoring will be conducted by:	
Instrument(s) used will be:	
Calibration Frequency:	
Frequency of Monitoring:	
Location of Monitoring:	
<b>NOTE:</b> Monitoring results are attached to this report.	

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### 5.3 SITE SAFETY AND HEALTH PLAN, CONTINUED

<b>10.? ON-SITE WORK PLANS</b>	
The field team will perform the following tasks:	
Team Member	Function
<b>11.? SPECIAL INSTRUCTIONS</b>	
<b>12.? COMMUNICATION PROCEDURES</b>	
The following emergency signal indicates that there is an emergency situation:	
	Horn blasts



**Personal Protective Equipment Failure** - If any worker experiences a failure or alteration of protective equipment that affects the protection factor, that person and his/her buddy shall immediately leave the affected area.? Reentry shall not be permitted until the equipment has been repaired or replaced.

**Other Equipment Failure** - If any other equipment on-site fails to operate properly, the Clean-Up Unit Leader and Site Safety Officer shall be notified and then determine the effect of this failure on continuing operations on site.? If the failure affects the safety of personnel or prevents completion of the Work Plan tasks, all personnel shall leave the area until the situation is evaluated and appropriate actions taken.

**IN ALL SITUATIONS, WHEN AN ON-SITE EMERGENCY RESULTS IN EVACUATION OF THE WORK AREA, PERSONNEL SHALL NOT REENTER UNTIL:**

1. The conditions resulting in the emergency have been corrected.
2. The hazards have been reassessed.
3. The Site Safety Plan has been reviewed.
4. Site personnel have been briefed on any change in the Site Safety Plan.

An exit route will be used in an emergency restricting the use of the main entrance.? Location of the Emergency Exit Route (See Site Map):

In the event of an accidental release, fire or explosion or the sounding of the emergency signal, workers will evacuate the work area and assemble in the designated location.

Location of Designated Assembly Area (See Site Map):

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### 5.3 SITE SAFETY AND HEALTH PLAN, CONTINUED

#### 15.? SITE SAFETY PLAN

Site Safety Officer(s):

The Site Safety Officer is directly responsible for safety recommendations on site.? He/She will maintain daily site logs documenting all notable events and/or conditions of health and safety concerns.

Emergency Medical Care:

Qualified Medical personnel are located on site (Y/N):

If there are qualified Medical personnel located on-site, then identify location (See Site Map):



Ambulance	
Hospital Emergency Room	
Sheriff	
Police	
State Police	
Fire Department	
Airport/Helicopter	
EPA Contact	
U. S. Coast Guard Contact	
M.M.S. Contact	
Claims	
Other:	
Other:	

## Emergency Medical Information For Substances Present:

Substance	Exposure Symptoms	First-Aid

**16.? TRAINING CERTIFICATION**

The Site Safety Officer will ensure that all employees have the appropriate training/certification as per 29 CFR 1910.120 (8) (e).

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## 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.

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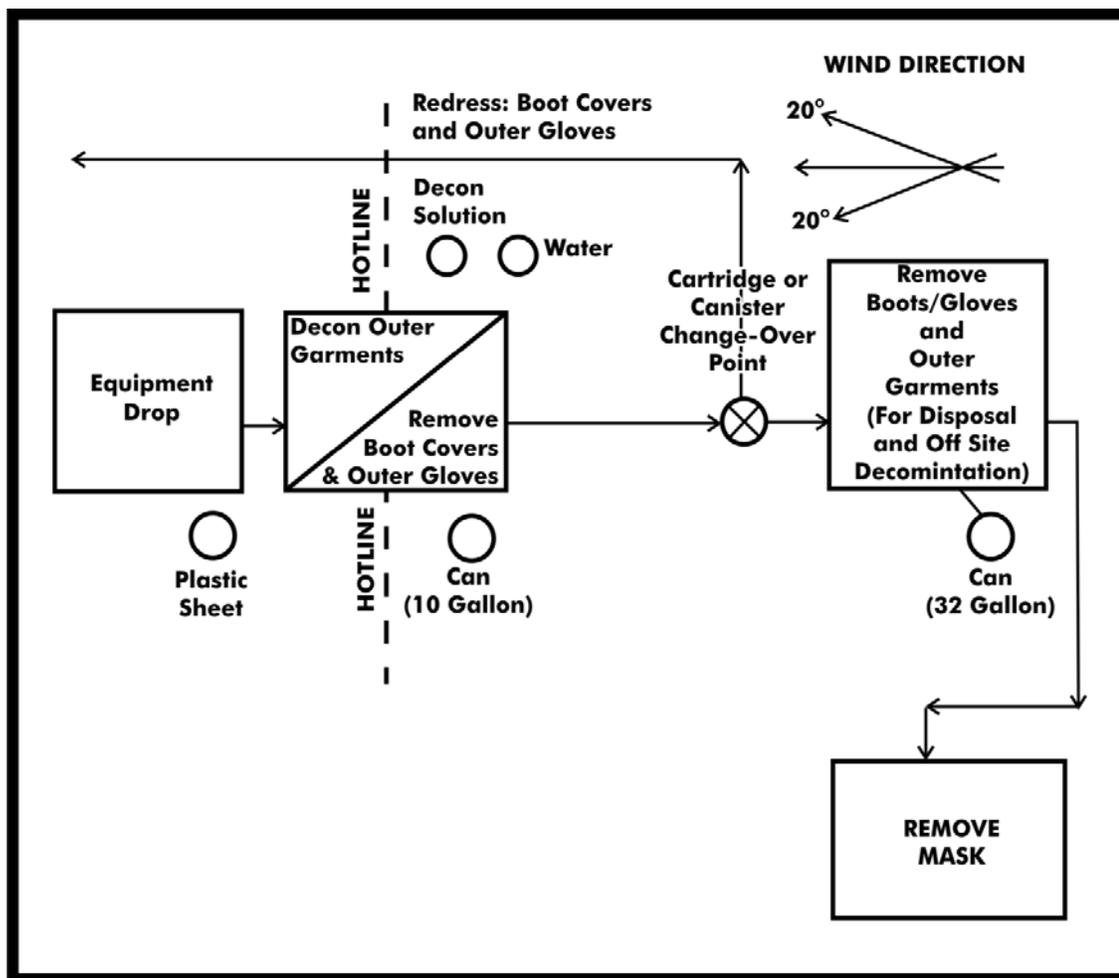
### 5.4 DECONTAMINATION PLAN, CONTINUED

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 and gloves wash and rinse	Scrub outer boots, outer gloves, and splash suit 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.

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### 5.4 DECONTAMINATION PLAN, CONTINUED

DECONTAMINATION PROCEDURES, MINIMUM DECONTAMINATION LAYOUT



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### 5.4 DECONTAMINATION PLAN, CONTINUED

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.

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### 5.4 DECONTAMINATION PLAN, CONTINUED

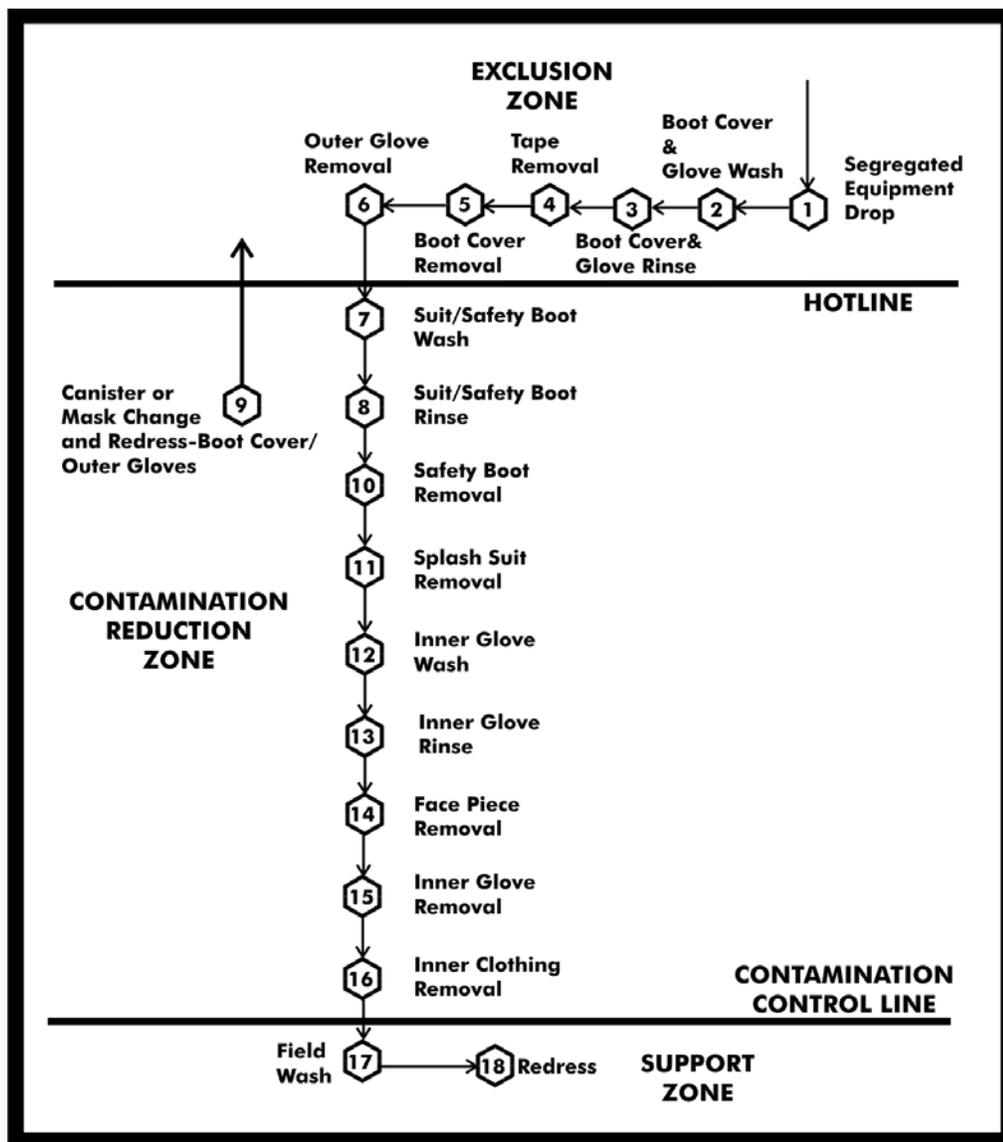
Procedures for these stations are as follows:

MAXIMUM MEASURES FOR DECONTAMINATION		
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.

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### 5.4 DECONTAMINATION PLAN, CONTINUED

#### DECONTAMINATION PROCEDURES, MAXIMUM DECONTAMINATION LAYOUT



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### 5.5 DISPOSAL PLAN

Incident Name:	Incident Location:
Status As Of:	
Waste Name:	
Weather Conditions:	
State Agency:	
Agency Representative responsible for waste management/disposal:	
Phone:	
Inquiry made to obtain variance on:	
Individual contacted:	
<b>Disposal Priorities</b>	
<b>Step One - Sample</b>	

Oil Sample was extracted/sent for analysis on:		
Lab Name:		
Chain of Custody:	Relinquished By:	Received By:
<b>Step Two - Option</b>	Available	Most Likely
Natural Degradation or Dispersion		
Pit Burial		
Landfill		
Land Farms		
In-Situ Burning		
Open Pit Burning		
Portable Incineration		
Air Curtain Incineration		
Process Incineration		
Reprocessing		
Reclaiming		
Recycling		
Well Injection		
Locate Resources for Disposal:		
Percent Oil:		
Percent Solids:		
Percent Debris:		
Disposal Plan	Page 1	1999-2000 dbSoft, Inc. Printed by:

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### 5.5 DISPOSAL PLAN, CONTINUED

<b>Step Three - Information</b>
Generator Name:
Generator USEPA ID:
Generator Address:
Technical Contact:
Properties and composition:
Process generating waste:
Waste Name:
Is USEPA Hazardous Waste:

Identify all USEPA listed and characterized waste code numbers (D,F,K,P,U):

State Waste Codes:

**Step Four - Waste Storage and Transportation**

Proposed shipping methods:

Transporter ID Number

Permit required:

Facility ID Number:

VN/NA:

Estimated storage capacity needed for disposal:

Type of storage needed:

Estimated quantity of each:

Local facilities for temporary storage:

Protective equipment:

Disposal Plan Page 2

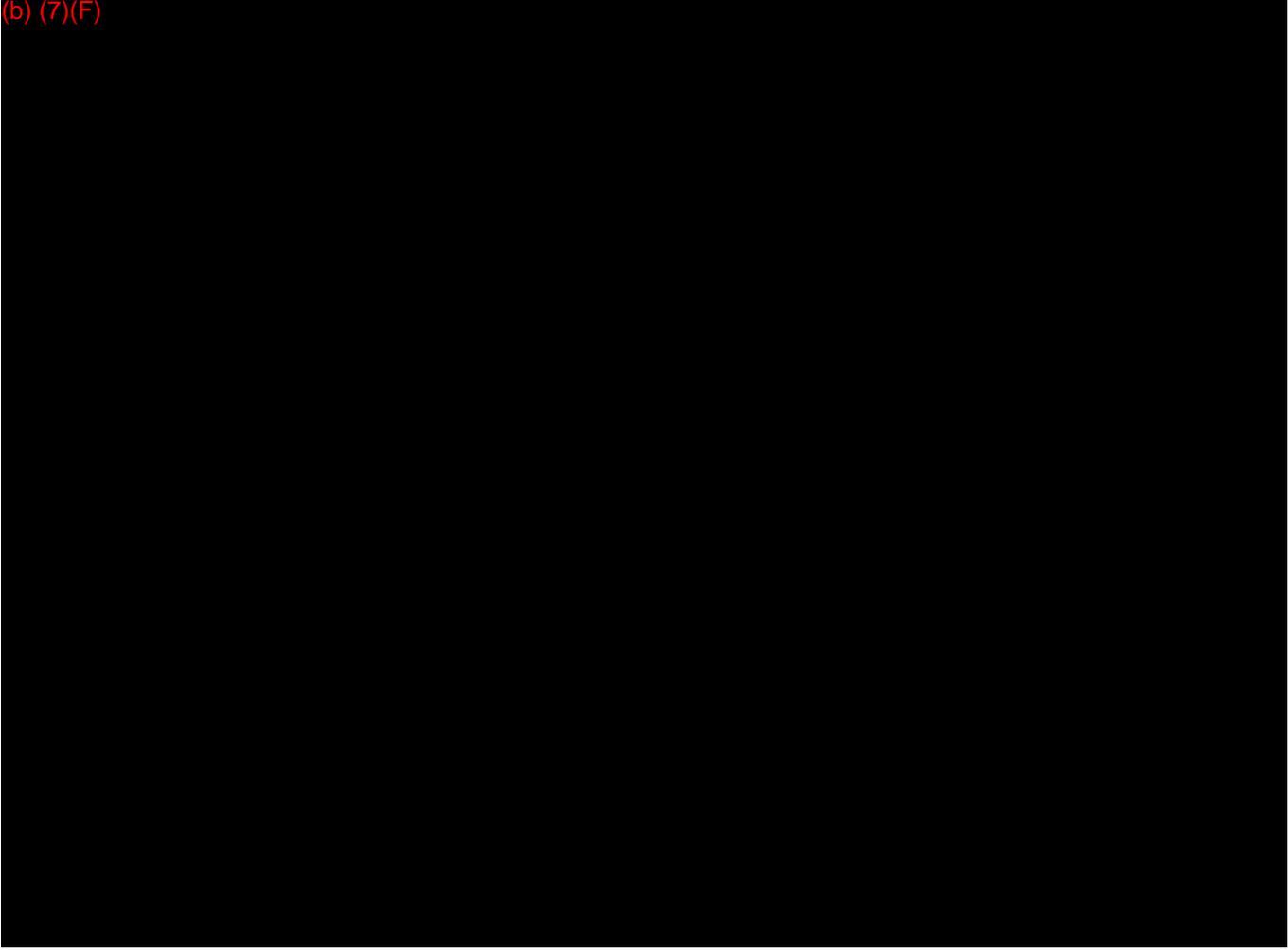
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5.7 DEMOBILIZATION PLAN

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.

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## SECTION 6

Last revised: September 2006

## SENSITIVE AREAS / RESPONSE TACTICS

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6.1 Area Description6.2 Spill Containment / RecoveryFigure 6.2-1 - Response Tactics for Various Shorelines6.3 Sensitive Area ProtectionFigure 6.3-1 - Sensitive Area Protection Implementation SequenceFigure 6.3-2 - Summary of Shoreline and Terrestrial Cleanup Techniques6.4 Alternative Response Strategies6.4.1 Dispersants6.4.2 Bioremediation6.4.3 In-Situ BurnFigure 6.4-1 - Alternate Strategies ChecklistFigure 6.4-2 - Decision Guide for the Federal Bioremediation Approval Process6.5 Wildlife Protection and Rehabilitation6.6 Endangered and Threatened Species By State6.7 Vulnerability Analysis6.8 Sensitivity Maps

## 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 6.8**.

## 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.

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## 6.2 SPILL CONTAINMENT / RECOVERY, CONTINUED

### Containment/Diversion Berming

- Berms are constructed ahead of advancing surface spills to contain spill or divert spill to a containment area.
- May cause disturbance of soils and some increased soil penetration.

---

**Blocking/Flow-Through Dams**

- Construct dam in drainage course/stream bed to block and 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.
- 

**Dearborn****6.2 SPILL CONTAINMENT / RECOVERY, CONTINUED**

**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.)

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FIGURE 6.2-1 - RESPONSE TACTICS FOR VARIOUS SHORELINES

TYPES	DESCRIPTION	PREDICTED OIL IMPACT	RECOMMENDED CLEANUP ACTIVITY
Developed/ Unforested Land	<ul style="list-style-type: none"> <li>• This class includes towns, cities, farms, pastures, fields, reclaimed wetlands, and other altered areas</li> <li>• Organisms and algae may be common in riprap structures and on pilings</li> </ul>	<ul style="list-style-type: none"> <li>• Oil would percolate easily between the gravel and boulders of riprap structures</li> <li>• Oil would coat the intertidal areas of solid structures</li> <li>• Biota would be damaged or killed under heavy accumulations</li> </ul>	<ul style="list-style-type: none"> <li>• May require high pressure spraying: <ul style="list-style-type: none"> <li>• To remove oil</li> <li>• To prepare substrate for recolonization of barnacle and oyster communities</li> </ul> </li> <li>• For aesthetic reasons</li> </ul>
Freshwater Flat	<ul style="list-style-type: none"> <li>• Mud or organic deposits located along the shore or in shallow portions of nontidal freshwater lakes and ponds</li> <li>• They are exposed to low wave and current energy</li> <li>• They are often areas of heavy bird use</li> </ul>	<ul style="list-style-type: none"> <li>• Oil is expected to be deposited along the shoreline</li> <li>• Penetration of spilled oil into the water-saturated sediments of the flat will not occur</li> <li>• When sediments are contaminated, oil may persist for years</li> </ul>	<ul style="list-style-type: none"> <li>• These areas require high priority for protection against oil contamination</li> <li>• Cleanup of freshwater flats is nearly impossible because of soft substrate</li> <li>• Cleanup is usually not even considered because of the likelihood of mixing oil deeper into the sediments during the cleanup effort</li> <li>• Passive efforts, such as sorbent boom can</li> </ul>

			be used to retain oil as it is naturally removed
Fresh Marsh	<ul style="list-style-type: none"> <li>• Found along freshwater ponds and lakes</li> <li>• 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</li> <li>• Birds and mammals extensively use fresh marshes for feeding and breeding purposes</li> </ul>	<ul style="list-style-type: none"> <li>• Small amounts of oil will contaminate the outer marsh fringe only; natural removal by wave action can occur within months</li> <li>• Large spills will cover more area and may persist for decades</li> <li>• Oil, particularly the heavy fuel oils, tends to adhere readily to marsh grasses</li> </ul>	<ul style="list-style-type: none"> <li>• Marshes require the highest priority for shoreline protection</li> <li>• Natural recovery is recommended when: <ul style="list-style-type: none"> <li>• A small extent of marsh is affected</li> <li>• A small amount of oil impacts the marsh fringe</li> </ul> </li> <li>• The preferred cleanup method is a combination of low-pressure flushing, sorption, and vacuum pumping performed from boats</li> <li>• Any cleanup activities should be supervised closely to avoid excessive disturbances of the marsh surface or roots</li> <li>• Oil wrack and other debris may be removed by hand</li> </ul>
Swamp	<ul style="list-style-type: none"> <li>• 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</li> <li>• Birds and mammals use swamps during feeding and breeding activities</li> </ul>	<ul style="list-style-type: none"> <li>• Even small amounts of spilled oil can spread through the swamp</li> <li>• Large spills will cover more area and may persist for decades since water-flushing rates are low</li> <li>• Oil, particularly the heavy fuel oils, will adhere to swamp vegetation</li> <li>• Unlike mangroves, the roots of swamp forest trees are not exposed; thus, little damage to trees is expected. Any</li> </ul>	<ul style="list-style-type: none"> <li>• No cleanup recommended under light conditions</li> <li>• 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</li> <li>• Proper strategic boom placement may be highly effective in trapping large quantities of oil, thus</li> </ul>

		underbrush vegetation, however, would be severely impacted	reducing oil impact to interior swamp forests <ul style="list-style-type: none"> <li>Oil trapped by boom can be reclaimed through the use of skimmers and vacuums</li> </ul>
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FIGURE 6.2-1 - RESPONSE TACTICS FOR VARIOUS SHORELINES, CONTINUED

TYPES	DESCRIPTION	PREDICTED OIL IMPACT	RECOMMENDED CLEANUP ACTIVITY
Open Water	<ul style="list-style-type: none"> <li>Have ocean-like waves and currents</li> <li>Weather changes effect on-water conditions</li> <li>River mouths present problems</li> <li>Thermal stratification occurs</li> </ul>	<ul style="list-style-type: none"> <li>Most organisms are mobile enough to move out of the spill area</li> <li>Aquatic birds are vulnerable to oiling</li> <li>Human usage (such as transportation, water intakes, and recreational activities) may be restricted</li> </ul>	<ul style="list-style-type: none"> <li>Booming, skimming, vacuuming, and natural recovery are the preferred cleanup methods</li> <li>Should not use sorbents, containment booming, skimming, and vacuuming on gasoline spills</li> <li>Cleanup options include physical herding, sorbents, and debris/vegetation removal</li> </ul>
Large Rivers	<ul style="list-style-type: none"> <li>May have varying salinities, meandering channels, and high flow rates</li> <li>May include manmade structures (such as dams and locks)</li> <li>Water levels vary seasonally</li> <li>Floods generate high suspended sediment and debris loads</li> </ul>	<ul style="list-style-type: none"> <li>Fish and migratory birds are of great concern</li> <li>Under flood conditions, may impact highly sensitive areas in floodplains</li> <li>Human usage may be high</li> <li>When sediments are contaminated, oil may persist for years</li> </ul>	<ul style="list-style-type: none"> <li>Booming, skimming, and vacuuming are the preferred cleanup methods</li> <li>Should not use sorbents, containment booming, skimming, and vacuuming on gasoline spills</li> <li>Cleanup options include natural recovery, physical herding, sorbents, and debris/vegetation removal</li> </ul>
Small Lakes and Ponds	<ul style="list-style-type: none"> <li>Water surface can be choppy</li> <li>Water levels can fluctuate widely</li> <li>May completely</li> </ul>	<ul style="list-style-type: none"> <li>Wildlife and socioeconomic areas likely to be impacted</li> <li>Wind will control the oil's distribution</li> </ul>	<ul style="list-style-type: none"> <li>Booming, skimming, vacuuming, and sorbents are the preferred cleanup methods</li> </ul>

	<p>freeze in winter</p> <ul style="list-style-type: none"> <li>• Bottom sediments near the shore can be soft and muddy</li> <li>• Surrounding area may include wet meadows and marshes</li> </ul>		<ul style="list-style-type: none"> <li>• Should not use containment booming, vacuuming, sorbents, and skimming on gasoline spills</li> <li>• Cleanup options include physical herding, sorbents, and debris/vegetation removal</li> </ul>
Small Rivers and Streams	<ul style="list-style-type: none"> <li>• Wide range of water bodies - fast flowing streams to slow moving bayous with low muddy banks and fringed with vegetation</li> <li>• May include waterfalls, rapids, log jams, mid-channel bars, and islands</li> <li>• Weathering rates may be slower because spreading and evaporation are restricted</li> </ul>	<ul style="list-style-type: none"> <li>• Usually contaminate both banks and the water column, exposing a large number of biota to being oiled</li> <li>• Water intakes for drinking water, irrigation, and industrial use likely to be impacted</li> </ul>	<ul style="list-style-type: none"> <li>• Booming, skimming, vacuuming, sorbents, barriers, and berms are the preferred cleanup methods</li> <li>• Should not use containment booming, sorbents, vacuuming, and skimming on gasoline spills</li> <li>• Cleanup options include physical herding, natural recovery, debris removal, vegetation removal, and in-situ burn</li> </ul>

## Dearborn

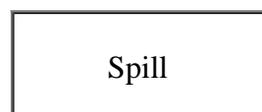
### 6.3 SENSITIVE AREA PROTECTION

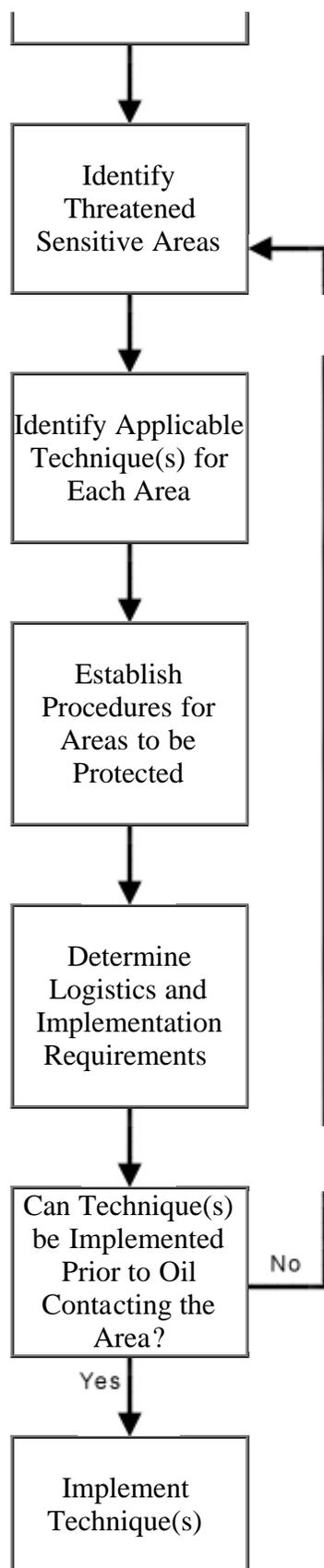
Protection refers to the implementation of techniques or methods to prevent oil from making contact with a shoreline or aquatic area that is determined to be sensitive for environmental, economic, cultural, or human use reasons. Implementation of sensitive area protection techniques must consider a number 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 6.8](#).

## Dearborn

**FIGURE 6.3-1 - SENSITIVE AREA PROTECTION IMPLEMENTATION SEQUENCE**





**Dearborn**

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

TECHNIQUE	DESCRIPTION	RECOMMENDED EQUIPMENT	APPLICABILITY	POTENTIAL ENVIRONMENTAL EFFECTS
<b>Removal</b>				
1. Manual Removal	Hand tool (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.	<u>Equipment</u> misc. hand tools <u>Personnel</u> 10-20 workers	<ul style="list-style-type: none"> <li>• Can be used on all habitat types</li> <li>• Light to moderate oiling conditions for stranded oil or heavy oils that have formed semi-solid to solid masses</li> <li>• In areas where roosting or birthing animals cannot or should not be disturbed</li> </ul>	<ul style="list-style-type: none"> <li>• Sediment disturbance and erosion potential</li> </ul>
2. Mechanical Removal	Mechanical earthmoving equipment is used to remove oiled sediments and debris from heavily impacted areas with suitable access.	<u>Equipment</u> motor grader, backhoe, dump truck elevating scrapers <u>Personnel</u> 2-4 workers plus equipment operators	<ul style="list-style-type: none"> <li>• On land, wherever surface sediments are accessible to heavy equipment</li> <li>• Large amounts of oiled materials</li> </ul>	<ul style="list-style-type: none"> <li>• Removes upper 2 to 12 inches of sediments</li> </ul>
3. Sorbent Use	Sorbents are applied manually to oil accumulations, coatings, sheens, etc., to remove and recover the oil.	<u>Equipment</u> misc. hand tools misc. sorbents <u>Personnel</u> 2-10 workers	<ul style="list-style-type: none"> <li>• Can be used on all habitat types</li> <li>• Free-floating oil close to shore or stranded on shore, secondary treatment method after gross oil removal</li> <li>• Sensitive</li> </ul>	<ul style="list-style-type: none"> <li>• Sediment disturbance and erosion potential</li> <li>• Trampling of vegetation and organisms</li> <li>• Foot traffic can work oil deeper into soft sediments</li> </ul>

			areas where access is restricted	
4. Vacuum/Pumps/Skimmers	Pumps, vacuum trucks, skimmers are used to remove oil accumulations from land or relatively thick floating layers from the water.	<u>Equipment</u> 1-2 50- to 100-bbl vacuum trucks w/hoses 1-2 nozzle screens or skimmer heads <u>Personnel</u> 2-6 workers plus truck operators	<ul style="list-style-type: none"> <li>• Can be used on all habitat types</li> <li>• Stranded oil on the substrate</li> <li>• Shoreline access points</li> </ul>	<ul style="list-style-type: none"> <li>• Typically does not remove all oil</li> <li>• Can remove some surface organisms, sediments, and vegetation</li> </ul>
<b>Washing</b>				
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.	<u>Equipment</u> 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 systems <u>Personnel</u> 6-8 workers per system	<ul style="list-style-type: none"> <li>• All shoreline types except steep intertidal areas</li> <li>• Heavily oiled areas where the oil is still fluid and adheres loosely to the substrate</li> <li>• Where oil has penetrated into gravel sediments</li> <li>• Used with other washing techniques</li> </ul>	<ul style="list-style-type: none"> <li>• Can impact clean downgradient areas</li> <li>• Can displace some surface organisms if present</li> <li>• Sediments transported into water can affect water quality</li> </ul>

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

TECHNIQUE	DESCRIPTION	RECOMMENDED EQUIPMENT	APPLICABILITY	POTENTIAL ENVIRONMENTAL EFFECTS
<b>Washing, Continued</b>				
6. Flushing	Water streams at low to moderate pressure, and possibly elevated temperatures, are	<u>Equipment</u> 1-5 50- to 100-gpm/100-psi pumping systems with manifold	<ul style="list-style-type: none"> <li>• Substrates, riprap, and solid man-made structures</li> </ul>	<ul style="list-style-type: none"> <li>• Can impact clean downgradient areas</li> <li>• Will displace</li> </ul>

	used to remove oil from surface or near-surface sediments through agitation and direct 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.	1-4 100-ft hoses and nozzles per system 1-2 200-ft containment booms per system 1 oil recovery device per system <u>Personnel</u> 8-10 workers per system	<ul style="list-style-type: none"> <li>• Oil stranded onshore</li> <li>• Floating oil on shallow intertidal areas</li> </ul>	<p>many surface organisms if present</p> <ul style="list-style-type: none"> <li>• Sediments transported into water can affect water quality</li> <li>• Hot water can be lethal to many organisms</li> <li>• Can increase oil penetration depth</li> </ul>
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.	<u>Equipment</u> 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 <u>Personnel</u> 2-4 workers per unit	<ul style="list-style-type: none"> <li>• Bedrock, man-made structures, and gravel substrates</li> <li>• When low-pressure flushing is not effective</li> <li>• Directed water jet can remove oil from hard to reach sites</li> </ul>	<ul style="list-style-type: none"> <li>• Will remove most organisms if present</li> <li>• Can damage surface being cleaned</li> <li>• Can affect clean downgradient or nearby areas</li> </ul>
<b>In Situ</b>				
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.	<u>Equipment</u> 1,000- to 2,000- ft sorbent/snare boom 200-400 stakes or anchor systems <u>Personnel</u> 4-10 workers	<ul style="list-style-type: none"> <li>• All shoreline types</li> <li>• Calm wave action</li> <li>• Slow removal process</li> </ul>	<ul style="list-style-type: none"> <li>• Significant amounts of oil can remain on the shoreline for extended periods of time</li> </ul>
9. Sediment Tilling	Mechanical equipment or hand tools are used to till lightly to moderately oiled	<u>Equipment</u> 1 tractor fitted with tines, dicer, ripper blades, etc. or 1-4 rototillers or 1 set of hand tools	<ul style="list-style-type: none"> <li>• Any sedimentary substrate that can support heavy equipment</li> </ul>	<ul style="list-style-type: none"> <li>• Significant amounts of oil can remain on the shoreline for extended periods of time</li> </ul>

	surface sediments to maximize natural degradation processes.	<u>Personnel</u> 2-10 workers	<ul style="list-style-type: none"> <li>• Sand and gravel beaches with subsurface oil</li> <li>• Where sediment is stained or lightly oiled</li> <li>• Where oil is stranded above normal high waterline</li> </ul>	<ul style="list-style-type: none"> <li>• Disturbs surface sediments and organisms</li> </ul>
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## Dearborn

**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.	<u>Equipment</u> 1-2 fertilizer applicators 1 tilling device if required <u>Personnel</u> 2-4 workers	<ul style="list-style-type: none"> <li>• Any shoreline habitat type where nutrients are deficient</li> <li>• Moderate to heavily oiled substrates</li> <li>• After other techniques have been used to remove free product on lightly oiled shorelines</li> <li>• Where other techniques are destructive or ineffective</li> </ul>	<ul style="list-style-type: none"> <li>• Significant amounts of oil can remain on the shoreline for extended periods of time</li> <li>• Can disturb surface sediments and organisms</li> </ul>
11. Log/Debris Burning	Oiled logs, driftwood, vegetation, and debris are	<u>Equipment</u> 1 set of fire control equipment 2-4 fans	<ul style="list-style-type: none"> <li>• On most habitats except dry muddy</li> </ul>	<ul style="list-style-type: none"> <li>• Heat may impact local near-surface organisms</li> </ul>

	burned to minimize material handling and disposal requirements. Material should be stacked in tall piles and fans used to ensure a hot, clean burn.	1 supply of combustion promoter <u>Personnel</u> 2-4 workers	substrates where heat may impact the biological productivity of the habitat <ul style="list-style-type: none"> <li>Where heavily oiled items are difficult or impossible to move</li> <li>Many potential applications on ice</li> </ul>	<ul style="list-style-type: none"> <li>Substantial smoke may be generated</li> <li>Heat may impact adjacent vegetation</li> </ul>
12. Natural Recovery	No action is taken and oil is allowed to degrade naturally.	None required	<ul style="list-style-type: none"> <li>All habitat types</li> <li>When natural removal rates are fast</li> <li>Degree of oiling is light</li> <li>Access is severely restricted or dangerous to cleanup crews</li> <li>When cleanup actions will do more harm than natural removal</li> </ul>	<ul style="list-style-type: none"> <li>Oil may persist for significant periods of time</li> <li>Remobilized oil or sheens may impact other areas</li> <li>Higher probability of impacting wildlife</li> </ul>

## Dearborn

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

TECHNIQUE	DESCRIPTION	RECOMMENDED EQUIPMENT	APPLICABILITY	POTENTIAL ENVIRONMENTAL EFFECTS
In Situ, Continued				
13. Dispersants	Dispersants are used to reduce the oil/water	Dispersants Boat or aircraft	<ul style="list-style-type: none"> <li>Water bodies with sufficient</li> </ul>	<ul style="list-style-type: none"> <li>Use in shallow water could affect benthic</li> </ul>

	<p>interfacial tension thereby decreasing the energy needed for the slick to break into small particles and mix into the water column.</p> <p>Specially formulated products containing surface-active agents are sprayed from aircraft or boats onto the slick.</p>		<p>depth and volume for mixing and dilution</p> <ul style="list-style-type: none"> <li>• When the impact of the floating oil has been determined to be greater than the impact of dispersed oil on the water-column community</li> </ul>	<p>resources</p> <ul style="list-style-type: none"> <li>• May adversely impact organisms in the upper 30 feet of the water column</li> <li>• Some water-surface and shoreline impacts could occur</li> </ul>
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.)

## Dearborn

### 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 different 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 re-coalescing. 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 and 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 FOOSC and the Regional Response Team (RRT).

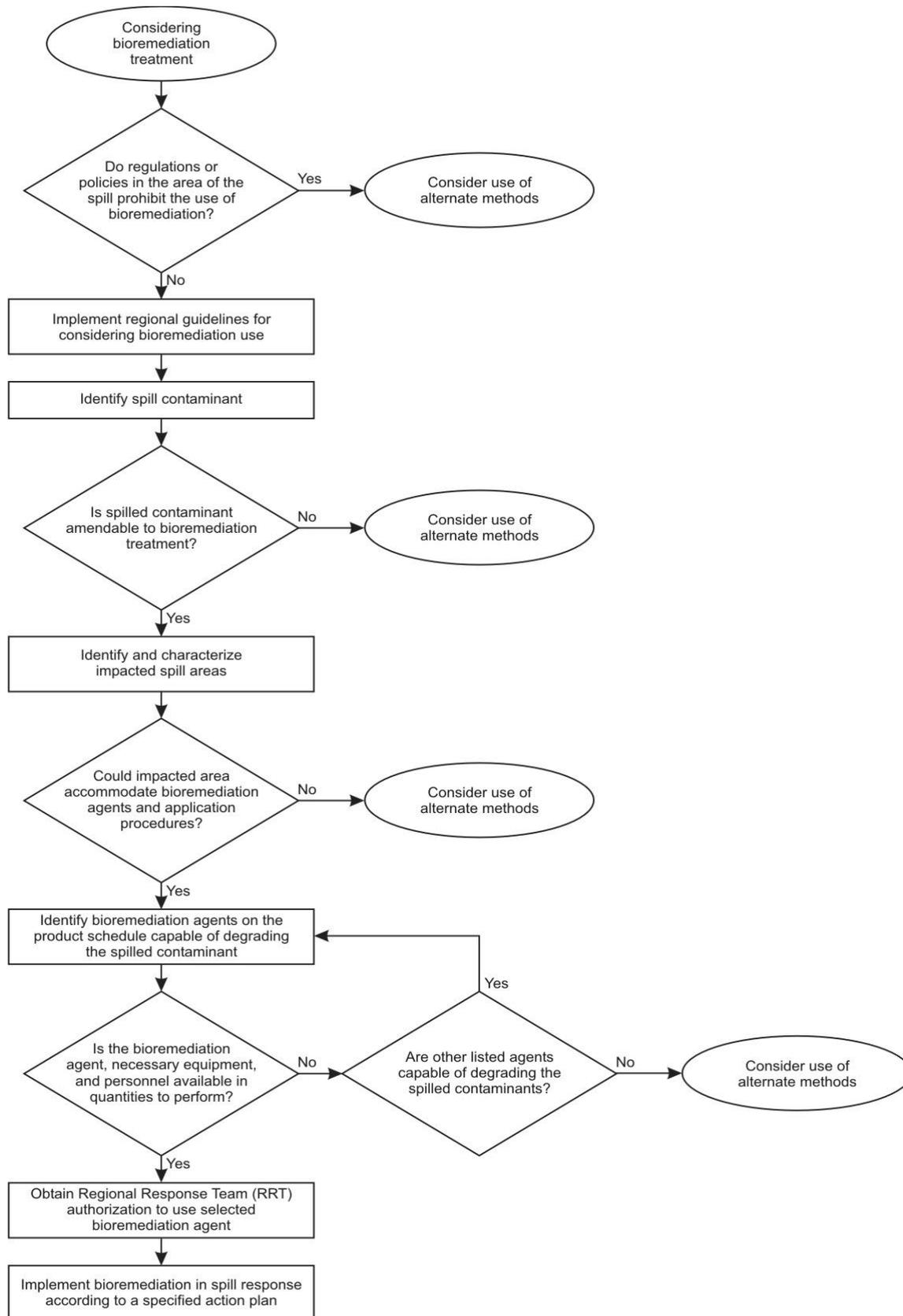
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FIGURE 6.4-1 - ALTERNATE STRATEGIES CHECKLIST

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			

## Dearborn

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.

### Dearborn

## 6.6 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Bat, Indiana	<i>Myotis sodalis</i>	Caves, mines, upland forests	E	Michigan
Beetle, American burying	<i>Nicrophorus americanus</i>	Cropland/hedgerow	E	Michigan
Beetle, Hungerford's crawling water	<i>Brychius hungerfordi</i>	Warm, shallow, gravel bottom outflow streams	E	Michigan
Butterfly, Karner blue	<i>Lycaeides melissa samuelis</i>	Pine barrens and oak savannas on sandy soils	E	Michigan
Butterfly, Mitchell's satyr	<i>Neonympha mitchellii mitchellii</i>	Sedge swamps, marshes	E	Michigan
Clubshell Entire Range	<i>Pleurobema clava</i>	Medium to large rivers in gravel or mixed gravel and sand	E	Michigan
Eagle, bald	<i>Haliaeetus leucocephalus</i>	Coastlines, rivers, lakes, wet prairies, and coastal pine lands	T	Michigan
Plover, piping	<i>Charadrius melodus</i>	Sandy beaches, islands	E	Michigan
Puma, eastern	<i>Puma concolor cougar</i>	Woodland/forest	E	Michigan
Riffleshell, northern	<i>Epioblasma torulosa</i>	Swiftly flowing, well-oxygenated water,	E	Michigan

	<i>rangiana</i>	coarse gravel runs		
Snake, copperbelly water	<i>Nerodia erythrogaster neglecta</i>	Wooded floodplains, shrub wetlands, and adjacent to slow moving rivers	T	Michigan

T - Threatened

E - Endangered

## Dearborn

### 6.6 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Warbler, Kirtland's	<i>Dendroica kirtlandii</i>	Shrubland/chaparral, woodland - conifer	E	Michigan
Wolf, gray	<i>Canis lupus</i>	Mixed, grassland/herbaceous	E	Michigan
Fern, American hart's-tongue	<i>Asplenium scolopendrium var. americanum</i>	High humidity, deeply shaded conditions near limestone sinks and caves	T	Michigan
Thistle, Pitcher's	<i>Cirsium pitcheri</i>	Shorelines of Lakes Michigan, Huron and Superior	T	Michigan
Daisy, lakeside	<i>Hymenoxys herbacea</i>	Full sun in dry calcareous sites	T	Michigan
Iris, dwarf lake	<i>Iris lacustris</i>	Sands to gravels, to sandy clay loam and organic-enriched sands	T	Michigan
Pogonia, small whorled	<i>Isotria medeoloides</i>	Cidic soils, in dry to mesic second-growth	T	Michigan
Monkey-flower, Michigan	<i>Mimulus glabratus var. michiganensis</i>	Sunny areas, rooted in silty, sandy, alkaline mud, and streams of cool running water	E	Michigan
Orchid, eastern prairie fringed	<i>Platanthera leucophaea</i>	Mesic to wet praries	T	Michigan
Goldenrod, Houghton's	<i>Solidago houghtonii</i>	Sparsely vegetated, moist, sandy, interdunal depressions, beach flats and beach sands	T	Michigan

T - Threatened

E - Endangered

**Dearborn**

## 6.7 VULNERABILITY ANALYSIS

**VULNERABILITY ANALYSIS (DETAILED)****Water Intakes:**

The nearest water intake is more than 10 miles from the Facility. It is extremely unlikely that a spill could reach this point.

**Schools:**

The closest schools to the Facility are:

**NAME, LOCATION:**

Treadwell Elementary School, 1.1 miles (south)  
 Hoover Middle School, 1.3 miles (south)  
 Holland Elementary School, 1.4 miles (south)  
 Fischer Elementary School, 1.5 miles (south)  
 Oakwood SDA Junior Academy, 2.0 miles (south)  
 Truman High School, 2.4 miles (south)  
 Clarence Randall Elementary School, 3.1 miles (east)  
 Arthur W. Meek Elementary School, 3.4 miles (south)  
 Light & Life Christian School, 3.3 miles (east)  
 Baylor-Woodson Elementary School, 3.4 miles (south)  
 Arthur W. Meek Elementary School, 3.4 miles (south)

It is unlikely that a spill could reach these points.

Any evacuation efforts for these schools will be coordinated with the local emergency assistance agencies (police departments, fire department, etc.). Additional details on the schools within the area of the Facility are included on the maps in SECTION 6.8.

**Medical Facilities:**

The Heritage Hospital is three miles from the Facility. It is extremely unlikely that a spill could reach this point.

Any evacuation efforts for the hospital will be coordinated with the local emergency assistance agencies (police departments, fire department, etc.).

**Residential Areas:**

The nearest residence is approximately ? mile from the Facility. It is extremely unlikely that a spill could reach this point.

Any evacuation efforts for these areas will be coordinated with the local emergency assistance agencies (police department, fire department, etc.). Additional details on the residential areas within the vicinity of the Facility are included on the maps in SECTION 6.8.

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## 6.7 VULNERABILITY ANALYSIS, CONTINUED

**VULNERABILITY ANALYSIS (DETAILED)****Businesses:**

The Facility is located within a business area. Several other businesses are located in close proximity to the Facility.

Any evacuation efforts for these areas will be coordinated with the local emergency assistance agencies (police department, fire department, etc.). Additional details on the general layout of businesses within the vicinity of the Facility are included on the maps in SECTION 6.8.

**Wetlands or Other Sensitive Environments:**

During a response situation the USFWS and applicable state agencies should be contacted for information regarding wetlands and other sensitive environments. Upon contact the agencies will be able to:

? Identify and establish priorities for fish and wildlife, wetlands, and other sensitive environments requiring protection from any direct or indirect effects from a discharge.

? Identify potential environmental effects on fish and wildlife, wetlands, and other sensitive environments resulting from removal actions or countermeasures.

Natural Resource Areas and Sensitive Species (plants, birds, fish, etc.) are identified in SECTION 6.8 (Inland Sensitivity Atlas, Tiles 93, 94, 103, 102, 110 and 109).

**Fish and Wildlife:**

During a response situation the USFWS and applicable state agencies should be contacted for information regarding wetlands and other sensitive environments. Upon contact the agencies will be able to:

? Identify and establish priorities for fish and wildlife, wetlands, and other sensitive environments requiring protection from any direct or indirect effects from a discharge.

? Identify potential environmental effects on fish and wildlife, wetlands, and other sensitive environments resulting from removal actions or countermeasures.

Natural Resource Areas and Sensitive Species (plants, birds, fish, etc.) are identified in SECTION 6.8 (Inland Sensitivity Atlas, Tiles 93, 94, 103, 102, 110 and 109).

**Lakes and Streams:**

The Ecorse River is located approximately 1/8 mile from the Facility. A release from the Facility could impact both the Ecorse and Detroit Rivers. In the event of a serious incident, the spill response contractor for the Facility would be assigned the task of protecting and remediating any lake or stream which might be damaged by a migrating oil spill.

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## 6.7 VULNERABILITY ANALYSIS, CONTINUED

**VULNERABILITY ANALYSIS (DETAILED)**

**Endangered Flora and Fauna:**

The endangered flora and fauna that may be potentially impacted by a discharge originating at the Facility are detailed in SECTION 6.8. USFWS and applicable state agencies will be contacted for information regarding endangered species.

Natural Resource Areas and Sensitive Species (plants, birds, fish, etc.) are identified in SECTION 6.8 (Inland Sensitivity Atlas, Tiles 93, 94, 103, 102, 110 and 109).

**Recreational Areas:**

The nearest recreational area is approximately 1.5 miles. It is extremely unlikely that a spill could reach this point.

The recreational areas that may be potentially impacted by a discharge originating at the Facility are more fully identified on the maps in SECTION 6.8.

Any evacuation efforts for these areas will be coordinated with the local emergency assistance agencies (police department, fire department, etc.). The media could also be used to issue public warnings if appropriate.

**Transportation Routes (Air, Water, Land):**

A railroad line is approximately 1/8 mile from the Facility. In the event of a serious incident, the spill response contractor for the terminal would be assigned the task of protecting the railroad and remediating any damage to it by a migrating oil spill.

**Utilities:**

There are no utilities or substations within a significant distance of this Terminal. It is not expected that a spill from the Facility could have impact on a local utility.

**Other Applicable Areas:**

The Detroit Metropolitan Airport is approximately 2 miles from the Facility. It is extremely unlikely that a spill could reach this point.

In the event of a spill or other emergency event which could have the likelihood of affecting any of the above referenced locations, at a minimum the following steps would be taken:

- 1) The appropriate public-emergency response-public health facilities/entities would be notified.
- 2) In the case of a facility/residence/business etc. which is occupied by people, appropriate public-emergency response-public health facilities/entities would be advised to warn these facilities, and recommend evacuation as necessary.
- 3) In the case of an environmentally sensitive area, the proper public agencies are advised, and recommended to take proper protective actions.

**Dearborn****6.8 SENSITIVITY MAPS**

[\(Click here for SEMINDEX.PDF\)](#)

[\(Click here for SEMDATA.PDF\)](#)

[\(Click here for LEGEND.PDF\)](#)

[\(Click here for SEM93.PDF\)](#)

[\(Click here for SEM93D3.PDF\)](#)

[\(Click here for SEM93D2.PDF\)](#)

[\(Click here for SEM93D4.PDF\)](#)

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[\(Click here for SEM94C2.PDF\)](#)

[\(Click here for SEM94D1.PDF\)](#)

**Dearborn**SECTION 7  
SUSTAINED RESPONSE ACTIONS

Last revised: September 2006

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7.1 Response Resources7.1.1 Response EquipmentFigure 7.1-1 - Regional Company and Response Contractor's  
Equipment List / Response Time7.1.2 Response Equipment Inspection and Maintenance7.1.3 Contractors, Contractor Equipment, and Labor7.1.4 Command PostFigure 7.1-2 - Command Post Checklist7.1.5 Staging Area7.1.6 Communications Plan**Figure 7.1-3 - Communications Checklist**7.2 Site Security MeasuresFigure 7.2-1 - Site Security ChecklistFigure 7.2-2 - Facility Security7.3 Waste ManagementFigure 7.3-1 - Waste Management Flow ChartFigure 7.3-2 - General Waste Containment and Disposal  
Checklist7.3.1 StorageFigure 7.3-3 - Temporary Storage MethodsFigure 7.3-4 - Facility-Specific Disposal Locations

SECTION 7  
SUSTAINED RESPONSE ACTIONS, CONTINUED

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7.4 Public Affairs

Figure 7.4-1 - Media Incident Fact Sheet

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7.1 RESPONSE RESOURCES

## 7.1.1 Response Equipment

CATEGORY	TYPE/MODEL	QUANTITY	SIZE	YEAR PURCHASED	OPERATIONAL STATUS	LOCATION AT FACILITY
Dearborn Terminal						
COMMUNICATION EQUIPMENT	Cellular phones	Varies			Operational	On Person
MAINTENANCE EQUIPMENT	Absorbent Pads	500	2 ft by 2 ft		Operational	Warehouse
MAINTENANCE EQUIPMENT	Granular Absorbent Material Personal Protective Equipment	4	50 lb.		Operational	Warehouse
MAINTENANCE EQUIPMENT	Fire Extinguishers	20			Operational	Throughout the Facility

\***Note:** Response equipment is tested and deployed as described in **APPENDIX A** of the Spill Response Plan.

### Dearborn

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

\* USCG Classified OSRO

COMPANY/CONTRACTOR	EQUIPMENT	RESPONSE TIME
*Marine Pollution Control Corporation Detroit, MI	Full response capabilities	1 hours
Inland Waters, Inc. Detroit, MI	Full response capabilities	1 hours

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#### 7.1.2 Response Equipment Inspection and Maintenance

Company response resources consist of strategically located response trailers containing primarily safety and emergency response equipment.

In general, one or more trailers can be mobilized to any location along the pipeline within six to 12 hours to meet the federal Tier 1 response planning requirements. Vacuum truck contractors can also respond to most locations along the pipeline system within six hours and regional response contractors can respond to any location within 30 to 36 hours to meet the

Tier 2 and Tier 3 response requirements.

Company response equipment is tested and inspected as noted below. The Manager of Operations is responsible for ensuring that the following response equipment and testing procedures are implemented. These consist of:

---

**Containment boom** During semiannual boom deployment exercises, boom will be inspected for signs of structural deficiencies. If tears in fabric or rotting is observed, boom will be repaired or replaced. In addition, end connectors will be inspected for evidence of corrosion. If severe corrosion is detected, equipment will be repaired or replaced.

---

**Miscellaneous equipment** Other response equipment identified in this Plan will be inventoried and tested on a semiannual basis to ensure that the stated quantities are in inventory and in proper working order. The equipment inspection and deployment exercises are recorded and maintained at the facility and retained for a period of five years. Exercise requirements are listed in **APPENDIX A**. An Emergency Response or Drill form is in **FIGURE A.1-3**.

### 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.
- **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.

## Dearborn

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, and
- Have moorage available for vessels to aid the loading/offloading of personnel.

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### 7.1.6 Communications Plan

Company-owned communications equipment and quantities commonly used to address response communications are listed below:

- Various number of cellular phones located on person.

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 set up 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 also may involve activation of multiple types of communications equipment and coordination among multiple responding agencies and contractors.

## Dearborn

**FIGURE 7.1-3 - COMMUNICATIONS CHECKLIST**

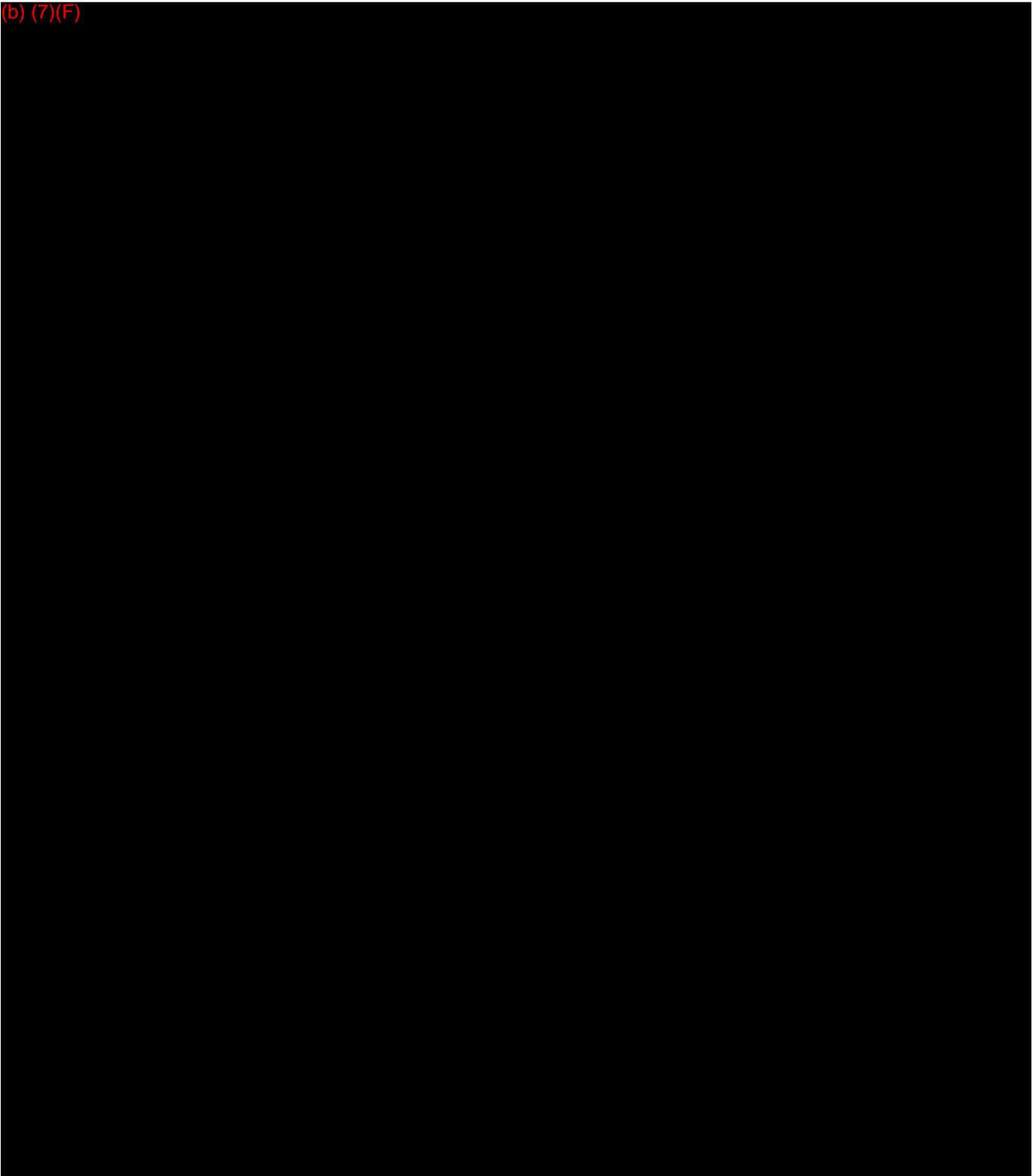
COMMUNICATIONS CHECKLIST	INITIALS	DATE/TIME STARTED	DATE/TIME COMPLETED
Develop a Communications Plan.			
Ensure adequate phone lines per staff element - contact local provider.			
Ensure adequate fax lines - contact local provider.			
Internet access necessary?			
Ensure recharging stations for cellular phones.			
VHF radio communications: <ul style="list-style-type: none"> <li>• Establish frequencies</li> <li>• Assign call signs</li> <li>• Distribute radios</li> <li>• Establish communications schedule</li> </ul>			
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.

## Dearborn

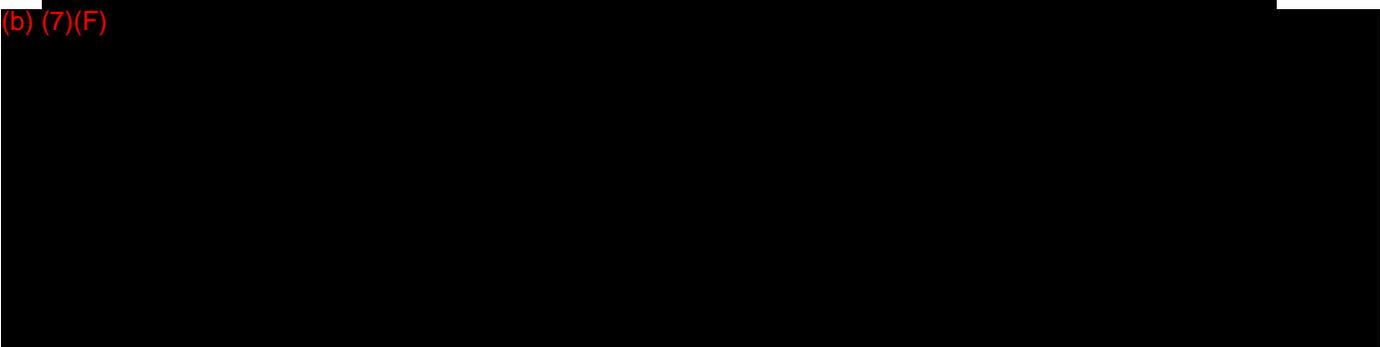
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## Dearborn

### 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,

## Dearborn

### 7.3 WASTE MANAGEMENT, CONTINUED

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

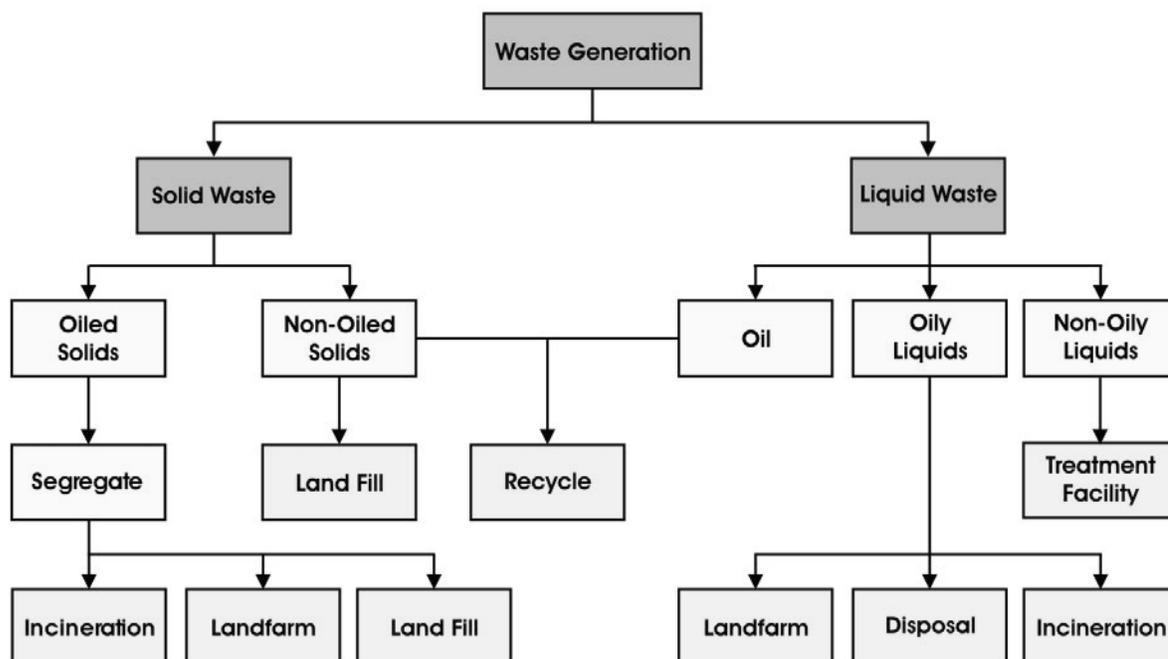
Solid wastes, such as sorbents, PPE, debris, and equipment, will typically be transported from the collection site to a designated facility for:

- Storage,
- Waste segregation,
- Packaging, and
- 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**



## Dearborn

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.

## Dearborn

**FIGURE 7.3-3 - TEMPORARY STORAGE METHODS**

CONTAINMENT	PRODUCT						CAPACITY
	OIL	OIL/WATER	OIL/SOIL	OIL/DEBRIS (Small)	OIL/DEBRIS (Medium)	OIL/DEBRIS (Large)	
Drums	X	X	X				0.2-0.5 yd <sup>3</sup>
Bags		X	X	X			1.0-2.0 yd <sup>3</sup>
Boxes		X	X	X			1-5 yd <sup>3</sup>
Open top rolloff	X	X	X	X	X	X	8-40 yd <sup>3</sup>
Roll top rolloff	X	X	X	X	X	X	15-25 yd <sup>3</sup>
Vacuum box	X	X					15-25 yd <sup>3</sup>
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 <sup>3</sup>
Bladders	X	X					25-1,500 gal

## Dearborn

**FIGURE 7.3-4 - FACILITY-SPECIFIC DISPOSAL LOCATIONS**

MATERIAL	DISPOSAL FACILITY	LOCATION
Recovered Product	Usher Oil	Usher

		Detroit, MI
Contaminated Soil	Contaminated Soil - non-reg HES-Roachdale	HES-Roachdale Roachdale, IN
	Contaminated Soil - haz (D018) HES/WTI	HES/WTI East Liverpool, OH
Contaminated Equipment	Contaminated Equipment - non-reg HES-Roachdale	HES-Roachdale Roachdale, IN
	Contaminated Equipment - haz (D018) HES/WTI	HES/WTI East Liverpool, OH
Personnel Protective Equipment	PPE - non-reg HES-Roachdale or Covanta	HES-Roachdale Roachdale, IN  HES Covanta Indianapolis, IN
	PPE - haz (D018) Green America or HES/WTI	Green America Hannibal, MO  HES/WTI East Liverpool, OH
Decontamination Solutions	Decontam Solns - non-reg HES-Indy or Usher Oil	HES-Indy Indianapolis, IN
	Decontam Solns - haz (D018) Usher Oil	Usher Detroit, MI
Adsorbents and Spent Chemicals	Absorbents - non-reg HES-Indy or Usher Oil	HES-Indy Indianapolis, IN
	Absorbents - haz (D018) Usher Oil	Usher Detroit, MI
	Spent Chemicals (depends on chemical) HES/WTI - incin / HES-Indy - aqueous treat / Green America - feuls blending	HES/WTI East Liverpool, OH  Green America Hannibal, MO

## Dearborn

### 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**)

## Dearborn

### 7.4 PUBLIC AFFAIRS, CONTINUED

#### 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.

---

#### Provide

- A brief, general description of what happened and
- 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, or
- 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.

## Dearborn

### 7.4 PUBLIC AFFAIRS, CONTINUED

#### 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.

## Dearborn

FIGURE 7.4-1 - MEDIA INCIDENT FACT SHEET

What occurred:
When (time):
Where (location):
What are hazards:
How is the situation being handled:
What agencies have been notified: <b>All necessary agencies have been notified.</b>
Has outside help been requested: <b>All necessary assistance has been requested.</b>
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:

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## SECTION 8

Last revised: September 2006

## DEMOBILIZATION / POST-INCIDENT REVIEW

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8.1 Terminating the Response8.2 DemobilizationFigure 8.2-1 - Demobilization Checklist8.3 Post-Incident ReviewFigure 8.3-1 - Emergency Response or Drill Form8.3.1 Final Spill Cleanup Report**Dearborn**

## 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.

## Dearborn

## 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.			
---	--	--	--

## Dearborn

### 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 also is 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 also should 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**. Results of the review are forwarded to the Company within 90 days following completion of response and cleanup procedures.

## Dearborn

### FIGURE 8.3-1 - EMERGENCY RESPONSE OR DRILL FORM

EXERCISE?????????  ACTUAL EVENT

Date & Time Convened:

1. Operations Director reviews facts of incident.

(Type, (b) (7)(F) [REDACTED] (?), Safety, Surroundings, Commodity, Volume Spilled (if spill), Weather)

Obtain topographical map of area from engineering.

Actions Taken:

Level:???????? ?????? 1?????? 2?????? 3

2. Is there anything that must be done prior to adjournment?

3. Who is on the scene?? (Company reps, others, i.e., fire, police, ambulance)

Who is the incident commander?

Phone Numbers:

Where is the command post?

Phone Numbers:

Who is BST Liaison with Incident Command?

Phone Numbers:

Request BST be included by speakerphone during EOC Unified Command meetings

## Dearborn

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

4. Is there a need to contact the Incident Management Teams?

Contact: a.? IMT?????? \_\_\_\_\_

b.? BART?? \_\_\_\_\_

5. Who (if anyone) has already been dispatched to the scene from Lisle/Chicago?

6. Who else should go to the scene ASAP?

7. Does an all-BP number need to be set up for notification purposes?

8. Next meeting at?

## Dearborn

### 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; and
- All other relative information.

**APPENDIX A**  
**TRAINING / EXERCISES**

Last revised: May 12, 2008

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**A.1 Exercise Requirements and Schedules****Figure A.1-1 - PREP Response Plan Core Components****Figure A.1-2 - Exercise Requirements****Figure A.1-3 - Emergency Response or Drill Form****Figure A.1-4 - EPA Required Response Equipment Testing and Deployment Drill Log****Figure A.1-5 - Qualified Individual Notification Drill Log****Figure A.1-6 - Emergency Management Team Tabletop Exercise Log****A.2 Training Program****Figure A.2-1 - Training Requirements****Figure A.2-2 - PREP Training Program Matrix****Figure A.2-3 - Personnel Response Training Log**

## 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, and
  - Post-drill evaluation improvements.
- **FIGURE A.1-2** provides descriptions of exercise requirements, **FIGURE A.1-3** provides an Emergency Response or Drill Form.

### Dearborn

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: <ul style="list-style-type: none"> <li>• Unified Command</li> <li>• Response management system</li> </ul>	<p>Demonstrate the ability of the spill response organization to work within a unified command.</p> <p>Demonstrate the ability of the response organization to operate within the framework of the response management system identified in their respective plans.</p>
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.

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FIGURE A.1-2 - EXERCISE REQUIREMENTS

EXERCISE TYPE	EXERCISE CHARACTERISTICS
Facility/QI notification	<ul style="list-style-type: none"> <li>• Conducted quarterly.</li> <li>• Safety/PSM Coordinator initiates mock spill notification to QI.</li> <li>• Safety/PSM Coordinator documents time/date of notification, name, and phone number of individual contacted.</li> <li>• Document in accordance with form in <u>FIGURE A.1-3</u>.</li> </ul>
Equipment deployment	<ul style="list-style-type: none"> <li>• Conducted semiannually if Company owns equipment.</li> <li>• Response contractors listed in the plan must participate in annual deployment exercise.</li> <li>• Document in accordance with form in <u>FIGURE A.1-3</u>.</li> </ul>
IMT tabletop	<ul style="list-style-type: none"> <li>• Conducted annually.</li> <li>• Tests IMT's response activities/responsibilities.</li> <li>• Notify the GLO and NRC.</li> <li>• Documents Plan's effectiveness.</li> <li>• Must exercise worst case discharge scenario once every three years.</li> <li>• Must test all Plan components at least once</li> </ul>

	<p>every three years.</p> <ul style="list-style-type: none"> <li>• Document in accordance with form in <u>FIGURE A.1-3</u>.</li> </ul>
Unannounced	<ul style="list-style-type: none"> <li>• Company will either participate in unannounced tabletop exercise or equipment deployment exercise on an annual basis, if selected.</li> <li>• Company may take credit for participation in government initiated unannounced drill in lieu of drill required by PREP guidelines.</li> <li>• 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.</li> </ul>
Area	<ul style="list-style-type: none"> <li>• 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.</li> </ul>
<b>OTHER EXERCISE CONSIDERATIONS</b>	
Drill program evaluation procedures	<ul style="list-style-type: none"> <li>• Company conducts post-exercise meetings to discuss positive items, areas for improvement, and to develop action item checklist to be implemented later.</li> </ul>
Records of drills	<ul style="list-style-type: none"> <li>• Company will maintain exercise records for five years following completion of each exercise.</li> <li>• Records will be made available to applicable agencies upon request.</li> <li>• 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.).</li> </ul>

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

EXERCISE?????????  ACTUAL EVENT

Date & Time Convened:

1. Operations Director reviews facts of incident.

(Type, Group Security (Terrorist Act?), Safety, Surroundings, Commodity, Volume Spilled (if spill), Weather)

Obtain topographical map of area from engineering.

Actions Taken:

Level:???????? ?????? 1?????? 2?????? 3

2. Is there anything that must be done prior to adjournment?

3. Who is on the scene?? (Company reps, others, i.e., fire, police, ambulance)

Who is the incident commander?

Phone Numbers:

Where is the command post?

Phone Numbers:

Who is BST Liaison with Incident Command?

Phone Numbers:

Request BST be included by speakerphone during EOC Unified Command meetings

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

4. Is there a need to contact the Incident Management Teams?

Contact:        a.? IMT??????? \_\_\_\_\_  
                  b.? BART?? \_\_\_\_\_

5. Who (if anyone) has already been dispatched to the scene from Lisle/Chicago?

6. Who else should go to the scene ASAP?

7. Does an all-BP number need to be set up for notification purposes?

8. Next meeting at?

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FIGURE A.1-4 - EPA REQUIRED RESPONSE EQUIPMENT TESTING AND DEPLOYMENT DRILL LOG

Item:	Date of Last Update:
<b>ACTIVITY</b>	<b>INFORMATION</b>
Last inspection or response equipment test date	
Inspection frequency	
Last deployment drill date	
Deployment frequency	
OSRO Certification (if applicable)	

Item:	Date of Last Update:
<b>ACTIVITY</b>	<b>INFORMATION</b>
Last inspection or response equipment test date	
Inspection frequency	
Last deployment drill date	
Deployment frequency	
OSRO Certification (if applicable)	

Item:	Date of Last Update:
<b>ACTIVITY</b>	<b>INFORMATION</b>
Last inspection or response equipment test date	

Inspection frequency	
Last deployment drill date	
Deployment frequency	
OSRO Certification (if applicable)	

Item:	Date of Last Update:
<b>ACTIVITY</b>	<b>INFORMATION</b>
Last inspection or response equipment test date	
Inspection frequency	
Last deployment drill date	
Deployment frequency	
OSRO Certification (if applicable)	

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FIGURE A.1-5 - QUALIFIED INDIVIDUAL NOTIFICATION DRILL LOG

Company:	Date:
<b>ACTIVITY</b>	<b>INFORMATION</b>
Qualified Individual(s) Contacted	
Evaluation	
Changes to be Implemented	
Time Table for Implementation	

Company:	Date:
<b>ACTIVITY</b>	<b>INFORMATION</b>
Qualified Individual(s) Contacted	
Evaluation	
Changes to be Implemented	
Time Table for Implementation	

Company:	Date:
<b>ACTIVITY</b>	<b>INFORMATION</b>
Qualified Individual(s) Contacted	
Evaluation	
Changes to be Implemented	
Time Table for Implementation	

Company:	Date:
ACTIVITY	INFORMATION
Qualified Individual(s) Contacted	
Evaluation	
Changes to be Implemented	
Time Table for Implementation	

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FIGURE A.1-6 - EMERGENCY MANAGEMENT TEAM TABLETOP EXERCISE LOG

Company:	Date:
ACTIVITY	INFORMATION
Emergency Scenario	
Evaluation	
Changes to be Implemented	
Time Table for Implementation	

Company:	Date:
ACTIVITY	INFORMATION
Emergency Scenario	
Evaluation	
Changes to be Implemented	
Time Table for Implementation	

Company:	Date:
ACTIVITY	INFORMATION
Emergency Scenario	
Evaluation	
Changes to be Implemented	
Time Table for Implementation	

Company:	Date:
ACTIVITY	INFORMATION
Emergency Scenario	
Evaluation	
Changes to be Implemented	
Time Table for Implementation	



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### 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	<ul style="list-style-type: none"> <li>All field personnel will be trained to properly report/monitor spills.</li> <li>Plan will be reviewed annually with all employees and contract personnel.</li> <li>The Personnel Response Training Log is located in <b>FIGURE A.2-3</b>.</li> </ul>
OSHA training requirements	<ul style="list-style-type: none"> <li>All Company responders designated in Plan must have 24 hours of initial spill response training.</li> <li>Laborers having potential for minimal exposure must have 24 hours of initial oil spill response instruction and eight hours of actual field experience.</li> <li>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.</li> <li>On-site management/supervisors required to receive same training as equipment operators/general laborers plus eight hours of specialized hazardous waste management training.</li> <li>Managers/employees require eight hours of annual refresher training.</li> </ul>
Incident Management Team personnel training	<ul style="list-style-type: none"> <li>See recommended PREP Training Program Matrix (<b>FIGURE A.2-2</b>).</li> </ul>
Training for casual laborers or volunteers	<ul style="list-style-type: none"> <li>Company will not use casual laborers/volunteers for operations requiring HAZWOPER training.</li> </ul>
Wildlife	<ul style="list-style-type: none"> <li>Only trained personnel approved by USFWS and appropriate state agency will be used to treat oiled wildlife.</li> </ul>
Training documentation and record maintenance	<ul style="list-style-type: none"> <li>Training activity records will be retained five years for all personnel following completion of training.</li> <li>Company will retain training records indefinitely for individuals assigned specific duties in the Plan.</li> </ul>

Training records will be retained at each facility or pipeline office; Supervisor/Area Manager will document all applicable training.

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FIGURE A.2-2 - PREP TRAINING PROGRAM MATRIX

TRAINING ELEMENT	QUALIFIED INDIVIDUAL (QI)	INCIDENT MANAGEMENT TEAM (IMT)	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 sheets (MSDS), special handling procedures, health and safety hazards, spill and fire fighting procedures	X	X	X
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:	X	X	X

<ul style="list-style-type: none"> <li>• Command and control</li> <li>• Public information</li> <li>• Safety</li> <li>• Liaison with government agencies</li> <li>• Spill response operations</li> <li>• Planning</li> <li>• Logistics support</li> <li>• Finance</li> </ul>			
The responsibilities and duties of each Incident Management Team (IMT) 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		

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

TRAINING ELEMENT	QUALIFIED INDIVIDUAL (QI)	INCIDENT MANAGEMENT TEAM (IMT)	PIPELINE PERSONNEL
The Area Contingency Plan (ACP) for the area in which the facility is located	x	x	x
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 IMT		x	
Procedures for the post discharge review		x	

of the plan to evaluate and validate its effectiveness			
Basic information on spill operations and oil spill clean-up technology including: <ul style="list-style-type: none"> <li>• Oil containment</li> <li>• Oil recovery methods and devices</li> <li>• Equipment limitations and uses</li> <li>• Shoreline cleanup and protection</li> <li>• Spill trajectory analysis</li> <li>• Use of dispersants, in-situ burning, bioremediation</li> <li>• Waste storage and disposal considerations</li> </ul>		X	
Hazard recognition and evaluation		X	
Site safety and security procedures		X	
Personnel management, as applicable to designated job responsibilities		X	

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

TRAINING ELEMENT	QUALIFIED INDIVIDUAL (QI)	INCIDENT MANAGEMENT TEAM (IMT)	PIPELINE PERSONNEL
Procedures for directing the deployment and use of spill response equipment, as applicable to designated job responsibilities		X	X
Specific procedures to shut down effected operations			X
Procedures to follow in the event of discharge, potential discharge, or emergency involving the following equipment or scenarios: <ul style="list-style-type: none"> <li>• Tank overfill</li> <li>• Tank rupture</li> <li>• Piping or pipeline rupture</li> <li>• Piping or pipeline leak, both under pressure or not under pressure, if applicable</li> <li>• Explosion or fire</li> <li>• Equipment failure</li> <li>• Failure of secondary containment system</li> </ul>			X
QI's name and how to contact him or her			X

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FIGURE A.2-3 - PERSONNEL RESPONSE TRAINING LOG

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

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APPENDIX C

Last Revised: January 2005

TANK TABLES, COMPANY FORMS AND PLOT PLANS

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Figure C-1 - Tank Tables

Figure C-2 - Drainage Diagram

Figure C-3 - Evacuation Diagram

Figure C-4 - Discharge Prevention Meeting Log

Figure C-5 - Inspection Procedures

Figure C-6 - Annual Inspection Record

Figure C-7 - Secondary Containment Drainage Log

Figure C-8 - Reportable Spill History

Figure C-9 - Containment and Drainage Planning

FIGURE C-1 - TANK TABLES

Container/ Source	Failure/Cause	Tank Type	Year Constructed/ Installed	Direction of Flow/Rate (See Plot Plan)	Product Stored
(b) (7)(F)	(b) (7)(F)	(b) (7)(F)	(b) (7)(F)	(b) (7)(F)	(b) (7)(F)
6	Overfill / Rupture / Leakage	Internal Floating Roof	1954	Northwest / Instantaneous	Jet Fuel
1	Overfill / Rupture / Leakage	External floating roof with snow cover	1954	Northwest / Instantaneous	Jet Fuel
2	Overfill / Rupture / Leakage	External floating roof with snow cover	1954	Northwest / Instantaneous	Jet Fuel
3	Overfill / Rupture / Leakage	Cone	1954	Northwest / Instantaneous	Jet Fuel
4	Overfill / Rupture / Leakage	Internal Floating Roof	1954	Northwest / Instantaneous	Jet Fuel
7	Overfill / Rupture / Leakage	Vertical Fixed Roof	1954	Northwest / Instantaneous	Interface Pipeline Knock Off
8	Overfill / Rupture / Leakage	Horizontal	1996	Northwest / Instantaneous	Additive
8a	Overfill / Rupture / Leakage	Horizontal	1996	Northwest / Instantaneous	Additive
13	Overfill / Rupture / Leakage	Horizontal	1982	Northwest / Instantaneous	VRU Knockout
14	Overfill / Rupture / Leakage	Horizontal	2002	Northwest / Instantaneous	Sump water from tank bottoms

Note: There are no underground storage tanks or surface impoundments located at this Facility.

\* Not in Containment Area \*\* Curbing and containment system

**Containment Type:**? 1-Earthern Berm and Floor,? 2-Concrete Berm and Floor, 3-Metal Berm and Floor, 4-Portable Containment or Inside Building, 5-Double Walled

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FIGURE C-1 - TANK TABLES , CONTINUED

(b) (7)(F)

Container/ Source	Failure/Cause	Secondary Containment Volume Type (gal)	Tank Type	Year Constructed/ Installed	Quantity Stored (gal)	Direction of Flow/Rate (See Plot Plan)	Product Stored
<b>MISCELLANEOUS - To</b>							
10	Overfill / Rupture / Leakage		Vault	1954	N/A	Northwest / Instantaneous	OWS #2 Holding Tank
11	Overfill / Rupture / Leakage		Vault	1996	N/A	Northwest / Instantaneous	OWS #1
12	Overfill / Rupture / Leakage		Vault	1954	N/A	Northwest / Instantaneous	OWS #2
<b>UNDERGROUND CON</b>		<b>- Total: 2,000</b>					
9	Overfill / Rupture /		Completely Buried	1991	N/A	Northwest / Instantaneous	Recovered Product

(b) (7)(F)

und storage tanks or surface impoundments located at this Facility.

\* Not in Containment Area \*\* Curbing and containment system

**Containment Type:?** 1-Earthen Berm and Floor, ? 2-Concrete Berm and Floor, 3-Metal Berm and Floor, 4-Portable Containment or Inside Building, 5-Double Walled

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FIGURE C-2 - DRAINAGE DIAGRAM

[\(Click here for Drainage Diagram\)](#)

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FIGURE C-3 - EVACUATION DIAGRAM

[\(Click here for Evacuation Diagram\)](#)

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FIGURE C-4 - DISCHARGE PREVENTION MEETING LOG

Spill Prevention Briefing

- Company personnel are kept knowledgeable of equipment, safety factors, and operating conditions.

- Annual training sessions are conducted by the Terminal Manager to assure oil handling personnel understand the SPCC Plan for the facility. These documented sessions keep personnel informed of their obligation to prevent pollution incidents and to improve spill control and response techniques.

DATE	ATTENDEES	
Subject/Issue Identified	Required Action	Implementation Date

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**FIGURE C-5 - INSPECTION PROCEDURES**

INSPECTION PROCEDURE	DATE
<b>A. ROUTINE VISUAL INSPECTION</b>	
• Check tank connections for leaks and localized dead vegetation	
• Inspect drains for accumulation of oil	
• Check tanks for gaps between tank and foundation and damage caused by vegetation roots	

<ul style="list-style-type: none"> <li>• Check valves and packing for leaks</li> </ul>	
<ul style="list-style-type: none"> <li>• Check drains and sumps for accumulation of oil and proper operation of level controls and pumps</li> </ul>	
<ul style="list-style-type: none"> <li>• Check tank seams for leaks, including drips, puddles, discolored area or localized dead vegetation</li> </ul>	
<ul style="list-style-type: none"> <li>• Check all tank and piping surfaces for signs of external corrosion</li> </ul>	
<ul style="list-style-type: none"> <li>• Check base of tanks for evidence of settling, leaks, including drips, puddles or discolored areas</li> </ul>	
<ul style="list-style-type: none"> <li>• Check piping for bowing between supports, leaks, including drips, puddles, discolored area, or localized dead vegetation</li> </ul>	
<ul style="list-style-type: none"> <li>• Check vent system outlets to ensure that they are not obstructed</li> </ul>	
<ul style="list-style-type: none"> <li>• Check secondary containment for discoloration and cracks or holes. Special attention should be given to seams and locations where piping goes through the deck, curbing or dikes. Ensure dike valves are closed and sealed</li> </ul>	
<ul style="list-style-type: none"> <li>• Check secondary containment for permeability, debris, erosion, location/status of pipes, inlets, drainage beneath tanks, and level of precipitation in dike vs. available capacity</li> </ul>	
<ul style="list-style-type: none"> <li>• Check secondary containment for presence of water in diked area. Follow appropriate Company procedures after visual inspection of the water to determine if sheen is present on the water</li> </ul>	
<ul style="list-style-type: none"> <li>• Check all gates to ensure that only the entrances/exits currently in use by authorized personnel are open and unlocked</li> </ul>	
<b>B. ANNUAL INSPECTIONS</b>	
<ul style="list-style-type: none"> <li>• Check facility lighting to ensure all are functioning</li> </ul>	
<ul style="list-style-type: none"> <li>• Check facility fencing for damages that would allow unauthorized entry</li> </ul>	
<ul style="list-style-type: none"> <li>• Inspect sumps for the accumulation of oil</li> </ul>	
<ul style="list-style-type: none"> <li>• Inspect diked/curbed areas for the accumulation of oil</li> </ul>	
<ul style="list-style-type: none"> <li>• Inspect drip pans on lift stations for the accumulation of oil</li> </ul>	
<ul style="list-style-type: none"> <li>• Inspect all tanks for proper operation including gauges, sight glasses, level controls and pressure controls</li> </ul>	







<b>applicable):</b>	
<b>Effectiveness and Capacity of Secondary Containment:</b>	Fully contained on the frozen water surface within the secondary containment diking
<b>Cleanup Actions Taken:</b>	Spill Response contractors contained/collected spillage
<b>Steps Taken to Reduce Possibility of Reoccurrence:</b>	Double lined the tank floor
<b>Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:</b>	(b) (7)(F)
<b>Enforcement Actions:</b>	None taken
<b>Effectiveness of Monitoring Equipment:</b>	Consisted of monitoring wells, they have not shown results that necessitate implementation of remediation activities
<b>Spill Detection:</b>	Visually detected by Terminal Employee
<b>Brief Summary of the Impact of the Spill:</b>	N/A
<b>Geographic Area:</b>	N/A

\*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or a discharge into or upon the navigable waters of the United States or adjoining shorelines in harmful quantities.

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**FIGURE C-8- REPORTABLE SPILL HISTORY\* , CONTINUED**

<b>Date of Discharge(s):</b>	1989
<b>Location (Equipment or Operations):</b>	
<b>List of Discharge Causes:</b>	Overflowed
<b>Material(s) Discharged:</b>	N/A
<b>Amount of Discharges in Gallons:</b>	Undetermined ()
<b>Amount That Reached Navigable Waters (if applicable):</b>	None ()
<b>Effectiveness and Capacity of Secondary Containment:</b>	N/A
<b>Cleanup Actions Taken:</b>	Spill Response Contractors mobilized and removed the impacted soils in the drainage ditch
<b>Steps Taken to Reduce Possibility of Reoccurrence:</b>	Replacement of the #1 oil/water separator system, installation of piping and installation of a canopy over the loading rack area
<b>Total Oil Storage Capacity of</b>	

<b>Tank(s) or Impoundment(s) From Which Material Discharged:</b>	2,000 ()
<b>Enforcement Actions:</b>	None taken
<b>Effectiveness of Monitoring Equipment:</b>	Consists of monitoring wells
<b>Spill Detection:</b>	Visually detected as a result of ground surface staining to the open drainage ditch
<b>Brief Summary of the Impact of the Spill:</b>	N/A
<b>Geographic Area:</b>	N/A

\*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or a discharge into or upon the navigable waters of the United States or adjoining shorelines in harmful quantities.

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**FIGURE C-8- REPORTABLE SPILL HISTORY\* , CONTINUED**

<b>Date of Discharge(s):</b>	04/29/1991
<b>Location (Equipment or Operations):</b>	
<b>List of Discharge Causes:</b>	Broke at the manifold
<b>Material(s) Discharged:</b>	Regular lead free gasoline
<b>Amount of Discharges in Gallons:</b>	300-500 (gals)
<b>Amount That Reached Navigable Waters (if applicable):</b>	None ()
<b>Effectiveness and Capacity of Secondary Containment:</b>	N/A
<b>Cleanup Actions Taken:</b>	Spill Response Contractors notified used a vacuum truck to collect product
<b>Steps Taken to Reduce Possibility of Reoccurrence:</b>	Pipeline was repaired and inspection procedures were implemented
<b>Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:</b>	(b) (7)(F)
<b>Enforcement Actions:</b>	None taken
<b>Effectiveness of Monitoring Equipment:</b>	Monitoring wells which show no evidence of subsurface contamination
<b>Spill Detection:</b>	Noticed by a Terminal Operator
<b>Brief Summary of the Impact of</b>	

<b>the Spill:</b>	N/A
<b>Geographic Area:</b>	N/A

\*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or a discharge into or upon the navigable waters of the United States or adjoining shorelines in harmful quantities.

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**FIGURE C-8- REPORTABLE SPILL HISTORY\* , CONTINUED**

<b>Date of Discharge(s):</b>	02/29/1992 b/f 6:00 - 7:10 pm
<b>Location (Equipment or Operations):</b>	
<b>List of Discharge Causes:</b>	Failed valve from expansion of freezing water
<b>Material(s) Discharged:</b>	Jet-A-Fuel
<b>Amount of Discharges in Gallons:</b>	8,400 (gals)
<b>Amount That Reached Navigable Waters (if applicable):</b>	None ()
<b>Effectiveness and Capacity of Secondary Containment:</b>	Total volume of spill was contained in western portion of secondary containment
<b>Cleanup Actions Taken:</b>	Contractors sealed leaking valve, contents were transferred to another tank
<b>Steps Taken to Reduce Possibility of Reoccurrence:</b>	Valve was replaced with blind flange
<b>Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:</b>	(b) (7)(F)
<b>Enforcement Actions:</b>	None
<b>Effectiveness of Monitoring Equipment:</b>	Monitoring wells continued sampling and analysis
<b>Spill Detection:</b>	Visually detected by a Terminal employee
<b>Brief Summary of the Impact of the Spill:</b>	N/A
<b>Geographic Area:</b>	N/A

\*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or a discharge into or upon the navigable waters of the United States or adjoining shorelines in harmful quantities.

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**FIGURE C-8- REPORTABLE SPILL HISTORY\* , CONTINUED**

<b>Date of Discharge(s):</b>	04/20/1992
<b>Location (Equipment or Operations):</b>	
<b>List of Discharge Causes:</b>	Pressure from calibrating pump forced cut plugs
<b>Material(s) Discharged:</b>	Lead-free gasoline
<b>Amount of Discharges in Gallons:</b>	1,500 (gals)
<b>Amount That Reached Navigable Waters (if applicable):</b>	None ()
<b>Effectiveness and Capacity of Secondary Containment:</b>	Contained within open yard east of loading rack area
<b>Cleanup Actions Taken:</b>	Impacted soils were excavated and removed
<b>Steps Taken to Reduce Possibility of Reoccurrence:</b>	N/A
<b>Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:</b>	1,500 (gals)
<b>Enforcement Actions:</b>	None
<b>Effectiveness of Monitoring Equipment:</b>	Sampling & analysis shows no need for remediation
<b>Spill Detection:</b>	Blow-out was immediately detected
<b>Brief Summary of the Impact of the Spill:</b>	N/A
<b>Geographic Area:</b>	N/A

\*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or a discharge into or upon the navigable waters of the United States or adjoining shorelines in harmful quantities.

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**FIGURE C-8- REPORTABLE SPILL HISTORY\* , CONTINUED**

<b>Date of Discharge(s):</b>	12/17/1992 at 6:00 - 6:30 p.m.
<b>Location (Equipment or Operations):</b>	
<b>List of Discharge Causes:</b>	4? water draw valve inadvertently left open
<b>Material(s) Discharged:</b>	Unleaded gasoline
<b>Amount of Discharges in Gallons:</b>	500-1,000 (gals)

<b>Amount That Reached Navigable Waters (if applicable):</b>	None ()
<b>Effectiveness and Capacity of Secondary Containment:</b>	Contained in eastern portion of dike
<b>Cleanup Actions Taken:</b>	Vacuum truck
<b>Steps Taken to Reduce Possibility of Reoccurrence:</b>	Observation wells were gauged using an electric oil water interface probe
<b>Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:</b>	(b) (7)(F)
<b>Enforcement Actions:</b>	None
<b>Effectiveness of Monitoring Equipment:</b>	Employee training on tank refilling & focus on fully implementing all procedures
<b>Spill Detection:</b>	Discovered by an employee conducting an in-service inspection
<b>Brief Summary of the Impact of the Spill:</b>	N/A
<b>Geographic Area:</b>	N/A

\*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or a discharge into or upon the navigable waters of the United States or adjoining shorelines in harmful quantities.

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**FIGURE C-8- REPORTABLE SPILL HISTORY\* , CONTINUED**

<b>Date of Discharge(s):</b>	12/23/1992 b/f 11:30 ? 12:30 a.m.
<b>Location (Equipment or Operations):</b>	
<b>List of Discharge Causes:</b>	Failure of a level controller on vapor recovery unit
<b>Material(s) Discharged:</b>	Unleaded gasoline
<b>Amount of Discharges in Gallons:</b>	42 (gals)
<b>Amount That Reached Navigable Waters (if applicable):</b>	None ()
<b>Effectiveness and Capacity of Secondary Containment:</b>	N/A
<b>Cleanup Actions Taken:</b>	Application of absorbent material collected an properly disposed of off-site
<b>Steps Taken to Reduce Possibility of Reoccurrence:</b>	N/A

<b>Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:</b>	N/A
<b>Enforcement Actions:</b>	None
<b>Effectiveness of Monitoring Equipment:</b>	Because of small nature, it was not necessitated
<b>Spill Detection:</b>	Visually detected by employee at 12:30 a.m.
<b>Brief Summary of the Impact of the Spill:</b>	N/A
<b>Geographic Area:</b>	N/A

\*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or a discharge into or upon the navigable waters of the United States or adjoining shorelines in harmful quantities.

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**FIGURE C-9 - CONTAINMENT AND DRAINAGE PLANNING**

<b>FACTORS</b>
<b>Available Volume of Containment</b>
Refer to FIGURE C-1.
<b>Route(s) of Drainage</b>
Refer to FIGURE C-2.
<b>Construction Materials Used in Drainage Troughs</b>
Earthen
<b>Type and Number of Valves Separators</b>
None
<b>Sump Pump Capacities</b>
150 GPM
<b>Containment Capacity of Weirs and Booms</b>
None
<b>Other Clean Up Materials</b>
Refer to SECTION 7.1.1 and APPENDIX B.

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## APPENDIX D

Last Revised:

## HAZARD EVALUATION AND RISK ANALYSIS

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D.1 Facility Hazard EvaluationD.2 Vulnerability AnalysisD.2.1 Analysis of the Potential for a SpillD.3 Spill Detection / Prevention InspectionD.3.1 Spill DetectionD.3.2 Spill PreventionFigure D.3-1 - Response Equipment InspectionD.4 Planning Distance CalculationsFigure D.4-1 - Planning Distance CalculationsD.5 Discharge ScenariosD.5.1 Small and Medium Discharge ScenariosD.5.2 Worst Case Discharge (WCD) Scenario DiscussionD.5.3 Description of Factors Affecting Response EffortsD.6 Planning Volume CalculationsD.7 Spill Volume CalculationsD.7.1 EPA Portion of the FacilityD.7.2 DOT / PHMSA Portion of the Pipeline / FacilityD.8 Pipeline - Abnormal ConditionsD.9 Product Characteristics and HazardsFigure D.9-1 - Summary of Commodity Characteristics**Dearborn**

## D.1 FACILITY HAZARD EVALUATION

A list of potential spill sources is identified in **FIGURE C-1**. This figure describes type and volumes of secondary containment areas along with tank manufacturer dates. All liquid storage tanks are visually inspected on a weekly basis. A description of facility operations is included in **FIGURE 1-2**.

## D.2 VULNERABILITY ANALYSIS

A vulnerability analysis was performed to address the potential effects of an oil spill within the planning distance of this facility. Refer to **SECTION 6.7** for a detailed list of vulnerabilities. The following features may be impacted by a spill:

Water Intakes	Schools	Medical Facilities	Residential Areas	Businesses	Wetlands or other Sensitive Environments	Fish and Wildlife	Lakes and Streams	Endangered Flora and Fauna	Recreational Areas	Transportation Routes (air, land, water)	Utilities	Other Applicable Areas
x	x	x	x	x	x	x	x	x	x			x

### D.2.1 Analysis of the Potential for a Spill

The probability of a spill occurring at this facility is minimal for the following reasons:

- Tanks are constructed in accordance with applicable engineering standards.
- Tank age is reviewed as a potential factor (refer to **FIGURE C-1**).
- Truck loading facilities are equipped with concrete pads with a spill collection drain system which returns spills to the recovery system.
- All trucks are monitored during tank unloading procedures.
- Product transfers are monitored and only conducted when facilities are manned.
- Facilities are inspected frequently for evidence of corrosion and leaks according to applicable API standards.
- Personnel are trained in procedures to prevent pollution.
- The horizontal range of a spill is dependent upon the topography and distance to the nearest water body described in more detail in **FIGURE D.4-1**.
- Natural disasters are not likely at these facilities; however, these facilities may experience flooding, tornadoes, or a lightning strike.
- Company personnel prepare for natural disasters by monitoring weather reports and warnings and taking appropriate safety precautions.
- The potential for a natural disaster is acknowledged, as appropriate, during drills and exercises.

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## D.3 SPILL DETECTION / PREVENTION INSPECTION

### D.3.1 Spill Detection

## Inspection

---

In accordance with 40 CFR 112.7 (e)(8), each facility includes written procedures and records of inspection. The inspection shall include tanks, secondary containment, and response equipment at the facility.

Facility self-inspection requires two steps:

- Checklist of items to inspect and
- Method of recording the actual inspection and its findings; records must be maintained for five years.

Facility specific procedures for transfer and secondary containment inspections are provided in **APPENDIX C**. Response equipment inspection information is provided in **SECTION 7.1.2**. **FIGURE D.3-1** may be used to record equipment inspection information.

## 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, or
- Visual detection by the public.

### AVAILABILITY - ALL TANKS

#### Automated detection

---

The pipelines are equipped with (b) (7)(F)

1. (b) (7)(F)

In case of an alarm, Operations Control personnel will take the appropriate actions in accordance with operating procedures. A summary of the operating procedures is provided below.

(b) (7)(F)

- [REDACTED]
- [REDACTED]
- [REDACTED]

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### D.3.1 Spill Detection, Continued

(b) (7)(F)

- (b) (7)(F)

(b) (7)(F)



#### AVAILABILITY - ALL LINES

- **Parameter Alarms**

A parameter alarm is a data value limit (high or low) which can be set by the Pipeline Control Center operator to alert upset conditions regardless of whether the Operator is actively monitoring the data point in question.

(b) (7)(F)



(b) (7)(F)

#### AVAILABILITY - ALL LINES

- **Trending**

(b) (7)(F)



#### AVAILABILITY - ALL LINES

(b) (7)(F)



#### AVAILABILITY - ALL TANKS

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#### D.3.1 Spill Detection, Continued

- **Training**

All operators are compliant with DOT 195 Operator Qualification Requirements.

## **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 also is monitored.**

Discharges to the land or surface waters also may 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 2.1-2** provides a checklist for initial response actions.

## **Visual detection by the public**

---

Right-of-way marker signs are installed and maintained at road crossings 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 service, 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 generally will 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 area supervisor and provide assessment results.

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### **D.3.2 Spill Prevention**

Programs designed to prevent emergencies include:

- Corrosion control programs,
- Preventative maintenance programs,
- Controller training programs,
- Operator training programs,
- 24-hour emergency telephone numbers,
- Supervisory control and data acquisition (SCADA) systems,




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Inspector's Signature

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**D.4 PLANNING DISTANCE CALCULATIONS**

To evaluate the potential risk to sensitive resources in the area, should a spill occur, a planning distance was calculated based on the following characteristics of this Facility and vicinity according to 40 CFR 112, Attachment C-III. Factors utilized include distance to the nearest body of moving water/storm sewer/drainage ditch or swale, geology, and topography of the area.

**FIGURE D.4-1** provides the planning distance calculation worksheets for this Facility.

**Dearborn**

FIGURE D.4-1 - PLANNING DISTANCE CALCULATIONS

**Intermediate Calculations**

$\alpha$  = elevation (in feet) = [stream elevation @ facility] - [stream elevation @ receptor (or 20 mile point)]

$\beta$  = horizontal distance from facility to receptor (or 20 mile point) in miles

$s$  = average stream slope =  $\alpha / \beta / 5280$

$r$  = hydraulic radius (in feet) = average mid channel depth x 0.667

$n$  = Manning's roughness coefficient from Table B

To calculate stream velocity (in ft./sec.), use:  $v = 1.49/n \times r^{2/3} \times s^{1/2}$

**Calculation of PLANNING DISTANCE**

$d$  = calculated planning distance (miles)

$v$  = Chezy-Manning based stream velocity (ft./Sec.)

$t$  = spill response time interval (from Table A)

$c$  = 0.68 (sec-mile/hr-ft conversion factor)

$d = v \times t \times c$  = planning distance equation

<b>Table A</b>	
Substantial Harm Planning Time (hours) Port Areas as Identified in 40 CFR § 112	
Boston, MA	15
New York, NY	15
Delaware Bay and River to Philadelphia	15
St. Croix, VI	15
Pascagoula, MS	15
Mississippi River from Southwest Pass, LA to Baton Rouge, LA	15
Louisiana Offshore Oil Port (LOOP)	15
Lake Charles, LA	15
Sabine-Natchez River, TX	16
Galveston Bay and Houston Ship Channel	16
Corpus Christi, TX	16
Los Angeles/Long Beach Harbor, CA	16
San Francisco Bay, San Pablo Bay, Carquinez Strait, and Suisun Bay to Antioch, CA	16
Straits of Juan de Fuca from Port Angeles, WA to and including Puget Sound	16
Prince William Sound, AK	16
Others are specified by RA for EPA Region	16
Allow other lakes, rivers canals inland and near shore areas	27

<b>Table B</b>	
Manning's Roughness Coefficient for Various Natural Stream Types (n)	
Minor Streams (Top width < 100 ft.)	
Clean:	
Straight	.03
Winding	.04
Sluggish (woody, deep pools):	
No trees/brush	.06
Trees and/or brush	.10
Major Streams (Top width > 100 ft.)	
Regular section:	
No boulders/brush	.036
Irregular section:	
Brush	.06

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FIGURE D.4-1 - PLANNING DISTANCE CALCULATIONS, CONTINUED

### Site Investigation

The following information is utilized to calculate the planning distance for each facility.

From USGS Quad/Topo Sheets

- Delineate watershed and downgradient receptor streams for runoff/release
- Determine whether navigable water is within 0.5 miles of the facility (or would be in worst case discharge scenario)

From Facility

- Identify alternate drainage pathways to navigable waters; namely storm drainage system/piping
- Establish list of soil or other factors effecting transport of oil over land

From maps, local/state authorities or investigation

- Identify fish/wildlife sensitivities and habitats in downgradient areas along with public drinking water intake locations
- Determine stream pool elevations at facility and at receptor points or at 20 miles downstream (maximum) for more distant receptors
- Characterize stream properties for accurate determination of roughness coefficient (n) and average mid-channel depth or hydraulic radius (r)

The total planning distance equals d.

	<b>Dearborn - Ecorse River Watershed - Tidally Influenced</b>
First receptor	N/A
First receptor location (miles)	N/A
$\alpha$ (feet)	N/A
$\beta$ (miles)	N/A
s (feet/mile)	N/A
Avg. mid-channel depth (feet)	N/A
r (feet)	N/A
n	N/A
v (feet/second)	N/A
t (hours)	N/A
c (seconds per mile/hours per foot)	N/A
d (total planning distance)	5 mile radius

**Dearborn****FIGURE D.4-1 - PLANNING DISTANCE CALCULATIONS, CONTINUED****If Tidally Influenced**

Planning distance calculations are based on the following factors and guidelines in accordance with 40 CFR Part 112 Attachment C-III, 4.2:

- The horizontal range of a potential oil spill is influenced by the wind direction and tidal stage; however, it is expected to spread quickly.
- Tidally influenced waters.
- Persistent and non-persistent product.
- Resulting planning distance is 15 miles persistent oils or five (5) miles for non-persistent oils from each Facility down current during ebb tide and to the point of maximum tidal influence or 15 miles persistent oils or five (5) miles for non-persistent oils, whichever is less, during flood tide.

## Dearborn

### D.5 DISCHARGE SCENARIOS

The equipment and personnel to respond to a spill are available from several sources and are provided with the equipment and contractors in **SECTION 7.1.1** and **APPENDIX B.1.1**. The following sections are discussions of these scenarios.

#### D.5.1 Small and Medium Discharge Scenarios

- The purpose of this section is to identify the sources and sizes of small and medium discharges as defined by OPA 90 regulations.
- Potential spill scenarios may include tank overflow, valve failure, tank failure, pipe failure, hose failure, or pump seal failure; these spills would likely be in contained areas and would be unlikely to travel off-site.
- The Company would respond to these types of incidents in the same manner as a worst case discharge, but at a level appropriate to the incident size; differences in response are described in the worst case scenario discussion described in this Appendix. The Company's response in such an event would in no way obviate the liability of any other responsible parties.
- Resources are identified in **FIGURE 3.1-4**, **SECTION 7.1.1**, and **APPENDIX B.1.1**.
- All resources shall be capable of arriving at the Facility within the applicable response tier requirements (Tier 1 = 12 hours; Tier 2 = 36 hours; Tier 3 = 60 hours).

The following table lists various facility operations and corresponding components which might be the source of a small, medium, and worst case discharge:

<b>FACILITY OPERATIONS AND COMPONENTS</b>	<b>SMALL DISCHARGE (up to 2,100 gallons)</b>	<b>MEDIUM DISCHARGE (2,100 to 36,000 gallons)</b>	<b>WORST CASE DISCHARGE (volume largest tank)</b>
Oil transfer operations	Hose failure	Hose failure	Not applicable

Facility maintenance operations	Leak from periodic maintenance, line not completely drained when opened	Seal failure Overfill	Not applicable
Facility piping	Flange, gasket, threaded connection	Seal failure Overfill	Not applicable
Pumps and sumps	Seal failure Overfill	Seal failure Overfill	Not applicable
Oil storage tanks	Overfill	Overfill	Catastrophic failure of largest tank
Vehicle refueling	Hose failure	Pipeline failure Seal failure	Not Applicable
Age and condition of facility and components	Flange, gasket, threaded connector	Pipeline failure Seal failure	Catastrophic failure of largest tank

## Dearborn

### D.5.1 Small and Medium Discharge Scenarios, Continued

The following table describes Facility-specific small discharge scenarios.

SMALL DISCHARGE SCENARIO
<p>A small discharge at this Terminal is considered to be a discharge that does not exceed 50 barrels (2,100 gallons).</p> <p>Description</p> <p>This size discharge would most likely occur due to minor equipment failures or human error. Examples may include, but not limited to:</p> <ul style="list-style-type: none"> <li>? Loading/unloading of surface transports</li> <li>? Terminal maintenance</li> <li>? Bulk fuel tank and associated operations</li> <li>? Terminal piping operations</li> <li>? Pumping</li> </ul> <p>Overfilling of any of the Terminal's storage tanks could result in a small or medium volume spill. Leakage from the tanks resulting from damaged valves or gaskets could also result in such a spill scenario. Small and medium volume discharges from any of the Terminal's tanks would be contained within the associated secondary containment structures. This fact would limit potential transport of spilled material to potentially vulnerable receptors and facilitate response actions. Rupture or failure of any of the smaller volume tanks (the additive tanks or holding tanks) could also result in a small or medium volume spill. Again, secondary containment features would minimize the potential impact of such a release.</p> <p>This size discharge would likely be noticed quickly and appropriate clean up measures taken since product transfers are monitored by Facility personnel. These types of small spills are typically contained on the grounds of the Facility (earthen material or concrete). Adverse weather conditions would not hinder response efforts during a small discharge.</p>

## Prevention

Several steps can be taken to limit the number of occurrences and the amount of discharges. In particular, employees receive training periodically on the proper procedures for the loading of product to trucks. In addition, preventive maintenance of equipment is performed at regularly scheduled intervals to ensure that any weaknesses are discovered. Also, old or worn parts are replaced as needed. Annual product transfer and pipeline testing is the most important of these measures.

## Additional Comments

While the Facility's OSRO or spill contractor would be notified and the best method for containment determined, such discharges that are contained at the Facility could be diverted to the product tanks that are not at maximum capacity. Spills that enter the bar ditch can be handled by response contract vacuum truck, absorbent pad and boom, or other equipment.

If floating oil from a release at the terminal should reach the Detroit River, then similar protective measures will be deployed to protect sensitive areas in an along the river downstream of the mouth of the Ecorse River. The focus of Tier One efforts will be to boom off the mouth of the Ecorse River to prevent an additional discharge to the Detroit River.

**Note:** Equipment and manpower resources are detailed in **FIGURE 3.1-4, SECTION 7.1.1,** and **APPENDIX B.1.1.**

## Dearborn

### D.5.1 Small and Medium Discharge Scenarios, Continued

The following table describes Facility-specific small discharge scenarios.

#### SMALL DISCHARGE RESPONSE RESOURCE

##### Facility Response Resources/Capability

The Facility will respond to a Small Discharge with the manpower detailed in SECTION 3, FIGURE 7.1-1, and APPENDIX B.

? A 50 Bbl discharge typically will not escape the containment of the Facility.

? If a fifty (50) barrel discharge escaped the Facility it would more than likely occur at the truck loading rack while loading jet fuel. In the event of a spill, the rack would immediately be shut down by manually activating one of the ESDS that are located at the rack. Facility management would immediately be notified and the situation would be assessed. The need for activating response contractors would be unlikely due to the design and containment capacity of the truck rack. The surface drainage of the truck rack will flow into the area drain in each load lane. The load rack drains are piped to an oil/water separator system.

##### Offsite Impact

? The closest waterway is the Ecorse River watershed into the Detroit River. A spill of this size is not expected to migrate offsite. Weather impacts would be minimal since most of the product would not leave the site.

? Oil storage capacity for recovery of a small or medium volume discharge could be

addressed by use of the 210,000-gallon product recovery tank (Tank 5). This tank would be used for the initial storage of recovered product and water in the event of a small or medium volume release. In addition, the Terminal operators are instructed, for any uncontained spill of larger magnitude, to call in the appropriate spill response contractor. The spill response contractors contracted to the Terminal are adequately staffed and equipped to respond to a medium volume discharge.

? Oil containment and recovery devices can be secured from contract resources (with a minimum effective daily recovery capacity of 50 Bbls) and can be implemented at the Facility, as the situation demands.

? A minimum of 100 Bbls of oil storage capacity for recovered oily material can be secured from contractor resources or made available within the Facility's storage facilities, as the situation demands.

? Additional recovery and storage equipment may be secured from other Company and contract resources, as the situation demands.

**Note:** Equipment and manpower resources are detailed in **FIGURE 3.1-4, SECTION 7.1.1,** and **APPENDIX B.1.1.**

## Dearborn

### D.5.1 Small and Medium Discharge Scenarios, Continued

The following table describes Facility-specific medium discharge scenarios.

MEDIUM DISCHARGE SCENERIO
<p>A medium discharge at this Facility is considered to be a discharge that does not exceed 857 barrels (36,000 gallons).</p>
<p>Description</p> <p>This size discharge would most likely occur due to a major equipment failure or during product transfer. Examples may include, but not limited to,</p> <ul style="list-style-type: none"> <li>? Loading/unloading of surface transports</li> <li>? Terminal maintenance</li> <li>? Bulk fuel tank and associated operations</li> <li>? Terminal piping operations</li> <li>? Pumping</li> </ul> <p>Overfilling of any of the Terminal's storage tanks could result in a small or medium volume spill. Leakage from the tanks resulting from damaged valves or gaskets could also result in such a spill scenario. Small and medium volume discharges from any of the Terminal's tanks would be contained within the associated secondary containment structures. This fact would limit potential transport of spilled material to potentially vulnerable receptors and facilitate response actions. Rupture or failure of any of the smaller volume tanks (the additive tanks or holding tanks) could also result in a small or medium volume spill. Again, secondary containment features would minimize the potential impact of such a release.</p>
<p>Prevention</p>

Several steps can be taken to limit the number of occurrences and the amount of discharges. In particular, employees receive training periodically on the proper procedures for truck loading and transfers to and from tanks (e.g. proper tank gauging procedures). This training includes what to do in the event of an unusual occurrence such as equipment rupture (i.e. how to transfer spilled material to the miscellaneous tank or product tanks).

In addition, preventive maintenance of equipment is performed at regularly scheduled intervals to ensure that any weaknesses are discovered. Old or worn parts are replaced as needed. Storage tank ages can be referenced in FIGURE C-1.

#### Additional Comments

In the event of a medium size discharge, the OSRO or spill contractor would be notified. While waiting for the OSRO to arrive, qualified Facility personnel would evacuate the Facility and initiate ?immediate response action?.

If floating oil from a release at the terminal should reach the Detroit River, then similar protective measures will be deployed to protect sensitive areas in an along the river downstream of the mouth of the Ecorse River. The focus of Tier One efforts will be to boom off the mouth of the Ecorse River to prevent an additional discharge to the Detroit River.

**Note:** Equipment and manpower resources are detailed in **FIGURE 3.1-4, SECTION 7.1.1,** and **APPENDIX B.1.1.**

## Dearborn

### D.5.1 Small and Medium Discharge Scenarios, Continued

The following table describes Facility-specific medium discharge scenarios.

#### MEDIUM DISCHARGE RESPONSE RESOURCE

##### Facility Response Resources/Capability

The Facility will initially respond to a Medium Discharge with a similar response to the Small Discharge. Additional response resources will be activated from an Oil Spill Removal Organization(s) (OSRO) as detailed in SECTION 3, FIGURE 7.1-1, and APPENDIX B and will arrive within 12 hours.

? All resources shall be capable of arriving at the Facility within the applicable response tier requirements (Tier 1 = 12 hours; Tier 2 = 36 hours; Tier 3 = 60 hours)

? Oil recovery devices with an effective daily recovery capacity of 428 Bbls (50% of the Medium Discharge volume) secured from the OSRO(s) will be on scene within 12 hours.

? 857 Bbls of oil storage capacity for recovered oily material will be secured from the OSRO(s) and/or made available within the Facility's storage facilities.

? Containment boom for oil collection and containment and for protection of fish and wildlife and sensitive areas will be secured from the OSRO(s) in the event that the spill escapes the boundaries of the Facility and impacts Ecorse River Watershed.

? The closest waterway is the Ecorse River watershed into the Detroit River. A spill of this size is not expected to migrate offsite. Weather impacts would be minimal since most of the

product would not leave the site.

? Oil storage capacity for recovery of a small or medium volume discharge could be addressed by use of the (b) (7)(F) This tank would be used for the initial storage of recovered product and water in the event of a small or medium volume release. In addition, the Terminal operators are instructed, for any uncontained spill of larger magnitude, to call in the appropriate spill response contractor. As indicated in Appendix A of this Plan, the spill response contractors contracted to the Terminal are adequately staffed and equipped to respond to a medium volume discharge. Refer to Section 1.7 of this Plan for specific response actions and resources for Terminal personnel to use for small and medium volume spills.

? Diked area containment of large spills can be handled with the use of contractor vacuum trucks

**Note:** Equipment and manpower resources are detailed in **FIGURE 3.1-4, SECTION 7.1.1,** and **APPENDIX B.1.1.**

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### D.5.2 Worst Case Discharge (WCD) Scenario Discussion

**APPENDIX D.7** provides worst case discharge calculations. Discussion of this scenario is as follows:

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 responders to shut down ignition sources.
  - Direct personnel to position resources in accordance with **SECTION 2.1**.
  - 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 2.1.3**.
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 Incident 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 (**SECTION 5.3**)
  - Incident Action (**SECTION 5.2.5**)
  - Disposal (**SECTION 5.5**)
  - Site Security (**SECTION 5.6**)
  - Decontamination (**SECTION 5.4**)
  - Demobilization (**SECTION 5.7**)
7. The response would continue until an appropriate level of cleanup is obtained.

## Dearborn

### D.5.2 Worst Case Discharge (WCD) Scenario Discussion, Continued

The following table describes the Facility-specific worst-case discharge scenario.

#### WORST CASE Discharge Scenario

A worst-case discharge at this Facility is considered to be a discharge that does not exceed (b) (7)(F).

#### Description

This size discharge would most likely occur due to a natural disaster or catastrophic event. Examples may include, but not be limited to,

- ? Tank fire
- ? Catastrophic tank shell failure
- ? Hurricane-induced spills
- ? Tornado-induced spills
- ? Pipeline manifold rupture.

Diking and containment areas are located throughout the Facility. For a discharge this size to reach a navigable waterway, or leave the Facility property, diking would have to be damaged or destroyed (breached). Spills of this size would be bulk fuel storage Jet fuel.

#### Prevention

For a worst-case discharge caused by a natural disaster, preparedness is more appropriate than prevention. The Facility employees receive training periodically on the proper procedures to deal with a natural disaster. Employees are also trained in steps to follow if the Facility must be evacuated (due to a tank fire or other emergency). In addition, preventive maintenance of tanks is performed at regularly scheduled intervals (to ensure that any weaknesses are discovered). Storage tank ages can be located in FIGURE C-1.

#### Worst Case Discharge and Adverse Weather

Severe rain events, tornadoes, and associated flooding would also increase the chances of an oil spill from leaving the property. Severe weather of this type could also negatively affect the response times of response contractors and other responders.

Probable chain reactions of failures would be induced by the weather conditions. They would include, but not be limited to, fires, health hazards, and discharges of more than one product.

#### Worst Case Spill Pathway Scenario

In the event of a tank rupture, the product may splash over the dike wall and enter storm sewers that discharge into Ecorse River which is located near the property.

#### Worst Case Spill Pathway Scenario (Cont'd)

For a spill that is confined to the land along the pathway, Facility personnel would have at least two (2) options by which to contain the spill:

- ? Dams
- ? Trenches

In the event of a worst case discharge release, such as a tank rupture, product may leave the property by splashing over the west dike wall, flow west off of facility property, and flow approximately 1,000 feet and enter the Douglas and Kelly Drain. Product will then flow via the Douglas and Kelly Drain into the Ecorse River.

Facility personnel would immediately contact the Facility's contracted OSROs for spill response equipment deployment. Released product would be directed to those areas where recovery could be most easily accomplished. Facility personnel would attempt to keep product from leaving facility property by constructing diversion berms and/or ditches.

**Note:** Equipment and manpower resources are detailed in **FIGURE 3.1-4, SECTION 7.1.1,** and **APPENDIX B.1.1.**

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### D.5.2 Worst Case Discharge (WCD) Scenario Discussion, Continued

#### WORST CASE Discharge Scenario, CONTINUED

##### Creek/Tributary Containment

A spill may be contained in smaller sections of a creek or tributary. Some practical containment methods are:

- ? A board skimming device
- ? Earth dam and weir
- ? Wire fence filter boom
- ? Culvert weir
- ? Under flow dam

These methods are simple to construct and effective for containment.

#### Spills that Reach the Waterway

The Facility is located near Ecorse River Watershed (see SECTION 6.8). The priority during larger spills is to prevent oil from reaching the waterway. Oil spill response organizations (OSROs) are under contract with the Facility. Some of these OSROs can initiate initial boom deployment and anchoring at the waterway within one hour. There are several locations along Douglas and Kelly Drain that could be used as strategic booming points. The Douglas and Kelly Drain flows into the Ecorse River and eventually into the Detroit River.

## Dearborn

### D.5.2 Worst Case Discharge (WCD) Scenario Discussion, Continued

The following table describes the Facility-specific worst-case discharge response resource.

#### WORST CASE Discharge RESPONSE RESOURCE

##### Facility Response Resources/Capability

The Facility will respond to a Worst Case Discharge (WCD) initially with a similar response as identified for a Small or Medium Discharge. Facility Management will initiate ?immediate response actions? immediately upon discovering a spill. Additional OSRO(s) will be activated as the situation demands. The response resources will be capable of arriving within the required response tiers and will include:

? Oil recovery devices with an effective daily recovery capacity equal to the lesser of the WCD Response Planning Volume calculation or the response caps will be secured from the OSRO(s) and other Company resources. Any amount in excess of the required caps will be contracted for and responded to as part of the same response effort.

? Temporary storage capacity equal to twice the daily recovery capacity will be secured from OSRO(s), other Company resources, or made available within the Facility's storage facilities.

? At least 20% of the on-water response equipment secured from the OSRO(s) and other Company resources will be capable of operating in water of 6 feet or less depth.

? Containment boom for oil collection and containment and for protection of fish and wildlife and sensitive environments and socio-economic sensitivities will be secured from the OSRO(s) and other Company resources.

? Resources capable of responding to a shoreline clean-up operation involving the calculated volume of oil and emulsified oil that might impact the shoreline will be secured from the OSRO(s) and other Company resources.

? Overall response operations will be conducted under the Incident Command System with

adequate Facility and Contract Response personnel to continue operations for a minimum of seven (7) days.

? The Response Planning Volume requirements, including response times, are based on Attachment E-1 of Appendix E of 40 CFR 112.

**Note:** Equipment and manpower resources are detailed in **FIGURE 3.1-4, SECTION 7.1.1,** and **APPENDIX B.1.1.**

## Dearborn

### D.5.3 Description of Factors Affecting Response Efforts

There are many factors which may affect the ability to respond to an incident. The factors are described in the following table:

FACTORS	CONSIDERATIONS AFFECTING RESPONSE EFFORTS
Size of spill	<ul style="list-style-type: none"> <li>• Location of spill in relation to identified sensitivities and/or sensitive areas.</li> <li>• Spread and spill movement.</li> </ul>
Proximity to down gradient water intakes	<ul style="list-style-type: none"> <li>• Refer to <b>SECTION 6.8</b> for maps showing proximity to down gradient water intakes.</li> </ul>
Proximity to fish and wildlife and sensitive environments	<ul style="list-style-type: none"> <li>• A release could impact fish, wildlife, and sensitive environments as described in <b>SECTION 6.6</b> and <b>SECTION 6.7.</b></li> </ul>
Likelihood that discharge will travel off-site	<ul style="list-style-type: none"> <li>• A small spill is unlikely to travel off-site.</li> <li>• A medium spill has the potential to travel off-site via adjacent waterways.</li> <li>• A worst case discharge has the greatest potential to travel off-site if secondary containment is breached.</li> </ul>
Location of material spilled	<ul style="list-style-type: none"> <li>• See facility information and drainage located in <b>FIGURE 1-2</b> and <b>FIGURE C-2.</b> Facility tankage, piping, and transfer areas are displayed on drawings provided in <b>FIGURE C-2.</b></li> </ul>
Material discharged	<ul style="list-style-type: none"> <li>• Typically Jet Fuel</li> <li>• Product is considered non-persistent but not volatile</li> </ul>
Weather or aquatic conditions	<ul style="list-style-type: none"> <li>• The areas have the potential to be affected by tornadoes, flooding, and lightning strikes.</li> </ul>
Available remediation equipment	<ul style="list-style-type: none"> <li>• The Company has response equipment available.</li> <li>• Resources are available through oil spill response contractors in quantities sufficient to meet applicable planning standards.</li> </ul>

Probability of a chain reaction or failures	<ul style="list-style-type: none"> <li>Potential for a chain reaction or failure is remotely possible but not anticipated; secondary containment, response contractors, and trained personnel minimize the potential of such events.</li> </ul>
Direction of spill pathway	<ul style="list-style-type: none"> <li>Refer to sensitivity maps in the <b>SECTION 6.8</b>.</li> <li>Wind direction and speed combined with currents will determine spill trajectory.</li> </ul>

## Dearborn

### D.6 PLANNING VOLUME CALCULATIONS

Once the worst case discharge volume has been calculated, response resources must be identified to meet the requirements of 40 CFR 112.20(h). 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.

### D.7 SPILL VOLUME CALCULATIONS

#### D.7.1 EPA portion of the facility (non-transportation related)

**The WCD for the EPA portion of the facility, as defined in 40 CFR 112, Appendix D, Part A, is calculated as:**

- For multiple tank facilities with adequate secondary containment, the WCD is calculated as the capacity of the largest single aboveground oil storage tank within an adequate secondary containment area or the combined capacity of a group of aboveground oil storage tanks permanently manifolded together, whichever is greater.

(b) (7)(F)

Planning volume data is included on the following page:

## Dearborn

### D.7 SPILL VOLUME CALCULATIONS, CONTINUED

#### EPA PLANNING VOLUME DATA

(b) (7)(F)

(D1)	Percent lost to natural dissipation	40
(D2)	Percent recovered floating oil	15
(D3)	Percent oil onshore	45
(E1)	On water recovery (bbls)	12,072
(E2)	Shoreline recovery (bbls)	36,216
(F)	Emulsification Factor	1.8
(G)	On water recovery resource mobilization factor	
(G1)	Tier I	0.30
(G2)	Tier II	0.40
(G3)	Tier III	0.60
Part II	On water recovery capacity (bbls/day)	
	Tier I	6,519
	Tier II	8,692
	Tier III	13,038
Part III	Shoreline cleanup volume (bbls/day)	65,189
Part IV	On water response capacity by operating area (bbls/day)	
(J1)	Tier I	1,875
(J2)	Tier II	3,750
(J3)	Tier III	7,500
Part V	On water amount needed to be identified, but not contracted for in advance	
	Tier I	4,644
	Tier II	4,942
	Tier III	5,538

\* R = Rivers and canals  
N = Nearshore/Inland

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### D.7.2 DOT / PHMSA Portion of Pipeline / Facility

The worst case discharge (WCD) for the DOT portion of the pipeline and/or facility, 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.**

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### D.7.2 DOT / PHMSA Portion of Pipeline / Facility, Continued

(b) (7)(F)

**Dearborn****D.7.2 DOT / PHMSA Portion of Pipeline / Facility, Continued**

The worst case tank volume is calculated as follows:

Largest tank x Credit for containment tank standards = Tank standards credit

The Company has implemented all of the spill prevention measures, listed on the previous page, except tertiary containment. Therefore, the percent reduction allowed for credit equals 50% and the worst case discharge volume is 50% of the total volume.

**Dearborn****D.7.2 DOT / PHMSA Portion of Pipeline / Facility, Continued**

(b) (7)(F)

(b) (7)(F)

**Dearborn****D.8 PIPELINE - ABNORMAL CONDITIONS**

PHMSA considers the “substantial threat” term to be 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 Operating, Maintenance, and Emergency Procedures for Hazardous Liquids Manual.

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## D.9 PRODUCT CHARACTERISTICS AND HAZARDS

This Facility may store various types of commodities, including, but not limited to:

- Jet Fuel

The key chemical and physical characteristics of each of these oils and/or other small quantity products/

chemicals are identified in the MSDS. The MSDS can be obtained by the facility via the Company intranet at <http://msds.bpweb.bp.com/login.asp>.

**FIGURE D.9-1** describes primary oils handled.

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FIGURE D.9-1 - SUMMARY OF COMMODITY CHARACTERISTICS

COMMON NAME	MSDS NAME	HEALTH HAZARD	FLASH POINT	SPECIAL HAZARD	REACTIVITY	HEALTH HAZARD WARNING STATEMENT
Jet Fuel	Appropriate Product Name	1	2	C,COR,H2S	0	Long term, repeated exposure may cause cancer. May cause damage to the following organs: blood, kidneys, liver, gastrointestinal tract, respiratory tract, skin, central nervous system, eye, lens, or cornea.
<b>Health Hazard</b>	<b>4 = Extremely Hazardous</b> <b>3 = Hazardous</b> <b>2 = Warning</b> <b>1 = Slightly Hazardous</b> <b>0 = No Unusual Hazard</b>			<b>Fire Hazard (Flash Point)</b>	<b>4 = Below 73°F, 22°C</b> <b>3 = Below 100°F, 37°C</b> <b>2 = Below 200°F, 93°C</b> <b>1 = Above 200°F, 93°C</b> <b>0 = Will not burn</b>	
<b>Special Hazard</b>	<b>A = Asphyxiant</b> <b>C = Contains Carcinogen</b> <b>W = Reacts with Water</b> <b>Y = Radiation Hazard</b> <b>COR = Corrosive</b>			<b>Reactivity Hazard</b>	<b>4 = May Detonate at Room Temperature</b> <b>3 = May Detonate with Heat or Shock</b> <b>2 = Violent Chemical Change</b>	

**OX = Oxidizer**  
**H<sub>2</sub>S = Hydrogen Sulfide**  
**P = Contents under Pressure**  
**T = Hot Material**

**with High**  
**Temperature and Pressure**  
**1 = Not Stable if Heated**  
**0 = Stable**

**Dearborn**APPENDIX E  
CROSS-REFERENCES

Last Revised: May 2006

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**Figure E-1 - EPA / FRP Cross-Reference****Figure E-2 - DOT / PHMSA Cross-Reference****Figure E-3 - OSHA Cross-Reference****Figure E-4 - EPA Response Plan Cover Sheet**

FIGURE E-1 - EPA / FRP CROSS-REFERENCE

EPA FRP REQUIREMENTS	LOCATION
<b>Facility Information</b>	
<b>General Information (1.0)</b>	
• Facility Name	<u>Figure 1-2</u>
• FRP #	<u>Figure 1-2</u>
• Facility Address	<u>Figure 1-2</u>
• Facility Telephone	<u>Figure 1-2</u>
• Facility Owner	<u>Figure 1-2</u>
• Owner Address	<u>Figure 1-2</u>
• Owner Telephone	<u>Figure 1-2</u>
• Name of Protected Waterway/ Environmentally Sensitive Area	<u>Section 6.7</u>
• Distance from Facility	<u>Figure D.4-1</u>
<b>Standard Facility Response Plan (sec. 1.0)</b>	
<b>Emergency Response Action Plan (ERAP) (sec. 1.1)</b>	
Qualified Individual (QI) information (sec. 1.2) partial	<u>ERAP - Figure 3-2</u>
Emergency notification phone list (sec. 1.3.1) partial	<u>ERAP - Figure 3-2</u>
Spill response notification form (sec. 1.3.1) partial	<u>ERAP - Figure 3-1</u>
Response equipment list and location (sec. 1.3.2) complete	<u>ERAP - Figure 5-2,</u> <u>Figure 5-3</u>
Response equipment testing and deployment (sec. 1.3.3) complete	<u>ERAP - Figure 5-4</u>
Facility response team list (sec. 1.3.4) partial	<u>ERAP - Figure 3-2</u>
Facility evacuation plan (sec. 1.3.5) condensed	<u>ERAP - Section 2.2</u>
Immediate actions (sec. 1.7.1) complete	<u>ERAP - Section 2.0</u>
Facility diagrams (sec. 1.9) complete	<u>ERAP - Section 6.0</u>
<b>Facility Information (sec. 1.2)</b>	
Facility name and location (sec. 1.2.1)	<u>Figure 1-2</u>
Latitude and longitude (sec. 1.2.2)	<u>Figure 1-2</u>
Wellhead protection area (sec. 1.2.3)	<u>Figure 1-2</u>
Owner/ operator (both names included, if different (sec. 1.2.4)	<u>Figure 1-2</u>

Qualified Individual (sec. 1.2.5) (name, position, home and work address, phone numbers) and specific response training experience	Figure 1-2
Date of oil storage start-up (sec. 1.2.6)	Figure 1-2
Current operation (sec. 1.2.7)	Figure 1-2
Date and type of substantial expansion (sec. 1.2.8)	Figure 1-2

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FIGURE E-1 - EPA / FRP CROSS-REFERENCE, CONTINUED

EPA FRP REQUIREMENTS	LOCATION
<b>Emergency Response Information (sec. 1.3)</b>	
<b>Notification (sec. 1.3.1)</b>	
National Response Center phone number	Figure 3.1-4
Qualified Individual (day and evening) phone numbers	Figure 1-2, Figure 3.1-3
Company Response Team (day and evening) phone numbers	Figure 3.1-3
Federal On-Scene Coordinator (FOSC) and/ or Regional Response Center (day and evening) phone numbers	Figure 3.1-4
Local response team phone numbers (fire department/ cooperatives)	Figure 3.1-4
Fire marshal (day and evening) phone numbers	Figure 3.1-4
State Emergency Response Commission (SERC) phone number	Figure 3.1-4
State police phone number	Figure 3.1-4
Local Emergency Planning Committee (LEPC) phone number	Figure 3.1-4
Local water supply system (day and evening) phone numbers	Figure 3.1-4
Weather report phone number	Figure 3.1-4
Local TV/ radio phone number(s) for evacuation notification	Figure 3.1-4
Hospital phone number	Figure 3.1-4
<b>Spill Response Notification Form</b>	
• Reporter's name	Figure 3.1-2
• Company information	Figure 3.1-2
• Incident description	Figure 3.1-2
• Materials	Figure 3.1-2
• Response actions	Figure 3.1-2
• Impact	Figure 3.1-2
<b>Response Equipment List (Identify if Facility, OSRO, CO-OP owned by letters O, F, or</b>	

<b>C) (sec. 1.3.2)</b>	
Equipment list	<u>Section 7.1.1, Figure 7.1-1</u>
Equipment location	<u>Section 7.1.1, Figure 7.1-1</u>
Release handling capabilities and limitations	<u>Section 7.1.1, Figure 7.1-1</u>
<b>Response Equipment Testing/ Deployment (sec. 1.3.3)</b>	
Last inspection or equipment test date	<u>Figure A.1-4</u>
Inspection frequency	<u>Figure A.1-4</u>
Last deployment drill date	<u>Figure A.1-4</u>
Deployment frequency	<u>Figure A.1-4</u>
OSRO certification (if applicable)	<u>Figure A.1-4</u>

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FIGURE E-1 - EPA / FRP CROSS-REFERENCE, CONTINUED

EPA FRP REQUIREMENTS	LOCATION
<b>Response Personnel (sec. 1.3.4)</b>	
Emergency response personnel list	<u>Figure 3.1-3</u>
Emergency response contractors	<u>Figure 3.1-3, Figure 7.1-1, Appendix B</u>
Evidence of response capability	<u>Appendix B</u>
Facility response team list (sec. 1.3.4)	<u>Figure 3.1-3</u>
<b>Evacuation Plans (sec. 1.3.5)</b>	
Facility-wide evacuation plan	<u>Section 2.6</u>
Reference to existing community evacuation plans (sec. 1.3.5.3)	<u>Section 2.6</u>
Evacuation routes shown on diagram	<u>Evacuation Diagram "Figure C-3"</u>
<b>Qualified Individual's Duties (sec. 1.3.6)</b>	
Description of duties	<u>Section 4.5</u>
Consistent with requirements	<u>Section 4.5</u>
<b>Hazard Evaluation (sec. 1.4)</b>	
<b>Hazard Identification (sec. 1.4.1)</b>	
<b>Schematic Diagram</b>	
Labeled schematic drawing	<u>Drainage Diagram "Figure C-2"</u>
Above-ground tanks identified separately	<u>Drainage Diagram "Figure C-2"</u>
Below-ground tanks identified separately	<u>Drainage Diagram</u>

	<u>"Figure C-2"</u>
Surface impoundments identified separately	N/A
<b>Tank Form:</b>	
Tank number	<u>Figure C-1</u>
Substance stored	<u>Figure C-1</u>
Quantity stored	<u>Figure C-1</u>
Tank type and year installed	<u>Figure C-1</u>
Maximum capacity	<u>Figure C-1</u>
Failure/ Cause	<u>Figure C-1</u>
<b>Surface Impoundment Form:</b>	
Surface impoundment number	<u>Figure C-1</u>
Substance stored	<u>Figure C-1</u>
Quantity stored	<u>Figure C-1</u>
Surface area/ year	<u>Figure C-1</u>
Maximum capacity	<u>Figure C-1</u>
Failure/ Cause	<u>Figure C-1</u>

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FIGURE E-1 - EPA / FRP CROSS-REFERENCE, CONTINUED

EPA FRP REQUIREMENTS	LOCATION
<b>Facility Operations Description:</b>	
Loading and unloading procedures	<u>Figure 1-2</u>
Day to day operations	<u>Figure 1-2</u>
Secondary containment	<u>Figure C-1</u>
Daily throughput	<u>Figure 1-2</u>
<b>Vulnerability Analysis (sec. 1.4.2)</b>	
<b>Vulnerability of:</b>	
• Water intakes	<u>Section 6.7, Section 6.8</u>
• Schools	<u>Section 6.7, Section 6.8</u>
• Medical facilities	<u>Section 6.7, Section 6.8</u>
• Residential areas	<u>Section 6.7, Section 6.8</u>
• Business	<u>Section 6.7, Section 6.8</u>
• Wetlands or other environmentally sensitive areas	<u>Section 6.7, Section 6.8</u>

• Fish and wildlife	<a href="#">Section 6.7</a> , <a href="#">Section 6.8</a>
• Lakes and streams	<a href="#">Section 6.7</a> , <a href="#">Section 6.8</a>
• Endangered flora and fauna	<a href="#">Section 6.7</a> , <a href="#">Section 6.8</a>
• Recreational areas	<a href="#">Section 6.7</a> , <a href="#">Section 6.8</a>
• Transportation routes (air, land, and water)	<a href="#">Section 6.7</a> , <a href="#">Section 6.8</a>
• Utilities	<a href="#">Section 6.7</a> , <a href="#">Section 6.8</a>
• Other applicable areas (List below)	<a href="#">Section 6.7</a> , <a href="#">Section 6.8</a>
• Other areas:	<a href="#">Section 6.7</a> , <a href="#">Section 6.8</a>
<b>Analysis of Potential for a Spill (sec. 1.4.3)</b>	
Probability of spill occurring at the facility	<a href="#">Appendix D.2.1</a>
<b>Incorporates Factors:</b>	
Tank age	<a href="#">Figure C-1</a>
Spill history	<a href="#">Figure C-8</a>
Horizontal range of a potential spill	<a href="#">Figure D.4-1</a>
Vulnerability to natural disaster	<a href="#">Appendix D.2.1</a>
<b>Facility Reportable Oil Spill History Description (sec. 1.4.4)</b>	
Date of discharge	<a href="#">Figure C-8</a>
List of discharge causes	<a href="#">Figure C-8</a>
Materials discharged	<a href="#">Figure C-8</a>
Amount discharged in gallons	<a href="#">Figure C-8</a>
Amount of discharge that reached navigable waters	<a href="#">Figure C-8</a>
Effectiveness and capacity of secondary containment	<a href="#">Figure C-8</a>
Clean-up actions taken	<a href="#">Figure C-8</a>

## Dearborn

FIGURE E-1 - EPA / FRP CROSS-REFERENCE, CONTINUED

EPA FRP REQUIREMENTS	LOCATION
<b>Facility Reportable Oil Spill History Description (sec. 1.4.4), Continued</b>	
Steps taken to reduce possibility of reoccurrence	<a href="#">Figure C-8</a>
Total oil storage capacity of tank(s) or impoundment(s) from which material is discharged	<a href="#">Figure C-8</a>
Enforcement actions	<a href="#">Figure C-8</a>

Effectiveness of monitoring equipment	<a href="#">Figure C-8</a>
Description of how each spill was detected	<a href="#">Figure C-8</a>
<b>Discharge Scenarios (sec. 1.5)</b>	
<b>Small and Medium Volume Discharges (sec. 1.5.1)</b>	
<b>Small Volume Discharges</b>	
Small volume discharge calculation for a facility	<a href="#">Appendix D.5</a>
Facility-specific spill potential analysis	<a href="#">Appendix D.5</a>
Average most probable discharge for "complexes"	N/A
1,000 feet of boom (1 hour deployment time)	<a href="#">Section 7.1.1, Figure 7.1-1, Appendix B</a>
Correct amount of boom for "complexes"	N/A
Oil recovery devices equal to small discharge (2 hour recovery time)	<a href="#">Section 7.1.1, Figure 7.1-1, Appendix B</a>
Oil storage capacity for recovered material	<a href="#">Section 7.1.1, Figure 7.1-1, Appendix B</a>
<b>Medium Volume Discharges</b>	
Medium volume discharge calculation for a facility	<a href="#">Appendix D.5</a>
Facility-specific spill potential analysis	<a href="#">Appendix D.5</a>
Maximum most probable discharge for "complexes"	N/A
Oil recovery devices equal to medium discharge	<a href="#">Section 7.1.1, Figure 7.1-1, Appendix B</a>
Availability of sufficient quantity of boom	<a href="#">Section 7.1.1, Figure 7.1-1, Appendix B</a>
Oil storage capacity for recovered material	<a href="#">Section 7.1.1, Figure 7.1-1, Appendix B</a>
<b>Worst Case Discharge (WCD) (sec. 1.5.2)</b>	
Correct WCD calculations	<a href="#">Appendix D.7</a>
Correct WCD for "complexes"	N/A
Sufficient response resources for WCD	<a href="#">Figure 7.1-1, Appendix B, Appendix D.7</a>
Sources and quantity of equipment for response to WCD	<a href="#">Section 7.1.1, Figure 7.1-1, Appendix B, Appendix D.7</a>
Oil storage capacity for recovered material	<a href="#">Section 7.1.1, Figure 7.1-1, Appendix B, Appendix D.7</a>

## Dearborn

FIGURE E-1 - EPA / FRP CROSS-REFERENCE, CONTINUED

EPA FRP REQUIREMENTS	LOCATION
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<b>Discharge Detection Systems (sec. 1.6)</b>	
<b>Discharge Detection by Personnel (sec. 1.6.1)</b>	
Detection procedures	<a href="#">Appendix D.3</a>
Discussion of facility inspections	<a href="#">Figure C-5, Appendix D.3</a>
Initial response actions	<a href="#">Figure 2-1</a>
<b>Automated Discharge Detection (sec. 1.6.2)</b>	
Equipment description	<a href="#">Appendix D.3</a>
Alarm verification procedures	<a href="#">Appendix D.3</a>
Initial response actions	<a href="#">Figure 2-1</a>
<b>Plan Implementation (sec. 1.7)</b>	
<b>Response Resources (sec. 1.7.1)</b>	
Demonstration of accessibility of proper response personnel and equipment	<a href="#">Appendix B</a>
Emergency plans for spill response	<a href="#">Section 2</a>
Additional response training	<a href="#">Appendix A.2</a>
Additional contracted help	<a href="#">Appendix B</a>
Access to additional equipment/ experts	<a href="#">Appendix B</a>
Ability to implement plan, including training and practice drills	<a href="#">Appendix A</a>
Immediate Actions Form for small, medium, and worst-case spills	<a href="#">Figure 2-1</a>
<b>Disposal Plans (sec. 1.7.2)</b>	
How and where materials will be disposed	<a href="#">Section 5.5, Section 7.3</a>
Disposal permits	<a href="#">Section 5.5, Section 7.3</a>
<b>Containment and Drainage Planning (sec. 1.7.3)</b>	
Containment and drainage plan available	<a href="#">Appendix C</a>
<b>Incorporates Factors:</b>	
Available volume of containment	<a href="#">Figure C-9</a>
Route(s) of drainage	<a href="#">Figure C-9</a>
Construction materials used in drainage troughs	<a href="#">Figure C-9</a>
Type and number of valves separators	<a href="#">Figure C-9</a>
Sump pump capacities	<a href="#">Figure C-9</a>
Containment capacity of weirs and booms	<a href="#">Figure C-9</a>
Other clean up materials	<a href="#">Figure C-9</a>

## Dearborn

FIGURE E-1 - EPA / FRP CROSS-REFERENCE, CONTINUED

EPA FRP REQUIREMENTS	LOCATION
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<b>Self-Inspection, Drills/ Exercises, and Response Training (sec. 1.8)</b>	
<b>Facility Self-Inspection (sec. 1.8.1)</b>	
Inspection checklist (with dates)	<a href="#">Figure C-5</a>
Records maintained for five years	<a href="#">Figure C-5</a> , <a href="#">Figure C-6</a>
<b>Tank Inspection (sec. 1.8.1.1)</b>	
Tank leaks	<a href="#">Figure C-5</a>
Tank foundations	<a href="#">Figure C-5</a>
Tank piping	<a href="#">Figure C-5</a>
<b>Response Equipment Inspection (sec. 1.8.1.2)</b>	
Inventory (item and quantity)	<a href="#">Figure D.3-1</a>
Storage location (time to access and respond)	<a href="#">Figure D.3-1</a>
Operation status/ condition	<a href="#">Figure D.3-1</a>
Actual use/ testing (last test date and frequency of testing)	Maintain On-Site
Shelf life	<a href="#">Figure D.3-1</a>
<b>Secondary Containment Inspection (sec. 1.8.1.3)</b>	
Dike or berm system	<a href="#">Figure C-5</a>
Secondary containment	<a href="#">Figure C-5</a>
Retention and drainage ponds	<a href="#">Figure C-5</a>
<b>Facility Drills/ Exercises (sec. 1.8.2)</b>	
Facility drills/ exercise description	<a href="#">Appendix A.1</a>
Equipment deployment exercise	<a href="#">Appendix A.1</a>
Unannounced exercise	<a href="#">Appendix A.1</a>
Area exercises	<a href="#">Appendix A.1</a>
Qualified Individual Notification Drills	<a href="#">Appendix A.1</a>
Qualified Individual Notification Drill Log (sec. 1.8.2.1) (date, company, qualified individual, other contacted, emergency scenario, evaluation)	<a href="#">Appendix A.1</a>
Emergency Management Team Tabletop Exercises	<a href="#">Appendix A.1</a>
Emergency Management Team Tabletop Drill Log (sec. 1.8.2.2) (date, company, qualified individual, participants, emergency scenario, evaluation, changes to be implemented, time table for implementation)	<a href="#">Appendix A.1</a>
<b>Response Training (sec. 1.8.3)</b>	
Description of response training program (including topics)	<a href="#">Figure A.2-2</a>
Personnel Response Training Logs (name, response training date/ and number of hours, prevention training date/ and number of hours)	<a href="#">Figure A.2-3</a>
Discharge Prevention Meeting Log (date, attendees)	<a href="#">Figure C-4</a>

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FIGURE E-1 - EPA / FRP CROSS-REFERENCE, CONTINUED

EPA FRP REQUIREMENTS	LOCATION
<b>Diagrams (sec. 1.9)</b>	
<b>Site Diagram includes:</b>	
Entire facility to scale	<u>Site Plan "Figure 1-5"</u>
Above and below-ground bulk storage tanks	<u>Site Plan "Figure 1-5"</u>
Contents and capacities of bulk storage tanks	<u>Site Plan "Figure 1-5"</u>
Contents and capacities of drum storage areas	<u>Site Plan "Figure 1-5"</u>
Contents and capacities of surface impoundments	<u>Site Plan "Figure 1-5"</u>
Process buildings	<u>Site Plan "Figure 1-5"</u>
Transfer areas	<u>Site Plan "Figure 1-5"</u>
Secondary containment systems	<u>Site Plan "Figure 1-5"</u>
Structures where hazardous materials are used and capacity	<u>Site Plan "Figure 1-5"</u>
Location of communication and emergency response equipment	<u>Site Plan "Figure 1-5"</u>
Location of electrical equipment which contains oil	<u>Site Plan "Figure 1-5"</u>
If a "complex" facility, interface between EPA and other regulating agencies	N/A
<b>Site Drainage Diagram</b>	
Major sanitary and storm sewers, manholes, and drains	<u>Drainage Diagram "Figure C-2"</u>
Weirs and shut-off valves	<u>Drainage Diagram "Figure C-2"</u>
Surface water receiving streams	<u>Drainage Diagram "Figure C-2"</u>
Fire fighting water sources	<u>Drainage Diagram "Figure C-2"</u>
Other utilities	<u>Drainage Diagram "Figure C-2"</u>
Response personnel ingress and egress	<u>Drainage Diagram "Figure C-2"</u>
Equipment transportation routes	<u>Drainage Diagram "Figure C-2"</u>
Direction of spill flow from release points	<u>Drainage Diagram "Figure C-2"</u>
<b>Site Evacuation Diagram includes:</b>	
Site plan diagram with evacuation routes	<u>Evacuation Diagram "Figure C-3"</u>
Location of evacuation regrouping areas	<u>Evacuation Diagram "Figure C-3"</u>

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FIGURE E-1 - EPA / FRP CROSS-REFERENCE, CONTINUED

EPA FRP REQUIREMENTS	LOCATION
<b>Site Security (sec. 1.10)</b>	
Emergency cut-off locations	<u>Figure 7.2-2</u>
Enclosure	<u>Figure 7.2-2</u>
Guards and their duties, day and night	<u>Figure 7.2-2</u>
Lighting	<u>Figure 7.2-2</u>
Valve and pump locks	<u>Figure 7.2-2</u>
Pipeline connection caps	<u>Figure 7.2-2</u>
<b>Response Plan Cover Sheet (sec. 2.0)</b>	
Owner/ operator of facility	<u>Figure E-4</u>
Facility name	<u>Figure E-4</u>
Facility address	<u>Figure E-4</u>
Facility phone number	<u>Figure E-4</u>
Latitude and longitude	<u>Figure E-4</u>
Dun and Bradstreet number	<u>Figure E-4</u>
<b>Response Plan Cover Sheet (sec. 2.0), Continued</b>	
North American Industrial Classification System (NAICS) Code	<u>Figure E-4</u>
Largest oil tank storage capacity	<u>Figure E-4</u>
Maximum oil storage capacity	<u>Figure E-4</u>
Number of oil storage tanks	<u>Figure E-4</u>
Worst case discharge amount	<u>Figure E-4</u>
Facility distance to navigable waters	<u>Figure E-4</u>
Applicability of substantial harm criteria	<u>Figure E-4</u>
Certification	<u>Figure E-4</u>

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FIGURE E-2 - DOT / PHMSA CROSS-REFERENCE

OPA 90 REQUIREMENTS (49 CFR 194)	LOCATION
<b>Information Summary</b>	
<ul style="list-style-type: none"> <li>For the core plan:</li> </ul>	
<ul style="list-style-type: none"> <li>Name and address of operator</li> </ul>	<u>Figure 1-2</u>
<ul style="list-style-type: none"> <li>For each Response Zone which contains one or more line sections that meet the criteria for determining significant</li> </ul>	<u>Figure 1-2</u>

and substantial harm (§194.103), listing and description of Response Zones, including county(s) and state(s)	
• For each Response Zone appendix:	
• Information summary for core plan	<u>Section 1</u>
• QI names and telephone numbers, available on 24-hr basis	<u>Figure 1-2, Figure 3.1-3</u>
• Description of Response Zone, including county(s) and state(s) in which a worst case discharge could cause substantial harm to the environment	<u>Figure 1-2</u>
• List of line sections contained in Response Zone, identified by milepost or survey station or other operator designation	<u>Figure 1-2</u>
• Basis for operator's determination of significant and substantial harm	<u>Figure 1-2</u>
• The type of oil and volume of the worst case discharge	<u>Appendix D</u>
• 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	<u>Section 1.3, Appendix B</u>
<b>Notification Procedures</b>	
• Notification requirements that apply in each area of operation of pipelines covered by the plan, including applicable state or local requirements	<u>Figure 3.1-4</u>
• Checklist of notifications the operator or Qualified Individual is required to make under the response plan, listed in the order of priority	<u>Figure 2.1-1, Figure 3.1-1, Section 4.2</u>
• Name of persons (individuals or organizations) to be notified of discharge, indicating whether notification is to be performed by operating personnel or other personnel	<u>Figure 3.1-1, Figure 3.1-3, Figure 3.1-4</u>
• Procedures for notifying Qualified Individuals	<u>Figure 3.1-1, Section 4.2</u>
• Primary and secondary communication methods by which notifications can be made	<u>Section 7.1.6</u>
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FIGURE E-2 - DOT / PHMSA CROSS-REFERENCE, CONTINUED

OPA 90 REQUIREMENTS (49 CFR 194)	LOCATION
<ul style="list-style-type: none"> <li>• Information to be provided in the initial and each follow-up notification, including the following:               <ul style="list-style-type: none"> <li>• Name of pipeline</li> <li>• Time of discharge</li> <li>• Location of discharge</li> <li>• Name of oil recovered</li> <li>• Reason for discharge (e.g. material failure, excavation damage, corrosion)</li> <li>• Estimated volume of oil discharged</li> <li>• Weather conditions on scene</li> <li>• Actions taken or planned by persons on scene</li> </ul> </li> </ul>	<u>Figure 3.1-2</u>
<b>Spill Detection and On-Scene Spill Mitigation Procedures</b>	
<ul style="list-style-type: none"> <li>• Methods of initial discharge detection</li> </ul>	<u>Appendix D.3</u>
<ul style="list-style-type: none"> <li>• 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</li> </ul>	<u>Section 2</u>
<ul style="list-style-type: none"> <li>• List of equipment that may be needed in response activities based on land and navigable waters including:               <ul style="list-style-type: none"> <li>• Transfer hoses and pumps</li> <li>• Portable pumps and ancillary equipment</li> <li>• Facilities available to transport and receive oil from a leaking pipeline</li> </ul> </li> </ul>	<u>Section 7.1.1, Appendix B</u>
<ul style="list-style-type: none"> <li>• Identification of the availability, location, and contact phone numbers to obtain equipment for response activities on a 24-hour basis</li> </ul>	<u>Figure 3.1-4, Appendix B</u>
<ul style="list-style-type: none"> <li>• Identification of personnel and their location, telephone numbers, and responsibilities for use of equipment in response activities on a 24-hour basis</li> </ul>	<u>Figure 3.1-3, Section 7.1, Appendix B</u>
<b>Response Activities</b>	
<ul style="list-style-type: none"> <li>• 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</li> </ul>	<u>Section 2, Section 4.5, Appendix B</u>
<ul style="list-style-type: none"> <li>• Qualified Individual's responsibilities and authority, including notification of the response resources identified in the response plan</li> </ul>	<u>Section 4.5</u>

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
<ul style="list-style-type: none"> <li>Oil spill response organizations (OSRO) available through contract or other approved means, to respond to a worst case discharge to the maximum extent practicable</li> </ul>	<u>Appendix B</u>
<ul style="list-style-type: none"> <li>For each organization identified under paragraph (d), a listing of: <ul style="list-style-type: none"> <li>Equipment and supplies available</li> <li>Trained personnel necessary to continue operation of the equipment and staff the oil spill removal organization for the first seven days of the response</li> </ul> </li> </ul>	<u>Appendix B</u>

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FIGURE E-2 - DOT / PHMSA CROSS-REFERENCE, CONTINUED

OPA 90 REQUIREMENTS (49 CFR 194)	LOCATION
<b>List of Contacts</b>	
<ul style="list-style-type: none"> <li>List of persons the Plan requires the operator to contact</li> </ul>	<u>Figure 3.1-1</u>
<ul style="list-style-type: none"> <li>Qualified individuals for the operator's areas of operation</li> </ul>	<u>Figure 1-2, Figure 3.1-3</u>
<ul style="list-style-type: none"> <li>Applicable insurance representatives or surveyors for the operator's areas of operation</li> </ul>	<u>Figure 3.1-3, Figure 3.1-4</u>
<ul style="list-style-type: none"> <li>Persons or organizations to notify for activation of response resources</li> </ul>	<u>Figure 3.1-1, Figure 3.1-3, Figure 3.1-4</u>
<b>Training Procedures</b>	
<ul style="list-style-type: none"> <li>Description of training procedures and programs of the operations</li> </ul>	<u>Appendix A.2</u>
<b>Drill Procedures</b>	
<ul style="list-style-type: none"> <li>Announced and unannounced drills</li> </ul>	<u>Appendix A.1</u>
<ul style="list-style-type: none"> <li>Types of drills and their frequencies; for example: <ul style="list-style-type: none"> <li>Manned pipeline emergency procedures and qualified individual notification drills conducted quarterly</li> <li>Drills involving emergency actions by assigned operating or maintenance personnel and notification of qualified individual on pipeline facilities which are normally unmanned, conducted quarterly</li> </ul> </li> </ul>	<u>Appendix A.1</u>

<p>Shore-based spill management team (SMT) tabletop drills conducted yearly</p> <ul style="list-style-type: none"> <li>Oil spill removal organization field equipment deployment drills conducted yearly</li> <li>A drill that exercises entire response plan for each Response Zone, would be conducted at least once every three years</li> </ul>	
<b>Response Plan review and update procedures</b>	
<ul style="list-style-type: none"> <li>Procedures to meet §194.121</li> </ul>	<u>Section 1.2</u>
<ul style="list-style-type: none"> <li>Procedures to review plan after a worst case discharge and to evaluate and record the plan's effectiveness</li> </ul>	<u>Section 1.2, Section 8.3</u>
<b>Response zone appendices</b>	
Each response zone appendix would provide the following information:	
<ul style="list-style-type: none"> <li>Name and telephone number of the qualified individual</li> </ul>	<u>Figure 1-2, Figure 3.1-3</u>
<ul style="list-style-type: none"> <li>Notification procedures</li> </ul>	<u>Section 3</u>
<ul style="list-style-type: none"> <li>Spill detection and mitigation procedures</li> </ul>	<u>Section 2.1.1, Appendix D.3</u>
<ul style="list-style-type: none"> <li>Name, address, and telephone number of oil spill response organization</li> </ul>	<u>Figure 3.1-4, Appendix B</u>
<ul style="list-style-type: none"> <li>Response activities and response resources including: <ul style="list-style-type: none"> <li>Equipment and supplies necessary to meet §194.115</li> <li>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</li> </ul> </li> </ul>	<u>Figure 3.1-3, Appendix A, Appendix B</u>
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FIGURE E-2 - DOT / PHMSA CROSS-REFERENCE, CONTINUED

<b>OPA 90 REQUIREMENTS (49 CFR 194)</b>	<b>LOCATION</b>
<ul style="list-style-type: none"> <li>Names and telephone numbers of federal, state, and local agencies which the operator expects to assume pollution response responsibilities</li> </ul>	<u>Figure 3.1-4</u>
<ul style="list-style-type: none"> <li>Worst case discharge volume</li> </ul>	<u>Appendix D</u>
<ul style="list-style-type: none"> <li>Method used to determine the worst case discharge volume, with calculations</li> </ul>	<u>Appendix D.7</u>

<ul style="list-style-type: none"> <li>• A map that clearly shows: <ul style="list-style-type: none"> <li>• Location of worst case discharge</li> <li>• Distance between each line section in the Response Zone: <ul style="list-style-type: none"> <li>• Each potentially affected public drinking water intake, lake, river, and stream within a radius of five miles of the line section</li> <li>• Each potentially affected environmentally sensitive area within a radius of one mile of the line section</li> </ul> </li> </ul> </li> </ul>	<p><u>Figure 1-3, Figure 1-5, Section 6.7, Section 6.8</u></p>
<ul style="list-style-type: none"> <li>• Piping diagram and plan-profile drawing of each line section; may be kept separate from the response plan if the location is identified</li> </ul>	<p><u>Figure 1-2</u></p>
<ul style="list-style-type: none"> <li>• For every oil transported by each pipeline in the response zone, emergency response data that: <ul style="list-style-type: none"> <li>• Include name, description, physical and chemical characteristics, health and safety hazards, and initial spill-handling and firefighting methods</li> <li>• Meet 29 CFR 1910.1200 or 49 CFR 172.602</li> </ul> </li> </ul>	<p><u>Section 2.2, Appendix D.9, Figure D.9-1</u></p>

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FIGURE E-3 - OSHA CROSS-REFERENCE

ERP REQUIREMENTS (29 CFR 1910.38)	LOCATION
(a) Application. An employer must have an emergency action plan whenever an OSHA standard in this part requires one. The requirements in this section apply to each such emergency action plan.	
(b) Written and oral emergency action plans. An emergency action plan must be in writing, kept in the workplace, and available to employees for review. However, an employer with 10 or fewer employees may communicate the plan orally to employees.	
(c) Minimum elements of an emergency action plan. An emergency action plan must include at a minimum:	
(1) Procedures for reporting a fire or other emergency;	<u>Section 2, Section 3</u>
(2) Procedures for emergency evacuation, including type of evacuation and exit route assignments;	<u>Section 2.6, Figure C-3</u>
(3) Procedures to be followed by employees who remain to operate critical plant operations before they evacuate;	N/A

(4) Procedures to account for all employees after evacuation;	<u>Section 2.6</u>
(5) Procedures to be followed by employees performing rescue or medical duties; and	<u>Section 2.3</u>
(6) The name or job title of every employee who may be contacted by employees who need more information about the plan or an explanation of their duties under the plan.	<u>Figure 3.1-3, Section 4</u>
(d) Employee alarm system. An employer must have and maintain an employee alarm system. The employee alarm system must use a distinctive signal for each purpose and comply with the requirements in §1910.165.	<u>Section 2.6.2</u>
(e) Training. An employer must designate and train employees to assist in a safe and orderly evacuation of other employees.	<u>Appendix A</u>
(f) Review of emergency action plan. An employer must review the emergency action plan with each employee covered by the plan:	<u>Appendix A.2</u>
(1) When the plan is developed or the employee is assigned initially to a job;	<u>Appendix A.2</u>
(2) When the employee's responsibilities under the plan change; and	<u>Appendix A.2</u>
(3) When the plan is changed.	<u>Appendix A.2</u>

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FIGURE E-3 - OSHA CROSS-REFERENCE, CONTINUED

<b>ERP REQUIREMENTS (29 CFR 1910.120 [q] [2])</b>	<b>LOCATION</b>
(q) Emergency response to hazardous substance releases. This paragraph covers employers whose employees are engaged in emergency response no matter where it occurs except that it does not cover employees engaged in operations specified in paragraphs (a)(1)(i) through (a)(1)(iv) of this section. Those emergency response organizations who have developed and implemented programs equivalent to this paragraph for handling releases of hazardous substances pursuant to section 303 of the Superfund Amendments and Reauthorization Act of 1986 (Emergency Planning and Community Right-to-Know Act of 1986, 42 U.S.C. 11003) shall be deemed to have met the requirements of this paragraph.	
(1) Emergency response plan. An emergency response plan shall be developed and implemented to handle anticipated emergencies prior to the commencement of emergency response operations. The plan shall be in writing and available for inspection and copying by	

employees, their representatives and OSHA personnel. Employers who will evacuate their employees from the danger area when an emergency occurs, and who do not permit any of their employees to assist in handling the emergency, are exempt from the requirements of this paragraph if they provide an emergency action plan in accordance with 29 CFR 1910.38.	
(2) Elements of an emergency response plan. The employer shall develop an emergency response plan for emergencies which shall address, as a minimum, the following to the extent that they are not addressed elsewhere:	
(i) Pre-emergency planning and coordination with outside parties.	<u>Section 3, Appendix C, Appendix D</u>
(ii) Personnel roles, lines of authority, training, and communication.	<u>Section 3, Section 4, Section 7.1.6, Appendix A.2</u>
(iii) Emergency recognition and prevention.	<u>Appendix C, Appendix D.3</u>
(iv) Safe distances and places of refuge.	<u>Section 2.6</u>
(v) Site security and control.	<u>Section 5.6, Section 7.2</u>
(vi) Evacuation routes and procedures.	<u>Section 2.6, Figure C-3</u>
(vii) Decontamination.	<u>Section 5.4</u>
(viii) Emergency medical treatment and first aid.	<u>Section 2.3</u>
(ix) Emergency alerting and response procedures.	<u>Section 2</u>
(x) Critique of response and follow-up.	<u>Section 8</u>
(xi) PPE and emergency equipment.	<u>Section 7.1.1, Figure 7.1-1</u>
(xii) Emergency response organizations may use the local emergency response plan or the state emergency response plan or both, as part of their emergency response plan to avoid duplication. Those items of the emergency response plan that are being properly addressed by the SARA Title III plans may be substituted into their emergency plan or otherwise kept together for the employer and employee's use.	

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FIGURE E-4 - EPA RESPONSE PLAN COVER SHEET

Owner/ operator of facility:	BP Products North America Inc., U.S. Logistics
Facility name:	Dearborn
(b) (7)(F)	
City, state, and U.S. zip code	Taylor, MI 48180
Facility mailing address:	As above
Facility phone number.:	(313) 291-3670
(b) (7)(F)	
Dun & Bradstreet number:	1544332
(b) (7)(F)	
Number of above ground oil storage tanks:	14 (including additive tanks)
North American Industrial Classification System (NAICS):	424710
(b) (7)(F)	
Facility distance to navigable water; mark the appropriate line.	
0-1/4 <input type="checkbox"/> 1/4-1/2 mile <input checked="" type="checkbox"/> 1/2 - 1 mile <input type="checkbox"/> > 1 mile <input type="checkbox"/>	
<b>APPLICABILITY OF SUBSTANTIAL HARM CRITERIA</b>	
Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?	
YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	
Does the facility have a total oil storage capacity greater than or equal to one million gallons and, within any storage area, does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation?	
YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	
Does the facility have a total oil storage capacity greater than or equal to one million gallons and is the facility located at a distance (as calculated using the appropriate formula in or a comparable formula) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments?	
YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	
Does the facility have a total oil storage capacity greater than or equal to one million gallons and is the facility located at a distance (using the appropriate formula in or a comparable formula) such that a discharge from the facility would shut down a drinking water intake?	
YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	
Does the facility have a total oil storage capacity greater than or equal to one million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last five years?	
YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	

**CERTIFICATION**

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and that based on my inquiry of those individuals responsible for obtaining information, I believe that the submitted information is true, accurate, and complete.

**Kept on file at Facility**

Date: On File

Signature:

Name: Jules Rygiel

Title: Terminal Manager

**Dearborn**APPENDIX F  
ACRONYMS AND DEFINITIONS

Last Revised: May 2006

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F.1 AcronymsF.2 Definitions**Dearborn**

## F.1 ACRONYMS

ACP	Area Contingency Plan
AFFF	Aqueous Film Forming Foam
ASTM	American Society of Testing Materials
BBL	Barrel(s)
BLM	Bureau of Land Management (USDOJ)
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 <sub>2</sub>	Carbon Dioxide
COTP	Captain of the Port (USCG)
CRZ	Contamination Reduction Zone
CWA	Clean Water Act of 1977 (Federal)
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
FRP	Facility Response Plan
FRT	Facility Response Team
FWPCA	Federal Water Pollution Control Act of 1972
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
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## Dearborn

### F.1 ACRONYMS, CONTINUED

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
NRC	National Response Center
NRDA	National Resource Damage Assessment
NRT	National Response Team
OBA	Oxygen Breathing Apparatus
OPA 90	Oil Pollution Act of 1990
OSC	On-Scene Coordinator/Commander
OSHA	Occupational Safety and Health Administration (USDL)
PPE	Personal Protective Equipment
PREP	(National) Preparedness for Response Exercise Program
QI	Qualified Individual
RCRA	Resource Conservation and Recovery Act of 1976
RQ	Reportable Quantity
RSPA	Research and Special Programs Administration (DOT)
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)

EMT	Emergency Management Team
SOSC	State On-Scene Coordinator
SPCC	Spill Prevention, Control, and Countermeasures (Plan)

## Dearborn

### F.1 ACRONYMS, CONTINUED

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
USDOJ	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 (USDOJ)
USGS	U.S. Geological Survey (USDOJ)

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### F.2 DEFINITIONS

#### Adverse Weather

The weather conditions that will be considered when identifying response systems and equipment in a response plan for the applicable operating environment. Factors to consider include significant wave height, ice, temperature, weather-related visibility, and currents with the Captain of the Port (COTP) zone in which the systems or equipment are intended to function.

#### Aqueous Film Forming Foam

A fluoro-carbon surfactant that acts as an effective vapor securing agent due to its effect on the surface tension of the water. Its physical properties enable it to float and spread across surfaces of a hydrocarbon fuel with more density than protein foam.

#### Average Most Probable Discharge (USCG)

A discharge of the lesser of 50 barrels (2100 gallons) or one percent of the volume of the worst case discharge.

#### Barrel

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

#### Bleve

**A boiling liquid-expanding vapor explosion; failure of a liquefied flammable gas container caused by fire exposure. Pronounced "blevey."**

**Boilover**

Occurs when the heat from a fire in a tank travels down to the bottom of the tank causing water that is already there to boil and push part of the tank's contents over the side.

**Carbon Dioxide**

A heavy, colorless, odorless, asphyxiating gas, that does not normally support combustion. It is one and one-half times heavier than air and when directed at the base of a fire its action is to dilute the fuel vapors to a lean mixture to extinguish the fire.

**Class A Fire**

A fire involving common combustible materials which can be extinguished by the use of water or water solutions. Materials in this category include wood and wood-based materials, cloth, paper, rubber and certain plastics.

**Class B Fire**

A fire involving flammable or combustible liquids, flammable gases, greases and similar products. Extinguishment is accomplished by cutting off the supply of oxygen to the fire or by preventing flammable vapors from being given off.

**Class C Fire**

A fire involving energized electrical equipment, conductors or appliances. Nonconducting extinguishing agents must be used for the protection of firefighters.

**Class D Fire**

A fire involving combustible metals, for example, sodium, potassium, magnesium, titanium and aluminum. Extinguishment is accomplished through the use of heat-absorbing extinguishing agents such as certain dry powders that do not react with the burning metals.

**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.

## Dearborn

### F.2 DEFINITIONS, CONTINUED

**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 contractual agreement with a response contractor. The agreement should identify and ensure the availability of the specified personnel and equipment described under U.S.C.G. Regulations within stipulated response times in the specified geographic areas
- Certification by the facility owner or operator that the specified personnel and equipment described under USCG Regulations are owned, operated, or under the direct control of the facility owner or operator, and are available within stipulated times in the specified geographic areas
- Active membership in a local or regional oil spill removal organization that has identified specified personnel and equipment described under USCG Regulations that are available to respond to a discharge within stipulated times in the specified geographic areas
- A document which:
  - Identifies the personnel, equipment, services, capable of being provided by the response contractor within stipulated response times in specified geographic areas
  - Sets out the parties' acknowledgment that the response contractor intends to commit the resources in the event of a response
  - Permits the Coast Guard to verify the availability of the response resources identified through tests, inspections, drills
  - Is incorporated by reference in the Response Plan
- 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.

## Dearborn

### F.2 DEFINITIONS, CONTINUED

#### Demand Breathing Apparatus

A type of self-contained breathing apparatus that provides air or oxygen from a supply carried by the user.

#### 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

Streams and water bodies, aquifer recharge zones, springs, wetlands, agricultural areas, bird rookeries, endangered or threatened species (flora and fauna) habitat, wildlife preserves or conservation areas, parks, beaches, dunes, or any other area protected or managed for its natural resource value.

### 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.

### Facility

Any pipeline, structure, equipment, or device used for handling oil including, but not limited to, underground and aboveground storage tanks, impoundments, mobile or portable drilling or workover rigs, barge mounted drilling or workover rigs, and portable fueling facilities located offshore or on or adjacent to coastal waters or any place where a discharge of oil from the facility could enter coastal waters or threaten to enter the coastal waters.

### 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.

### Flashover

The ignition of combustibles in an area heated by convection, radiation, or a combination of the two. The action may be a sudden ignition in a particular location followed by rapid spread or a "flash" of the entire area.

## Dearborn

### F.2 DEFINITIONS, CONTINUED

#### 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.

#### Higher Volume Port Area

Ports of:

- Boston, MA
- New York, NY
- Delaware Bay and River to Philadelphia, PA
- St. Croix, VI
- Pascagoula, MS
- Mississippi River from Southwest Pass, LA to Baton Rouge, LA
- Louisiana Offshore Oil Port (LOOP), LA
- Lake Charles, LA
- Sabine-Nachez River, TX
- Galveston Bay and Houston Ship Channel, TX
- Corpus Christi, TX
- Los Angeles/Long Beach Harbor, CA
- San Francisco Bay, San Pablo Bay, Carquinez Strait, Suisun Bay to Antioch, CA
- Straits of Juan de Fuca and Puget Sound, WA
- Prince William Sound, AK

#### 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.

## Dearborn

### F.2 DEFINITIONS, CONTINUED

#### 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.

**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.

**Interim Storage Site**

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

**Lead Agency**

The government agency that assumes the lead for directing 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.

**Lower Flammable Limit**

Minimum flammable concentration of a particular gas in the air.

**Marine Transportation-Related Facility (MTR Facility)**

An onshore facility, including piping and any structure used to transfer oil to or from a vessel, subject to regulation under 33 CFR Part 154 and any deepwater port subject to regulation under 33 CFR Part 150.

**Maximum Extent Practicable**

The planning values derived from the planning criteria used to evaluate the response resources described in the response plan 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 facility in adverse weather.

**Dearborn****F.2 DEFINITIONS, CONTINUED****Maximum Most Probable Discharge (USCG)**

A discharge of the lesser of 2,500 barrels or ten percent of the volume of a worst case discharge.

**Medium Discharge (EPA)**

Same as maximum most probable discharge.

#### 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.

#### Nearshore Area

The area extending seaward 12 miles from the boundary lines defined in 46 CFR Part 7, except in the Gulf of Mexico. In the Gulf of Mexico, it means the area extending seaward 12 miles from the line of demarcation (COLREG) lines) defined in '80.740 - 80.850 of Title 33 of the CFR.

#### Non-Persistent or Group I Oil

A petroleum-based oil that, at the time of shipment, consists of hydrocarbon fractions:

- 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.

#### Offshore Area

The area beyond 12 nautical miles measured from the boundary lines defined in 46 CFR Part 7 extending seaward to 50 nautical miles, except in the Gulf of Mexico. In the Gulf of Mexico it is the area beyond 12 nautical miles of the line of demarcation (COLREG lines) defined in '80-740 - 80.850 of Title 33 of the CFR extending seaward to 50 nautical miles.

#### 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 oil spill response resources, and includes any for profit or not-for-profit contractor, cooperative, or in-house response resources that have been established in a geographic area to provide required response resources.

#### 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.

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## F.2 DEFINITIONS, CONTINUED

### Overhaul

A procedure following a fire whereby the area is examined for hidden fire and fire extension and the fire area is cleaned up.

### 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

### 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(s) of the facility identified in the plan, located in the United States, available on a 24-hour basis, familiar with implementation of the facility response plan, and trained in his or her responsibilities under the plan. This person must have full written authority to implement the facility's response plan. 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.**

### Reid Vapor Pressure Method

Method used by the American Society of Testing Materials to test vapor pressure. It is a measure of the volatility, or tendency to vaporize, of a liquid.

### 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.

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## F.2 DEFINITIONS, CONTINUED

### 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.

### Sloper

An event that occurs when water is introduced into a tank of very hot liquid, causing the liquid to froth and spatter.

### Small Discharge (EPA)

Same as average most probable discharge.

### 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.

### Emergency 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.

### 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.

### Tornado Warning

A tornado has been sighted.

### Tornado Watch

Conditions are favorable for tornados to form.

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**Dearborn****F.2 DEFINITIONS, CONTINUED****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.

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APPENDIX G  
ADDITIONAL INFORMATION

Last Revised: May 2006

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