



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety Administration**

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

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







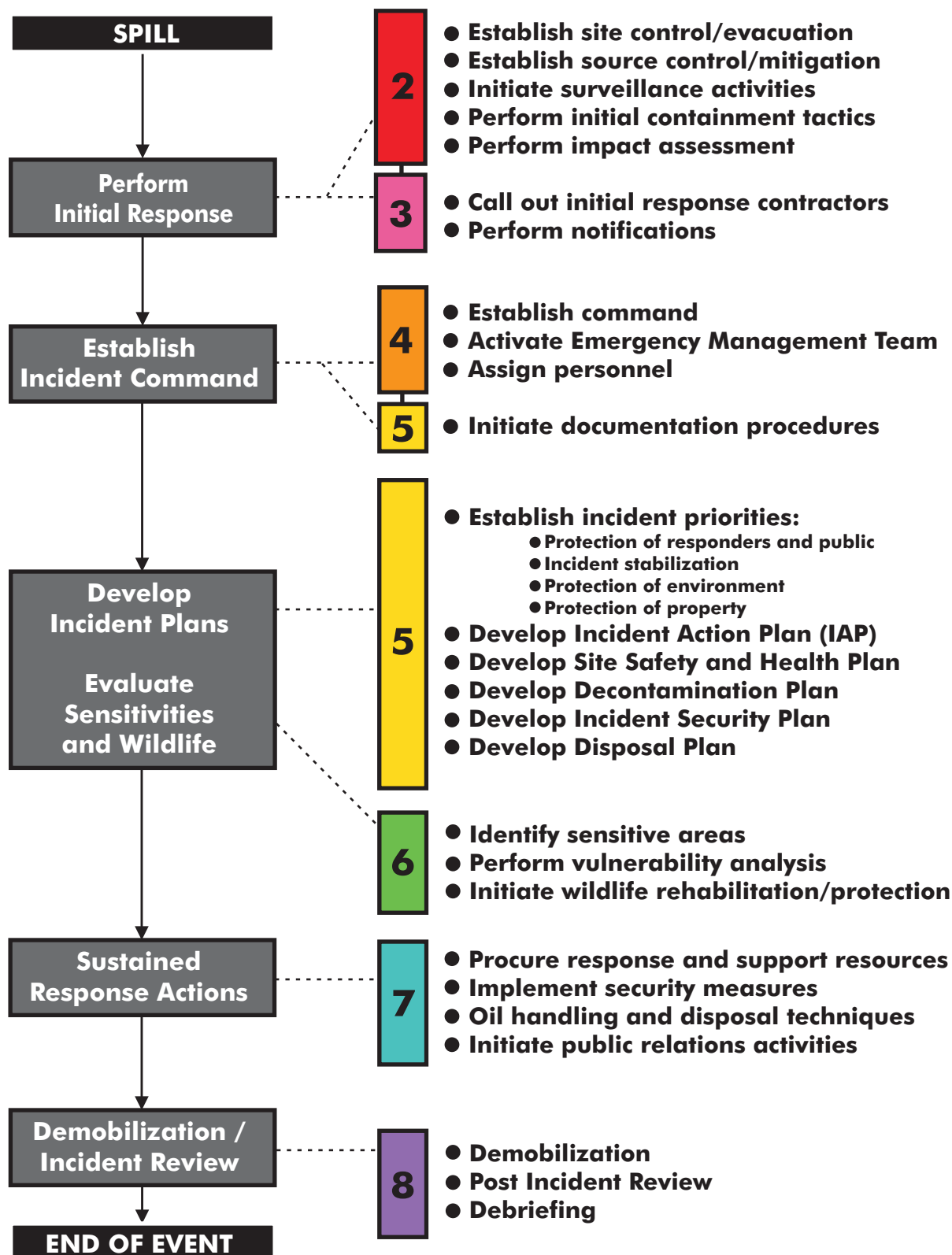
**Response Zone 4 Ardmore Operations - Central, TX
Integrated Contingency Plan**

Developed by:



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Response Procedures Flow Chart



1. Introduction

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Response
Actions3. Notifications
Phone
Numbers4. Response
Team
Organization5. Incident
Planning6. Sensitive
Areas
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RECORD OF CHANGES

Changes to this Plan will be documented on this page. Plan review and modifications will be initiated and coordinated by the Business Unit Health, Safety, Security & Environmental (HSS&E) Department in conjunction with the Area Supervisor/Manager of Operations.

DATE OF CHANGE	DESCRIPTION OF CHANGE	PAGE NUMBER

SECTION 1

Last revised: May 2008

INTRODUCTION

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Figure 1-1 - Distribution ListFigure 1-2 - Information SummaryFigure 1-3 - Overview Map1.1 Purpose / Scope of Plan1.2 Plan Review and Update Procedure1.3 Certification of Adequate Resources1.4 Agency Submittal / Approval Letters

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FIGURE 1-1 - DISTRIBUTION LIST

PLAN HOLDER	ADDRESS	NUMBER OF COPIES			
		PAPER	DISTRIBUTION DATE	ELECTRONIC	DISTRIBUTION DATE
Melanie Barber Environmental Planning Officer	Office of Pipeline Safety Department of Transportation Room E22-210 1200 New Jersey Avenue, SE Washington, D.C. 20590-0001	0		2	
NuStar Logistics, L.P., Attn: Dannie Cagle, Director of Operations	4201 West Cliffside Amarillo, TX 79124	1		0	
NuStar Logistics, L.P., Attn: Robert (Bob) Rickords, Manager Area Pipeline, and Chet Howell, Sr. Technician	5629 West Broadway Ardmore, OK 73401	1		0	
NuStar Logistics, L.P., Wichita Falls Crude Oil Pump Station, Attn: Randy Barber, Manager Area Pipeline, and Dannie Cagle, Director of Operations	2345 Harding Street Wichita Falls, TX 76307	1		0	
NuStar Logistics, L.P., Attn: Todd Denton, V.P. Pipelines & Terminals	2330 Loop 1604 West San Antonio, TX 78248	1		0	

Central West Region - HSE Regional Manager	210 SPID ste 200 Corpus Christi, TX 78405	1		0	
NuStar Logistics, L.P., Attn: Bill Mamalakis, Central Control Center Manager	2330 Loop 1604 West San Antonio, TX 78248	1		0	

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FIGURE 1-2 - INFORMATION SUMMARY

Owner:	NuStar Logistics, L.P. 2330 Loop 1604 West San Antonio, TX 78248 (210) 918-2000	
Operator:	NuStar Logistics, L.P. 2330 Loop 1604 West San Antonio, TX 78248 (210) 918-2000	
Zone Name:	Response Zone 4 Ardmore Operations - Central	
Zone Mailing Address:	410 S. Padre Island Drive, Suite 200 Corpus Christi, TX 78405	
Zone Telephone/Fax:	(361) 249-9432 / (210) 918-5762	
Qualified Individuals:		Work
	Wes Gore VP & General Manager Operations Planning Chief/ Administration/Finance Chief (361) 249-9402 (Office) (b) (6) (806) 679-3781 (Mobile)	410 S. Padre Island Drive, Suite 210 Corpus Christi, TX 78405
	Danny Cagle Director of Operations Incident Commander, Logistics/ Operations (806) 371-1310 (Office) (b) (6) (940) 632-6100 (Mobile)	4200 W. Cliffside Amarillo, TX 79124
	Randy Barber Area Manager, Supervisor, Amarillo Ops- Eastern	2345 Harding Street

	Incident Commander (940) 761-4930, (940) 733-0861 (Office) (b) (6) (940) 733-0861 (Mobile)	Wichita Falls, TX 76305
	Bob Rickords Area Operations Manager Logistics/Operations/Administration/Finance Chief / Alternate Qualified Individual (580) 226-1638 (Office) (b) (6) (580) 220-8845 (Mobile)	5629 West Broadway Ardmore, Oklahoma 73401

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FIGURE 1-2 - INFORMATION SUMMARY, CONTINUED

Line Sections/ Products Handled: (Refer to Product Characteristics and Hazards, FIGURE C.6-1)	SECTION	PRODUCTS
	Ringgold Crude Oil Pipeline	Crude
	Wasson Crude Oil Pipeline	Crude

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FIGURE 1-2 - INFORMATION SUMMARY, CONTINUED

Description of Zone:	The pipeline carries refined oil (including Crude Oil) in the areas shown in FIGURE 1-3 .
Response Zone Consists of the Following Counties:	OK: Carter, Jefferson, Murray. TX: Montague.
Alignment Maps (Piping, Plan Profiles):	Maintained at: Located on the company intranet
Worst Case Discharge:	(b) (7)(F)
Spill Detection and Mitigation Procedures:	Refer to SECTION 2 and APPENDIX C .
Statement of Significant and Substantial Harm:	Each Response Zone identified in this Plan contains line sections that are greater than 6 5/8" in nominal outside diameter, greater than 10 miles in length and either are located within a 5 mile radius of a public drinking water intake or are located within a 1 mile radius of an environmentally sensitive area. Therefore, each Response Zone in the Plan is treated as if it is expected to cause significant and

	substantial harm. The Company's goal is to respond as quickly as possible to all uncontrolled releases of petroleum product, regardless of the source point location along the system. Based upon this goal, and the definitions provided in 49 CFR 194.103 (c)(4) & (5), the Company is compelled to consider all the active line sections listed in this section as capable of a release potentially causing "significant and substantial harm".
PHMSA #:	1618
Date Prepared:	December 2010

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 - Response Zone 4 Ardmore Operations - Central OVERVIEW MAP
[Click here to view - Central West Region Overview Map](#)

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1.1 PURPOSE / SCOPE OF PLAN

The purpose of this Spill Response Plan (Plan) is to provide guidelines to quickly, safely, and effectively respond to a spill. The Pipeline is owned and operated by NuStar Logistics, L.P., herein referred to as "Company."

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), Region VI Inland Area Contingency Plan (New Mexico, Oklahoma and Texas), U.S. Coast Guard - South Central Zone: Corpus Christi, TX, U.S. Coast Guard - MSO Houston-Galveston, TX. Specifically, this Plan is intended to satisfy:

- Pipeline and Hazardous Materials Safety Administration (PHMSA), U.S. Department of Transportation requirements for an OPA 90 plan (49 CFR 194)
- Texas GLO Title 31, Chapter 19

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1.2 PLAN REVIEW AND UPDATE PROCEDURE

In accordance with 49 CFR Part 194.121, this Plan will be reviewed annually and modified to address new or different operating conditions or information included in the Plan. Upon review of the response plan for each five-year period, revisions will be submitted to PHMSA provided the changes to the current plan are needed, or a letter stating that the plan is still current. 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 effect the implementation of the Plan, the Company will modify the Plan to address such a change and, within 30 days of making such a change, submit the change to PHMSA. Examples of changes in operating conditions that would cause a significant change to the Plan include:

CONDITIONS REQUIRING REVISIONS AND SUBMISSIONS	DOT
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
A change in the type of oil handled, stored, or transferred that materially alters the required response resources.	x
A change in key personnel (Qualified Individuals).	x
A change in the name of the Oil Spill Removal Organization (OSRO).	x
Any other changes that materially affect the implementation of the Plan.	x
A change in the NCP or ACP that has significant impact on the equipment appropriate for response activities.	x

HSE Department will coordinate with Facility Management to support the plan review and update procedures.

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 need to be reprinted and inserted in to the paper copy of the plan.

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1.3 CERTIFICATION OF ADEQUATE RESOURCES

CERTIFICATION

Pursuant to the Clean Water Act Section

311(j)(5)(F)

NuStar Logistics, L.P.

The NuStar Logistics, L.P., hereby certify to the Pipeline and Hazardous Materials Safety

Administration (PHMSA) 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.



Wes Gore
VP & General Manager Operations

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1.4 AGENCY SUBMITTAL / APPROVAL LETTERS

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SECTION 2

Last Revised: May 2008

INITIAL RESPONSE ACTIONS

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2.1 Spill ResponseFigure 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 - 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 Evacuation****2.3 Tornado****2.4 Flood****2.5 Medical****2.6 Bomb Threat****2.7 Fire and/or Explosion****2.8 Vapor Cloud**

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2.1 SPILL RESPONSE

FIGURE 2.1-1 - SPILL RESPONSE ACTION CHECKLIST

RESPONSE ACTION	
First Person to Discover Spill	
Immediately notify Facility Management. Take appropriate action to protect life and ensure safety of personnel. Contact the appropriate local emergency responders or request the office to do so.	<input type="checkbox"/>
Immediately shut down operations (if applicable). (b) (7)(F)	<input type="checkbox"/>
Secure the scene. Isolate the area and assure the safety of people and the environment. Keep people away from the scene and outside the safety perimeter.	<input type="checkbox"/>
Pipeline Management	
Assume role of Incident Commander until relieved by upper Management (if applicable).	<input type="checkbox"/>
Conduct preliminary assessment of health and safety hazards.	<input type="checkbox"/>
Evacuate nonessential personnel, notify emergency response agencies to provide security, and evacuate surrounding area (if necessary).	<input type="checkbox"/>
Call out Emergency Management Team and primary spill response contractors, as needed (FIGURE 3.1-4).	<input type="checkbox"/>
Notify the Facility Management and provide an incident briefing. Evaluate the need for activating the Regional Response Team (RRT).	<input type="checkbox"/>
Notify the Regional General Manager and Regional HSE Manager.	<input type="checkbox"/>
If safe to do so, direct facility responders to shut down potential ignition sources in the vicinity of the spill, including motors, electrical pumps, electrical power, flairs, etc. Keep drivers away from truck rack if spill occurs there.	<input type="checkbox"/>
If safe to do so, direct facility responders to shut down and control the source of the spill. Be aware of potential hazards associated with product and ensure that lower explosive limits (LELs) are within safe levels before sending personnel into the spill area.	<input type="checkbox"/>
If safe to do so, direct facility responders to stabilize and contain the situation. This may include construction of minor earthen berms and/or sorbent boom and pads.	<input type="checkbox"/>
For low flash oil (<100°F), consider applying foam over the oil, using water spray to reduce vapors, grounding all equipment handling the oil, and using non-sparking tools.	<input type="checkbox"/>
If there is a potential to impact shorelines, consider lining shoreline with sorbent or diversion boom to reduce impact.	<input type="checkbox"/>
Notify Local Emergency Responders. Obtain the information necessary to complete the Release Notification Data Sheet (FIGURE 3.1-2).	<input type="checkbox"/>
Make appropriate local notifications (as necessary):	
<ul style="list-style-type: none"> • LEPC 	

Police	<input type="checkbox"/>
• Fire	
• Sheriff	
HSE Regional Manager	
Make appropriate notifications:	<input type="checkbox"/>
• National Response Center (800) 424-8802	
• External regulatory notifications (FIGURE 3.1-4)	

FIGURE 2.1-1 - SPILL / RELEASE RESPONSE ACTION CHECKLIST, CONTINUED

RESPONSE ACTION, CONTINUED	
Emergency Management Team	
Activate all or a portion of Emergency Management Team (EMT) (as necessary). HSE Department will maintain contact with notified regulatory agencies.	<input type="checkbox"/>
Mobilize spill response contractors (if necessary). It is much better to demobilize equipment and personnel if not needed than to delay contacting them if they are needed.	<input type="checkbox"/>
Document all response actions taken, including notifications, agency/media meetings, equipment and personnel mobilization and deployment, and area impacted. (Refer to SECTION 5 for documentation.)	<input type="checkbox"/>
Water-based Spills: Initiate spill tracking and surveillance operations. Determine extent of pollution via surveillance aircraft or vehicle. Estimate volume of spill utilizing information in SECTION 2.1.3 . Send photographer / videographer, if safe. Use of dispersants requires Federal or State approval.	<input type="checkbox"/>
Land-based Spills: Initiate spill tracking and surveillance, if applicable.	<input type="checkbox"/>
SECONDARY RESPONSE ACTIONS (Refer to EMT job descriptions in SECTION 4.6)	
FACILITY-SPECIFIC RESPONSE CONSIDERATIONS (Refer to SECTION 6 for maps, tactical plans, and sensitivity information.)	

FIGURE 2.1-1 - SPILL / RELEASE RESPONSE ACTION CHECKLIST, CONTINUED

SITE SPECIFIC ACTIONS	
DOCUMENT ALL ACTIONS TAKEN	
First Priority	
Account for all personnel and visitors.	<input type="checkbox"/>

Identify and assess fire/safety hazards.	<input type="checkbox"/>
Second Priority	
Secure spill source, if possible.	<input type="checkbox"/>
Assure all required notifications are conducted.	<input type="checkbox"/>
Secure all drainage leading from Facility.	<input type="checkbox"/>
Third Priority	
Once deployment of response equipment has been completed, initiate recovery of product.	<input type="checkbox"/>
Upon arrival of EMT, assure all information is accurate and complete prior to being released.	<input type="checkbox"/>
Assure proper documentation has been completed from initial discovery of spill to finish; reference SECTION 5 .	<input type="checkbox"/>

2.1.1 Spill Detection and Mitigation Procedures

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

Each spill mitigation situation is unique and must be treated according to the circumstance present. In every situation, however, personnel safety must be assessed as the first priority. The potential for ignition and/or toxic exposure must be promptly evaluated. Spill mitigation procedures are listed in **FIGURE 2.1-2**. Discharge volume calculations are provided in **APPENDIX C**.

FIGURE 2.1-2 - SPILL MITIGATION PROCEDURES

TYPE	MITIGATION PROCEDURE
Failure of Transfer Equipment	<div>1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at high risk.</div> <div>2. Terminate transfer operations and close block valves.</div> <div>3. Drain product into containment areas (if possible).</div> <div>4. Eliminate sources of vapor cloud ignition by shutting down all engines and motors.</div>
Tank Overfill/Failure	<div>1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at high risk.</div> <div>2. Shut down or divert source of incoming flow to tank.</div> <div>3. Shut down source of vapor cloud ignition by shutting down all engines and motors.</div> <div>4. Ensure that dike discharge valves are closed.</div> <div>5. Transfer fluid to another tank with adequate storage capacity (if possible).</div> <div>6. Monitor diked containment area for leaks and potential capacity limitations.</div> <div>7. Begin transferring spilled product to another tank as soon as possible.</div>

Piping Rupture/Leak (under pressure and no pressure)	<ol style="list-style-type: none">1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at high risk.2. Shut down pumps. Close the closest block valves on each side of the rupture.3. Drain the line back into contained areas (if possible). Alert nearby personnel of potential safety hazards.4. Shut down source of vapor cloud ignition by shutting down all engines and motors.5. If piping is leaking and under pressure, relieve pressure by draining into a containment area or back to a tank (if possible). Then repair line according to established procedures.
Fire/Explosion	<ol style="list-style-type: none">1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at risk of injury.2. Notify local fire and police departments.3. Attempt to extinguish fire if it is in incipient (early) stage and if it can be done safely.4. Shut down transfer or pumping operation. Attempt to divert or stop flow of product to the hazardous area (if it can be done safely).5. Eliminate sources of vapor cloud ignition by shutting down all engines and motors.6. Control fire before taking steps to contain spill. <p>Also refer to fire/explosion response procedures in SECTION 2.7.</p>
Manifold Failure	<ol style="list-style-type: none">1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at high risk.2. Terminate transfer operations immediately.3. Isolate the damaged area by closing block valves on both sides of the leak/rupture.4. Shut down source of vapor cloud ignition by shutting down all engines and motors.5. Drain fluids back into containment areas (if possible).

2.1.2 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.
- All surveillance should be done upwind of the spill.
- Dispatch observers to crossings downstream or downgradient to determine the spill's 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.
- Sorbent pads may be used to detect oil on water.

- 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 to document the location and movements of the spill; however, this method may not be safe if the spill involves a highly flammable product.
- Surveillance also is required during spill response operations to gauge the effectiveness of response operations; to assist in locating skimmers; and to assess the spill's size, movement, and impact.
- A Spill Surveillance Checklist is provided in **FIGURE 2.1-3**.

FIGURE 2.1-3 - 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.

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, shore):
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 or land spaces, shallow water areas):
Oil Observations	
Slick location(s):	Color and appearance (i.e., rainbow, dull or silver sheen, black or brown in color or mousse):
Slick dimensions:	Percent coverage:
Orientation of slick(s):	Is oil recoverable (Y/N)?:
Distribution of oil (i.e., windrows, streamers, pancakes or patches):	
Considerations	
<ul style="list-style-type: none">• During surveillance, travel beyond known impacted areas to check for additional oil spill sites.• Include the name and phone number of the person making the observations.• Clearly describe the locations where oil is observed and the areas where no oil has been seen.	
Other Observations	
Response Operations	
Equipment deployment (general locations where equipment is working and whether the work is done 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):	

FIGURE 2.1-3 - SPILL SURVEILLANCE CHECKLIST, CONTINUED

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.

Environmental Observations
Locations of convergence lines, terrain, and sediment plumes:

Locations of debris and other features that could be mistaken for oil:

Wildlife present in area (locations and approximate numbers):

Spill Sketch

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.

- 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.
 - Different products may behave differently, depending upon their properties.

FIGURE 2.1-4 - SPILL ESTIMATION FACTORS

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

NOAA, 09/2000

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. Hand calculations typically utilize the following assumptions:

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

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

- National Oceanic and Atmospheric Administration (NOAA) through the Federal On-Scene Commander (FOSC)
- Private consulting firms

2.1.5 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.
- Limit the environmental impact to the immediate spill area.

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 trained to do so).

- Ensure that the area remains secure to air/boat/vehicular traffic.

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2.2 EVACUATION

EVACUATION CHECKLIST	
TASK	
Request assistance from off-site response organizations; convey Command Post's location. Notify appropriate agencies (if appropriate).	<input type="checkbox"/>
Assemble personnel at predetermined safe location: upwind/up gradient of release (assembly area).	<input type="checkbox"/>
Account for Company and contractor personnel.	<input type="checkbox"/>
Assess casualties (number/type/location).	<input type="checkbox"/>
Determine probable location of missing personnel.	<input type="checkbox"/>
Secure site, establish re-entry point and check-in/check-out procedures.	<input type="checkbox"/>
Develop list of known hazards (confined spaces, electrical hazards, physical hazards, vapors, oxygen deficiency, fire/explosion, etc.).	<input type="checkbox"/>
Monitor situation (weather, vapors, product migration) for significant changes.	<input type="checkbox"/>
Assist in developing a Rescue Plan, if necessary.	<input type="checkbox"/>

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2.3 TORNADO

TORNADO CHECKLIST	
TASK	
Monitor news media reports (FIGURE 3.1-4).	<input type="checkbox"/>
<ul style="list-style-type: none"> • Tornado watch means conditions are favorable for tornadoes. • Tornado warning means a tornado has been sighted. 	
When a tornado warning is issued, immediately notify all personnel on-site. Notify off-site personnel of the situation (Control Center or Regional Management).	<input type="checkbox"/>
Take shelter:	<input type="checkbox"/>
<ul style="list-style-type: none"> • Go to an interior room on the lowest floor. • Get under a sturdy piece of furniture or solid structure. 	

• Use your arms to protect head and neck.	
Have location personnel report to the designated area.	<input type="checkbox"/>
Account for all personnel on duty.	<input type="checkbox"/>
Look for funnel formations on the ground or in the clouds; listen for a roar that sounds like a jet aircraft or rail traffic.	<input type="checkbox"/>
If the facility is damaged by the tornado, notify Management.	<input type="checkbox"/>
Go to the scene of the incident to evaluate the situation.	<input type="checkbox"/>
• Be aware of broken glass and downed power lines.	
• Assess the area for damaged equipment or product releases.	
• Check for injuries.	
• Use caution entering a damaged building.	
Update Supervisory Personnel/Management.	<input type="checkbox"/>
Conduct post-emergency evaluation and report.	<input type="checkbox"/>

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2.4 FLOOD

FLOOD CHECKLIST	
TASK	
Perform continuous monitoring of the situation by listening to radio and/or television reports (FIGURE 3.1-4).	<input type="checkbox"/>
• Flash flood watch means flooding is possible.	
• Flash flood warning means flooding is occurring or is imminent.	
Update Supervisory Personnel when flooding is imminent.	<input type="checkbox"/>
Establish an evacuation plan (SECTION 2.2).	<input type="checkbox"/>
Take preliminary actions to secure the facility before flooding and mandatory evacuation.	<input type="checkbox"/>
Consider having sandbags brought to sites that could be affected by the flooding.	<input type="checkbox"/>
Consider obtaining portable pumps and hoses from local suppliers or from other petroleum service locations in the area.	<input type="checkbox"/>
Remove product from underground storage tanks (i.e., sumps and separators, if applicable) and replace with water to prevent them from floating out of the ground.	<input type="checkbox"/>
If additional new product is available fill each tank to the minimum level necessary to prevent buoyancy in the event of flooding (Rule of thumb is 30% of the safe fill height). If additional product is not available, transfer appropriate product among tanks to prevent buoyance. If minimum levels cannot be reached	<input type="checkbox"/>

through product transfer, add water bottoms.	
Plug all rack drains and facility drains connected to the sump.	<input type="checkbox"/>
Empty all dikes of water.	<input type="checkbox"/>
Ensure that tank roof drains are working properly.	<input type="checkbox"/>
Anchor all bulk additive tanks, fuel barrels, empty drums, and propane tanks (if applicable).	<input type="checkbox"/>
Notify Supervisory Personnel/Management that the facility will be closed. Customer should be notified.	<input type="checkbox"/>
Back up computer files.	<input type="checkbox"/>
Remove assets such as files, computers, spare parts, and vehicles.	<input type="checkbox"/>
Shut off high voltage power and natural gas lines.	<input type="checkbox"/>
Close all valves on product and additive storage tanks.	<input type="checkbox"/>
Before evacuation, know where all the employees will be residing and obtain phone numbers so they can be contacted if additional emergencies occur.	<input type="checkbox"/>

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2.4 FLOOD, CONTINUED

FLOOD CHECKLIST	
TASK	
Conduct a post-emergency evacuation and report.	<input type="checkbox"/>
Maintain hazards awareness: <ul style="list-style-type: none"> • Structural damage; • Equipment damage and product releases; • Downed power lines; • Leaking natural gas, water, and sewer lines; • Poisonous snakes and other wildlife sheltering in structures, vehicles, and furniture; and • Avoid direct contact with flood water, mud, and animal carcasses. 	<input type="checkbox"/>

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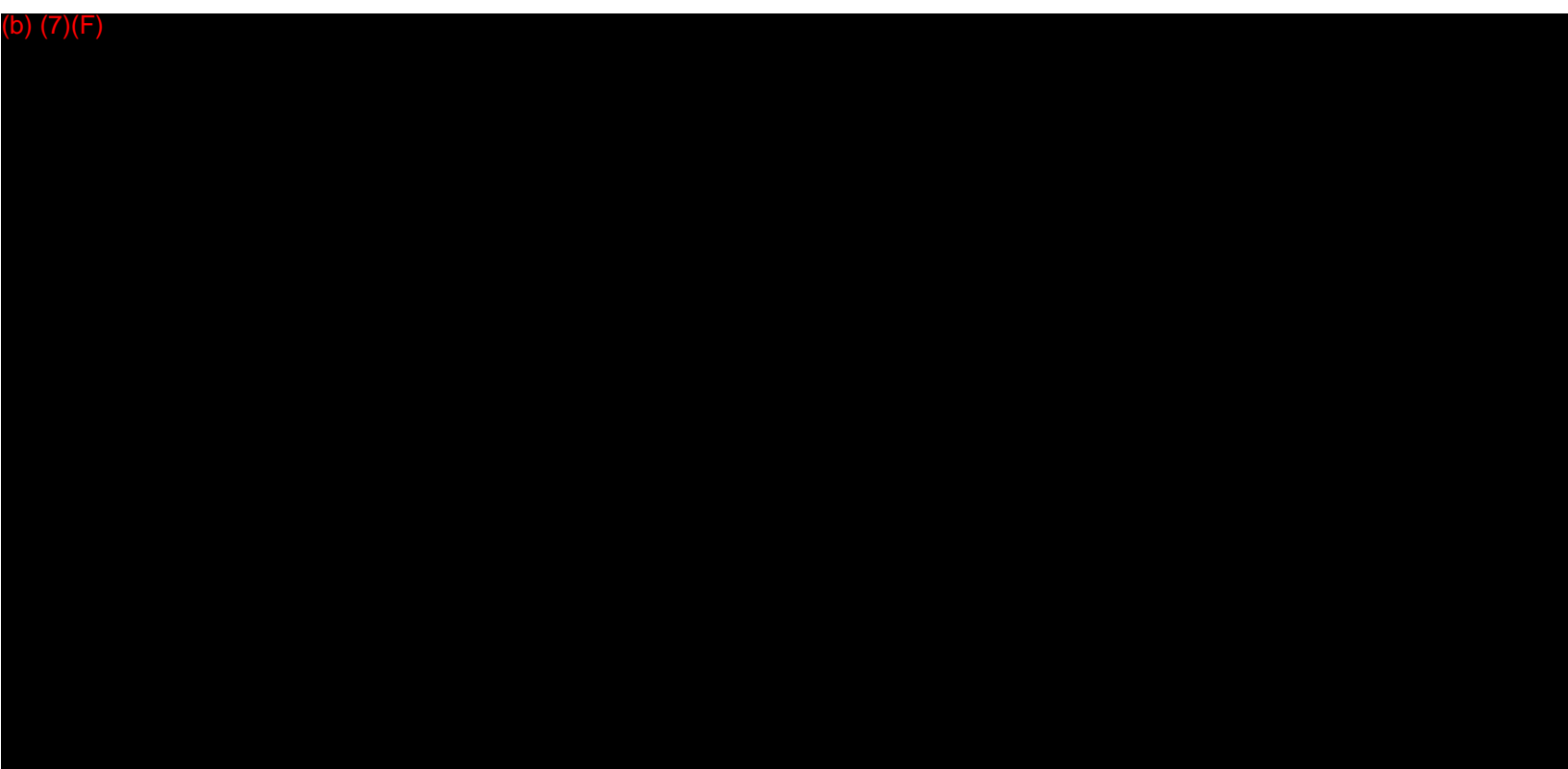
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2.5 MEDICAL

MEDICAL CHECKLIST	
TASK	
Summon Emergency Medical Services (EMS) to the scene (FIGURE 3.1-4).	<input type="checkbox"/>

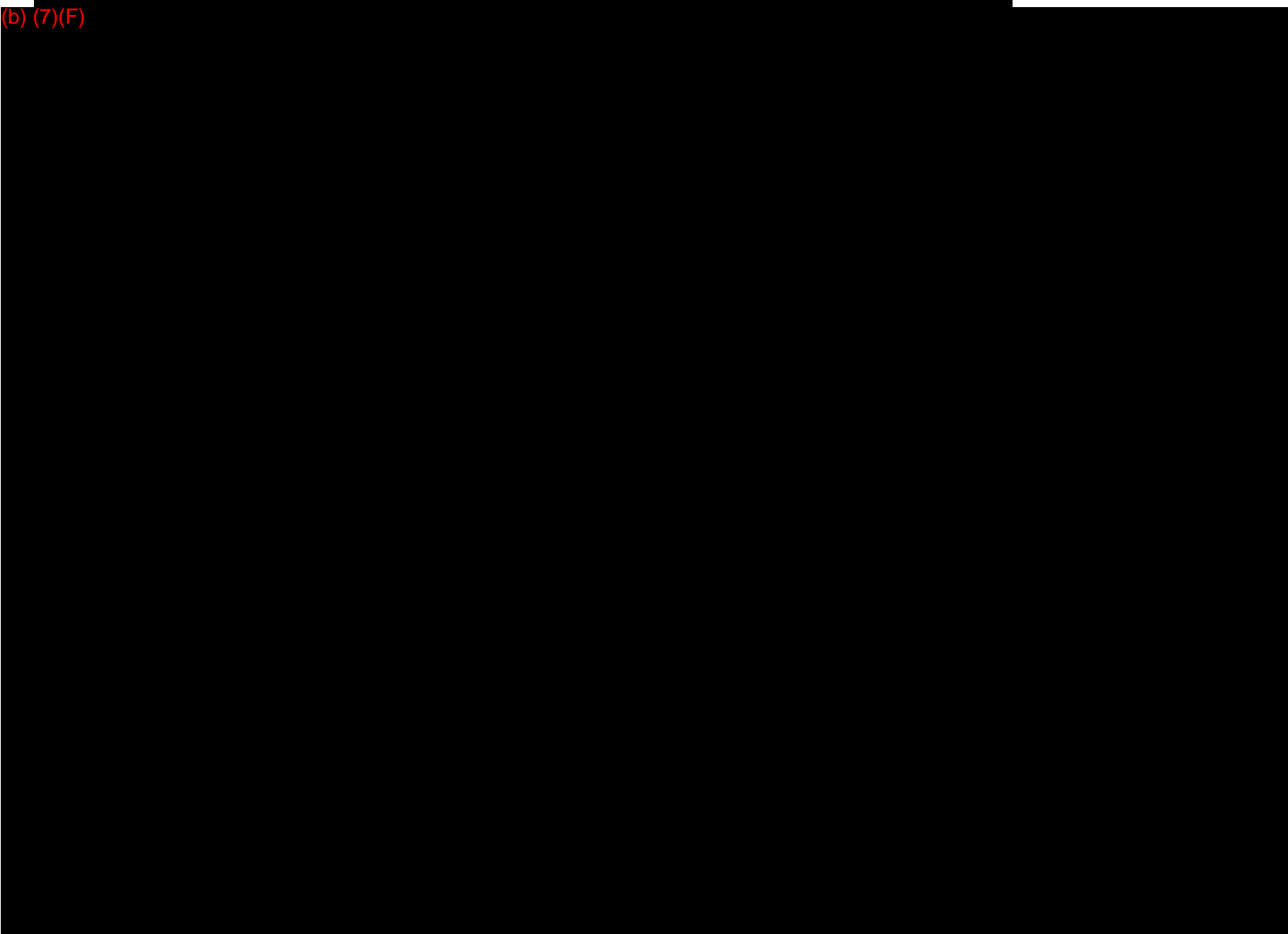
Do not move the patient unless a situation (such as a fire) threatens the patient's life.	<input type="checkbox"/>
If trained, provide appropriate first aid for both injury and shock until the EMS arrives at the scene.	<input type="checkbox"/>
As the situation warrants, try to stop the bleeding and keep the patient breathing until the EMS arrives at the scene.	<input type="checkbox"/>
The rescuer's role includes: <ul style="list-style-type: none">• Removing the patient from any situation threatening patient's life or the lives of rescuers.• Correcting life-threatening problems and immobilizing injured parts before transporting the patient.• Transporting the patient in a way that minimizes further damage to injured parts.• Administering essential life support while the patient is being transported.• Observing and protecting the patient until medical staff can take over.• Administering care as indicated or instructed.	<input type="checkbox"/>
Notify Supervisory Personnel and/or Regional Management.	<input type="checkbox"/>
Notify victim's immediate family.	<input type="checkbox"/>
Complete follow-up and written reporting, as the situation demands.	<input type="checkbox"/>

(b) (7)(F)



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2.7 FIRE AND/OR EXPLOSION

**Your first consideration is always the safety of people
in the immediate area, including your own.**

The first responder's initial objective is site management.

FIRE AND/OR EXPLOSION CHECKLIST**TASK****At a manned facility**

Evaluate the situation; approach cautiously from upwind; do not rush in.	<input type="checkbox"/>
Notify the local police and fire departments (Dial 911).	<input type="checkbox"/>
Sound the facility alarm and push the red emergency shutdown switch (if equipped).	
Notify Qualified Individual and Operations Control (if applicable).	<input type="checkbox"/>
Appropriately trained personnel may attempt to extinguish the fire if it is in the incipient (early) stage and if it can be done safely .	<input type="checkbox"/>
In the event the fire is too large for an individual to fight alone, the individual sounding the alarm or making the phone call should stand by at a safe distance to direct the fire department to the scene of the fire and keep personnel and vehicles from entering the danger area.	<input type="checkbox"/>
	<input type="checkbox"/>

Alert all Facility areas of the exact location and extent of the fire.	
Instruct all drivers to discontinue loading, disconnect loading arms, and tell all drivers present to stand by the trucks (if safe to do so) and wait for instructions to remove same to safe area.	<input type="checkbox"/>
Shut off all pumps.	
If the fire/explosion is a result of a pipe rupture, isolate product release by closing valves.	<input type="checkbox"/>
If product is being received from pipelines, notify the appropriate pipeline personnel of the fire and request that the pipeline be shut down. The tank which is receiving product from the pipeline must not be closed until assurance is received that the pipeline is shut down, unless that tank is on fire.	
After confirmation has been received that pipelines have been shut down, close the pipeline header valves.	<input type="checkbox"/>
Undertake basic site control: <ul style="list-style-type: none">• Make an assessment of hazards.• Isolate the area.• Keep people away from the scene and outside the safety perimeter.• Establish safety zones and escape routes.	<input type="checkbox"/>
Respond to the fire: <ul style="list-style-type: none">• Establish a Command Post and lines of communication.• Maintain site control.• Establish Incident Command/Unified Command as necessary (<u>SECTION 4.4</u>).	<input type="checkbox"/>
Call in additional resources if on-scene personnel and equipment are inadequate to handle the emergency.	<input type="checkbox"/>
Conduct a post-emergency evaluation and report.	<input type="checkbox"/>

2.7 FIRE AND/OR EXPLOSION, CONTINUED

Your first consideration is always the safety of people in the immediate area, including your own.

The first responder's initial objective is site management.

FIRE AND/OR EXPLOSION CHECKLIST, CONTINUED
TASK
At an unmanned facility

Handle the call.	<input type="checkbox"/>
Notify the local police and fire departments.	<input type="checkbox"/>
Notify Qualified Individual and Operations Control.	<input type="checkbox"/>
Go to the incident scene to evaluate the situation; approach cautiously from upwind; do not rush in.	<input type="checkbox"/>
Undertake basic site control: <ul style="list-style-type: none">• Make an assessment of hazards.• Isolate the area.• Keep people away from the scene and outside the safety perimeter.• Establish safety zones and escape routes.	<input type="checkbox"/>
If roads or railroads are in the affected area, assist the sheriff or local emergency officials with halting traffic.	<input type="checkbox"/>
Update the next level manager.	<input type="checkbox"/>
If the fire/explosion is a result of a pipe rupture, isolate the product release by closing valves.	<input type="checkbox"/>
Respond to the fire: <ul style="list-style-type: none">• Establish a Command Post and lines of communication.• Maintain site control.• Establish Incident Command/Unified Command as necessary (<u>SECTION 4.4</u>).	<input type="checkbox"/>
Call in additional resources if on-scene personnel and equipment are inadequate to handle the emergency.	<input type="checkbox"/>
Conduct a post-emergency evaluation and report.	<input type="checkbox"/>

2.8 VAPOR CLOUD

VAPOR CLOUD CHECKLIST	
TASK	
The person who discovers the vapor cloud will notify the facility management on duty and vacate the area.	<input type="checkbox"/>
Remember: the only proper action in the presence of a vapor cloud is to get away from it. Do not shut off electrical equipment.	<input type="checkbox"/>
All personnel will report to the evacuation muster point for roll call and further instructions.	<input type="checkbox"/>
After all personnel have been accounted for, the Facility Management, the Facility Supervisor, or a Facility Operator will initiate the following actions as	

deemed necessary: <ul style="list-style-type: none">• Shut down pipeline.• Evacuate adjacent property.• Only the fire department will be permitted to enter the Facility.	<input type="checkbox"/>
Contact the appropriate agencies and potentially affected neighbors (refer to FIGURE 3.1-4).	<input type="checkbox"/>



SECTION 3

Last Revised: May 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 - Release Notification Data Sheet
- Figure 3.1-3 - Internal Notifications and Telephone Numbers
- Figure 3.1-4 - External Notifications and Telephone Numbers

3.1 EMERGENCY INFORMATION AND NOTIFICATION PROCEDURES

The notification sequence for a spill is as follows:

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

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

This section also contains the following:

- **FIGURE 3.1-2** provides a Release Notification Data Sheet. This form is utilized for notification summary and documentation.

The Company has attempted to make the following arrangements, as appropriate for the type of hazardous waste handled and the potential need for the services of these organizations:

- Familiarize police, fire departments, and emergency response teams with the layout of the facility, properties of hazardous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to roads inside the facility, and possible evacuation routes;
- Where more than one police and fire department might respond to an emergency, agreements designating primary emergency authority to a specific police and a specific fire department, and agreements with any others to provide support to the primary emergency authority;
- Agreements with State emergency response teams, emergency response contractors, and equipment suppliers; and
- Arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illnesses which could result from fires, explosions, or releases at the facility.

FIGURE 3.1-1 - EMERGENCY NOTIFICATION FLOW CHART

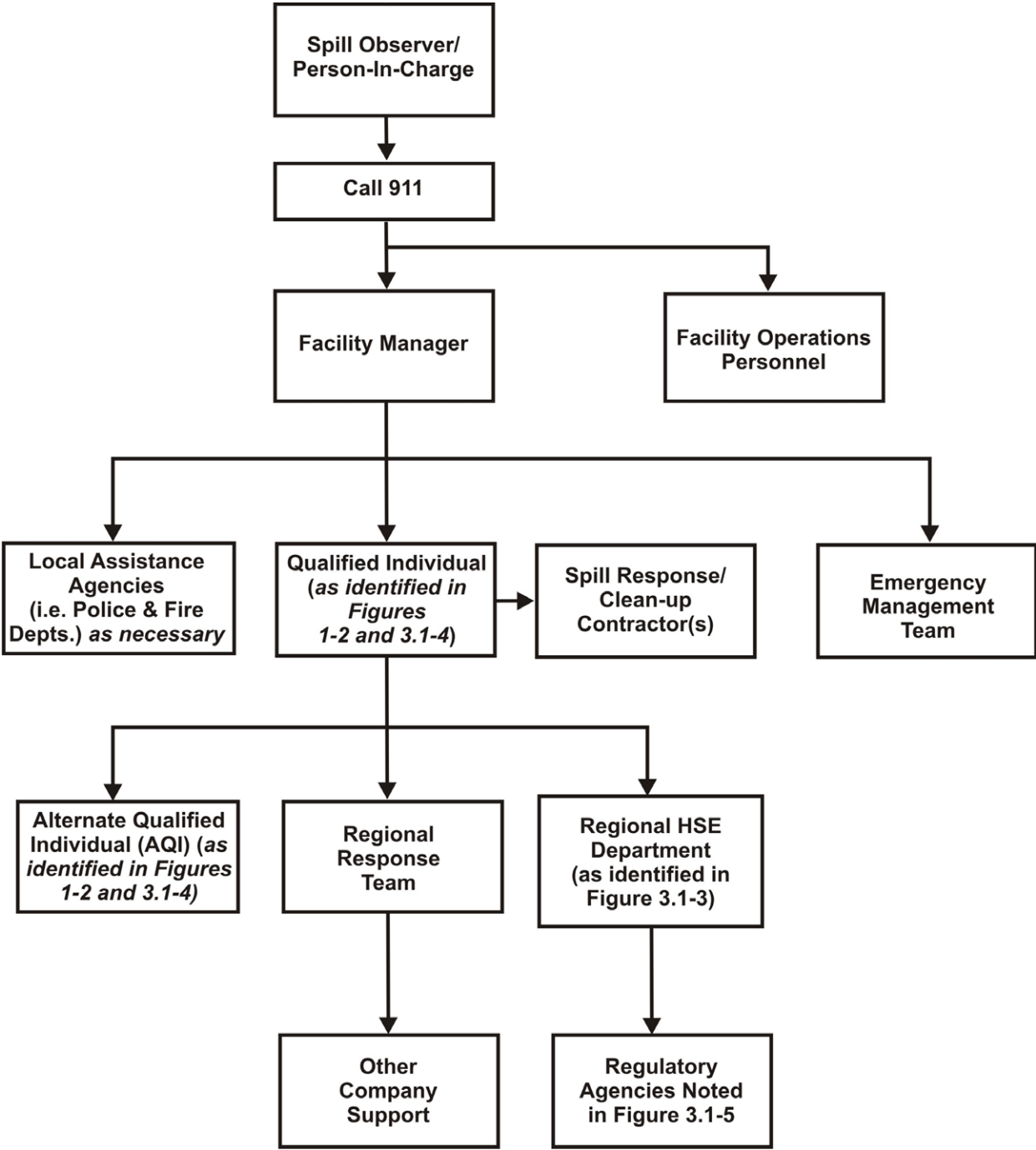


FIGURE 3.1-2 - RELEASE NOTIFICATION DATA SHEET

Incident Date:		Incident Time:	
Reporters Name:		Reporter's Position:	
Name of Person who notified the reporter of the incident:			
Incident Description			
Facility Name:		Facility Address or	

		driving directions:			
Responsible Party: (Name of company)		Owner's Address:		P.O. Box 696000 San Antonio, Texas 78269	
Facility Contact Name & Title:		Facility Contact Phone No's		Office	
				Cell	
				Other	
Location of Spill:					
Material Released:					
Source or Cause of Discharge:					
Total Quantity Released:		Was water impacted by the spill? (yes or no)			
Total Quantity Recovered:		Total quantity into the water:			
Net Loss:		Tank Number involved or pipe diameter:			
Nearest City:		County:		State:	
Weather conditions at time of incident (wind, rain, snow, temperature, etc.):					
Was there a fire or explosion involved?					
Number of Injuries:		Extent of Injuries, if known:			
Number of Deaths:		Numbers Evacuated (if any):			
Additional Information:					
Response Actions					
Actions taken to correct, control, or mitigate the incident:					
Notifications					
Group or Agency		Persons Notified	Date & Time Notified	Notify By:	Incident No.
NRC					
State Agency					
LEPC - County					
Other:					
Other:					

Other:					
HSE Group					

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FIGURE 3.1-3 - INTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS

Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

COMPANY PERSONNEL		
NAME/TITLE	PHONE NUMBER	RESPONSE TIME (hours)
Wes Gore VP & General Manager Operations Qualified Individual	(361) 249-9402 (Office) (b) (6) (806) 679-3781 *(Mobile)	
Danny Cagle Director of Operations Qualified Individual	(806) 371-1310 (Office) (b) (6) (940) 632-6100 *(Mobile)	
Randy Barber Area Manager, Supervisor, Amarillo Ops-Eastern Qualified Individual	(940) 761-4930, (940) 733-0861 (Office) (b) (6) (940) 733-0861 *(Mobile)	
Bob Rickords Area Operations Manager Qualified Individual	(580) 226-1638 (Office) (b) (6) (580) 220-8845 *(Mobile)	
SA Control Center	(210) 918-4901, (800) 481-0038, (800) 433-4250 (Office)	
Bill Mamalakakis SA Control Center-Sr. Manager	(210) 918-3399 (Office) (b) (6) (210) 859-9309 *(Mobile)	
Jerry Stauffer Executive Director HSE	(210) 918-4942 (Office) (b) (6) (210) 865-1527 *(Mobile)	
Chris Butler Sr. Manager HSE Compliance	(210) 918-2257 (Office) (b) (6) (210) 215-4244 *(Mobile) (210) 872-7438 *(Mobile)	

Craig Hebert Sr. Manager Process Safety	(210) 918-3782 (Office) (b) (6) (210) 241-4504 *(Mobile)	
Greg Matula Manager, Corporate Communications	(210) 918-2318 (Office) (210) 601-3897 *(Mobile)	
Dan Villarreal Corporate Security Manager	(210) 918-2253 (Office) (b) (6) (210) 487-9953 *(Mobile)	
Ron Walton Director, Risk Management	(210) 918-2258 (Office) (b) (6) (210) 323-9848 *(Mobile)	

Refer to **APPENDIX A, FIGURE A.2-3** for personnel training records

Response Zone 4 Ardmore Operations - Central
FIGURE 3.1-3 - INTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS,
CONTINUED

Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

EMERGENCY RESPONSE CONTRACTORS						
NAME/TITLE	PHONE NUMBER	RESPONSE TIME (hours)	RESPONSIBILITY DURING RESPONSE ACTION	RESPONSE TRAINING TYPE ¹		
				1	2	3
Conestoga Rover Associates, Inc.	(866) 812-9565* (713) 734-3090 Houston (972) 331-8500 Dallas (361) 506-8803 Austin (432) 686-0086 Midland (918) 828-2424 Okla.	12		x	x	x
EMERGENCY RESPONSE TRAINING TYPE ¹						
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 ¹	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.

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FIGURE 3.1-4 - EXTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS

Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Initial		
National Response Center	(800) 424-8802* (202) 267-2675*	
Recommended		
Federal Agencies		
National Oceanic & Atmospheric Administration (NOAA) - National Weather Service, Southern Region (NM, TX, OK, AR, LA, MS, TN, AL, GA, FL, the Commonwealth of Puerto Rico and the U.S. Virgin Islands)	(817) 978-1100 Operational Support Division (817) 978-1300 Science & Technology Services (817) 978-1111 Administrative Management Division	
U.S. Coast Guard - Marine Safety Office, Corpus Christi	(361) 888-3162 (800) 434-9486 (361) 888-3115 (Fax)	
U.S. Coast Guard - Marine Safety Office, Galveston, TX	(713) 671-5100 (713) 671-5177 (Fax)	
U.S. Coast Guard Marine Safety Satellite Office, Victoria, TX	(361) 533-0087* (361) 582-0362	
U.S. Department of Transportation (DOT), Pipeline and Hazardous Materials Administration (PHMSA), Pipeline	(800) 424-8802* Emergency Reporting (202) 366-4595	

Safety Program	Pipeline Safety Information Center (202) 267-2675*	
U.S. Environmental Protection Agency - Region VI (6SF-RO)	(866) 372-7745* Emergencies (800)887-6063 Toll Free Main line (214) 665-2200 Main line (214) 665-8365 Region 6 FOOSC	
U.S. Fish and Wildlife Service (USFWS), Southwest Region, Texas Ecological Field Offices	(361) 490-0057 Austin (361) 994-9005 Corpus Christi (817) 277-1100 Arlington (281) 286-8282 Clear Lake	
U.S. Fish and Wildlife Service (USFWS), Tulsa Ecological Services Field Office, Region II	(918) 581-7458 (918) 581-7467 (Fax)	
State Agencies - Oklahoma		
Oklahoma Corporation Commission - Oil and Gas Conservation Division Area 2 District Field Office	(405) 375-5570 (405) 375-5576 (Fax)	
Oklahoma Corporation Commission - Oil and Gas Conservation Division Area 3 District Field Office	(580) 255-0103 (580) 255-0154 (Fax)	
Oklahoma Department of Environmental Quality (DEQ) - SERC	(800) 522-0206* (405) 702-6203	
Oklahoma Department of Wildlife Conservation	(405) 521-4601	
Oklahoma State Patrol	(405) 338-3366 Gymon (405) 477-2765 Altus (580) 353-0783 Lawton (580) 223-8800 Ardmore	
County Agencies - Oklahoma		
Carter County		
Ardmore Fire Department	(580) 221-2550	

Response Zone 4 Ardmore Operations - Central
FIGURE 3.1-4 - EXTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS,
CONTINUED

Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Recommended		
County Agencies - Oklahoma		
Carter County		
Carter County Sheriff Department (Ardmore, OK)	(580) 223-6014	
Carter County LEPC	(580) 223-1212	
Jefferson County		
Ringling Fire Department	(580) 662-2323	
Waurika Fire Department	(580) 228-2323	
Jefferson County Sheriff	(580) 228-2375	
Jefferson County LEPC	(580) 228-2147	
Murray County		
Murray County LEPC	(580) 622-3319	
State Agencies - Texas		
Texas Commission on Environmental Quality (TCEQ)	(915) 834-4949	
Texas Emergency Response Center (TERC)	(800) 832-8224*	
Texas General Land Office Oil Spill Program	(361) 475-1575 (800) 832-8224	
Texas Railroad Commission (RRC), District 9	(940) 723-2153	
Texas Railroad Commission (TRRC), Austin, TX	(361) 463-6788	
Texas State Patrol - Bowie	(940) 872-3390	
County Agencies - Texas		
Montague County		
Montague County Fire Department	(940) 872-1131	

Montague County Sheriff Department	(940) 894-2871	
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FIGURE 3.1-4 - EXTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS,
CONTINUED
Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Recommended		
County Agencies - Texas		
Montague County		
Montague County LEPC	(817) 845-3781 911 (Spills)	

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

*24-Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Recommended , Continued		
Non-Classified OSRO's		
Conestoga Rover Associates, Inc.	(866) 812-9565* (713) 734-3090 Houston (972) 331-8500 Dallas (361) 506-8803 Austin (432) 686-0086 Midland (918) 828-2424 Okla.	
Service Providers		
Basin Industrial X-Ray, Inc. - Corpus Christi, TX (X-Ray Contractor)	(361) 241-3377	
Big State X-Ray - Chickashaw, OK (X-Ray Contractor)	(405) 222-0031	

Bonded Inspection, Inc. - Garland, TX (X-Ray Contractor)	(214) 276-0846	
Brazos Valley X-Ray - Bryan, TX (X-Ray Contractor)	(409) 822-5063	
D. E. Rice - Borger, Texas (Pipeline Repair)	(b) (6)	
Driver Pipeline - Dallas, TX (Pipeline Repair)	(214) 638-7131	
Eagle X-Ray - Mont Belvieu, TX (X-Ray Contractor)	(713) 385-2244	
Enerpipe Corporation - Perryton, Texas (Pipeline Repair)	(806) 371-8854* or 8855 Amarillo (Ans. Service) (b) (6)	
Enerpipe Ltd (Pipeline Repair)	(806) 435-7644 Perryton, TX (806) 371-8851 Amarillo, TX	
Gorman Phillips - Perryton, Texas (Pipeline Repair)	(b) (6)	
Hancock Construction - Freer, TX (Pipeline Repair)	(361) 394-6171 Pete Perez	
Intermountain Testing - Englewood, CO (X-Ray Contractor)	(303) 761-0650	
Kooney X-Ray - Barker, TX (X-Ray Contractor)	(713) 492-1694	
Merrill Lease Service - Three Rivers, TX (Pipeline Repair)	(361) 786-2531 Roy Merrill	
Midwest Inspection Service, Inc. - Perryton, TX (X-Ray Contractor)	(b) (6)	
Panhandle NDT - Borger, TX (X-Ray	(806) 273-2733	

Contractor)		
Quality Assurance Service, Inc. - Grand Prairie, TX (X-Ray Contractor)	(214) 606-1218 (214) 223-1831	
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 FIGURE 3.1-4 - EXTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS,
 CONTINUED

*24-Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Recommended , Continued		
Service Providers		
R & R Contractors - Corpus Christi, TX (Pipeline Repair)	(361) 289-0756 Don Chapman	
Radiograph Inspection, Inc. - Liberal, KS (X-Ray Contractor)	(b) (6)	
T. D. Williamson Services - Tulsa, Oklahoma (Stopple & Hot Tap Contractor)	(918) 446-1941	
Topaz Inc. - Houston, Texas (Stopple & Hot Tap Contractor)	(b) (6)	
Troy Construction Co. - Houston, TX (Pipeline Repair)	(713) 437-8214 David Dacus	
W. T. Construction - Premont, TX (Pipeline Repair)	(361) 348-3525 Mike Weeks	
Vacuum Truck Services		
Bob Mitchell Vacuum Service - Bryan, TX	(409) 778-0080 (409) 779-1801	
Bridgeport Tank Truck - Bridgeport, TX	(940) 683-5487 (817) 683-5487	
Coffman Tank Trucks - Chico, TX	(817) 683-4094	
Curtis and Son Vacuum Truck Service - Dayton, TX	(409) 258-9603 (409) 258-3611	

Mission Tank Truck - Three Rivers, TX	(361) 786-2575	
Mobley Vacuum Service - Dallas, TX	(214) 637-6264	
Permian Corporation - Spearman, TX	(806) 659-2571	
Pronto Vacuum Service - George West, TX	(361) 449-1541	
TWI Dayton (Formerly Dayton Vacuum Truck Service) - Dayton, TX	(936) 258-2274 (409) 258-2274 (713) 456-8205 (800) 880-0903	
Wildlife Rehabilitation		
Michele Johnson - Texas Certified Oiled Wildlife and Response Team Member	(281) 992-8080 (281) 418-8100 (PGR)	
Sharon Schmalz - Texas Certified Oiled Wildlife and Response Team Member	(281) 332-8319 (281) 731-8826 (MBL) (713) 279-1417 (PGR)	

SECTION 4

Last Revised: May 2008

RESPONSE TEAM ORGANIZATION

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4.1 Description

4.2 Activation Procedures

4.3 Team Member Response Times

4.4 Incident Command System / Unified Command

4.5 Qualified Individual (QI)

Figure 4.5-1 - Emergency Management Team (EMT) Activation
Procedure

Figure 4.5-2 - Emergency Management Team (EMT) Organization
Chart

4.6 Emergency Management Team (EMT) Job Descriptions and Guidelines

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Central**

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4.1 DESCRIPTION

The Company has developed its emergency response organization around the Incident Command System (ICS), which provides the structure for effective management of response resources. The Emergency Management Team (EMT) has been created and organized to plan for and manage oil spills and other emergencies.

The Company utilizes a Regional Response Team (RRT) to staff ICS positions during emergencies that exceed the capabilities of the on-site Emergency Management Team. The RRT provides enhanced assimilation with the Unified Command System during significant emergencies. Personnel from the RRT are trained to address Planning, Logistics, Administration/Finance, Information, and Liaison roles.

Job descriptions for each EMT member are provided in **SECTION 4.6**. The EMT will train by participating in exercises as noted in **APPENDIX A**. Refer to **FIGURE 3.1-1** for notification procedures.

4.2 ACTIVATION PROCEDURES

Following initial notification the IC may be able to respond without assistance from the EMT. If the situation requires more resources, additional personnel or management support may be requested from the EMT. The EMT activation procedure is provided in **FIGURE 4.5-1**.

In the case of a larger emergency, the RRT would be activated by the QI requesting additional resources through the General Manager. The General Manager would activate the RRT to the incident. Depending on the size of the event, the General Manager may request activation of the Corporate Emergency Response Plan (CERP). Activation of the CERP will initiate assistance from corporate personnel to provide additional resources, as needed.

4.3 TEAM MEMBER RESPONSE TIMES

See **FIGURE 3.1-3** for each team member's response time "EPA Facilities only".

4.4 INCIDENT COMMAND SYSTEM / UNIFIED COMMAND

The Incident Command System (ICS) will be used by the Company EMT for spill response. The EMT organization chart is provided in **FIGURE 4.5-2**. The organization can be expanded or contracted as necessary. If an OSRO or other contractor is used to staff ICS positions for the Spill Management Team, the commitment will be specified in writing.

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

- Federal On-Scene Coordinator (FOSC)
- State On-Scene Coordinator (SOSC)
- Company Incident Commander

These three people share decision-making authority within the Incident Command System and are each responsible for coordinating other federal, state, and company personnel to form an effective integrated Emergency Management Team. Refer to **SECTION 4.6** for detailed

checklists of the EMT roles and responsibilities as well as organizational interfaces with external parties.

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4.5 QUALIFIED INDIVIDUAL (QI)

The Qualified Individual (QI) is an English-speaking representative, available on a 24-hour basis, and trained in the responsibilities outlined in this section. The QI has the following responsibilities and authorities as required by the Oil Pollution Act of 1990 (OPA 90):

- The Qualified Individual (QI) is granted full authority to implement the Facility Response Plan (FRP).
- Activate internal alarm and hazard communication systems to notify all appropriate personnel.
- Notify all response personnel and contractors (as needed).
- Identify the character, exact source, amount, and extent of the release and other necessary items needed for notifications.
- Notify and provide information to appropriate federal, state, and local authorities.
- Assess the interaction of the spilled substance with water and/or other substances stored at the facility and notify on-scene response personnel of assessment.
- Assess possible hazards to human health and the environment.
- Assess and implement prompt removal actions.
- Coordinate rescue and response actions.
- Access Company funds to initiate cleanup activities.
- Direct cleanup activities until properly relieved of the responsibility or the incident is terminated.

For further information on Qualified Individual's training, refer to **APPENDIX A**. Phone numbers for Qualified Individuals are provided in **FIGURES 1-2** and **3.1-4**.

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FIGURE 4.5-1 - EMERGENCY MANAGEMENT TEAM (EMT) AND
REGIONAL RESPONSE TEAM (RRT) ACTIVATION PROCEDURE

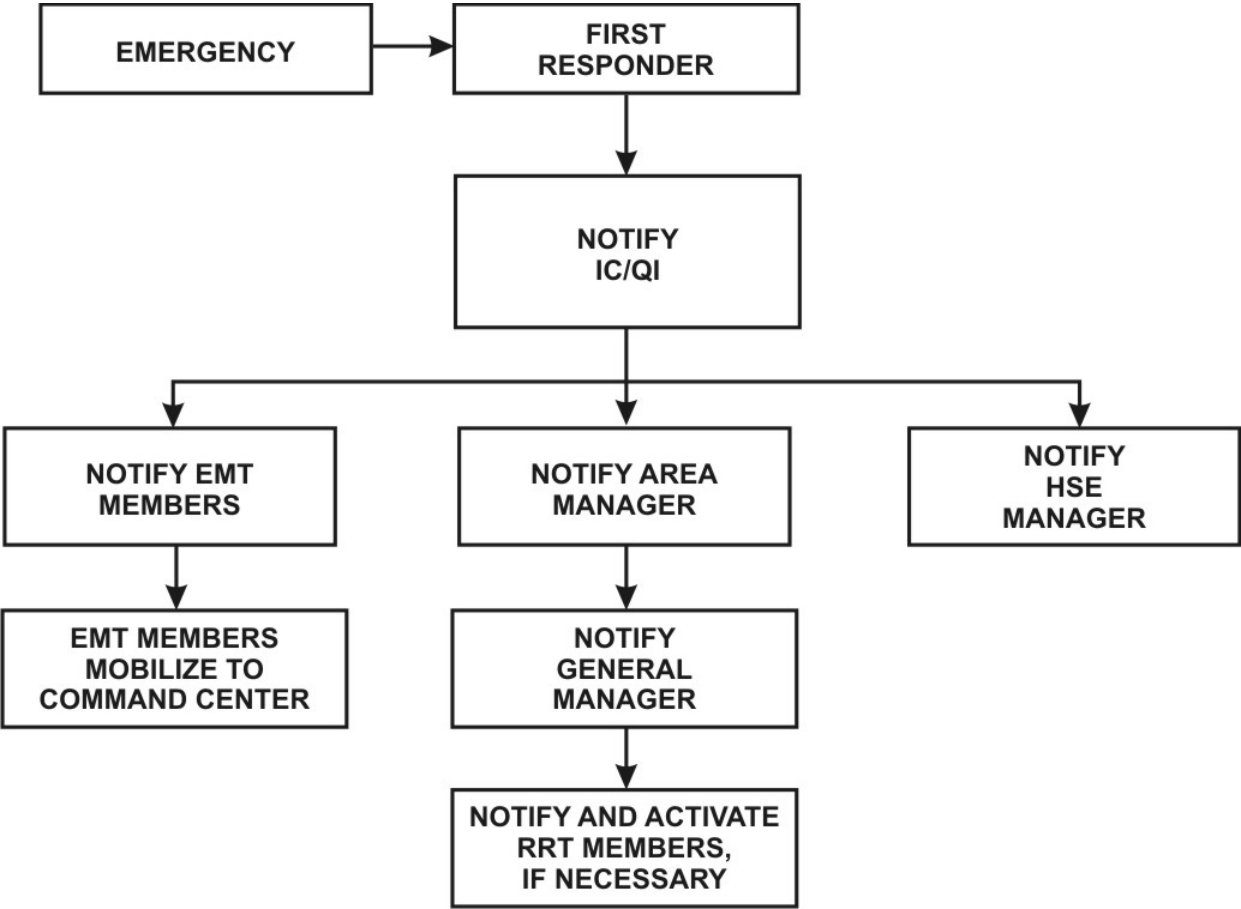
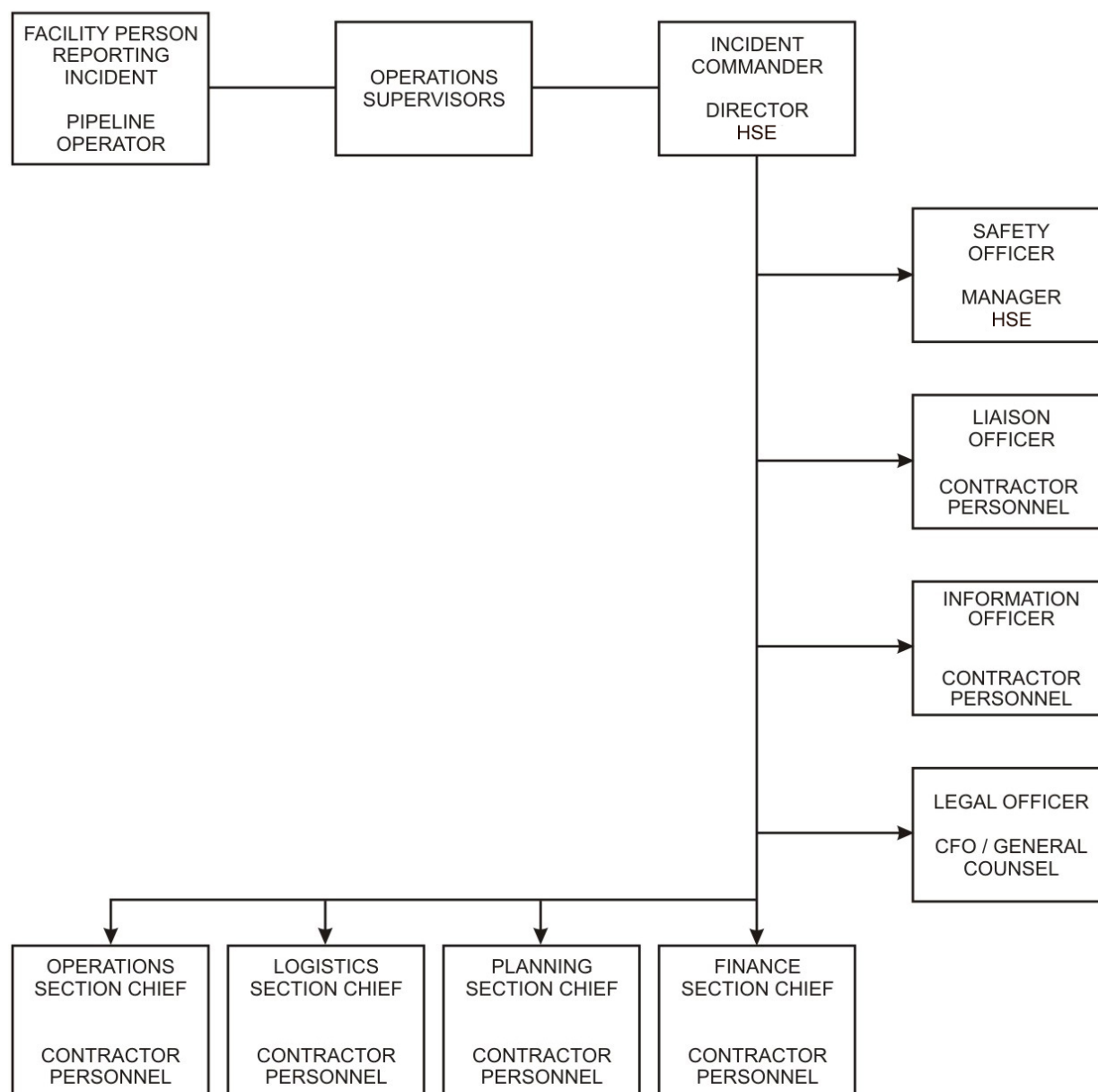


FIGURE 4.5-2 - EMERGENCY MANAGEMENT TEAM (EMT) ORGANIZATION CHART

[\(Click here for larger view\)](#)



4.6 EMERGENCY MANAGEMENT TEAM (EMT) JOB DESCRIPTIONS AND GUIDELINES

The following job descriptions and guidelines are intended to be used as a tool to assist EMT members in their particular positions within the Incident Command System (ICS):

- Incident Commander
- Safety Officer
- Operations Chief
- Planning Chief
- Logistics Chief

- Finance Chief
- Information Officer
- Liaison Officer

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INCIDENT COMMANDER

The Incident Commander (IC) manages all activities related to an emergency response and acts as Qualified Individual (QI). As such, the Incident Commander needs to be familiar with the contents of the Facility Response Plan (FRP), Oil Spill Response Plan (OSRP), Emergency Response Action Plan (ERAP), and the Spill Prevention Control and Countermeasure Plan (SPCC). The Incident Commander (IC) must also be familiar with the operation of the Incident Command System (ICS) and the Unified Command Structure (UCS).

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

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

Responsibilities:

- ☐ Maintain Activity Log.
- ☐ Establish Incident Command/Unified Command Post.
- ☐ Activate necessary section(s) of the Incident Command System (ICS) to deal with the emergency. Fill out the appropriate section(s) of the Incident Command organization chart and post it at the Incident Command Center.
- ☐ Develop goals and objectives for response.
- ☐ Work with Safety Officer and Planning Section Chief to develop a Site Safety Plan (SSP).
- ☐ Approve, authorize, and distribute Incident Action Plan (IAP) and SSP.
- ☐ Conduct planning meetings and briefings with the section chiefs.
- ☐ As Qualified Individual coordinate actions with Federal On-Scene Coordinator (FOSC) and State On-Scene Coordinator (SOSC).
- ☐ In a multi-jurisdictional response, ensure that all agencies are represented in the ICS.
- ☐ Coordinate and approve media information releases with the FOSC, SOSC, and Public Information Officer (PIO).
- ☐ Keep management informed of developments and progress.
- ☐ Authorize demobilization of resources as they are no longer needed.

- ☐ Complete Standard Incident Debriefing Form (**FIGURE 8.3-1**).

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SAFETY OFFICER

The Safety Officer is responsible for assessing and monitoring hazardous and unsafe situations at the emergency response site(s). The Safety Officer must develop measures that assure the safety of the public and response personnel. This involves maintaining an awareness of active and developing situations, ensuring the preparation and implementation of the Site Safety Plan (SSP) and assessing safety issues related to the Incident Action Plans (IAP).

Responsibilities:

- ☐ Maintain Activity Log.
- ☐ Obtain briefing from Incident Commander (IC).
- ☐ Develop, implement, and disseminate SSP with IC and section chiefs.
- ☐ Participate in planning meetings and briefings.
- ☐ Establish safety staff if necessary.
- ☐ Identify emergency contact numbers. Fill out emergency contact chart and post in the Incident Command Center.
- ☐ Conduct safety briefings with all emergency responders.
- ☐ Investigate accidents that have occurred during emergency response.
- ☐ Ensure proper hazard zones are established.
- ☐ Ensure all emergency responders have appropriate level of training.
- ☐ Ensure proper Personal Protective Equipment (PPE) is available and used.
- ☐ Advise Security/Medical Group Leader concerning PPE requirements.
- ☐ Ensure emergency alarms/warning systems are in place as needed.
- ☐ Participate in Post Incident Review (**SECTION 8.3**).

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OPERATIONS CHIEF

The Operations Chief is responsible for the management of all operations applicable to the field response and site restoration activities. Operations directs field activities based on the Incident Action Plan (IAP) and Site Safety Plan (SSP).

Responsibilities:

- ☐ Maintain Activity Log.
- ☐ Obtain briefing from Incident Commander (IC).
- ☐ Participate in Incident Command planning meetings and briefings.

- ☐ Conduct planning meetings and briefings for Operations Section.
- ☐ Develop operations portion of IAP.
- ☐ Supervise the implementation of the IAP.
- ☐ Make or approve expedient changes to the IAP.
- ☐ Request resources needed to implement IAP.
- ☐ Approve list of resources to be released.
- ☐ Ensure safe tactical operations.
- ☐ Establish a staging area for personnel and equipment.
- ☐ Confirm first responder actions.
- ☐ Confirm the completion of rescue/evacuation and administering of first aid.
- ☐ Confirm site perimeters have been established.
- ☐ Coordinate activities of public safety responders, contractors, and mutual assistance organizations.
- ☐ Participate in Post Incident Review (**SECTION 8.3**).

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PLANNING CHIEF

The Planning Chief is responsible for collecting, evaluating, and disseminating information related to the current and future events of the response effort. The Planning Chief must understand the current situation; predict the future course of events; predict future needs; develop response and cleanup strategies; and review the incident once complete.

The Planning Chief must coordinate activities with the Incident Commander (IC) and other Chiefs to ensure that current and future needs are appropriately handled.

Responsibilities:

- ☐ Maintain Activity Log.
- ☐ Obtain briefing from the IC.
- ☐ Establish and maintain communication with IC and other Section Chiefs.
- ☐ Advise IC on any significant changes of incident status.
- ☐ Conduct planning meetings and briefings for Planning section.
- ☐ Coordinate and provide input to the preparation of the Incident Action Plan (IAP).
- ☐ Participate in Incident Command planning meetings and briefings.
- ☐ In a multi-jurisdictional response, ensure that all agencies are represented in the Planning Section.
- ☐ Coordinate future needs for the emergency response.
- ☐ Determine response personnel needs.
- ☐ Determine personnel needs and request personnel for Planning section.
- ☐ Assign technical specialists (archaeologists, historians, biologists, etc.) where

needed.

- ☐ Collect and analyze information on the situation.
- ☐ Assemble information on alternative response and cleanup strategies.
- ☐ Ensure situation status unit has a current organization chart of the Incident Command Organization.
- ☐ Provide periodic spill movement/migration prediction.
- ☐ Participate in Post Incident Review (**SECTION 8.3**).

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LOGISTICS CHIEF

The Logistics Chief is responsible for procuring facilities, services, and material in support of the emergency response effort.

Responsibilities:

- ☐ Maintain Activity Log.
- ☐ Obtain briefing from the Incident Commander (IC).
- ☐ Participate in Incident Command planning meetings and briefings.
- ☐ Conduct planning meetings and briefings for Logistics section.
- ☐ Participate in the preparation of the Incident Action Plan (IAP).
- ☐ Identify service and support requirements for planned operations.
- ☐ Identify sources of supply for identified and potential needs.
- ☐ Advise IC on current service and support requirements.
- ☐ Procure needed materials, equipment and services from sources by means consistent with the timing requirements of the IAP and Operations.
- ☐ Ensure all purchases are documented.
- ☐ Participate in Post Incident Review (**SECTION 8.3**).

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FINANCE CHIEF

The Finance Chief is responsible for accounting, legal, right-of-way and risk management functions that support the emergency response effort. In this role, the primary responsibility is supporting the Command Staff and Logistics Section matters pertaining to expenses during and following the emergency response.

Responsibilities:

- ☐ Maintain Activity Log.
- ☐ Obtain briefing from Incident Commander (IC).

- ☐ Participate in Incident Command planning meetings and briefings.
- ☐ Conduct planning meetings and briefings for Finance section.
- ☐ Participate in preparation of the Incident Action Plan (IAP).
- ☐ Participate in planning meetings.
- ☐ Participate in Unified Command System (UCS) as incident warrants.
- ☐ Request assistance of corporate accounting, legal, right-of-way or risk management as needed.
- ☐ Assist with contracting administration.
- ☐ Participate in Post Incident Review (**SECTION 8.3**).

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INFORMATION OFFICER

The Information Officer (IO) provides critical contact between the media/public and the emergency responders. The IO is responsible for developing and releasing information about the incident to the news media, incident personnel, appropriate agencies and public. When the response is multi-jurisdictional (involves the federal and state agencies), the IO must coordinate gathering and releasing information with these agencies.

The IO needs to communicate that the Company is conducting an effective response to the emergency. The IO is responsible for communicating the needs and concerns of the public to the Incident Commander (IC).

Responsibilities:

- ☐ Maintain Activity Log.
- ☐ Obtain briefing from IC.
- ☐ Participate in all planning meetings and briefings.
- ☐ Obtain outside information that may be useful to incident planning.
- ☐ Develop goals and objectives regarding public information.
- ☐ Arrange for necessary workspace, materials, telephones and staffing for Public Information Center (PIC).
- ☐ Establish a PIC, ensuring all appropriate agencies participate.
- ☐ Provide a single point of media contact for the IC.
- ☐ Coordinate media access to the response site as approved by the IC.
- ☐ Obtain approval for release of information from the IC.
- ☐ Arrange for meetings between media and emergency responders.
- ☐ Maintain list of all media present.
- ☐ Participate in Post Incident Review (**SECTION 8.3**)

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LIAISON OFFICER

If a Unified Command Structure is not established, a Liaison Officer is appointed as the point of contact for personnel assigned to the incident from assisting or cooperating agencies.

Responsibilities:

- ☐ Maintain Activity Log.
- ☐ Obtain briefing from Incident Commander (IC).
- ☐ Participate in planning meetings and briefings.
- ☐ Identify and maintain communications link with agency representatives, assisting, and coordinating agencies.
- ☐ Identify current or potential inter-organizational issues and advise IC as appropriate.
- ☐ Coordinate with Legal Group Leader and Public Information Officer (PIO) regarding information and documents released to government agencies.
- ☐ Participate in Post Incident Review (**SECTION 8.3**).

SECTION 5

Last Revised: May 2008

INCIDENT PLANNING

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5.1 Documentation Procedures5.2 Incident Action Plan Process and MeetingsFigure 5.2-1 Operational Period Planning Cycle5.2.1 Incident Occurs / Notifications5.2.2 Initial Response and Assessment5.2.3 Unified Command Objectives Meeting5.2.4 Tactics Meeting5.2.5 Planning Meeting5.2.6 Incident Action Plan (IAP) Preparation and Approval5.2.7 Operations Briefing5.2.8 Assess Progress5.2.9 Initial Unified Command Meeting5.2.10 Command Staff Meeting5.2.11 Command and General Staff Breakfast / Supper5.2.12 Business Management Meeting5.2.13 Agency Representative Meeting5.2.14 News Briefing

SECTION 5 INCIDENT PLANNING, CONTINUED

5.3 ICS Forms

5.3.1 Incident Briefing ICS 201-OS

5.3.2 Incident Action Plan (IAP) Cover Sheet

5.3.3 Incident Objectives ICS 202-OS

5.3.4 Organization Assignment List ICS 203-OS

5.3.5 Assignment List ICS 204-OS

5.3.6 Communications Plan ICS 205-OS

5.3.7 Medical Plan ICS 206-OS

5.3.8 Incident Status Summary ICS 209-OS

5.3.9 Unit Log ICS 214-OS

5.3.10 Individual Log ICS 214a-OS

5.3.11 Operational Planning Worksheet ICS 215-OS

5.4 Site Safety and Health Plan

5.5 Decontamination Plan

5.6 Disposal Plan

5.7 Incident Security Plan

5.8 Demobilization Plan

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 cleanup 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.

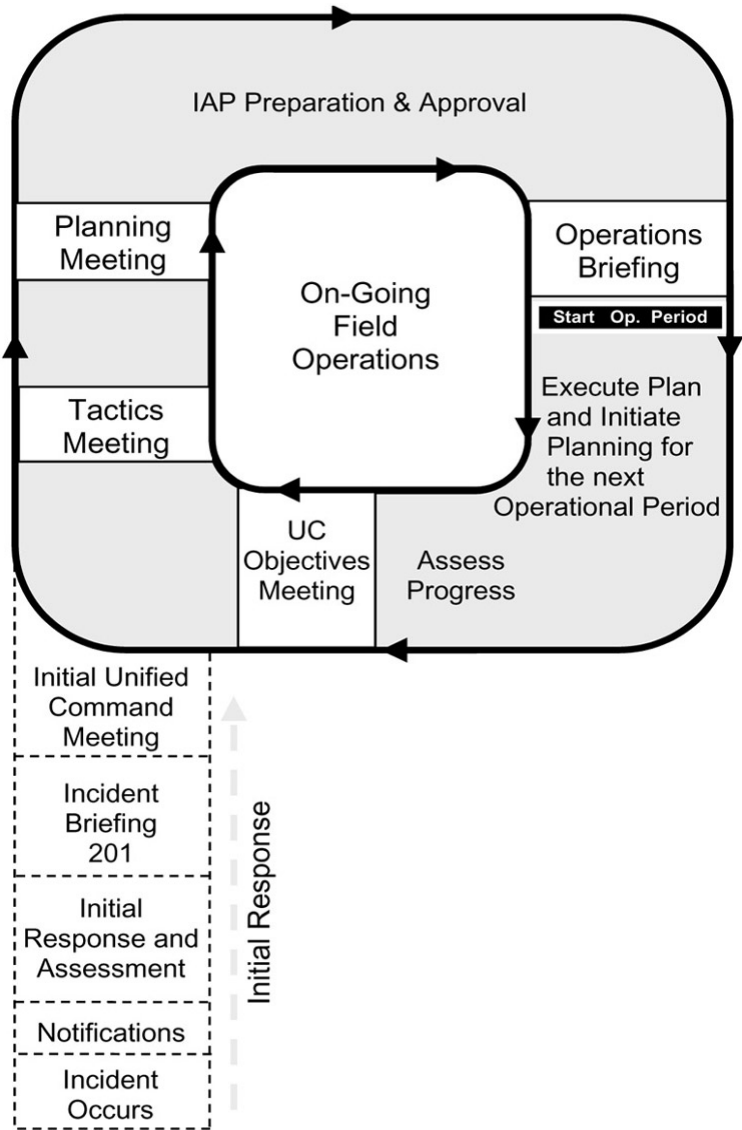
5.2 INCIDENT ACTION PLAN PROCESS AND MEETINGS

The period of INITIAL RESPONSE AND ASSESSMENT occurs in all incidents. Short-term responses (small in scope and/or duration, e.g., few resources working one operational period) often can be coordinated using only ICS 201 Briefings.

Longer-term, more complex responses, will likely require a dedicated Planning Section Chief (PSC) who must arrange for transition into the OPERATIONAL PERIOD PLANNING CYCLE. Certain meetings, briefings, and information-gathering during the Cycle lead to the Incident Action Plan (IAP) that guides operations of the next operational period. Only the meetings and events directly relevant to assembling the IAP are described. The IC/UC specifies the operational periods (e.g., 12-hour shifts, sunrise to sunset, 24-hour shifts etc.).

The SPECIAL PURPOSE meetings are most applicable to larger incidents requiring an OPERATIONAL PERIOD PLANNING CYCLE, but may have utility during INITIAL RESPONSE AND ASSESSMENT. The UNIFIED COMMAND MEETING and other special purpose meetings are briefly noted.

FIGURE 5.2-1 OPERATIONAL PERIOD PLANNING CYCLE



5.2.1 Incident Occurs / Notifications

When an incident occurs, notifications will be made to the appropriate Federal, State, and Local agencies and the initial assessment and response actions will begin.

5.2.2 Initial Response and Assessment

INCIDENT BRIEFING (ICS 201)

During the transfer of command process, an ICS 201 formatted briefing provides the incoming IC/UC with basic information regarding the incident situation and the resources allotted to the incident. Most importantly, it is the de facto Incident Action Plan (IAP) for the initial response and remains in force and continues to develop until the response ends or the Planning Section generates the incident's first IAP. It also is suitable for briefing individuals newly assigned to Command and General Staff, as well as needed assessment briefings for the staff.

When: New IC/UC; staff briefing, as required
Briefer: Current IC/UC

Attendees: Prospective IC/UC; Command, and General Staff, as required
Agenda: Using ICS 201 as an outline, included:

1. Situation (note territory, exposures, safety concerns, etc.; use map/charts).
2. Objectives and priorities.
3. Strategies and tactics.
4. Current organization.
5. Resource assignments.
6. Resources enroute and/or ordered.
7. Facilities established.

OPERATIONAL PERIOD PLANNING CYCLE (Events most related to assembling IAP)

5.2.3 Unified Command Objectives Meeting

The IC/UC will review/identify and prioritize objectives for the next operational period for the ICS 202 form. Objectives from the previous operational period are reviewed and any new objectives are identified.

When: Prior to Tactics Meeting
Facilitator: UC Member
Attendees: UC Members; Command and General Staff, as appropriate
Agenda:

1. Review/identify objectives for the next operational period (clearly stated and attainable with the resources available, yet flexible enough to allow Operations Section Chief to choose tactics).
2. Review any open agenda items from initial/previous meetings.

5.2.4 Tactics Meeting

This 30-45 minute meeting creates the blueprint for tactical deployment during the next operational period. In preparation for the Tactics Meeting, the Planning Section Chief and Operations Section Chief review the current IAP and situation status information, as provided through the Situation Unit, to assess work progress against IAP objectives. The Operations Section Chief/Planning Section Chief will jointly develop primary and alternate strategies to meet objectives for consideration at the next Planning Meeting.

When: Prior to Planning Meeting
Facilitator: Planning Section Chief
Attendees: Planning Section Chief, Operations Section Chief, Logistics Section Chief, Resources Unit Leader, Situation Unit Leader, and Environmental Unit Leader
Agenda:

1. Review the objectives for the next operational period.
2. Develop strategies (primary and alternatives).
3. Prepare a draft of ICS 215 to identify resources that should be ordered through Logistics.

5.2.5 Planning Meeting

This meeting defines incident objectives, strategies, and tactics and identifies resource needs for the next operational period. Depending on incident complexity, this meeting should last no longer than 45 minutes. This meeting fine-tunes objectives and priorities, identifies and solves problems, and defines work assignments and responsibilities on a completed ICS Form 215 (Operations Planning Worksheet). Meeting preparations include conducting a Tactics Meeting. Displays in the meeting room should include Objectives (ICS 202) for the next operational period, large sketch maps or charts clearly dated and timed, poster-size Operational Planning Worksheet (ICS 215), current resource inventory prepared by Resources Unit, and current situation status displays prepared by Situation Unit. After the meeting, the ICS 215 is used by the Logistics Section Chief to prepare the off-incident tactical and logistical resource orders, and used by Planning Section Chief to develop IAP assignment lists.

When: After the Tactics Meeting
 Facilitator: Planning Section Chief
 Attendees: Determined by IC/UC, generally IC/UC, Command Staff, General Staff, Air Operations Section Chief, Resources Unit Leader, Situation Unit Leader, Environmental Unit Leader, and Technical Specialists, as required

Agenda:

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5.2.5 Planning Meeting, Continued

1. State incident objectives and policy issues. IC/UC
2. Briefing of situation, critical and sensitive areas, weather/sea forecast, resource status/availability. Planning Section Chief with Situation Unit Leader, Resources Unit Leader
3. State primary and alternative strategies to meet objectives. Operations Section Chief with Planning Section Chief, Logistics Section Chief
4. Designate Branch, Division, Group boundaries and functions, as appropriate; use maps and ICS 215. Operations Section Chief
5. Specify tactics for each Division, note limitations. Operations Section Chief, Situation Unit Leader assist
6. Specify resources needed by Divisions/Groups. Operations Section Chief, with Planning Section Chief, Logistics Section Chief
7. Specify operations facilities and reporting locations (plot on map). Operations Section Chief, Logistics Section Chief assist
8. Develop resources, support, and overhead order(s). Planning Section Chief, Logistics Section Chief
9. Consider support issues and agree on plans: communications, traffic, safety, medical, etc. Logistics Section Chief, Planning Section Chief assist
10. Assisting or cooperating agency and stakeholder group considerations regarding Incident Action Plan. Liaison Officer
11. Safety considerations regarding Incident Action Plan. Safety Officer
12. News media/public considerations regarding Incident Action Plan. Information Officer
13. Finalize, approve Incident Action Plan for next operational period. IC/UC

5.2.6 Incident Action Plan (IAP) Preparation and Approval

Immediately following the Planning Meeting, the attendees prepare their assignments for the IAP to meet the Planning Section Chief deadline for assembling the IAP components. The deadline will be early enough to permit timely IC/UC approval, and duplication of sufficient

copies for the Operations Briefing and for overheads.

When: Immediately following Planning Meeting, Planning Section Chief assigns deadline
Facilitator: Planning Section Chief

Common Components:		Responsible to Prepare
1.	Incident Objectives (ICS 202)	[Resources Unit Leader]
2.	Organization List (ICS 203)	[Resources Unit Leader]
3.	Assignment List (ICS 204)	[Resources Unit Leader/Planning Section Chief]
4.	Communications Plan (ICS 205)	[Communications Unit Leader]
5.	Medical Plan (ICS 205)	[Medical Unit Leader]
6.	Incident Map	[Situation Unit Leader]

Optional Components (use as pertinent):

Optional Components (use as pertinent):		Responsible to Prepare
1.	Air Operations Summary (ICS 220)	[Air Operations Branch Director]
2.	Traffic Plan	[Ground Support Unit Leader]
3.	Demobilization Plan	[Demobilization Unit Leader]

5.2.7 Operations Briefing

This less-than-30-minute meeting conveys the IAP for the oncoming shift to the response organization. After this meeting, off-going field supervisors should be interviewed by their reliefs and by Operations Section Chief in order to further confirm or adjust the course of the new shift's IAP. Shifts in tactics may be made by the operations section supervisors. Similarly, a supervisor may reallocate resources within a division or group to adapt to changing conditions.

When: About an hour prior to each shift
Facilitator: Planning Section Chief
Attendees: IC/UC, Command Staff, General Staff, Branch Directors, Division/Group Supervisors, Task Force/Strike Team Leaders (if possible), Unit Leaders, others as appropriate.

Agenda:		Responsible to Present
1.	Review of IC/UC Objectives, changes to IAP.	[Planning Section Chief]
2.	Current response actions and last shift's accomplishments.	[Operations Section Chief]
3.	Weather and sea conditions forecast.	[Situation Unit Leader]
4.	Division/Group and air operations assignment.	[Operations Section Chief]
5.	Trajectory analysis.	[Situation Unit Leader]

6.	Transport, communications, supply updates.	[Logistics Section Chief]
7.	Safety message.	[Safety Officer]
8.	Financial report.	[Finance/Administration Section Chief]
9.	News Media report.	[Information Officer]
10.	Assisting/cooperating organization/agency reports of concern.	[Liaison Officer]
11.	Incident Action Plan endorsement and motivational remarks.	[IC/UC]

5.2.8 Assess Progress

The Operations and Planning Sections will review the incident response progress and make recommendations to the IC/UC in preparation for reviewing/identifying objectives for the next operational period. This feedback/information is gathered from various sources, including Field Observers, responder debriefs, stakeholders, etc.

SPECIAL PURPOSE MEETINGS

5.2.9 Initial Unified Command Meeting

Provides UC officials with an opportunity to discuss and concur on important issues prior to joint incident action planning. The meeting should be brief, and important points documented. Prior to the meeting, parties should review and prepare to address the agenda items. Planning Meeting participants will use the results of this meeting to guide the response efforts.

5.2.9 Initial Unified Command Meeting, Continued

When: When UC is formed, prior to the first operational period Planning Meeting
Facilitator: UC member
Attendees: Only ICs who will comprise UC
Agenda:

1. Identify jurisdictional priorities and objectives.
2. Present jurisdictional limitations, concerns, restrictions.
3. Develop collective set of incident objectives.
4. Establish and agree on acceptable priorities.
5. Adopt an overall strategy to accomplish objectives.
6. Agree on basic organizational structure and size.
7. Designate the best-qualified and acceptable Operations Section Chief.
8. Agree on General Staff personnel designations and planning, logistical, and finance agreements and procedures.
9. Agree on resource ordering procedures.
10. Agree on cost-sharing procedures.
11. Agree on informational matters.
12. Designate a Unified Command spokesperson.

5.2.10 Command Staff Meeting

Coordinate Command Staff functions, responsibilities and objectives. It is scheduled as

necessary by the IC/UC. Command Staff (IC/UC, Safety Officer, Liaison Officer, Information Officer) attend.

5.2.11 Command and General Staff Breakfast / Supper

An opportunity for the Command (IC/UC, Safety Officer, Liaison Officer, Information Officer) and General Staff (Operations Section Chief, Planning Section Chief, Logistics Section Chief, Finance/Administration Section Chief) to gather under informal and relaxing conditions to share and update each other on developing issues.

5.2.12 Business Management Meeting

This under-30-minute meeting is for participants to develop and update the operating plan for finance and logistics support. The agenda could include: finance requirements and criteria imposed by contributing organizations, business operating plan for resource procurement and incident funding, cost analysis and financial summary data. Attendees include: Finance/Administration Section Chief, Cost Unit Leader, Logistics Section Chief, Supply Unit Leader, Demobilization Unit Leader. It is generally conducted before the PLANNING MEETING.

5.2.13 Agency Representative Meeting

To update agency representatives and ensure that they can support IAP. Conducted by Liaison Officer, attended by Agency Representatives. Most appropriately held after the PLANNING MEETING in order to announce plans for next operational period, yet allow for changes should the plan's expectations be unattainable by an agency.

5.2.14 News Briefing

To brief the news media and public on the most current and accurate incident facts. Set up by the Information Officer, moderated by an appropriate representative, and featuring selected spokespersons. Spokespersons should be prepared by the Information Officer to address anticipated issues. The briefing should be well planned, organized, and scheduled to meet the media's needs.

5.3 ICS FORMS

All ICS Forms are available electronically via this Plan's Forms Navigator.

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

For use by the Command Staff to gather information on the Emergency Management Team's (EMT) efforts to implement applicable response plans. It is prepared by the initial Incident Commander (IC) for providing documentation of the initial response.

- **INCIDENT ACTION PLAN**

For use by the Planning Section to plan each day's response actions. This plan consists of the portions identified on the IAP cover page and must be approved by the Incident Commander, Federal On-Scene Coordinator (FOSC), and State On-Scene Coordinator (SOSC).

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

- **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 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.

- **ASSIGNMENT LIST - ICS 204**

Submits assignments at the level of Division and Groups.

- **COMMUNICATIONS PLAN - 205**

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

- **MEDICAL PLAN - ICS 206**

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

5.3 ICS FORMS, CONTINUED

All ICS Forms are available electronically via the Forms Navigator.

- **INCIDENT STATUS SUMMARY - ICS 209**

Used to inform personnel about the status of response efforts. It is not included in the IAP.

- **UNIT LOG - ICS 214**

Used to log activities for an entire unit.

- **INDIVIDUAL LOG - ICS 214a**

Used to log activities for an individual.

5.3.1 Incident Briefing ICS 201-OS

1. Incident Name	2. Prepared By: (name) Date: Time:	INCIDENT BRIEFING ICS 201-OS
3. Map/Sketch (Include maps drawn here or attached, showing the total area of operations, the incident site/area, overflight results, trajectories, impacted shorelines or other graphics depicting situational and response status)		
INCIDENT BRIEFING March, 2000 ICS 201-OS (pg 1 of 4)		

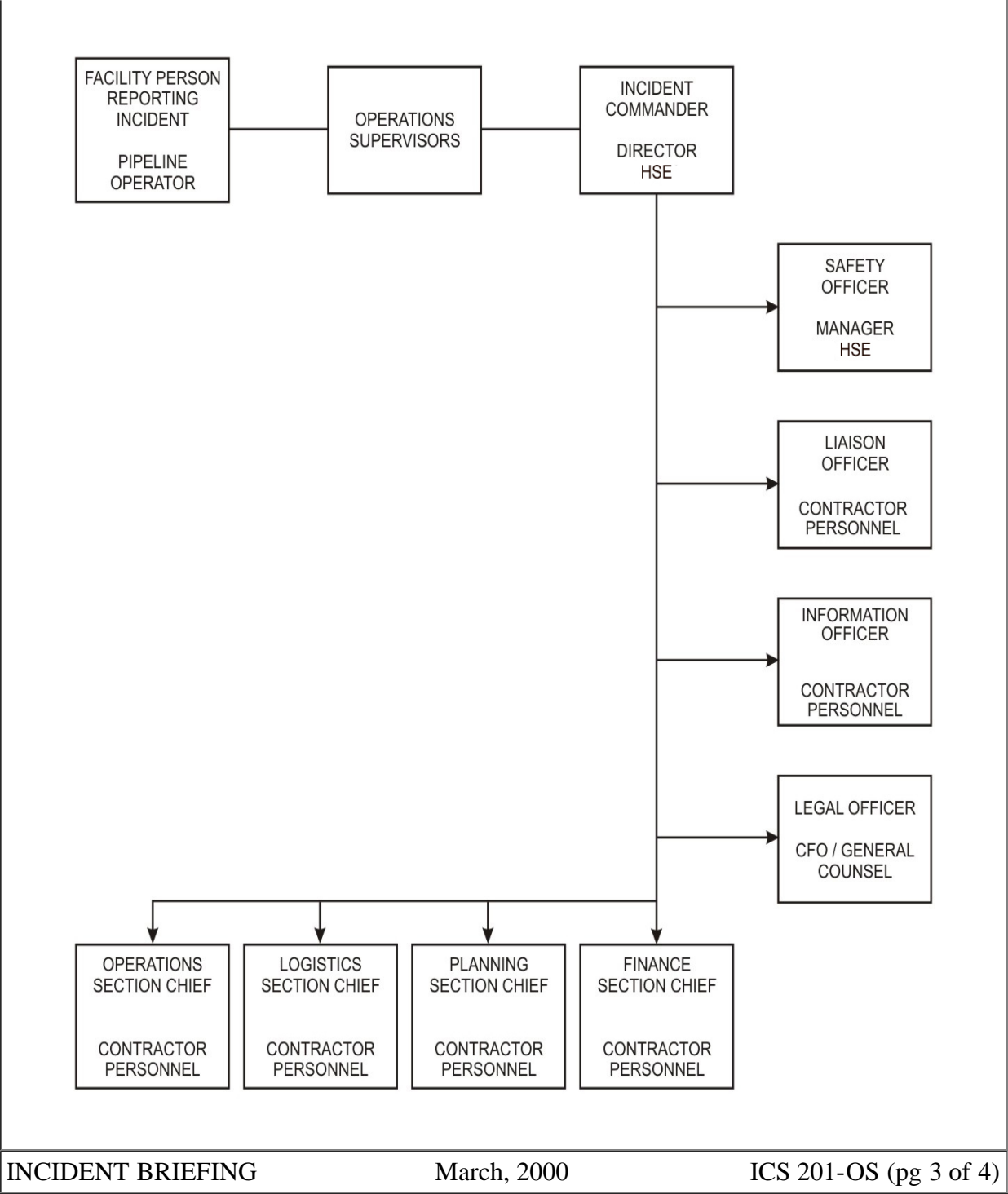
5.3.1 Incident Briefing ICS 201-OS, Continued

[illegible]

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

5.3.1 Incident Briefing ICS 201-OS, Continued

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



5.3.1 Incident Briefing ICS 201-OS, Continued

1. Incident Name	2. Prepared By: (name)	INCIDENT BRIEFING			
	Date: Time:	ICS 201-OS			
7. Resources Summary					
Resources	Time	Resource		On	

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5.3.2 Incident Action Plan (IAP) Cover Sheet

1. Incident Name	2. Operational Period to be covered by IAP (Date/Time)		IAP COVER SHEET
	From:	To:	
3. Approved by:			
FOSC			
SOSC			
IC			
<div>INCIDENT ACTION PLAN</div> <div>The items checked below are included in this Incident Action Plan:</div> <div><div><input type="checkbox"/> ICS 202-OS (Incident Objectives)</div><div><input type="checkbox"/> ICS 203-OS (Organization Assignment List)</div><div><input type="checkbox"/> ICS 204-OS (Assignment List)</div><div><input type="checkbox"/> ICS 205-OS (Communications Plan)</div><div><input type="checkbox"/> ICS 206-OS (Medical Plan)</div><div><input type="checkbox"/> ICS 209-OS (Incident Status Summary)</div><div><input type="checkbox"/> ICS 214-OS (Unit Log)</div><div><input type="checkbox"/> ICS 214a-OS (Individual Log)</div><div><input type="checkbox"/></div><div><input type="checkbox"/></div></div>			
4. Prepared By: (Planning Section Chief)			Date/Time:
IAP COVER SHEET			March, 2000

5.3.3 Incident Objectives ICS 202-OS

1. Incident Name	2. Operational Period (Date/Time) From: To:	INCIDENT OBJECTIVES ICS 202-OS
3. Overall Incident Objective(s)		
4. Objectives for Specified Operational Period		
5. Safety Message for Specified Operational Period		
Approved Site Safety Plan Located at:		
6. Weather: See Attached Weather Sheet		
7. Tides/Currents: See Attached Tide/Current Data		
8. Time of Sunrise:	Time of Sunset:	
9. Attachments (check if attached)		
<input type="checkbox"/> Organization List (ICS 203-OS)	<input type="checkbox"/> Assignment List (ICS 204-OS)	<input type="checkbox"/> Communications Plan (ICS 205-OS)
<input type="checkbox"/> Medical Plan (ICS 206-OS)	<input type="checkbox"/> Weather	
10. Prepared By: (Planning Section Chief)	Date/Time:	
INCIDENT OBJECTIVES	March, 2000	ICS 202-OS

5.3.4 Organization Assignment List ICS 203-OS

1. Incident Name		2. Operational Period (Date/Time) From: To:		ORGANIZATION ASSIGNMENT LIST ICS 203-OS	
3. Incident Commander and Staff				7. Operations Section	
		Primary	Deputy	Chief	
Federal:				Deputy	
State:				a. Branch I - Division/Groups	
IC:				Branch Director	
Safety Officer :				Deputy	
Information Officer:				Division / Group	
Liaison Officer:				Division / Group	
4. Agency Representatives				Division / Group	
Agency		Name		Division / Group	
				Division / Group	
				Division / Group	
				Division / Group	
				Division / Group	
				Division / Group	
5. Planning Section				b. Branch II - Division/Groups	
Chief				Branch Director	
Deputy				Deputy	
Resources Unit				Division / Group	
Situation Unit				Division / Group	
Environmental Unit				Division / Group	
Documentation Unit				Division / Group	
Demobilization Unit				Division / Group	
Technical Specialists				Division / Group	
6. Logistics Section				c. Branch III - Division/Groups	
Chief				Branch Director	
Deputy				Deputy	
Time Unit				Division / Group	
Procurement Unit				Division / Group	
Compensation Unit				Division / Group	
Cost Unit				Division / Group	
a. Support Branch				d. Air Operations Branch	
Director				Air Operations Br. Dir.	
Supply Unit				Air Tactical Supervisor	
Facilities Unit				Air Support Supervisor	
Transportation Unit				Helicopter Coordinator	
Vessel Support Unit				Fixed-wing Coordinator	
Ground Support Unit				8. Finance Section	
b. Service Branch				Chief	
Director				Deputy	
				Time Unit	
				Procurement Unit	
				Compensation Unit	
				Cost Unit	

Communications Unit		
Medical Unit		
Food Unit		

9. Prepared by: (Resources Unit)	Date/Time	
ORGANIZATION ASSIGNMENT LIST	March, 2000	ICS 203-OS

5.3.5 Assignment List ICS 204-OS

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

3. Branch		4. Division/Group		
-----------	--	-------------------	--	--

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

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

7. Assignments

8. Special Instruction for Division/Group

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

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

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

5.3.6 Communications Plan ICS 205-OS

1. Incident Name	2. Operational Period (Date/Time)		COMMUNICATIONS PLAN ICS 205-OS		
	From:	To:			
3. Basic Radio Channel Use					
SYSTEM/CACHE	CHANNEL	FUNCTION	FREQUENCY	ASSIGNMENT	REMARKS

4. Prepared By (Communications Unit)			Date/Time		
COMMUNICATIONS PLAN		March, 2000		ICS 205-OS	

5.3.7 Medical Plan ICS 206-OS

1. Incident Name		2. Operational Period (Date/Time) From: To:		MEDICAL PLAN ICS 206-OS		
3. Medical Aid Stations						
Name	Location	Contact #	Paramedics On Site (Y/N)			
4. Transportation						
Ambulance Service	Address	Contact #	Paramedics On Board (Y/N)			
5. Hospitals						
Hospital Name	Address	Contact #	Travel Time		Burn Ctr?	Heli-Pad?
			Air	Ground		

6. Special Medical Emergency Procedures						
7. Prepared By (Medical Unit Leader)		Date/Time	8. Reviewed By (Safety Officer)		Date/Time	
MEDICAL PLAN		March, 2000			ICS 206-OS	

5.3.8 Incident Status Summary ICS 209-OS

1. Incident Name		2. Period Covered By Report From: To:		Time of Report	INCIDENT STATUS SUMMARY ICS 209-OS	
3. Spill Status (Estimated, in Barrels)			[OPS/EUL/SSC]		7. Safety Status [Safety Officer]	
			Since Last Report		Total	
Source Status:		Remaining Potential (bbl):				
		Rate of Spillage (bbl/hr):				
Secured		<input type="checkbox"/>	Unsecured		<input type="checkbox"/>	
		Since Last Report		Total		
Volume Spilled						
Mass Balance/Oil Budget						
Recovered Oil						
Evaporation						
Natural Dispersion						
Chemical Dispersion						
Burned						
Floating, Contained						
Floating, Uncontained						
Onshore						
Total Spilled Oil Accounted For:						
4. Waste Management (Estimated)			[OPS/Disposal]			
		Recovered	Stored	Disposed		
Oil (bbl)						
Oily Liquids (bbl)						
Liquids (bbl)						
Oily Solids (tons)						
Solids (tons)						
8. Equipment Resources					[RUL]	
Description	Ordered	Available / Staged		Assigned	Out of Service	
Spill Resp. Vsls						
Fishing Vessels						
Tugs						
Barges						
Other Vessels						
Skimmers						
Boom (ft.)						
Sbnt/Snr Bm. (ft.)						
Vacuum Trucks						
Helicopters						
Fixed Wing						
9. Personnel Resources				[RUL]		
Description	People in Cmd. Post		People in the Field		Total People On Scene	

5. Shoreline Impacts (Estimated, in miles)		[PSC/EUL/SSC]													
Degree of Oiling	Affected	Cleaned		To Be Cleaned		Federal									
Light						State									
Medium						Local									
Heavy						RP									
Total						Contract Personnel									
						Volunteers									
						Total Response Personnel From All Organizations:									
6. Wildlife Impacts						[OPS/Wildlife Br.]		10. Special Notes							
Numbers in () indicate subtotal that are threatened / endangered species.						Died in Facility									
	Captured	Cleaned	Released	DOA	Euth.	Other									
Birds															
Mammals															
Reptiles															
Fish															
Total															
11. Prepared By (Situation Unit Leader)								Date/Time							
INCIDENT STATUS SUMMARY								March, 2000				ICS 209-OS			

5.3.9 Unit Log ICS 214-OS

1. Incident Name	2. Operational Period (Date / Time)	UNIT LOG ICS 214-OS
	From: To:	
3. Unit Name	4. Unit Leader (Name and ICS Position)	
5. Personnel Assigned		
Name	ICS Position	Home Base
6. Activity Log (Continue on Reverse)		

Time	Major Events	
7. Prepared by:		Date / Time
UNIT LOG	June 2000	ICS 214-OS

5.3.9 Unit Log ICS 214-OS, Continued

1. Incident Name	2. Operational Period (Date / Time) From: To:	UNIT LOG(Cont) ICS 214-OS
3. Unit Name	4. Unit Leader (Name and ICS Position)	
5. Personnel Assigned		
Name	ICS Position	Home Base
6. Activity Log (Continue on Reverse)		
Time	Major Events	

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[illegible]

7. Prepared by:	Date / Time	
INDIVIDUAL LOG	June 2000	ICS 214a-OS

5.3.11 Operational Planning Worksheet ICS 215-OS

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

HAZARDOUS SITUATION:	(Known or suspected; contaminated media; type storage container; type occupancy; obvious leaks, spills, or breaches; physical damage)
RESPONDING AGENCIES:	
Agency:	Name:
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	

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

5.4 SITE SAFETY AND HEALTH PLAN, CONTINUED

GENERAL SAFETY RULES AND EQUIPMENT:

- 1. There will be no eating, drinking, or smoking in the exclusion zone or the contamination reduction zone.
- 2. All personnel must pass through the contamination reduction zone to enter or exit the exclusion zone (hot zone).
- 3. At a minimum, Decontamination Team members must be in one (1) level of protection lower than that of the entry teams.

4. All decontamination equipment and systems must be in place before an entry can be made.
5. Entry team will consist of a minimum of two members with the same number of personnel assigned to a backup team. All entry personnel will adhere to the buddy system.
6. At the end of the incident, or directly after a possible exposure, each entry team member will take a full body shower and launder any personal clothing used at the scene.
7. All breathing air shall be certified as Grade D or better.
8. Where practical, all tools shall be of the nonsparking type.
9. Fire equipment shall be on hand when the situation warrants such support. At a minimum, fire extinguishers shall be available on scene.
10. Since incident evacuation may be necessary if an explosion, fire, or other event occurs; an individual shall be assigned to sound, alert, and notify the responsible command personnel and public officials (if required). The evacuation signal shall be four short blasts on an air horn every 30 seconds until all personnel are known to be evacuated.
11. An adequately stocked Emergency Medical Services (EMS) Unit shall be on-site at all times.
12. The location and telephone number of the nearest medical facility shall be posted and known to all personnel.

GENERAL SAFETY BRIEFING:

Before any incident actions are taken, a briefing from the Command Staff will be accomplished with all personnel present. Personnel will sign a log sheet, attesting to being present at the briefing. Topics discussed should include, but not limited to known and suspected hazards along with the operation's goals and objectives.

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5.4 SITE SAFETY AND HEALTH PLAN, CONTINUED

EMERGENCY ACTION CONDITIONS:

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

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

- Indications of emissions from the incident such as CGI readings of 25% or greater, less than 19.5% oxygen, or one Mr/Hr of ionizing radiation are present.
- Current or projected meteorological data indicates that a probable impact on

working conditions could occur.

- If background readings obtained during cessation of activities worsen, reassessment of the findings should be confirmed; actions to lower levels of contaminant or contingencies for further incident monitoring must take place.
- If this condition exists, incident personnel will immediately notify command staff.

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

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

Sheltering/Evacuation Plan:
Ordered By:

5.4 SITE SAFETY AND HEALTH PLAN, CONTINUED

LIST OF ACCESS AUTHORIZED PERSONNEL (Outside Agencies):
SPECIALIZED TASK ASSIGNMENTS:

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

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.

SKETCH OR ATTACH PLOT PLAN HERE:

5.4 SITE SAFETY AND HEALTH PLAN, CONTINUED

RESPONSE SAFETY CHECK-OFF SHEET

TYPE OF RESPONSE:	
Highway	Industrial
Railway	Marine
Residential	Other
Specify:	
TYPE OF SAFETY PLAN:	
Federal	State
Local	Other
Specify:	
SUSPECTED CHEMICAL(S) INVOLVED:	
1.	2.
3.	4.
5.	6.

7.	8.		
9.	10.		
INITIAL LEVEL OF PROTECTION: (If level D you must justify)			
A	B	C	D
INITIAL MEDICAL SCREENING COMPLETE: <input type="checkbox"/> Yes <input type="checkbox"/> No			
If no, justify:			
In the event of fire or explosion:			
In the event of potential or actual ionizing radiation exposure:			

5.4 SITE SAFETY AND HEALTH PLAN, CONTINUED

In the event migration and contamination beyond the boundaries of the incident:
EMERGENCY SERVICES:
Emergency medical facility:
Ambulance service:

Poison Control Center:

Chemical manufacturer's representative:

EMERGENCY PROCEDURES (in the event of personnel exposure):

EMERGENCY PROCEDURES (in the event of personnel injury):

HAZARD ASSESSMENT:

Attach Hazardous Materials Safety Data Sheets (MSDS), or other reference materials, for chemicals involved to this document.

MONITORING PROCEDURES:

Monitoring the incident to identify concentration of contaminants in all media. List the instruments to be used and what areas to be monitored.

Hot Zone (Excursion Zone)

Warm Zone (Contamination Reduction Zone)

Cold Zone (Support Zone)

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5.4 SITE SAFETY AND HEALTH PLAN, CONTINUED

MEDICAL MONITORING: (Procedures to be used to monitor personnel for evidence of personal exposure.)

PERSONNEL POTENTIALLY EXPOSED TO HAZARDOUS MATERIALS:

NAME	POSITION	DATE/TIME

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

DECONTAMINATION SOLUTIONS USED:

DISPOSAL PROCEDURES:

Authorized By:

5.4 SITE SAFETY AND HEALTH PLAN, CONTINUED

POST RESPONSE:			
Level of protection used:			
A	B	C	D
Rationale:			
EQUIPMENT DECONTAMINATION:			
	Clothing	SCBA/Resp.	Monitoring

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HEALTH AND SAFETY / RESPONSE PLAN

file:///X:/82504 - NuStar Admore Central/Plan/1_terminal_epa_template/sec5 htm?MAIN_ID=345[11/5/2013 9:27:35 AM]

<input type="checkbox"/> Heavy equipment	<input type="checkbox"/> Poor visibility
<input type="checkbox"/> Drum handling	<input type="checkbox"/> Motor vehicles
<input type="checkbox"/> Wildlife/plants	<input type="checkbox"/> Confined spaces (see attachment/appendix)
<input type="checkbox"/> Hand/power tools	<input type="checkbox"/> Ionizing radiation
<input type="checkbox"/> Lifting	<input type="checkbox"/> Other

Air Monitoring			
% LEL	% O ₂	PPM Benzene	PPM H ₂ S
<input type="checkbox"/> Other (specify)			
<input type="checkbox"/> See attachment - Monitoring Results/Methods			

CONTROL MEASURES:

Engineering Controls

<input type="checkbox"/> Source of release secured	<input type="checkbox"/> Valve(s) closed	<input type="checkbox"/> Facility shut down
<input type="checkbox"/> Site secured		
<input type="checkbox"/> Other		

Personal Protective Equipment (PPE) HAZWOPER Coordination with OSRO

<input type="checkbox"/> PVC suits	<input type="checkbox"/> PE/TYVEK suits	<input type="checkbox"/> Respirator
<input type="checkbox"/> Site secured	<input type="checkbox"/> PVC gloves	<input type="checkbox"/> Other
<input type="checkbox"/> Other	<input type="checkbox"/> Hard hats	<input type="checkbox"/> Eye protection

5.4 SITE SAFETY AND HEALTH PLAN, CONTINUED

HEALTH AND SAFETY / RESPONSE PLAN

CONTROL MEASURES (cont'd):

Decontamination

<input type="checkbox"/> Stations established (see site map)
--

Sanitation

<input type="checkbox"/> Facilities provided per OSHA 1910.120(n)

Illumination

<input type="checkbox"/> Facilities provided per OSHA 1910.120(m)

Medical Surveillance

<input type="checkbox"/> Facilities provided per OSHA 1910.120(f)

WORK PLAN: (buddy system must be used.)

<input type="checkbox"/> Booming	<input type="checkbox"/> Skimmers	<input type="checkbox"/> Vac. trucks	<input type="checkbox"/> Pumping	<input type="checkbox"/> Excavation
<input type="checkbox"/> Heavy equipment	<input type="checkbox"/> Sorbent pads	<input type="checkbox"/> Patching	<input type="checkbox"/> Hot work	<input type="checkbox"/> Shoring
<input type="checkbox"/> Appropriate permits issued				
<input type="checkbox"/> Other (describe):				

TRAINING (HAZWOPER training program):

<input type="checkbox"/> Verified site workers trained per OSHA 1910.120
--

ORGANIZATION (See Incident Command System chart.):

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

SITE SECURITY:

- ☐ Pre-entry briefing
- ☐ Security level

LowMediumHigh
- ☐ Other topics

DATE/TIME/PLAN COMPLETED:By:

5.4 SITE SAFETY AND HEALTH PLAN, CONTINUED

SITE DIAGRAM

GENERAL DIAGRAM INSTRUCTIONS

1. Site Diagram should include the following (label the items drawn with corresponding letter):
- A. Sketch with major feature locations
(buildings, drainage paths, roads, etc.)

B. Hazardous substance location

C. Work zones (exclusion, contamination reduction, support)

D. Command center and decontamination area

E. Access and access restrictions

F. Routes of entry

G. Wind direction

H. Emergency evacuation routes

I. Assembly points

J. First aid locations

K. Communication system

5.5 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.

5.5 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, 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.

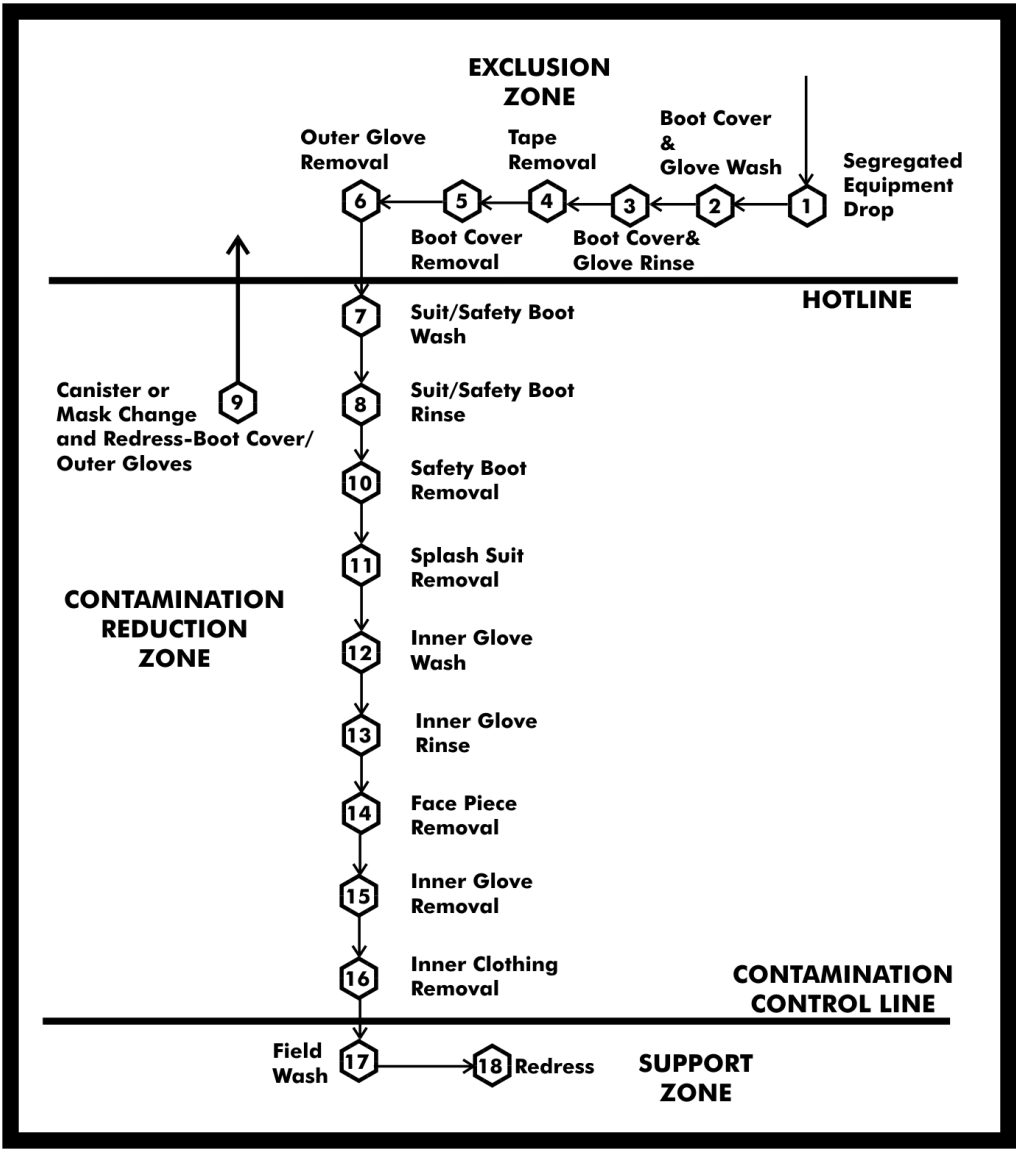
5.5 DECONTAMINATION PLAN, CONTINUED

Procedures for these stations are as follows:

MAXIMUM MEASURES FOR DECONTAMINATION, CONTINUED		
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.

5.5 DECONTAMINATION PLAN, CONTINUED

DECONTAMINATION PROCEDURES, MAXIMUM DECONTAMINATION LAYOUT



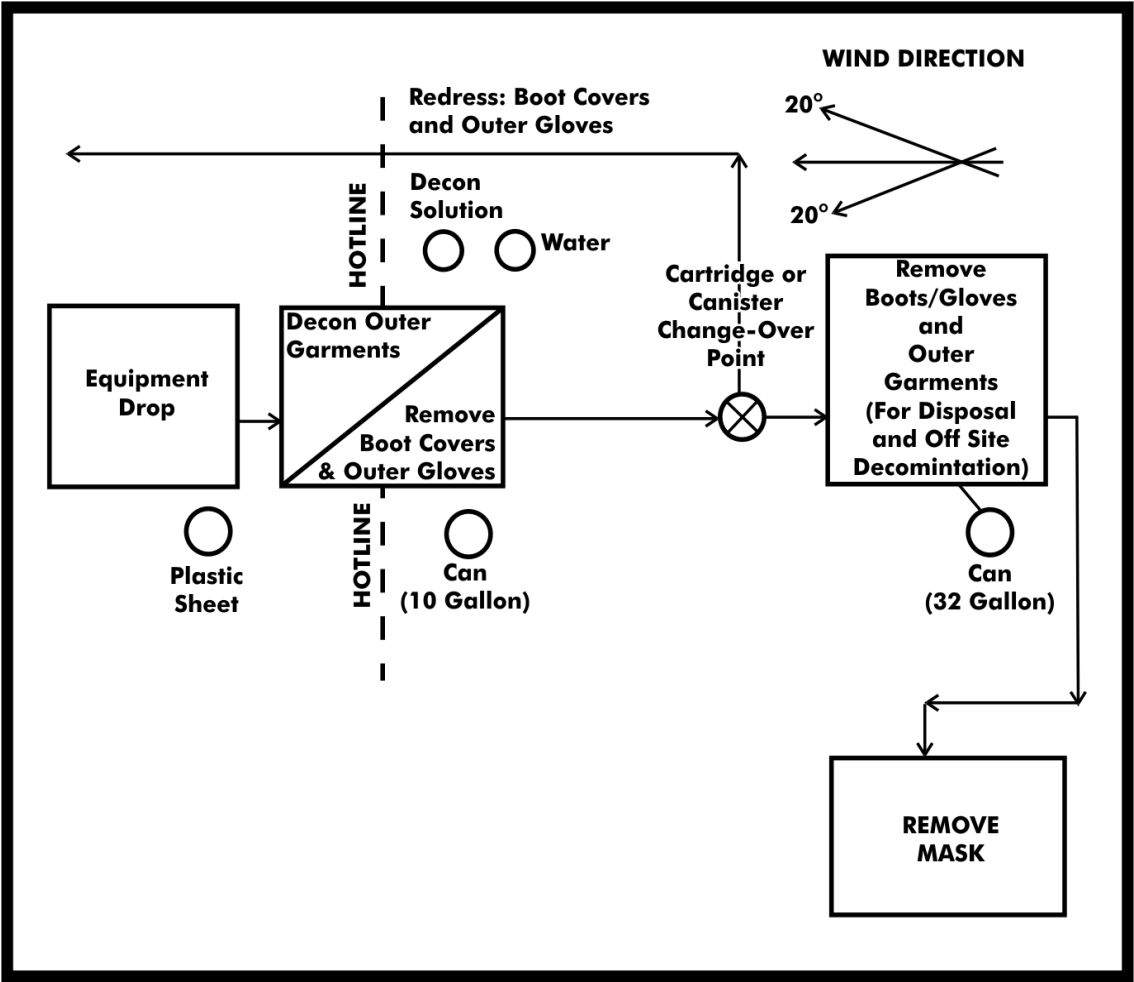
5.5 DECONTAMINATION PLAN, CONTINUED

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.

5.5 DECONTAMINATION PLAN, CONTINUED

DECONTAMINATION PROCEDURES, MINIMUM DECONTAMINATION LAYOUT



5.6 DISPOSAL PLAN

Date:	Location:			
Source of release:				
Amount of release:				
Incident name:				
State On-Scene Coordinator:				
Federal On-Scene Coordinator:				
Time required for temporary storage:				
Proposed storage method:				
Disposal priorities:				
Sample date:			Sample ID:	
Analysis required (type):				
Laboratory performing analysis:				
Disposal options:				
	Available	Likely	Possible	Unlikely
Landfill:				
In-situ/ bio-remediation:				
In-situ burn:				
Pit burning:				
Hydrocyclone:				
Off-site incineration:				
Reclaim:				
Recycle:				
Resources required for disposal options:				
General information:				
Generator name:		U.S. EPA ID#:		
Waste properties:		Waste name:		
U.S. EPA waste code:		State waste code:		
EPA hazardous waste:				
Waste storage and transportation:				
Proposed storage method:				
Proposed transportation method:				

5.6 DISPOSAL PLAN, CONTINUED

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

PPE required for waste handling:	
Waste coordinator:	Date:
Resources required for disposal options:	

Incident name:	
Sample number:	Date sent:
Source of sample:	
Date sample data received:	
Waste hazardous:	Non-hazardous:
Permits/variances requested:	
Approval received on waste profile:	
Date disposal can begin:	
Disposal facilities:	
Profile number:	
Storage contractors:	

Waste transporters:
PPE designated and agrees with Site Safety and Health Plan:

5.6 DISPOSAL PLAN, CONTINUED

Additional information:
Waste coordinator:

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5.8 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 Supervisor will ensure a log is maintained documenting that proper decontamination procedures are performed for each piece of equipment.
- The Operations Section will ensure that redeployed personnel receive proper rest prior to returning to duty.
- The Planning Section Chief will monitor personnel redeployment activities to ensure

number of hours worked is within acceptable guidelines.

- The Operations Section Chief must approve the Demobilization Plan before decontamination, release, or redeployment of any resources.

SECTION 6

Last Revised: May 2008

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 Wildlife Protection and Rehabilitation6.5 Endangered and Threatened Species By State6.6 Tactical Overview Map6.7 Tactical Plan Index6.8 Tactical Plans6.9 Sensitivity Maps

6.1 AREA DESCRIPTION

Site specific maps and response tactics are included in **SECTION 6.6** and **SECTION 6.8**. Description of shoreline types and specific shoreline protection and cleanup 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.

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 storage tanks. Spills occurring within the secondary containment area or along pipeline and piping 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. A summary of booming techniques is provided on the following page.

- 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.

- 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://www.response.restoration.noaa.gov> for the latter two.)

FIGURE 6.2-1 - RESPONSE TACTICS FOR VARIOUS SHORELINES

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

			<p>sediments during the cleanup effort</p> <ul style="list-style-type: none">• Passive efforts, such as sorbent boom can be used to retain oil as it is naturally removed
Fresh Marsh	<ul style="list-style-type: none">• Found along freshwater ponds and lakes• These marshes have various types of vegetative cover, including floating aquatic mats, vascular submerged vegetation, needle and broad-leaved deciduous scrubs and shrubs, and broad-leaved evergreen scrubs and shrubs• Birds and mammals extensively use fresh marshes for feeding and breeding purposes	<ul style="list-style-type: none">• Small amounts of oil will contaminate the outer marsh fringe only; natural removal by wave action can occur within months• Large spills will cover more area and may persist for decades• Oil, particularly the heavy fuel oils, tends to adhere readily to marsh grasses	<ul style="list-style-type: none">• Marshes require the highest priority for shoreline protection• Natural recovery is recommended when:<ul style="list-style-type: none">• A small extent of marsh is affected• A small amount of oil impacts the marsh fringe• The preferred cleanup method is a combination of low-pressure flushing, sorption, and vacuum pumping performed from boats• Any cleanup activities should be supervised closely to avoid excessive disturbances of the marsh surface or roots• Oil wrack and other debris may be removed by hand
Swamp	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Even small amounts of spilled oil can spread through the swamp• Large spills will cover more area and may persist for decades since water-flushing rates are low• Oil, particularly the heavy fuel oils, will adhere to swamp vegetation• Unlike mangroves,	<ul style="list-style-type: none">• No cleanup recommended under light conditions• Under moderate to heavy accumulations, to prevent chronic oil pollution of surrounding areas placement of sorbent along fringe swamp forest (to absorb oil as it is slowly released) may be effective under close scientific supervision

	forested woodlands <ul style="list-style-type: none"> Birds and mammals use swamps during feeding and breeding activities 	the roots of swamp forest trees are not exposed; thus, little damage to trees is expected. Any underbrush vegetation, however, would be severely impacted	<ul style="list-style-type: none"> Proper strategic boom placement may be highly effective in trapping large quantities of oil, thus reducing oil impact to interior swamp forests Oil trapped by boom can be reclaimed through the use of skimmers and vacuums
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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"> Have ocean like waves and currents Weather changes effect on-water conditions River mouths present problems Thermal stratification occurs 	<ul style="list-style-type: none"> Most organisms are mobile enough to move out of the spill area Aquatic birds are vulnerable to oiling Human usage (such as transportation, water intakes, and recreational activities) may be restricted 	<ul style="list-style-type: none"> Booming, skimming, vacuuming, and natural recovery are the preferred cleanup methods Should not use sorbents, containment booming, skimming, and vacuuming on gasoline spills Cleanup options include physical herding, sorbents, and debris/vegetation removal
Large rivers	<ul style="list-style-type: none"> May have varying salinities, meandering channels, and high flow rates May include manmade structures (such as dams and locks) Water levels vary seasonally Floods generate high suspended sediment and 	<ul style="list-style-type: none"> Fish and migratory birds are of great concern Under flood conditions, may impact highly sensitive areas in floodplains Human usage may be high When sediments are contaminated, oil may persist for years 	<ul style="list-style-type: none"> Booming, skimming, and vacuuming are the preferred cleanup methods Should not use sorbents, containment booming, skimming, and vacuuming on gasoline spills Cleanup options include natural recovery, physical herding, sorbents, and debris/vegetation

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

6.3 SENSITIVE AREA PROTECTION

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

SECTION 6.6.

FIGURE 6.3-1 - SENSITIVE AREA PROTECTION IMPLEMENTATION SEQUENCE

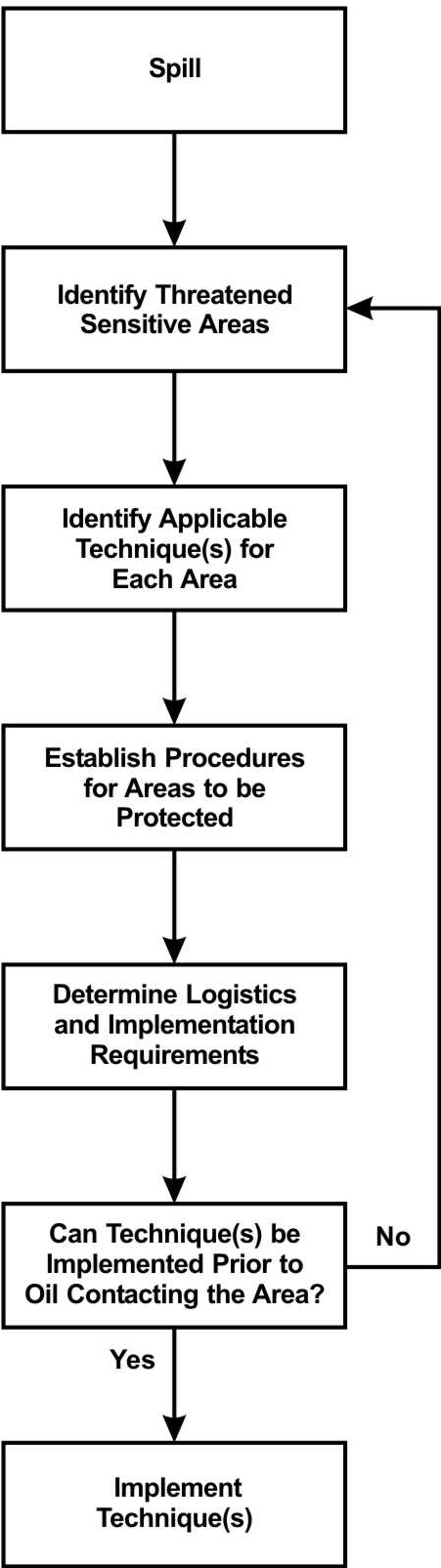


FIGURE 6.3-2 - SUMMARY OF SHORELINE AND TERRESTRIAL CLEANUP TECHNIQUES

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

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

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

TECHNIQUE	DESCRIPTION	RECOMMENDED	APPLICABILITY	POTENTIAL ENVIRONMENTAL
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		EQUIPMENT		EFFECTS
Washing, Continued				
6. Flushing	Water streams at low to moderate pressure, and possibly elevated temperatures, are used to remove oil from surface or near-surface sediments through agitation and direct 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.	<u>Equipment</u> 1-5 50- to 100-gpm/100-psi pumping systems with manifold 1-4 100-ft hoses and nozzles per system 1-2 200-ft containment booms per system 1 oil recovery device per system <u>Personnel</u> 8-10 workers per system	<ul style="list-style-type: none">• Substrates, riprap, and solid man-made structures• Oil stranded onshore• Floating oil on shallow intertidal areas	<ul style="list-style-type: none">• Can impact clean downgradient areas• Will displace many surface organisms if present• Sediments transported into water can affect water quality• Hot water can be lethal to many organisms• Can increase oil penetration depth
7. Spot (High Pressure Washing)	High pressure water streams are used to remove oil coatings from hard surfaces in small areas where flushing is ineffective. Oil is directed back into water or collection point for subsequent recovery.	<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">• Bedrock, man-made structures, and gravel substrates• When low-pressure flushing is not effective• Directed water jet can remove oil from hard to reach sites	<ul style="list-style-type: none">• Will remove most organisms if present• Can damage surface being cleaned• Can affect clean downgradient or nearby areas
In Situ				
8. Passive Collection	Sorbent/snare booms or other sorbent materials are anchored at the waterline adjacent to heavily oiled areas to contain and recover oil as it leaches	<u>Equipment</u> 1,000-2,000 ft sorbent/snare boom 200-400 stakes or anchor systems <u>Personnel</u> 4-10 workers	<ul style="list-style-type: none">• All shoreline types• Calm wave action• Slow removal process	<ul style="list-style-type: none">• Significant amounts of oil can remain on the shoreline for extended periods of time

	from the sediments.			
9. Sediment Tilling	Mechanical equipment or hand tools are used to till lightly to moderately oiled surface sediments to maximize natural degradation processes.	<u>Equipment</u> 1 tractor fitted with tines, dicer, ripper blades, etc. or 1-4 rototillers or 1 set of hand tools <u>Personnel</u> 2-10 workers	<ul style="list-style-type: none">Any sedimentary substrate that can support heavy equipmentSand and gravel beaches with subsurface oilWhere sediment is stained or lightly oiledWhere oil is stranded above normal high waterline	<ul style="list-style-type: none">Significant amounts of oil can remain on the shoreline for extended periods of timeDisturbs surface sediments and organisms

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">Any shoreline habitat type where nutrients are deficientModerate to heavily oiled substratesAfter other techniques have been used to remove free product on lightly oiled	<ul style="list-style-type: none">Significant amounts of oil can remain on the shoreline for extended periods of timeCan disturb surface sediments and organisms

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

Central

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 (use of dispersants requires Federal or State approval) (Dispersants are not authorized for use in EPA Region V)	Dispersants are used to reduce the oil/water interfacial tension thereby decreasing the energy needed for the slick to break into small particles and mix into the water column. Specially formulated products containing surface-active agents are sprayed from aircraft or boats onto the slick.	Dispersants Boat or aircraft	<ul style="list-style-type: none">• Water bodies with sufficient depth and volume for mixing and dilution• When the impact of the floating oil has been determined to be greater than the impact of dispersed oil on the water-column community	<ul style="list-style-type: none">• Use in shallow water could affect benthic resources• May adversely impact organisms in the upper 30 feet of the water column• Some water-surface and shoreline impacts could occur
1 - Per 1000 feet of shoreline or oiled area				

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

6.4 WILDLIFE PROTECTION AND REHABILITATION

- The Company will support wildlife protection and rehabilitation efforts during the response, and assist in these efforts in alignment with local, state, and federal authorities and certified contractors.
- 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 is

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.

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6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Bat, gray	<i>Myotis grisescens</i>	Caves and mines; rivers adjacent to forests	E	Oklahoma
Bat, Indiana	<i>Myotis sodalis</i>	Caves, mines, upland forests	E	Oklahoma
Bat, Ozark big-eared	<i>Corynorhinus (=Plecotus) townsendii ingens</i>	Caves, mines, upland forests	E	Oklahoma
Beetle, American burying	<i>Nicrophorus americanus</i>	Forest/pasture ecotone and open pastures in a ridge and valley area	E	Oklahoma
Crane, whooping except where EXPN	<i>Grus americana</i>	Cropland/hedgerow, grassland/herbaceous	E	Oklahoma
Curlew, Eskimo	<i>Numenius borealis</i>	Cropland/hedgerow, grassland/herbaceous, tundra	E	Oklahoma
Mapleleaf, winged Entire; except where listed as experimental populations	<i>Quadrula fragosa</i>	Big River, high gradient, medium river, moderate gradient, riffle	E	Oklahoma
Mussel, scaleshell	<i>Leptodea leptodon</i>	Creeks and large rivers	E	Oklahoma
Pocketbook, Ouachita rock	<i>Arkansia wheeleri</i>	Pools, side channels, rivers and large creeks in or near the Ouachita Uplift	E	Oklahoma
Tern, least interior pop.	<i>Sterna antillarum</i>	Open sandy or gravelly beach, dredge spoil and other open shoreline areas	E	Oklahoma
Vireo, black-capped	<i>Vireo atricapillus</i>	Shrubland/chaparral	E	Oklahoma
		Open pine forests with		

Woodpecker, red-cockaded	<i>Picoides borealis</i>	large, widely-spaced older trees	E	Oklahoma
Cavefish, Ozark	<i>Amblyopsis rosae</i>	Dark cave waters	T	Oklahoma
Darter, leopard	<i>Percina pantherina</i>	Clear, upland small to medium rivers	T	Oklahoma
Eagle, bald Sonoran Desert DPS	<i>Haliaeetus leucocephalus</i>	Coastlines, rivers, lakes, wet prairies, and coastal pine lands	T	Oklahoma

E - Endangered
T - Threatened

Response Zone 4 Ardmore Operations - Central

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Madtom, Neosho	<i>Noturus placidus</i>	Large, medium-gradient streams	T	Oklahoma
Orchid, eastern prairie fringed	<i>Platanthera leucophaea</i>	Mesic to wet praries	T	Oklahoma
Orchid, western prairie fringed	<i>Platanthera praeclara</i>	Wet praries and sedge meadows	T	Oklahoma
Plover, piping except Great Lakes watershed	<i>Charadrius melodus</i>	Sandy beaches, islands	T	Oklahoma
Shiner, Arkansas River Arkansas R. Basin	<i>Notropis girardi</i>	Unshaded channels of creeks and small to large rivers	T	Oklahoma
Ambrosia, south Texas	<i>Ambrosia cheiranthifolia</i>	Grasslands and various mesquite-dominated shrublands	E	Texas
Amphipod, Peck's cave	<i>Stygobromus</i> (=Stygonectes) <i>pecki</i>	Subterranean springs	E	Texas
Ayenia, Texas	<i>Ayenia limitaris</i>	Dense subtropical woodlands	E	Texas
Bat, Mexican long-nosed	<i>Leptonycteris nivalis</i>	Caves or similar mines and tunnels	E	Texas
Beetle, American burying	<i>Nicrophorus americanus</i>	Cropland/hedgerow	E	Texas
Beetle, Coffin Cave	<i>Batrissodes</i>	Isolated caves within the		

mold	<i>texanus</i>	Edwards Limestone Formation	E	Texas
Beetle, Comal Springs dryopid	<i>Stygoparnus comalensis</i>	Comal Springs	E	Texas
Beetle, Comal Springs riffle	<i>Heterelmis comalensis</i>	Gravel substrates and shallow riffles in spring runs	E	Texas
Beetle, Helotes mold	<i>Batrisodes venyivi</i>	Cavelike formations of Bexar County, Texas	E	Texas
Beetle, Kretschmarr Cave mold	<i>Texamaurops reddelli</i>	Edward's Plateau caves	E	Texas

E - Endangered
T - Threatened

Response Zone 4 Ardmore Operations - Central

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Beetle, Tooth Cave ground	<i>Rhadine persephone</i>	Karst caves within the Edwards Limestone Formation	E	Texas
Bladderpod, white	<i>Lesquerella pallida</i>	Exposed calcareous Weches Formation outcrops	E	Texas
Bladderpod, Zapata	<i>Lesquerella thamnophila</i>	Open, evergreen thorn shrublands on gravelly to sandy loams	E	Texas
Cactus, black lace	<i>Echinocereus reichenbachii</i> var. <i>albertii</i>	Grassy openings on south Texas rangeland	E	Texas
Cactus, Nellie cory	<i>Coryphantha minima</i>	Rock crevices on novaculite outcrops	E	Texas
Cactus, Sneed pincushion	<i>Coryphantha sneedii</i> var. <i>sneedii</i>	Grasslands or lechuguilla-sotol shrublands on limestone outcrops and rocky slopes	E	Texas
Cactus, star	<i>Astrophytum asterias</i>	Sparse, fairly open brushland	E	Texas
Cactus, Tobusch fishhook	<i>Ancistrocactus tobuschii</i>	Sparse, fairly open brushland	E	Texas
Cat's-eye, Terlingua Creek	<i>Cryptantha crassipes</i>	Low hills and gentle slopes composed of a platy, yellowish limestone	E	Texas
Crane, whooping	<i>Grus americana</i>	Cropland/hedgerow,		

except where EXPN		grassland/herbaceous	E	Texas
Curlew, Eskimo	<i>Numenius borealis</i>	Cropland/hedgerow, grassland/herbaceous, tundra	E	Texas
Darter, fountain	<i>Etheostoma fonticola</i>	Springs and spring-fed streams in dense beds of aquatic plants	E	Texas
Dawn-flower, Texas prairie	<i>Hymenoxys texana</i>	Poorly drained, sparsely vegetated areas	E	Texas
Dogweed, ashy	<i>Thymophylla tephroleuca</i>	Fine sand or sandy-loam soils on level or rolling grasslands often shrub-invaded	E	Texas
Falcon, northern aplomado	<i>Falco femoralis septentrionalis</i>	Open grassland or savannah with scattered trees or shrubs	E	Texas

E - Endangered
T - Threatened

Response Zone 4 Ardmore Operations - Central

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Flycatcher, southwestern willow	<i>Empidonax traillii extimus</i>	Streamside thickets, brushy fields, and willows	E	Texas
Frankenia, Johnston's	<i>Frankenia johnstonii</i>	Arid, gravelly, limestone- derived soils on gentle slopes	E	Texas
Gambusia, Big Bend	<i>Gambusia gaigei</i>	Herbaceous wetlands	E	Texas
Gambusia, Clear Creek	<i>Gambusia heterochir</i>	Springs and outflow streams	E	Texas
Gambusia, Pecos	<i>Gambusia nobilis</i>	Herbaceous wetlands	E	Texas
Gambusia, San Marcos	<i>Gambusia georgei</i>	Herbaceous wetlands	E	Texas
Ground beetle, [unnamed]	<i>Rhadine exilis</i>	Burrows, under stones and in damp soil	E	Texas
Ground beetle, [unnamed]	<i>Rhadine infernalis</i>	Burrows, under stones and in damp soil	E	Texas
Harvestman, Bee Creek	<i>Texella reddelli</i>	Karst caves within the Edwards Limestone	E	Texas

Cave		Formation		
Harvestman, Bone Cave	<i>Texella reyesi</i>	Karst caves within the Edwards Limestone Formation	E	Texas
Harvestman, Cokendolpher Cave	<i>Texella cokendolpheri</i>	Subterranean obligate	E	Texas
Jaguarundi, Gulf Coast	<i>Herpailurus (=Felis) yagouaroundi cacomitli</i>	Tropical and subtropical forests	E	Texas
Ladies'-tresses, Navasota	<i>Spiranthes parksii</i>	Narrow band of vegetation called the Post-Oak Savannah	E	Texas
Manatee, West Indian	<i>Trichechus manatus</i>	Shallow coastal waters, estuaries, bays, rivers, and lakes	E	Texas
Manioc, Walker's	<i>Manihot walkerae</i>	Tamaulipan grassland-thornscrub community	E	Texas

E - Endangered
T - Threatened

Response Zone 4 Ardmore Operations - Central

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Meshweaver, Braken Bat Cave	<i>Cicurina venii</i>	Subterranean obligate	E	Texas
Meshweaver, Government Canyon Bat Cave	<i>Cicurina vespera</i>	Subterranean obligate	E	Texas
Meshweaver, Madla's Cave	<i>Cicurina madla</i>	Subterranean obligate	E	Texas
Meshweaver, Robber Baron Cave	<i>Cicurina baronia</i>	Subterranean obligate	E	Texas
Ocelot	<i>Leopardus (=Felis) pardalis</i>	Forest, wetlands	E	Texas
Phlox, Texas trailing	<i>Phlox nivalis ssp. texensis</i>	"In fire-maintained openings in upland longleaf pine savannas or	E	Texas
	<i>Echinocereus</i>	Flat hills on a specific		

Pitaya, Davis' green	<i>viridiflorus</i> var. <i>davisii</i>	substrate rich in quartz sand, in west Texas	E	Texas
Pondweed, Little Aguja (=Creek)	<i>Potamogeton clystocarpus</i>	Pools and flowing streams with igneous-derived alluvium.	E	Texas
Poppy-mallow, Texas	<i>Callirhoe scabriuscula</i>	Grasslands, shin oak shrublands, or open oak or mesquite woodlands	E	Texas
Prairie-chicken, Attwater's greater	<i>Tympanuchus cupido attwateri</i>	Forest	E	Texas
Pseudoscorpion, Tooth Cave	<i>Tartarocreagris texana</i>	Dry caves within the Edwards Limestone Formation	E	Texas
Pupfish, Comanche Springs	<i>Cyprinodon elegans</i>	Spring-marsh complex, irrigation canals	E	Texas
Pupfish, Leon Springs	<i>Cyprinodon bovinus</i>	Spring-marsh complex, irrigation canals	E	Texas
Rush-pea, slender	<i>Hoffmannseggia tenella</i>	Sparsely vegetated openings within bluestem-sacahuista grasslands	E	Texas
Salamander, Barton Springs	<i>Eurycea sosorum</i>	Aquatic, rubble in the spring outflow at Barton Springs	E	Texas

E - Endangered
T - Threatened

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6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Salamander, Texas blind	<i>Typhlomolge rathbuni</i>	Subterranean streams of the Purgatory Creek system	E	Texas
Sand-verbena, large-fruited	<i>Abronia macrocarpa</i>	Deep, well-drained sands	E	Texas
Sawfish, smalltooth	<i>Pristis pectinata</i>	Shallow coastal waters of tropical seas and estuaries; sheltered bays, on shallow banks, and in estuaries or river mouths	E	Texas
Sea turtle, hawksbill	<i>Eretmochelys imbricata</i>	Clear offshore waters off the mainland and on island shelves	E	Texas

Sea turtle, Kemp's ridley	<i>Lepidochelys kempii</i>	Shallow areas with sandy and muddy bottoms	E	Texas
Sea turtle, leatherback	<i>Dermochelys coriacea</i>	Warm sands of tropical beaches	E	Texas
Snail, Pecos assiminea	<i>Assiminea pecos</i>	Permanent, flowing, unpolluted, fresh to moderately saline water; Moist or saturated soil at stream or spring run margins with native vegetation growing in or adapted to aquatic or very wet environment, such as salt grass or sedges; and Stable water levels with natural diurnal and seasonal variation	E	Texas
Snowbells, Texas	<i>Styrax texanus</i>	Praries and pastures	E	Texas
Spider, Government Canyon Bat Cave	<i>Neoleptoneta microps</i>	Subterranean obligate	E	Texas
Spider,Tooth Cave	<i>Leptoneta myopica</i>	Subterranean obligate	E	Texas
Tern, least interior pop.	<i>Sterna antillarum</i>	Open sandy or gravelly beach, dredge spoil and other open shoreline areas	E	Texas
Toad, Houston	<i>Bufo houstonensis</i>	Soft sandy soils; pine forest, mixed deciduous forest	E	Texas
Vireo, black-capped	<i>Vireo atricapillus</i>	Shrubland/chaparral	E	Texas
Warbler (=wood), golden-cheeked	<i>Dendroica chrysoparia</i>	Woodlands with tall Ashe juniper, oaks, and other hardwood trees	E	Texas
Whale, finback	<i>Balaenoptera physalus</i>	Offshore ocean waters	E	Texas

E - Endangered
T - Threatened

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6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
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Whale, humpback	<i>Megaptera novaeangliae</i>	Surface of the ocean	E	Texas
Wild-rice, Texas	<i>Zizania texana</i>	Gravelly, sandy to silty clays in relatively shallow water	E	Texas
Woodpecker, red-cockaded	<i>Picoides borealis</i>	Open pine forests with large, widely-spaced older trees	E	Texas
(No common name)	<i>Geocarcinus minimum</i>	Grazing land	T	Texas
Bear, Louisiana black	<i>Ursus americanus luteolus</i>	Forest - mixed, woodland	T	Texas
Cactus, Chisos Mountain hedgehog	<i>Echinocereus chisoensis var. chisoensis</i>	Desert grasslands or sparsely vegetated shrublands on gravelly flats and terraces	T	Texas
Cactus, Lloyd's Mariposa	<i>Echinomastus mariposensis</i>	Arid, gravelly, limestone-derived soils on gentle slopes	T	Texas
Cory cactus, bunched	<i>Coryphantha ramillosa</i>	Chihuahuan Desert succulent scrub on rocky slopes, ledges, and gravelly flats	T	Texas
Eagle, bald Sonoran Desert DPS	<i>Haliaeetus leucocephalus</i>	Coastlines, rivers, lakes, wet prairies, and coastal pine lands	T	Texas
Minnow, Devils River	<i>Dionda diaboli</i>	Creek medium river	T	Texas
Oak, Hinckley	<i>Quercus hinckleyi</i>	Arid, rocky, limestone-derived soils or limestone outcrops	T	Texas
Owl, Mexican spotted	<i>Strix occidentalis lucida</i>	Forest, woodlands	T	Texas
Plover, piping except Great Lakes watershed	<i>Charadrius melodus</i>	Wetlands	T	Texas
Salamander, San Marcos	<i>Eurycea nana</i>	Clear spring water coming from the headwaters of the San Marcos River	T	Texas
Sea turtle, green except where endangered	<i>Chelonia mydas</i>	Coasts, open sea	T	Texas

E - Endangered
T - Threatened

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Sea turtle, loggerhead	<i>Caretta caretta</i>	Estuaries, coastal streams and salt marshes	T	Texas
Shiner, Arkansas River Arkansas R. Basin	<i>Notropis girardi</i>	Unshaded channels of creeks and small to large rivers	T	Texas
Snake, Concho water	<i>Nerodia paucimaculata</i>	Bare rock/talus/scree	T	Texas
Sunflower, Pecos (=puzzle, =paradox)	<i>Helianthus paradoxus</i>	Desert wetlands	T	Texas

E - Endangered
T - Threatened

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6.6 TACTICAL OVERVIEW MAP

Under Review For Future Development

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6.7 TACTICAL PLAN INDEX

SITE NAME
<u>Under Review For Future Dev.</u>

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6.8 TACTICAL PLANS

[Click here for Site 1 - Under Review For Future Dev.](#)

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6.9 SENSITIVITY MAPS**[Click here for Ringgold Crude Oil Pipeline](#)****[Click here for Wasson Crude Oil Pipeline](#)****[Click here for Wasson Adj Crude Oil Pipeline](#)**

SECTION 7

Last Revised: May 2008

SUSTAINED RESPONSE ACTIONS

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7.1 Response Resources**7.1.1 Response Equipment****Figure 7.1-1 - Regional Company and Response Contractor's
Equipment List / Response Time****7.1.2 Response Equipment Inspection and Maintenance****7.1.3 Contracts, Contractor Equipment, and Labor****7.1.4 Command Post****Figure 7.1-2 - Command Post Checklist****7.1.5 Staging Area****7.1.6 Communications Plan****Figure 7.1-3 - Communications Checklist****7.2 Public Affairs****Figure 7.2-1 - Incident Fact Sheet****7.3 Site Security Measures****Figure 7.3-1 - Site Security Checklist****7.4 Waste Management****Figure 7.4-1 - Waste Management Flow Chart****Figure 7.4-2 - General Waste Containment and Disposal
Checklist**

SECTION 7
SUSTAINED RESPONSE ACTIONS, CONTINUED

7.4.1 Waste Storage

Figure 7.4-3 - Temporary Storage Methods

7.4.2 Waste Transfer

7.4.3 Waste Disposal

7.1 RESPONSE RESOURCES

7.1.1 Facility Response Equipment

BOOM					
TYPE/MODEL/YEAR	QUANTITY	SIZE	CONTAINMENT AREA (sq ft)	STORAGE LOCATION	
The Company does not own any spill response equipment. The Company has contracts in place with oil spill removal organizations and other clean-up contractors for response to a discharge.					

***Note:** Response equipment is tested and deployed as described in **FIGURE A.1-2** and **FIGURE A.1-4**.

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

*USCG Classified OSRO for facility

COMPANY/CONTRACTOR	EQUIPMENT	RESPONSE TIME
Conestoga Rover Associates, Inc. Houston, TX	Full Response Capability	12 hours

Note: Response times are based on 35 mph for land (five knots for water) and take into account traffic, weather, and other environmental conditions that could restrict response efforts.

7.1.2 Response Equipment Inspection and Maintenance

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 annual 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.1**. A Spill/Exercise Documentation form is in **FIGURE A.1-3**. **FIGURE A.1-4** provides a log for response equipment testing and deployment drills.

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 **FIGURE 3.1-4**.
- The Company has ensured by contract the availability of private personnel and equipment necessary to respond, to the maximum extent practicable, to the worst case discharge or the substantial threat of such discharge.
- Contractors without USCG classification deploy and inspect boom to meet PREP guidelines. Company requires that these exercises are completed annually.
- **APPENDIX B** contains evidence of contracts for the Company's primary response contractors and equipment lists of contractors without USCG classification.

7.1.4 Command Post

In the event of a major spill or other emergency, both a Company off-site EMT Command Center and a Command Post (located close to but at a safe distance back from the incident scene) may be established. For a minor emergency, only a Command Post may be established. Refer to **FIGURE 7.1-2** for guidelines in establishing a Command Post.

FIGURE 7.1-2 - COMMAND POST CHECKLIST

COMMAND POST CHECKLIST	INITIALS	DATE/TIME STARTED	DATE/TIME COMPLETED
Ensure adequate space for size of staff.			
Ensure 24-hour accessibility.			
Ensure personal hygiene facilities.			
Ensure suitability of existing communications			

resources (phone/fax/radio).			
Ensure suitability of private conference and briefing rooms.			
Identify Command Post security requirements, safe location.			
Notify other parties of Command Post location; provide maps/driving directions.			
Determine staging areas and incident base locations.			
Identify future need to move, upgrade facilities.			

Command Posts for this facility are located at "list location": The Command Post will be positioned within a mile radius of the area of concern

7.1.5 Staging Area

According to the incident type and magnitude, numerous staging areas may be required to support containment and cleanup operations. The staging area should be located in the cold zone inside the delineated isolation perimeter.

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

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

In addition, the staging area should:

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

Staging areas for this facility are located at "list location": The Staging Area will be positioned within a mile radius of the area of concern

7.1.6 Communications Plan

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

Only land lines and cell phones will be used, six satellite phones are available.

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

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

FIGURE 7.1-3 - COMMUNICATIONS CHECKLIST

COMMUNICATIONS CHECKLIST	INITIALS	DATE/TIME STARTED	DATE/TIME COMPLETED
Develop a Communications Plan.			
Ensure adequate phone lines per staff element - contact local provider.			
Ensure adequate fax lines - contact local provider.			
Evaluate need for internet access.			
Ensure recharging stations for cellular phones.			
VHF radio communications: <ul style="list-style-type: none">• Establish frequencies.• Assign call signs.• Distribute radios.• Establish communications schedule.			
Ensure recharging stations for VHF radios.			
Determine need for VHF repeaters.			
Ensure copy machine available.			
Ensure communications resource accountability.			
Ensure responders have capability to communicate with aircraft.			

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

7.2 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
- Incident Fact Sheet (**FIGURE 7.2-1**)

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7.2 PUBLIC AFFAIRS, CONTINUED

GUIDELINES FOR DEALING WITH THE MEDIA

- The Facility or Regional Managers 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.
- **IMPORTANT:** Notify Regional Management and/or Corporate Communications for guidance in addressing media inquiries.

Provide

- A brief, general description of what happened.
- Number of injured or killed, if known.
- 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.
- 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. Don't use industry jargon or acronyms.
- 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.

7.2 PUBLIC AFFAIRS, CONTINUED

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

FIGURE 7.2-1 - INCIDENT FACT SHEET

What occurred:
When (time):
Where (location):
What are hazards:
How is the situation being handled:
How many people involved:
Confirmed injuries/fatalities:
Treatment location:
Name of injured (release only after next of kin are notified):

Name of fatalities (release only after next of kin are notified):
What agencies have been notified:
On scene? (yes/no):
Who is in charge:
Has outside help been requested:
Who:
On scene? (yes/no):
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:
Is there a need for evacuation:

(b) (7)(F)

7.4 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 5.4**) addressing the proper PPE and waste handling procedures.
- Development of a Disposal Plan (**SECTION 5.6**) 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 Federal, State, and Local laws and 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.
- Treating waste to reduce hazards or reducing amount of waste generated.

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7.4 WASTE MANAGEMENT, CONTINUED

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

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

- Storage
- Waste segregation
- Packaging
- Transportation

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

A general flow chart for waste management guidelines is provided in **FIGURE 7.4-1**. An overall checklist for containment and disposal is provided in **FIGURE 7.4-2**.

FIGURE 7.4-1 - WASTE MANAGEMENT FLOW CHART

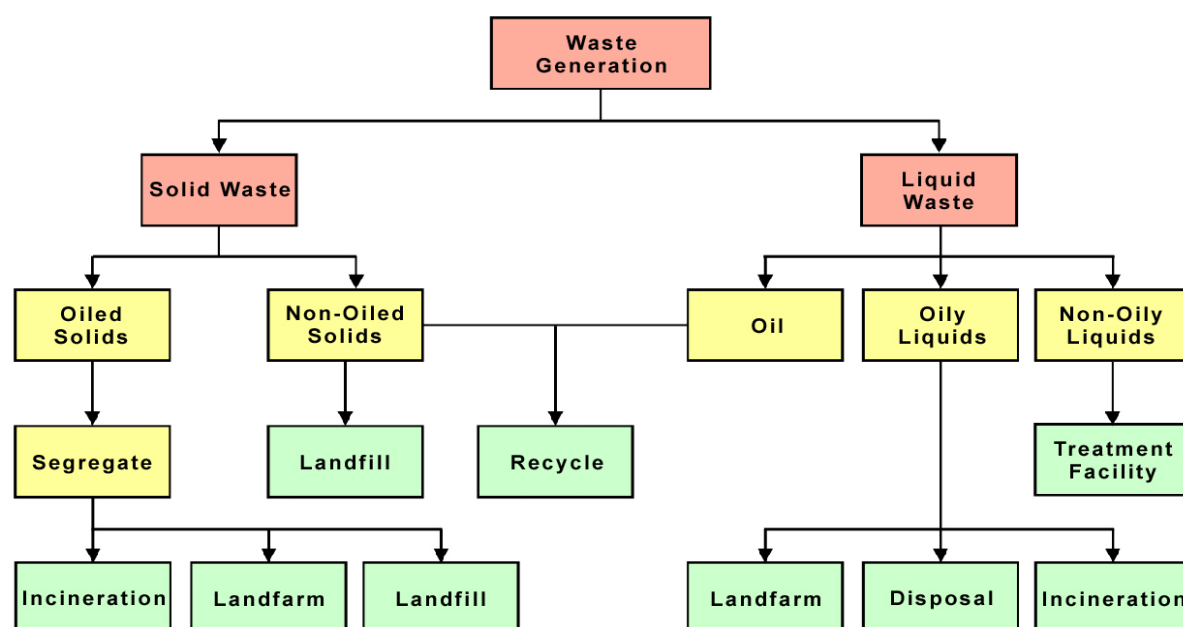


FIGURE 7.4-2 - GENERAL WASTE CONTAINMENT AND DISPOSAL CHECKLIST

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?	

7.4.1 Waste 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 7.4-3](#). 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.

Use of any site for storage is dependent on the approval of local authorities. The following elements affect the choice of a potential storage site:

- Geology
 - Soil
 - Surface water
 - Covered materials
 - Climatic factor
 - Toxic air emissions
 - Access
- Ground water
 - Flooding
 - Slope
 - Capacity
 - Land use
 - Security
 - Public contact

FIGURE 7.4-3 - 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 ³
Bags		X	X	X			1.0-2.0 yd ³
Boxes		X	X	X			1-5 yd ³
Open top rolloff	X	X	X	X	X	X	8-40 yd ³
Roll top rolloff	X	X	X	X	X	X	15-25 yd ³
Vacuum box	X	X					15-25 yd ³
Frac tank	X	X					500-20,000

							gal
Poly tank	X	X					200-4,000 gal
Vacuum truck	X	X	X				2,000-5,000 gal
Tank trailer	X	X					2,000-4,000 gal
Barge	X	X					3,000+ gal
Berm, 4 ft		X	X	X	X	X	1 yd ³
Bladders	X	X					25-1,500 gal

7.4.2 Waste Transfer

In most oil spill response operations, it would be necessary to transfer recovered oil and oil debris from one point to another several times before the oil and oily debris are ultimately disposed of at a state approved disposal site. Depending on the location of response operations, any or all of the following transfer operations may occur:

- Directly into the storage tank of a vacuum device.
- Directly in to impermeable bags that, in turn, are placed in impermeable containers.
- From a vacuum device storage tank to a truck.
- From containers to trucks.
- From trucks to lined pits.
- From lined pits to incinerators and/or landfills.
- From a tank truck to a processing system (i.e., oil/water separator).
- From a processing system to a recovery system and/or incinerator.
- From a skimming vessel or flexible bladder to a barge.
- From a barge to a tank truck.
- Directly into the storage tank on a dredge.
- From portable or vessel mounted skimmers into flexible bladder tanks, the storage tanks of the skimming vessel itself, or a barge.

There are four general classes of transfer systems that could be employed to effect oily waste transfer operations. The following is a brief description of the four transfer systems:

Pumps

Rotary pumps, such as centrifugal pumps, may be used when transferring large volumes of oil,

but they may not be appropriate for pumping mixtures of oil and water. The extreme shearing action of centrifugal pumps tends to emulsify oil and water, thereby increasing the viscosity of the mixture and causing low, inefficient transfer rates.

The resultant emulsion would also be more difficult to separate into oil and water fractions. Lobe or "positive displacement" pumps work well on heavy, viscous oils, and do not emulsify the oil/water mixture. Double-acting piston and double acting diaphragm pumps are reciprocating pumps that may also be used to pump oily wastes.

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7.4.2 Waste Transfer, Continued

Vacuum Systems

Vacuum systems, such as air conveyors, vacuum trucks and portable vacuum units, may be used to transfer viscous oils and debris but they usually pick up a very high water/oil ratio.

Belt / Screw Conveyors

Conveyor may be used to transfer oily wastes containing a large amount of debris. These systems can transfer weathered debris laden oil either horizontally or vertically for short distances but are bulky and difficult to operate.

Wheeled Vehicles

Wheeled vehicles may be used to transfer liquid waste of oily debris to storage or disposal sites. These vehicles are readily available but have a limited rate (i.e., 100 bbls) and require good site access.

7.4.3 Waste Disposal

In order to obtain the best overall Incident Disposal Plan, a combination of methods should be used. There is no template or combination of methods that can be used in every spill situation. Each incident should be reviewed carefully to ensure an appropriate combination of disposal techniques are employed.

The following is a brief description of some disposal techniques available for recovered oil and oily debris.

Recycling

Recycling involves processing discarded materials for another use.

Incineration

This technique entails the destruction of the recovered oil by high temperature thermal oxidation reactions. There are licensed incineration facilities as well as portable incinerators that may be brought to a spill site. Incineration may require the approval of the local Air Pollution Control Authority.

In-Situ Burning / Open Burning

Burning techniques entail igniting oil or oiled debris allowing it to burn under ambient conditions. These disposal techniques are subject to restrictions and permit requirements established by federal, state, and local laws. Permission for in-situ burning may be difficult to obtain when the burn takes place near populated areas.

As a general rule, in-situ burning would be appropriate only when atmospheric conditions will

allow the smoke to rise several hundred feet and rapidly dissipate. Smoke from burning oil will normally rise until its temperature drops to equal the ambient temperature. Afterwards, it will travel in a horizontal direction under the influence of prevailing winds.

Landfill Disposal

This technique entails burying the recovered oil in a approved landfill in accordance with regulatory procedures. Landfill disposal of free liquids is prohibited by federal law in the United States.

SECTION 8

Last Revised: May 2008

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 - Standard Incident Debriefing Form8.3.1 Final Spill Cleanup Report

8.1 TERMINATING THE RESPONSE

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

8.2 DEMOBILIZATION

The Company can reduce costs considerably by developing a Demobilization Plan (**SECTION 5.8**). Therefore, emphasis must be placed on establishing efficient demobilization procedures. A Demobilization Checklist is provided in **FIGURE 8.2-1**.

FIGURE 8.2-1 - DEMOBILIZATION CHECKLIST

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

Develop impact assessment and statements.			
Obtain concurrence of Planning and Operations Group Leaders before release of personnel or equipment.			

8.3 POST-INCIDENT REVIEW

All Facility personnel involved in the incident shall be debriefed (by the Company) within two weeks after termination of operations. A Standard Incident Debriefing Form is provided in **FIGURE 8.3-1**. 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 should also be used for evaluating training drills or exercises. Key agency personnel that were involved in the response will be invited to attend the post-incident review.

Debriefs with participating agencies and organizations may be appropriate if unified command has been established during a spill and are required when significant Plan updates are identified or significant lessons can be recorded and implemented.

FIGURE 8.3-1 - STANDARD INCIDENT DEBRIEFING FORM

Name of incident:
Date:
PERSONNEL DEBRIEFED
Name:
Normal duty:
Summary of duties performed during incident (list date, time, and location):
Positive aspects of the response:

Aspects of the response which could be improved:
Name:
Title:
Signature:

8.3.1 Final Spill Cleanup Report

A final, comprehensive report shall be prepared by the Incident Commander or designee and forwarded to the Administrator within 90 days 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):

- Name, address, and telephone number of the owner or operator.
- Name, address, and telephone number of the Facility.
- 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.
- Estimated quantity and disposition of recovered material that resulted from the incident.

- Description of actual or potential hazards to human health or 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.
- The extent of injuries, if any.
- 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.

8.3.1 Final Spill Cleanup Report, Continued

- All other relative information.
- A final signature as follows:

The above information is true to the best of my knowledge and belief:

Name:
Title:
Signature:
Date:

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A. TRAINING / EXERCISES**B. CONTRACTOR RESPONSE EQUIPMENT****C. HAZARD EVALUATION AND RISK ANALYSIS****D. CROSS-REFERENCES****E. ACRONYMS AND DEFINITIONS****F. ADDITIONAL INFORMATION**

APPENDICES



APPENDIX A

Last Revised: May 2008

TRAINING / EXERCISES

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A.1 Exercise Requirements and SchedulesFigure A.1-1 - PREP Response Plan Core ComponentsFigure A.1-2 - Exercise RequirementsFigure A.1-3 - Spill / Exercise Documentation FormFigure A.1-4 - EPA Required Response Equipment Testing
and Deployment Drill LogFigure A.1-5 - Qualified Individual Notification Drill LogFigure A.1-6 - Emergency Management Team Tabletop
Exercise LogA.2 Training Program**Figure A.2-1 - Training Requirements**Figure A.2-2 - PREP Training Program MatrixFigure A.2-3 - Personnel Response Training Log

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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 HSE Managers or designee, 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 a Spill/Exercise Documentation form or a corresponding Company form may be used, and **FIGURE A.1-4** provides a log for response equipment testing and deployment drill.

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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"> • Unified Command • Response management system 	<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. Source 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, mitigate, and remove the discharged product includes mitigation and removal activities.
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 throughout the scope of the Plan for the spill response organization.
11. Transportation	Demonstrate the ability to establish effective multi-mode transportation both for execution of the discharge and support functions.
12. Personnel support	Demonstrate the ability to provide the necessary logistical 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 an effective procurement system.
15. Documentation	Demonstrate the ability of the spill response organization to document all operational and support aspects of the response and provide detailed records of decisions and actions taken.

FIGURE A.1-2 - EXERCISE REQUIREMENTS

EXERCISE TYPE	EXERCISE CHARACTERISTICS
Facility/QI notification	<ul style="list-style-type: none">• Conducted quarterly.• The facility initiates mock spill notification to QI.• The Qualified Individual documents time/date of notification, name, and phone number of individual contacted.• Document in accordance with form in FIGURE A.1-3.
Equipment deployment	<ul style="list-style-type: none">• Conducted annually.• Response contractors listed in the plan must participate in annual deployment exercise.• An exercise where response equipment is deployed to a

	<p>specific site and operated in its normal operating medium.</p> <ul style="list-style-type: none">• Document in accordance with form in FIGURE A.1-3.
EMT tabletop	<ul style="list-style-type: none">• Conducted annually.• Tests EMT’s response activities/responsibilities.• Documents Plan’s effectiveness.• Must exercise worst case discharge scenario once every three years.• Must test all Plan components at least once every three years• Document in accordance with form in FIGURE A.1-3.
Unannounced	<ul style="list-style-type: none">• Company will either participate in unannounced tabletop exercise or equipment deployment exercise on an annual basis, if selected.• Company may take credit for participation in government-initiated unannounced drill in lieu of drill required by PREP guidelines.• Plan holders who have participated in a PREP government-initiated unannounced exercise will not be required to participate in another one for at least 36 months from the date of the exercise.
Area	<ul style="list-style-type: none">• An industry plan holder that participates in an Area Exercise would not be required to participate in another Area Exercise for a minimum of six years.
OTHER EXERCISE CONSIDERATIONS	
Drill program evaluation procedures	<ul style="list-style-type: none">• Company conducts post-exercise meetings to discuss positive items, areas for improvement, and to develop action item checklist to be implemented later.
Records of drills	<ul style="list-style-type: none">• Company will maintain exercise records for five years following completion of each exercise.• Records will be maintained at the facility via company electronic documentation system.• Company will verify appropriate records are kept for each spill response contractor listed in Plan as required by PREP guidelines (annual equipment deployment drill, triennial unannounced drill, etc.).

FIGURE A.1-3 - SPILL / EXERCISE DOCUMENTATION FORM

Retain this form for a minimum of five years (Other versions of this form may be used).

1. Date(s) performed:		
2. <input type="checkbox"/> Exercise <input type="checkbox"/> Actual spill		
If exercise: <input type="checkbox"/> Announced <input type="checkbox"/> Unannounced <input type="checkbox"/> Deployment <input type="checkbox"/> Notification <input type="checkbox"/> Tabletop		
If exercise, frequency: <input type="checkbox"/> Quarter <input type="checkbox"/> 1st <input type="checkbox"/> 2nd <input type="checkbox"/> 3rd <input type="checkbox"/> 4th <input type="checkbox"/> Annual		
3. Location of exercise/spill:		
4. Time started:		
5. Description of scenario or spill including volume and content (crude oil, condensate, etc.):		
6. Describe how the following objectives were exercised:		
Team's knowledge of the Oil Spill Response Plan:		
	Yes	No
Was briefing meeting conducted:	<input type="checkbox"/>	<input type="checkbox"/>
Established field Command Post:	<input type="checkbox"/>	<input type="checkbox"/>
Confirmed source was stopped:	<input type="checkbox"/>	<input type="checkbox"/>
Developed Site Safety and Health Plan:	<input type="checkbox"/>	<input type="checkbox"/>
Prepared ICS 201:	<input type="checkbox"/>	<input type="checkbox"/>
Established work zones and perimeter security:	<input type="checkbox"/>	<input type="checkbox"/>
Developed short range tactical plan:	<input type="checkbox"/>	<input type="checkbox"/>
Developed long range tactical plan:	<input type="checkbox"/>	<input type="checkbox"/>
Proper Notifications:		
Qualified Individual (or designee):	<input type="checkbox"/>	<input type="checkbox"/>
Facility Manager:	<input type="checkbox"/>	<input type="checkbox"/>
Release/Spill Report Form completed:	<input type="checkbox"/>	<input type="checkbox"/>

Notification to agencies completed (attach log):	<input type="checkbox"/>	<input type="checkbox"/>
Transportation/Communication System:		
Established primary/secondary communication system:	<input type="checkbox"/>	<input type="checkbox"/>
Primary: <input type="checkbox"/> cellular phone <input type="checkbox"/> two way radio <input type="checkbox"/> land telephone line		
Secondary: <input type="checkbox"/> cellular phone <input type="checkbox"/> two way radio <input type="checkbox"/> land telephone line		
<input type="checkbox"/> Other		

FIGURE A.1-3 - SPILL / EXERCISE DOCUMENTATION FORM, CONTINUED

Transportation/Communication System, Continued:		
	Yes	No
Motor vessel deployed:	<input type="checkbox"/>	<input type="checkbox"/>
Provider name:		
Helicopter/Sea plane deployed:	<input type="checkbox"/>	<input type="checkbox"/>
Call sign:		
Describe function (i.e., transportation, surveillance, dispersant application):		
Ability to access contracted Oil Spill Removal Organizations (OSROs):		
Who contacted - (name of individual and OSRO):		
When contacted:		
Response time projection for deployment:		
Type and amount of containment used:		
Spill material recovered:	<input type="checkbox"/>	<input type="checkbox"/>
Spilled material disposed:	<input type="checkbox"/>	<input type="checkbox"/>
Where?		

Ability to coordinate spill response with on-scene coordinator, state, and applicable agencies:		
Was regulatory on-scene coordinator(s) contacted:	<input type="checkbox"/>	<input type="checkbox"/>
List person and agency represented:		
Ability to access sensitive site and resource information in the Area Contingency Plan (ACP):		
Was pre-impact assessment conducted:	<input type="checkbox"/>	<input type="checkbox"/>
Were pre-impact samples taken:	<input type="checkbox"/>	<input type="checkbox"/>
Were pre-impact photographs taken:	<input type="checkbox"/>	<input type="checkbox"/>
Were NRDA specialists mobilized:	<input type="checkbox"/>	<input type="checkbox"/>
Were deficiencies identified:	<input type="checkbox"/>	<input type="checkbox"/>
If yes, changes implemented:	<input type="checkbox"/>	<input type="checkbox"/>
If no, why were changes not implemented:		
LESSONS LEARNED	PERSON RESPONSIBLE FOR FOLLOW-UP OF CORRECTIVE MEASURES	
	Name:	
	Position:	
	Certifying Signature:	

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

(Other versions of this form may be used)

Item:	Date of Last Update:
ACTIVITY	INFORMATION

Last inspection or response equipment test date	
Inspection frequency	
Last deployment drill date	
Deployment frequency	
OSRO Certification (if applicable)	

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

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

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

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

(Other versions of this form may be used)

--	--

Company:	Date:
ACTIVITY	INFORMATION
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	

Company:	Date:
ACTIVITY	INFORMATION
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	

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

(Other versions of this form may be used)

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	

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">• All field personnel will be trained to properly report/monitor spills.• Plan will be reviewed annually with employees.• The Personnel Response Training Log is located in FIGURE A.2-3.
OSHA training requirements	<ul style="list-style-type: none">• All Company responders designated in Plan must have 24 hours of initial spill response training.• Laborers having potential for minimal exposure must have 24 hours of initial oil spill response instruction and eight hours of actual field experience.

	<ul style="list-style-type: none">• Responders having potential exposure to hazardous substances at levels exceeding permissible exposure limits must have 40 hours of initial training offsite and 24 hours of actual field experience.• On-site management/supervisors required to receive same training as equipment operators/general laborers plus eight hours of specialized hazardous waste management training.• Managers/employees require eight hours of annual refresher training.
Spill management team personnel training	<ul style="list-style-type: none">• See recommended PREP Training Matrix (<u>FIGURE A.2-2</u>).
Training for casual laborers or volunteers	<ul style="list-style-type: none">• Company will not use casual laborers/volunteers for operations requiring HAZWOPER training.
Wildlife	<ul style="list-style-type: none">• Only trained personnel approved by USFWS and appropriate state agency will be used to treat oiled wildlife.
Training documentation and record maintenance	<ul style="list-style-type: none">• Training activity records will be retained for five years for all personnel following completion of training.• Company will retain training records indefinitely for individuals assigned specific duties in the Plan.• Training records will be maintained at the Corporate Headquarters.

FIGURE A.2-2 - PREP TRAINING PROGRAM MATRIX

TRAINING ELEMENT	QUALIFIED INDIVIDUAL (QI)	EMERGENCY MANAGEMENT TEAM (EMT)	FACILITY 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 OSROs 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: <ul style="list-style-type: none">• Command and control• Public information• Safety• Liaison with government agencies• Spill response operations• Planning• Logistics support• Finance	X	X	X
The responsibilities and duties of each Emergency Management Team (EMT) 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		
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	X	X	X

state agencies in pollution response			
--------------------------------------	--	--	--

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

TRAINING ELEMENT	QUALIFIED INDIVIDUAL (QI)	EMERGENCY MANAGEMENT TEAM (EMT)	FACILITY PERSONNEL
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 EMT		x	
Procedures for the post discharge review of the plan to evaluate and validate its effectiveness		x	
Basic information on spill operations and oil spill cleanup technology including: <ul style="list-style-type: none">Oil containmentOil recovery methods and devicesEquipment limitations and usesShoreline cleanup and protectionSpill trajectory analysisUse of dispersants, in-situ burning, bioremediationWaste storage and disposal considerations		x	
Hazard recognition and evaluation		x	
Site safety and security procedures		x	
Personnel management, as applicable to			

designated job responsibilities		X	
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">• Tank overfill• Tank rupture• Piping or pipeline rupture• Piping or pipeline leak, both under pressure or not under pressure, if applicable• Explosion or fire• Equipment failure• Failure of secondary containment system			X
QI's name and how to contact him or her			X

FIGURE A.2-3 - PERSONNEL RESPONSE TRAINING LOG

Training records are maintained in the company training database (Other versions of this form may be used).

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

*Qualified Individual

APPENDIX B

Last Revised: May 2008

CONTRACTOR RESPONSE EQUIPMENT

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B.1 Cooperatives and ContractorsB.1.1 OSRO ClassificationFigure B.1-1 - Evidence of Contracts and Equipment Lists

Response Zone 4 Ardmore Operations - Central

B.1 COOPERATIVES AND CONTRACTORS

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

B.1.1 OSRO Classification

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

The following is a listing of the USCG classified OSROs that may respond to incidents for areas listed in this Plan. For a detailed listing of USCG classified OSROs and other contractors, refer to **FIGURE 3.1-4** and **FIGURE 7.1-1**.

COMPANY / CONTRACTOR / TERM	APPLICABLE COTP ZONE (S)	USCG CLASSIFICATIONS	RESPONSE TIME
-----------------------------------	-----------------------------	----------------------	------------------

Response Zone 4 Ardmore Operations - Central

The following contractors are retained by the Company, but are not USCG classified OSROs within this Area:

- Conestoga Rover Associates, Inc.
6320 Rothway, Suite 100
Houston,TX
77040
Response Time:12 hours
Term of contract:
To

FIGURE 7.1-1 provides both OSRO and non-OSRO summarized equipment lists and response times.

FIGURE B.1-1 provides evidence of contracts with OSROs and equipment lists for contractors without USCG classification.

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FIGURE B.1-1 - EVIDENCE OF CONTRACTS AND EQUIPMENT LISTS

- **Conestoga Rover Associates, Inc., Houston, TX**

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APPENDIX C

Last revised: May 2008

HAZARD EVALUATION AND RISK ANALYSIS

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C.1 Spill Detection

C.2 Worst Case Discharge (WCD) Scenario

C.3 Planning Volume Calculations

C.4 Spill Volume Calculations

C.5 Pipeline - Abnormal Conditions

C.6 Product Characteristics and Hazards

Figure C.6-1- Summary of Commodity Characteristics

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C.1 SPILL DETECTION

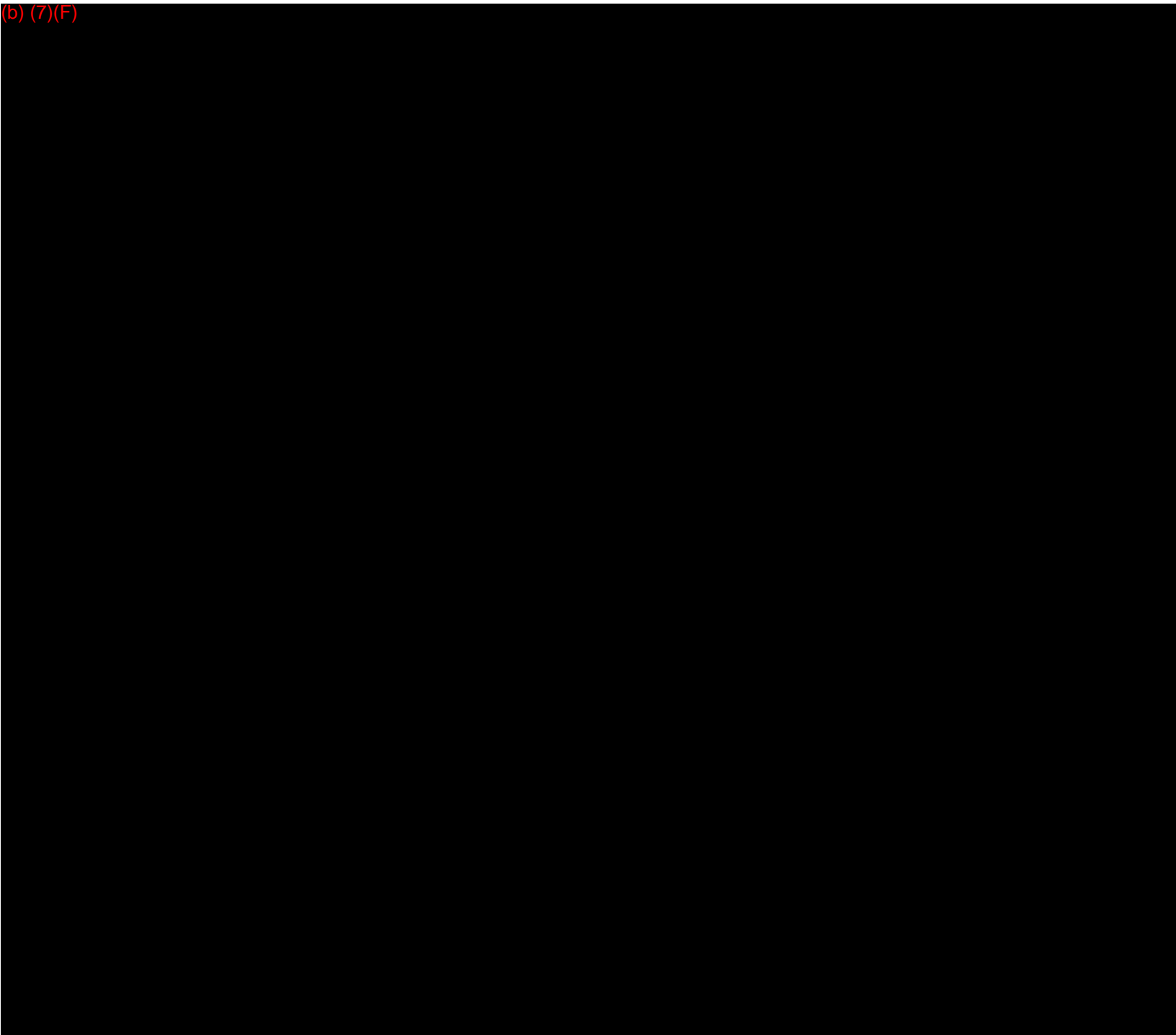
Detection

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

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

AVAILABILITY - ALL TANKS

(b) (7)(F)



(b) (7)(F)

- **Training**

All operators are compliant with DOT 195 Operator Qualification Requirements.

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C.1 SPILL DETECTION, CONTINUED

Visual detection by Company personnel

Aerial patrol flights will be made 26 times a year not to exceed 21 days apart. If unable to fly

area personnel will walk or drive the right-of-way. The intent of the patrol is to observe the area directly over the pipeline right-of-way for leaks, exposed pipes, washes, missing markers and other unusual conditions. Construction on either side of the pipeline right-of-way is also monitored.

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

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

FIGURE 2.1-1 provides a checklist for initial response actions.

Visual detection by the public

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

Pipeline shutdown

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

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

C.2 WORST CASE DISCHARGE (WCD) SCENARIO

The equipment and personnel to respond to a spill are available from several sources and are provided with the equipment and contractors in **SECTION 7** and **APPENDIX B**. The following sections are discussions of these scenarios.

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

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

1. The First Responder would notify Supervisory Personnel and notifications would be initiated in accordance with **FIGURE 2.1-1**.
2. The Area Supervisor/Manager of Operations 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 2.1-1** and evacuate personnel as needed in accordance with **SECTION 2**.
 - Direct facility responders to shut down ignition sources.
 - Direct facility personnel to position resources in accordance with **SECTION 6**.
 - Complete spill report form in accordance with **FIGURE 3.1-2**.
 - Ensure regulatory agencies are notified (**FIGURE 3.1-4**).
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 Emergency Management Team. However, for a large spill, the Qualified Individual would assume the role of Incident Commander and would activate the entire Emergency 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 4.6** as a reminder of ICS position responsibilities. The primary focus would be to establish incident priorities and objectives and to brief staff accordingly.
6. The Emergency 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 5.4**)
 - Site Security (**SECTION 5.7**)
 - Incident Action (**SECTION 5.3.2**)
 - Decontamination (**SECTION 5.5**)

- Disposal (**SECTION 5.6**)
- Demobilization (**SECTION 5.8**)

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

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C.3 PLANNING VOLUME CALCULATIONS

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

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C.4 SPILL VOLUME CALCULATIONS

DOT/PHMSA portion of pipeline/facilities

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

1. The pipeline's maximum shut-down response time in hours (based on historic discharge data or in the absence of such data, the operators best estimate), multiplied by the maximum flow rate expressed in barrels per hour (based on the maximum daily capacity of the pipeline), plus the largest drainage volume after shutdown of the line section(s) in the response zone expressed in barrels; or
2. The largest foreseeable discharge for the line section(s) within a response zone, expressed in barrels (cubic meters), based on the maximum historic discharge, if one exists, adjusted for any subsequent corrective or preventative action taken; or
3. If the response zone contains one or more breakout tanks, the capacity of the single largest tank or battery of tanks within a single secondary containment system, adjusted for the capacity or size of the secondary containment system, expressed in barrels.

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

SPILL PREVENTION MEASURES	PERCENT REDUCTION ALLOWED
Secondary containment capacity greater than 100% capacity of tank and designed according to NFPA 30	50%
Tank built, rebuilt, and repaired according to API Std 620/650/653	10%

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

***Note:** The facilities do not have tertiary containment.

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

The Company has determined the worst case discharge volume to be a catastrophic line failure of the largest line section with the greatest drainage capacity in each response zone or 30 percent of the volume of the largest tank in each zone.

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

All of the breakout tanks in the pipeline system are within adequate secondary containment, therefore, the discharge volumes for the largest tank was determined by adjusting the total tank volume downward by 70% per the company guidelines.

Considering the volume of release from a line break compared to that of historic discharge in the zone and to the volumes released from a tank failure, the tank failure was found to represent the worst case scenario.

The maximum historic discharge is not applicable for WCD covered by this plan. Given below are the tank and pipeline WCD calculations for this plan.

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(b) (7)(F)

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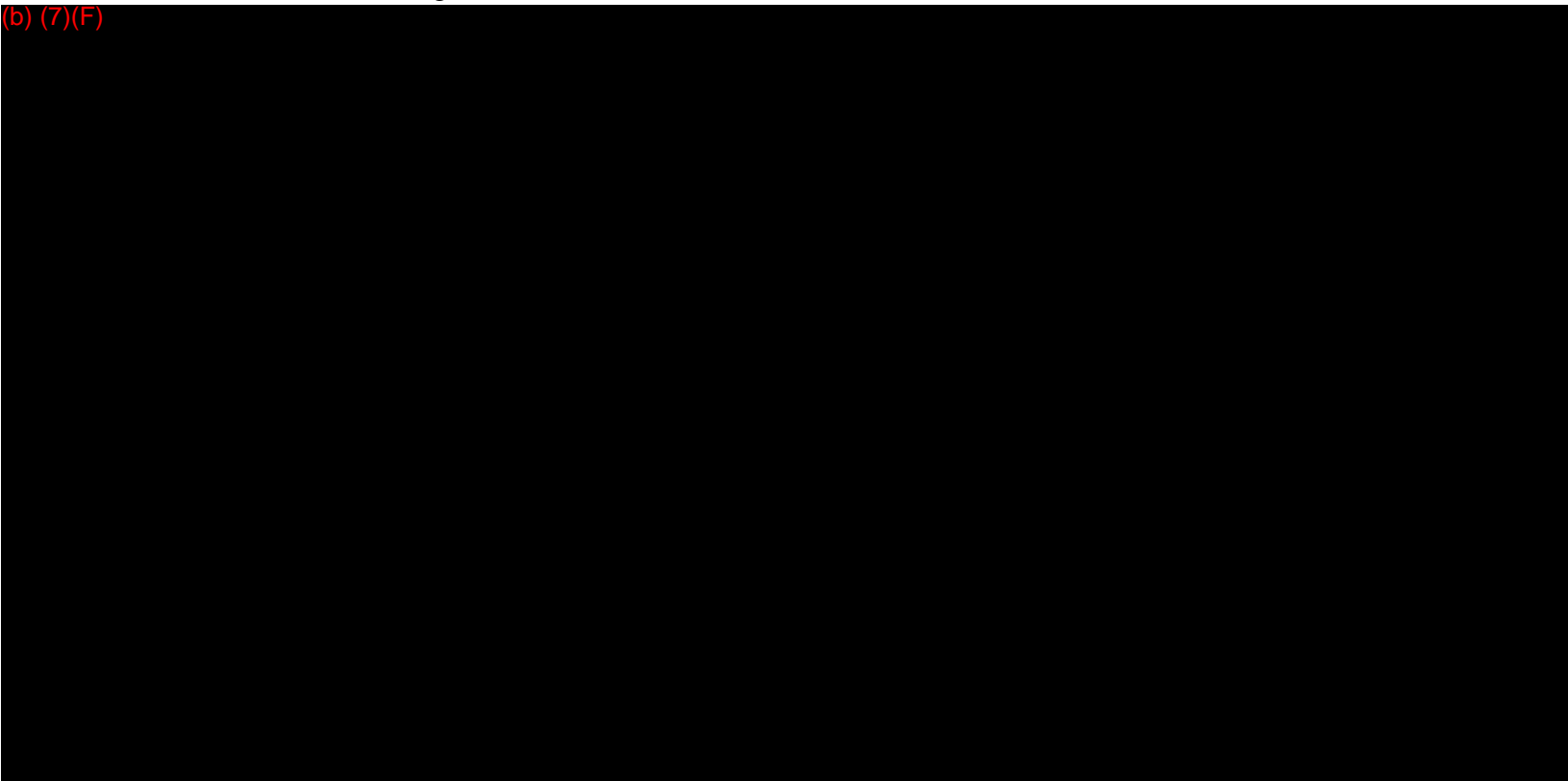
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The worst case tank volume is calculated as follows:

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 70% and the worst case discharge volume is 30% of the total volume.



C.5 PIPELINE - ABNORMAL CONDITIONS

Because PHMSA considers the "substantial threat" term in 49 CFR Part 194.115(a) equivalent to the "abnormal conditions" term under 49 CFR Part 195.402(d), procedures to identify events and conditions that can pose a threat of worst case discharge, and actions to take for preventing and mitigating such events and conditions are described in the System Integrity Plan.

C.6 PRODUCT CHARACTERISTICS AND HAZARDS

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

- Crude Oil

The key chemical and physical characteristics of each of these oils and/or other small quantity products/chemicals are identified in MSDS. MSDS can be obtained by the Facility via the Company intranet.

FIGURE C.6-1 describes primary oils handled.

FIGURE C.6-1 - SUMMARY OF COMMODITY CHARACTERISTICS

COMMON NAME	MSDS NAME	HEALTH HAZARD	FLASH POINT	SPECIAL HAZARD	REACTIVITY	HEALTH HAZARD WARNING STATEMENT
Crude Oil	Appropriate product name	2	3	C, H2S	0	May contain benzene, a carcinogen, or hydrogen sulfide, which is harmful if inhaled; flash point varies widely. Skin, nose, throat, lung irritant. May cause more serious skin disorders, irregular heartbeats. Aspiration hazard.
Health Hazard	4 = Extremely Hazardous 3 = Hazardous 2 = Warning 1 = Slightly Hazardous 0 = No Unusual Hazard			Fire Hazard (Flash Point)	4 = Below 73° F, 22° C 3 = Below 100° F, 37° C 2 = Below 200° F, 93° C 1 = Above 200° F, 93° C 0 = Will not burn	
Special Hazard	A = Asphyxiant C = Contains Carcinogen W = Reacts with Water Y = Radiation Hazard COR = Corrosive OX = Oxidizer H ₂ S = Hydrogen Sulfide P = Contents under Pressure T = Hot Material			Reactivity Hazard	4 = May Detonate at Room Temperature 3 = May Detonate with Heat or Shock 2 = Violent Chemical Change with High Temperature and Pressure 1 = Not Stable if Heated 0 = Stable	

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APPENDIX D

Last revised: May 2008

CROSS-REFERENCES

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Figure D-1 - DOT / PHMSA Cross-Reference**Figure D-2 - DOT Emergency Procedure Manual for
Transportation Hazardous Liquids by Pipeline****Figure D-3 - PHMSA Facility Response Plan Review
Cross-Reference**Figure D-4 - TGLO Cross-Reference

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FIGURE D-1 - DOT / PHMSA CROSS-REFERENCE

OPA 90 REQUIREMENTS (49 CFR 194)	LOCATION
Information Summary	
<ul style="list-style-type: none">For the core plan:	
<ul style="list-style-type: none">Name and address of operator	Figure 1-2
<ul style="list-style-type: none">For each Response Zone which contains one or more line sections that meet the criteria for determining significant and substantial harm (Â§194.103), listing and description of Response Zones, including county(s) and state(s)	Figure 1-2
<ul style="list-style-type: none">For each Response Zone appendix:	
<ul style="list-style-type: none">Information summary for core plan	Section 1
<ul style="list-style-type: none">QI names and telephone numbers, available on 24-hr basis	Figure 1-2
<ul style="list-style-type: none">Description of Response Zone, including county(s) and state(s) in which a worst case discharge could cause substantial harm to the environment	Figure 1-2
<ul style="list-style-type: none">List of line sections contained in Response Zone, identified by milepost or survey station or other operator designation	Figure 1-2
<ul style="list-style-type: none">Basis for operator's determination of significant and substantial harm	Figure 1-2
<ul style="list-style-type: none">The type of oil and volume of the worst case discharge	Figure 1-2, Appendix C.4
<ul style="list-style-type: none">Certification that the operator has obtained, through contract or other approved means, the necessary private personnel and equipment to respond, to the maximum extent practicable, to a worst case discharge or threat of such discharge	Section 1.3, Appendix B
Notification Procedures	
<ul style="list-style-type: none">Notification requirements that apply in each area of operation of pipelines covered by the plan, including applicable state or local requirements	Figure 3.1-3, Figure 3.1-4
<ul style="list-style-type: none">Checklist of notifications the operator or Qualified Individual is required to make under the response plan, listed in the order of	Figure 3.1-3, Figure 3.1-4

priority	
<ul style="list-style-type: none">• Name of persons (individuals or organizations) to be notified of discharge, indicating whether notification is to be performed by operating personnel or other personnel	Figure 3.1-1 , Figure 3.1-3 , Figure 3.1-4
<ul style="list-style-type: none">• Procedures for notifying Qualified Individuals	Figure 3.1-1 , Section 4.5 , Figure 4.5-1
<ul style="list-style-type: none">• Primary and secondary communication methods by which notifications can be made	Section 7.1.6

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FIGURE D-1 - DOT / PHMSA CROSS-REFERENCE, CONTINUED

OPA 90 REQUIREMENTS (49 CFR 194)	LOCATION
Notification Procedures, Continued	
<ul style="list-style-type: none">• Information to be provided in the initial and each follow-up notification, including the following:<ul style="list-style-type: none">• Name of pipeline• Time of discharge• Location of discharge• Name of oil recovered• Reason for discharge (e.g. material failure, excavation damage, corrosion)• Estimated volume of oil discharged• Weather conditions on scene• Actions taken or planned by persons on scene	Figure 3.1-2
Spill Detection and On-Scene Spill Mitigation Procedures	
<ul style="list-style-type: none">• Methods of initial discharge detection	Appendix C.1
<ul style="list-style-type: none">• Procedures, listed in order of priority, that personnel are required to follow in responding to a pipeline emergency to mitigate or prevent any discharge from the pipeline	Section 2
<ul style="list-style-type: none">• List of equipment that may be needed in response activities based on land and navigable waters including:<ul style="list-style-type: none">• Transfer hoses and pumps• Portable pumps and ancillary equipment• Facilities available to transport and receive oil from a leaking pipeline	Section 7.1.1 , Figure 7.1-1 , Appendix B
<ul style="list-style-type: none">• Identification of the availability, location, and contact phone numbers to obtain equipment for response activities on a 24-	Figure 3.1-3 , Appendix B

hour basis	
<ul style="list-style-type: none">• Identification of personnel and their location, telephone numbers, and responsibilities for use of equipment in response activities on a 24-hour basis	Figure 3.1-3 , Section 7.1.1 , Appendix B
Response Activities	
<ul style="list-style-type: none">• Responsibilities of, and actions to be taken by, operating personnel to initiate and supervise response actions pending the arrival of the Qualified Individual or other response resources identified in the response plan	Section 2 , Section 4.6 , Appendix B
<ul style="list-style-type: none">• Qualified Individual's responsibilities and authority, including notification of the response resources identified in the response plan	Section 4.5
<ul style="list-style-type: none">• 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 , Figure 4.5-2
<ul style="list-style-type: none">• Oil spill response organizations (OSRO) available through contract or other approved means, to respond to a worst case discharge to the maximum extent practicable	Appendix B

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FIGURE D-1 - DOT / PHMSA CROSS-REFERENCE, CONTINUED

OPA 90 REQUIREMENTS (49 CFR 194)	LOCATION
Response Activities, Continued	
<ul style="list-style-type: none">• For each organization identified under paragraph (d), a listing of:<ul style="list-style-type: none">• Equipment and supplies available• Trained personnel necessary to continue operation of the equipment and staff the oil spill removal organization for the first seven days of the response	Appendix B
List of Contacts	
<ul style="list-style-type: none">• List of persons the Plan requires the operator to contact	Figure 3.1-1
<ul style="list-style-type: none">• Qualified individuals for the operator's areas of operation	Figure 1-2 , Figure 3.1-3
<ul style="list-style-type: none">• Applicable insurance representatives or surveyors for the operator's areas of operation	Figure 3.1-1

<ul style="list-style-type: none">Persons or organizations to notify for activation of response resources	Figure 3.1-1
Training Procedures	
<ul style="list-style-type: none">Description of training procedures and programs of the operations	Appendix A.2
Drill Procedures	
<ul style="list-style-type: none">Announced and unannounced drills	Figure A.1-2
<ul style="list-style-type: none">Types of drills and their frequencies; for example:<ul style="list-style-type: none">Manned pipeline emergency procedures and qualified individual notification drills conducted quarterlyDrills involving emergency actions by assigned operating or maintenance personnel and notification of qualified individual on pipeline facilities which are normally unmanned, conducted quarterlyShore-based spill management team (SMT) tabletop drills conducted yearlyOil spill removal organization field equipment deployment drills conducted yearlyA drill that exercises entire response plan for each Response Zone, would be conducted at least once every three years	Figure A.1-2
Response Plan review and update procedures	
<ul style="list-style-type: none">Procedures to meet Â§194.121	Section 1.2
<ul style="list-style-type: none">Procedures to review plan after a worst case discharge and to evaluate and record the plan's effectiveness	Section 1.2 , Section 8.3
Response zone appendices	
Each response zone appendix would provide the following information:	
<ul style="list-style-type: none">Name and telephone number of the qualified individual	Figure 1-2
<ul style="list-style-type: none">Notification procedures	Figure 3.1-1
<ul style="list-style-type: none">Spill detection and mitigation procedures	Section 2.1.1 , Appendix C.1

FIGURE D-1 - DOT / PHMSA CROSS-REFERENCE, CONTINUED

OPA 90 REQUIREMENTS (49 CFR 194)	LOCATION
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Response zone appendices, Continued	
<ul style="list-style-type: none">• Name, address, and telephone number of oil spill response organization	<u>Figure 3.1-3, Figure 3.1-4, Appendix B</u>
<ul style="list-style-type: none">• Response activities and response resources including:<ul style="list-style-type: none">• Equipment and supplies necessary to meet §194.115• Trained personnel necessary to sustain operation of the equipment and to staff the oil spill response organization and spill management team for the first seven days of the response	<u>Figure 3.1-3, Appendix A, Appendix B</u>
<ul style="list-style-type: none">• Names and telephone numbers of federal, state, and local agencies which the operator expects to assume pollution response responsibilities	<u>Figure 3.1-4</u>
<ul style="list-style-type: none">• Worst case discharge volume	<u>Appendix C.4</u>
<ul style="list-style-type: none">• Method used to determine the worst case discharge volume, with calculations	<u>Appendix C.4</u>
<ul style="list-style-type: none">• A map that clearly shows:<ul style="list-style-type: none">• Location of worst case discharge• Distance between each line section in the Response Zone:<ul style="list-style-type: none">• Each potentially affected public drinking water intake, lake, river, and stream within a radius of five miles of the line section• Each potentially affected environmentally sensitive area within a radius of one mile of the line section	<u>Figure 1-3, Section 6.9</u>
<ul style="list-style-type: none">• Piping diagram and plan-profile drawing of each line section; may be kept separate from the response plan if the location is identified	<u>Figure 1-2</u>
<ul style="list-style-type: none">• For every oil transported by each pipeline in the response zone, emergency response data that:<ul style="list-style-type: none">• Include name, description, physical and chemical characteristics, health and safety hazards, and initial spill-handling and firefighting methods• Meet 29 CFR 1910.1200 or 49 CFR 172.602	<u>Figure C.6-1</u>

FIGURE D-2 - DOT EMERGENCY PROCEDURE MANUAL FOR TRANSPORTATION

HAZARDOUS LIQUIDS BY PIPELINE

ERP REQUIREMENTS (49 CFR 195.402(e))	LOCATION
a. Procedures for the following to provide safety when an emergency condition occurs:	
1. Receiving, identifying, and classifying notices of events which need immediate response by the operator or notice to fire, police, or other appropriate public officials and communicating this information to appropriate operator personnel for corrective action	Section 2
2. Prompt and effective response to a notice of each type emergency, including fire or explosion occurring near or directly involving a pipeline facility, accidental release of hazardous liquid or carbon dioxide from a pipeline facility, operational failure causing a hazardous condition, and natural disaster affecting pipeline facilities	Section 2
3. Having personnel, equipment, instruments, tools, and material available as needed at the scene of an emergency.	Section 3 , Section 7 , Appendix B
4. Taking necessary action, such as emergency shutdown or pressure reduction, to minimize the volume of hazardous liquid or carbon dioxide that is released from any section of a pipeline system in the event of a failure	Section 2 , Appendix C
5. Control of released hazardous liquid or carbon dioxide at an accident scene to minimize the hazards, including possible intentional ignition in the cases of flammable highly volatile liquid	Section 6
6. Minimization of public exposure to injury and probability of accidental ignition by assisting with evacuation of residents and assisting with halting traffic on roads and railroads in the affected area, or taking other appropriate action	Section 2 , Section 5 , Section 7
7. Notifying fire, police, and other appropriate public officials of hazardous liquid or carbon dioxide pipeline emergencies and coordinating with them preplanned and actual responses during an emergency, including additional precautions necessary for an emergency involving a pipeline system transporting a highly volatile liquid	Section 2 , Section 3
8. In the case of failure of a pipeline system transporting a highly volatile liquid, use of appropriate instruments to assess the extent and coverage of the vapor cloud and	Section 2

determine the hazardous areas	
9. Providing for a post accident review of employee activities to determine whether the procedures were effective in each emergency and taking corrective action where deficiencies are found	Section 8
10. Actions required to be taken by a controller during an emergency, in accordance with Â§195.446.	Appendix C.1

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FIGURE D-3 - PHMSA FACILITY RESPONSE PLAN REVIEW CROSS-REFERENCE

Office of Pipeline Safety (OPS)	LOCATION
National Contingency Plan and Area Contingency Plan Certifications (49 CFR 194.107(b))	
1.A. Has the operator reviewed the National Contingency Plan (NCP) and each applicable Area Contingency Plan (ACP)?	Section 1.1
1.B. Does the Facility Response Plan follow the Area Contingency Plans?	Section 1.1
1.C. Please list the names of the Area Contingency Plans and the pages in the Facility Response Plan that relate to the Area Contingency Plans.	Section 1.1 , Entire Plan
Plan Information Summary (49 CFR 194.107(c)(1), (c)(1)(i) and (c)(2) and 49 CFR 194.113)	
2. Does the Plan Information Summary contain the following?	
<ul style="list-style-type: none">The Operator Name, Street Address, City, State, and Zip Code.	Figure 1-2
<ul style="list-style-type: none">A list of response zones that meet the criteria for significant and substantial harm (49 CFR 194.113(a)(2)) and a list of response zones in which a worst-case discharge could cause substantial harm.	Figure 1-2
<ul style="list-style-type: none">The basis for the operator's determination that the response zone meets the criteria for significant and substantial harm and a statement that a worse case discharge in the response zone can be expected to cause significant and substantial harm for each response zone.	Figure 1-2
<ul style="list-style-type: none">Description of each response zone, including the county(s) and State(s).	Figure 1-2
<ul style="list-style-type: none">Explanation for each response zone designation.	Figure 1-2
<ul style="list-style-type: none">Name(s), title(s), and office and cellular telephone number(s) for the Qualified Individual(s) twenty-four hours a day in each	Figure 1-2 , Figure 3.1-3

response zone.	
<ul style="list-style-type: none">Name(s), title(s), and office and cellular telephone number(s) for the Alternate Qualified Individual(s) twenty-four hours a day in each response zone.	Figure 1-2 , Figure 3.1-3
<ul style="list-style-type: none">List of line sections in each response zone by milepost, survey station number, or other operator designation.	Figure 1-2
<ul style="list-style-type: none">If any response zone contains multiple pipeline systems, all pipeline systems are described and the oils they transport are listed.	Figure 1-2
<ul style="list-style-type: none">The type of oil and the volume of the worst-case discharge in each response zone.	Figure 1-2
Notifications	
3.1. What person, position, or facility is responsible for starting immediate notification? (49 CFR 194.107(c)(1)(ii)) Please list the person's, position's, or facility's mailing and electronic mail addresses and office, fax, and cellular telephone information.	Figure 1-2
3.2. Is the person, position, or facility capable of starting immediate notification twenty-four hours a day, three hundred sixty-five days a year? (49 CFR 194.107(c)(1)(ii)) Please describe your immediate notification plan.	Section 3

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FIGURE D-3 - PHMSA FACILITY RESPONSE PLAN REVIEW CROSS-REFERENCE, CONTINUED

Office of Pipeline Safety (OPS)	LOCATION
Notifications, Continued	
3.3. Do the Facility Response Plan notification procedures include telephone numbers so that the qualified individual(s) and oil spill removal organization(s) can be reached twenty-four hours a day, three hundred sixty-five days a year? (49 CFR 194.107(b)(1) and (2), 194.107(c)(1)(ii) and 194.113(b)(2))	Section 3
<ul style="list-style-type: none">Qualified Individual(s)?	Figure 3.1-3
<ul style="list-style-type: none">Oil Spill Removal Organization(s)?	Figure 3.1-3 , Figure 3.1-4
<ul style="list-style-type: none">Are the National Response Center numbers correctly listed as 1-800-424-8802 and 202-267-2675 in the plan?	Figure 3.1-4
<ul style="list-style-type: none">Company personnel?	Figure 3.1-3

3.4. Does the notification section include the following information? (49 CFR 194.107(b)(1) and (2), and 194.107(c)(1)(ii))	
• Name of pipeline operator?	Figure 3.1-2
• Time of discharge?	Figure 3.1-2
• Location of discharge?	Figure 3.1-2
• Name of oil involved?	Figure 3.1-2
• Reason for discharge?	Figure 3.1-2
• Estimated volume of oil discharged?	Figure 3.1-2
• Weather conditions on scene?	Figure 3.1-2
3.5. Does the Facility Response Plan name and give the address(es) and telephone number(s) for the operator's oil spill removal organization(s)? (49 CFR 194.107(c)(1)(iv) and 194.115)	
• Name(s)?	Appendix B.1.1
• Address(es)?	Appendix B.1.1
• Telephone Number(s)?	Figure 3.1-3 , Figure 3.1-4
Spill Detection and Mitigation Procedures	
4.1. Does the Facility Response Plan contain procedures to name and mitigate or prevent a substantial threat of a worst-case discharge? (49 CFR 194.107(a) and (b)(2)(i))	Appendix C.2
4.2. Does the Facility Response Plan name personnel, equipment, and procedures for detecting leaks and spills and locating spills throughout the response zone? (49 CFR 194.107(c)(1)(iii))	Figure 3.1-3 , Section 7.1.1 , Figure 7.1-1 , Appendix B
4.3. Does the Facility Response Plan name the maximum time to detect the spill and shut down flow in affected pipeline(s) in bad weather? (49 CFR 194.105(b)(1))	Appendix C.4
4.4. Does the Facility Response Plan have procedures to mitigate spills appropriate for the response zone(s) and consistent with applicable Area Contingency Plan(s)? (49 CFR 194.107(b)(2)(i), and (c)(1)(iii) and (v))	Section 2.1

FIGURE D-3 - PHMSA FACILITY RESPONSE PLAN REVIEW CROSS-REFERENCE, CONTINUED

Office of Pipeline Safety (OPS)	LOCATION
Spill Containment	
5.1. Does the Facility Response Plan name spill containment strategies appropriate for the response zone(s) and consistent with applicable Area Contingency Plans? (49 CFR 194.107(b)(1)(iii), (b)(2)(i), and (c)(1)(v))	Section 7.4
5.2. Can planned spill containment activities be accomplished within the appropriate tier times? (49 CFR 194.107(b)(2)(i) and (c)(1)(v), and 194.115)	Appendix C.4
5.3. Are containment equipment capacities described in sufficient detail and does the Facility Response Plan identify enough spill containment equipment to respond to a worst-case discharge to the maximum extent practicable? (49 CFR 194.107(b)(2)(i) and (c)(1)(v), and 194.115)	Section 7.1.1, Figure 7.1-1, Appendix B
Spill Recovery	
6.1. Does the Facility Response Plan identify the spill recovery strategies appropriate for the response zone(s) and consistent with applicable Area Contingency Plan(s)? (49 CFR 194.107(b)(1)(iii), (b)(2)(i) and (iv), and (c)(1)(v))	Section 2.1, Appendix C.2
6.2. Can planned spill recovery activities be accomplished within the appropriate tier times?(49 CFR 194.107(b)(2)(i) and(c)(1)(v), and 194.115)	Appendix C
6.3. Are recovery equipment capacities described in sufficient detail and does the Facility Response Plan identify sufficient spill recovery equipment to respond to a worst-case discharge to the maximum extent practicable? (49 CFR 194.107(b)(2)(i) and (c)(1)(v), and 194.115)	Section 7.1.1, Figure 7.1-1, Appendix B
Disposal	
7.1. Does the Facility Response Plan identify disposal procedures, including temporary storage equipment for recovered oil appropriate for the response zone and consistent with applicable Area Contingency Plans? (49 CFR 194.107(b)(1)(iii), (b)(2)(i), and (c)(1)(v))	Section 7.4, Section 7.1.1, Figure 7.1-1, Appendix B
7.2. Can planned temporary storage and waste disposal activities be accomplished within the appropriate tier times? (49 CFR 194.107(b)(2)(i) and (c)(1)(v), and 194.115)	Section 7.4, Appendix C.4
7.3. Does the Facility Response Plan identify sufficient temporary storage capabilities to respond to a worst-case discharge to the maximum extent practicable? (49 CFR 194.107(b)(2)(i) and (c)(1)(v), and 194.115)	Section 7.4, Section 7.1.1, Figure 7.1-1, Appendix B
Sensitive Area Protection	
8.1. Does the Facility Response Plan identify the protection strategies appropriate for the response zone and consistent with applicable Area Contingency Plans? (49 CFR 194.107(b)(1)(iii), (b)(2)(i) and (ii), and (c)(1)(v))	Section 6
8.2. Can planned protection activities be accomplished within the appropriate tier times?(49 CFR 194.107(b)(2)(i) and (c)(1)(v), and	Section 6, Appendix C.4

194.115)

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FIGURE D-3 - PHMSA FACILITY RESPONSE PLAN REVIEW CROSS-REFERENCE,
CONTINUED

Office of Pipeline Safety (OPS)	LOCATION
Response Management	
9.1. Is the response management system described in the Facility Response Plan based on an Incident Command System? (49 CFR 194.107(b)(1)(i), (b)(2)(iii), and (c)(3))	Section 4
9.2. Does the operator's response organization describe roles and responsibilities for (49 CFR 194.107(b)(1)(i), (b)(2)(iii), and (c)(3))	
<ul style="list-style-type: none"> • Qualified Individual? 	Section 4.5
<ul style="list-style-type: none"> • Other operator response personnel including the spill management team? 	Section 4.5 , Section 4.6
<ul style="list-style-type: none"> • Contracted Oil Spill Removal Organization(s)? 	Section 7.1.3 , Figure A.1-2
9.3. Does the operator's response organization describe how the operator works with the Unified Command and with responders including (49 CFR 194.107(b)(1)(i), (b)(2)(iii), and (c)(3))	Section 4.4
<ul style="list-style-type: none"> • Oil Spill Removal Organization(s)? 	Figure 4.5-2 , Section 4.6
<ul style="list-style-type: none"> • State and Local Responders? 	Section 4.4
<ul style="list-style-type: none"> • Federal On-Scene Coordinator? 	Section 4.4
Communications, Response Equipment and Transportation	
10.1. Does the Facility Response Plan describe appropriate communications procedures and system(s) adequate for notifications and response operations? (49 CFR 194.107(c)(1)(ii) and (v))	Section 7.1.6
10.2. Does the Facility Response Plan identify response equipment that the operator owns and maintains? (49 CFR 194.107(c)(1)(v) and 194.115(a))	Section 7.1.1
10.3. Does the Facility Response Plan describe procedures for maintaining response equipment the operator owns? (49 CFR 194.107(c)(1)(viii))	Section 7.1.2
10.4. Does the Facility Response Plan identify Oil Spill Removal Organization(s)' response equipment that the U.S. Coast Guard has not classified? (49 CFR 194.107(c)(1)(v) and 194.115(a))	Section 7.1.3 , Appendix B
10.5. Does the Facility Response Plan describe procedures for maintaining Oil Spill Removal Organization(s)' response equipment	Section 7.1.3 , Appendix A.1

that the U.S. Coast Guard has not classified? (49 CFR 194.107(c)(1)(viii))	
10.6. Does the Facility Response Plan identify location(s) for operator-owned and Oil Spill Removal Organization-owned response equipment? (49 CFR 194.115(b))	Section 7.1.1, Figure 7.1-1, Appendix B
10.7. Does the Facility Response Plan describe mobilizing and deploying response equipment within the appropriate tier times consistent with the plan's response activities? (49 CFR 194.107(c)(1)(v) and 194.115(b))	Appendix C.2
10.8. Does the size of the response zone permit planned response activities, including equipment mobilization and deployment, within the appropriate tier times? (49 CFR 194.115(b))	Appendix C.4

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FIGURE D-3 - PHMSA FACILITY RESPONSE PLAN REVIEW CROSS-REFERENCE,
CONTINUED

Office of Pipeline Safety (OPS)	LOCATION
Response Personnel and Mobilization	
11.1. Does the Facility Response Plan identify enough trained personnel to respond to the worse case discharge consistent with the Plan's response activities? (49 CFR 194.107(a), (c)(1)(v), and (c)(3), 194.115, and 194.117)	Figure 3.1-3
11.2. Does the Facility Response Plan describe procedures for mobilizing and deploying response personnel throughout the response zone(s) consistent with the Plan's response activities? (49 CFR 194.107(b)(2)(i) and (c)(1)(v), and 194.115)	Section 2, Section 3, Section 4.2
Response Documentation and Worst Case Discharge	
12.1. Does the operator describe procedures the response management organization must use to document response decisions, activities, and costs? (49 CFR 194.107(c)(3))	Section 3, Section 5, Appendix C.2
12.2. Does the Facility Response Plan provide the calculations and methodology used for determining the worst-case discharge for the response zone(s)? (49 CFR 194.105)	Appendix C.4
12.3. Is the worst-case discharge volume calculated using the three specified methods in the Department of Transportation regulation? Are the calculations accurate and as prescribed?(49 CFR 194.105(b))	Appendix C.4
Training: Program and Procedures	
13.1. Does the Facility Response Plan describe a training program that teaches response personnel about the Plan and their responsibilities under the Plan? (49 CFR 194.107(b)(1)(ii), (c)(1)(vii) and (c)(3), and 194.117)	Appendix A.2
13.2. Does the Facility Response Plan describe a training program that teaches response personnel about matters including (49 CFR 194.117(a)(3))	Appendix A.2

<ul style="list-style-type: none">Oil characteristics and hazards?	Appendix A.2
<ul style="list-style-type: none">Conditions that are likely to worsen emergencies, including the consequences of facility malfunctions or failures and appropriate corrective actions?	Appendix A.2
<ul style="list-style-type: none">Steps necessary to control an accidental discharge of oil?	Appendix A.2
<ul style="list-style-type: none">Steps necessary to minimize the potential for fire, explosion, or environmental damage?	Appendix A.2
<ul style="list-style-type: none">Proper fire-fighting procedures and use of personal protective equipment?	Appendix A.2
13.3. Does the Facility Response Plan describe a response-training program that addresses the appropriate levels of training and the requirements in OSHA 29 CFR 1910.120? (49 CFR 194.107(b)(1)(ii) and 194.117(c))	Appendix A.2
13.4. Does the Facility Response Plan describe the operator's procedures for maintaining records for response personnel? (49 CFR 194.117(b))	Appendix A.2

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FIGURE D-3 - PHMSA FACILITY RESPONSE PLAN REVIEW CROSS-REFERENCE, CONTINUED

Office of Pipeline Safety (OPS)	LOCATION
Response Personnel and Mobilization	
14.1. Does the Facility Response Plan describe procedures for conducting internal and external drills that include (49 CFR 194.107(c)(1)(ix))	Appendix A.1
<ul style="list-style-type: none">Responsibility for planning, carrying out, and monitoring drills?	Appendix A.1
<ul style="list-style-type: none">Announced drills?	Appendix A.1
<ul style="list-style-type: none">At least one unannounced internal drill?	Appendix A.1
<ul style="list-style-type: none">Quarterly Qualified Individual notifications drills?	Appendix A.1
<ul style="list-style-type: none">Annual spill management team tabletop drills?	Appendix A.1
<ul style="list-style-type: none">Annual Oil Spill Removal Organization(s) equipment deployment drills of representative types and amounts of key equipment in the Facility Response Plan?	Appendix A.1

<ul style="list-style-type: none">• At least one drill that tests the entire response plan for each response zone at least once every three years?	Appendix A.1
14.2. Does the Facility Response Plan describe a three-year drill and exercise cycle and the frequencies for each type of drill in that cycle? (49 CFR 194.107(c)(1)(ix))	Appendix A.1
14.3. Does the Facility Response Plan describe procedures for maintaining drill documentation for three years? (49 CFR 194.107(c)(1)(ix))	Appendix A.1
Response Plan Maintenance	
15.1. Does the Facility Response Plan describe the requirements and procedures for the operator to: (49 CFR 194.107(c)(1)(x) and 194.121(a))	
<ul style="list-style-type: none">a. Review the Facility Response Plans at least once every five years from the date the Office of Pipeline Safety approves the plan,	Section 1.2
<ul style="list-style-type: none">b. Modify the Facility Response Plan to address new or different operating conditions or information in the Facility Response Plan, and	Section 1.2
<ul style="list-style-type: none">c. Submit the plan for the Office of Pipeline Safety to review, require changes, and approve?	Section 1.2
15.2. Does the Facility Response Plan identify key factors that may cause revisions to the response plan and require the operator to submit revisions to the Office of Pipeline Safety within 30 days of making the revisions for factors including: (49 CFR 194.121(b))	
<ul style="list-style-type: none">• New pipeline construction or purchase?	Section 1.2
<ul style="list-style-type: none">• Different worst-case discharge volume?	Section 1.2
<ul style="list-style-type: none">• Change in commodities transported?	Section 1.2
<ul style="list-style-type: none">• Change in Oil Spill Removal Organization(s)?	Section 1.2
<ul style="list-style-type: none">• Change in Qualified Individual(s)?	Section 1.2
<ul style="list-style-type: none">• Change in a National Contingency Plan or Area Contingency Plan that has a significant impact on the appropriateness of response equipment or response strategies?	Section 1.2
<ul style="list-style-type: none">• Change in response procedures?	Section 1.2

FIGURE D-3 - PHMSA FACILITY RESPONSE PLAN REVIEW CROSS-REFERENCE, CONTINUED

Office of Pipeline Safety (OPS)	LOCATION
Response Plan Maintenance, Continued	
15.3. Does the Facility Response Plan describe procedures for incorporating improvements in the following? (49 CFR 194.121(b)(8))	
• Post-drill evaluation results?	<u>Section 8.3</u>
• Post-incident evaluation results?	<u>Section 8.3</u>
National Contingency Plan and Area Contingency Plan Consistency and Concept of Operations	
16.1. Is the Plan consistent with the National Contingency Plan in effect at the time of submission? (49 CFR 194.107(b)(1)) Please answer yes or no.	<u>Section 1.1</u>
16.2. Is the Plan consistent with the Area Contingency Plans in effect for each response zone at the time of submission? (49 CFR 194.107(b)(2)) Please answer yes or no.	<u>Section 1.1</u>
16.3. Is the Plan's concept of operations adequate to carry out a response to the worse case discharge under 49 CFR 194? (49 CFR 194.107) Please answer yes or no.	<u>Section 7.1, Appendix B, Appendix C.2, Entire Plan</u>

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FIGURE D-4 - TGLO CROSS-REFERENCE

OIL SPILL PREVENTION AND RESPONSE (31 TAC §19)		LOCATION
19.13(a)	Applicability. This section applies to any person who operates a waterfront or offshore facility and must obtain a discharge prevention and response certificate.	
19.13(b)	Implementation of plans. An operator of any facility that requires certification must develop and implement a written discharge prevention and response plan. Before issuing a certificate, the GLO will conduct an on-site review of the plan. The GLO will determine whether the facility's plan contains all the information required by this section and has been fully implemented.	
19.13(c)	Required elements of discharge prevention and response plans for all facility classifications. Operators of all facilities that require certification must prepare discharge prevention and response plans which include the following information:	

19.13(c)(1)	The owner and operator of the facility	Figure 1-2
19.13(c)(2)	The person or persons in charge of the facility, as required by §19.16 of this title (relating to Person in Charge)	Figure 1-2
19.13(c)(3)	The name and address (both physical and mailing) of the facility	Figure 1-2
19.13(c)(4)	A description of the facility, including:	
19.13(c)(4)(A)	The location of the facility by latitude and longitude	N/A
19.13(c)(4)(B)	The facility's primary activity	Figure 1-2
19.13(c)(4)(C)	The types of oil handled, whether material safety data sheets (MSDS) have been prepared for them and the location of where the MSDS are maintained	Figure 1-2, Appendix C.6
19.13(c)(4)(D)	The storage capacity of each tank used for storing oil	Appendix C.4
19.13(c)(4)(E)	The diameter of all lines through which oil is transferred	Figure 1-2
19.13(c)(4)(F)	The average daily throughput of oil at the facility	N/A
19.13(c)(4)(G)	The dimensions and capacity in barrels of the largest oil-handling vessel which docks at the facility	N/A

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FIGURE D-4 - TGLO CROSS-REFERENCE, CONTINUED

OIL SPILL PREVENTION AND RESPONSE (31 TAC §19)		LOCATION
19.13(c)(5)	For a facility which normally does not have personnel on-site, a commitment to maintain in a prominent location a sign or placard which states the GLO and National Response Center are to be notified of an oil spill and gives the 24-hour phone numbers for notifying the GLO and National Response Center	On-Site
19.13(c)(6)	A general description of measures taken by the facility to prevent unauthorized discharges of oil	Appendix C.1
19.13(c)(7)	A plan to conduct an annual oil spill drill that entails notifying the GLO and National Response Center and keeping a log at the facility which documents when the notification drill was conducted and facility personnel who participated in it	Figure A.1-2, Figure 3.1-3, Figure 3.1-4
19.13(c)(8)	If oil is transferred at the facility, emergency transfer procedure to be implemented if an actual or threatened unauthorized discharge of oil occurs at the facility	N/A
19.13(c)(9)	Strategic plans to contain and clean up unauthorized discharges of oil from the facility	Section 6.2, Figure 6.2-1

19.13(c)(10)	A statement that all facility personnel who might be involved in an oil spill response have been informed that detergents or other surfactants are prohibited from being used on an oil spill in the water, and that dispersants can only be used with the approval of the Regional Response Team, the interagency group composed of federal and state agency representatives that coordinates oil spill responses	Figure 6.3-2
19.13(c)(11)	A description of any secondary containment or diversionary structures or equipment at the facility to prevent discharged oil from reaching coastal waters, including the methodology for determining that the structures or equipment are adequate to prevent oil from reaching coastal waters	N/A

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FIGURE D-4 - TGLO CROSS-REFERENCE, CONTINUED

OIL SPILL PREVENTION AND RESPONSE (31 TAC §19)		LOCATION
19.13(d)	Additional requirements for facilities classified as intermediate. In addition to the requirements in §19.13(c), operators of intermediate facilities must prepare written discharge prevention and response plans which include the following information:	
19.13(d)(1)	A description of the worst case unauthorized discharge of oil reasonably likely to occur at the facility and the rationale used to determine the worst case unauthorized discharge	Appendix C.4
19.13(d)(2)	A description and map of environmentally sensitive areas that would be impacted by the worst case unauthorized discharge and plans for protecting these areas if an oil spill occurs at the facility	Section 6.9
19.13(d)(3)	A description of the facility's response strategies to contain and clean up the worst case unauthorized discharge	Appendix C.2
19.13(d)(4)	A description of discharge prevention procedures implemented at the facility, including procedures to prevent discharges from transfers of oil	Appendix C.1
19.13(d)(5)	A plan to conduct an annual oil spill drill that includes the following elements:	Figure A.1-2
19.13(d)(5)(A)	Notifying the GLO and National Response Center	Figure A.1-2 , Figure 3.1-4
19.13(d)(5)(B)	Notifying any third parties, such as discharge cleanup organizations, which have agreed to respond to an oil spill and confirming they would be able to respond to an oil spill at the facility on the day of the drill	Figure A.1-2 , Figure 3.1-4 , Appendix B

19.13(d)(5)(C)	If the facility has spill response equipment stored on-site, deployment of a representative portion of the equipment which would be used to respond to the type of discharge most likely to occur at the facility	<u>Figure A.1-2</u>
19.13(d)(5)(D)	A log documenting when the annual drill was conducted and the facility personnel who participated in it	<u>Figure A.1-2</u>
19.13(d)(6)	If the operator has entered into any oil spill response or cleanup contracts or basic ordering agreements with a discharge cleanup organization, copies of the contracts or agreements or a narrative description of their terms	<u>Figure B.1-1</u>
19.13(e)	Required elements for facilities classified as large (>250,000 gallons)	N/A

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APPENDIX E

Last revised: May 2008

ACRONYMS AND DEFINITIONS

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E.1 Acronyms

E.2 Definitions

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E.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 ₂	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

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LEL	Lower Explosive Limit
LEPC	Local Emergency Planning Committee
LEPD	Local Emergency Planning District
LNG	Liquid Natural Gas
LPG	Liquefied Petroleum Gas
MSDS	Material Safety Data Sheets
MTR	Marine Transportation Related
N/A	Not Applicable
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NIIMS	National Interagency Incident Management System
NM	Nautical Miles
NOAA	National Oceanic and Atmospheric Administration
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 (USDH)
PHMSA	Pipeline and Hazardous Materials Safety Administration (DOT)
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
SARA	Superfund Amendments and Reauthorization Act
SCADA	Supervisory Control and Data Acquisition (System)
SCBA	Self Contained Breathing Apparatus
SDWA	Safe Drinking Water Act of 1986
SERC	State Emergency Response Commission
SETS	Safety Environment and Training Services
SI	Surface Impoundment

SIC	Standard Industrial Classification (Code)
SMT	Spill Management Team
SOSC	State On-Scene Coordinator
SPCC	Spill Prevention, Control, and Countermeasures (Plan)
SSC	Scientific Support Coordinator (NOAA)

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UCS	Unified Command System
UEL	Upper Explosive Limit
USACOE	U. S. Army Corps of Engineers
USCG	U. S. Coast Guard
USDOD	U. S. Department of Defense
USDL	U. S. Department of Labor
USDOE	U. S. Department of Energy
USDOI	U. S. Department of the Interior
USDOJ	U. S. Department of Justice
USDOT	U. S. Department of Transportation
USFWS	U. S. Fish and Wildlife Service (USDOI)
USGS	U. S. Geological Survey (USDOI)

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E.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.

Response Zone 4 Ardmore Operations - Central

E - 6**Cold (Support) Zone**

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

Command Post

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

Communication Equipment

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

Containment Boom

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

Contamination Reduction Zone

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

Contingency Plan

A document used by: (1) federal, state, and local agencies to guide planning and response procedures regarding spill of oil, hazardous substances, or other emergencies; (2) a document

used by industry as a response plan to spills of oil, hazardous substances, or other emergencies occurring upon their vessels or at their facilities.

Contract or Other Approved Means

Includes:

- A written 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

Response Zone 4 Ardmore Operations - Central

E - 7

Contract or Other Approved Means, Continued

- 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.

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.

Response Zone 4 Ardmore Operations - Central

E - 8

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.

Response Zone 4 Ardmore Operations - Central

E - 9

Hypothermia

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 clean-up capability to conduct response activities for a worst case discharge from a facility in adverse weather.

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.

**Response Zone 4 Ardmore Operations
- Central****E - 10****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.

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.

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.

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.

Slopoover

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.

Spill Management Team

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

Spontaneous Ignition

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

Staging Areas

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

State Emergency Response Commission (SERC)

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

Static Electricity

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

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.

**Response Zone 4 Ardmore Operations
- Central****E - 13****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.

**Response Zone 4 Ardmore Operations -
Central**

F - 1

APPENDIX F

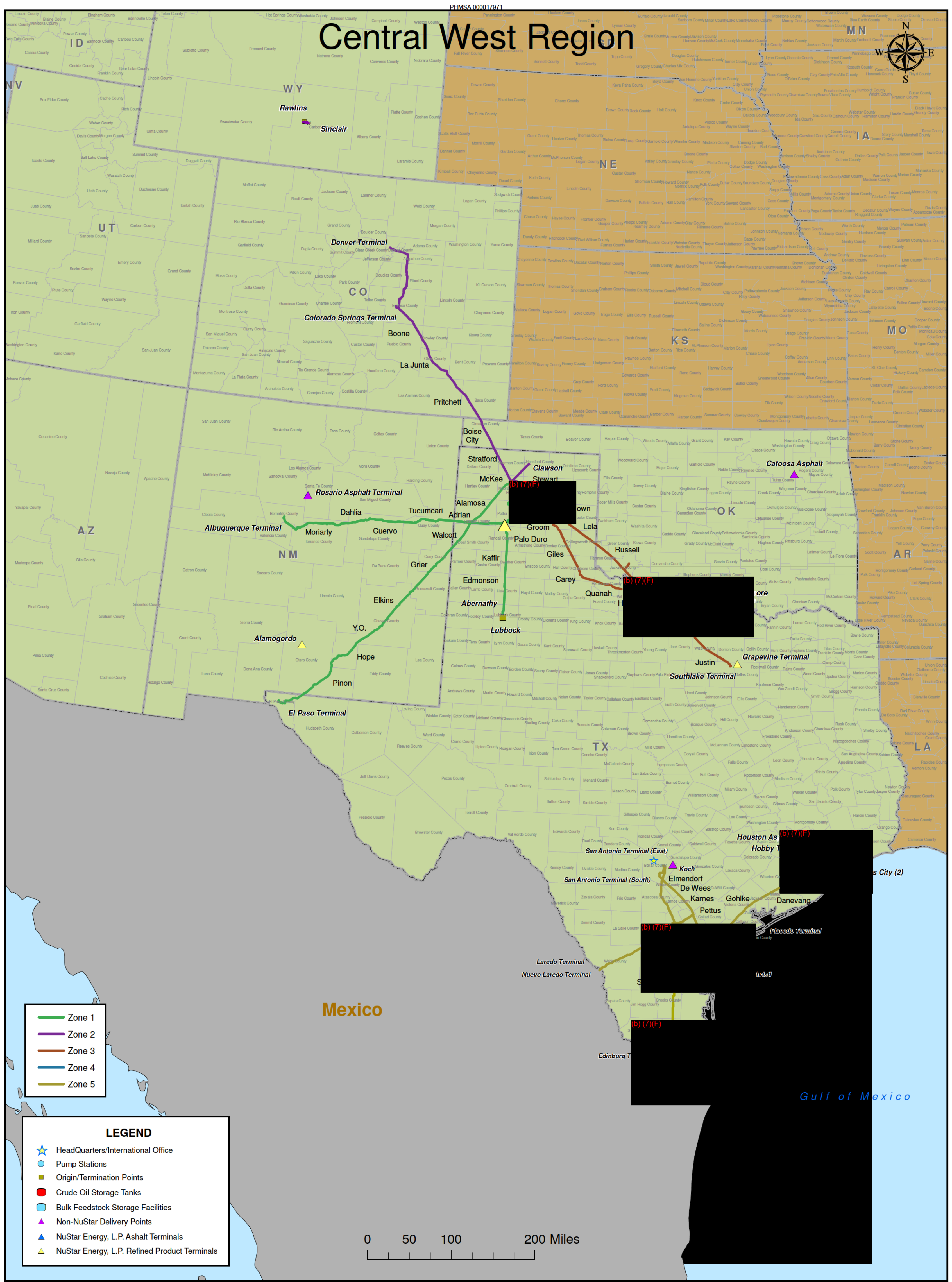
Last revised: May 2008

ADDITIONAL INFORMATION

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LINK FILES

Central West Region



- Zone 1
- Zone 2
- Zone 3
- Zone 4
- Zone 5

LEGEND

HeadQuarters/International Office

Pump Stations

Origin/Termination Points

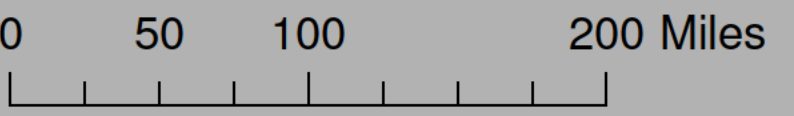
Crude Oil Storage Tanks

Bulk Feedstock Storage Facilities

Non-NuStar Delivery Points

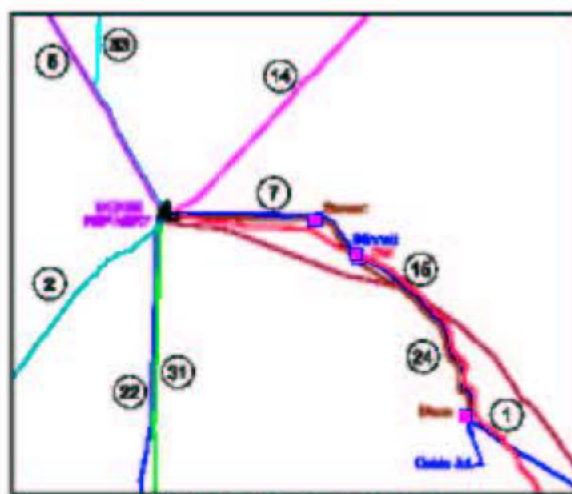
NuStar Energy, L.P. Ashalt Terminals

NuStar Energy, L.P. Refined Product Terminals

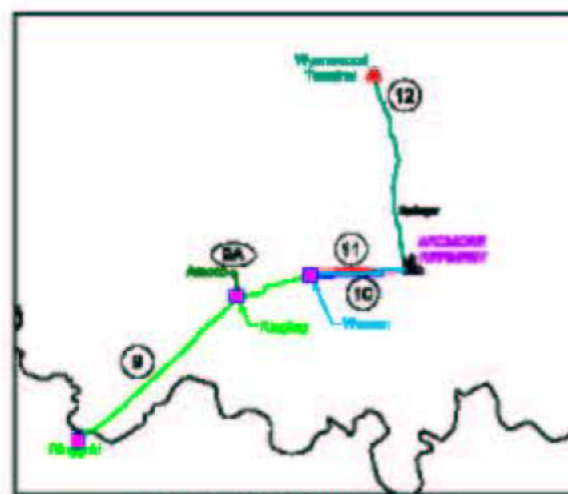


Valero
Valero Logistics Operations, L.P.
Pipeline Systems - Central West
2005

System Names					
1	Three Rivers Pipeline	10	Wesson - Ardmore Pipeline	18	CC Refinery East - Lone Star Pipeline
2	El Paso Pipeline	11	Wesson AGU Crude Pipeline	20	Tribble Lane - Grove Junction
3	El Paso Kinder-Morgan 8" Pipeline	12	Wynnewood Products Pipeline	21	DFW Pipeline
4	El Paso Kinder-Morgan 18" Pipeline	13	Laredo Pipeline	22	Amarillo 8" Pipeline
5	McKee - Denver Pipeline	13A	Doe Laredo Segment	23	Amarillo - Lubbock Pipeline
5A	Chesler Lateral 18"	14	Clemons - McKee Pipeline	24	Gorger - McKee Pipeline
6	Colorado Springs Airport Pipeline	15	McKee Falls - McKee 14"	25	Houston Pipeline
7	Southern Pipeline	15A	Aliso Lateral	25A	Ship Channel Loop Lateral
7A	Aliso Lateral	15B	Sigüenza Lateral	25B	Alameda Lateral
7B	Aliso Lateral	16	Three Rivers to San Antonio (East) Pipeline	25C	Hobby Mainline Lateral
7C	Aliso to ConocoPhillips Lateral	16A	San Antonio to Chevron Lateral (CRG)	26	Olgo Scooter - Origin Pipeline
7D	Southern to Conoco Lateral	16B	San Antonio to Southern Pacific Lateral (Union Pacific)	27	Corpus - Three Rivers Crude Pipeline
7E	Extension of Conoco Lateral	17	Three Rivers to San Antonio (South) Pipeline	28	Corpus Christi Chemical Pipeline
7F	Koch Lateral	17A	San Antonio - Koch Lateral	29	Corpus - Odem - Three Rivers Pipeline
7G	Fina Lateral	18	Three Rivers to Tribble Lane	30	Valley Pipeline
8	Amarillo - Albuquerque Pipeline	18A	Lone Star to CDP Lateral	31	Amarillo 8" Pipeline
8A	Albuquerque - Conoco Lateral	18B	Lone Star to Origin Lateral	32	McKenzie Pipeline
9	Ringgold - Wesson Pipeline			33	Colorado Crude Gathering System
9A	McMurry - Ringling Jct. Segment				



McKee Refinery Area



Ardmore Refinery Area

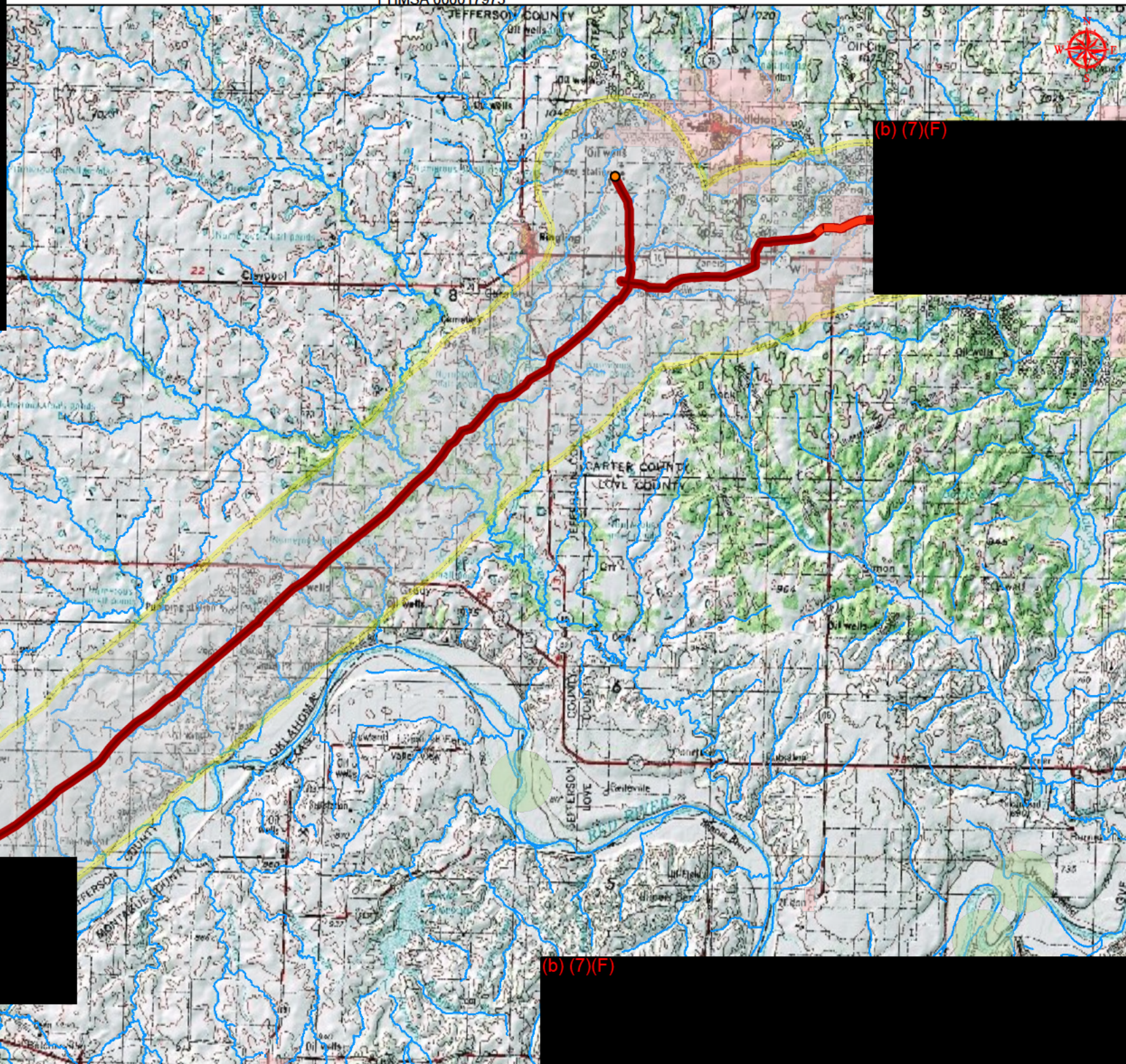


Three Rivers Refinery Area

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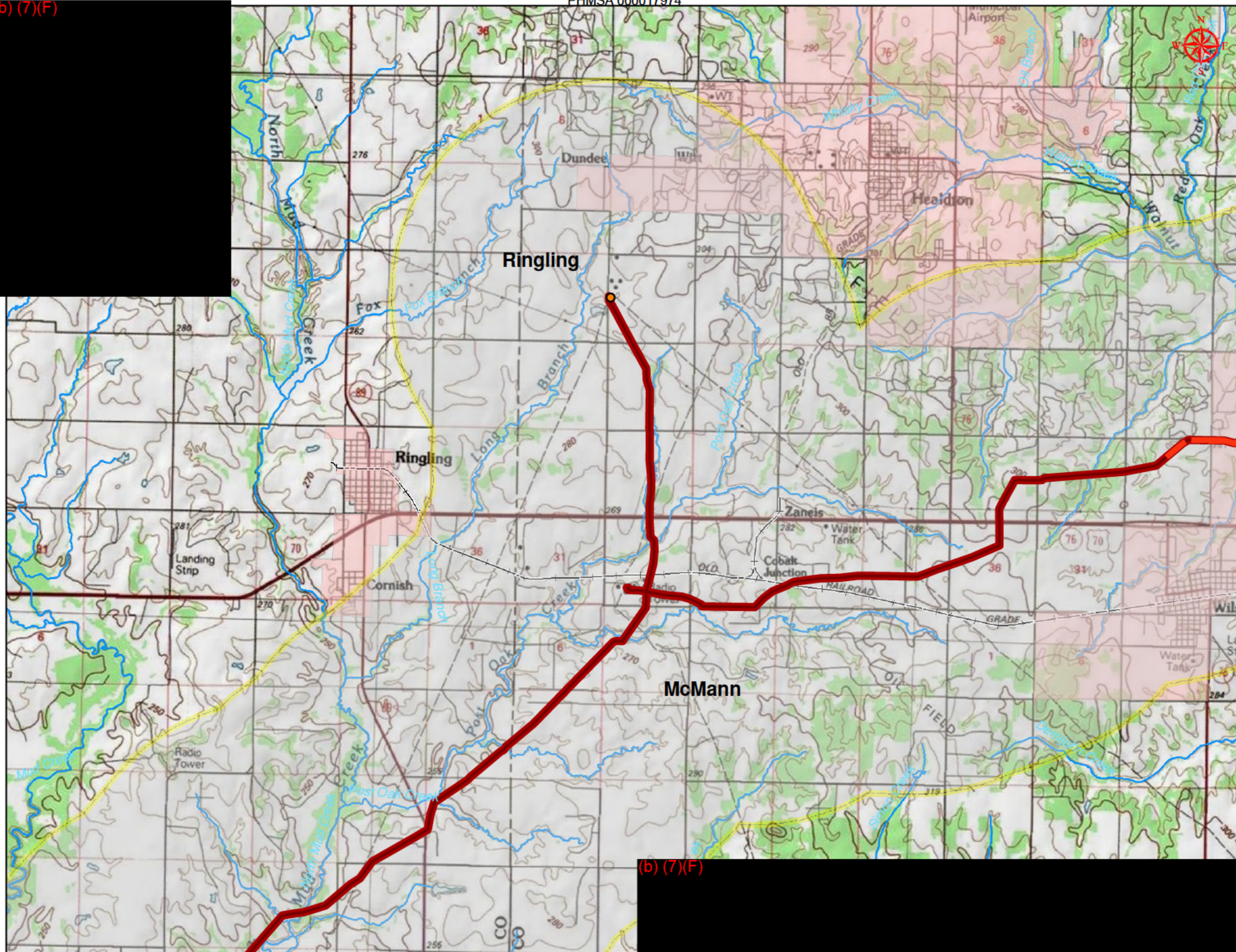


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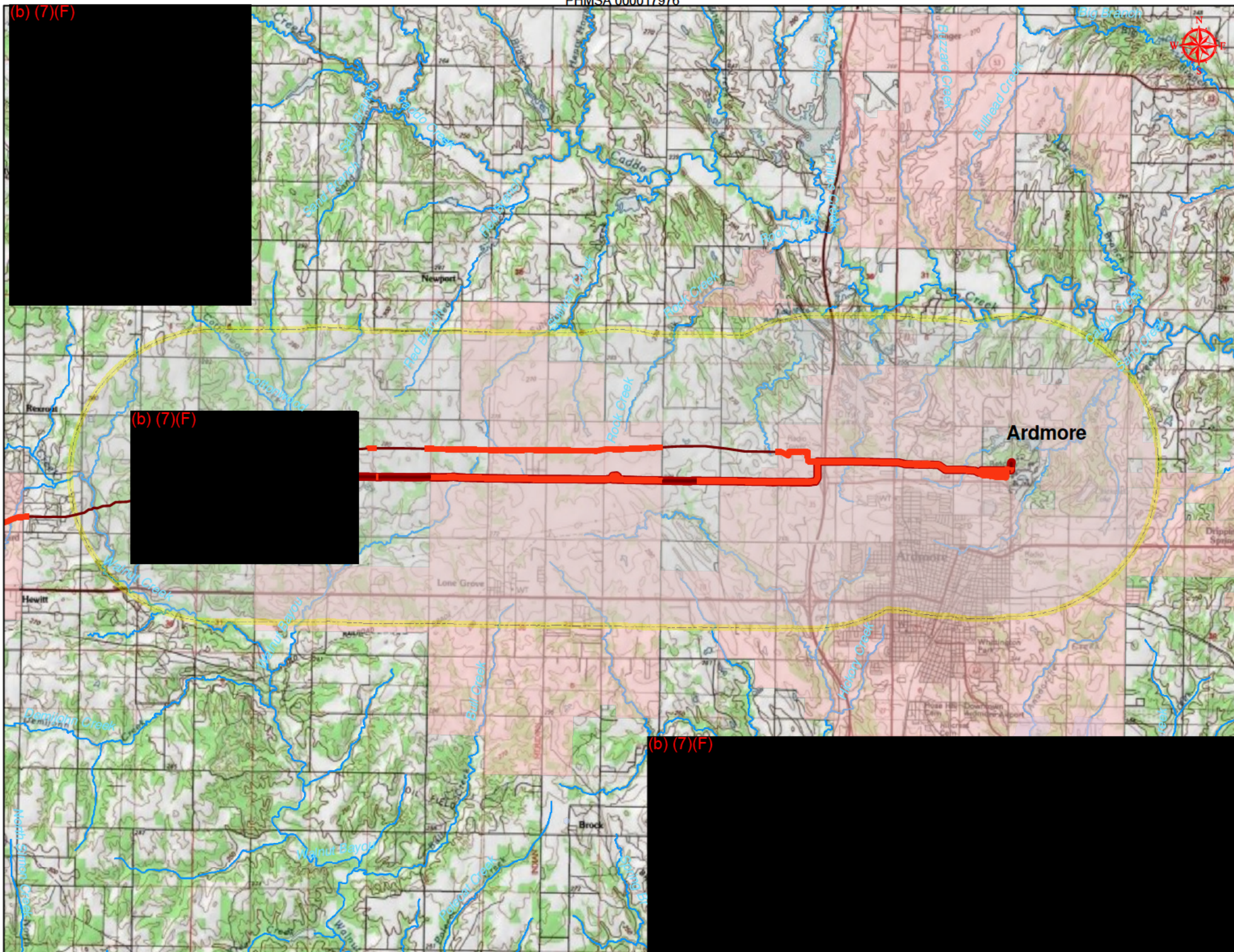


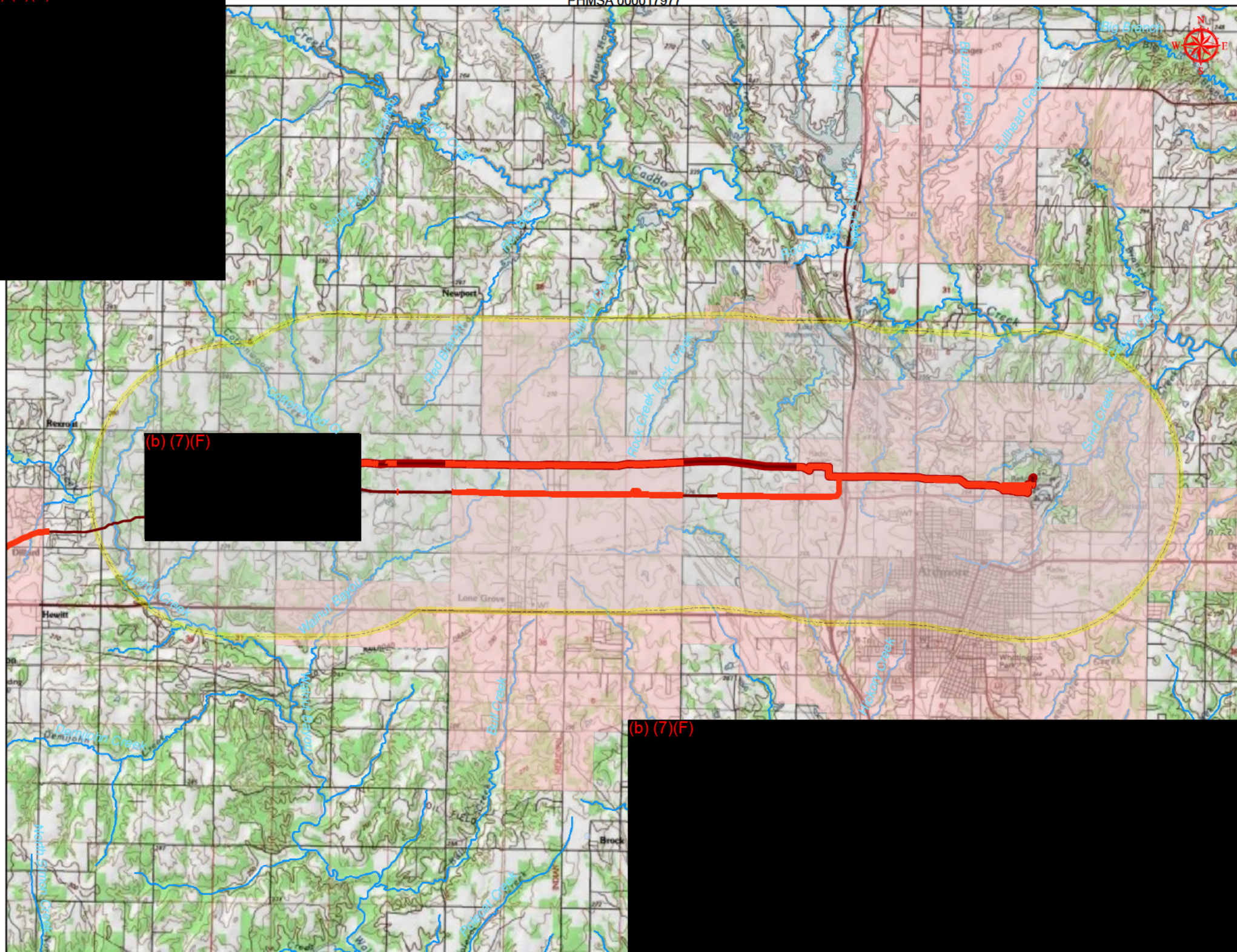
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Standby Emergency Response Addendum

This Standby Emergency Response Addendum ("Addendum") is entered into by and between NuStar Logistics, L.P. ("Logistics"), a Delaware limited partnership, with its principal place of business at 2330 N. Loop 1604 West, San Antonio, TX 78248 and Conestoga Rovers & Associates, Inc. ("Contractor"), a Delaware corporation with offices at 2055 Niagara Falls Boulevard, Suite #3, Niagara Falls, NY 14304, on August 4, 2010 ("Effective Date"). This Addendum supplements the Master Environmental Services Agreement between the Parties (as hereinafter defined) dated August 4, 2010 ("Agreement"). Except as provided in this Addendum, all terms of the Agreement remain in effect. In the event of an inconsistency between this Addendum and the Agreement, this Addendum will prevail.

This Addendum consists of these terms and conditions together with Exhibit A, Exhibit B, Exhibit C and Exhibit D attached hereto and incorporated herein, and all exhibits and addenda executed by the Parties from time to time that reference and incorporate this Addendum. Company and Contractor agree as follows:

RECITALS

A. Contractor owns, maintains, and operates certain equipment for use in the containment, recovery and cleanup of oil spills, and Contractor has Personnel who are trained in oil spill response and who are proficient in the use of this equipment and who are available and have agreed to respond to oil spills within the prescribed time limits required by Federal, State and/or local governmental agencies, in and about the locations described on Exhibit A hereto, as modified from time to time ("Facilities").

B. Logistics and certain of its Affiliates own refineries and operate pipelines and terminals primarily for the refinery, transportation and storage of liquid products. Company (as defined below) desires to contract with Contractor for: (1) the standby availability of oil spill containment and cleanup services at Facilities; and (2) the provision of such services at such Facilities. In addition, in order to expedite the process of Company and its Affiliates engaging Contractor to provide additional services at other locations ("New Locations"), Company and Contractor desire to agree in advance that the terms and conditions of this Addendum will govern any such engagement of future locations.

C. Company and Contractor agree on the terms and conditions set forth herein.

AGREEMENTS

ARTICLE I

Definitions

Capitalized terms used but not defined herein have the meanings ascribed to them in the Agreement. As used in this Addendum, the following terms shall have the following respective meanings:

“Adverse Weather” means weather conditions that make it difficult for response Equipment and Personnel to clean up and/or remove spilled oil as further defined in 40 CFR Part 112.

“Area of Interest” mean the geographical extent of real property on which a spill originating from a Facility has occurred or migrated, to include public and private real properties as well as any surrounding waters and wetlands, if any, including, but not limited to, beaches, harbors and waters along the waterfront and the coastal portions of the Facilities and all that territory within the jurisdiction of any relevant Captain of the Port at the Facilities; provided that nothing herein shall preclude the Parties from contracting or cooperating with persons or organizations in other geographic areas for the purposes set forth in the recitals above.

“Company” means: (a) Logistics for all Facilities listed on Exhibit A or (b) an entity that engages Contractor to perform Work or adds a New Location pursuant to this Addendum, which entity may be Logistics or any Affiliate.

“Designated Spill” is defined in Section 2.2.

“Effective Date” is defined in the preamble.

“Equipment” means the equipment owned, leased on a regular basis, or otherwise regularly used by Contractor in order to make available the Services.

“Facility” means any mobile or fixed, onshore or offshore building, structure, installation, equipment, pipe, or pipeline (other than a vessel or a public vessel) of Company within the Area of Interest set forth in Attachment A and all New Locations added from time to time.

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

“Governmental On-Scene Coordinator” is defined in Section 2.5.

“Incident Commander” means a qualified individual identified in the Facility Response Plan and designated by Company to be the primary Company representative in charge of overseeing oil spill containment and cleanup services during an actual or threatened spill. The Incident Commander may change during the duration of an actual or threatened spill upon notification to Contractor.

“Law” means any and all applicable federal, state, and local codes, constitutions, decrees, directives, laws, licenses, ordinances, injunctions, orders, permits, regulations, requirements, rules, and statutes.

“Liabilities” means actions, claims, causes of action, costs, demands, damages, expenses, fines, lawsuits, liabilities, losses, obligations, and penalties including court costs, defense costs, and reasonable attorneys’ fees.

“New Locations” has the meaning set forth in the recitals.

“Personnel” means all individuals Contractor commits to make available to Company to perform the Services and all individuals Contractor actually uses to perform the Services, including employees of any subcontractor, other emergency oil spill response contractors, response networks and/or oil spill cooperatives utilized by Contractor as well as Contractor’s own employees.

“Purchase Order” means the document used by Company to engage Contractor to perform Services at New Locations and/or Work at Facilities that shall describe the Work, designate the time for performance, and state the compensation to be paid. Contractor may accept a Purchase Order to provide Services at New Locations in writing and Contractor must accept a Purchase Order for performance of the Work as further described in Article II. Once a Purchase Order is entered into, the terms and conditions expressed in this Agreement will govern the Work contemplated by the Purchase Order. Each Purchase Order that is entered into will create a separate contract between Contractor and the Affiliate entering into the Purchase Order. Only the Affiliate entering into the Purchase Order will be liable to the Contractor under the Purchase Order. Logistics will not be jointly and severally liable with the Affiliate entering into the Purchase Order and Logistics will not guarantee the payment or performance of any obligation of the Affiliate entering into the Purchase Order with Contractor.

“Services” means the standby availability to complete specific oil spill containment and clean up services and the actual completion of Work rendered by the Contractor at Company’s Facility(ies) as further described in Article II.

“Site” means the site of any oil spill at a Facility covered by this Addendum which may include an Area of Interest.

“Supplies” shall mean goods, materials or other items that are not Equipment used by Contractor in order to make available the Services to contain, recover, remediate, and protect employees, the public and the environment during a spill event or natural disaster.

“Work” shall mean a written description of the specific scope of the oil spill containment and clean up Services to be performed at a Site or a reference to the Facility Response Plan in response to an actual or threatened spill from a Facility as further described in Article II and attached to a Purchase Order.

ARTICLE II

Services

2.1. General. The Contractor shall provide to Company Services at the Site, using the Equipment, Supplies and Personnel available as set forth in this Addendum in accordance with Laws, including, but not limited to, 40 CFR 112. The Services shall be available on a twenty-four hour/seven day a week standby basis for threatened spills and shall include actual containment, recovery, and cleanup in the event of a spill. Contractor shall provide Company with a priority response compared to any third parties. Contractor shall participate with Company in Federal, State, and/or locally mandated spill response drills.

2.2. Initiation of Work. In the event of an actual or threatened spill at/from a Facility, and if Company desires Services with respect to such spill, Company may notify the Contractor orally of such actual or threatened spill (the "Designated Spill") by a direct telephone call to Contractor's contact number as specified in the Facility Response Plan. Such notification shall include the company name, the name and title of the caller, the estimated location of the Site requiring emergency oil containment and cleanup Services, the type of oil or other product involved, if known, the estimated size of the Designated Spill, if known, whether the Designated Spill is on land or in water, the identity of and contact information for the Incident Commander with whom Contractor is to coordinate until notified otherwise, and any other relevant information relating to the Designated Spill then known to the caller.

Company agrees to use reasonable efforts to confirm in writing all oral notifications within twenty-four (24) hours of giving such oral notice, by providing Contractor with a written description of the Work to be performed. The written confirmation and description of Work attached to a Purchase Order may be sent to Contractor by e-mail or facsimile as specified in the Facility Response Plan. In the event of a conflict between the terms of such written description attached to a Purchase Order and this Addendum, the terms of this Addendum shall prevail.

Contractor will respond as soon as practicable after receiving oral notification of such a Designated Spill, but no later than as required by the Facility Response Plan and Law. Following the initial response and deployment, Contractor will continue to marshal the necessary Equipment, Supplies, and Personnel and proceed to the Site or such other effected area as quickly as reasonably possible and in accordance with the Law and the Facility Response Plan under the direct supervision of the Company Incident Commander or their delegate.

2.3. Mobilization Standby. Company may limit its response initiation to a notice of "mobilization standby" (e.g. 72 hours, 48 hours, and 24 hours in advance). If Company so limits its initiation, Contractor shall bring its Personnel, Supplies, and Equipment to a high state of readiness, but shall not dispatch Equipment, Supplies, or Personnel to the Site until Company thereafter gives express verbal instruction to Contractor to respond to the Designated Spill. For the period of time Contractor is on mobilization standby, Company shall pay Contractor at the

straight time rate or the overtime rate (as described on Exhibit B hereto), as appropriate, a minimum of four (4) hours for each person standing-by.

2.4. Scope of Spill Response. Company acknowledges that Services provided by Contractor under this Addendum are provided to the maximum extent practicable in response to an emergency; that the purpose of each spill response is to ensure the safety of the Facility and to mitigate or prevent, to the maximum extent practicable, the environmental damage and health and safety risks resulting from a spill of oil; and that it may not ultimately be possible to fully remove all such substances from the Site or other affected areas. Contractor does not warrant, by the terms of this Addendum or by undertaking Services pursuant to this Addendum, that such response will render the Site, or areas affected by the spill, safe for any human activity or in a state of compliance with any Laws. However, nothing stated in this subsection shall diminish or relieve Contractor from fully complying with the provisions and obligations set forth in this Addendum and its obligations under Law.

2.5 Equipment & Supplies. Contractor shall make available to Company, as, when and where requested, as outlined above, oil spill containment and recovery Supplies and related types of Equipment of the types, makes and/or models, having the capacity ratings, and in the minimum quantities as necessary to perform the Services in response to an emergency as required by the relevant Facility Response Plan in a timely and professional manner. Unless otherwise listed in a Facility Response Plan, a list of the minimum Equipment that will be available for each Designated Spill is set forth in Exhibit C attached hereto.

All Equipment and Supplies furnished by Contractor shall be designed so as to operate effectively in Adverse Weather and under such other conditions as may reasonably be expected to be encountered in the area in which it is to be used.

Such Equipment and Supplies shall be stored at a location or locations, sufficiently near to the Facilities at which it might be utilized so as to enable the mobilization, travel, and response times required by Law and those times stipulated in the relevant Facility Response Plan to be met. During an actual or threatened spill, Contractor shall keep a daily listing of all Equipment and Supplies brought to the Site, and shall detail all Supplies used on the Site daily.

Contractor shall maintain all Equipment and Supplies in good working order at all times and shall test Equipment periodically for serviceability. Following any use of the Equipment for Services, training, inspection or other lawful purpose, Contractor shall promptly perform any necessary cleaning, replacement, or repair of such Equipment and Supplies.

Contractor shall maintain proper licensing of its Equipment to the extent said Equipment is required to be licensed by Laws.

Contractor acknowledges that the United States Coast Guard, Environmental Protection Agency and/or other relevant governmental authorities with jurisdiction ("Governmental On-Scene Coordinator") may from time to time require access to Contractor's Equipment and Supply

inventory to verify its condition and availability or require Contractor to deploy its Personnel, Equipment, and Supplies as part of a preparedness drill.

2.6 Personnel. Contractor shall make available to Company as, when, and where required, trained, properly documented and credentialed, and qualified response teams, in sufficient numbers and having the necessary skills and experience necessary to perform the response to an emergency as required by the relevant Facility Response Plan in a timely and professional manner.

Contractor shall have Personnel on call on a twenty-four (24) hour/seven (7) days a week basis. These Personnel will be based or stationed at locations sufficiently near to the Facilities at which they might be utilized so as to enable the mobilization, travel, and response times required by Law and those times stipulated in the relevant Facility Response Plan to be met. During an actual or threatened spill, Contractor shall keep a daily log of all Personnel working at the Site or such other effected areas and shall detail the position held and hours worked by each individual.

Contractor agrees that it will maintain and that it will require its subcontractors to maintain a drug-free and alcohol-free workplace, and Contractor agrees to implement an appropriate testing program of its Personnel to ensure that such a workplace is maintained. In the event Work is provided, Contractor agrees to remove from the Site any of Contractor's Personnel upon the request of the Incident Commander.

Contractor shall maintain proper licensing (see 3.6) of its Personnel to the extent said Personnel are required to be licensed by Laws.

2.7 Priority. In the event of an actual or threatened oil spill at a Facility, Contractor shall accord to Company a priority response compared to third parties with whom Contractor has no stand-by contract, except to the extent if Contractor would be required to remove Equipment and Personnel from the site of another response to in order to respond to a Designated Spill of Company. In the event Contractor receives notification of the need for Services from more than one party with whom Contractor has entered into a stand-by agreement similar to this Addendum, then Contractor shall accord priority to the party first notifying Contractor pursuant to Section 2.2. Company acknowledges that Contractor may be otherwise directed by a responsible governmental authority exercising lawful authority to use its response Personnel, Equipment and Supplies in connection with other oil spills. In such event, the priority provisions of this Section 2.7 shall have no effect to the extent said provisions are inconsistent with such directions of such responsible governmental authority.

2.8 Contractor Coordination. Company acknowledges that Contractor may have entered into arrangements with subcontractors, other emergency oil spill response contractors, response networks and/or oil spill cooperatives as may be necessary in order to enable Contractor to perform its obligations under this Addendum. All such subcontractors, other emergency oil spill response contractors, response networks and/or oil spill cooperatives shall be billed at the same or lower rate than the Contractor's rate. Emergency contact information for subcontractor services shall be provided the Company prior to mobilization for a specific emergency response.

Contractor will be responsible for the acts and omissions of all Personnel, in the same capacity as it is responsible for its own acts and omissions.

Contractor acknowledges that Company may have also entered into arrangements with other emergency oil spill response contractors, response networks, oil spill cooperatives and/or subcontractors as may be necessary to ensure compliance with each Facility Response Plan. Contractor further acknowledges that unless otherwise dictated by the Governmental On-Scene Coordinator for the Designated Spill, the Company or delegate will coordinate all activities of any and all oil spill response organizations that have responded to the Designated Spill, the regulatory authorities and agencies, any and all other persons, organizations, agencies or entities that may be involved in the emergency response efforts. The Parties acknowledge that the provisions of this Addendum in no way require Company to utilize the Services of Contractor in the event of an oil spill in the Area of Interest.

2.9 Incident Commander. All Services provided by Contractor, its Personnel and Subcontractors shall be performed under the direction and control of Company's Incident Commander. Company will notify Contractor of the identity of and provide contact information for the Incident Commander. The Incident Commander may change as the Designated Spill progresses. Company will designate a new Incident Commander as needed and inform Contractor of the change. Upon being directed by Company's Incident Commander, Contractor and/or any or all subcontractors shall cease all cleanup operations, unless Contractor is otherwise directed by a responsible governmental authority exercising lawful authority. Contractor agrees to follow the company Incident Command Structure and lines of authority.

2.10 Contingency Plans. Company may identify the Contractor in any Facility oil spill cleanup contingency plan filed by Contractor with the United States Coast Guard or any other similar governmental authority as being available to provide oil spill assistance to Company. Company has furnished Contractor a paper or electronic copy of the Facility Response Plan for each Facility covered by this Addendum. Contractor has reviewed each Facility Response Plan and represents and warrants that based on standby agreements with subcontractors and other entities, Contractor has the Equipment, Supplies, Personnel, expertise and capability to fulfill the Facility Response Plan's requirements as they relate to Contractor. Contractor will use its best efforts to provide Services in accordance with each Facility Response Plan and otherwise as provided herein. Company will inform Contractor of all material changes or amendments to each of the Facility Response Plans to the extent such change would affect the ability of Contractor to perform Services in response to an actual or threatened spill.

ARTICLE III

Contractor Obligations

3.1 General. Contractor shall furnish all Personnel, supervision, labor, Supplies, Equipment and subcontracted items necessary for the performance and completion of Contractor's Services hereunder at the rates set forth in the schedule of fees attached hereto as Exhibit B. Said schedule of fees is subject to revision, annually on the anniversary of the

Effective Date, upon thirty (30) days written notice provided, however, that no change in such fees will become effective for any Designated Spill where Contractor's response to the Designated Spill commenced prior to any such notification of a change in fees.

3.2 Trained Personnel. Contractor represents, warrants and covenants that all Personnel it provides under the terms of this Addendum shall at all times be trained, with documented credentials and qualified to perform the required Services in response to an actual or threatened spill emergency in accordance with industry standards and all applicable federal, state and/or local regulations or requirements for oil spill or hazardous substance emergency response. Contractor will maintain a minimum of thirty (30) trained responders (or greater if required by Law) based or stationed at locations sufficiently near to each Facility at which they might be utilized that have a minimum of twenty-four (24) hours of OSHA Hazardous Waste Operations and Emergency Response Standard ("HAZWOPER") training and other training necessary for Personnel to respond to an actual or threatened spill pursuant that Facility's Facility Response Plan. In addition, Contractor will maintain at least one (1) individual based or stationed sufficiently near to each Facility at which they might be utilized that has completed forty (40) hours of HAZWOPER training.

3.3 Drills and Training Programs. When requested by Company, Contractor shall participate in, and shall cause its Personnel to participate in, Company's sponsored training programs, exercises and periodic unannounced drills, provided Company agrees to compensate Contractor for the cost of labor, for the cost of returning the Equipment to serviceability, and for the reasonable rent of such Equipment, as provided in the Exhibit B.

Contractor shall not charge Company for desktop drills (up to a maximum of two (2) per Calendar year per Facility) conducted by Contractor for the benefit of Company, so long as each such desktop drill lasts no more than one (1) day and involves the participation of no more than two (2) individuals.

3.4 Contractor Employee Safety. Contractor shall take all necessary precautions to ensure the safety of its Personnel and shall comply with all Laws including those pertaining to health and safety. Contractor will comply with Company's then-current policies for contractors at the Work Site, including Company's safety, security, and drug and alcohol policies (including pre-hire, random, and post-incident testing) that are provided by Company to Contractor. Contractor will request a copy of Company's then-current policies that are applicable to the Work prior to accepting a Purchase Order.

Contractor shall erect and properly maintain at all times and as required by the Services being performed, all necessary and appropriate safeguards for the protection of persons, property and the environment.

3.5 Contractor Records. Contractor shall keep complete and accurate records detailing Contractor's conformance to its obligations under this Addendum, including, without limitation, health and safety records, exercise and drill records, and Equipment and Supply inventories, and

Equipment maintenance and usage records for a period of three (3) years, beyond the latter of the term of this Addendum, completion of Work or a longer period as may be required by Law or for such longer periods if said records are required for use in any pending arbitration and/or litigation at the expiration of said term. Additionally, in the event Contractor performs Work under this Addendum, Company shall have the right to audit, at its own expense, upon giving reasonable notice to Contractor, the records of Contractor as they pertain to Contractor's obligations under this Addendum and charges billed to Company.

3.6 Contractor Licenses/Permits. Contractor shall acquire and maintain any and all required government or agency licenses, permits, authorizations, certifications and/or approvals as may be necessary to perform emergency Services.

3.7 Company Owned Supplies and Equipment. Any and all Company-owned supplies and equipment including, but not limited to, individual personal protective equipment, issued to Contractor and/or Contractor's Personnel by Company during the course of any Designated Spill is to be returned to Company upon completion of the Work. A detailed listing of all such supplies and equipment issued to Contractor will be maintained by Company. The cost of any item(s) which are not timely returned to Company by Contractor will be charged to Contractor. This return requirement shall not apply to any disposable items utilized by Contractor while performing the Work, to the extent such items are no longer serviceable. The provisions of this Section 3.7 do not obligate Company to provide Contractor any supplies and equipment in conjunction with Contractor's performance of Work pursuant to this Addendum.

ARTICLE VIII

Fees and Charges

4.1 Fees for Services. As compensation for any non-emergency Services rendered hereunder, Company shall pay to the Contractor any undisputed invoices within thirty (30) days after receipt for the amounts set forth in Exhibit B for Equipment, Personnel, and Supplies, as provided in Section 3.1 above

4.2 Major Spill Response Billing. In the event of Work under a major spill that will take more than seven (7) days to clean up that requires the use of subcontractors, including tugboat companies, Contractor may submit field work sheets on a daily basis to Company which itemize all charges incurred by Contractor or its subcontractor(s) for each such twenty-four (24) hour period. Upon receipt of such field work sheets, Company shall guarantee payment of ninety percent (90%) of such charges, allowing ten percent (10%) retainage for final invoice review, and shall make payment of such amounts as quickly as practically possible under the circumstances, which shall at the most be within ten (10) days of delivery of each such twenty-four (24) hour period's field work sheets. Such amounts not timely paid within ten (10) days shall accrue interest at the rate of the then-existing prime rate plus eighteen percent (18%) per annum, or the maximum permissible under Law, whichever is lesser. Daily billing may continue for up to one (1) month.

Contractor shall exercise good faith efforts to use the lowest cost available qualified subcontractors, and shall use subcontractors only when the requirements of the Work surpass the resources of Contractor.

4.3 Other Billing. In performing activities other than Services under this Addendum that only require the resources of Contractor, Contractor shall invoice Company and Company shall pay Contractor's invoices in accordance with the Agreement.

ARTICLE V

Minimum Insurance Requirements

With respect to Contractor's performance under this Addendum, and in addition to Contractor's obligations of indemnification in the Agreement, Contractor shall, at its sole cost and expense, obtain and maintain insurance policies set out in Exhibit D attached hereto.

ARTICLE VI

Disposal of Waste

Company shall be solely responsible for the disposal, including but not limited to selection of the site for disposal and the means of transportation to the site, of all substances collected by the Contractor or other individuals during any cleanup of a Designated Spill, including but not limited to all oil, oil refuse, oily debris, oil absorbent, dispersant, and any other waste materials, whether or not such materials are considered dangerous or hazardous. Company shall be solely responsible for obtaining any permits required by the federal or state government prior to such disposal.

ARTICLE VII

Responder Immunity Indemnification and Liens

7.1 Notwithstanding anything to the contrary herein or the indemnification set forth in the Agreement, it is understood and agreed by the Parties that Contractor will at all times under this Addendum retain any exemption or limitation from liability pursuant to the Federal Water Pollution Control Act, as amended (FWPCA) 33 U.S.C.A. § 1251 et seq., the Oil Pollution Act of 1990, as amended (OPA-90) 33 U.S.C.A. § 2701 et seq., and any other applicable Federal, state, or local law, regulation, or ordinance which provides such responder immunity. Operation of such immunity shall be suspended if Contractor is negligent or engages in willful misconduct. For purposes of this indemnity, "negligence" shall be deemed to include Contractor's lack of available Equipment, Supplies or Personnel or failure of Contractor's Equipment. The term "negligence" shall not be deemed to include acts performed in strict accordance by the Contractor at the direction of the U.S. Coast Guard or other governmental authority at the direction of the Company.

7.2 Upon submission of a final statement or invoice for Work completed hereunder, Contractor shall warrant that there are no amounts owed by it or by any of its subcontractors if any that could become the basis for a materialman's lien under relevant Law against Company's property. In consideration of the final payment made in full for such amounts legitimately owed to Contractor for any Work completed under this Addendum, Contractor agrees to defend, indemnify and hold harmless Company against any such materialman's liens arising out of or in any way connected with or resulting from Contractor's or any of its subcontractor's non-payment or disputed payments, for Services rendered hereunder.

ARTICLE VIII

Miscellaneous

8.1 Press Releases. All information provided to the press shall be the responsibility of Company. All statements made by Contractor require Company's prior approval. Any statement, if approved, shall be limited to a response that Services are being performed on behalf of Company, a brief description of the Services being performed, the role of the Contractor and a statement that all further inquiries shall be directed to Company.

8.2 Notices. Except for initial oral or telephone notification of a Designated Spill described in Section 2.2, any notice provided for by this Addendum and any other notice, demand or communication that any Party may wish to send to the other in connection with this Addendum shall be in writing and either delivered in person, sent via a nationally recognized express mail service, sent via facsimile transmission with receipt confirmed or sent by registered or certified U.S. mail, first class postage prepaid, return receipt requested, and addressed as follows:

Notice provided to Company shall be provided to the Incident Commander identified to Company as per Section 2.2 above,

With a copy to:

Attn: Senior Manager, Strategic Sourcing
2330 N. Loop 1604 W.
San Antonio, Texas 78248
Fax: (210) 918-5495

With a copy of legal notices to:

Attn: VP and AGC (Commercial)
2330 N. Loop 1604 W.
San Antonio, Texas 78248
Fax: (210) 918-5500

Notice to Contractor:

Conestoga Rovers & Associates, Inc.
Attn:
2055 Niagara Falls Boulevard, Suite #3
Niagara Falls, NY 14304
E-mail:
Fax:

8.3 Governing Law, Interpretation. This Addendum will be governed and construed in accordance with the laws of the State of New York, without reference to the choice of law principles thereof. Any disputes arising out of this Addendum will be subject to the exclusive jurisdiction of the U.S. District Court located in the Borough of Manhattan, New York if federal jurisdiction is available and to the courts of the State of New York located in the Borough of Manhattan, New York if federal jurisdiction is not available. Company and Contractor irrevocably waive any right to a trial by jury in connection with any disputes arising out of this Addendum.

8.4 Amendments. This Addendum and the Exhibits hereto constitute the entire agreement between the Parties and supersedes any and all prior agreements. The Addendum may only be amended, modified, supplemented or altered in writing signed by the Parties.

8.5 Assignments. This Addendum and any rights or duties hereunder shall not be assigned by either Party without the express written consent of the other, except as provided below. The following assignments shall be permitted: (a) a transfer by a Party of its interest to an Affiliate of such Party; or (b) a corporate reorganization of a Party, by merger or otherwise; provided in each case the assignee assumes in writing all obligations under this Addendum from such transferring or reorganized Party. Any attempted assignment in violation of this Section 8.5 shall be null and void.

8.6 Binding on Successors. This Addendum shall be binding upon, and shall inure to the benefit of, the Parties and their respective successors and permitted assigns.

8.7 Attorney's Fees. If any litigation is commenced by the Parties arising out of this Addendum, the prevailing Party shall be entitled to recover a reasonable allowance for attorneys' fees and expenses.

8.8 Waiver. No waiver by either Party of any provision or condition of this Addendum shall be construed or deemed to be a waiver by such Party of any other provision or condition of this Addendum or a waiver of any subsequent breach of the same provision or condition, unless such waiver is specifically expressed in writing, signed by the waiving Party.

8.9 Severability. If any provision of this Addendum or portion thereof is declared invalid for any reason, the invalid provisions or portion thereof shall be deemed omitted and the remaining terms shall nevertheless be carried into effect.

IN WITNESS THEREOF, the Parties have executed this Addendum as of the date first above written.

NuStar Logistics, L.P.

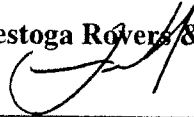
By: NuStar GP, Inc., its general partner



Name: Todd Denton

Title: Vice President

Conestoga Rovers & Associates, Inc.



Name:

Vincent Nasowski

Title:

Principal

EXHIBIT A

List of Facilities

Facility	Region	State	Site Type	Contractor	First Responder Yes or No	Est. miles to nearest OSRO location	Subcontractor Available	Subcontractors to CRA Agreement (Chris)
Rosario Asphalt Terminal	REF	NM	Terminal	CRA	No	270	Yes	Advanced Environmental Solutions (Approved Subcontractor to CRA) Conestoga Rovers Associates Kachina Petroleum (Approved Subcontractor to CRA) Rhino Environmental Services, Inc. (Approved Subcontractor to CRA)
Salisbury Terminal	EC	MD	Terminal	CRA	No	128	Yes	Clean Harbors Environmental Services, Inc. Baltimore, MD Trumvirate Environmental Baltimore, MD Lewis
Alamogordo Terminal	CW	NM	Terminal	CRA	No	293	Yes	Conestoga Rovers Associates Reycon Construction Solutions LP (Craig Waterbury- contact, owner) Alamo Earthworks and Paving Inc. (subcontractor to CRA) D/H Petroleum Timmons Rhino
Macon Terminal	GC	GA	Terminal	CRA	No	25	Yes	Conestoga Rovers Associates Inc. First Environmental Moran
Orion Pump Station	CW	TX	Pump Station	CRA	No	50	Yes	Corpus Christi Area Oil Spill Control Assn Corpus Christi, TX Miller Environmental Services, Inc. (CRA-Approved Subcontractor) Corpus Christi, TX Conestoga-Rovers & Associates
Harlingen Terminal	CW	TX	Terminal	CRA	No	140		Corpus Christi Area Oil Spill Corpus Christi, TX Gamer Environmental Services (Approved Subcontractor to CRA) Deer Park, TX Chemical Response & Remediation Contractors (CRA subcontractor) Conestoga Rovers Associates, Inc. Miller Env Alamo
Abernathy Terminal	CW	TX	Terminal	CRA	Yes	134	Yes	Ecological & Environment, Messer Construction Messer Construction Co., Inc. Gamer Environmental Services (Approved Subcontractor to CRA) Enerpipe BJB
St. James Terminal	GC	LA	Terminal	CRA	Yes	30	Yes	ES&H - Per Mark Prewitt Environmental Safety & Health Consulting Services Houma, LA Oil Mop
Tucuman Pump Station	CW	NM	Pump Station	CRA	No	112	Yes	Gamer Environmental Services (Approved Subcontractor to CRA) Deer Park, TX Conestoga Rovers Associates EmTech Environmental Services, Inc. Riedel Environmental Services, Inc. Kachina Oil Mop
Denver Terminal	CW	CO	Terminal	CRA	No	15	Yes	Gamer Environmental Services (Approved Subcontractor to CRA) Deer Park, TX Belfor Environmental Services, Inc. (formerly RMCAT) (approved subcontractor of CRA) Custom Environmental Services, Inc. (Approved Subcontractor to CRA)
San Antonio (South) Terminal	CW	TX	Terminal	CRA	Yes	100	Yes	Gamer Environmental Services (Approved Subcontractor to CRA) Deer Park, TX Conestoga Rovers Associates, Inc. TAS Environmental (CRA subcontractor) Alamo I
Laredo Terminal	CW	TX	Terminal	CRA	Yes	233	Yes	Gamer Environmental Services (Approved Subcontractor to CRA) Deer Park, TX Conestoga Rovers Associates, Inc. MO-VAC Environmental R/J Env.
Stratford Pump Station	CW	CO	Pump Station	CRA	Yes	16	Yes	Gamer Environmental Services (Approved Subcontractor to CRA) Deer Park, TX Enerpipe Ltd. Messer Construction Co., Inc. Venable's Construction Belfor
Sturgis Pump Station	CW	OK	Pump Station	CRA	Yes	144	Yes	Gamer Environmental Services (Approved Subcontractor to CRA) Deer Park, TX Enerpipe Ltd. Messer Construction Co., Inc. Venable's Construction Hull Hulls
Ringgold Pump Station	CW	OK	Pump Station	CRA	Yes	15	Yes	Gamer Environmental Services (Approved Subcontractor to CRA) Deer Park, TX Hull's Environmental Services Lewis, J. D. Construction Co. Dillon UPS
El Paso Terminal	CW	TX	Terminal	CRA	No	305	Yes	Gamer Environmental Services (Approved Subcontractor to CRA) Deer Park, TX Reycon Construction Solutions LP (Craig Waterbury- contact, owner) D/H Petroleum Timmons

San Antonio (East) Terminal	CW	TX	Terminal	CRA	Yes	80	Yes	Gamer Environmental Services (Approved Subcontractor to CRA) Deer Park, TX TAS Environmental (CRA subcontractor) Alamo
Grapevine Terminal	CW	TX	Terminal	CRA	Yes	10	Yes	Gamer Environmental Services (Approved Subcontractor to CRA) Deer Park, TX TAS Environmental (CRA subcontractor) Fort Worth, TX Conestoga-Rovers & Associates UPS SET
Catoosa Asphalt Terminal	REF	OK	Terminal	CRA	Yes	10	Yes	Gamer Environmental Services (Approved Subcontractor to CRA) Deer Park, TX ACME Pollution Control Conestoga Rovers Associates Sooner Hull
Albuquerque Terminal	CW	NM	Terminal	CRA	No	287	Yes	Gamer Environmental Services (Approved Subcontractor to CRA) Deer Park, TX Advanced Environmental Solutions (Approved Subcontractor to CRA) Kachina Petroleum (Approved Subcontractor to CRA) D/H Petroleum
Colorado Springs Terminal	CW	CO	Terminal	CRA	No	40	Yes	Gamer Environmental Services (Approved Subcontractor to CRA) Deer Park, TX Belfor Environmental Services, Inc. (formerly RMCAT) (approved subcontractor of CRA) Conestoga-Rovers & Associates Custom Environmental Services, Inc. (Approved Subcontractor to CRA) Enerpipe
Hobby Terminal	CW	TX	Terminal	CRA	Yes	25	Yes	Gamer Environmental Services (Approved Subcontractor to CRA) Deer Park, TX Conestoga Rover Associates, Inc. Anderson Oil Mop
Clawson Pump Station	CW	TX	Pump Station	CRA	Yes	95	Yes	Gamer Environmental Services (Approved Subcontractor to CRA) Deer Park, TX Conestoga Rover Associates, Inc. Enerpipe Ltd. Messer Construction Co., Inc. Hull L/W
Southlake Terminal	CW	TX	Terminal	CRA	Yes	15	Yes	Gamer Environmental Services (Approved Subcontractor to CRA) Deer Park, TX Conestoga-Rovers & Associates UPS SET
Dixon Pump Station	CW	TX	Pump Station	CRA	Yes	3	Yes	Gamer Environmental Services (Approved Subcontractor to CRA) Deer Park, TX Enerpipe Ltd. Messer Construction Co., Inc. UPS SET
Placedo Terminal	CW	TX	Terminal	CRA	No	14	Yes	Gamer Environmental Services (Approved Subcontractor to CRA) Deer Park, TX Miller Environmental Services, Inc. (CRA-Approved Subcontractor) Corpus Christi, TX Cary Construction (Approved Subcontractor to CRA) Conestoga Rover Associates, Inc. Palacios Marine & Industrial Coatings, Inc. (PMI) Oil Mop
Amarillo Terminal	CW	TX	Terminal	CRA	Yes	3	Yes	Gamer Environmental Services (Approved Subcontractor to CRA) Deer Park, TX TAS Environmental Services LP Fort Worth, Texas Conestoga Rover Associates, Inc. Ecological and Environmental (CRA Subcontractor) Enerpipe Ltd. D/H Petroleum
Texas City STOP Terminal #2	GC	TX	Terminal	CRA	Yes	50	Yes	Gamer Environmental Services, Inc. (Approved Subcontractor to CRA) La Marque, TX Oil Mop TnT
Texas City Terminal #1	GC	TX	Terminal	CRA	Yes	50	Yes	Gamer Environmental Services, Inc. (Approved Subcontractor to CRA) La Marque, TX Oil Mop
North Platte Terminal	CE	NE	Terminal	CRA	Yes	0	Yes	Haz-Mat Response Inc. North Platte, NE North Platte Terminal (response assistance)
Norfolk Terminal	CE	NE	Terminal	CRA	Yes	124	Yes	Haz-Mat Response Inc. Olathe, KS Central Transport Company Norfolk Terminal Porter Construction Weiland
Sioux Falls Terminal	CE	SD	Terminal	CRA	No	242	Yes	Haz-Mat Response Inc. Olathe, KS Sioux Falls Terminal Rybak
Roseville	CE	MN	Terminal	CRA	No	8	Yes	Haz-Mat Response Inc. Olathe, KS West Central Environmental Consultants Fridley, MN Roseville Terminal Rybak
Sauk Centre Terminal	CE	MN	Terminal	CRA	No	116	Yes	Haz-Mat Response Inc. Olathe, KS West Central Environmental Consultants Morris, MN Sauk Centre Terminal Sauk Centre Terminal (refer to Section 7.1.1 for equipment list) Rybak
Wolsey Terminal	CE	SD	Terminal	CRA	No	300	Yes	Haz-Mat Response Inc. Olathe, KS Wolsey Terminal Rybak
Yankton Terminal	CE	SD	Terminal	CRA	No	159	Yes	Haz-Mat Response Inc. Olathe, KS Yankton Terminal Rybak

Mitchell Terminal	CE	SD	Terminal	CRA	Yes	245	Yes	Haz-Mat Response Inc. Olathe, KS Mitchell Terminal Rybak
El Dorado Terminal	CE	KS	Terminal	CRA	Yes	110	Yes	Haz-Mat Response Inc. Wichita, KS Albert Hogoboom Oil Field Trucking Service Blackburn Construction Company Conestoga Rovers Associates El Dorado Station Savage Services
Columbus Terminal	CE	NE	Terminal	CRA	No	78	Yes	Haz-Mat Response Inc. Wichita, KS Columbus, NE Terminal Conestoga Rovers Associates Cummings and Sons Koch Excavating Weiland Environmental Solutions
Concordia Terminal	CE	KS	Terminal	CRA	Yes	130	Yes	Haz-Mat Response Inc. Wichita, KS Concordia, NE Terminal Environmental Solutions
Rock Rapids Terminal	CE	IA	Terminal	CRA	No	229	Yes	Haz-Mat Response Inc. Wichita, KS Conestoga Rovers Associates Rock Rapids Terminal Rybak
Salina Terminal	CE	KS	Terminal	CRA	Yes	111	Yes	Haz-Mat Response Inc. Wichita, KS Conestoga Rovers Associates Salina Terminal
Osceola Terminal	CE	NE	Terminal	CRA	Yes	75	Yes	Haz-Mat Response Inc. Wichita, KS Geneva Terminal Osceola Terminal
Le Mars Terminal	CE	IA	Terminal	CRA	No	123	Yes	Haz-Mat Response Inc. Wichita, KS Le Mars terminal
McPherson Pump Station	CE	KS	Pump Station	CRA	Yes	135	Yes	Haz-Mat Response Inc. Wichita, KS Albert Hogoboom Oilfield Trucking Conestoga Rovers Associates McPherson Station
Hutchinson Terminal	CE	KS	Terminal	CRA	Yes	163	Yes	Haz-Mat Response Inc. Wichita, KS Conestoga Rovers Associates Hutchinson Terminal Salina Terminal
Geneva Terminal	CE	NE	Terminal	CRA	No	67	Yes	Haz-Mat Response Inc. Wichita, KS Geneva Terminal Environmental Response
Milford Terminal	CE	IA	Terminal	CRA	No	170	Yes	Haz-Mat Response Inc. Wichita, KS Milford Terminal Rybak
Indianapolis Terminal	CE	IN	Terminal	CRA	Yes	10	Yes	Industrial Service Group Veolia ES Special Services Inc. Heritage SWS
Edinburg Terminal	CW	TX	Terminal	CRA	No	143	Yes	Miller Environmental Services, Inc. (CRA-Approved Subcontractor) Corpus Christi, TX Chemical Response & Remediation Contractors (CRA subcontractor) Alamo
Bremen Terminal	GC	GA	Terminal	CRA	No	37	Yes	Moran Environmental Recovery Savannah, GA Conestoga Rovers Associates Inc.
Moundville Terminal	GC	AL	Terminal	CRA	Yes	77	Yes	SWS First Response Birmingham, AL United States Environmental Services, LLC (USES) Alabaster, AL Conestoga-Rovers & Associates
Montgomery Terminal	GC	AL	Terminal	CRA	No	159	Yes	SWS First Response Birmingham, AL United States Environmental Services, LLC (USES) Alabaster, AL Conestoga-Rovers & Associates
Chickasaw Terminal (N&S)	GC	AL	Terminal	CRA	No	210	Yes	SWS First Response Pensacola, FL United States Environmental Services, LLC (USES) Biloxi, MS Conestoga-Rovers & Associates Oil Recovery Oil Mop
Blakeley Terminal	GC	AL	Terminal	CRA	No	200	Yes	SWS First Response Pensacola, FL United States Environmental Services, LLC (USES) Mobile, AL Conestoga-Rovers & Associates Oil Recovery Oil Mop
Andrews AFB	EC	MD	Terminal	CRA	No	160	Yes	Triumvirate Environmental Baltimore, MD Lewis
Piney Point Terminal	EC	MD	Terminal	CRA	No	100	Yes	Triumvirate Environmental Stafford, VA Lewis
Aberdeen Terminal	CE	SD	Terminal	CRA	No	150	Yes	West Central Environmental Consultants Rybak
Jamestown (East) Terminal	CE	ND	Terminal	CRA	No	159	Yes	West Central Environmental Consultants Morris, MN Jamestown East Terminal Rybak
Jamestown (North) Terminal	CE	ND	Terminal	CRA	No	159	Yes	West Central Environmental Consultants Morris, MN Jamestown North Rybak
Moorhead Terminal	CE	MN	Terminal	CRA	No	243	Yes	West Central Environmental Consultants Morris, MN Moorhead Terminal Rybak

EXHIBIT B

Fee schedules



NUSTAR LOGISTICS, L.P.
Proposed-Professional Services/Spill Response-Mgt. Rate Schedule
(Misc. Heavy Equipment and Field Equipment Rates August 4, 2010)

Personnel Classification	Standard per unit	ST Overtime per unit	Emergency per unit	ER Overtime per unit
Principal	\$ 120/hr	N/A	\$ 130/hr	N/A
Sr. Personnel or Spill Coordinator	95/hr	N/A	105/hr	N/A
Project Manager, Geologist, Engineer, Hydrologist	75/hr	N/A	85/hr	N/A
Industrial Hygienist	65/hr	N/A	75/hr	N/A
Safety Manager	58/hr	N/A	65/hr	N/A
Staff Engineer, Geologist, Hydrologist	65/hr	N/A	74/hr	N/A
Field Engineer, Geologist, Manager	60/hr	N/A	65/hr	N/A
CADD/Drafting	50/hr	N/A	55/hr	N/A
Construction Mgr.	68/hr	N/A	72/hr	N/A
Crew Supervisor/Foreman	55/hr	77/hr	65/hr	88/hr
Environmental Technician	53/hr	72/hr	68/hr	86/hr
Emergency Response Technician	45/hr	62/hr	50/hr	70/hr
Equipment Operator	42/hr	60/hr	48/hr	62/hr
Truck Driver	35/hr	48/hr	38/hr	48/hr
Labor	35/hr	36/hr	38/hr	38/hr
Word Processing/Secretarial	38/hr	N/A	36/hr	N/A
Per Diem (food & lodging)	140/day	N/A	140/day	N/A
Per Diem (food only)	45/day	N/A	45/day	N/A

Laboratory Testing	Standard per unit	ST Overtime per unit	Emergency per unit	ER Overtime per unit
Analytical Testing	Cost + 5%	N/A	Cost + 5%	N/A
Geotechnical Testing	Cost + 5%	N/A	Cost + 5%	N/A
Legal Surveying	Cost + 5%	N/A	Cost + 5%	N/A

Equipment Description	Standard per unit	ST Overtime per unit	Emergency per unit	ER Overtime per unit
*MetroTech 850 - Line Locator	\$50/day	N/A	\$50/day	N/A
*Trimble GIS/GPS Survey Equipment	350/day	N/A	350/day	N/A
*Field Screening - PID	70/day	N/A	75/day	N/A
*Field Screening - FID	80/day	N/A	80/day	N/A
*Field Screening - IR	125/day	N/A	175/day	N/A
Decon. Equipment (pool)	275/day	N/A	275/day	N/A
PPE (level A&B)	quoted upon need	N/A	quoted upon need	N/A
PPE (level C&D)	25/NC	N/A	25/NC	N/A
6"x 6" skirted river boom	1.25 per foot/day	N/A	1.25 per foot/day	N/A
6"x 9" skirted river boom	1.50 per foot/day	N/A	1.50 per foot/day	N/A
3" floating skimmer	200/day	N/A	200/day	N/A

Equipment (con't.) Description	Standard per unit	ST Overtime per unit	Emergency per unit	ER Overtime per unit
*T ^m skimmer	\$55/day	N/A	\$55/day	N/A
Drum skimmer	275/day	N/A	275/day	N/A
*String trimmer	45/day	N/A	45/day	N/A
Hand-held Radios	25/day	N/A	25/day	N/A
Cell Phones	10/day	N/A	10/day	N/A
Long Range Hand-held Radios	30/day	N/A	30/day	N/A
*Life jacket	12/day	N/A	12/day	N/A
*Waders	15/day	N/A	15/day	N/A
*Blowers	35/day	N/A	35/day	N/A
*Pressure washer	225/day	N/A	250/day	N/A
*Chain Saw	25/day	N/A	25/day	N/A
4 x 4 ATV	180/day	N/A	220/day	N/A
3" pump (diaphragm)	90/day	N/A	100/day	N/A
2" pump (diaphragm)	85/day	N/A	95/day	N/A
2" Wash down Pump	80/day	N/A	80/day	N/A
4" trash pump	95/day	N/A	95/day	N/A
3" trash pump	85/day	N/A	85/day	N/A
4" discharge hose (50' section)	15/each	N/A	15/each	N/A
3" discharge hose (50' section)	15/each	N/A	15/each	N/A



NUSTAR LOGISTICS, L.P.
Proposed-Professional Services/Spill Response-Mgt. Rate Schedule

2" discharge hose (50' section)	15/each	N/A	15/each	N/A
4" suction hose (20' section)	15/each	N/A	15/each	N/A
3" suction hose (20' section)	15/each	N/A	15/each	N/A
2" suction hose (20' section)	15/each	N/A	15/each	N/A
*4000 Watt Light Tower	115/night	N/A	115/night	N/A
*Generator 5000 Watt	85/day	N/A	85/day	N/A
*Generator 25 KVA diesel	145/day	N/A	145/day	N/A
*Generator 125-149 KW	275/day	N/A	275/day	N/A
*Small tools (shovel, rakes, etc.)	10/each	N/A	10/each	N/A
14', 15', 18' Motorized aluminum boats	185/day	N/A	185/day	N/A
20' Motorized boat	335/day	N/A	335/day	N/A
26' Motorized boat	400/day	N/A	400/day	N/A
All other Equipment not listed	Cost + 5%	N/A	Cost + 5%	N/A

Vehicles and Heavy Equipment Classification	Standard per unit	ST Overtime per unit	Emergency per unit	ER Overtime per unit
Haul trucks and trailer	\$65/hr	N/A	\$ 75/hr	N/A
1/2 ton truck + Mileage	35/day + IRS rate/mile	N/A	40/day + IRS rate/mile	N/A
1 ton truck w/tools + Mileage	58/day + IRS rate/mile	N/A	58/day + IRS rate/mile	N/A
*Spill trailer (15')	185/day	N/A	185/day	N/A
*Spill trailer (20')	210/day	N/A	210/day	N/A
*Spill trailer (45')	260/day	N/A	260/day	N/A

Vehicles and Heavy Equipment (Cont.) Classification	Standard per unit	ST Overtime per unit	Emergency per unit	ER Overtime per unit
*16' to 20' trailer	\$55/day	N/A	\$55/day	N/A
*8' - 10' trailer	35/day	N/A	35/day	N/A
130 bbl. Vacuum truck, operated	125/hr	N/A	125/hr	N/A
120 bbl. Vacuum truck, operated	115/hr	N/A	115/hr	N/A
80 or 70 bbl. Vacuum truck	85/hr	N/A	85/hr	N/A
20 yd. Roll-off Box	35/day	N/A	35/day	N/A
30 yd. Roll-off Box	40/day	N/A	40/day	N/A
500 bbl. Frac Tank	60/day	N/A	60/day	N/A
Container Clean Out	425/ls	N/A	425/ls	N/A
* D-7 Dozer	Cost + 5%	* N/A	Cost + 5%	* N/A
* D-8 Dozer LGP	Cost + 5%	* N/A	Cost + 5%	* N/A
* D-6 Dozer	Cost + 5%	* N/A	Cost + 5%	* N/A
* D-5 Dozer	* 80/hr	* N/A	* 80/hr	* N/A
* D-4 Dozer	* 60/hr	* N/A	* 70/hr	* N/A
* 330 Excavator	Cost + 5%	* N/A	Cost + 5%	* N/A
* 325 Excavator	* 115/hr	* N/A	* 115/hr	* N/A
* 320 Excavator	* 82/hr	* N/A	* 82/hr	* N/A
* 315 Excavator	* 76/hr	* N/A	* 76/hr	* N/A
* 312 Excavator	* 65/hr	* N/A	* 65/hr	* N/A
* 416 Backhoe	* 40/hr	* N/A	* 40/hr	* N/A
* 416 Backhoe 4x4	* 45/hr	* N/A	* 45/hr	* N/A
* 926 Loader AWD	* 55/hr	* N/A	* 55/hr	* N/A
* 928F Loader AWD	* 60/hr	* N/A	* 60/hr	* N/A
* 950 Loader AWD	* 100/hr	* N/A	* 100/hr	* N/A
* 963 Tracked Loader	Cost + 5%	* N/A	Cost + 5%	* N/A
* Off road dump truck	Cost + 5%	* N/A	Cost + 5%	* N/A
* Pulvixer	Cost + 57%	* N/A	Cost + 5%	* N/A
Fuel	Cost + 5%	N/A	Cost + 5%	N/A
All other Heavy Equipment not listed	Cost + 5%	N/A	Cost + 5%	N/A

- 1.) All other expendables (absorbents (boom and pads), plastic, rope, etc.) will be cost + 5%.
- 2.) These rates do not apply to open water spill. They do apply to small creek and small pond spills.
- 3.) Level A & B PPE - quoted upon request if project requires this level.
- 4.) Equipment mobilization and demobilization - quoted upon project and location.
- 5.) Subcontracted Services/Subcontractor will be cost + 5%.
- 6.) All rates are "non - union".
- 7.) We understand that our labor rates maybe adjusted a maximum of 4% for years 2011 and 2012, upon agreement of the parties.
- 8.) 1 day indicates minimum 8 hour charge.
- 9.) 1 week indicates ≥ 3 days usage maximum 40 hours usage.
- 10.) 1 month indicates ≥ 3 weeks usage-maximum 176 hours usage.
- 11.) Month also defined as 176 hours of operation time; If hours of usage exceed 176 hours the appropriate rate will be used either hourly, daily, weekly or monthly.
- 12.) Not to Exceed - Indicates maximum charge for listed piece of equipment per project.
- 13.) * For revised rates please see following page 3, to cover daily, weekly, and monthly rates.



NUSTAR LOGISTICS, L.P.
Proposed-Professional Services/Spill Response-Mgt. Rate Schedule

DAI/LY, WEEKLY AND MONTHLY RATES FOR HEAVY EQUIPMENT AND FIELD EQUIPMENT

Vehicles and Heavy Equipment (Cont.) Classification		Monthly per unit	Weekly per unit	Daily per unit
D-7 Dozer		Cost + 5%	Cost + 5%	Cost + 5%
D-6 Dozer LGP		Cost + 5%	Cost + 5%	Cost + 5%
D-6 Dozer		Cost + 5%	Cost + 5%	Cost + 5%
D-5 Dozer		5,038.60	1,679.53	559.84
D-4 Dozer		3,569.50	1,189.83	386.61
330 Excavator		Cost + 5%	Cost + 5%	Cost + 5%
325 Excavator		9,145.00	3,048.33	1,016.11
320 Excavator		5,894.10	1,964.70	654.90
315 Excavator		5,457.50	1,819.17	606.39
312 Excavator		4,661.00	1,553.67	517.89
416 Backhoe		2,301.00	767.00	255.67
416 Backhoe 4x4		2,301.00	767.00	255.67
926 (924) Loader AWD		3,793.70	1,264.57	421.52
928F Loader AWD		4,277.50	1,425.83	475.28
950 Loader AWD		7,192.10	2,397.37	799.12
963 (966) Tracked Loader		Cost + 5%	Cost + 5%	Cost + 5%
Off road dump truck		Cost + 5%	Cost + 5%	Cost + 5%
Pulvimixer		10,024.10	3,341.37	1,113.79
Equipment				
Description				
	Not to Exceed			
MetroTech 850 - Line Locator	N/A	450.00	150.00	50.00
Trimble GIS/GPS Survey Equipment	N/A	3,150.00	1,050.00	350.00
Field Screening - PID	840.00	630.00	210.00	70.00
Field Screening - FID	960.00	720.00	240.00	80.00
Field Screening - IR	1,500.00	1,125.00	375.00	125.00
String trimmer	540.00	405.00	135.00	45.00
Chain Saw	400.00	225.00	75.00	25.00
Life jacket	144.00	108.00	36.00	12.00
Waders	180.00	135.00	45.00	15.00
Blowers	450.00	315.00	105.00	35.00
Pressure washer	N/A	2,025.00	675.00	225.00
4000 Watt Light Tower	N/A	1,035.00	345.00	115.00
Generator 5000 Watt	N/A	765.00	255.00	85.00
Generator 25 KVA diesel	N/A	1,305.00	435.00	145.00
Generator 125-149 KW	N/A	2,475.00	825.00	275.00
Small tools (shovel, rakes, etc.)	60.00	N/A	30.00	10.00
16' to 20' trailer	N/A	495.00	165.00	55
8' - 10' trailer	N/A	315.00	105.00	35
Spill trailer (15')	N/A	1,665.00	555.00	185
Spill trailer (20')	N/A	1,890.00	630.00	210
Spill trailer (45')	N/A	2,340.00	780.00	260

- 1.) All other expendables (absorbents (boom and pads), plastic, rope, etc.) will be cost + 5%.
- 2.) These rates do not apply to open water spill. They do apply to small creek and small pond spills.
- 3.) Level A & B PPE - quoted upon request if project requires this level.
- 4.) Equipment mobilization and demobilization - quoted upon project and location.
- 5.) Subcontracted Services/Subcontractor will be cost + 5%.
- 6.) All rates are "non - union".
- 7.) We understand that our labor rates maybe adjusted a maximum of 4% for years 2011 and 2012, upon agreement of the parties.
- 8.) 1 day indicates minimum 8 hour charge.
- 9.) 1 week indicates ≥ 3 days usage maximum 40 hours usage.
- 10.) 1 month indicates ≥ 3 weeks usage-maximum 176 hours usage.
- 11.) Month also defined as 176 hours of operation time; If hours of usage exceed 176 hours the appropriate rate will be used either hourly, daily, weekly or monthly.
- 12.) Not to Exceed - Indicates maximum charge for listed piece of equipment per project.

EXHIBIT C

Equipment List

CONESTOGA-ROVERS & ASSOCIATES, INC.
HOUSTON, TEXAS EMERGENCY RESPONSE EQUIPMENT LIST

July 2, 2010

Tools	Misc. Items	Misc. Items
toolbox chest	nylon rope	trailer wheel chock blocks
screw drivers-regular set	braided rope	drum wrench
screw drivers-phillips set	bundle of wooden stakes	plug and patch kit
screw drivers-torx set	2-5 gallon buckets w/lids	screws-assortment
allen wrenches	silt fencing	bolts w/washers & nuts-assortment
bolt cutters	trash bags	power saw
box knives- 2 w/replacement blades	galvanized tub	drill
impact wrench	blow up swimming pool-8	reciprocating saw
25' measuring tape	traffic cones-6	1-5 gallon MicroBlaze
flashlights-4	road flares	2-60 minute SCBA's-Survivair
pry bar	1-fire extinguisher-20-30 lb w/holding bracket	2-60 minute SCBA spare bottles
bungi cords	1-fire extinguisher- 5 lb w/holding bracket	(6) Body harnesses
hand saw	pump sprayer-2	(4) Lanyards
hack saw and blades	over boots	fuel cans safety steel 5 gal
come-a-long	rubber boots steel toe	over pack drum 95 gallon
extension cords-2 50' w/ground	goggles	hard hat MSA V guard
bailing wire-roll	face shields	ear plugs max lite/chord NRR 30
sledge hammer	safety glasses	ear plugs max lite/NRP 33
ball-ping hammer	hard hats	respirator wipes box
loaded rubber mallet	umbrella w/stand	barrier tape-2
lightstand	safety horn	nitril gloves 4mL powder free-2 boxes
explosion proof drop light	hand cleaner	nitril gloves 8mL-1 box
ax	liquinox	black night PVC gloves-1 box (12 dozen)
hatchet	Administrative supplies-pens,pencils,paper	over booties-10
machete	stainless steel bowls	tyvek coveralls w/hood XXL- 1 case (25)
hammer	stainless steel spades	tyvek coveralls w/hood XXXL- 1case (25)
ratchet 1/4" w/extensions	stainless steel spoons	poly sheeting 10'x100'-3 rolls
ratchet 1/2" w/extensions	Marker slgn board-Dry erase	
ratchet 3/8" w/extensions	2-first aid kits	
1/2" sockets-metric and standard	floor fan	
3/8" sockets-metric and standard	5 gal. gas can-metal	
1/4" sockets-metric and standard	5 gal. diesel can-metal	
aluminum pipe wrenches-8", 10", 12"	1-gal. fuel can-metal	
crowbar-large, medium, small	Insect spray	
pliers-channel locks	baking soda	
pillers-regular insulated	cat litter or granular absorbent	
pliers-needle nose	leather work gloves	
vice grips	wisk broom	
crescent wrenches-large, medium, small	shop rags	
combination wrench set	hand towels	
drum wrench	paper towels-rolls	
fire hydrant wrench	ziplock baggies-1 gallon (case)	
wire brush	ziplock baggies-2 gallon (case)	
WD-40	safety vests	
electrician tape	large plastic tarps-2	
teflon tape	safety road triangle reflectors	
measuring wheel	rain suits-XXL	
fiberglass extension ladder-20'	100 ft. of 6" skirted boom	
decon brushes	upside down spray paint-3 cans	
soda ash-2 bags	garden hose-2- 50'	
de-ionized water-10 gallons	adjustable garden spray nozzle	
2-cycle engine oil	rakes, shovels, hoes	
plastic siphon hand pumps-4	steel collapsible chairs & table	
trailer wheel chock blocks	(3) extention cord	
ear plugs	wheel chalks	
aluminum collapsible ladder	Broom and dust pan	
respirator wipes	(1) generator	
nonhazardous & hazardous labels (4"x4")	(7) flashlights	
corn broom & street broom	power inverter	
(3) drill bits	tape gun	
allied tool set	(2) overhead lights	
huskey tool set	(3) double palm leather gloves	
Dewalt skill saw		
(2) Dewalt drills		
Dewalt drill		
bolt cutters		
(4) hand saws		

BOOM TRAILER:

Out board Motor
 4 Electric Motors
 2 Boats
 200 foot hand boom
 12 Bails soft boom
 12 bails pads
 15 Life Jackets
 10 Workvests

**CONESTOGA-ROVERS & ASSOCIATES, INC.
DALLAS, TEXAS EMERGENCY RESPONSE EQUIPMENT LIST**

July 21, 2010

Tools	Misc. Items	Misc. Items
toolbox chest	nylon rope	Rail chock blocks
screw drivers-regular set	braided rope	Rail clamp-on sign holder
screw drivers-phillips set	bundle of wooden stakes	trailer wheel chock blocks
screw drivers-torx set	empty sand bags	drum wrench
allen wrenches	2-5 gallon buckets w/lids	plug and patch kit
bolt cutters	silt fencing	lockout/tagout kit
box knives- 2 w/replacement blades	trash bags	MultiRae 4-gas meter
Impact wrench	galvanized tub	radios w/ charger-6 to 8
hand auger	blow up swimming pool-8	Draegar Bellows Pump
tin snips	traffic cones-6	screws-assortment
25' measuring tape	road flares	bolts w/washers & nuts-assortment
flashlights-4	1-fire extinguisher-20-30 lb w/holding bracket	power saw
pry bar	1-fire extinguisher- 5 lb w/holding bracket	drill
bungi cords	pump sprayer-2	reciprocating saw
hand saw	over boots	1- wind socks w/frames
hack saw and blades	chest waders=size 11, 12, 13	1-5 gallon MicroBlaze
come-a-long	rubber boots steel toe	50'-4" PVC slotted screen
extension cords-2 50' w/ground	goggles	50'-4" PVC risers
bailing wire-roll	face shields	2-60 minute SCBA's-Survivalr
sledge hammer	safety glasses	2-60 minute SCBA spare bottles
ball-ping hammer	hard hats	(8) Body harnesses
loaded rubber mallet	umbrella w/stand	(4) Lanyards
lightstand	safety horn	5 gallon bucket of small c-clamps
explosion proof drop light	hand cleaner	(8) grinding blades
ax	liquinox	fuel cans safety steel 5 gal
hatchet	Administrative supplies-pens,pencils,paper	over pack drum 95 gallon
machete	stainless steel bowls	hard hat MSA V guard
hammer	stainless steel trowels	ear plugs max lite/chord NRR 30
ratchet 1/4" w/extensions	stainless steel spoons	ear plugs max lite/NRP 33
ratchet 1/2" w/extensions	Marker sign board-Dry erase	respirator wipes box
ratchet 3/8" w/extensions	rechargeable flash lights-2 (lightbox)	coveralls kappler CPF 11 XXXL-1 box
1/2" sockets-metric and standard	2-first aid kits	barrier tape-2
3/8" sockets-metric and standard	floor fan	nitril gloves 4mL powder free-2 boxes
1/4" sockets-metric and standard	5 gal. gas can-metal	nitril gloves 6mL-1 box
aluminum pipe wrenches-8", 10", 12"	5 gal. diesel can-metal	black night PVC gloves-1 box (12 dozen)
crowbar-large, medium, small	fence T-posts and driver	glove night knit memphis string
pliers-channel locks	1-gal. fuel can-metal	over booties-10
pliers-regular insulated	Insect spray	tyvek coveralls w/hood XXL- 1 case (25)
pliers-needle nose	baking soda	tyvek coveralls w/hood XXXL- 1case (25)
vice grips	cat litter or granular absorbent	traffic cones reflective -6 each
crescent wrenches-large, medium, small	leather work gloves	poly sheeting 10'x100'-3 rolls
combination wrench set	wisk broom	
drum wrench	shop rags	
fire hydrant wrench	hand towels	
wire brush	paper towels-rolls	
WD-40	Tiger-sorb	
electrician tape	bubble wrap	
teflon tape	ziplock baggies-1 gallon (case)	
hose clamps-assortment	ziplock baggies-2 gallon (case)	
hydraulic floor jack	safety vests	
air cooler/fan(swamp cooler)	sunscrean	
measuring wheel	large plastic tarps-2	
level survey	safety road triangle reflectors	
fiberglass extension ladder-20'	rain suits-XXL	
fiberglass step ladder-10'	100 ft. of 6" skirted boom	
decon brushes	survey flags	
soda ash-2 bags	upside down spray paint-3 cans	
de-ionized water-10 gallons	garden hose-2- 50'	
2-cycle engine oil	adjustable garden spray nozzle	
plastic slphon hand pumps-4	wet/dry vacuum	
drum dolly	drinking water-5 cases	
trailer wheel chock blocks	rakes, shovels, hoes	
ear plugs	steel collapsible chairs & table	
aluminum collapsible ladder	(3) extention cord	
respirator wipes	wheel chalks	
nonhazardous & hazardous labels (4"x4")	Broom and dust pan	
com broom & street broom	shop vac	
(3) drill bits	(1) generator	
allied tool set	(7) flashlights	
huskey tool set	power inverter	
skil saw	tape gun	
(2) black & decker drills	(bag) tie downs	
Dewalt drill	(2 boxes) blue poly tarp	
bolt cutters	(2) overhead lights	
(4) hand saws	(3) double palm leather gloves	
	(5-gallon bucket) bungee cords	

EXHIBIT D**Minimum Insurance Requirements**

Policy	Limits	Coverage
Workers' Compensation	Amount required by law in each state where Contractor conducts operations.	Must include coverage for alternate employers and borrowed servants, if leased employees will be used. To the extent Contractor's activities are subject to the Jones Act, the Longshore and Harbor Workers Compensation Act, or the Defense Base Act (collectively, the "Acts"), the Workers' Compensation policy must be endorsed to cover all liability under any such Acts.
Stop Gap Employers Liability	\$500,000 (each accident or disease)	Required in all states where Workers' Compensation insurance is a monopolistic state-run system.
Employer's Liability	<ul style="list-style-type: none"> • \$500,000 for bodily injury (each accident) • \$500,000 for bodily injury by disease (policy limits) • \$500,000 for bodily injury by disease (each employee) 	
Commercial General Liability	<ul style="list-style-type: none"> • \$2,000,000 general aggregate limit • \$1,000,000 each occurrence limit (bodily injury/property damage) • \$1,000,000 each occurrence limit (personal injury and advertising injury) • \$2,000,000 aggregate limit (products/completed operations) • \$1,000,000 each occurrence limit (products/completed operations) 	Must be written on Insurance Services Office (ISO) Form CG 00 01 12 04 or a substitute form providing equivalent coverage, covering liability arising from premises, operations, personal injury, advertising injury, products/completed operations, and liability assumed under an insured contract (including tort liability of a third party assumed in a business contract).

	<ul style="list-style-type: none"> • \$1,000,000 each occurrence limit (fire legal liability) 	
Business Automobile Liability	\$1,000,000 combined single limit (bodily injury/property damage)	Must include coverage for all owned, non-owned and hired vehicles.
Umbrella/Excess Liability	\$10,000,000 each occurrence limit	Must include terms at least as broad as the underlying Employer's Liability, Commercial General Liability and Business Automobile Liability policies.
Environmental Insurance (Contractor's Pollution Liability)	<ul style="list-style-type: none"> • \$10,000,000 aggregate limit • \$5,000,000 each occurrence limit 	<p>The policy must include Company, its Affiliates, and their directors, officers, and employees as Additional Insureds. Contractor shall provide a copy of the Additional Insured endorsement to Company. The policy must not contain an Insured vs. Insured exclusion, or the exclusion must be modified to allow Company to bring a claim against Contractor. If required within the scope of Contractor's Work, the insurance required herein cannot exclude coverage for bodily injury, property damage, pollution or environmental harm resulting from or arising out of the Work, asbestos, lead or silica-related claims, claims, or liability arising out of the transportation and disposal of waste. The policy must contain a separation of insureds clause. If a motor vehicle is used in connection with the Work, the Business Automobile Liability policy will include coverage at least as broad as Insurance Services Office (ISO) CA 99 48 and be endorsed to include Motor Carrier Act endorsement MCS 90.</p>

The Workers' Compensation, Commercial General Liability and Business Automobile Liability policies will, to the fullest extent allowable by law, include a waiver of subrogation in favor of Company, its Affiliates, and each of their respective officers, directors, employees and borrowed servants. The Commercial General Liability policy will (i) include Company, its Affiliates, and each of their respective officers, directors, employees and borrowed servants as additional insureds (collectively, the "Company Insured Group"); and (ii) be primary and non-contributory with respect to any insurance or self-insurance maintained by Company. Any additional insured endorsement may be either specific to the Company Insured Group or "blanket" or "automatic" (i.e., addressing any person or entity), as required by contract. The endorsement must include coverage for "completed operations" if the work involves construction, repairs, or maintenance. Contractor shall provide a copy of the additional insured endorsement to Company within sixty (60) days of the date of execution of this Addendum and within sixty (60) days of each policy renewal.

Contractor covenants and agrees to:

- (A) maintain the insurance coverages and limits required hereby and any additional insurance and/or bonds required by law (i) at all times during the term of this Addendum and until completion of all Work associated with this Addendum, whichever is later; and (ii) with respect to any coverage maintained in a "claims-made" policy, for two (2) years following termination of this Addendum or completion of all Work associated with this Addendum, whichever is later; provided that, if a "claims-made" policy is maintained, the retroactive date must precede the date of commencement of Work under this Addendum;
- (B) require each subcontractor who may perform Work under this Addendum or enter upon the Work site to maintain coverages, requirements, and limits at least as broad as those listed in this Exhibit D (excluding any Umbrella/Excess Liability requirements) from the time when the subcontractor begins Work, throughout the term of the subcontractor's Work and, with respect to any coverage maintained on a "claims-made" policy, for two (2) years following completion of subcontractor's Work;
- (C) procure the required insurance from an insurance company eligible to do business in the state or states where Work will be performed and having and maintaining a Financial Strength Rating of "A-" or better and a Financial Size Category of "VII" or better, as rated in the A.M. Best Key Rating Guide for Property and Casualty Insurance Companies; provided, however, with respect to Workers' Compensation insurance, Contractor may procure such insurance from the state fund of the state where Work is to be performed; and
- (D) deliver to Company certificates of insurance stating the types of insurance and policy limits, and further provide, or cause the issuing insurance company to provide, at least 30 days prior written notice to Company of any cancellation, non-renewal, or reduction in coverage, terms, or limits. Contractor shall deliver such certificates (i) prior to execution of this Addendum and prior to commencement of any Work; (ii) prior to expiration of any insurance policy required under this Addendum; and (iii) for any coverage maintained on

a "claims-made" policy, for two (2) years following the termination of this Addendum or completion of all Work associated with this Addendum, whichever is later.

Company and Contractor further covenant and agree that (i) the failure of Company to demand such certificate of insurance or failure of Company to identify a deficiency therein will not be construed as a waiver of Contractor's obligation to maintain the insurance required under this Addendum; (ii) the insurance required under this Addendum does not represent that coverage and limits will necessarily be adequate to protect Contractor, nor be deemed as a limitation of Contractor's liability to Company in this Addendum; (iii) Contractor may meet the required insurance coverages and limits with any combination of primary and umbrella/excess liability insurance; and (iv) Contractor is solely responsible for any deductible or self-insured retention.

CERTIFICATE OF INSURANCE					ISSUE DATE (MM/DD/YY) 10/13/2009																	
BROKER <div style="margin-top: 10px;"> Program Brokerage Corporation 225 Metro Centre Boulevard Warwick, RI 02886 </div>			This certificate is issued as a matter of information only and confers no rights upon the certificate holder. This certificate does not amend, extend or alter the coverage afforded by the policies below.																			
INSURED'S FULL NAME AND MAILING ADDRESS Conestoga-Rovers & Associates Inc. 2055 Niagara Falls Blvd., Suite 3 Niagara Falls, NY 14304			Company A		American International Specialty Lines Ins. Co																	
			Company B																			
			Company C																			
			Company D																			
			Company E																			
COVERAGES																						
This is to certify that the policies of insurance listed below have been issued to the insured named above for the policy period indicated, not withstanding any requirement, term or condition of any contract or other document with respect to which this certificate may be issued or may pertain. The insurance afforded by the policies described herein is subject to all the terms, exclusions and conditions of such policies. Limits shown may have been reduced by paid claims.																						
TYPE OF INSURANCE	CO LTR	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS OF LIABILITY (Canadian dollars unless indicated otherwise)																	
COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS MADE <input checked="" type="checkbox"/> OCCURRENCE <input checked="" type="checkbox"/> PRODUCTS AND/OR COMPLETED OPERATIONS <input checked="" type="checkbox"/> PERSONAL INJURY <input type="checkbox"/> EMPLOYER'S LIABILITY <input checked="" type="checkbox"/> TENANT'S LEGAL LIABILITY <input type="checkbox"/> NON-OWNED AUTOMOBILE <input type="checkbox"/> HIRED AUTOMOBILE	A	12380282 LIMITS IN USD	09/30/2009	09/30/2010	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="padding: 2px;">EACH OCCURRENCE</td><td style="padding: 2px; text-align: right;">\$ 1,000,000</td></tr> <tr><td style="padding: 2px;">GENERAL AGGREGATE</td><td style="padding: 2px; text-align: right;">\$ 2,000,000</td></tr> <tr><td style="padding: 2px;">PRODUCTS - COMP/OP AGGREGATE</td><td style="padding: 2px; text-align: right;">\$ 2,000,000</td></tr> <tr><td style="padding: 2px;">PERSONAL INJURY</td><td style="padding: 2px; text-align: right;">\$ 1,000,000</td></tr> <tr><td style="padding: 2px;">EMPLOYER'S LIABILITY</td><td style="padding: 2px; text-align: right;">\$</td></tr> <tr><td style="padding: 2px;">TENANT'S LEGAL LIABILITY</td><td style="padding: 2px; text-align: right;">\$ 1,000,000</td></tr> <tr><td style="padding: 2px;">NON-OWNED AUTOMOBILE</td><td style="padding: 2px; text-align: right;">\$</td></tr> <tr><td style="padding: 2px;">HIRED AUTOMOBILE</td><td style="padding: 2px; text-align: right;">\$</td></tr> </table>		EACH OCCURRENCE	\$ 1,000,000	GENERAL AGGREGATE	\$ 2,000,000	PRODUCTS - COMP/OP AGGREGATE	\$ 2,000,000	PERSONAL INJURY	\$ 1,000,000	EMPLOYER'S LIABILITY	\$	TENANT'S LEGAL LIABILITY	\$ 1,000,000	NON-OWNED AUTOMOBILE	\$	HIRED AUTOMOBILE	\$
EACH OCCURRENCE	\$ 1,000,000																					
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NON-OWNED AUTOMOBILE	\$																					
HIRED AUTOMOBILE	\$																					
AUTOMOBILE LIABILITY <input type="checkbox"/> DESCRIBED AUTOMOBILES <input type="checkbox"/> ALL OWNED AUTOMOBILES <input type="checkbox"/> LEASED AUTOMOBILES ** <input type="checkbox"/> GARAGE LIABILITY <input type="checkbox"/> <small>**ALL AUTOMOBILES LEASED IN EXCESS OF 30 DAYS WHERE THE INSURED IS REQUIRED TO PROVIDE INSURANCE</small>					<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="padding: 2px;">BODILY INJURY</td><td style="padding: 2px; text-align: right;">\$</td></tr> <tr><td style="padding: 2px;">PROPERTY DAMAGE COMBINED</td><td style="padding: 2px; text-align: right;">\$</td></tr> <tr><td style="padding: 2px;">BODILY INJURY (Per person)</td><td style="padding: 2px; text-align: right;">\$</td></tr> <tr><td style="padding: 2px;">BODILY INJURY (Per accident)</td><td style="padding: 2px; text-align: right;">\$</td></tr> <tr><td style="padding: 2px;">PROPERTY DAMAGE</td><td style="padding: 2px; text-align: right;">\$</td></tr> </table>		BODILY INJURY	\$	PROPERTY DAMAGE COMBINED	\$	BODILY INJURY (Per person)	\$	BODILY INJURY (Per accident)	\$	PROPERTY DAMAGE	\$						
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PROPERTY DAMAGE	\$																					
EXCESS LIABILITY <input checked="" type="checkbox"/> UMBRELLA FORM <input type="checkbox"/> OTHER THAN UMBRELLA FORM	A	12380283 LIMITS IN USD	09/30/2009	09/30/2010	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="padding: 2px;">EACH OCCURRENCE</td><td style="padding: 2px; text-align: right;">\$ 15,000,000</td></tr> <tr><td style="padding: 2px;">AGGREGATE</td><td style="padding: 2px; text-align: right;">\$ 15,000,000</td></tr> </table>		EACH OCCURRENCE	\$ 15,000,000	AGGREGATE	\$ 15,000,000												
EACH OCCURRENCE	\$ 15,000,000																					
AGGREGATE	\$ 15,000,000																					
OTHER (SPECIFY) Pollution/Professional Liability	A	12456483 LIMITS IN USD	09/30/2009	09/30/2010	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="padding: 2px;">Per Occurrence</td><td style="padding: 2px; text-align: right;">\$ 10,000,000</td></tr> <tr><td style="padding: 2px;">Aggregate</td><td style="padding: 2px; text-align: right;">\$ 10,000,000</td></tr> <tr><td style="padding: 2px;">Cov A - Prof (Claims Made)</td><td style="padding: 2px; text-align: right;">\$</td></tr> <tr><td style="padding: 2px;">Cov B - Poll (Occurrence)</td><td style="padding: 2px; text-align: right;">\$</td></tr> </table>		Per Occurrence	\$ 10,000,000	Aggregate	\$ 10,000,000	Cov A - Prof (Claims Made)	\$	Cov B - Poll (Occurrence)	\$								
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DESCRIPTION OF OPERATIONS/LOCATIONS/AUTOMOBILES/SPECIAL ITEMS/ ADDITIONAL INSURED Re: NuStar Energy L.P. Service Contractor List, Master Work Agreement NuStar Logistics, L.P. its Affiliates, and their directors, officers, employees and borrowed servants are added as Additional Insured(s) to the Commercial General Liability Policies, but only with respect to liability arising out of the operations performed by or on behalf of the Named Insured Waiver of Subrogation is granted in favor of NuStar Logistics, L.P. its Affiliates, and their Directors, Officers, employees and borrowed servants under the Commercial General Liability Policy where required by written contract. General Liability Coverage is Primary and Non-Contributory.																						
CERTIFICATE HOLDER NuStar Logistics, L.P. its Affiliates, and their Directors, Officers, employees and borrowed servants Attn: Strategic Sourcing P.O. Box 781609 San Antonio, TX 78278-1609			CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL ENDEAVOUR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE COMPANY, ITS AGENTS OR REPRESENTATIVES. AUTHORIZED REPRESENTATIVE <div style="text-align: center;"> Per: _____ Page 1 of 1 </div>																			

IMPORTANT

If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

DISCLAIMER

This Certificate of Insurance does not constitute a contract between the issuing insurer(s), authorized representative or producer, and the certificate holder, nor does it affirmatively or negatively amend, extend or alter the coverage afforded by the policies listed thereon.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

5/27/2010

PRODUCER (716) 819-5500 FAX: (716) 819-5140
 First Niagara Risk Management, Inc
 726 Exchange Street Suite 900

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

Buffalo NY 14210

INSURED

Conestoga-Rovers & Associates, Inc.
 2055 Niagara Falls Blvd

Niagara Falls NY 14304

INSURERS AFFORDING COVERAGE

NAIC #

INSURER A: National Union Fire Ins Co

INSURER B: New Hampshire Insurance Co

INSURER C:

INSURER D:

INSURER E:

COVERAGES

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR	ADD'L LTR	INSRD	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YYYY)	POLICY EXPIRATION DATE (MM/DD/YYYY)	LIMITS	
			GENERAL LIABILITY <input type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS MADE <input type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC				EACH OCCURRENCE \$ DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COMP/OP AGG \$	
A			AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input checked="" type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS <input checked="" type="checkbox"/> \$500 ded collision <input checked="" type="checkbox"/> \$250 ded comp	CA9725603	7/1/2010	7/1/2011	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$	
			GARAGE LIABILITY <input type="checkbox"/> ANY AUTO				AUTO ONLY - EA ACCIDENT \$ OTHER THAN EA ACC \$ AUTO ONLY: AGG \$	
			EXCESS / UMBRELLA LIABILITY <input type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS MADE <input type="checkbox"/> DEDUCTIBLE RETENTION \$				EACH OCCURRENCE \$ AGGREGATE \$ \$ \$ \$	
B			WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) <input type="checkbox"/> Y/N If yes, describe under SPECIAL PROVISIONS below	WC4800796	AOS	7/1/2010	7/1/2011	<input checked="" type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
A			OTHER Hired Auto Physical Damage	CA9725603		7/1/2010	7/1/2011	Max Limit \$50,000 \$500 Ded Collision \$250 Ded Comp

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES / EXCLUSIONS ADDED BY ENDORSEMENT / SPECIAL PROVISIONS

RE: NuStar Energy LP Service Contractor List

NuStar Logistics LP, its Affiliates, and their Directors, Officers, employees and borrowed servants is included as Additional Insured as required by written contract with respects to the Automobile Liability Coverage. Waiver of Subrogation is included in favor of NuStar Logistics LP, its Affiliates, and their Directors, Officers, employees and borrowed servants as required by written contract with respects to Auto Liability and Workers Compensation coverages.

CERTIFICATE HOLDER

CANCELLATION

NuStar Logistics, L.P. its Affiliates, and their Directors, Officers, employees and borrowed servants
 Attn: Strategic Sourcing
 PO Box 781609
 San Antonio, TX 78278-1609

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE

Joseph Teresi/SVIKSJ

ACORD 25 (2009/01)

INS025 (200901)

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