



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.



**Wilmington
Spill Response Plan
Terminals**



**Wilmington
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Wilmington

**Spill Response Plan
Terminals**



Developed by:



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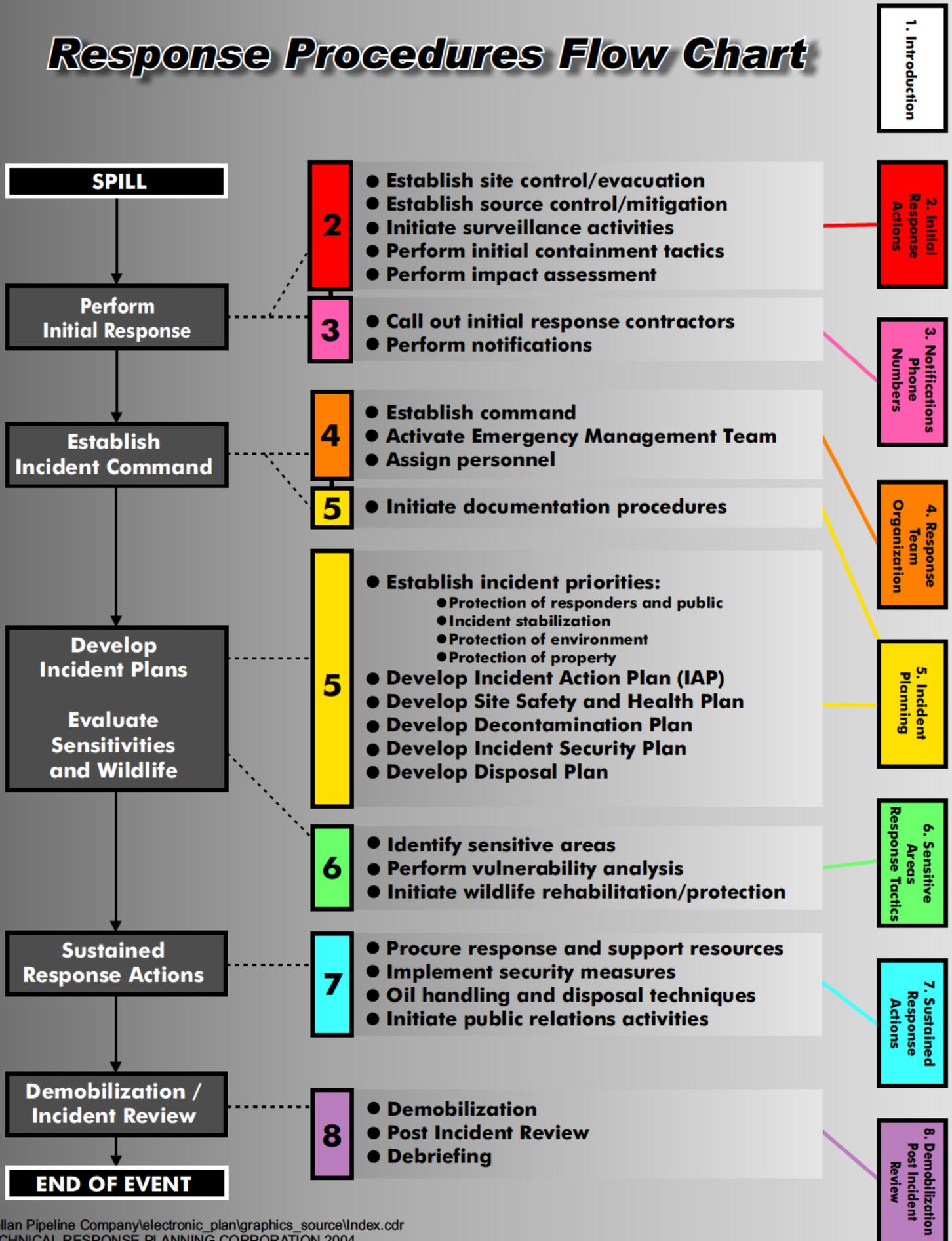
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Response Procedures Flow Chart



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SECTION 1

Last revised: December 17, 2010

INTRODUCTION

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FIGURE 1-1 - RECORD OF CHANGES

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

DATE OF CHANGE	DESCRIPTION OF CHANGE	PAGE NUMBER
5/1/2006	Change Manager Operations from Ed Fuchs to Frank Lynch and add Alan Cosby's home phone number.	Various
7/1/2006	Change primary OSRO from Clean Harbors to Miller Environmental.	Various
6/26/2006	Update various phone numbers.	Various
10/17/2007	Section 3 Figure 3.1-3, Appedix A Figure A.2-3 and ERAP Figure 3-2	
3/11/2008	Change phone numbers of various Magellan personnel	
8/11/2008	Appendix C Figure C-8	
8/12/2008	Appendix E Figure E-4	
9/3/2008	Appendix C Figure C-7 and ERAP Figure 5-2	
9/3/2008	Section 1 Figure 1-2	
9/12/2008	Appendix C Figure C-6 and ERAP Figure 5-1	
10/2/2008	Appendix C Figure C-4 and ERAP Figure 5-3	
10/2/2008	Appendix C Figure C-3	

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DATE OF CHANGE	DESCRIPTION OF CHANGE	PAGE NUMBER
12/18/2008	Section 7 Figure 7.1-1, Appendix B.1.1 and ERAP Figure 4-3	
1/15/2009	Section 3 Figure 3.1-3 and ERAP Figure	

	3-2	
1/16/2009	Section 7.1.1 and ERAP Figure 4-2	
1/23/2009	DOCK OPERATIONS MANUAL Figure 13	
2/3/2009	Section 7.1.1 and ERAP Figure 4-2	
6/10/2009	Appendix C Figure C-3	
6/10/2009	Appendix C Figure C-4 and ERAP Figure 5-3	
9/17/2009	Section 7.1.1 and ERAP Figure 4-2	
8/23/2010	Appendix D.8 and Figure D.8-1	
11/1/2010	Section 3 Figure 3.1-3, Appedix A Figure A.2-3 and ERAP Figure 3-2 from Company Personnel Import	
11/30/2010	Appendix C Figure C-8	
12/17/2010	Section 3 Figure 3.1-3, Appedix A Figure A.2-3 and ERAP Figure 3-2	

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DATE OF CHANGE	DESCRIPTION OF CHANGE	PAGE NUMBER
12/17/2010	Section 1 Figure 1-2	
12/20/2010	Appendix C Figure C-8	
12/22/2010	Section 3 Figure 3.1-3, Appedix A Figure A.2-3 and ERAP Figure 3-2	
1/26/2011	Appendix C Figure C-1	
2/15/2011	Appendix D.8 and Figure D.8-1	
2/24/2011	Section 3 Figure 3.1-3, Appedix A Figure A.2-3 and ERAP Figure 3-2 from Company Personnel Import	
3/8/2011	Appendix C Figure C-13	
4/5/2011	Section 3 Figure 3.1-3, Appedix A Figure A.2-3 and ERAP Figure 3-2	
4/27/2011	Section 6.7 and ERAP Secton 6.0	
5/2/2011	Appendix D.8 and Figure D.8-1	
5/2/2011	Section 6.6 and ERAP Section 6.0	

5/2/2011	Section 6.7 and ERAP Section 6.0	
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FIGURE 1-1 - RECORD OF CHANGES

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

DATE OF CHANGE	DESCRIPTION OF CHANGE	PAGE NUMBER
5/12/2011	Section 3 Figure 3.1-3, Appedix A Figure A.2-3 and ERAP Figure 3-2	
5/12/2011	Section 3 Figure 3.1-3, Appedix A Figure A.2-3 and ERAP Figure 3-2	
6/21/2011	Section 3 Figure 3.1-3, Appedix A Figure A.2-3 and ERAP Figure 3-2 from Company Personnel Import	
6/21/2011	Section 3 Figure 3.1-3, Appedix A Figure A.2-3 and ERAP Figure 3-2 from Company Personnel Import	
6/21/2011	Section 3 Figure 3.1-3, Appedix A Figure A.2-3 and ERAP Figure 3-2 from Company Personnel Import	
7/6/2011	Section 3 Figure 3.1-3, Appedix A Figure A.2-3 and ERAP Figure 3-2 from Company Personnel Import	
7/7/2011	Section 3 Figure 3.1-3, Appedix A Figure A.2-3 and ERAP Figure 3-2	

FIGURE 1-2 - DISTRIBUTION LIST

Paper copies of this plan are located in the facility office and are accessible to facility employees and online versions of the plans are available to all employees with computer access.

PLAN HOLDER	ADDRESS	NUMBER OF COPIES		INITIAL DISTRIBUTION DATE
		PAPER	ELECTRONIC	
Wilmington Terminal	1050 Christina Avenue Wilmington , DE 19801	1	1	June 2007
U.S. EPA Region III	1650 Arch Street Philadelphia, PA 19103-	1	0	August 7, 2007

(3HS61) FRP Coordinator Attn: Linda Zigler	2029			
US Coast Guard, COTP, Philadelphia	One Washington Avenue Philadelphia, PA 19147	1	0	June 5, 2007
Mr. Chris Nelson, Environmental Specialist	Magellan, P.O. Box 3102, Mail Drop 27-3 Tulsa, OK 74172	1	1	
Mr. John (Wes) O'Neil	1802 Poth Lane Corpus Christi, Texas 78408	0	1	
Response Plans Officer, Pipeline and Hazardous Material Safety	U.S. Department of Transportation 1200 New Jersey Ave SE., Room E22-210 Washington, DC 20590	1	0	May 1, 2006

FIGURE 1-3 - WILMINGTON INFORMATION SUMMARY

Owner/Operator:	Magellan Wilmington Terminal 1050 Christina Avenue Wilmington, DE 19801
Owner Telephone:	(302) 654-3717
Facility Name:	Wilmington
Facility Address:	1050 Christina Avenue Wilmington, DE 19801
Facility Telephone/Fax:	(302) 654-3717 /
Facility EPA FRP #:	DEFRP003
Facility USCG FRP #:	
Facility PHMSA OSRP #:	1731
Description of Facility:	The facility consists of approximately 54 acres with oil storage tanks, piping, truck loading racks, ship/barge marine dock and several structures used for offices, control equipment, maintenance, storage, etc. The majority of the site is developed with tanks, containment structures, buildings, and paved surfaces.

. Petroleum product distribution, wholesaling, bunker fuel blending, and ship bunkering are the primary activities at the facility. Petroleum products are delivered to the terminal via river barge or vessel and transfer pipelines located on the Delaware River.

FIGURE 1-3 - WILMINGTON INFORMATION SUMMARY

*24 Hour Numbers

Qualified Individuals: (Refer to APPENDIX A, FIGURE A.2-3 for QI Training Records)	Work	
	Alan Cosby Supv Area Incident Commander 302/654-3717 (Office) 302/985-1891 *(Mobile) (302) 655-3209 (fax) (Pager)	1050 Christina Ave Wilmington, DE 19801
	Andrew Zaun Supv Maintenance II 302/654-3717 (Office) 302/985-3531 *(Mobile)	1050 Christina Ave Wilmington, DE 19801
	Dan Whitmarsh Terminal Operator Sr Operations Officer 302/654-3717 (Office) 302/985-1881 *(Mobile)	1050 Christina Ave Wilmington, DE 19801

FIGURE 1-3 - WILMINGTON INFORMATION SUMMARY, CONTINUED

Line Sections / Products Handled: (Refer to Product Characteristics and Hazards, FIGURE D.9-1)			
LINE NUMBER		LENGTH (miles)	PRODUCTS
#1		.97 miles	No. 6 fuel oil
#2		1.35 miles	No. 6 Fuel Oil
#3		2.66 miles	No. 6 Fuel Oil
#4		2.76 miles	No. 6 Fuel Oil
#5		3.1 miles	No. 6 Fuel Oil

Description of Zone:	The pipeline carries refined oil (including) in the areas shown in FIGURE 1-4 and FIGURE 1-5
Response Zone Consists of the Following Counties:	New Castle
Alignment Maps (Piping, Plan Profiles):	Maintained at:
Worst Case Discharge:	
Statement of Significant and Substantial Harm:	The response zones in this system all contain pipelines greater than 6 5/8 inches and are longer than ten miles. At least one section of pipeline in each response zone crosses a major waterway or comes within five miles of a public drinking water intake. Therefore, in accordance with 49 CFR 194.103(c), each entire response zone described in this Plan will be treated as if expected to cause significant and substantial harm.

FIGURE 1-3 - WILMINGTON INFORMATION SUMMARY, CONTINUED

Facility Data				
Location (Address and County)	Hours of Operations/ Manning	Throughput	Date of Startup	Wellhead Protection Area
1050 Christina Avenue Wilmington, New Castle , DE 19801	The facility is continually attended by company personnel 24 hours a day, year round. Normal hours of the barge/ship dock are 24 hours a day, 7 days a week.		1950s (Magellan acquired 9/1/05)	N/A
Date and Type of Substantial Expansion				
The only facility expansions that have occurred are additions of various tanks. Refer to FIGURE C-4 for tank data.				
Current Operations				
The aboveground storage tanks serve loading racks for No. 2 oil, gasoline, low sulfur diesel, and No. 6 oil. Ethanol is blending at the rack into gasoline. Petroleum products are dispensed at these racks into tank trucks which deliver these products to other distributors and end users. Petroleum products are pumped to the loading area and placed into tank trucks with standard bottom loading equipment and top loading petroleum transfer equipment (for some distillates only). Truck Racks: There is potential for a spill due to overfilling a tank truck compartment during filling operations. The potential volume of a				

spill|

_____ will vary depending on the time duration involved. Another potential spill condition could occur when the unloading system piping is parted or broken off while filling the tanks. Tire blocks are used to prevent the departure of trucks while its tank is being filled. Adequate secondary containment is provided at the loading racks where product is transferred from storage tanks to transport and delivery trucks. Three of four of the product loading racks are protected from the elements with a canopy roof. Pipelines at the tanker truck loading racks are marked as to the specific product that they dispense. The inadvertent mixing of the petroleum products currently stored at the facility would not be expected to result in additional hazard with respect to fire, explosion, or unusual corrosion. The front loading rack (at the front of the terminal nearest the entrance gate) areas is covered by a canopy and equipped with curbing to contain and direct spilled petroleum products t

_____ Any petroleum product and/or water can be recovered from this tanker tank and disposed of site or recovered back into a product storage tank at the terminal. The facility has two separate black oil truck rack areas. |

_____ For haulers that frequently use the facility, Magellan has provided an automated service for truck loading for the front rack. Should the hauler need assistance, a call box is located inside the building. |

_____ Haulers new to the facility are given step by step loading procedures, and are walked through the loading operation by terminal personnel. Warning signs and loading procedures are also posted at each loading position. During non-automated loading operations, terminal personnel are present to control the loading of each transport. Drains and outlets of all tank trucks are inspected for leakage by truck drivers or terminal personnel before fill and departure. Each tank truck is inspected prior to loading, during loading, and after loading. Inspection is performed to ensure that equipment is functioning properly. If necessary, remedial maintenance may be performed prior to loading. If a serious leak is apparent after loading, the truck may have to unload the product before leaving the terminal. As a contingency, the facility has an unloading spot, located at the black oil truck rack. Containment is also provided at the unloading manifold where product is transferred from tanker trucks to the aboveground storage tanks. An earthen berm approximately one foot in height surrounds the unloading manifold. This system provides suitable on-site containment for spilled product at the unloading area until cleanup of spilled petroleum product can be accomplished.

FIGURE 1-3 - WILMINGTON INFORMATION SUMMARY, CONTINUED

Size, Type, and Number of Vessels the Facility can Transfer Oil to or from Simultaneously:

The facility receives a majority of its product by barge and ship, but is also capable of receipt of product by tanker truck. The ships dock into two berths. |

_____ Dock Area: Magellan's Wilmington facility receives product from a marine receiving dock

which can accommodate two vessels at a time. The barge/ship is held in place with rope and/or steel cables attached to bollards upstream, downstream, and in the center of the berthed vessel. The dock and vessel transfer facilities are illuminated and posted with proper signage. Fire extinguishers are strategically placed at the vessels during unloading, and they are manned and attended continually by barge/ship company personnel who are in charge of unloading and attending the petroleum transfer. The barge/ship company personnel are also responsible for checking valves and connection points and maintaining proper safety measures at all times. Terminal personnel are in contact with barge/ship operating personnel at all times by voice communication via two-way, portable radio equipment. Additionally, the facility is equipped with a dock telephone to the terminal office in the event the portable radio system fails.

Waterfront spillage is contained by a steel collection basin installed around the entire hose handling area at the dock. Drip and discharge collection and vessel slop recovery is provided by a collection basin installed around each individual hose handling area at the dock. Collected spillage is pumped into oil tanks located shoreside. The capacity of the containment complies with the specifications of the United States Coast Guard. In the event of a breach of the secondary containment systems, the discharge would most likely travel east towards the Delaware River.

Spill Detection and Mitigation Procedures:	Refer to <u>SECTION 2</u> and <u>APPENDIX D.</u>
Date Prepared:	

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

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

FIGURE 1-4 - FACILITY AREA MAP



FIGURE 1-5 - PIPELINE OVERVIEW

[Click here to view the Pipeline Overview](#)

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 Facility is owned and operated by Magellan Wilmington Terminal, 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), EPA Region III Regional Contingency Plan Specifically, this Plan is intended to satisfy:

- U.S. Environmental Protection Agency (EPA) requirements for an OPA 90 plan (40 CFR 112.20)
- U.S. Coast Guard (USCG) requirements for an OPA 90 plan (33 CFR 154.1035)
- Pipeline and Hazardous Materials Safety Administration (PHMSA), U.S. Department of Transportation requirements for an OPA 90 plan (49 CFR 194)
- EPA requirements for a Spill Prevention Control and Countermeasures (SPCC) Plan (40 CFR 112.7)
- Occupational Safety and Health Administration (OSHA) requirements for emergency response plans (EAP and ERP) (29 CFR 1910)

1.2 PLAN REVIEW AND UPDATE PROCEDURE

In accordance with 40 CFR 112.20, this Plan will be reviewed annually and modified to address new or different operating conditions or information included in the Plan. Company internal policy states that the Plan will be reviewed at least annually and modified as appropriate. In the event the Company experiences a Worst Case Discharge, the effectiveness of the plan will be evaluated and updated as necessary. If a new or different operating condition or information would substantially 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. EPA must receive the change within 60 days.

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

The U.S. Coast Guard (USCG) requires that plan changes be submitted in a timely manner. The plan review must occur within one (1) month of the anniversary date of the USCG approval letter. If no revisions are required, the facility owner or operator shall indicate the completion of the annual review on the record of changes page.

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

CONDITIONS REQUIRING REVISIONS AND SUBMISSIONS	EPA	USCG	PHMSA
Relocation or replacement of the transportation system in a way that substantially effects the information included in the Plan, such as a change to the Worst Case Discharge volume.	x		x
A change in the Facility's configuration that materially alters the information included in the Plan.	x	x	

A change in the type of oil handled, stored, or transferred that materially alters the required response resources.	X	X	X
A change in key personnel (Qualified Individuals).	X		X
Material change in capabilities of the Oil Spill Removal Organization(s) (OSROs) that provide equipment and personnel.	X		X
Material change in the Facility's spill prevention and response equipment or emergency response procedures.	X	X	
Any other changes that materially affect the implementation of the Plan.	X	X	X
A change in the name of the Oil Spill Removal Organization (OSRO).		X	
A change in the Facilities operating area that includes ports or geographic area.		X	
A change in the NCP or ACP that has significant impact on the equipment appropriate for response activities.			X

All requests for changes must be made through the Plan Coordinator and will be submitted to EPA by the Environmental, Health, Safety and Training Department (EHS&T).

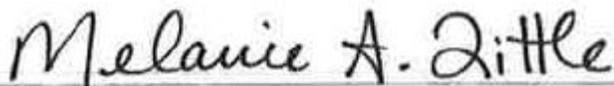
1.3 CERTIFICATION OF ADEQUATE RESOURCES

CERTIFICATION

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

Magellan Wilmington Terminal

The Magellan Wilmington Terminal, hereby certify to the Pipeline and Hazardous Materials Safety Administration of the Department of Transportation that they have obtained, through contract or other approved means, the necessary private personnel and equipment to respond, to the maximum extent practicable, to a worst case discharge or a substantial threat of such a discharge.



Melanie A. Little
Vice President Operations

1.4 AGENCY SUBMITTAL / APPROVAL LETTERS

[Click here to view EPA Approval Letter](#)

Wilmington

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1.4 AGENCY SUBMITTAL / APPROVAL LETTERS

[Click here to view USCG Submittal Letter](#)

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1.4 AGENCY SUBMITTAL / APPROVAL LETTERS

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SECTION 2

Last revised: January 2005

INITIAL RESPONSE ACTIONS

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SECTION 2

INITIAL RESPONSE ACTIONS, CONTINUED

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FIGURE 2-1 - INITIAL RESPONSE ACTION CHECKLIST

To be used in conjunction with Section 2.2 through 2.7

SPECIFIC RESPONSE ACTIONS	COMMENT
First Person On-Scene	
Assume the role of Incident Commander until relieved.	
Take appropriate personal protective measures.	
Notify Emergency Responders (911).	
Alert personnel in the area of any potential threat and/ or initiate evacuation procedures.	
Eliminate possible sources of ignition in the vicinity of any spilled product.	
Notify the Magellan Spill Reporting Number.	
Notify Qualified Individual.	
Qualified Individual	
The Qualified Individual will assume or assign the role of Incident Commander.	
Restrict access to the incident scene and surrounding area as the situation demands. Take any other steps necessary to minimize any threat to health and safety.	
Initiate the appropriate Initial Response Actions (SECTION 2).	
Ensure medical assistance has been requested for any injury.	
Ensure the Magellan Spill Reporting Number has been called to make appropriate regulatory notifications.	
Verify the type of product and quantity released, request/obtain Material Safety Data Sheets as necessary.	
Identify/isolate the source and minimize the loss of product.	
Coordinate further initial response actions with local supervision and Incident Commander.	
Environmental Specialist	
Notify appropriate regulatory agencies per the state reporting matrix and update any significant changes (FIGURE 3.1-3).	
<ul style="list-style-type: none"> • Send out initial release report to Company personnel. • Work assigned role in Spill Management Team, as needed. • Contact environmental contractors, as needed. 	

FIGURE 2-1 - INITIAL RESPONSE ACTION CHECKLIST, CONTINUED

To be used in conjunction with Section 2.2 through 2.7

SPECIFIC RESPONSE ACTIONS	COMMENT
Incident Commander/Qualified Individual	

Activate the Spill Management Team (SMT), as the situation demands (SECTION 4).	
Activate additional response contractors and local response resources, as the situation demands (SECTION 3).	
Evaluate the Severity, Potential Impact, Safety Concerns, and Response Requirements based on the initial information provided by the First Person On-Scene.	
Classify the incident (SECTION 3.1).	
Confirm safety aspects at site, including need for personal protective equipment, sources of ignition, and potential need for evacuation.	
If necessary to ensure the safety of employees, reduce the potential for accidental ignition, or to mitigate further damage, take action to safely halt vehicular and/or railroad traffic in the affected area. Coordinate all requests for halting railroad traffic through the local police or fire authorities. All required vehicular and/or railroad traffic control activities will be conducted with the approval of the local police and/or fire authorities.	
Notify Manager of Operations or Director, as appropriate. Provide incident briefing and coordinate activation of Corporate Spill Management Team (SMT), as the situation demands.	
Coordinate/complete additional Internal and External Notifications (SECTION 3).	
Proceed to incident site and direct response and clean-up operations.	
Designated SMT personnel will immediately respond to an incident at the Facility as the situation demands.	
Perform response/cleanup operations as directed or coordinated by the Incident Commander.	
Assist as directed at the incident scene.	

2.1 SPILL RESPONSE

Emergencies are unplanned, significant events or conditions that require time-urgent response from outside the immediate or affected area of the incident. Incidents that do not pose a significant safety or health hazard to employees in the immediate vicinity and that can be controlled by employees in the immediate area or affected facility are not classified as emergencies that would invoke the emergency plan.

FIGURE 2.1-1 - SPILL RESPONSE ACTION CHECKLIST

RESPONSE ACTION	PERSON TAKING ACTION (INITIALS)	DATE/TIME ACTION TAKEN
First Person to Discover Spill		
Take appropriate action to protect life and ensure safety of personnel. Contact the appropriate local emergency responders		

or request the office to do so.		
Obtain the information necessary to complete the Release/Spill Report Form (FIGURE 3.1-2) and phone this information to the Magellan Spill Reporting number to make appropriate regulatory notifications.		
Notify the Qualified Individual.		
Immediately shutdown pipeline (if applicable).		
Secure the scene: 1. Isolate the spill scene to assure the safety of people and the environment. Establish a SECURITY PERIMETER with barriers, roadblocks and fencing if possible. Keep non-essential personnel and onlookers outside the SECURITY PERIMETER. As soon as possible, assign security personnel to monitor roadblocks and other barriers, keep records of arriving responders, and to deny entry to unauthorized personnel. 2. Establish an EXCLUSION ZONE encompassing all free liquids, hazardous vapors, or any potential hazards such as fire or explosion. As soon as possible define the Hotline with a physical barrier (such as warning tape), and if possible upgrade the hotline to safety fencing as soon as materials are available. 3. All responders inside the SECURITY PERIMETER should wear high-visibility reflective vests for identification purposes. 4. Personnel should not be permitted to enter the EXCLUSION ZONE unless they are wearing appropriate PPE, and have been directed by the Incident Commander to cross the Hotline.		
Qualified Individual		
Assume role of Incident Commander until relieved.		
Conduct preliminary assessment of health and safety hazards.		
Evacuate non-essential personnel, notify emergency response agencies to provide security, and evacuate surrounding area (if necessary).		
Notify Local Emergency Responders, if necessary.		
Call out spill response contractors (FIGURE 3.1-3).		
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FIGURE 2.1-1 - SPILL RESPONSE ACTION CHECKLIST, CONTINUED

RESPONSE ACTION	PERSON TAKING ACTION (INITIALS)	DATE/TIME ACTION TAKEN
Qualified Individual, Continued		

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, etc. Keep drivers away from truck rack if spill occurs there.		
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.		
If safe to do so, direct facility responders to stabilize and contain the situation. This may include berming or deployment of containment and/or sorbent boom.		
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.		
If there is a potential to impact shorelines, consider lining shoreline with sorbent or diversion boom to reduce impact.		
Environmental Specialist		
Notify appropriate regulatory agencies per the state reporting matrix, and update any significant changes (FIGURE 3.1-3).		
Send out initial release report to Company personnel.		
Work assigned role in spill management team, as needed.		
Contact environmental contractors, as needed.		
On-Scene Coordinator/Qualified Individual		
Activate all or a portion of Spill Management Team (SMT) (as necessary). Environmental Specialist will maintain contact with notified regulatory agencies.		
Ensure the SMT has mobilized spill response contractors (if necessary). It is much better to demobilize equipment and personnel, if not needed, than to delay contacting them if they are needed.		
Document all response actions taken, including notifications, agency/media meetings, equipment and personnel mobilization and deployment, and area impacted. (Refer to SECTION 5 for documentation.)		
Initiate spill tracking and surveillance operations. Determine extent of pollution via surveillance aircraft or vehicle. Estimate volume of spill utilizing information in SECTION 2.2 and SECTION 2.3 . Send photographer / videographer, if safe.		
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FIGURE 2.1-1 - SPILL RESPONSE ACTION CHECKLIST, CONTINUED

RESPONSE ACTION	PERSON TAKING ACTION (INITIALS)	DATE/TIME ACTION TAKEN
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SECONDARY RESPONSE ACTIONS (Refer to SMT job descriptions in SECTION 4.6)	
FACILITY SPECIFIC RESPONSE CONSIDERATIONS (Refer to the EMERGENCY RESPONSE PLAN and SECTION 6 for maps and sensitivity information).	
SITE SPECIFIC ACTIONS	
DOCUMENT ALL ACTIONS TAKEN	INITIALS
First Priority	
Account for all personnel and visitors.	
Identify and assess fire/safety hazards.	
Second Priority	
Secure spill source, if possible.	
Assure all required notifications are conducted.	
Secure all drainage leading from facility.	
Third Priority	
Facility drainage and secondary containment will be adequate to contain a spill of small or medium size, preventing it from reaching a small retention pond with outfall lines connected to a storm water system that outfalls in close proximity to the Delaware River. Once the spill has been contained, resources are present at the facility to recover spilled product, safety conditions permitting.	
If unable to contain spill to facility property, refer to SECTION 6.8 of the FRP for location of booming/fill dirt strategy.	
Once deployment of response equipment has been completed, initiate recovery of product.	
Upon arrival of SMT, assure all information is accurate and complete prior to being released.	
Assure proper documentation has been completed from initial discovery of spill to finish; reference SECTION 5 in the Spill Response Plan .	

FIGURE 2.1-1 - SPILL RESPONSE ACTION CHECKLIST, CONTINUED

RESPONSE ACTION	PERSON TAKING ACTION (INITIALS)	DATE/TIME ACTION TAKEN
Cold Weather Response		
PPE is essential; use a layered approach <ul style="list-style-type: none"> • Base Layer - lightweight, snug fitting, and has the ability to wick perspiration away from the body (silk, polypropylene, etc.) • Mid Layer - insulating and wicking material (fleece, wool, microfiber, etc.) 		

<ul style="list-style-type: none"> • Waterproof Outer Layer - wind proof, water repellent material, breathable (nylon, gore-tex, down, etc.) • Footwear - thin socks (nylon, silk, wool), heavier socks (wool), overboots (rubber, waterproof & insulated) • Hand and Head Protection - layer with liners and waterproof shells as appropriate, 40-80% of heat loss is through the head (gore-tex, fleece, wool, down, etc.) <p>Remember the COLD method; Clean (keep insulating layers clean), Overheating (adjust layers of clothing as needed), Loose Layers (wear several layers that don't impede circulation), Dry (stay dry, avoid cotton).</p>		
<p>Watch for signs of hypothermia (shivering, apathy, slurred speech, confusion, poor coordination and unconsciousness). Call for medical assistance if symptoms are present.</p>		
<p>If spill involves a water body, assess water body conditions including:</p> <ul style="list-style-type: none"> • Location of release and product • Current and direction of movement (spill movement will be slower under ice) 		
<p>Conducting oil recovery operations on iced bodies of water can be dangerous. Only personnel or OSROs trained in cold weather response tactics should undertake this type of effort.</p>		
<p>Rules and Tactics for Ice recovery operations by trained and qualified personnel:</p> <ul style="list-style-type: none"> • Always use a buddy system and wear harnesses when working on ice. • Do not stand over slotted ice. • Determine thickness of ice (A powered auger can be used to determine ice conditions). Note: River Ice will be less stable than Lake Ice. • Slotting involves cutting and removing ice blocks at a 30 degree angle to the current. The end of the slot should be wide enough to house an oil skimmer. • Slots should be cut with a slight "J" curve to provide current slow toward the shoreline recovery area. • Effective barriers can be installed by augering holes next to each other and installing plywood sheets to divert product to a sump area. 		

FIGURE 2.1-1 - SPILL RESPONSE ACTION CHECKLIST, CONTINUED

RESPONSE ACTION	PERSON TAKING ACTION (INITIALS)	DATE/TIME ACTION TAKEN

Cold Weather Response		
<p>Snow can absorb released product. Depending on the moisture content of the snow, it can act as a wick, pulling product away from the release site. Impacted snow can be addressed by techniques including:</p> <ul style="list-style-type: none"> • Temporary storage in a side dump to reduce or eliminate any leakage from melting snow or product • Stockpiling under a rack so melt water and product drain to a sump • Using a “thawzall” heating system to melt snow stockpiled under a rack or in a side dump. 		
<p>Well-compacted snow lined with plastic can be used as a berming material.</p>		
<p>Employ standard spill response procedures, including:</p> <ul style="list-style-type: none"> • Establish incident command. • Making proper notifications. • Identify and Isolate the source. • Monitor weather conditions. • Use appropriate PPE. • Monitor vapors. • Establish site control. 		

2.1.1 Spill Detection and Mitigation Procedures

See **APPENDIX D.3** for spill detection protocols.

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

FIGURE 2.1-2 - SPILL MITIGATION PROCEDURES

TYPE	MITIGATION PROCEDURE
Failure of Transfer Equipment	<ol style="list-style-type: none"> 1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at high risk. 2. Terminate transfer operations and close block valves. 3. Drain product into containment areas if possible. 4. Eliminate sources of vapor cloud ignition by shutting down all engines and motors.
Tank Overfill/Failure	<ol style="list-style-type: none"> 1. Personnel safety is the first priority. Evacuate nonessential

	<p>personnel or personnel at high risk.</p> <ol style="list-style-type: none"> 2. Shut down or divert source of incoming flow to tank. 3. Transfer fluid to another tank with adequate storage capacity (if possible). 4. Shut down source of vapor cloud ignition by shutting down all engines and motors. 5. Ensure that dike discharge valves are closed. 6. Monitor diked containment area for leaks and potential capacity limitations. 7. Begin transferring spilled product to another tank as soon as possible.
Piping Rupture/Leak (under pressure and no pressure)	<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, then 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 shutting down all engines and motors. 6. Control fire before taking steps to contain spill. <p>See also fire/explosion response steps in SECTION 2.2.</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

- Dispatch observers to crossings downstream or down gradient to determine the spills maximum reach
- Clouds, shadows, sediment, floating organic matter, submerged sand banks or wind-induced patterns on the water may resemble an oil slick if viewed from a distance
- Use surface vessels to confirm the presence of any suspected oil slicks (if safe to do so); consider directing the vessels and photographing the vessels from the air, the latter to show their position and size relative to the slick
- It is difficult to adequately observe oil on the water surface from a boat, dock, or shoreline
- Spill surveillance is best accomplished through the use of helicopters or small planes; helicopters are preferred due to their superior visibility and maneuverability
- If fixed-wing planes are to be used, high-wing types provide better visibility than low-wing types
- All observations should be documented in writing and with photographs and/or videotapes
- Describe the approximate dimensions of the oil slick based on available reference points (i.e. vessel, shoreline features, facilities); use the aircraft or vessel to traverse the length and width of the slick while timing each pass; calculate the approximate size and area of the slick by multiplying speed and time
- Record aerial observations on detailed maps, such as topographic maps
- In the event of reduced visibility, such as dense fog or cloud cover, boats may have to be used to patrol the area and document the location and movements of the spill; however, this method may not be safe if the spill involves a highly flammable product
- Surveillance is also required during spill response operations to gauge the effectiveness of response operations; to assist in locating skimmers; and assess the spill's size, movement, and impact
- An 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):
Observer's name:	Flight path/trackline:
Observer's affiliation:	Altitude where observation taken:
Location of source (if known):	Areas not observed (i.e. foggy locations, restricted air spaces, shallow water areas):
Oil Observations	
Slick location(s):	Color and appearance (i.e. rainbow, dull or silver sheen, black or brown in color or mousse):
Slick dimensions:	Percent coverage:
Orientation of slick(s):	Is oil recoverable (Y/N)?:
Distribution of oil (i.e. windrows, streamers, pancakes or patches):	
Considerations	
<ul style="list-style-type: none"> • During surveillance flights, travel beyond known impacted areas to check for additional oil spill sites • Include the name and phone number of the person making the observations • Clearly describe the locations where oil is observed and the areas where no oil has been seen 	
Other Observations	
Response Operations	
Equipment deployment (general locations where equipment is working and whether they are working in the heaviest concentration of oil):	
Boom deployment (general locations of boom, whether the boom contains oil, and whether the oil entrains under the boom):	
Environmental Observations	
Locations of convergence lines, terrain, and sediment plumes:	
Locations of debris and other features that could be mistaken for oil:	
Wildlife present in area (locations and approximate numbers):	

2.1.3 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		
Barely Visible	0.0000015	0.00004	25 gals/mile ²	44 liters/km ²
Silvery	0.000003	0.00008	50 gals/mile ²	88 liters/km ²
Slightly colored	0.000006	0.00015	100 gals/mile ²	179 liters/km ²
Brightly colored	0.000012	0.0003	200 gals/mile ²	351 liters/km ²
Dull	0.00004	0.001	666 gals/mile ²	1,167 liters/km ²
Dark	0.00008	0.002	1,332 gals/mile ²	2,237 liters/km ²
Thickness of light oils: 0.0010 inches to 0.00010 inches				
Thickness of heavy oils: 0.10 inches to 0.010 inches				

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

Selection of the appropriate location and method will depend upon:

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

2.1.6 Safety Considerations

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

2.2 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	INITIALS
At a manned facility	
Evaluate the situation; approach cautiously from upwind; do not rush in	
Warnings, Notifications, and Evacuation: <ul style="list-style-type: none"> • Alert co-workers or others on-site; use alarm systems • Account for all personnel • Notify local police and fire departments (911), provide detailed information regarding material, product and equipment involved, wind direction • Notify the Qualified Individual • Notify the utility companies if on-site utilities, such as gas and electric, may be affected by the fire 	
Site Control: <ul style="list-style-type: none"> • Account for all personnel; use an entry/exit log that includes names, company and time • Prepare evacuation routes and monitor incident for changes requiring evacuation • Keep outside personnel from entering the facility; enlist aid from law enforcement • Establish safety zones • Meet fire personnel at gate; have copy of emergency plans and data on affected tank(s) • Establish a safe media assembly area 	
Fire Fighting:	

<ul style="list-style-type: none"> • Trained company personnel, firefighters, or fire and hazard control techs may attempt to extinguish the fire if it is in the incipient (early) stage and IF IT CAN BE DONE SAFELY; personnel should be prepared to evacuate if fire is beyond their capabilities to fight • If fire is too large for a Hazmat Tech to fight, the person sounding the alarm or making the phone call to 911 should stand by at a safe distance to direct the fire department and to keep personnel from entering the danger area 	
<p>Establish Command:</p> <ul style="list-style-type: none"> • Establish Incident Command • Establish a Command Post and lines of communication; use radios and cell phones • Provide fire department with contact numbers or facility radio • Appoint a recorder 	
<p>Additional Resources:</p> <ul style="list-style-type: none"> • Call in additional resources if on scene personnel and equipment are inadequate to handle the emergency <ul style="list-style-type: none"> • Air Monitoring contractors should be contacted for any large fire • Specialty Fire-fighting services • Oil Spill Removal Organizations (OSROs) 	
Conduct a post-emergency evaluation and report	

2.2 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	INITIALS
At an unmanned facility	
Handle the call	
<p>Warnings and Notifications:</p> <ul style="list-style-type: none"> • Notify local police and fire departments (911) • Notify the Qualified Individual • Notify the utility companies if on-site utilities, such as gas and electric, may be affected by the fire • Notify railroads or local emergency officials to halt traffic If roads or railroads are in the affected area 	

Go to the incident scene to evaluate the situation; approach cautiously from upwind; do not rush in	
Site Control: <ul style="list-style-type: none"> • Account for all personnel • Prepare evacuation routes and monitor incident for changes requiring evacuation • Keep outside personnel from entering area – enlist aid from law enforcement • Establish safety zones • Meet fire personnel at scene; have copy of emergency plans and data on affected lines 	
Valves and Controls: <ul style="list-style-type: none"> • If the fire/explosion is a result of a pipe rupture, isolate product release by closing valves outside the affected area • Stay in contact with Qualified Individual to update on valve closings 	
Establish Command: <ul style="list-style-type: none"> • Establish Incident Command • Establish a Command Post and lines of communication -use radios and cell phones • Provide fire department with contact numbers • Appoint a recorder 	
Additional Resources: <ul style="list-style-type: none"> • Call in additional resources if on-scene personnel and equipment are inadequate to handle the emergency • Air monitoring contractors should be contacted for any large fire • Specialty firefighting services • Oil Spill Removal Organizations (OSROs) 	
Conduct a post-emergency evaluation and report	

2.3 EVACUATION

EVACUATION CHECKLIST	
TASK	INITIALS
Request assistance from off-site agencies; convey Command Post's location	
Assemble personnel at predetermined safe location: upwind/up gradient of release (regrouping area)	
Account for Company and contractor personnel	
Assess casualties (number/type/location)	
Determine probable location of missing personnel	

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

2.3 EVACUATION, CONTINUED

EVACUATION FACTORS	
FACTOR	DESCRIPTION
Stored material location	<ul style="list-style-type: none"> • Located in oil storage area • Identified in facility Plot Plan (<u>APPENDIX C</u>)
Spilled material hazards	<ul style="list-style-type: none"> • Hazard is fire/explosion
Water currents, tides or wave conditions	<ul style="list-style-type: none"> • Not applicable
Evacuation routes	<ul style="list-style-type: none"> • Routes are summarized on Evacuation Plan Diagram (<u>APPENDIX C</u>) • Criteria for determining safest evacuation routes from facility may include: wind direction, potential exposure to toxins and carcinogens, intense heat, potential for explosion/fire, and blockage of planned route by fire, debris, or released liquid
Alternate evacuation routes	<ul style="list-style-type: none"> • Alternate routes may exist; refer to Evacuation Plan Diagram (<u>APPENDIX C</u>)
Injured personnel transportation	<ul style="list-style-type: none"> • Emergency vehicles can be mobilized to the facility
Alarm/Notification system location	<ul style="list-style-type: none"> • Air horn will be used as notification of an emergency situation • One three-second blast = emergency constituting evacuation of location • Three one-second blasts = emergency constituting going to a designated weather shelter
Community evacuation plans	<ul style="list-style-type: none"> • Company may request local police, county sheriff and/or state police assistance. Community evacuations are the responsibility of these agencies. • Port of Wilmington Evacuation Plan and public address and siren system

Spill flow direction	<ul style="list-style-type: none"> Easterly toward the Delaware River Identified in facility drainage diagram (APPENDIX C)
Prevailing wind direction and speed	<ul style="list-style-type: none"> Varies from 7-10 mph from the S or WNW. Because wind direction varies with weather conditions, consideration for evacuation routing will depend in part on wind direction
Emergency personnel/response equipment arrival route	<ul style="list-style-type: none"> I495 to Port of Wilmington Exit (Hwy 9A) to Main port entrance, then Christina Ave. to Terminal Directions to nearest medical facility provided below

2.3 EVACUATION, CONTINUED

EVACUATION FACTORS	
FACTOR	DESCRIPTION
	<ul style="list-style-type: none"> Supervisor is responsible for head count
	<ul style="list-style-type: none">
	<ul style="list-style-type: none">
Directions to nearest medical facility	<p>Directions to St. Francis Hospital :</p> <ul style="list-style-type: none"> Start at 1050 Christiana Ave, Wilmington going toward A ST - go 1.1 mi. Turn right on US-13 NORTH - go 0.4 mi. Continue on 4th St - go 1.5 mi. Turn right on N Clayton St - go 0.2 mi. Arrive at St. Francis Hospital, 701 N Clayton St.

ALARM

IMMEDIATE

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2.4 MEDICAL

MEDICAL CHECKLIST	
TASK	INITIALS
Summon Emergency Medical Services (EMS) to the scene	
Do not move the patient unless a situation (such as a fire) threatens their life	
If trained, provide first aid until the EMS arrives at the scene	
As the situation warrants, try to stop the bleeding and keep the patient breathing until the EMS arrives at the scene	
The rescuer's role includes: <ul style="list-style-type: none"> • Removing the patient from any situation threatening their 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 	

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2.5 TORNADO

TORNADO CHECKLIST	
TASK	INITIALS

Use television or radio to monitor news weather reports	
When a tornado warning is issued, sound the local alarm	
<p>Tornado Watch:</p> <ul style="list-style-type: none"> • Tornado watch means conditions are favorable for tornadoes • Monitor television, radio or weather alert radio reports for approaching storms • Be prepared to take action if the watch is upgraded to a warning • Pre-Identify facility shelter locations <ul style="list-style-type: none"> • Sturdy building • Bottom floor • Innermost room with the maximum number of walls between occupants and outside • Minimum number of windows • Watch for danger signs <ul style="list-style-type: none"> • Dark, often greenish clouds • Large hail • Wall cloud or funnel cloud 	
<p>Tornado Warning:</p> <ul style="list-style-type: none"> • Tornado warning means a tornado has been sighted. A warning may come from emergency officials but may also come from facility personnel who site a funnel formation and hear a roar similar to a jet engine <ul style="list-style-type: none"> • People in its path should take shelter immediately • Sound the local alarm • Have location personnel report to a designated shelter area • Consider shutting down operations if it can be done safely • Account for all personnel • Take shelter; under furniture using arms to protect head and neck 	
<p>After High Winds or Tornadoes:</p> <ul style="list-style-type: none"> • Account for all personnel; check for injuries and contact emergency medical assistance, if needed • Evaluate the facility • Use caution when entering damaged buildings • Check for down power lines • Update the Qualified Individual/Supervisor 	
Perform Initial Response Actions functions as stated in FIGURE 2-1	
Conduct post-emergency evaluation and report	

2.6 FLOOD

FLOOD CHECKLIST	
TASK	INITIALS

Perform continuous monitoring of the situation by listening to radio and/or television reports. Consider utilizing your local LEPC contacts	
Flood watch means flooding is possible	
Flood warning means flooding is occurring or is imminent	
Update the Qualified Individual/Supervisor, Management, Commercial and Operations Control when flooding is imminent	
Consider preparing a site specific shutdown procedure prior to the actual flooding event and share this information with location personnel. Use a site specific shutdown procedure when flooding is imminent	
Pre-establish an evacuation plan and action levels for executing shutdown and evacuation (SECTION 2.3)	
Take preliminary actions to secure the facility before flooding and mandatory evacuation	
Forecast staffing requirements and plan accordingly.	
Consider obtaining the following services early in the process to ensure availability: <ul style="list-style-type: none"> • Sandbags • Portable pumps and hoses • Power generators 	
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	
Keep at least a normal bottom in all above ground tankage, more if possible	
If time allows, consider removing pumps and motors that may be affected by a flood Plug all rack drains and facility drains connected to the sump	
Anchor, move or otherwise protect all bulk additive tanks, fuel barrels, empty drums, and propane tanks (if applicable)	
Monitor locations of 30 day retention samples and gasoline cans	
Remove all vehicles from potential flood area	
Maintain contact with OSROs before and during flooding conditions	
Continually update Qualified Individual/Supervisor, Management, Commercial and Operations Control on facility status	
Back up computer files	
Remove or move to higher elevation assets such as files, computers, and spare parts	
Communicate potential for shutting off high voltage power and natural gas lines to energy providers	
Close all valves on product and additive storage tanks	
Before evacuation, know where all the employees or contractors will be residing and obtain phone numbers so they can be contacted if additional emergencies occur	
Conduct a post-emergency evacuation and report	
Maintain hazards awareness:	

Structural damage <ul style="list-style-type: none"> • Downed power lines • Leaking natural gas, water, and sewer lines • Poisonous snakes and other wildlife sheltering in structures, vehicles, and furniture • Avoid direct contact with flood water, mud, and animal carcasses 	
--	--

2.7 ICE/SNOW STORM

ICE/SNOW STORM CHECKLIST	
TASK	INITIALS
Monitor news and weather reports on television or the radio	
Alert co-workers or others on-site that severe weather is approaching	
Be aware of the dangers posed by ice and snow falling from equipment	
Be aware of product release danger posed by ice falling on exposed piping	
Monitor ice and snow accumulation on tanks	
Obtain snow or ice removal equipment	
Obtain generators, if necessary to re-power facilities	
Use cold weather response techniques when responding to product spills as released product may flow under ice or snow	
Establish and maintain communication with personnel in remote areas	
Ensure that vehicles have a full tank of gas and are functioning (heater, windshield wipers, etc.)	
Consider limiting vehicle traffic	
Obtain fresh water supplies	
Notify the supervisor/Qualified individual if the facility loses power or is otherwise unable to operate	

<ul style="list-style-type: none"> • _____ • _____ 	

SECTION 3

Last revised: July 7, 2011

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 / Spill Report FormFigure 3.1-3 - Notifications and Telephone Numbers

3.1 EMERGENCY INFORMATION AND NOTIFICATION PROCEDURES

The notification sequence for a spill is as follows:

- Facility personnel will identify and control the source of a spill, if safe to do so, then will notify the Qualified Individual and Operations Control Center.
- The Qualified Individual will assume or assign the role of Incident Commander, and 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/Spill Report Form. This form is utilized for initial and follow-up notifications. Follow-up notifications are the responsibility of the Liaison Officer.
- **FIGURE 3.1-3** provides a notification summary and documentation form to assist in documenting notifications.

Paper copies of this plan are located in the facility office and are accessible to facility employees and online versions of the plans are available to all employees with computer access.

FIGURE 3.1-1 - EMERGENCY NOTIFICATION FLOW CHART

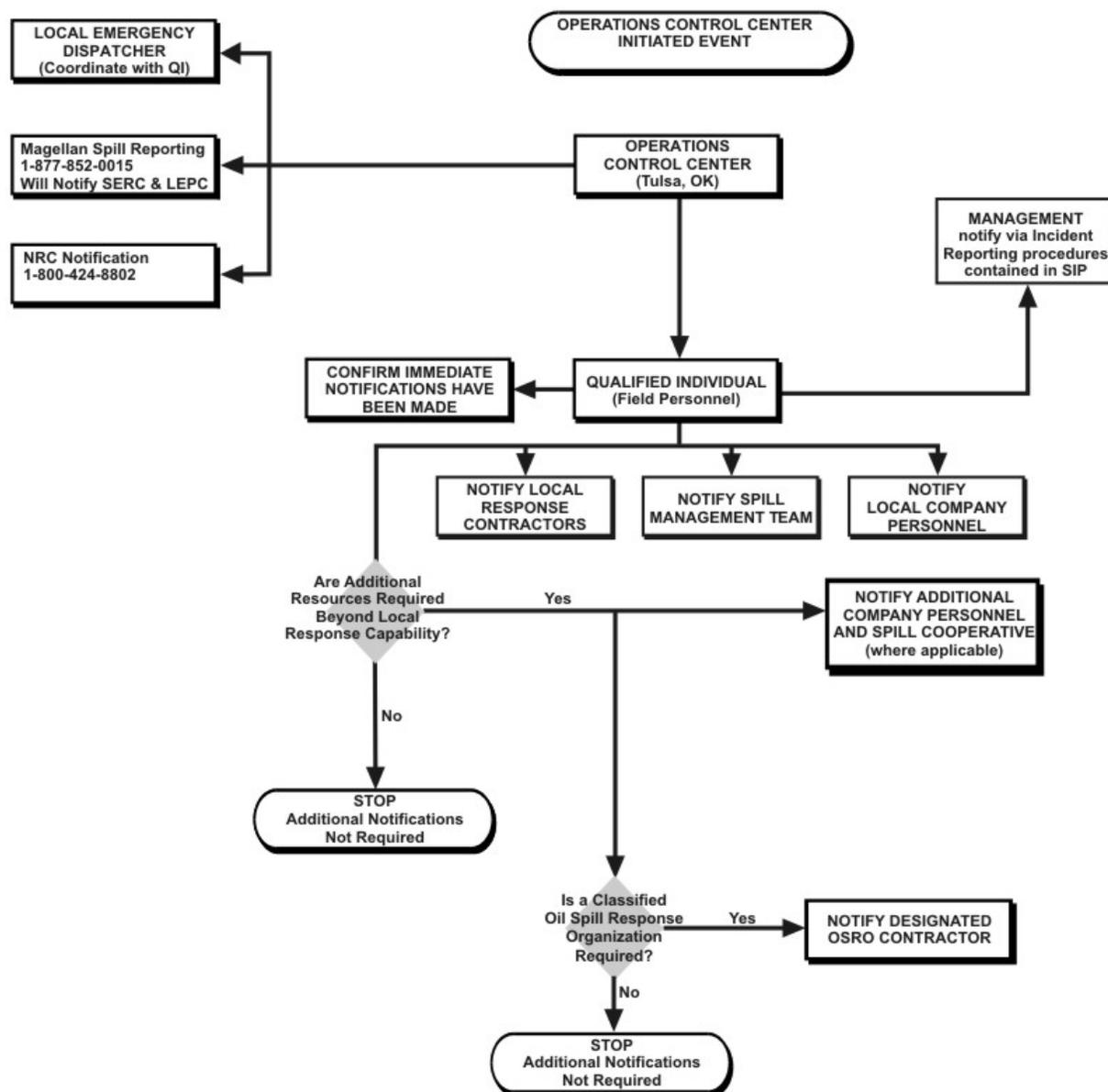


FIGURE 3.1-1 - EMERGENCY NOTIFICATION FLOW CHART, CONTINUED

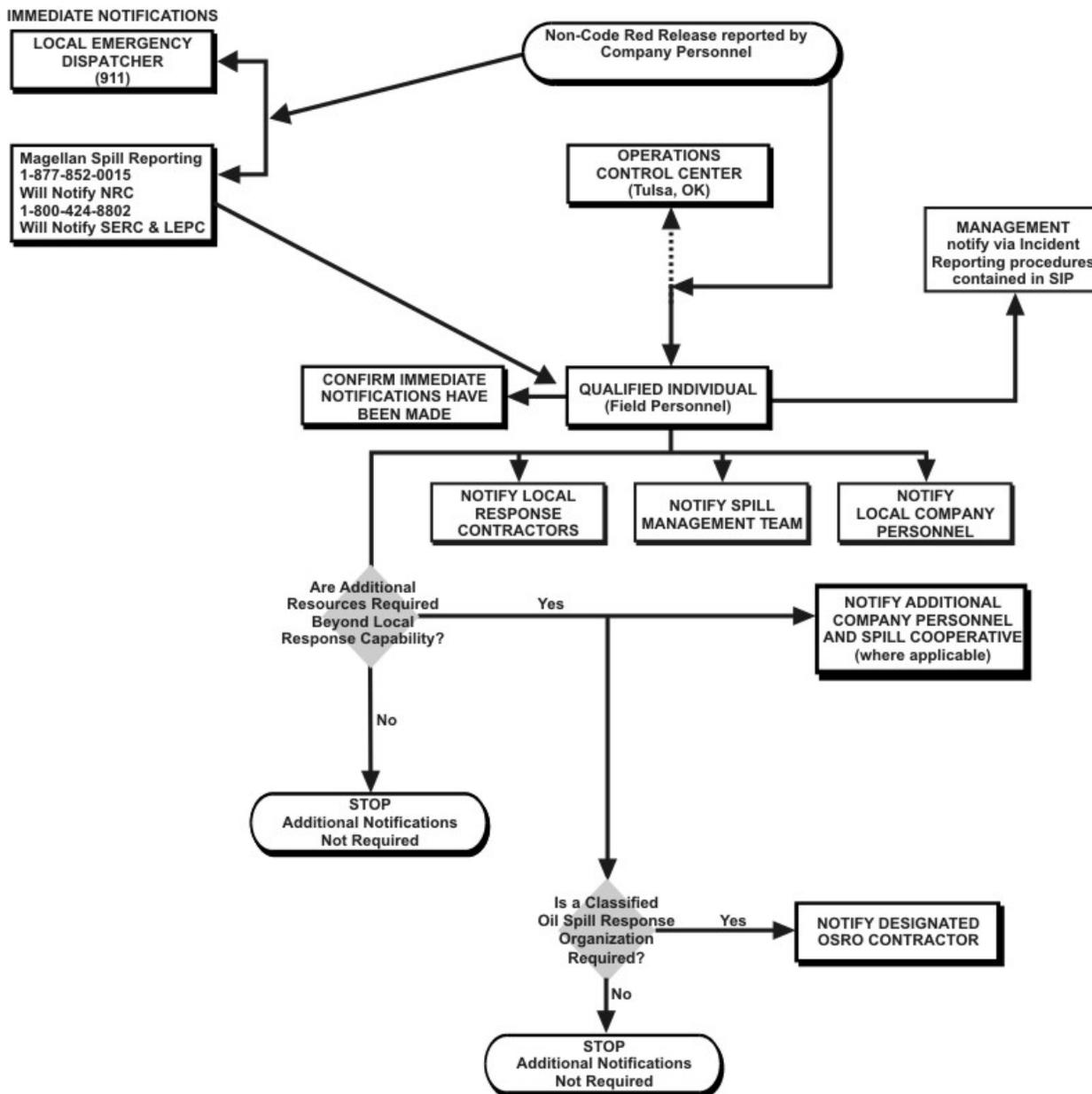


FIGURE 3.1-2 - RELEASE / SPILL REPORT FORM

Call Magellan Spill Reporting at 1-877-852-0015 to report all releases (suspected or confirmed)			
Is this a drill:	<input type="text"/>	Type of Drill:	<input type="text"/>
Reporter's Name:	<input type="text"/>	Report Time:	<input type="text"/>
Reporter's Company:	<input type="text"/>	Job Title:	<input type="text"/>
Company address:	<input type="text"/>		
Phone Number:	<input type="text"/>		<input type="text"/>

Date Release Occurred:

Month Day Year State Material: Estimated Released 0 (gallons)CHRIS Code Estimated Discharge to Water 0 (gallons)Estimated Free Liquids Recovered 0 (gallons)*Released to: Estimated Amount Recovered Soil 0 (gallons)Estimated Total Amount Recovered 0 (gallons)Define Other: Estimated Amount Not Recovered 0 (gallons)

Note: *For a release to be contained inside of a "dike" it must be a permanent dike designed specifically to contain releases.

Was maintenance being performed at the time of the incident? Intentional Blowdown? Release Reportable? Waterway Affected? Waterway Name:

AGENCY NOTIFICATIONS

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

Report	Date	Number	Time	Name	Title	City	State
NRC <input type="checkbox"/>							
SERC <input type="checkbox"/>							
	Was a written report requested?		Time Frame	<input type="text"/>	Days		
TNRCC <input type="checkbox"/>							
	If a written report is requested, do not provide it. Contact Environmental Specialist.						
LEPC <input type="checkbox"/>							
Other <input type="checkbox"/>							

Facility Name Release Occurred: Facility Type: Facility Capacity: Tank Capacity: Did release occur on loading rack or non-breakout tank/piping? If yes, Ignore Pipeline Information

AND/OR

Pipeline Name Release Occurred: Pipeline Interstate Asset?

Incident Description: (Include details of container type, and facility and container volumes in gallons, and the distance and direction from the nearest city in miles and degrees)

Response Actions:

Impact: (Include description of the medium affected and any relevant additional information; and in addition, provide the details of any evacuations, including the number of persons evacuated)

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FIGURE 3.1-2 - RELEASE / SPILL REPORT FORM - CONTINUED

Call Magellan Spill Reporting at 1-877-852-0015 to report all releases (suspected or confirmed)					
Release Discovered by:	<input type="text"/>	Discover Time:	<input type="text"/>		
Release Verified:	<input type="text"/>	Verification Time:	<input type="text"/>	Release Stop Time:	<input type="text"/>
BU:	<input type="text"/>	District:	<input type="text"/>	Area:	<input type="text"/>
Area Supervisor:	<input type="text"/>	Asset Integrity Contact:	<input type="text"/>	(COM/Maint Supervisor)	
Address of Release:	<input type="text"/>			City:	<input type="text"/>
Distance from Nearest City:	<input type="text"/>	County:	<input type="text"/>	Zip Code:	<input type="text"/>
Caller's E-mail Address:	<input type="text"/>	Provide spelling of e-mail address.			
Suspected Responsible Party (if other than Magellan) Address:	<input type="text"/>				
Pipeline Address:					
Section	<input type="text"/>	Township	<input type="text"/>	Range	<input type="text"/>
		Milepost	<input type="text"/>	Tract #	<input type="text"/>
		Latitude	<input type="text"/>	Longitude	<input type="text"/>
Engineering Stationing Number:	<input type="text"/>				
Origin of Release:	<input type="text"/>				
Cause (pre-investigation) Check all that apply:					
<input type="checkbox"/> Third Party Damage	<input type="checkbox"/> Human Error - Contractor	<input type="checkbox"/> Equipment Failure			
<input type="checkbox"/> Internal Corrosion	<input type="checkbox"/> Human Error - Company Personnel	<input type="checkbox"/> Unknown			
<input type="checkbox"/> External Corrosion	<input type="checkbox"/> Human Error - Driver	<input type="checkbox"/> Other			

<input type="checkbox"/> Natural Forces	<input type="checkbox"/> Pipe or Weld Failure - Other than Corrosion
Temp <input type="text"/>	Relative Humidity <input type="text"/> Precipitation: <input type="text"/>
Cloud Cover <input type="text"/>	Wind Speed <input type="text"/> Wind Direction: <input type="text"/>
Injury <input type="text"/> Fire <input type="text"/> Fatality <input type="text"/> Explosion <input type="text"/> Unconsciousness <input type="text"/>	
Injury Requiring Hospitalization? <input type="text"/>	Significant News Coverage: <input type="text"/>
Incident Classification: <input type="text"/>	Loss/Damage Estimate: <input type="text"/> Loss and damage estimate should include all costs associated with clean-up (maintenance, cleanup, product loss).
Environmental Contact for release: <input type="text"/>	
Safety Contact for this release: <input type="text"/>	
Form completed by: <input type="text"/>	Completion Date: <input type="text"/>
<i>Latest revision date for form</i> 04/03/11	Magellan Midstream Partners, L.P. One Williams Center, P.O. Box 3102 Tulsa, OK 74172
<i>Replaces previous revision date</i> 06/16/08	

FIGURE 3.1-3 - NOTIFICATIONS AND TELEPHONE NUMBERS
(Phone numbers have been verified and are updated as needed)

*24 Hour Number

FACILITY RESPONSE TEAM		
NAME/TITLE	PHONE NUMBER	RESPONSE TIME (hours)
Alan Cosby Supv Area Qualified Individual	302/654-3717 (Office) 302/985-1891 *(Mobile) (302) 655-3209 (fax) (Pager)	0.75
Andrew Zaun Supv Maintenance II Qualified Individual	302/654-3717 (Office) 302/985-3531 *(Mobile)	.5
Dan Whitmarsh	302/654-3717 (Office)	

Terminal Operator Sr Qualified Individual	302/985-1881 *(Mobile)	0.50
Brad Righi Technician Sr	302/654-3717 (Office)	.75

Refer to **APPENDIX A, FIGURE A.2-3** for personnel training records. Refer to **FIGURE 1-1** for last date revised.

FIGURE 3.1-3 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED
(Phone numbers have been verified and are updated as needed)

*24 Hour Number

EMERGENCY RESPONSE PERSONNEL						
NAME/TITLE	PHONE NUMBER	RESPONSE TIME (hours)	RESPONSIBILITY DURING RESPONSE ACTION	RESPONSE TRAINING TYPE ¹		
				1	2	3
Alan Cosby Supv Area Qualified Individual	302/654-3717 (Office) _____ 302/985-1891 *(Mobile) (302) 655-3209 (fax) (Pager)	.75	Spill Management Team	x	x	x
Andrew Zaun Supv Maintenance II Qualified Individual	302/654-3717 (Office) _____ 302/985-3531 *(Mobile)	.5	Spill Management Team	x	x	x
Dan Whitmarsh Terminal Operator Sr Qualified Individual	302/654-3717 (Office) _____ 302/985-1881 *(Mobile)	.5	Spill Management Team	x	x	x
Rick Bondy ER Preparedness Prog Coordinator	918/574-7363 (Office) _____ 918/629-8207 *(Mobile)	12	SMT Coordinator	x	x	x

Amber Kistler Safety Specialist	918/574-7758 (Office) 515/408-6652 *(Mobile)		Spill Management Team	x	x	
Chris Nelson Environmental Specialist II	918/574-7380 (Office) _____ 918/706-6162 *(Mobile)	12	Agency Liason	x		
Bruce Heine Dir Government & Media Affairs	918/574-7010 (Office) _____ 918/645-8989 *(Mobile)	12	Spill management team - media relations	x	x	
EMERGENCY RESPONSE TRAINING TYPE						
TYPE	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 3.1-3 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED
(Phone numbers have been verified and are updated as needed)

*24 Hour Number

EMERGENCY RESPONSE CONTRACTORS						
NAME/TITLE	PHONE NUMBER	RESPONSE TIME (hours)	RESPONSIBILITY DURING RESPONSE ACTION	RESPONSE TRAINING TYPE ¹		
				1	2	3
Miller Environmental Group	(856) 224-1100	1	Primary Response	x	x	x
Guardian Companies, Inc.	(302) 918-3070	1	Secondary Response	x	x	x
EMERGENCY RESPONSE TRAINING TYPE						

TYPE	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 3.1-3 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED
(Phone numbers have been verified and are updated as needed)

*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Initial		
Magellan Spill Reporting	(877) 852-0015*	
National Response Center (NRC)	(800) 424-8802* (202) 267-2675*	
Recommended		
Federal Agencies		
EPA Region III, Philadelphia	(215) 814-5000	
FEMA	(800) 462-7585	
U.S.C.G. Captain of the Port, Philadelphia	(215) 271-4807	
US Coast Guard, Philadelphia	(215) 271-4800	
State Agencies		
Delaware Dept. of Natural Resources and Environmental Control (DNREC), Emergency Response Commission	(800) 662-8802	
Delaware State Police, Wilmington	(302) 573-2800	
NJ Department of Emergency Planning and Response	(609) 633-2168	
NJ Dept. of Environmental Protection	(877) 927-6337	
PA Dept of Emergency Response, Southeast Region (Delaware County)	(484) 250-5900	
PA Dept. of Environment Protection (Southeast Region)	(484) 250-5900	

State Emergency Response Committee (SERC)	(800) 662-8802	
Local Agencies		
City of Wilmington, Delaware	(302) 654-5151 or 911	
Health Department-City of Wilmington, Delaware	911	

FIGURE 3.1-3 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED
(Phone numbers have been verified and are updated as needed)

*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Recommended, Continued		
Local Agencies		
New Castle Co. LEPC	(302) 395-3633 (866) 274-0884	
New Castle County	911	
Police Departments		
Harbor Police-Port of Wilmington	(302) 472-7864	
Police Department-City of Wilmington, Delaware	911	
Fire Departments		
Wilmington Fire Department	911, (302) 571-4594	
Emergency Medical Services		
Ambulance Department-City of Wilmington, Delaware	911	
St. Francis Hospital	(302) 421-4100	
Wilmington Hospital (Christiana Care)	(302) 428-4181	
Service Providers		
Center for Toxicology & Environmental Health (CTEH)	(866) 869-2834*	
Delmarva Power, electric service	(302) 454-0317	
Guardian Companies, Inc.	(302) 918-3070	

HMHTTC Response Inc.	(888) 774-5571, 302-777-7403	
Williams Fire & Hazard Control (Tank Firefighting & Equipment)	281-999-0276 409-727-2347	
Wilmington Tug and Launch Service (Tug boats)	(302) 652- 1666	
USCG Classified OSRO's		
Clean Venture Inc. Clayton, NJ	(856) 863-8778, (800) 412-9794 pager	

FIGURE 3.1-3 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED

(Phone numbers have been verified and are updated as needed)

*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Recommended, Continued		
USCG Classified OSRO's		
Lewis Environmental Royersford, PA	(800) 258-5585, (800) 258-5585*	
Miller Environmental Group Paulsboro, NJ	(856) 224-1100	
Television Stations		
WPVI-Channel 6, Wilmington	(302) 429-6666	
Weather		
Weather Channel Forecast	www.weather.com	
Weather Underground Forecast	www.wunderground.com	
Transport Companies		
Interstate Bulk Transport (Ibt)	(856) 853-8566	
Lee Transport Incorporated LLC Elmer, NJ	(856) 358-7555	
Tipton Trucking Co. Inc.	(800) 444-7178 (610) 932-5120	
Waste Management		
Clean Harbors of Braintree	(781) 380-7100	

	(781) 380-7190 FAX 1-800-645-8265	
Clean Harbors of Maine, Inc.	(207) 772-2201	
Clean Harbors Woburn, MA	(781) 935-9066	
GSX	(803) 452-5003	
MSDS		
3E - MSDS Hotline	(888) 677-2370*	
Parks/Recreation Areas		
Fort Mott State Park, Killcohook National Wildlife Refuge Pennsville, New Jersey	(609) 540-6190	
Water Intakes		
United Water	(302) 633-5900	

FIGURE 3.1-3 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED
(Phone numbers have been verified and are updated as needed)

*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Recommended, Continued		
Neighboring Facilities		
Atlantic Electric	(609) 678-1730* Main Control Room	
Delmarva Power, Edgemoor	(302) 761-7099 *, main gate (302) 761-7103 *, operations	
DuPont Chambers Works	(856) 540-2222	
DuPont, Edgemoor	(302) 761-2218*, Main Gate (302) 761-2579, Site Security (302) 761-2218 , Emer. Resp. Mgr.	

IKO Manufacturing	(302) 764-3100	
Salem Nuclear Power Plant	(609) 769-2959	

SECTION 4
RESPONSE TEAM ORGANIZATION

Last revised: January 2005

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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 - Spill Management Team (SMT) Activation Procedure

Figure 4.5-2 - Spill Management Team (SMT) Organization Chart

4.6 Spill Management Team (SMT) Job Descriptions and Guidelines

4.1 DESCRIPTION

The Spill Management Team (SMT) has been created and organized to plan for and manage oil spills. (The SMT may also respond to other emergencies.) The SMT is composed of Company personnel from offices within the Area. Additional personnel from outlying offices can be used (if needed). The SMT will develop strategies and priorities for a response, then will supervise contractors, handle safety and security matters, and will provide logistical support for contractor personnel. The SMT will handle all communications with the media and the public. Job descriptions for each SMT member are provided in **SECTION 4.6**. The SMT will train by participating in exercises as noted in **APPENDIX A**.

4.2 ACTIVATION PROCEDURES

Activation of the SMT may be accomplished in stages. Initially, the First Responder assumes the role of Incident Commander (IC). During a spill incident, the initial IC may be able to respond without assistance from the SMT. If the situation requires more resources, he may request additional personnel or management support from the SMT. This request is made to the Qualified Individual (QI). Depending on the situation, the QI may then assume the role of Incident Commander. The QI would then call out the other SMT members. The SMT activation procedure is provided in **FIGURE 4.5-1**.

4.3 TEAM MEMBER RESPONSE TIMES

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

4.4 INCIDENT COMMAND SYSTEM / UNIFIED COMMAND

The Incident Command System (ICS) will be used by the Company SMT for spill response. The SMT organization chart is provided in **FIGURE 4.5-2**. The organization can be expanded or contracted as necessary.

Because a spill may cross geographic boundaries, involve multiple government levels or involve different statutory responsibilities, several entities may be affected. The Unified Command System (UCS) is the accepted method of organizing key spill management entities within the Incident Command System. The primary entities may include:

- Federal On-Scene Coordinator (FOSC)
- State On-Scene Coordinator (SOSC)
- Magellan Incident Commander
- Local Emergency Response Agency

In order to be a member of a Unified Command, the entity or agency should:

- Have jurisdictional authority or functional responsibility under a law or contingency plan,
- Be specifically charged with commanding or coordinating a major portion of the response,
- Have the resources to participate in the response, and

- Be impacted by the event.

4.4 INCIDENT COMMAND SYSTEM / UNIFIED COMMAND, CONTINUED

The Unified Command shares decision-making authority within the Incident Command System. Other responders, such as state, local or private contractors, are integrated into the system as appropriate for their function. OSROs and other spill contractors are generally managed by the Operation Section Chief. Police, Fire, and other Emergency Agencies may be managed by a Deputy Operations Section Chief who is a member of their department. In some cases the Emergency Agencies may be managed by an Operations Section Chief who is a member of their department, with a Magellan employee as a deputy who is managing the spill response.

Other agencies may be represented by the Liaison and not otherwise represented in the Unified Command Structure.

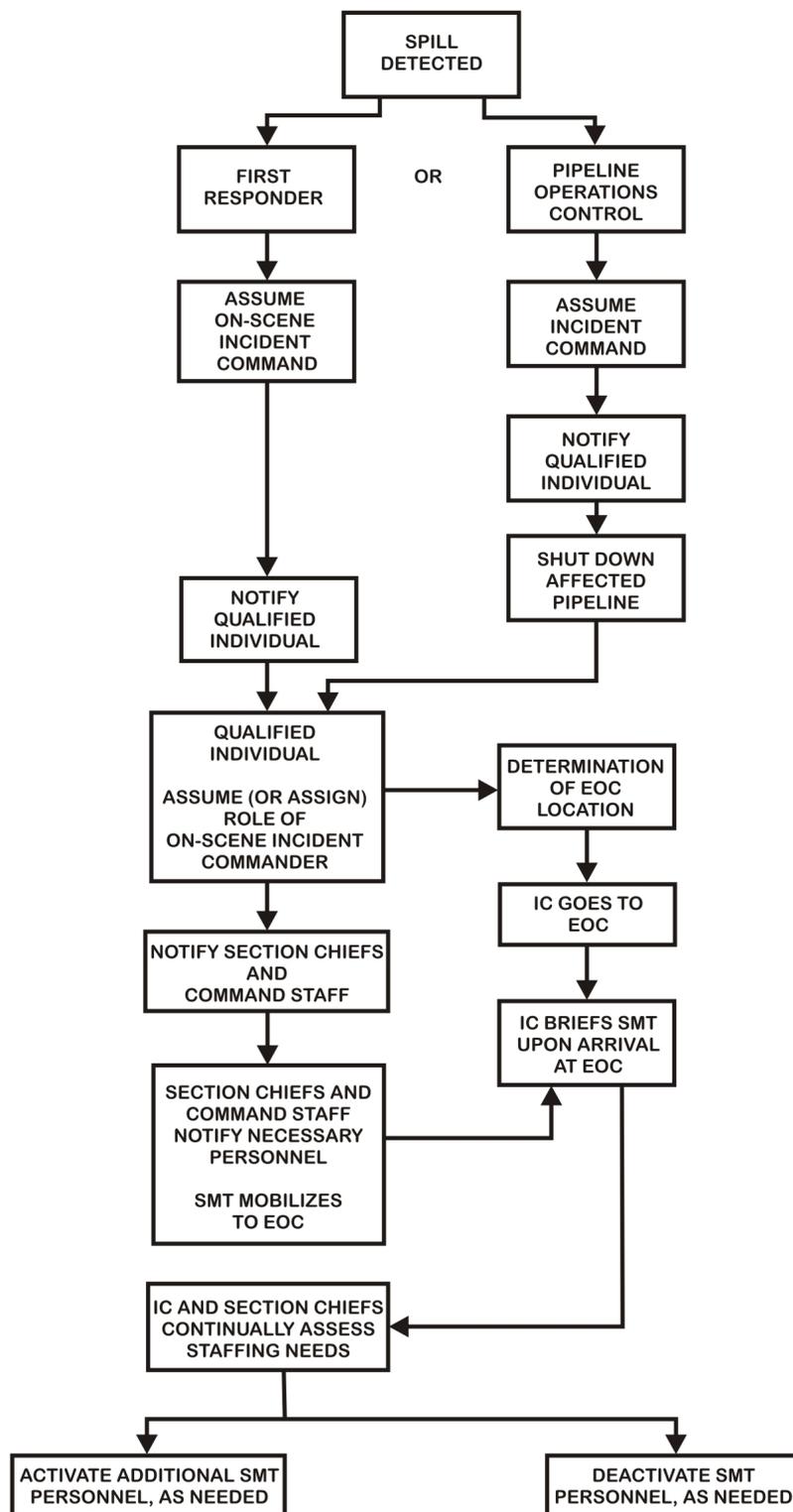
4.5 QUALIFIED INDIVIDUAL (QI)

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):

- 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 clean-up 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 **FIGURE 1-3** and **FIGURE 3.1-3**.

FIGURE 4.5-1 - SPILL MANAGEMENT TEAM (SMT) ACTIVATION PROCEDURE



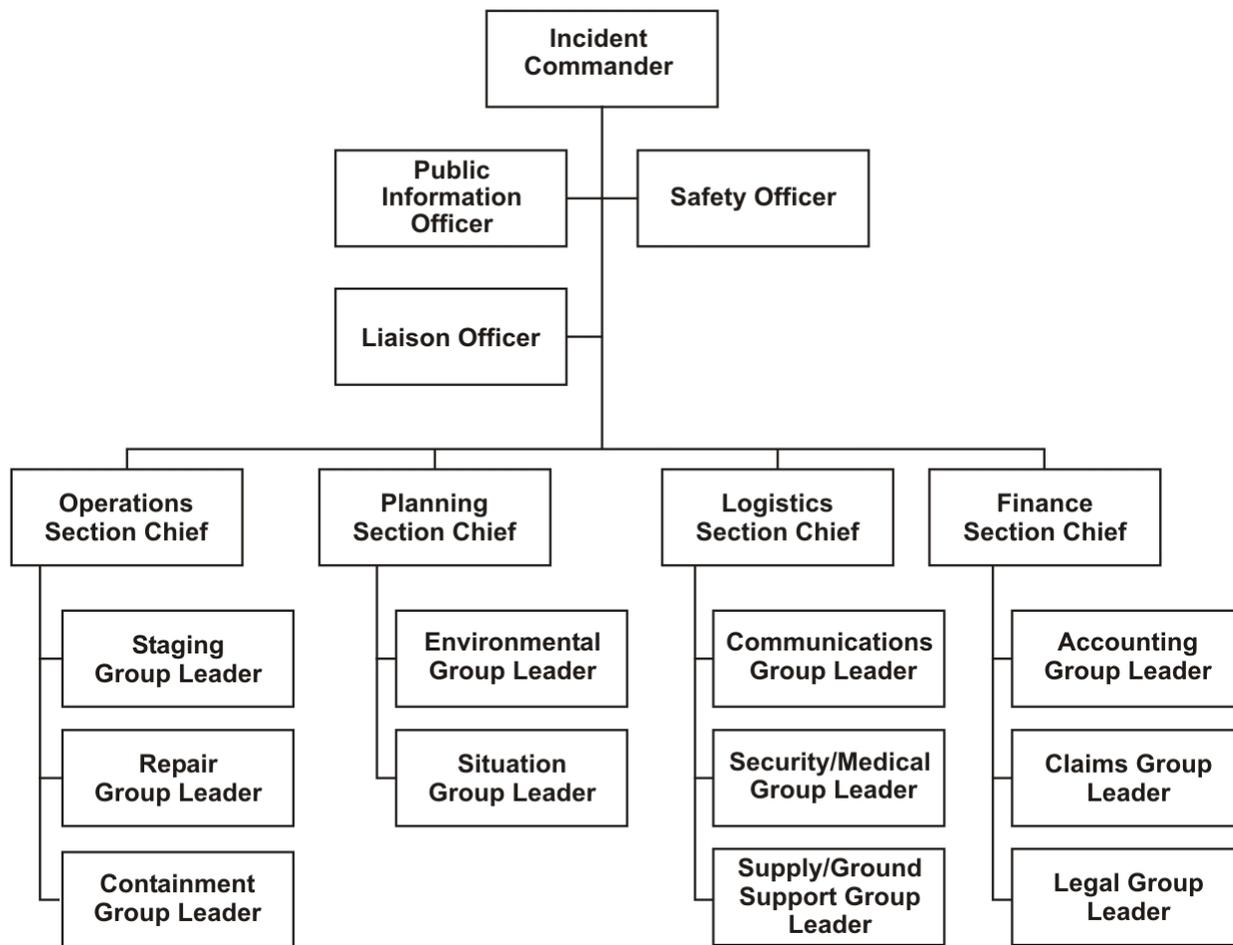
EOC - Emergency Operations Center

IC - Incident Commander

QI - Qualified Individual

SMT - Spill Management Team

FIGURE 4.5-2 - SPILL MANAGEMENT TEAM (SMT) ORGANIZATION CHART



4.6 SPILL MANAGEMENT TEAM (SMT) JOB DESCRIPTIONS AND GUIDELINES

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

- Incident Commander
- Public Information Officer
- Liaison Officer
- Safety Officer
- Operations Section Chief
- Staging Group Leader
- Repair Group Leader
- Containment Group Leader
- Planning Section Chief
- Environmental Group Leader
- Situation Group Leader
- Logistics Section Chief
- Communications Group Leader

- Security/Medical Group Leader
- Supply/Ground Support Group Leader
- Finance Section Chief
- Accounting Group Leader
- Claims Group Leader
- Legal Group Leader

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**).

PUBLIC INFORMATION OFFICER

The Public Information Officer (PIO) provides critical contact between the media/public and the emergency responders. The PIO 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 PIO must coordinate gathering and releasing information with these agencies.

The PIO needs to communicate that the Company is conducting an effective response to the emergency. The PIO 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**)

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**).

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. (See Hazard Zones.)
- 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**).

OPERATIONS SECTION CHIEF

The Operations Section 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). The duties of the Operations Section Chief also include coordination and management of Oil Spill Removal Organization's (OSROs) activities.

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**).

STAGING GROUP LEADER

The Staging Group Leader is responsible for managing all activities within the staging area(s). The Staging Group Leader will collect, organize, and allocate resources to the various response locations as directed by Operations Section Chief.

Responsibilities:

- Maintain Activity Log.
- Obtain briefing from Operations Section Chief.
- Participate in Operations' planning meetings and briefings.
- Advise Operations Section Chief of equipment location and operational status.
- Periodically advise Operations Section Chief on inventory status of consumable items (sorbent pads, sorbent boom, etc.).
- Coordinate with Logistics Section Chief regarding inbound equipment, personnel and supplies.

- Participate in development of Operations' portion of Incident Action Plan (IAP).
- Establish check-in function and inventory control as appropriate.
- Allocate personnel/equipment to site(s) as requested.
- Establish and maintain boundaries of staging area(s).
- Demobilize/relocate staging area as needed.
- Post signs for identification and traffic control.
- Participate in Post Incident Review (**SECTION 8.3**)

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REPAIR GROUP LEADER

The Repair Group Leader is responsible for supervising the repair and restoration of pipeline facilities.

Responsibilities:

- Maintain Activity Log.
- Obtain briefing from Operations Section Chief.
- Periodically advise Operations Section Chief on status of restoration activities.
- Conduct frequent hazard assessments and coordinate safety needs with Operations Section Chief and Safety Officer.
- Participate in Operations' planning meetings and briefings.
- Participate in development of Operations' portion of Incident Action Plan (IAP).
- Conduct facility restoration activities in accordance with Company procedures, Site Safety Plan (SSP) and IAP.
- Determine and request additional materials, equipment and personnel as needed.
- Ensure all equipment is decontaminated prior to being released.
- Participate in Post Incident Review (**SECTION 8.3**).

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CONTAINMENT GROUP LEADER

The Containment Group Leader is responsible for supervising the containment and recovery of spilled product and contaminated environmental media both on land and on water.

Responsibilities:

- Maintain Activity Log.
- Obtain briefing from Operations Section Chief.
- Participate in Operations' planning meetings and briefings.
- Participate in development of Operations' portion of Incident Action Plan (IAP).

- Conduct activities in accordance with the IAP.
- Assess overall situation for containment and recovery needs and supervise group activities.
- Periodically advise the Operations Section Chief on the status of containment and recovery actions.
- Ensure hazard zones are established and maintained.
- Ensure adequate communication equipment for the containment group response.
- Determine and request additional resources as needed.
- Participate in Post Incident Review (**SECTION 8.3**).

PLANNING SECTION CHIEF

The Planning Section Chief is responsible for collecting, evaluating, and disseminating information related to the current and future events of the response effort. The Planning Section 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 Section Chief must coordinate activities with the Incident Commander (IC) and other Section 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**).

ENVIRONMENTAL GROUP LEADER

The Environmental Group Leader is responsible for ensuring that all areas impacted by the release are identified and cleaned up following company and regulatory standards. The Environmental Group Leader supports Planning and Operations to minimize and document the environmental impact of the release. The Environmental Group Leader must plan for future site considerations such as long-term remediation and alternative response strategies in unusually sensitive areas. In a Unified Command Structure (UCS), representatives from the federal and state responding agencies will be included in this group.

Responsibilities:

- Maintain Activity Log.
- Obtain briefing from the Planning Section Chief.
- Participate in Planning section meetings and briefings.
- Participate in development of Planning's portion of Incident Action Plan (IAP).
- Coordinate environmental activities with responding regulatory agencies.
- Periodically advise the Planning Section Chief on status of group activities.
- Request additional personnel/specialists to support response effort.
- Determine environmental group resource needs.
- Identify and develop a prioritized list of natural, cultural and economic (NCE) resources at risk.
- Initiate and coordinate Natural Resources Damage Assessment (NRDA) activities.
- Develop a management plan for recovered contaminated media and ensure coordination with Containment Group Leader.
- Ensure proper management of injured/oiled wildlife.
- Determine alternative cleanup strategies for response.
- Participate in Post Incident Review (**SECTION 8.3**).

SITUATION GROUP LEADER

The Situation Group Leader is responsible for the collection, evaluation, display, and dissemination of all information related to the emergency response effort. The Situation Group Leader must establish and maintain communications with all portions of the Incident Command and the response site in order to collect the information. The Situation Group Leader also attempts to predict spill movement/migration and identifies areas that may be impacted by the emergency.

Responsibilities:

- Maintain Activity Log.
- Obtain briefing from the Planning Section Chief.
- Participate in Planning section meetings and briefings.
- Participate in development of Planning's portion of Incident Action Plan (IAP).
- Maintain a master list of response resources ordered, in staging and in use.
- Collect and display current status of requested response resources.
- Collect and display current status of resources, current spill location, personnel and weather.
- Analyze current information to determine spill trajectory and potential impacts.
- Disseminate information concerning the situation status upon request from the emergency responders.
- Provide photographic services and maps.
- Establish periodic reconnaissance of impacted area to support information needs.
- Collect information on the status of the implementation of Incident Action Plans. Display this information in the Incident Command Center.
- Participate in Post Incident Review (**SECTION 8.3**).

LOGISTICS SECTION CHIEF

The Logistics Section 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**).

COMMUNICATIONS GROUP LEADER

The Communications Group Leader is responsible for ensuring that the Incident Command and emergency responders have reliable and effective means of communication. This may involve activation of multiple types of communications equipment and coordination among multiple responding agencies and contractors.

Responsibilities:

- Maintain Activity Log.
- Obtain briefing from Logistics Section Chief.
- Periodically advise Logistics Section Chief on status of communications group.
- Participate in Logistics section planning meetings and briefings.
- Participate in development of Logistics' portion of Incident Action Plan (IAP).
- Establish an Incident Command communications center.
- Ensure Incident Commander (IC) has communications compatible with other response agencies.
- Identify all communications circuits/equipment used by emergency responders and keep a chart updated with this information.
- Determine the type and amount of communications required to support the response effort (computer, radio, telephone, fax, etc.).
- Ensure timely establishment of adequate communications equipment and systems.
- Advise Logistics Section Chief on communications capabilities/limitations.
- Establish an equipment inventory control system for communications gear.
- Ensure all equipment is tested and repaired.
- Participate in Post Incident Review (**SECTION 8.3**).

SECURITY/MEDICAL GROUP LEADER

The Security/Medical Group Leader is responsible for developing a plan to deal with medical emergencies, obtaining medical aid and transportation for emergency response personnel, and preparation of reports and records.

The Security/Medical Group Leader is responsible for providing safeguards needed to protect personnel and property from loss or damage. The Security/Medical Group Leader also controls access to the emergency site and Incident Command Center.

Responsibilities:

- Maintain Activity Log.
- Obtain briefing from Logistics Section Chief.
- Periodically advise Logistics Section Chief on the status of security and medical problems.
- Participate in Logistics meetings and briefings.

- Participate in development of Logistics' portion of Incident Action Plan (IAP).
- Determine and develop security/medical support plan needs.
- Request medical or security personnel, as needed.
- Work with Safety Officer to identify/coordinate local emergency medical services.
- Coordinate with Safety Officer and Operations Section Chief to establish the Site Safety Plan (SSP) with site boundaries, hazard zones, escape routes, staging areas, command Center and Personal Protective Equipment (PPE) requirements.
- Coordinate/develop an identification system in order to control access to the incident site.
- Participate in Post Incident Review (**SECTION 8.3**).

SUPPLY/GROUND SUPPORT GROUP LEADER

The Supply/Ground Support Group Leader is responsible for procurement and the disposition of personnel, equipment and supplies; receiving and storing all supplies for the incident; maintaining an inventory of supplies; and servicing non-expendable supplies and equipment. The Supply/Ground Support Group Leader supports the following: transportation of personnel; supplies, food, equipment; and fueling, service, maintenance and repair of vehicles and equipment.

Responsibilities:

- Maintain Activity Log.
- Obtain briefing from Logistics Section Chief.
- Periodically advise Logistics Section Chief on status of supply/ground support group.
- Participate in Logistics meetings and briefings.
- Participate in development of Logistics' portion of Incident Action Plan (IAP).
- Communicate with Staging Group Leader concerning material, equipment and personnel that are inbound and the approximate time of arrival.
- Coordinate with other Section Chiefs to ascertain the priority of needed materials, equipment and services.
- Coordinate with Finance Section Chief to establish accounts, purchase orders, AFEs and procedures as necessary.
- Establish an inventory control system for materials and equipment.
- Maintain roads, when necessary.
- Participate in Post Incident Review (**SECTION 8.3**).

FINANCE SECTION CHIEF

The Finance Section 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**).

ACCOUNTING GROUP LEADER

The Accounting Group Leader is responsible for accumulating and dispensing funding during an emergency response. All charges directly attributed to the incident should be accounted for in the proper charge areas.

Responsibilities:

- Maintain Activity Log.
- Obtain briefing from Finance Section Chief.
- Periodically advise Finance Section Chief.
- Participate in Finance planning meetings and briefings.
- Participate in development of Finance's portion of Incident Action Plan (IAP).
- Make recommendations for cost savings to Finance and Logistics Section Chiefs.
- Establish accounts as necessary to support the Logistics section.
- Ensure all invoices are documented, verified and paid accordingly.
- Involve corporate accounting group for assistance as necessary.
- Participate in Post Incident Review (**SECTION 8.3**).

CLAIMS GROUP LEADER

The Claims Group Leader is responsible for managing all risk management and right-of-way issues at, during and following an emergency response. It is important that all claims are investigated and handled expediently.

Responsibilities:

- Maintain Activity Log.
- Obtain briefing from Finance Section Chief.
- Participate in Finance planning meetings and briefings.
- Participate in development of Finance's portion of Incident Action Plan (IAP).
- Periodically inform affected parties of status of emergency response.
- Review and authorize payment of all claims.
- Provide needs of evacuated persons or groups.
- Purchase or acquire property.
- Inform and update necessary insurance groups and underwriters.
- Involve corporate Risk Management or Land, Records and Claims as needed.
- Participate in Post Incident Review (**SECTION 8.3**).

LEGAL GROUP LEADER

The Legal Group Leader is responsible for advising the Incident Command Staff and Section Chiefs on all matters that may involve legal issues.

Responsibilities:

- Maintain Activity Log.
- Obtain briefing from Finance Section Chief.
- Periodically advise Finance Section Chief of status.
- Participate in Finance planning meetings and briefings.
- Participate in development of Finance's portion of Incident Action Plan (IAP).
- Conduct investigations per Incident Commander's (IC) request.
- Provide skilled negotiators.
- Communicate to all affected emergency response personnel if work product is declared "Attorney-Client Privilege. "
- Participate in Post Incident Review (**SECTION 8.3**).

SECTION 5
INCIDENT PLANNING

Last revised: January 2005

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5.1 Documentation Procedures

5.2 ICS Forms

5.2.1 Incident Briefing ICS 201-CG

5.2.2 Incident Action Plan (IAP) Cover Sheet

5.2.3 Incident Objectives ICS 202-OS

5.2.4 Organization Assignment List ICS 203-OS

5.2.5 Assignment List ICS 204-OS

5.2.6 Communications Plan ICS 205-OS

5.2.7 Medical Plan ICS 206-OS

5.2.8 Incident Status Summary ICS 209-OS

5.3 Site Safety and Health Plan

Figure 5.3-1 - Site Safety Plan Cover Sheet

Figure 5.3-2 - Preliminary Safety Plan

Figure 5.3-3 - Safety Meeting Log

Figure 5.3-4 - Site Safety and Health Plan

5.4 Decontamination Plan

5.5 Disposal Plan

5.6 Incident Security Plan

5.7 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 clean-up costs.

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

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

5.2 ICS FORMS

- **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 (FOOSC), 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**

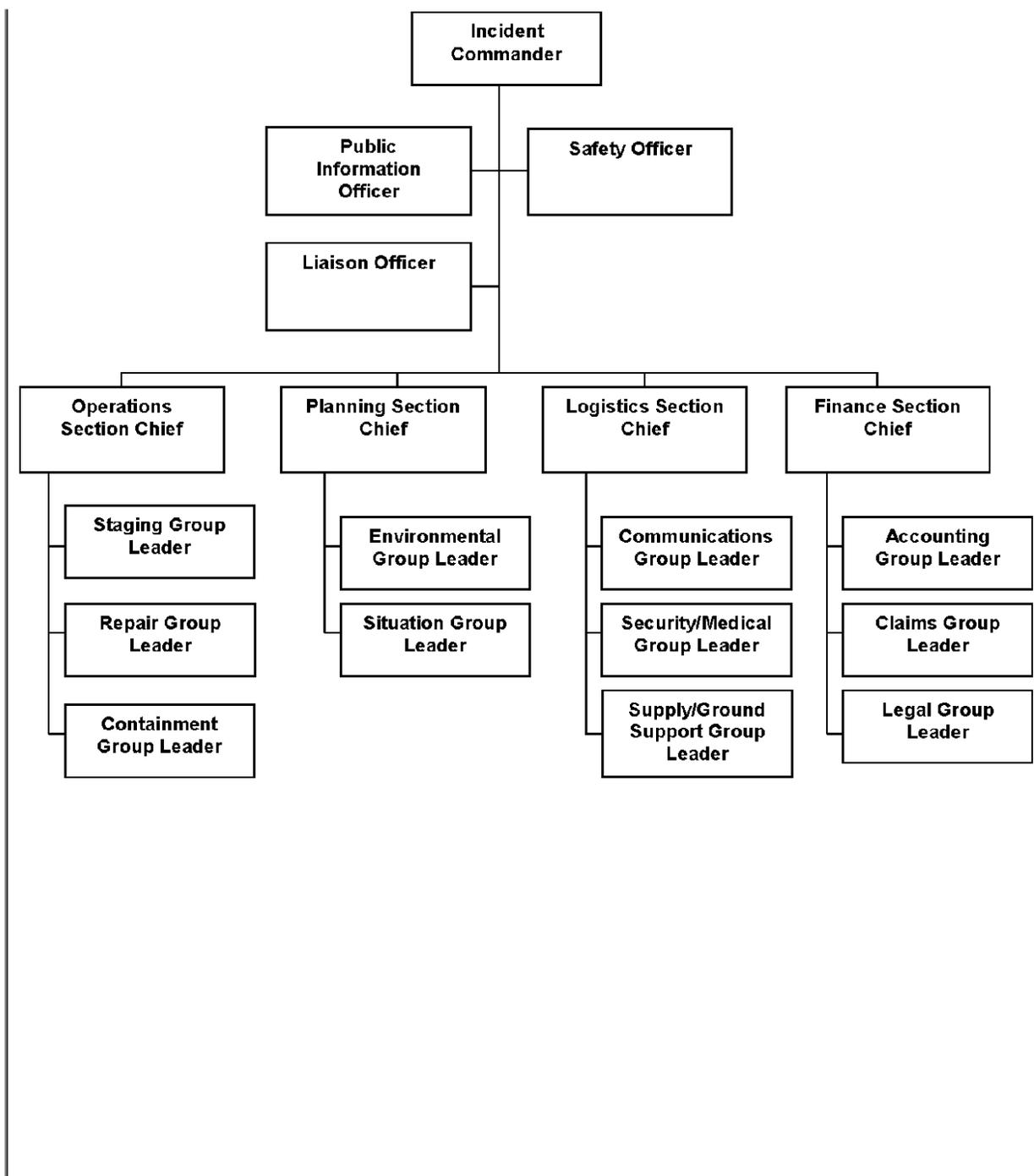
Provides information in incident medical aid stations, transportation services, hospitals, and medical emergency procedures.

- **INCIDENT STATUS SUMMARY - ICS 209**

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

5.2.1 Incident Briefing ICS 201-CG

1. Incident Name	2. Prepared By: (name) Date: Time:	INCIDENT BRIEFING ICS 201-CG
3. Map/Sketch (Include sketch, 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

ICS 201-CG (pg 3 of 4) (Rev 08/04)

5.2.1 Incident Briefing ICS 201-CG, Continued

1. Incident Name	2. Prepared By: (name)	INCIDENT BRIEFING ICS 201-CG			
	Date: Time:				
7. Resources Summary					
Resource	Resource Identifier	Date Time	ETA	On-Scene	NOTES: (Location/Assignment/Status)

5.2.2 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			
INCIDENT ACTION PLAN			
The items checked below are included in this Incident Action Plan:			
<input type="checkbox"/> ICS 202-OS (Incident Objectives)			
<input type="checkbox"/> ICS 203-OS (Organization Assignment List)			
<input type="checkbox"/> ICS 204-OS (Assignment List)			
<input type="checkbox"/> ICS 205-OS (Communications Plan)			
<input type="checkbox"/> ICS 206-OS (Medical Plan)			
<input type="checkbox"/> ICS 209-OS (Incident Status Summary)			
<input type="checkbox"/>			
4. Prepared By: (Planning Section Chief)			Date/Time:
IAP COVER SHEET			March, 2000

5.2.3 Incident Objectives ICS 202-OS

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

3. Incident Commander and Staff

	Primary	Deputy
Federal:	<input style="width:100%;" type="text"/>	<input style="width:100%;" type="text"/>
State:	<input style="width:100%;" type="text"/>	<input style="width:100%;" type="text"/>
IC:	<input style="width:100%;" type="text"/>	<input style="width:100%;" type="text"/>

Safety Officer :

Information Officer:

Liaison Officer:

4. Agency Representatives

Agency	Name

5. Planning Section

Chief	<input style="width:85%;" type="text"/>
Deputy	<input style="width:85%;" type="text"/>
Resources Unit	<input style="width:85%;" type="text"/>
Situation Unit	<input style="width:85%;" type="text"/>
Environmental Unit	<input style="width:85%;" type="text"/>
Documentation Unit	<input style="width:85%;" type="text"/>
Demobilization Unit	<input style="width:85%;" type="text"/>
Technical Specialists	<input style="width:85%;" type="text"/>

6. Logistics Section

Chief	<input style="width:85%;" type="text"/>
Deputy	<input style="width:85%;" type="text"/>
Time Unit	<input style="width:85%;" type="text"/>
Procurement Unit	<input style="width:85%;" type="text"/>
Compensation Unit	<input style="width:85%;" type="text"/>
Cost Unit	<input style="width:85%;" type="text"/>

a. Support Branch

Director	<input style="width:85%;" type="text"/>
Supply Unit	<input style="width:85%;" type="text"/>
Facilities Unit	<input style="width:85%;" type="text"/>
Transportation Unit	<input style="width:85%;" type="text"/>
Vessel Support Unit	<input style="width:85%;" type="text"/>

7. Operations Section

Chief	<input style="width:85%;" type="text"/>
Deputy	<input style="width:85%;" type="text"/>
a. Branch I - Division/Groups	
Branch Director	<input style="width:85%;" type="text"/>
Deputy	<input style="width:85%;" type="text"/>
Division / Group	<input style="width:85%;" type="text"/>
Division / Group	<input style="width:85%;" type="text"/>
Division / Group	<input style="width:85%;" type="text"/>
Division / Group	<input style="width:85%;" type="text"/>
Division / Group	<input style="width:85%;" type="text"/>
Division / Group	<input style="width:85%;" type="text"/>
b. Branch II - Division/Groups	
Branch Director	<input style="width:85%;" type="text"/>
Deputy	<input style="width:85%;" type="text"/>
Division / Group	<input style="width:85%;" type="text"/>
Division / Group	<input style="width:85%;" type="text"/>
Division / Group	<input style="width:85%;" type="text"/>
Division / Group	<input style="width:85%;" type="text"/>
Division / Group	<input style="width:85%;" type="text"/>
Division / Group	<input style="width:85%;" type="text"/>
c. Branch III - Division/Groups	
Branch Director	<input style="width:85%;" type="text"/>
Deputy	<input style="width:85%;" type="text"/>
Division / Group	<input style="width:85%;" type="text"/>
Division / Group	<input style="width:85%;" type="text"/>
Division / Group	<input style="width:85%;" type="text"/>
Division / Group	<input style="width:85%;" type="text"/>
Division / Group	<input style="width:85%;" type="text"/>
Division / Group	<input style="width:85%;" type="text"/>

d. Air Operations Branch

Air Operations Br. Dir.	<input style="width:85%;" type="text"/>
Air Tactical Supervisor	<input style="width:85%;" type="text"/>
Air Support Supervisor	<input style="width:85%;" type="text"/>
Helicopter Coordinator	<input style="width:85%;" type="text"/>
Fixed-wing Coordinator	<input style="width:85%;" type="text"/>

8. Finance Section

Chief	<input style="width:85%;" type="text"/>
Deputy	<input style="width:85%;" type="text"/>
Time Unit	<input style="width:85%;" type="text"/>
Procurement Unit	<input style="width:85%;" type="text"/>

Ground Support Unit		Compensation Unit	
b. Service Branch		Cost Unit	
Director			
Communications Unit			
Medical Unit			
Food Unit			

9. Prepared by: (Resources Unit)	Date/Time
ORGANIZATION ASSIGNMENT LIST	March, 2000 ICS 203-OS
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5.2.5 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)				

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

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5.2.8 Incident Status Summary ICS 209-OS

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

hourly.

Updating the PSP consists of verifying the site hazards, risks, and risk mitigation. If a complete revision of the PSP is made on a new form, the old form should be retained and the box labeled SUPERSEDED BY REVISED PSP should be checked.

All active or superseded revisions of the PSP, Safety Message Briefings, the Site Safety Plan, and the Medical Plan shall all be maintained together beneath the Site Safety Plan Cover Sheet.

Risk Analysis:

- **Hazard** is an observed danger to life safety. Typical hazards have been identified on the form - add others as appropriate.
- **Risk** is the probability that a hazard will impact responders or the public. Risk is evaluated as None, Med, or High.

Mitigation is a measure to counteract the hazard, such as PPE or evacuation. Consider the suggested measures or take others, as appropriate.

The items checked below are included in this Site Safety Plan:

- Preliminary Safety Plan
- First Version Date / Time _____
 First Revision Date / Time _____
 Second Revision Date / Time _____
 _____ Date / Time _____
 _____ Date / Time _____
- Site Safety Plan Date / Time _____
- ICS 206-OS (Medical Plan) Date / Time _____

4. Submitted By:

SSHP COVER SHEET

March, 2000

FIGURE 5.3-2 - PRELIMINARY SAFETY PLAN

[Click here to view](#)

FIGURE 5.3-2 - PRELIMINARY SAFETY PLAN, CONTINUED

[Click here to view](#)

FIGURE 5.3-4 - SITE SAFETY AND HEALTH PLAN

PLAN REVIEW:		
Incident Safety Officer:		
APPROVALS:		
Incident Commander:		
Operations Officer:		
Haz Mat Division Officer:		
PLAN PREPARED:	DATE:	TIME:
Incident Location:		
Incident Number:		
HAZARDOUS SITUATION:	(Known or suspected, contaminated media, type storage container, type occupancy, obvious leaks, spills or breaches, physical damage)	
RESPONDING AGENCIES:		
Agency:	Name:	
1.		
2.		
3.		
4.		
5.		

6.	
7.	
8.	
9.	
10.	

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

FIGURE 5.3-4 - 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. As a minimum, Decontamination Team members must be in one (1) level of protection lower than that of the entry teams.
4. All decontamination equipment and systems must be in place before an entry can be made.
5. Entry team will consist of a minimum of two members with the same number of personnel assigned to a backup team. All entry personnel will adhere to the buddy system.
6. At the end of the incident, or directly after a possible exposure, each entry team member will take a full body shower and launder any personal clothing used at the scene.
7. All breathing air shall be certified as Grade D or better.
8. Where practical, all tools shall be of the nonsparking type.
9. Fire equipment shall be on hand when the situation warrants such support. At a minimum, fire extinguishers shall be available on scene.
10. Since incident evacuation may be necessary if an explosion, fire, or other event occurs; an individual shall be assigned to sound, alert, and notify the responsible command personnel and public officials (if required). The evacuation signal shall be four short blasts on an air horn every 30 seconds until all personnel are known to be evacuated.
11. An adequately stocked Emergency Medical Services (EMS) Unit shall be on site at all

times.

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

GENERAL SAFETY BRIEFING:

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

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FIGURE 5.3-4 - 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 effected areas. This is because incident control methods may or may not reduce the source of contamination or threat to the general public.

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

Sheltering/Evacuation Plan:

Highway	Industrial		
Railway	Marine		
Residential	Other		
Specify:			
TYPE OF SAFETY PLAN:			
Federal	State		
Local	Other		
Specify:			
SUSPECTED CHEMICALS INVOLVED:			
1.	2.		
3.	4.		
5.	6.		
7.	8.		
9.	10.		
INITIAL LEVEL OF PROTECTION: (If level D you must justify)			
A	B	C	D
INITIAL MEDICAL SCREENING COMPLETE: <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:			

FIGURE 5.3-4 - SITE SAFETY AND HEALTH PLAN, CONTINUED

In the event of spread of contamination beyond the boundaries of the incident:
EMERGENCY SERVICES:
Emergency medical facility:
Ambulance service:
Poison Control Center:
Chemical manufacturer's representative:
EMERGENCY PROCEDURES (in the event of personnel exposure):
EMERGENCY PROCEDURES (in the event of personnel injury):
HAZARD ASSESSMENT:
Attach Hazardous Materials Safety Data Sheets (MSDS), or other reference materials, for chemicals involved to this document.
MONITORING PROCEDURES:
Monitoring the incident to identify concentration of contaminants in all media. List the instruments to be used and what areas to be monitored.
Hot Zone (Excursion Zone)
Warm Zone (Contamination Reduction Zone)

Cold Zone (Support Zone)

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FIGURE 5.3-4 - SITE SAFETY AND HEALTH PLAN, CONTINUED

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

PERSONNEL POTENTIALLY EXPOSED TO HAZARDOUS MATERIALS:

NAME	POSITION	DATE/TIME

DECONTAMINATION PROCEDURES:

(Contaminated personnel, surfaces, materials, instruments, other equipment.)

DECONTAMINATION SOLUTIONS USED:

DISPOSAL PROCEDURES:

Authorized By: _____

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FIGURE 5.3-4 - SITE SAFETY AND HEALTH PLAN, CONTINUED

POST RESPONSE:			
Level of protection used:			
A	B	C	D
Justify			
EQUIPMENT DECONTAMINATION:			
	Clothing	SCBA/Resp.	Monitoring
Disposed:			
Cleaned:			
No Action:			
Specify:			
TOTAL APPROXIMATE TIME IN HOT ZONE:		Days	Hours
DATE PREPARED:		PREPARED BY:	
Reviewed By:			
Assistance in preparing this safety plan can be obtained from Haz Mat personnel.			

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FIGURE 5.3-4 - SITE SAFETY AND HEALTH PLAN, CONTINUED

HEALTH AND SAFETY/RESPONSE PLAN

APPLIES TO SITE:			
DATE:			
PRODUCTS:			(ATTACH MSDS)
SITE CHARACTERIZATION			
	<input type="checkbox"/> Marine vessel	<input type="checkbox"/> Pipeline	<input type="checkbox"/> Storage facility
	<input type="checkbox"/> Truck/Rail car	<input type="checkbox"/> Other	
Water	<input type="checkbox"/> Shoreline	<input type="checkbox"/> Wetlands	<input type="checkbox"/> Other

Land	<input type="checkbox"/> Rocky	<input type="checkbox"/> Sandy	<input type="checkbox"/> Muddy	<input type="checkbox"/> Other	
	<input type="checkbox"/> River	<input type="checkbox"/> Creek	<input type="checkbox"/> Canal	<input type="checkbox"/> Bay	<input type="checkbox"/> Ocean
	<input type="checkbox"/> Mountains	<input type="checkbox"/> Hills	<input type="checkbox"/> Brushland	<input type="checkbox"/> Forest	<input type="checkbox"/> Grassland
	<input type="checkbox"/> Other				
Use	<input type="checkbox"/> Public	<input type="checkbox"/> Government	<input type="checkbox"/> Residential	<input type="checkbox"/> Commercial	
	<input type="checkbox"/> Recreational	<input type="checkbox"/> Industrial	<input type="checkbox"/> Farmland	<input type="checkbox"/> Other	
Weather	<input type="checkbox"/> Temp _____°F	<input type="checkbox"/> Wind/Dir. _____ mph	<input type="checkbox"/> Rain		
	<input type="checkbox"/> Snow	<input type="checkbox"/> Ice	<input type="checkbox"/> Other		
Pathways for Dispersion	<input type="checkbox"/> Air	<input type="checkbox"/> Water	<input type="checkbox"/> Land	<input type="checkbox"/> Other	
Site Hazards					
<input type="checkbox"/> Chemical Hazards	<input type="checkbox"/> Boats				
<input type="checkbox"/> Slips, trips, falls	<input type="checkbox"/> Helicopters				
<input type="checkbox"/> Heat stress	<input type="checkbox"/> Noise				
<input type="checkbox"/> Cold stress	<input type="checkbox"/> Pumps, hoses				
<input type="checkbox"/> Weather	<input type="checkbox"/> Steam, hot water				
<input type="checkbox"/> Drowning	<input type="checkbox"/> Fire/Explosion				
<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			

FIGURE 5.3-4 - SITE SAFETY AND HEALTH PLAN, CONTINUED

HEALTH AND SAFETY/RESPONSE PLAN

CONTROL MEASURES (cont'd):

Decontamination

 Stations established (see site map)

Sanitation



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.) | F. Routes of entry |
| B. Hazardous substance location | G. Wind direction |
| C. Work zones (exclusion, contamination
reduction, support) | H. Emergency evacuation routes |
| D. Command center and decontamination
area | I. Assembly points |
| E. Access and access restrictions | J. First aid locations |
| | K. Communication system |

5.4 DECONTAMINATION PLAN

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

- Work Zones:
 - Support (cold) zone
 - Contamination reduction (warm) zone
 - Exclusion (hot) zone

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

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

- Decontamination Stations:

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

5.4 DECONTAMINATION PLAN, CONTINUED

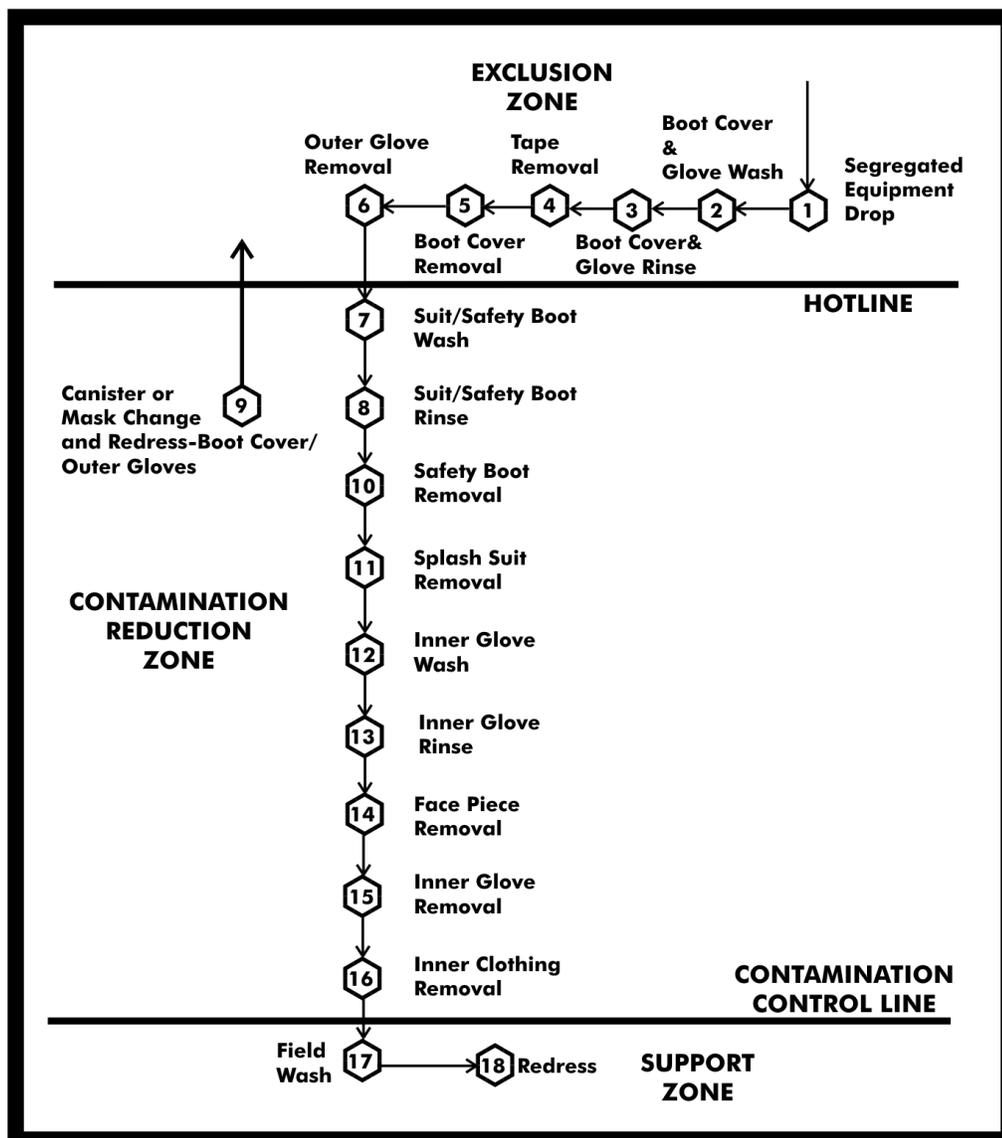
Procedures for these stations are as follows:

MAXIMUM MEASURES FOR DECONTAMINATION		
STATION 1	Segregated equipment drop	Deposit equipment used on site (tools, sampling devices and containers, monitoring instruments, radios, clipboards, etc.) on plastic drop cloths or in different containers with plastic liners. Segregation at the drop reduces the probability of cross contamination. During hot weather operations, a cool down station may be set up within this area.
STATION 2	Boot cover and glove wash	Scrub outer boot cover and gloves with decontamination solution or detergent and water.
STATION 3	Boot cover and glove rinse	Rinse off decontamination solution from Station 2 using copious amounts of water.
STATION 4	Tape removal	Remove tape around boots and gloves and deposit in container with plastic liner.
STATION 5	Boot cover removal	Remove boot covers and deposit in containers with plastic liner.
STATION 6	Outer glove removal	Remove outer gloves and deposit in container with

		plastic liner.
STATION 7	Suit and boot wash	Wash splash suit, gloves, and safety boots. Scrub with long-handled scrub brush and decontamination solution.
STATION 8	Suit and boot and glove rinse	Rinse off decontamination solution using water. Repeat as many times as necessary.
STATION 9	Canister or mask change	If worker leaves exclusion zone to change canister or this is the last step in the decontamination procedure; worker's canister is exchanged, new outer gloves and boot covers are donned, joints are taped, and the worker returns to duty.
STATION 10	Safety boot removal	Remove safety boots and deposit in container with plastic liner.
STATION 11	Splash suit removal	With assistance of helper, remove splash suit. Deposit in container with plastic liner.
STATION 12	Inner glove wash	Wash inner gloves with decontamination solution.
STATION 13	Inner glove rinse	Rinse inner gloves with water.
STATION 14	Face piece removal	Remove face piece. Deposit in container with plastic liner. Avoid touching face with fingers.
STATION 15	Inner glove removal	Remove inner gloves and deposit in lined container.
STATION 16	Inner clothing removal	Remove clothing soaked with perspiration and place in lined container. Do not wear inner clothing off-site since there is a possibility that small amounts of contamination might have been transferred in removing the protective suit.
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.

5.4 DECONTAMINATION PLAN, CONTINUED

DECONTAMINATION PROCEDURES, MAXIMUM DECONTAMINATION LAYOUT



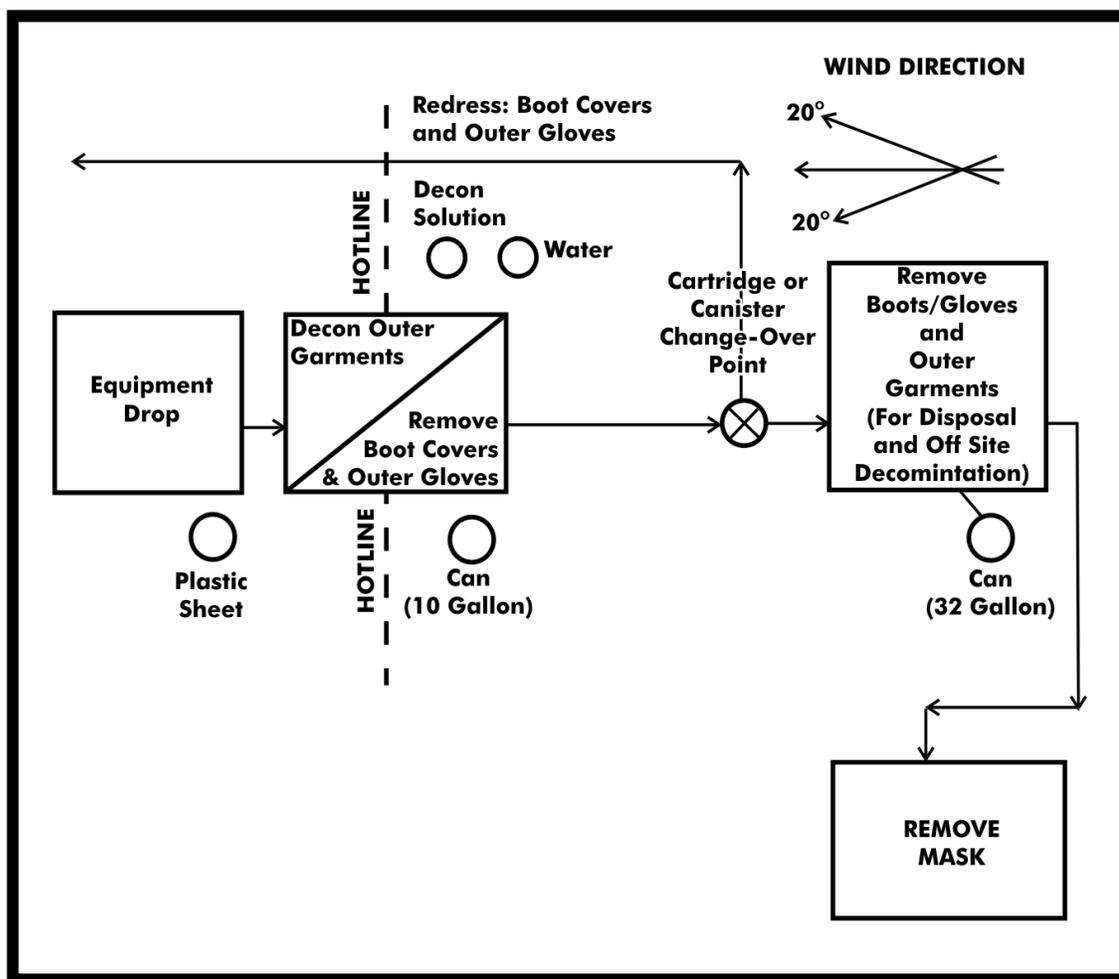
5.4 DECONTAMINATION PLAN, CONTINUED

MINIMUM MEASURES FOR DECONTAMINATION		
STATION 1	Equipment drop	Deposit equipment used on site (tools, sampling devices and containers, monitoring instruments, radios, clipboards, etc.) on plastic drop cloths. Segregation at the drop reduces the probability of cross contamination. During hot weather operations, a cool down station may be set up within this area.
STATION 2	Outer garment, boots and gloves wash, and rinse	Scrub outer boots, outer gloves, and splash suit with decontamination solution or detergent and water. Rinse off using copious amounts of water.
STATION 3	Outer boot and glove removal	Remove outer boots and gloves. Deposit in container with plastic liner.
STATION 4	Canister or mask change	If worker leaves exclusion zone to change canister (or mask) or this is the last step in the

		decontamination procedures; worker's canister is exchanged, new outer gloves and boot covers are donned, joints are taped, the worker returns to duty.
STATION 5	Boot, gloves, and outer garment removal	Boots, chemical-resistant splash suit, inner gloves removed and deposited in separate containers lined with plastic.
STATION 6	Face piece removal	Face piece is removed. Avoid touching face with fingers. Face piece deposited on plastic sheet.
STATION 7	Field wash	Hands and face are thoroughly washed. Shower as soon as possible.

5.4 DECONTAMINATION PLAN, CONTINUED

DECONTAMINATION PROCEDURES, MINIMUM DECONTAMINATION LAYOUT



5.5 DISPOSAL PLAN

Date:	Location:
Source of release:	
Amount of release:	
Incident name:	
State On-Scene Coordinator:	
Federal On-Scene Coordinator:	
Time required for temporary storage:	
Proposed storage method:	

Disposal priorities:

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

Disposal options:

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

Resources required for disposal options:

General information:

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

5.5 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:

5.7 DEMOBILIZATION PLAN

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

Demobilization procedures:

- Operations Section will determine which resources are ready for release from a specific collection site
- The Planning Section will provide guidance on release priorities and demobilization recommendations
- Information maintained by the Planning Section will be utilized to assist in the prioritization
- Each incident will require a Decontamination Area
- Decontaminated equipment will be returned to appropriate staging area for release or re-deployment
- Transports for equipment will be required if remote from staging area
- The Planning Section will document all demobilization and decontamination activities
- Equipment designated for re-assignment will be mobilized to the appropriate staging area
- The 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
SENSITIVE AREAS / RESPONSE TACTICS

Last revised: May 2, 2011

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6.1 Area Description

6.2 Spill Containment / Recovery

Figure 6.2-1 - Response Tactics for Various Shorelines

Figure 6.2-2 - Response to Oil Spills in Urban Environments

6.3 Sensitive Area Protection

Figure 6.3-1 - Sensitive Area Protection Implement Sequence

Figure 6.3-2 - Summary of Shoreline and Terrestrial Cleanup Techniques

6.4 Wildlife Protection and Rehabilitation

6.5 Endangered and Threatened Species By State

6.6 Terminal Map Feature Index

6.7 Terminal Sensitivity Maps

6.8 Tactical Plans

6.9 Pipeline Sensitivity Maps

6.1 AREA DESCRIPTION

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

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

6.2 SPILL CONTAINMENT / RECOVERY

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

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

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

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

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

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

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

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://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 sediments during the cleanup effort

			<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 forested woodlands 	<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, the roots of swamp forest trees are not 	<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 • Proper strategic boom placement may be

	<ul style="list-style-type: none"> Birds and mammals use swamps during feeding and breeding activities 	<p>exposed; thus, little damage to trees is expected. Any underbrush vegetation, however, would be severely impacted</p>	<p>highly effective in trapping large quantities of oil, thus reducing oil impact to interior swamp forests</p> <ul style="list-style-type: none"> Oil trapped by boom can be reclaimed through the use of skimmers and vacuums
--	---	--	--

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

TYPES	DESCRIPTION	PREDICTED OIL IMPACT	RECOMMENDED CLEANUP ACTIVITY
Open water	<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 debris loads 	<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 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

FIGURE 6.2-2 - RESPONSE TO OIL SPILLS IN URBAN ENVIRONMENTS

APPLICABILITY	DESCRIPTION	RECOMMENDED EQUIPMENT	POTENTIAL ISSUES
Storm Sewers: Spilled product may be able to infiltrate a storm sewer, either directly, via a grate, or indirectly	<ul style="list-style-type: none"> • Flushing ? Use of high pressure water to move suspended product to a collection area. • Jet-Flushing ? Specialized sewer cleaning equipment 	<ul style="list-style-type: none"> • Vac Truck • Frac Tank • Jet Flushing Truck • Pumps 	<ul style="list-style-type: none"> • Simple flushing may not be able to remove product that has infiltrated silt or "hung up" in corrugated sides of storm piping. Jet flushing may be

<p>through cracks or gaps in underground pipes.</p>	<p>to remove suspended product as well as silt and debris.</p>		<p>required.</p> <ul style="list-style-type: none"> • Jet flushing may result in accumulation of solid wastes to be managed. Sewer inspection may require confined space entry. • Product may follow the outside of sewer lines. • Sewer system may have to be rerouted during response to eliminate recontamination. • Storm sewers may be part of a combined sewer system (See Sanitary Sewer System). • As part of initial assessment, dye marking may be required along with marking manhole covers to identify locations • Collect upstream and downstream water quality samples.
<p>Stormwater Retention Ponds</p>	<ul style="list-style-type: none"> • Aeration/Sparging ? Use of compressors to inject air into the water to volatize hydrocarbons. • Booming - Using sorbent and/or containment booms to contain and recover petroleum products. • Skimming ? Skimmers may be used depending on concentration of flowing product. • Shoreline Cleanup 	<ul style="list-style-type: none"> • Vac Truck • Frac Tank • Compressors • Containment Boom • Sorbent Boom 	<ul style="list-style-type: none"> • Storm water ponds are designed for the temporary storage of storm water. Water conditions may result in the pond overflowing to a storm sewer, to another pond, or to a river. Conditions must be monitored to ensure boom placement matches changing water height.

	<p>? See Shoreline tactics.</p> <ul style="list-style-type: none"> • Underflow Dams 		
<p>Sanitary Sewers: Spilled product may be able to infiltrate a sanitary sewer indirectly through cracks or gaps in underground pipes.</p>	<ul style="list-style-type: none"> • Flushing ? Use of high pressure water to move suspended product to a collection area. • Jet-Flushing ? Specialized sewer cleaning equipment to remove suspended product as well as solids. • Biological/Cleaning Agents ? Specialized cleaning agents used with flushing to remove petroleum products. Helpful bacteria may remain to assist in cleaning any residual petroleum products. 	<ul style="list-style-type: none"> • Vac Truck • Frac Tank • Jet Flushing Truck • Pumps • Cleaning Agent 	<ul style="list-style-type: none"> • Simple flushing may not be able to remove product that has infiltrated solids or "hung up" in high or low spot in piping. Jet flushing may be required. Jet flushing will result in accumulation of solid wastes to be managed. • Sewer system may have to be rerouted upstream of impacted area during response to eliminate recontamination. • Product may follow the outside of sewer lines. • Any flushing and recovery will result in accumulation of biological wastes which must be stored and handled separately from other recovered petroleum or contact water. • Municipalities may not allow cleaning agents to be released to their water treatment plants, requiring recovery downstream of the injection point. • As part of the initial assessment, dye marking, manhole marking and air monitoring may be required. • Check residential

			and business properties for vapors that may have migrated through dry traps. <ul style="list-style-type: none">• Permits may be required to discharge treated water.
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6.3 SENSITIVE AREA PROTECTION

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

FIGURE 6.3-1 - SENSITIVE AREA PROTECTION IMPLEMENT SEQUENCE

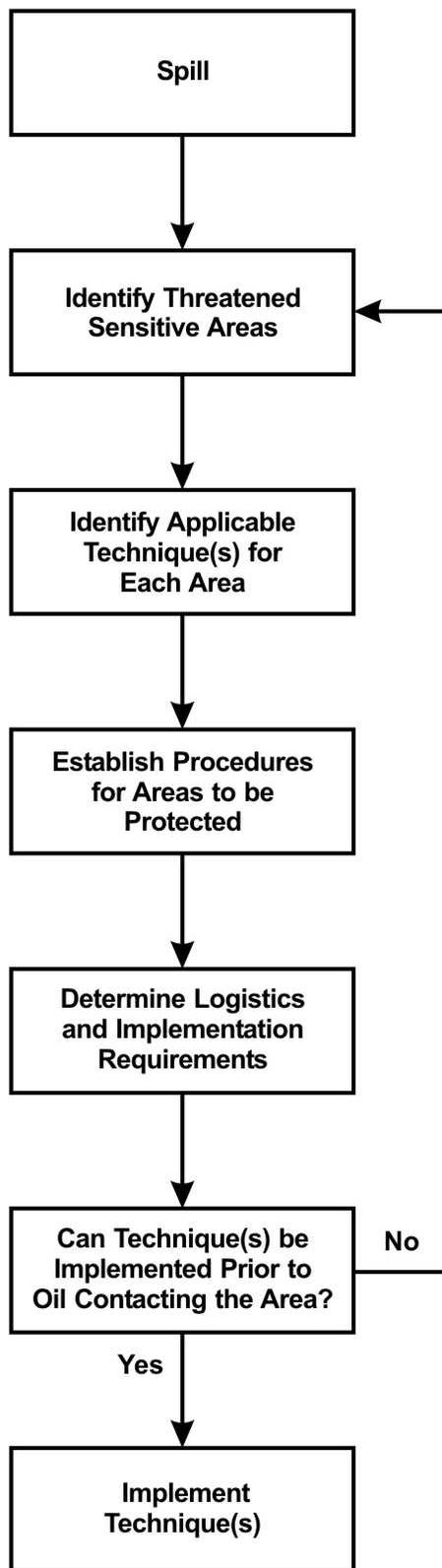


FIGURE 6.3-2 - SUMMARY OF SHORELINE AND TERRESTRIAL CLEANUP TECHNIQUES

TECHNIQUE	DESCRIPTION	RECOMMENDED	APPLICABILITY	POTENTIAL ENVIRONMENTAL
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		EQUIPMENT		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, secondary treatment method after gross oil removal • Sensitive areas where access is 	<ul style="list-style-type: none"> • Sediment disturbance and erosion potential • Trampling of vegetation and organisms • Foot traffic can work oil deeper into soft sediments

			restricted	
4. Vacuum / Pumps / Skimmers	Pumps, vacuum trucks, skimmers are used to remove oil accumulations from land or relatively thick floating layers from the water.	<u>Equipment</u> 1-2 50- to 100-bbl vacuum trucks w/hoses 1-2 nozzle screens or skimmer heads <u>Personnel</u> 2-6 workers plus truck operators	<ul style="list-style-type: none"> • 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	High volumes of water at low pressure are used to flood the oiled area to float oil off and out of sediments and back into the water or to a containment area where it can be recovered.? Frequently used with flushing.	<u>Equipment</u> 1-5 100- to 200-gpm pumping systems 1 100-ft perforated header hose per system 1-2 200-ft containment booms per system 1 oil recovery device per system <u>Personnel</u> 6-8 workers per system	<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 EQUIPMENT	APPLICABILITY	POTENTIAL ENVIRONMENTAL EFFECTS
Washing, Continued				
6. Flushing	Water streams at low to moderate pressure, and possibly elevated temperatures, are	<u>Equipment</u> 1-5 50- to 100-gpm/100-psi pumping systems with manifold	<ul style="list-style-type: none"> • Substrates, riprap, and solid man-made structures 	<ul style="list-style-type: none"> • Can impact clean downgradient areas • Will displace

	used to remove oil from surface or near-surface sediments through agitation and direct contact.? Oil is flushed back into the water or a collection point for subsequent recovery.? May also be used to flush out oil trapped by shoreline or aquatic vegetation.	1-4 100-ft hoses and nozzles per system 1-2 200-ft containment booms per system 1 oil recovery device per system <u>Personnel</u> 8-10 workers per system	<ul style="list-style-type: none"> • Oil stranded onshore • Floating oil on shallow intertidal areas 	<p>many surface organisms if present</p> <ul style="list-style-type: none"> • 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 from the sediments.	<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
9. Sediment Tilling	Mechanical equipment or hand tools are used to till lightly to moderately oiled	<u>Equipment</u> 1 tractor fitted with tines, dicer, ripper blades, etc. or 1-4 rototillers or 1 set of hand tools	<ul style="list-style-type: none"> • Any sedimentary substrate that can support heavy equipment 	<ul style="list-style-type: none"> • Significant amounts of oil can remain on the shoreline for extended periods of time

	surface sediments to maximize natural degradation processes.	<u>Personnel</u> 2-10 workers	<ul style="list-style-type: none"> • Sand and gravel beaches with subsurface oil • Where sediment is stained or lightly oiled • Where oil is stranded above normal high waterline 	<ul style="list-style-type: none"> • Disturbs surface sediments and organisms
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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 deficient Moderate to heavily oiled substrates After other techniques have been used to remove free product on lightly oiled shorelines Where other techniques are destructive or ineffective 	<ul style="list-style-type: none"> • Significant amounts of oil can remain on the shoreline for extended periods of time • Can disturb surface sediments and organisms
11. Log/Debris??	Oiled logs, driftwood,	<u>Equipment</u> 1 set of fire control	<ul style="list-style-type: none"> • On most habitats 	<ul style="list-style-type: none"> • Heat may impact local

Burning	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.	equipment 2-4 fans 1 supply of combustion promoter <u>Personnel</u> 2-4 workers	except dry muddy substrates where heat may impact the biological productivity of the habitat <ul style="list-style-type: none"> Where heavily oiled items are difficult or impossible to move Many potential applications on ice 	near-surface organisms <ul style="list-style-type: none"> Substantial smoke may be generated Heat may impact adjacent vegetation
12. Natural Recovery	No action is taken and oil is allowed to degrade naturally.	None required	<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
13. Dispersants (Pursuant to Texas Administrative Code, Title 31, Part 1, Chapter 19, Subchapter B, Rule 19.13 (c) (10) - Under no circumstances will any	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. ?	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 	<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

<p>facility personnel who might be involved in an oil spill response, disperse detergents or other surfactants. These products are prohibited from being used on an oil spill in water; such usage requires written approval of the Regional Response Team, consisting of federal and state agency representatives that coordinate oil spill response efforts)</p>	<p>Specially formulated products containing surface-active agents are sprayed from aircraft or boats onto the slick.</p>		<p>to be greater than the impact of dispersed oil on the water-column community</p>	<p>shoreline impacts could occur</p>
<p>1 - Per 1000 feet of shoreline or oiled area</p>				

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, but will not typically directly manage these efforts.
- Company personnel will not attempt to rescue or clean affected wildlife, because such actions may cause harm to the individuals or may place the animals at further risk.
- Federal and state agencies responsible for wildlife capture and rehabilitation will typically coordinate capturing and rehabilitating oiled wildlife; a list of these agencies are included in **FIGURE 3.1-3**.
- 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.

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Bat, Indiana	<i>Myotis sodalis</i>	Caves, mines, upland forests	E	New Jersey
Beaked-rush, Knieskern's	<i>Rhynchospora knieskernii</i>	Edges of abandoned clay, sand, and gravel pits	T	Delaware
Dropwort, Canby's	<i>Oxypolis canbyi</i>	Pond cypress savannahs, cypress/pond pine ponds, sloughs, and wet pine savannas	E	Delaware
Joint-vetch, sensitive	<i>Aeschynomene virginica</i>	Freshwater to slightly brackish tidal marshes	T	New Jersey
Pink, swamp	<i>Helonias bullata</i>	Acidic wetlands	T	New Jersey
Pink, swamp	<i>Helonias bullata</i>	Acidic wetlands	T	Delaware
Pogonia, small whorled	<i>Isotria medeoloides</i>	Cidic soils, in dry to mesic second-growth	T	Delaware
Sea turtle, Kemp's ridley	<i>Lepidochelys kempii</i>	Shallow areas with sandy and muddy bottoms	E	Delaware
Sea turtle, Kemp's ridley	<i>Lepidochelys kempii</i>	Shallow areas with sandy and muddy bottoms	E	New Jersey
Squirrel, Delmarva Peninsula fox Entire, except Sussex Co., DE	<i>Sciurus niger cinereus</i>	Edges of mixed pine-hardwood forests	E	Delaware
Sturgeon, shortnose	<i>Acipenser brevirostrum</i>	Rivers, estuaries, and the sea	E	Delaware
Sturgeon, shortnose	<i>Acipenser brevirostrum</i>	Rivers, estuaries, and the sea	E	New Jersey
Tern, roseate northeast U.S. nesting pop.	<i>Sterna dougallii dougallii</i>	Coastal islands and beaches	E	New Jersey
Tiger beetle, northeastern beach	<i>Cicindela dorsalis dorsalis</i>	Coastal beaches	T	New Jersey
Turtle, bog		Calcareous (limestone) fens,		

(=Muhlenberg) northern	<i>Clemmys muhlenbergii</i>	sphagnum bogs, and wet, grassy pastures	T	New Jersey
Turtle, bog (=Muhlenberg) northern	<i>Clemmys muhlenbergii</i>	Calcareous (limestone) fens, sphagnum bogs, and wet, grassy pastures	T	Delaware
Whale, finback	<i>Balaenoptera physalus</i>	Offshore ocean waters	E	Delaware
Whale, finback	<i>Balaenoptera physalus</i>	Offshore ocean waters	E	New Jersey
Whale, humpback	<i>Megaptera novaeangliae</i>	Surface of the ocean	E	New Jersey
Whale, humpback	<i>Megaptera novaeangliae</i>	Surface of the ocean	E	Delaware

T - Threatened

E - Endangered

Wilmington

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6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Whale, right	<i>Balaena glacialis</i> (incl. <i>australis</i>)	Surface of the ocean	E	Delaware
Whale, right	<i>Balaena glacialis</i> (incl. <i>australis</i>)	Surface of the ocean	E	New Jersey

T - Threatened

E - Endangered

Wilmington

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6.6 TERMINAL MAP FEATURE INDEX

MAP ID#	MAP NAME	FEATURE	NAME
1	Sensitivity Figure 3	Transportation Route	DuPonts Landing Pier (Edgemoor 2)

			Road 4&8
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5	Sensitivity Figure 3	Businesses	Unnamed pier. Snow pier.
6	Sensitivity Figure 3	Lakes and Streams	Confluence of Shellpot Creek and Delaware River
7	Sensitivity Figure 3	Recreational Area	Shore residents on east bank of Delaware River (Penns Grove), 1 mile to north and south
8	Sensitivity Figures 3 & 4	Lakes and Streams	USGS Gaging Station 01481602, Delaware River below Christina River at Wilmington, DE
9	Sensitivity Figures 3 & 4	Recreational Area	Helms Cove
10	Sensitivity Figures 3 & 4	Lakes and Streams	Confluence of Christina River and Delaware River
11	Sensitivity Figures 3 & 4	Recreational Area	Carneys Point
12	Sensitivity Figures 3 & 4	Lakes and Streams	Confluence of Hanby Creek and Delaware River
13	Sensitivity Figures 3 & 4	Lakes and Streams	Overland flow entering drainage ditch
14	Sensitivity Figures 3 & 4	Transportation Route	Flow under Allen Court
15	Sensitivity Figures 3 & 4	Transportation Route	Flow under Allen Court
16	Sensitivity Figures 3 & 4	Businesses	Unnamed pier
17	Sensitivity Figures 3 & 4	Lakes and Streams	Overland flow entering drainage ditch
18	Sensitivity Figures 3 & 4	Transportation Route	Flow under Allen Court
19	Sensitivity Figures 3 & 4	Lakes and Streams	Overland flow entering drainage ditch to Delaware River
20	Sensitivity Figure 4	Lakes and Streams	Confluence of Whooping John Creek and Delaware River
21	Sensitivity Figure 4	Lakes and Streams	Confluence of overland drainage and Delaware River
22	Sensitivity Figure 4	Recreational Area	Deepwater Point
23	Sensitivity Figure 4	Lakes and Streams	Sluice Gate
24	Sensitivity	Recreational Area	Boat Ramp (unnamed)

	Figure 4		
26	Sensitivity Figure 4	Transportation Route	State Hwy 40, Interstate 295, Delaware Memorial Bridges tower/pier crossing over Delaware River
27	Sensitivity Figure 4	Lakes and Streams	Confluence of unnamed tributary and Delaware River
28	Sensitivity Figure 4	Lakes and Streams	Confluence of Deepwater Canal and Delaware River
29	Sensitivity Figure 4	Transportation Route	Deepwater Station Heliport (GNIS location questionable)
31	Sensitivity Figure 4 & 5	Schools	Pencader Charter High School
32	Sensitivity Figure 4 & 5	Recreational Area	Shore residents on east bank of Delaware River, next 1.2 miles to south-southwest
33	Sensitivity Figure 5	Lakes and Streams	Sluice Gate

6.6 TERMINAL MAP FEATURE INDEX

MAP ID#	MAP NAME	FEATURE	NAME
34	Sensitivity Figure 5	Recreational Area	Travis Cove Jetty
35	Sensitivity Figure 5	Recreational Area	Brandiff Beach
36	Sensitivity Figure 5	Lakes and Streams	Sluice Gate
37	Sensitivity Figure 5	Recreational Area	Riverview Beach Park
38	Sensitivity Figure 5	Recreational Area	Shore residents on west bank of Delaware River (New Castle), next 0.2 mile to south-southwest
39	Sensitivity Figure 5	Endangered Flora and Fauna	NOAA Environmental Sensitivity Index Habitat Point (Bur-marigold)

40	Sensitivity Figure 5	Recreational Area	Shore residents on east bank of Delaware River (Penns and Riverview Beach), next 1.8 miles to the SW
41	Sensitivity Figure 5	Recreational Area	Battery Park and Pier
42	Sensitivity Figure 5	Endangered Flora and Fauna	NOAA Environmental Sensitivity Index Habitat Point (Bur-marigold)
43	Sensitivity Figure 5	Lakes and Streams	Confluence of Hoppemense Creek and Delaware River
44	Sensitivity Figure 5	Endangered Flora and Fauna	NOAA Environmental Sensitivity Index Habitat Point (Bur-marigold)
45	Sensitivity Figure 5	Recreational Area	Deemers Beech
46	Sensitivity Figure 5	Endangered Flora and Fauna	NOAA Environmental Sensitivity Index Habitat Point (Bur-marigold)
47	Sensitivity Figure 5	Lakes and Streams	Confluence of Army Creek and Delaware River
48	Sensitivity Figure 5	Recreational Area	Pennsville Municipal Boat Ramp
49	Sensitivity Figure 5	Lakes and Streams	Confluence of Stonebank Creek and Delaware River
50	Sensitivity Figure 5	Recreational Area	Kelly Point
51	Sensitivity Figure 5	Businesses	Unnamed pier
52	Sensitivity Figure 5	Recreational Area	Shore park on Delaware River
53	Sensitivity Figure 5	Recreational Area	Deemers Beech
54	Sensitivity Figure 5 & 6	Lakes and Streams	Confluence of Miles Creek and Delaware River
55	Sensitivity Figure 5 & 6	Lakes and Streams	Pea Patch Island Dike (submerged)
56	Sensitivity Figure 5 & 6	Lakes and Streams	Confluence of Gambles Gut and Delaware River
57	Sensitivity Figure 6	Recreational Area	Killcohook National Refuge
58	Sensitivity Figure 6	Recreational Area	Ommelanden Hunter State Safety Training Center
59	Sensitivity Figure 6	Lakes and Streams	Confluence of Tom Creek with Delaware River

60	Sensitivity Figure 6	Lakes and Streams	Concrete Pier
62	Sensitivity Figure 6	Lakes and Streams	Confluence of Red Lion Creek and Delaware River
63	Sensitivity Figure 6	Recreational Area	Fort Mott State Park and historical Military Battery
64	Sensitivity Figure 6	Lakes and Streams	Concrete Pier

66	Sensitivity Figure 6 & 7	Recreational Area	Fort Mott State Park pier
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6.6 TERMINAL MAP FEATURE INDEX

MAP ID#	MAP NAME	FEATURE	NAME
67	Sensitivity Figure 6 & 7	Recreational Area	Shore residents on east bank of Delaware River, next 0.2 miles to southeast
68	Sensitivity Figure 6 & 7	Recreational Area	Fort Delaware State Park / Pea Patch Island
69	Sensitivity Figure 6 & 7	Recreational Area	Supawna Meadows National Wildlife Refuge
70	Sensitivity Figure 6 & 7	Lakes and Streams	Confluence of unnamed tributary and Delaware River
71	Sensitivity Figure 6 & 7	Fish and Wildlife	NOAA Environmental Sensitivity Index Nest (various birds, see Sensitivity Map Figure 2 for species)
72	Sensitivity Figure 6 & 7	Lakes and Streams	Confluence of unnamed tributary and Delaware River
73	Sensitivity Figure 7	Lakes and Streams	Confluence of Goose Pond / Goose Creek / Mill Creek and Delaware River
74	Sensitivity Figure 7	Lakes and Streams	Light and historical Military Battery

Sensitivity

Confluence of Dragon Creek and

76	Figure 7	Lakes and Streams	Delaware River
77	Sensitivity Figure 7	Transportation Route	Delaware City
78	Sensitivity Figure 7	Endangered Flora and Fauna	NOAA Environmental Sensitivity Index Habitat Point (Bur-marigold)
79	Sensitivity Figure 7	Recreational Area	Penn-Salem Marina and boat ramp
80	Sensitivity Figure 7	Lakes and Streams	Confluence of Chesapeake and Delaware Canal with the Delaware River
81	Sensitivity Figure 7	Lakes and Streams	Confluence of Baldrige Creek and Delaware River
82	Sensitivity Figure 7	Recreational Area	Fort DuPont State Park boat launch
83	Sensitivity Figure 7	Recreational Area	Fort DuPont State Park and historical Military Battery
84	Sensitivity Figure 7	Lakes and Streams	Confluence of Salem River and Delaware River
85	Sensitivity Figure 7	Recreational Area	Shore residents on east bank of Delaware River (Oakwood Beach), next 1.7 miles to south-southwest
86	Sensitivity Figure 7 & 8	Lakes and Streams	Confluence of Chesapeake and Delaware Canal with the Delaware River, and light
87	Sensitivity Figure 7 & 8	Recreational Area	Salen Country Club on shore of Delaware River
88	Sensitivity Figure 7 & 8	Recreational Area	Chesapeake and Delaware Canal fishing pier. Canal Wildlife Area.
89	Sensitivity Figure 8	Recreational Area	C&D Canal State Wildlife Management Area
90	Sensitivity Figure 8	Recreational Area	Abbots Meadow State Wildlife Management Area
91	Sensitivity Figure 8	Lakes and Streams	Confluence of St. George Creek and Delaware River
92	Sensitivity Figure 8	Lakes and Streams	Confluence of Mill Creek and Delaware River
93	Sensitivity Figure 8	Recreational Area	Augustine State Wildlife Management Area
94	Sensitivity Figure 8	Lakes and Streams	Confluence of unnamed tributary and Delaware River
95	Sensitivity Figure 8 & 9	Lakes and Streams	Sluice Gate

96	Sensitivity Figure 8 & 9	Lakes and Streams	Confluence of Straight Ditch and Delaware River
97	Sensitivity Figure 8 & 9	Recreational Area	Canadas Beach
98	Sensitivity Figure 8 & 9	Recreational Area	Reedy Island
99	Sensitivity Figure 9	Recreational Area	Augustine Beach State Fishing and Access Area

6.6 TERMINAL MAP FEATURE INDEX

MAP ID#	MAP NAME	FEATURE	NAME
100	Sensitivity Figure 9	Lakes and Streams	Confluence of Back Ditch and Delaware River
101	Sensitivity Figure 9	Recreational Area	Augustine Beach
102	Sensitivity Figure 9	Recreational Area	Augustine Beach boat landing, DE River.
103	Sensitivity Figure 9	Recreational Area	Shore residents on west bank of Delaware River (Augustine Beach), next 0.2 mile to south-southwest
104	Sensitivity Figure 9	Recreational Area	Mad Horse Creek State Wildlife Management Area
106	Sensitivity Figure 9	Lakes and Streams	Confluence of Alloways Creek and Delaware River
107	Sensitivity Figure 9	Lakes and Streams	Light and Reedy Island Dike
109	Sensitivity Figure 9	Lakes and Streams	Confluence of Augustine Creek and Delaware River
110	Sensitivity Figure 9	Lakes and Streams	Confluence of Hope Creek and Delaware River
111	Sensitivity Figure 9 & 10	Recreational Area	Shore residents on west bank of Delaware River (Bay View Beach), next 0.4 mile to south-southwest
	Sensitivity		

112	Figure 9 & 10	Recreational Area	Reedy Island Dike
113	Sensitivity Figure 10	Lakes and Streams	Confluence of Silver Run Creek and Delaware River

115	Sensitivity Figure 10	Lakes and Streams	Confluence of Upper Break and Delaware River
116	Sensitivity Figure 10	Lakes and Streams	Light and end of Reedy Island Dike

118	Sensitivity Figure 10	Lakes and Streams	Confluence of Lower Break and Delaware River
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120	Sensitivity Figure 10	Recreational Area	Mad Horse Creek State Wildlife Management Area
121	Sensitivity Figure 10	Lakes and Streams	Confluence of Appoquinimink River and Delaware River

6.7 TERMINAL SENSITIVITY DESCRIPTION

EXPLANATION OF THE VULNERABILITY ANALYSIS:

A Vulnerability Analysis has been conducted for the terminal using the following general methodology (in accordance with 40CFR 112, Appendix F, paragraph 1.4.2 and 1.4.3, and external references provided therein):

Hazards identified in FIGURE C-4 of this terminal Integrated Contingency Plan (ICP) are carefully reviewed for spill potential.

Worst-case, Medium and Small Spill Scenarios are developed on the basis of spill history of the terminal; vulnerability to natural disaster; the operator's knowledge and experience related to the terminal's spill history, container age and other factors; and the sensitivities identified within the calculated planning distance.

Sensitive receptors are reviewed, and Tactical Plans are developed to mitigate the risk of exposure of the identified receptors to an oil spill.

Tactical exercises and oil spill prevention meetings are conducted to increase awareness, decrease the probability of oil spills, and increase the effectiveness of mitigation techniques employed should a spill occur.

Within this ICP, the Vulnerability Analysis required under Pt 112, App. F is split across three sections in the document. APPENDIX C comprises the hazard analysis (Spill Prevention Containment and Countermeasures Plan); APPENDIX D comprises the hazard analysis continuation, scenario analysis and downstream planning distance calculations; and SECTION 6 comprises the sensitivity analysis ? this is also where the detailed Tactical Site Plans are located.

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6.9 PIPELINE SENSITIVITY MAPS

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SUSTAINED RESPONSE ACTIONS
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7.1 RESPONSE RESOURCES

7.1.1 Response Equipment

CATEGORY	TYPE/MODEL	QUANTITY	SIZE	YEAR PURCHASED	OPERATIONAL STATUS/ CONTAINMENT CAPACITY	LOCATION AT FACILITY
Booms	American Boom & Barrier, Mark II-River	400 feet	18	1986-2009	Operational/250,000+ sq. ft.	400' at the dock facility
Sorbents	Conweb sorbent boom	300'	8	2006-2009	Operational/1,050 Gal.	Terminal Facility
Hand Tools	Shovels	15	N/A	Unknown	Operational/ N/A	Maintenance Building
Hand Tools	Rakes/Pitchforks	2/2	N/A	Unknown	Operational/ N/A	Maintenance Building
Hand Tools	Trash Pump	2	N/A	Unknown	Operational/ N/A	Maintenance Building
Hand Tools	Generator	1	N/A	Unknown	Operational/ N/A	Maintenance Building
Communication	Motorola Radios XPR 6350	15	Mototurbo (Digital)	2009	Operational/ N/A	Control Buildings
Fire Fighting Equipment	Respirators	15	N/A	Unknown	Operational/ N/A	Terminal Facility
Fire Fighting Equipment	CPK Fire Etinguishers	8	20LB	Unknown	Operational/ N/A	Dock Facility
Fire Fighting Equipment	Misc. Protective Clothing	Unknown	Varoius	Unknown	Operational/ N/A	Terminal Facility
Heavy Equipment	John Deere Backhoe	1	N/A	1999	Operational/ N/A	Shop Building

***Note:** Response equipment is tested and deployed as described in **APPENDIX A** of the Spill Response Plan. Response equipment not included in the above table is not maintained at this facility for response (i.e. weirs, booms, etc.). Containment capacity for sorbents is equivalent to absorption capacity.

***Note:** The response resources listed above have been determined to be appropriate for this facility given the unique characteristics of the facility which may include flow paths, proximity to spill contractors, and natural and man-made tertiary containment. The analysis to determine the appropriate response resources, including functional equivalents of containment boom, is explained in the Discharge Scenarios in **APPENDIX D.5.1**.

7.1.1 Response Equipment, Continued

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CATEGORY	TYPE/MODEL	QUANTITY	SIZE	YEAR PURCHASED	OPERATIONAL STATUS/ CONTAINMENT CAPACITY	LOCATION AT FACILITY
Fire Fighting Equipment	Water Systems	2	N/A	Unknown	Operational/ N/A	Hydrant Systems
Fire Fighting Equipment	Water Systems	1	N/A	Unknown	Operational/ N/A	10,000 BBL Water Tank
Fire Fighting Equipment	Standpipes/Hydrants	1	N/A	Unknown	Operational/ N/A	Terminal Access Road Behind Control Building
Fire Fighting Equipment	Standpipes/Hydrants	1	N/A	Unknown	Operational/ N/A	Between Maint. Heaters 2 & 4
Fire Fighting Equipment	Standpipes/Hydrants	1	N/A	Unknown	Operational/ N/A	Terminal Road Behind Tank T2
Fire Fighting Equipment	Standpipes/Hydrants	1	N/A	Unknown	Operational/ N/A	Terminal Road Behind Tank T4
Fire Fighting Equipment	Standpipes/Hydrants	1	N/A	Unknown	Operational/ N/A	Inside Tank T6 Dike Area
Fire Fighting Equipment	Standpipes/Hydrants	1	N/A	Unknown	Operational/ N/A	Behind Clean Oil Manifold
Fire Fighting Equipment	Standpipes/Hydrants	1	N/A	Unknown	Operational/ N/A	Behind 10" Pipeline Pig Launcher
Fire Fighting Equipment	Standpipes/Hydrants	1	N/A	Unknown	Operational/ N/A	Terminal Entrance
Fire Detection Systems		1	N/A	Unknown	Operational/ N/A	Clean Oil Truck Rack

***Note:** Response equipment is tested and deployed as described in **APPENDIX A** of the Spill Response Plan. Response equipment not included in the above table is not maintained at this facility for response (i.e. weirs, booms, etc.). Containment capacity for sorbents is equivalent to absorption capacity.

***Note:** The response resources listed above have been determined to be appropriate for this facility given the unique characteristics of the facility which may include flow paths, proximity to spill contractors, and natural and man-made tertiary containment. The analysis to determine the appropriate response resources, including functional equivalents of containment boom, is explained in the Discharge Scenarios in

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7.1.1 Response Equipment, Continued

CATEGORY	TYPE/MODEL	QUANTITY	SIZE	YEAR PURCHASED	OPERATIONAL STATUS/ CONTAINMENT CAPACITY	LOCATION AT FACILITY
Sorbents	Coastal Pak Pillows, Rolls, Spill Blanket	10		Unknown	Operational/ N/A	Terminal Storage
Sorbents	Oil Only Pads	10		Unknown	Operational/ N/A	Terminal Storage
Fire Fighting Equipment	Aboveground Water Storage Tank	1	10,000 BBL	2004	Operational/ NA	Terminal Facility
Fire Fighting Equipment	Electric Fire Pump	1	3,000 gpm at 140psi	2004	Operational/ NA	Terminal Facility
Fire Fighting Equipment	12" underground fire water supply piping	3000 ft	12"	2008	Operational/ NA	From Terminal Facility to Dock
Fire Fighting Equipment	Foam Risers	2	6	2008	Operational / NA	Foam Tank Building at Dock
Fire Fighting Equipment	Foam Bladder Tank	1	2000 gal	2008	Operational/ NA	Foam Tank Building at Dock
Fire Fighting Equipment	Water Line on Trestle and Dock	1900 ft	4 and 6 inch	2008	Operational / NA	Trestle and Dock
Fire Fighting Equipment	Foam Solution Piping	1800 ft	8 and 6 inch	2008	Operational / NA	Trestle and Dock
Fire Fighting Equipment	Remote Controlled Oscillating Monitors	4	500 gpm	2008	Operational / NA	Dock
Fire Fighting Equipment	Manual Pull Stations	7	N/A	2008	Operational / NA	Trestle and Dock

***Note:** Response equipment is tested and deployed as described in **APPENDIX A** of the Spill Response Plan. Response equipment not included in the above table is not maintained at this facility for response (i.e. weirs, booms, etc.). Containment capacity for sorbents is equivalent to absorption capacity.

***Note:** The response resources listed above have been determined to be appropriate for this facility given the unique characteristics of the facility which may include flow paths, proximity to spill contractors, and natural and man-made tertiary containment. The analysis to determine the appropriate response resources, including functional equivalents of containment boom, is explained in the Discharge Scenarios in **APPENDIX D.5.1.**

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7.1.1 Response Equipment, Continued

CATEGORY	TYPE/MODEL	QUANTITY	SIZE	YEAR PURCHASED	OPERATIONAL STATUS/ CONTAINMENT CAPACITY	LOCATION AT FACILITY
Fire Fighting Equipment	Releasing Panel	1	N/A	2008	Operational / NA	Foam Tank Building at Dock
Fire Fighting Equipment	Remote Control Monitor Panel	1	N/A	2008	Operational / NA	Trestle
Sorbents	SPC Mobile Spill Totes SKM-XLT	3	XL Marine	2009	Operational/ N/A	Dock

***Note:** Response equipment is tested and deployed as described in **APPENDIX A** of the Spill Response Plan. Response equipment not included in the above table is not maintained at this facility for response (i.e. weirs, booms, etc.). Containment capacity for sorbents is equivalent to absorption capacity.

***Note:** The response resources listed above have been determined to be appropriate for this facility given the unique characteristics of the facility which may include flow paths, proximity to spill contractors, and natural and man-made tertiary containment. The analysis to determine the appropriate response resources, including functional equivalents of containment boom, is explained in the Discharge Scenarios in **APPENDIX D.5.1.**

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FIGURE 7.1-1 - EQUIPMENT/RESPONSE CAPABILITIES AND LIMITATIONS

* USCG Classified OSRO for facility

COMPANY/CONTRACTOR	EQUIPMENT	RESPONSE TIME
HMHTTC Response Inc. Wilmington, DE		0.5 hours
*Miller Environmental Group Paulsboro, NJ	Full response capabilities	1 hours
*Guardian Companies, Inc. Bear, DE		1 hours
*Clean Venture Inc.	Full response capabilities	1.25 hours

Clayton, NJ		
*Lewis Environmental Royersford, PA	Full response capabilities	1.75 hours

7.1.2 Response Equipment Inspection and Maintenance

Depending on the region, Company response resources consist of:

- Strategically located response trailers containing primarily safety and emergency response equipment
- Facility based equipment designed for releases at or near facilities.

In general, regional response contractors as well as one or more trailers can be mobilized to any location along the pipeline within six to 12 hours to meet the federal Tier 1 response planning requirements. Vacuum truck contractors can also respond to most locations along the pipeline system within six hours and multiple regional response contractors can respond to any location within 30 to 36 hours to meet the Tier 2 and Tier 3 response requirements.

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

Containment boom

During 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**. 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 **SECTION 3**
- The Company has ensured by contract the availability of private personnel and equipment necessary to respond, to the maximum extent practicable, to the worst case discharge or the substantial threat of such discharge
- Contractors without USCG classification deploy and inspect boom to meet PREP

guidelines. Company requires that these exercises are completed annually

- **APPENDIX B** contains evidence of contracts for the Company's primary response contractors and equipment lists of contractors without USCG classification

7.1.4 Command Post

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

FIGURE 7.1-2 - COMMAND POST CHECKLIST

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

7.1.5 Staging Area

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

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

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

In addition, the staging area should:

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

7.1.6 Communications Plan

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

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

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

FIGURE 7.1-3 - COMMUNICATIONS CHECKLIST

COMMUNICATIONS CHECKLIST	INITIALS	DATE/TIME STARTED	DATE/TIME COMPLETED
Develop a Communications Plan.			
Ensure adequate phone lines per staff element - contact local provider.			
Ensure adequate fax lines - contact local provider.			
Internet access necessary?			
Ensure recharging stations for cellular phones.			
VHF radio communications: <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.

7.3 WASTE MANAGEMENT

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

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

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

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

Good hazardous waste management includes:

- Reusing materials when possible
- Recycling or reclaiming waste

- Treating waste to reduce hazards or reducing amount of waste generated

- The management of the wastes generated in cleanup and recovery activities must be conducted with the overall objective of ensuring:
 - Worker safety
 - Waste minimization
 - Cost effectiveness
 - Minimization of environmental impacts
- 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 7.3-1**. An overall checklist for containment and disposal is provided in **FIGURE 7.3-2**.

FIGURE 7.3-1 - WASTE MANAGEMENT FLOW CHART

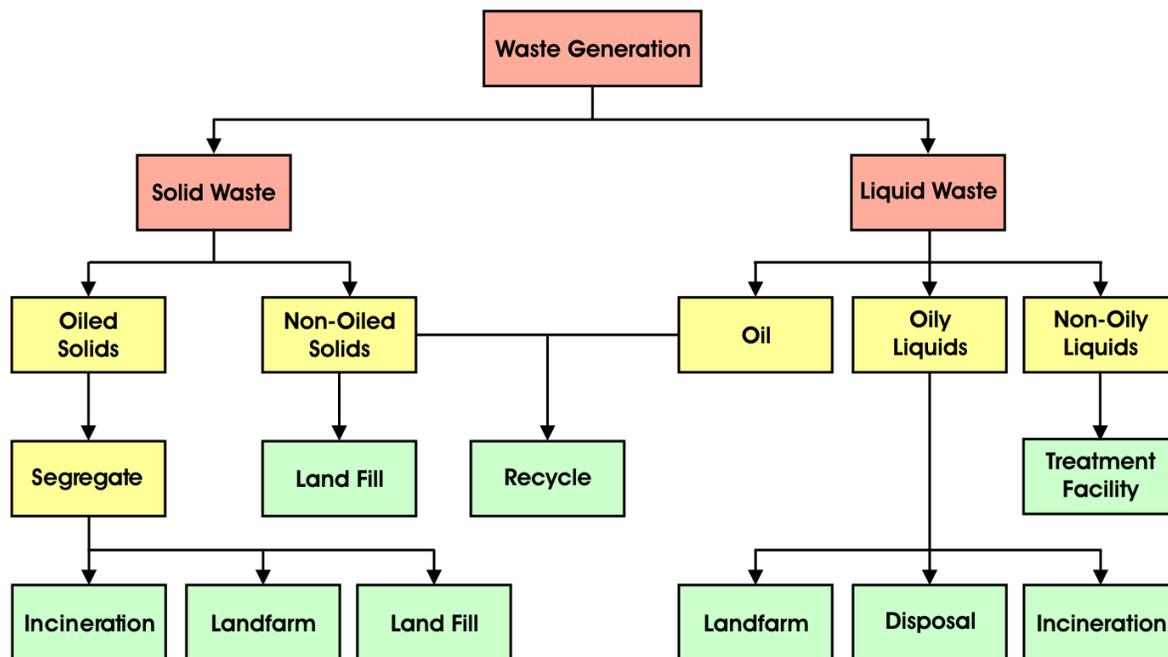


FIGURE 7.3-2 - GENERAL WASTE CONTAINMENT AND DISPOSAL CHECKLIST

CONSIDERATION	YES/NO/NA
Is the material being recovered a waste or reusable product?	
Has all recovered waste been containerized and secured so there is no potential for further leakage while the material is being stored?	
Has each of the discrete waste streams been identified?	
Has a representative sample of each waste stream been collected?	
Has the sample been sent to an approved laboratory for the appropriate analysis, (i.e. hazardous waste determination)?	
Has the appropriate waste classification and waste code number(s) for the individual waste streams been received?	
Has a temporary EPA identification number and generator number(s) been received, if they are not already registered with EPA?	
Have the services of a registered hazardous waste transporter been contracted, if waste is hazardous?	
If the waste is nonhazardous, is the transporter registered?	
Is the waste being taken to an approved disposal site?	
Is the waste hazardous or Class I nonhazardous?	
If the waste is hazardous or Class I nonhazardous, is a manifest being used?	
Is the manifest properly completed?	

Are all federal, state, and local laws/regulations being followed?	
Have State Environmental and local agencies been notified?	
Are all necessary permits being obtained?	
Has a Disposal Plan been submitted for approval/review?	
Has PPE and waste-handling procedures been included in the Site Safety and Health Plan to protect the health and safety of waste handling personnel?	

7.3.1 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 7.3-3](#). If storage containers such as bags or drums are used, the container should be clearly marked and/or color-coded to indicate the type of material or waste contained and/or the ultimate disposal option.

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 7.3-3 - TEMPORARY STORAGE METHODS

CONTAINMENT	PRODUCT						CAPACITY
	OIL	OIL/WATER	OIL/SOIL	OIL/DEBRIS (Small)	OIL/DEBRIS (Medium)	OIL/DEBRIS (Large)	
Drums	X	X	X				0.2-0.5 yd 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 gal-1,500 gal

7.3.2 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.

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.

7.3.3 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.

FIGURE 7.3-4 - FACILITY SPECIFIC DISPOSAL PLAN

MATERIAL	DISPOSAL FACILITY	LOCATION
Recovered Product	Clean Harbors of Braintree	385 Quincy Avenue Braintree MA 02184
	Clean Harbors of Maine, Inc.	37 Rumery Road South Portland ME 04106
	GSX	Route 1, Box 255 Pinewood SC 29125
	Clean Harbors	252 Salem Street Woburn MA 01801
Contaminated Soil	Clean Harbors of Braintree	385 Quincy Avenue Braintree MA 02184
	Clean Harbors of Maine, Inc.	37 Rumery Road South Portland ME 04106
	GSX	Route 1, Box 255 Pinewood SC 29125
	Clean Harbors	252 Salem Street Woburn MA 01801
Contaminated Equipment	Clean Harbors of Braintree	385 Quincy Avenue Braintree MA 02184
	Clean Harbors of Maine, Inc.	37 Rumery Road South Portland ME 04106
	GSX	Route 1, Box 255 Pinewood SC 29125
	Clean Harbors	252 Salem Street Woburn MA 01801
		385 Quincy Avenue

<p>Personnel Protective Equipment</p>	<p>Clean Harbors of Braintree Clean Harbors of Maine, Inc. GSX Clean Harbors</p>	<p>Braintree MA 02184 37 Rumery Road South Portland ME 04106 Route 1, Box 255 Pinewood SC 29125 252 Salem Street Woburn MA 01801</p>
<p>Decontamination Solutions</p>	<p>Clean Harbors of Braintree Clean Harbors of Maine, Inc. GSX Clean Harbors</p>	<p>385 Quincy Avenue Braintree MA 02184 37 Rumery Road South Portland ME 04106 Route 1, Box 255 Pinewood SC 29125 252 Salem Street Woburn MA 01801</p>
<p>Adsorbents and Spent Chemicals</p>	<p>Clean Harbors of Braintree Clean Harbors of Maine, Inc. GSX Clean Harbors</p>	<p>385 Quincy Avenue Braintree MA 02184 37 Rumery Road South Portland ME 04106 Route 1, Box 255 Pinewood SC 29125 252 Salem Street Woburn MA 01801</p>

7.4 PUBLIC AFFAIRS

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

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

GUIDELINES FOR DEALING WITH THE MEDIA

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

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
 - Answer only the question that is asked by the reporter
 - Give the most important facts first
 - Talk to the public's concern about the incident such as whether these were deaths, injuries, any threat to the public, or danger of explosion or fire
 - If you don't know the answer to a question, don't be afraid to say "I don't know"; make note of the question and tell the reporter that you will try to get the answer for him - then do it
 - Don't be defensive

Other considerations, continued:

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

FIGURE 7.4-1 - 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:

SECTION 8 Last revised: January 2005
DEMOBILIZATION / POST-INCIDENT REVIEW

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8.1 Terminating the Response

8.2 Demobilization

Figure 8.2-1 - Demobilization Checklist

8.3 After Action Review

Figure 8.3-1 - Standard Incident Debriefing Form

8.3.1 After Action Review Guidelines

8.1 TERMINATING THE RESPONSE

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

8.2 DEMOBILIZATION

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

FIGURE 8.2-1 - DEMOBILIZATION CHECKLIST

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

Operations Group Leaders before release of personnel or equipment.			
--	--	--	--

8.3 AFTER ACTION REVIEW

All facility personnel involved in the incident shall be debriefed by the Company Incident Commander. A Standard Incident Debriefing Form is provided in **FIGURE 8.3-1**. This form should be completed by the Incident Commander, and all members of the ICS Command Staff and General Staff involved in the incident within two weeks after termination of emergency operations.

The primary purpose of the After Action Review is to identify actual or potential deficiencies in this Plan and to determine the changes required to correct the deficiencies. The After Action Review is also intended to identify which response procedures, equipment, and techniques were or were not effective and the reasons why or why not. 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.

The After Action Review process should also be used for evaluating training and exercises. Key agency personnel that were involved in the response will be invited to attend the After Action Review.

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:

and geographic boundaries, and so that implementation of improvements can be tracked.

- a. A formal AAR is more structured, requires planning and takes longer to conduct. The formal AAR usually occurs immediately or soon after an event is completed. It may also occur while the event is in-progress. A neutral third party should facilitate a formal AAR.
- b. Informal AARs are less structured, require much less preparation and planning and can be conducted anywhere, anytime, for any event, by anyone. Incident Commanders, Section Leaders, Safety Officers or other interested parties may facilitate their own informal AARs.

5. **Agenda for an AAR.** Formal AARs will follow this simple format:

- Introduction and ground rules
- Analysis of the Incident according to the 15 National Preparedness for Response (PREP) Response Plan Core Components (**FIGURE A.1-1**):

For each PREP Core Component:

- What was supposed to happen?
 - What actually happened?
 - Why did it happen that way?
 - What will we do to improve the way we do it next time?
- Closing comments and agreement on next steps

8.3.1 After Action Review Guidelines, Continued

6. **AAR Planning and Execution Sequence.** Schedule AARs as close to the completion of the event as possible. The amount of planning and preparation required for an AAR will vary based on the type of AAR conducted; however, the process for both informal and formal AARs has three steps:

Planning and Preparation:

- Schedule the AAR
- Select a facilitator
- Notify participants
- Establish the AAR agenda

Conduct:

- Seek maximum participation
- Maintain focus on AAR objectives
- Review key points learned
- Record the AAR and maintain accurate meeting attendance list

Follow up:

- Prepare an After Action Review Report (memorandum or e-mail), and distribute the report to all participants
- Consider publishing lessons learned to the entire Company
- Develop action plan to resolve deficiencies (revise procedure, develop a new process, etc.)

7. **Role of the AAR Facilitator.** The AAR facilitator's role should be to ensure the goals of the AAR are met. The AAR facilitator:

- Remains unbiased throughout the process
- Speaks only to draw out comments from all participants
- Ensures the discussion remains professional and focused on continuous improvement
- Keeps AAR on track and determines when to move on to discuss other points
- Does not allow personal attacks
- Does not offer solutions; allows the participants to do that.

8.3.1 After Action Review Guidelines, Continued

8. **Ground Rules for Conducting the AAR.**

- Participants are participants, not a passive audience. The facilitator should prepare leading questions and may have to ask it of several people
- An AAR is a dynamic, candid, professional discussion of events and projects, focusing on performance against the known standards and/or expected outcomes. Everyone involved with the event should participate to share an insight, observation or question that will help identify areas for improvement.
- An AAR is not a critique. No one, regardless of position has all of the information and answers. AARs maximize learning and continuous improvement by allowing everyone to learn from each other.
- An AAR does not grade success or failure. There are always areas of improvement and strengths to improve as well.
- Set ground rules up front, e.g. no personal attacks, focus on how to improve, commit to getting to the heart of the issue, etc.

9. **Conclusion.** An AAR is both an art and science. What makes AARs so powerful is that they can be applied across a wide spectrum of events from two individuals conducting a 5-minute AAR at the end of a short meeting to a longer AAR held by a Spill Management Team at the end of a large emergency. Individuals involved may absorb lessons learned on the spot and they can be documented in a format that can be shared with a wider audience. A properly conducted AAR can also have a powerful influence on the climate of the organization. It is a part of the communication process that educates and motivates people and focuses them on organizational priorities to improve procedures across the organization.

8.3.1 After Action Review Guidelines, Continued

MEMORANDUM FOR RECORD

SUBJECT: (Document name of the incident for which the AAR was conducted)

1. Begin the memo with an overview/introduction. Identify the Incident Commander and briefly describe the project or event. Document what kind of AAR was conducted and how. For informal AARs, detail how the AAR was conducted (via meeting, teleconference, etc.) and who provided feedback. For formal AARs, identify all participants.

2. Following are the results of the AAR:

- a. **Issue:** Analysis of the incident according to a (or a logical grouping) PREP Core Component. The intent is to leave a record of the analysis so others may learn. (What should have happened?)

Discussion: Succinctly discuss the emergency response in terms of the PREP Core Components (or logical grouping) so the reader can understand why the component or group was important or relevant, what the ramifications were, and so on. (What actually happened and why?)

Recommendation: Present a recommendation with respect to any issues raised during the discussion. In the case of issues where something positive occurred, the recommendation may simply be to continue to follow processes/procedures. In the case where the issue represented a problem, recommend a solution to prevent the problem from occurring in the future. (How do we improve or sustain success?)

Action Taken: Present an action taken or to be taken by the stakeholders. Commit to doing what is written here. Examples of actions taken for successes: verified current procedures are valid; provided a copy of AAR to all affected parties and so on. Examples of actions taken for problems: coordinated with PPM and changed SOP; published information paper on small business contracting requirements and briefed the District; changed specifications to reflect new wall covering, etc. Clearly identify the “action owner” in this paragraph. For example: Revise PMPB SOP on accepting new work. Action: PPMD.

- b. **Repeat** the above for each of the 15 PREP Response Plan Core Components.

3. Conclude by summarizing key lessons learned, noting when and where the AAR will be published for others to access. The Incident Commander shall sign and date the AAR Report.

Note: AAR writers are to be mindful that documented AARs may be the subject of litigation or a media report. Accordingly, AARs are to present accurate, factual information and solid, focused recommendations.

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A. TRAINING / EXERCISES

B. CONTRACTOR RESPONSE EQUIPMENT

C. SPCC PLANS

D. HAZARD EVALUATION AND RISK ANALYSIS

E. CROSS-REFERENCES

F. ACRONYMS AND DEFINITIONS

APPENDICES

APPENDIX A TRAINING / EXERCISES

Last revised: August 11, 2009

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A.1 Exercise Requirements and Schedules

Figure A.1-1 - PREP Response Plan Core Components

Figure A.1-2 - Exercise Requirements

Figure A.1-3 - Spill / Exercise Documentation Form

Figure A.1-4 - EPA Required Response Equipment Testing
and Deployment Drill Log

Figure A.1-5 - Qualified Individual Notification Drill Log

Figure A.1-6 - Spill Management Team Tabletop Exercise
Log

A.2 Training Program

Figure A.2-1 - Training Requirements

Figure A.2-2 - PREP Training Program Matrix

Figure A.2-3 - Personnel Response Training Log

A.1 EXERCISE REQUIREMENTS AND SCHEDULES

- The Company participates in the National Preparedness for Response Exercise Program (PREP)
- During each triennial cycle, all components of the Plan (**FIGURE A.1-1**) must be exercised at least once
- The District Manager is responsible for the following aspects:
 - Scheduling
 - Maintaining records
 - Implementing
 - Evaluation of the Company's training and exercise program
 - Post-drill evaluation improvements
- **FIGURE A.1-2** provides descriptions of exercise requirements, **FIGURE A.1-3** provides a Spill/Exercise Documentation form or corresponding Company form may be used, and **FIGURE A.1-4** provides a log for response equipment testing and deployment drill

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. Discharge control	Demonstrate the ability of the spill response organization to control and stop the discharge at the source.
5. Assessment	Demonstrate the ability of the spill response organization to provide initial assessment of the discharge and provide continuing assessments of the effectiveness of the tactical

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

FIGURE A.1-2 - EXERCISE REQUIREMENTS

EXERCISE TYPE	EXERCISE CHARACTERISTICS
Facility/QI notification	<ul style="list-style-type: none"> • Conducted quarterly (one per year must be performed during non-business hours) • 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"> • Terminals with response equipment such as boom will conduct semiannually • Terminals without response equipment will obtain documentation from OSRO response contractors indicating participation in annual deployment exercise • Conducted annually (Pipeline) • Document in accordance with form in FIGURE A.1-3

SMT tabletop	<ul style="list-style-type: none"> • Conducted annually • Tests SMT's response activities/responsibilities • Documents Plan's effectiveness • Must exercise worst case discharge scenario once every three years • Must test all Plan components at least once every three years • Document in accordance with form in FIGURE A.1-3
Unannounced	<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 made available to applicable agencies upon request • Company will verify appropriate records are kept for each spill response contractor listed in Plan as required by PREP guidelines (annual equipment deployment drill, triennial unannounced drill, etc.)

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

Retain this form for a minimum of five years.

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"/>
EHS&T Department	<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: cellular phone <input type="checkbox"/> two way radio <input type="checkbox"/> land telephone line <input type="checkbox"/>		
Secondary: cellular phone <input type="checkbox"/> two way radio <input type="checkbox"/> land telephone line <input type="checkbox"/>		
<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

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

Company:	Date:
ACTIVITY	INFORMATION
Qualified Individual(s) Contacted	
Emergency Scenario	
Evaluation	
Changes to be Implemented	

Time Table for Implementation	
-------------------------------	--

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

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

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

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

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

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

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

Company:	Date:
ACTIVITY	INFORMATION
Qualified Individual(s)	
Participants	
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 all employees and contract personnel

	<p>Plan will be reviewed with all employees and contract personnel:</p> <ul style="list-style-type: none"> • When the plan is developed or the employee is assigned initially to a job; • When the employee's responsibilities under the plan change; and • When the plan is changed. <p>• The Personnel Response Training Log is located in FIGURE A.2-3</p>
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 • Spill 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 five years for all personnel following completion of training • Company will retain training records indefinitely for individuals assigned specific duties in the Plan • Training records will be retained at each facility or pipeline office; Manager of Operations will document all applicable training

FIGURE A.2-2 - PREP TRAINING PROGRAM MATRIX

	QUALIFIED	SPILL	
--	-----------	-------	--

TRAINING ELEMENT	INDIVIDUAL (QI)	MANAGEMENT TEAM (SMT)	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 OSRO's to respond small, medium, and large discharges	X	X	X
Responsibilities and authority of the Qualified Individual (QI) as described in the Spill Response Plan and Company response organization	X	X	X
<p>The organization structure that will be used to manage the response actions including:</p> <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 spill management team (SMT) within the organization structure	X	X	
The drill and exercise program to meet federal and state regulations as required under Oil Pollution Act of 1990 (OPA 90)	X	X	X
The role of the QI in the post discharge review of the Plan to evaluate and validate its effectiveness	X		
The Area Contingency Plan (ACP) for the area in which the facility is located	X	X	X
The National Contingency Plan (NCP)	X	X	X
Roles and responsibilities of federal and state agencies in pollution response	X	X	X

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

TRAINING ELEMENT	QUALIFIED INDIVIDUAL (QI)	SPILL MANAGEMENT TEAM (SMT)	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 SMT		X	
Procedures for the post discharge review of the plan to evaluate and validate its effectiveness		X	
Basic information on spill operations and		X	

oil spill clean-up technology including: <ul style="list-style-type: none"> • Oil containment • Oil recovery methods and devices • Equipment limitations and uses • Shoreline cleanup and protection • Spill trajectory analysis • Use of dispersants, in-situ burning, bioremediation • Waste storage and disposal considerations 			
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

NAME	RESPONSE TRAINING/DATE AND NUMBER OF HOURS	PREVENTION TRAINING/DATE AND NUMBER OF HOURS
Rick Bondy	7/15/2010 - 8hr Hazwoper Refresher	7/15/2010 - 8hr Hazwoper Refresher

Amber Kistler	2/8/11 - 8-Hour Hazwoper Refresher	2/8/11 - 8-Hour Hazwoper Refresher
Chris Nelson	10/4/10 - 8hr Hazwoper Refresher Training	10/4/10 - 8hr Hazwoper Refresher Training
Brad Righi	July 2008	July 2008
*Andrew Zaun	July 24, 2009	July 24, 2009

*Qualified Individual

APPENDIX B Last revised: December 18, 2008
CONTRACTOR RESPONSE EQUIPMENT

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B.1 Cooperatives and Contractors

B.1.1 OSRO Classification

Figure B.1-1 - Evidence of Contracts and Equipment Lists

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 OSROs 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 by terminal, refer to **FIGURE 3.1-3** and **FIGURE 7.1-1**.

COMPANY / CONTRACTOR	APPLICABLE COPT ZONE (S)	USCG CLASSIFICATIONS								RESPONSE TIME		
			Facilities				Vessels					
			MM	W1	W2	W3	MM	W1	W2	W3		
Miller Environmental Group 105 Riverview Drive Paulsboro NJ 08066	Philadelphia	River/Canal	✓	✓	✓	✓	✓	✓	✓	✓	1 hours	
		Inland	✓	✓	✓	✓	✓	✓	✓	✓		
		Open Ocean										
		Offshore										
		Nearshore										
		Great Lakes										
Guardian Companies, Inc. 1280 Porter Road. Bear DE 19701		River/Canal									1 hours	
	Inland											
	Open Ocean											
	Offshore											
	Nearshore											
	Great Lakes											
Clean Venture Inc. 600 Cenco Blvd. Clayton NJ 08312	Philadelphia	River/Canal	✓	✓	✓	✓	✓	✓	✓	✓	1.25 hours	
		Inland	✓				✓					
		Open Ocean										
		Offshore										

		Nearshore										
		Great Lakes										
Lewis Environmental 155 Railroad Plaza Royersford PA 19468	Philadelphia		Facilities				Vessels				1.75 hours	
			MM	W1	W2	W3	MM	W1	W2	W3		
		River/Canal	✓		✓	✓	✓	✓	✓	✓		
		Inland	✓			✓	✓		✓	✓		
		Open Ocean										
		Offshore				✓						
		Nearshore										
		Great Lakes										

The following contractors retained by the Company, but are not USCG classified OSRO's within this Area, are as follows:

- HMHTTC Response Inc.
PO Box 10183
Wilmington, DE
19850

FIGURE B.1-1 provides evidence of contracts with OSRO's and equipmentlists for contractors without USCG classification. **FIGURE 7.1-1** provides local response contractor's equipment lists and response times.

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

- Center for Toxicology & Environmental Health (CTEH), Franklin, TN
- Clean Venture Inc., Clayton, NJ
- Guardian Companies, Inc., Bear, DE
- HMHTTC Response Inc., Wilmington, DE
- Lewis Environmental, Royersford, PA
- Miller Environmental Group, Paulsboro, NJ

APPENDIX C
SPCC PLANS

Last revised: May 2, 2011

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Figure C-1 - Professional Engineer Certification

Figure C-2 - SPCC Review Record

Figure C-3 - SPCC

Figure C-4 - Potential Spill Sources

Figure C-5 - Addendum 1

Figure C-6 - Drainage Diagram

Figure C-7 - Evacuation Diagram

Figure C-8 - Piping Diagram

Figure C-9 - Discharge Prevention Meeting Log

Figure C-10 - Inspection Procedures

Figure C-11 - Facility Monthly Inspection Record

Figure C-12 - Secondary Containment Drainage Log

Figure C-13 - Reportable Spill History

Figure C-14 - Management Approval and Review

Figure C-15 - Containment and Drainage Planning

SPILL PREVENTION, CONTROL, AND COUNTERMEASURE (SPCC) PLAN

Wilmington
1050 Christina Avenue
Wilmington, DE 19801

Wilmington

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FIGURE C-1 - PROFESSIONAL ENGINEER CERTIFICATION

40 CFR, Part 112.3(d) Professional Engineer Certification	
<p>Being familiar with the provisions of 40 CFR, Part 112, I attest to the following:</p> <ul style="list-style-type: none"> I am familiar with the requirements of this part I or my agent has visited and examined the Facility The Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards, and with the requirements of this part Procedures for required inspections and testing have been established The Plan is adequate for the Facility <p>Note: Certification is conditional pending satisfactory resolution of the required improvements listed in Addendum 1.</p>	
Printed Name of Registered Professional Engineer:	M. Richard Beringer
Signature of Registered Professional Engineer:	
Date:	January 26, 2011
Registration No.:	14892 - Delaware
<p>Seal:</p> <div style="border: 1px solid black; height: 100px; width: 100%; margin-top: 5px;">  </div>	

Wilmington

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FIGURE C-2 - SPCC REVIEW RECORD

Review Criteria
<ul style="list-style-type: none"> In accordance with 40 CFR 112.5(b), the SPCC Plan must be reviewed and evaluated every 5 years. As a result of this review and evaluation, the SPCC Plan must be

			Production
Location of Facility:	1050 Christina Avenue Wilmington , DE 19801	Name & Address of Owner or Operator:	Magellan Wilmington Terminal 1050 Christina Avenue Wilmington , DE 19801
		Designated Personnel Accountable for Oil Spill Prevention at the Facility:	Alan Cosby
40 CFR, 112.7			
(a) GENERAL REQUIREMENTS			
(1) Include a discussion of your facilities conformance with the requirements listed in this part			
<ul style="list-style-type: none"> The plan meets the general requirements of 40 CFR 112.7 and the specific requirements identified in 40 CFR 112.8. 			
(2) Comply with all applicable requirement listed in this part. Your Plan may deviate from some requirements if you provide additional protection or explanation			
<ul style="list-style-type: none"> No deviations/nonconformances have been noted from the rule. 			
(3) Describe in your Plan the physical layout of the facility and include a facility diagram. You must also address in your plan:			
<ul style="list-style-type: none"> Diagrams displaying the physical layout of the property are included as FIGURES C-6, C-7, and C-8. 			
i. The type of oil in each container and its storage capacity			
<ul style="list-style-type: none"> Oil types and container storage capacities are listed in Figure C-4. 			
ii. Discharge prevention measures			
<ul style="list-style-type: none"> Discharge prevention measures are included in this FRP. 			
iii. Discharge or drainage controls			
<ul style="list-style-type: none"> Refer to FIGURE C-3 [40 CFR 112.8 (b)]. 			
iv. Countermeasures for discharge			
<ul style="list-style-type: none"> Refer to Section 2 of Spill Response Plan. 			
v. Methods of disposal			
<ul style="list-style-type: none"> Refer to Section 7 Figure 7.3-4 - Facility Specific Disposal Plan. 			
vi. Contact list and phone numbers			
<ul style="list-style-type: none"> Refer to FIGURE 3.1-3. 			
(4) Unless you have submitted a response plan, provide information and procedures to report a discharge			
<ul style="list-style-type: none"> A Response Plan has been submitted to the Regional Administrator. 			
(5) Unless you have submitted a response plan, describe procedures you will use when a discharge occurs			
<ul style="list-style-type: none"> A Response Plan has been submitted to the Regional Administrator. 			
(b) PREDICTION OF THE DIRECTION, RATE OF FLOW, AND TOTAL QUANTITY OF OIL WHICH COULD BE DISCHARGED FROM THE FACILITY AS A RESULT OF EACH TYPE OF MAJOR EQUIPMENT FAILURE			
<ul style="list-style-type: none"> Direction, rate of flow, and total quantity of oil that could be discharged are listed in Figure C-4. 			
<ul style="list-style-type: none"> Natural drainage patterns are illustrate on the Site Map and Drainage Figure C-6. 			
(c) PROVIDE APPROPRIATE CONTAINMENT			
<ul style="list-style-type: none"> Appropriate containment/diversionary structures are in place to prevent a discharge from leaving a containment system before cleanup occurs. Refer to FIGURE C-4. 			
(d) PRACTICABILITY OF SECONDARY CONTAINMENT			

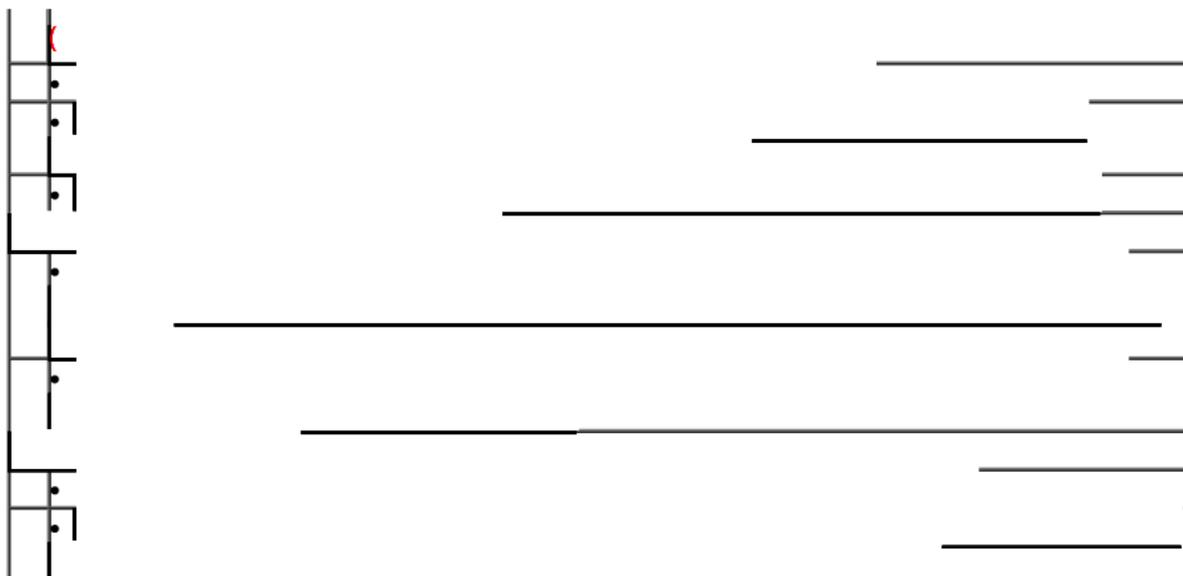
<ul style="list-style-type: none"> Containers are tested to applicable API 653 standards.
<ul style="list-style-type: none"> Valves and piping are tested to applicable API 570 standards.

FIGURE C-3 - SPCC, CONTINUED

40 CFR, 112.7
(e) INSPECTIONS, TESTS, AND RECORDS
<ul style="list-style-type: none"> Containers are tested to applicable API 653 standards.
<ul style="list-style-type: none"> A record of containment drainage is maintained in the SPCC file.
<ul style="list-style-type: none"> Operators perform daily visual inspections when the facility is manned. Inspection procedures are outlined in FIGURE C-10.
<ul style="list-style-type: none"> Monthly visual inspections of all containers and associated equipment are documented. Inspection documentation is maintained at the facility for three (3) years. Repairs are made as necessary.
<ul style="list-style-type: none"> Drill records will be kept on file for a period of five years at the Wilmington terminal office and available to agency personnel upon request.
<ul style="list-style-type: none"> Oil transfer records are reviewed for verifying the accuracy and integrity of the system.
(f) PERSONNEL TRAINING AND DISCHARGE PREVENTION PROCEDURES
(1) PERSONNEL TRAINING
<ul style="list-style-type: none"> Employees are trained in safe operation of the facility to prevent spills, and on procedures for spill discovery and notification.
<ul style="list-style-type: none"> Non-Company personnel (contractors) are required to meet with company personnel prior to working at the facility.
<ul style="list-style-type: none"> Proper operation of vehicles to prevent damage to piping is addressed when applicable.
<ul style="list-style-type: none"> All drills will be conducted and reviewed with improvements recommended, documented, and maintained on file at the facility for no less than five years.
<ul style="list-style-type: none"> There will be an annual tabletop exercise to test and train the facility personnel in emergency response on a verbal and visual basis.
<ul style="list-style-type: none"> Where practical, facility personnel, response organizations, contractors, and other industrial neighbors will participate in joint drill exercises on a triennial basis.
(2) DESIGNATED PERSON
<ul style="list-style-type: none"> Refer to FIGURE C-3, Facility Information, for the "Designated Personnel Accountable for Oil Spill Prevention at the Facility".
(3) SPILL PREVENTION BRIEFINGS
<ul style="list-style-type: none"> Employees review spill prevention procedures and the contents of the SPCC Plan at least annually.
<ul style="list-style-type: none"> Spill events are reviewed and discussed in safety meetings.
<ul style="list-style-type: none"> Employees are instructed in operations and maintenance of equipment, applicable pollution control laws, rules, and regulations.

FIGURE C-3 - SPCC, CONTINUED

40 CFR, 112.7
<ul style="list-style-type: none">



(h)?FACILITY TANK CAR AND TANK TRUCK LOADING/UNLOADING RACK

(1) TRANSFER AREA DRAINAGE

- An earthen berm approximately one foot in height surrounds the unloading manifold. This system provides suitable on-site containment for spilled product at the unloading area until cleanup of spilled petroleum product can be accomplished.
- The main (front) loading rack area has concrete containment curb and collection system connected to a 1,000 gallon sump which pumps to a 10,000 above ground storage tank. Any water or product collected in this tank is disposed off site.
- The clean oil loading rack area has concrete containment curb and collection system connected to a 300 gallon sump (in tank dike) which pumps to above ground product tank #9.
- The potential volume of a spill due to overfilling during product transfer at a flow rate ranging between approximately 200 to 800 gallons per minute will vary depending on the time duration involved.

FIGURE C-3 - SPCC, CONTINUED

40 CFR, 112.7

(h)?FACILITY TANK CAR AND TANK TRUCK LOADING/UNLOADING RACK

(1) TRANSFER AREA DRAINAGE

- The back rack loading/unloading area has concrete containment curbs and a catch basin which drains to the Tanks T3 and T4 dike area.

<ul style="list-style-type: none"> • Loading/unloading procedures meet or exceed DOT requirements.
<ul style="list-style-type: none"> • All drivers are trained by facility operators on approved transfer procedures.
<ul style="list-style-type: none"> • During non-automated loading operations, terminal personnel are present to control the loading of each transport.
<ul style="list-style-type: none"> • Natural drainage patterns are illustrated on the Plot Plan, refer to FIGURE C-6, Drainage Diagram.
(2) INTERLOCKED WARNING LIGHT OR PHYSICAL BARRIER
<ul style="list-style-type: none"> • Three of four of the product loading racks are protected from the elements with a canopy roof.
<ul style="list-style-type: none"> • Tire blocks are used to prevent the departure of trucks while its tank is being filled.
<ul style="list-style-type: none"> • Pipelines at the tanker truck loading racks are marked as to the specific product that they dispense.
<ul style="list-style-type: none"> • Posted visible warning signs instruct drivers to fully disconnect and inspect valves prior to departure.
<ul style="list-style-type: none"> • Prior to initiation of tank filling for all the storage tanks at the facility, the attending company personnel verify the respective storage tank capacity prior to commencement of product transfers.
<ul style="list-style-type: none"> • Warning signs and loading procedures are posted at each loading position.
(3) TRUCK DRAIN / OUTLET EXAMINATION
<ul style="list-style-type: none"> • Drains and outlets of all tank trucks are inspected for leakage by truck drivers or terminal personnel before fill and departure. Each tank truck is inspected prior to loading, during loading, and after loading.
(i) BRITTLE FRACTURE EVALUATION REQUIREMENTS
<ul style="list-style-type: none"> • Evaluations conducted as necessary.
<ul style="list-style-type: none"> • Brittle fracture evaluation will be done on field-constructed, aboveground tanks undergoing repair, alteration, reconstruction, or change in service that might affect the risk of a discharge or failure due to fracture or other catastrophe. Furthermore, aboveground tanks must be tested for integrity on a regular schedule and whenever material repairs are done.
(j) STATE DISCHARGE PREVENTION REQUIREMENTS
<ul style="list-style-type: none"> • Sections 6.1, 6.3 and 6.4 of the State of Delaware, Department of Natural Resources and Environmental Control, Tank Management Branch's "Regulations Governing Aboveground Storage Tanks," require internal and external inspections in accordance with nationally recognized codes, such as API 653, API 570, and NACE RP-0294. These regulations require external inspections every five (5) years or more frequently.
(k) QUALIFIED OIL-FILLED EQUIPMENT
<ul style="list-style-type: none"> • Qualified oil-filled equipment identified in Figure C6 Drainage Diagram or Figure C4 Spill Sources

FIGURE C-3 - SPCC, CONTINUED

40 CFR, 112.7
(k) QUALIFIED OIL-FILLED EQUIPMENT
<ul style="list-style-type: none"> • Containment in accordance with Section (c) of this section or covered by facility inspections in accordance with alternative requirements of this section.

FIGURE C-3 - SPCC, CONTINUED

40 CFR, 112.8	
(a) GENERAL REQUIREMENTS	
	<ul style="list-style-type: none"> The plan meets the general requirement of 40 CFR 112.7 and the specific requirements identified in 40 CFR 112.8
(b) FACILITY DRAINAGE	
(1) DRAINAGE FROM DIKED AREAS	
	<ul style="list-style-type: none"> Records of all diked area drainage are maintained at the facility. From diked areas, rainwater is drained manually through valved drain pipe(s) or manually pumped. In the event of a breach of the secondary containment systems, the discharge would most likely travel east towards the Delaware River located approximately 3,000 feet to the east of the facility.
(2) DRAIN VALVES AND DROP PIPES	
	<ul style="list-style-type: none"> All drain valves are manual/open and closed design and are normally in the closed position. Water is visually inspected for sheen prior to drainage. The draining of dikes is supervised and controlled. Dikes are drained as necessary to maintain adequate protective containment and protect tanks and equipment. The secondary containment includes areas of Geosynthetic Clay Liner (GCL), silt (soil) liner, and concrete liner.
(3) FACILITY DRAINAGE SYSTEM FROM UNDIKED AREAS	
	<ul style="list-style-type: none"> Facility has in plant storm water collection system. Natural drainage patterns are illustrated on the Plot Plan. Contaminated drainage from undiked areas should be minimal due to inspection and preventive maintenance procedures. (Refer to Company's System Integrity Plan).
(4) DIVERSION SYSTEM	
	<ul style="list-style-type: none"> Not Applicable
(5) TREATED DRAINAGE WATERS	
	<ul style="list-style-type: none"> Not Applicable
(c) BULK STORAGE CONTAINERS	
(1) CONTAINER CONSTRUCTION AND MATERIALS	
	<ul style="list-style-type: none"> Tanks are constructed in accordance with applicable local codes and API standards. Tanks are compatible with the products stored. Venting capacity is suitable for the fill and withdrawal rates experienced during normal operation. Tanks are gauged or available storage capacity confirmed prior to receipt. Cathodic protection is provided by a combination of anodes and an impressed current system.
(2) SECONDARY CONTAINMENT	
	<ul style="list-style-type: none"> Each of the five dike areas is designed to contain at least 110% of the largest tank (volume). Refer to the "Potential Spill Sources", FIGURE C-4, for secondary containment type and volume. There is adequate secondary containment for the contents of the largest tank plus sufficient freeboard for precipitation and fire water. Secondary containment includes a compacted soil liner floor.

FIGURE C-3 - SPCC, CONTINUED

40 CFR, 112.8	
(c) BULK STORAGE CONTAINERS	
(3) RAINWATER DRAINAGE	
	<ul style="list-style-type: none"> Rainwater is inspected for sheen prior to draining to assure compliance with applicable water quality standards.
	<ul style="list-style-type: none"> If sheen is observed, appropriate actions are taken to comply with 40 CFR 110.
	<ul style="list-style-type: none"> Storm and wash water and any spills, leaks or releases from the main (front) loading rack drains to a sump/containment system and then is pumped to an above ground storage tank for disposal off-site.
	<ul style="list-style-type: none"> All other surface water is inspected for sheen, discolorization or other contaminants and then is discharged off the facility. This is documented on a form similar to C12.
(4) BURIED METALLIC STORAGE TANKS	
	<ul style="list-style-type: none"> Not Applicable
(5) PARTIALLY BURIED METALLIC STORAGE TANKS	
	<ul style="list-style-type: none"> Not Applicable
(6) ABOVEGROUND CONTAINERS	
	<ul style="list-style-type: none"> See FIGURE C-10 for visual and routine inspection procedures.
	<ul style="list-style-type: none"> Integrity testing completed on a regular schedule per industry standards.
	<ul style="list-style-type: none"> Refer to the "Potential Spill Sources" table.
(7) INTERNAL HEATING COILS	
	<ul style="list-style-type: none"> The tanks are heated through a closed loop hot oil system.
	<ul style="list-style-type: none"> Pressure and temperature alarms alert operations personnel to changes in the heating system.
	<ul style="list-style-type: none"> The heating oil system's oil reservoir tank is equipped with a low level alarm to warn the operator of a volume loss in the system. In addition, the return lines are monitored for oil.
(8) FAIL SAFE ENGINEERING	
	<ul style="list-style-type: none"> Visual site gauges are installed on the side of each of the large volume field-erected aboveground vertical steel storage tank.
	<ul style="list-style-type: none"> Liquid level sensing devices are tested regularly for proper operations.
	<ul style="list-style-type: none"> Tanks not equipped with high level alarms are gauged prior to receipt and are inspected daily.
	<ul style="list-style-type: none"> Even though aboveground storage tanks at the facility are manifolded, they do not work as one single tank, thus there is a low probability of a chain reaction of failures.
(9) FACILITY EFFLUENTS	
	<ul style="list-style-type: none"> Not Applicable
(10) VISIBLE OIL LEAKS	
	<ul style="list-style-type: none"> Visible oil leaks are documented and necessary repairs are made promptly.
(11) MOBILE/PORTABLE STORAGE CONTAINERS	
	<ul style="list-style-type: none"> Miscellaneous quantities petroleum-based products stored in 55-gallon drums are located on wooden palettes near the maintenance garage. This is on a concrete slab with a concrete containment berm.
(d) FACILITY TRANSFER OPERATIONS, PUMPING, AND FACILITY PROCESSES	
(1) BURIED PIPING INSTALLATIONS	
	<ul style="list-style-type: none"> Where product and drainage pass underground, piping has been wrapped and/or coated with polyurethane, bitumastic, or other coatings to prevent corrosion.

FIGURE C-3 - SPCC, CONTINUED

40 CFR, 112.8	
(d) FACILITY TRANSFER OPERATIONS, PUMPING, AND FACILITY PROCESSES	
(1) BURIED PIPING INSTALLATIONS	
<ul style="list-style-type: none"> Corrosion controls are installed, operated, and maintained to applicable industry standards. 	
<ul style="list-style-type: none"> If corrosion damage is observed on the exposed pipeline, additional examination and corrective action will be performed as warranted by observed conditions. 	
<ul style="list-style-type: none"> If a section of buried pipeline section is exposed for any reason, it is carefully examined for deterioration. 	
<ul style="list-style-type: none"> Cathodic protection is provided for pipelines when determined necessary by electrolytic testing. 	
(2) PIPELINE OUT OF SERVICE	
<ul style="list-style-type: none"> Out of service pipelines are disconnected and plugged in accordance with applicable industry standards. 	
(3) PIPING SUPPORTS	
<ul style="list-style-type: none"> Numerous types of pipe supports with micarta sleeve insulators protect against abrasion, corrosion, and expansion/contraction. 	
<ul style="list-style-type: none"> The terminal piping supports are designed to meet the engineering standards at the time of installation. 	
(4) ABOVEGROUND VALVES AND PIPELINES	
<ul style="list-style-type: none"> Piping from the truck transport unloading manifold to the aboveground vertical steel storage tanks is on the ground surface except where passing through dike walls. 	
<ul style="list-style-type: none"> Operators perform daily visual inspections during normal operating activities. 	
<ul style="list-style-type: none"> In the event of a rupture or leak from aboveground product pipelines, the maximum quantity of product that could be discharged would not exceed the working capacity of the largest affected tank in the respective secondary containment system. 	
<ul style="list-style-type: none"> Monthly inspections are also performed, documented, and retained at the facility. 	
<ul style="list-style-type: none"> Repairs are made as necessary. 	
<ul style="list-style-type: none"> Pressure testing is performed as warranted. 	
(5) VEHICULAR TRAFFIC	
<ul style="list-style-type: none"> Vehicle traffic warned of aboveground and underground transfer lines. 	
<ul style="list-style-type: none"> Vehicle traffic should be limited. Under wet conditions, both the silt liner and GCL are vulnerable to damage. 	
<ul style="list-style-type: none"> Truck speed is limited to five (5) mph. 	

FIGURE C-4 - POTENTIAL SPILL SOURCES

Container/ Source	Failure/Cause	Total Capacity (gal)	Secondary Containment Volume Type (gal)	Tank Type	Year Constructed/ Installed	Quantity Stored (gal)	Direction of Flow/Rate (See Plot Plan)	Product Stored
ABOVEGROUND CONTAINERS -								
T1	Overfill/ Failure			V/ FX	1974		West/ Instantaneous	No. 6 Fuel Oil
T2	Overfill/ Failure			V/ FX	1974		West/ Instantaneous	No. 6 Fuel Oil
T3	Overfill/ Failure			V/ FX	1975		North/ Instantaneous	No. 6 Fuel Oil

T4	Overfill/ Failure	V/ FX	1975	North/ Instantaneous	No. 4 Oil
T5	Overfill/ Failure	V/ FX	1974	West/ Instantaneous	Heating Oil
T6	Overfill/ Failure	V/ FX	1976	North/ Instantaneous	No. 6 Fuel Oil
T7	Overfill/ Failure	V/ FX	1979	North/ Instantaneous	No. 6 Fuel Oil
T8	Overfill/ Failure	V/ FX	1980	West/ Instantaneous	No. 4 Oil
T9	Overfill/ Failure	V/ FX	1980	Southwest/ Instantaneous	No. 6 Fuel Oil
T10	Overfill/ Failure	V/ FX	1980	South/ Instantaneous	No. 6 Fuel Oil
T11	Overfill/ Failure	V/ FX	1980	South/ Instantaneous	Gasoline
T12	Overfill/ Failure	V/ FX	1980	South/ Instantaneous	Gasoline
T15	Overfill/ Failure	V/ FX	1991	West/ Instantaneous	Marine diesel
T16	Overfill/ Failure	V/ FX	1991	West/ Instantaneous	Heating Oil
T17	Overfill/ Failure	V/ FX	1991	West/ Instantaneous	No. 6 Oil
T18	Overfill/ Failure	V/ FX	1991	West/ Instantaneous	No. 6 Oil
T19	Overfill/ Failure	V/ FX	1991	North/ Instantaneous	No. 6 Oil
T20	Overfill/ Failure	V/ FX	1991	North/ Instantaneous	No. 6 Oil

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

* Not in Containment Area ** Curbing and containment system

Containment Type: 1-Earthen Berm and Floor, 2-Concrete Berm and Floor, 3-Metal Berm and Floor, 4-Portable Containment or Inside Building, 5-Double Walled, 6-Earthen Floor and Concrete Walls

Tank / Roof Type: C =Conical or Cone, D = Dome, H = Horizontal, L = Lifter, S = Spheroid, V = Vertical, G = Geodesic, Fx = Fixed, F = Floating, W = Welded, R = Riveted, IF = Internal Floating Roof, EF = External Floating Roof

FIGURE C-4 - POTENTIAL SPILL SOURCES , CONTINUED

Container/ Source	Failure/Cause	Total Capacity (gal)	Secondary Containment Volume Type (gal)	Tank Type	Year Constructed/ Installed	Quantity Stored (gal)	Direction of Flow/Rate (See Plot Plan)	Product Stored
ABOVEGROUND CONTAINERS -								
T21	Overfill/			V/ FX	2004		West/ Instantaneous	Diesel

T22	Failure Overfill/ Failure	V/ FX	2004	West/ Instantaneous	Diesel
T23	Failure Overfill/ Failure	I/ FL	2008	West/ Instantaneous	Gasoline
T24	Failure Overfill/ Failure	I/ FL	2008	West/ Instantaneous	Gasoline
T25	Failure Overfill/ Failure	I/ FL	2008	West/ Instantaneous	Gasoline
T26	Failure Overfill/ Failure	I/ FL	2008	West/ Instantaneous	Ethanol
T27	Failure Overfill/ Failure	I/ FL	2008	West/ Instantaneous	Fuel Oil No. 2
T28	Failure Overfill/ Failure	I/ FL	2008	West/ Instantaneous	Gasoline
T29	Failure Overfill/ Failure	V/ F	1950's	West/ Instantaneous	Diesel
T30	Failure Overfill/ Failure	I/ FL	2008	West/ Instantaneous	Gasoline
T31	Failure Overfill/ Failure	I/ FL	2008	Varies depending on release ocation/Instantaneous	Gasoline
T32	Failure Overfill/ Failure	I/ FL	2008	South/ Instantaneous	Ethanol
T33	Failure Overfill/ Failure	I/ FL	2008	South/ Instantaneous	Gasoline
T34	Failure Overfill/ Failure	I/ FL	2008	South/ Instantaneous	Fuel Oil No. 2
ADDITIVE CONTAINERS - Total:					
1A	Failure Overfill/ Failure	Horizontal Fixed	2008	South/ Instantaneous	Gasoline Additive
2A	Failure Overfill/ Failure	Horizontal Fixed	2008	South/ Instantaneous	Diesel Additive
DRUM STORAGE AREA - Total:					
Drums	Spill/ Rupture	Drums	N/A	Varies	West/ Instantaneous Maintenance Fluids
MISCELLANEOUS - Total:					
Black Oil Manifold	Rupture	-	N/A	Varies	East/ Instantaneous Varies

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

* Not in Containment Area ** Curbing and containment system

Containment Type: 1-Earthen Berm and Floor, 2-Concrete Berm and Floor, 3-Metal Berm and Floor, 4-Portable Containment or Inside Building, 5-Double Walled, 6-Earthen Floor and Concrete Walls

Tank / Roof Type: C =Conical or Cone, D = Dome, H = Horizontal, L = Lifter, S = Spheroid, V = Vertical, G = Geodesic, Fx = Fixed, F = Floating, W = Welded, R = Riveted, IF = Internal Floating Roof, EF = External Floating Roof

FIGURE C-4 - POTENTIAL SPILL SOURCES , CONTINUED

Container/ Source	Failure/Cause	Total Capacity (gal)	Secondary Containment Volume Type (gal)	Tank Type	Year Constructed/ Installed	Quantity Stored (gal)	Direction of Flow/Rate (See Plot Plan)	Product Stored
MISCELLANEOUS								
Black Oil Truck Rack (back rack)	Rupture			-	N/A		North/ Instantaneous	Varies
Clean Oil Rack Sump	Overfill			H	N/A		Contained	Varies
Clean Oil Truck Rack	Rupture			-	Unknown		East/ Instantaneous	No. 2 Diesel Oil
Foam House	Overfill/ Failure			H	Unknown		West/ Instantaneous	No. 2 Diesel Oil
Front Rack Overflow Tank	Overfill/ Failure			Horizontal Fixed	2008		East/ Instantaneous	Varies
Front Truck Loading Rack	Rupture			-	N/A		East/ Instantaneous	Varies
Maintenance Building	Overfill/ Failure			H	Unknown		South/ Instantaneous	No. 2 Diesel Oil
Transfer Pump Area	Leak/ Failure			-	N/A		East/ Instantaneous	Varies
UNDERGROUND CONTAINERS -								
Front Rack Sump	Overfill			H	2008	0	West	Varies
Facility Total:		1						

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

* Not in Containment Area ** Curbing and containment system

Containment Type: 1-Earthern Berm and Floor, 2-Concrete Berm and Floor, 3-Metal Berm and Floor, 4-Portable Containment or Inside Building, 5-Double Walled, 6-Earthern Floor and Concrete Walls

Tank / Roof Type: C =Conical or Cone, D = Dome, H = Horizontal, L = Lifter, S = Spheroid, V = Vertical, G = Geodesic, Fx = Fixed, F = Floating, W = Welded, R = Riveted, IF = Internal Floating Roof, EF = External Floating Roof

FIGURE C-5 - ADDENDUM 1

Certification of this Spill Prevention Control and Countermeasure plan is contingent upon correction of all discrepancies listed in this Addendum. The discrepancies for this facility are:

REGULATION	DISCREPANCY	COMMENTS
None		

FIGURE C-6 - DRAINAGE DIAGRAM

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

This ICP is based on a database design that was intended to be maintained through a worldwide web interface. As a result, global references are made within the plan text to certain components of the plan, such as drawings, which are not titled after those database references. For example, the Drawing entitled “Evacuation Plan” is referred to within the ICP (body and cross reference) as Figure C-7, but the actual drawing is entitled “Figure 1: Evacuation Plan” on the hard copy. This is an inevitable consequence of the design of the plan. This naming convention is important to consider when using the hard copy cross reference during a regulatory review; however, when using the plan as intended or reviewing the plan on a computer, the database naming convention does not affect the utility or cogency of the plan. For further explanation please contact the plan holder or TRP.

FIGURE C-7 - EVACUATION DIAGRAM

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

This ICP is based on a database design that was intended to be maintained through a worldwide web interface. As a result, global references are made within the plan text to certain components of the plan, such as drawings, which are not titled after those database references. For example, the Drawing entitled “Evacuation Plan” is referred to within the ICP (body and cross reference) as Figure C-7, but the actual drawing is entitled “Figure 1: Evacuation Plan” on the hard copy. This is an inevitable consequence of the design of the plan. This naming convention is important to consider when using the hard copy cross reference during a regulatory review; however, when using the plan as intended or reviewing the plan on a computer, the database naming convention does not affect the utility or cogency of the plan. For further explanation please contact the plan holder or TRP.

FIGURE C-8 - PIPING DIAGRAM

[\(Click here for Piping Diagram\) 1](#)

This ICP is based on a database design that was intended to be maintained through a worldwide web interface. As a result, global references are made within the plan text to certain components of the plan, such as drawings, which are not titled after those database references. For example, the Drawing entitled “Evacuation Plan” is referred to within the ICP (body and cross reference) as Figure C-7, but the actual drawing is entitled “Figure 1: Evacuation Plan” on the hard copy. This is an inevitable consequence of the design of the plan. This naming convention is important to consider when using the hard copy cross reference during a

regulatory review; however, when using the plan as intended or reviewing the plan on a computer, the database naming convention does not affect the utility or cogency of the plan. For further explanation please contact the plan holder or TRP.

FIGURE C-8 - PIPING DIAGRAM

[\(Click here for Piping Diagram\) 2](#)

This ICP is based on a database design that was intended to be maintained through a worldwide web interface. As a result, global references are made within the plan text to certain components of the plan, such as drawings, which are not titled after those database references. For example, the Drawing entitled "Evacuation Plan" is referred to within the ICP (body and cross reference) as Figure C-7, but the actual drawing is entitled "Figure 1: Evacuation Plan" on the hard copy. This is an inevitable consequence of the design of the plan. This naming convention is important to consider when using the hard copy cross reference during a regulatory review; however, when using the plan as intended or reviewing the plan on a computer, the database naming convention does not affect the utility or cogency of the plan. For further explanation please contact the plan holder or TRP.

FIGURE C-8 - PIPING DIAGRAM

[\(Click here for Piping Diagram\) 3](#)

This ICP is based on a database design that was intended to be maintained through a worldwide web interface. As a result, global references are made within the plan text to certain components of the plan, such as drawings, which are not titled after those database references. For example, the Drawing entitled "Evacuation Plan" is referred to within the ICP (body and cross reference) as Figure C-7, but the actual drawing is entitled "Figure 1: Evacuation Plan" on the hard copy. This is an inevitable consequence of the design of the plan. This naming convention is important to consider when using the hard copy cross reference during a regulatory review; however, when using the plan as intended or reviewing the plan on a computer, the database naming convention does not affect the utility or cogency of the plan. For further explanation please contact the plan holder or TRP.

FIGURE C-9 - DISCHARGE PREVENTION MEETING LOG

Spill Prevention Briefing

- Company personnel are kept knowledgeable of equipment, safety factors and operating conditions.
- Annual training sessions are conducted by the Area Supervisor to assure oil handling personnel understand the SPCC Plan for the facility. These documented sessions keep personnel informed of their obligation to prevent pollution incidents and to improve spill control and response techniques.

DATE	ATTENDEES	
Subject/Issue Identified	Required Action	Implementation Date

FIGURE C-10 - INSPECTION PROCEDURES

INSPECTION PROCEDURES	DATE
A. ROUTINE VISUAL INSPECTIONS (EACH SHIFT)	
• Check tank connections for leaks and localized dead vegetation	
• Check tanks for gaps between tank and foundation and damage caused by vegetation roots	
• Check valves and packing for leaks	
• Check drains and sumps for accumulation of oil and proper operation of level controls and pumps	
• Check tank seams for leaks, including drips, puddles, discolored area or localized dead vegetation	

• Check all tank and piping surfaces for signs of external corrosion	
• Check base of tanks for evidence of settling, leaks, including drips, puddles or discolored areas	
• Check piping for bowing between supports, leaks, including drips, puddles, discolored area, or localized dead vegetation	
• Check vent system outlets to ensure that they are not obstructed	
• Check secondary containment for discoloration and cracks or holes. Special attention should be given to seams and locations where piping goes through the deck, curbing or dikes. Ensure dike valves are closed and sealed	
• Check secondary containment for permeability, debris, erosion, location/status of pipes, inlets, drainage beneath tanks, and level of precipitation in dike vs. available capacity	
• Check secondary containment for presence of water in diked area. Follow appropriate Company procedures after visual inspection of the water to determine if sheen is present on the water	
• Check all gates to ensure that only the entrances/exits currently in use by authorized personnel are open and unlocked	
• Check facility lighting to ensure all are functioning	
• Check facility fencing for damages that would allow unauthorized entry	
B. MONTHLY INSPECTIONS	
• Inspect drains for accumulation of oil	
• Inspect sumps for the accumulation of oil	
• Inspect diked/curbed areas for the accumulation of oil	
• Inspect drip pans on lift stations for the accumulation of oil	
• Inspect all tanks for proper operation including gauges, sight glasses, level controls and pressure controls	
• Inspect valves and valve glands for proper operation and ensure complete valve closure (leak proof)	
• Inspect sump for proper operation. Manually gauge sump and pump out if level is high	
• Examine the outside of the tank for signs of corrosion, damaged paint surfaces and signs of leaking	

Material(s) Discharged:	Gasoline
Amount of Discharges in Gallons:	15 (gals)
Amount That Reached Navigable Waters (if applicable):	N/A ()
Effectiveness and Capacity of Secondary Containment:	100% Effective
Cleanup Actions Taken:	Product recovered in sump and cleaned up with absorbents.
Steps Taken to Reduce Possibility of Reoccurrence:	N/A
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	
Enforcement Actions:	None.
Effectiveness of Monitoring Equipment:	N/A
Spill Detection:	Operator

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

FIGURE C-13 - REPORTABLE SPILL HISTORY*

Date of Discharge(s):	7/28/2010
List of Discharge Causes:	Check valve failure.
Material(s) Discharged:	No. 4 Oil
Amount of Discharges in Gallons:	4 (gals)
Amount That Reached Navigable Waters (if applicable):	N/A ()
Effectiveness and Capacity of Secondary Containment:	100% Effective
Cleanup Actions Taken:	Oil contained and cleaned up with absorbents.
Steps Taken to Reduce Possibility of Reoccurrence:	Replace Check Valve
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	
Enforcement Actions:	None

Effectiveness of Monitoring Equipment:	N/A
Spill Detection:	Operator

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

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FIGURE C-13 - REPORTABLE SPILL HISTORY*

Date of Discharge(s):	4/15/2010
List of Discharge Causes:	Seal leak on load arm
Material(s) Discharged:	No. 6 Oil
Amount of Discharges in Gallons:	3 (gals)
Amount That Reached Navigable Waters (if applicable):	N/A ()
Effectiveness and Capacity of Secondary Containment:	N/A
Cleanup Actions Taken:	Product was removed from load arm.
Steps Taken to Reduce Possibility of Reoccurrence:	N/A
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	
Enforcement Actions:	None.
Effectiveness of Monitoring Equipment:	N/A
Spill Detection:	Dock PIC

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

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FIGURE C-13 - REPORTABLE SPILL HISTORY*

Date of Discharge(s):	12/30/2009
List of Discharge Causes:	Truck struck speedbreaker at the rack.
Material(s) Discharged:	Red Dye Heating Oil
Amount of Discharges in Gallons:	1800 (gals)

Amount That Reached Navigable Waters (if applicable):	N/A ()
Effectiveness and Capacity of Secondary Containment:	100% Effective
Cleanup Actions Taken:	Product was pumped out via a Vac Truck and rack cleaned up with absorbents.
Steps Taken to Reduce Possibility of Reoccurrence:	Created a smoother transition over the speedbreaker.
Total Oil Storage Capacity of Tank(s) or Impoundment From Which Material Discharged:	
Enforcement Actions:	None.
Effectiveness of Monitoring Equipment:	N/A
Spill Detection:	Operator

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

FIGURE C-13 - REPORTABLE SPILL HISTORY*

Date of Discharge(s):	12/22/2009
List of Discharge Causes:	Broken Ball Valve
Material(s) Discharged:	Red Dye Heating Oil
Amount of Discharges in Gallons:	1806 (gals)
Amount That Reached Navigable Waters (if applicable):	N/A ()
Effectiveness and Capacity of Secondary Containment:	N/A
Cleanup Actions Taken:	Pumped out free liquid and excavated contaminated soil.
Steps Taken to Reduce Possibility of Reoccurrence:	N/A
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	
Enforcement Actions:	None.
Effectiveness of Monitoring Equipment:	N/A

Spill Detection:	N/A
-------------------------	-----

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

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FIGURE C-13 - REPORTABLE SPILL HISTORY*

Date of Discharge(s):	5/8/2009
List of Discharge Causes:	Truck driver overflow
Material(s) Discharged:	Gasoline
Amount of Discharges in Gallons:	275 (gals)
Amount That Reached Navigable Waters (if applicable):	N/A ()
Effectiveness and Capacity of Secondary Containment:	100% effective
Cleanup Actions Taken:	Gasoline was washed down the sump.
Steps Taken to Reduce Possibility of Reoccurrence:	Driving Training
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	
Enforcement Actions:	None
Effectiveness of Monitoring Equipment:	N/A
Spill Detection:	Operator

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

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FIGURE C-13 - REPORTABLE SPILL HISTORY*

Date of Discharge(s):	4/5/2009
List of Discharge Causes:	Faulty Fire Pump
Material(s) Discharged:	AFFF
Amount of Discharges in Gallons:	1000 (gals)
Amount That Reached Navigable Waters (if applicable):	1000 (gals)

Effectiveness and Capacity of Secondary Containment:	N/A
Cleanup Actions Taken:	Allowed product to degrade in sunlight.
Steps Taken to Reduce Possibility of Reoccurrence:	N/A
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	N/A ()
Enforcement Actions:	None
Effectiveness of Monitoring Equipment:	None
Spill Detection:	Contractor

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

FIGURE C-13 - REPORTABLE SPILL HISTORY*

Date of Discharge(s):	5/4/2007
List of Discharge Causes:	Faulty fire pump system
Material(s) Discharged:	#6 Oil
Amount of Discharges in Gallons:	30 (gals)
Amount That Reached Navigable Waters (if applicable):	0 (gals)
Effectiveness and Capacity of Secondary Containment:	All contained
Cleanup Actions Taken:	Vacuum truck & excavation
Steps Taken to Reduce Possibility of Reoccurrence:	Fire equipment inspection
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	Tank Farm ()
Enforcement Actions:	N/A
Effectiveness of Monitoring Equipment:	N/A
Spill Detection:	N/A

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

FIGURE C-13 - REPORTABLE SPILL HISTORY*

Date of Discharge(s):	5/22/2006
List of Discharge Causes:	Bleeder valve left open
Material(s) Discharged:	Diesel
Amount of Discharges in Gallons:	0.2 (gals)
Amount That Reached Navigable Waters (if applicable):	0.2 (gals)
Effectiveness and Capacity of Secondary Containment:	Sprayed out of containment pan
Cleanup Actions Taken:	Adsorbent pad
Steps Taken to Reduce Possibility of Reoccurrence:	Review of procedures
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	Dock operations ()
Enforcement Actions:	N/A
Effectiveness of Monitoring Equipment:	N/A
Spill Detection:	N/A

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

FIGURE C-13 - REPORTABLE SPILL HISTORY*

Date of Discharge(s):	1/29/2006
List of Discharge Causes:	Tank corrosion leak
Material(s) Discharged:	Therminol
Amount of Discharges in Gallons:	150 (gals)
Amount That Reached Navigable Waters (if applicable):	0 (gals)
Effectiveness and Capacity of Secondary Containment:	Escaped from open valve in earthen containment
Cleanup Actions Taken:	Vacuum truck & excavation
Steps Taken to Reduce	

Possibility of Reoccurrence:	Valve maintenance & close.
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	
Enforcement Actions:	N/A
Effectiveness of Monitoring Equipment:	N/A
Spill Detection:	N/A

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

FIGURE C-13 - REPORTABLE SPILL HISTORY*

Date of Discharge(s):	10/21/2003
List of Discharge Causes:	overflowed spill pan containment
Material(s) Discharged:	#6 Oil
Amount of Discharges in Gallons:	less than one (gals)
Amount That Reached Navigable Waters (if applicable):	less than one (gals)
Effectiveness and Capacity of Secondary Containment:	not applicable
Cleanup Actions Taken:	deployed spill boom and cleaned with absorbents
Steps Taken to Reduce Possibility of Reoccurrence:	N/A
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	N/A
Enforcement Actions:	N/A
Effectiveness of Monitoring Equipment:	N/A
Spill Detection:	visual

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

FIGURE C-13 - REPORTABLE SPILL HISTORY*

Date of Discharge(s):	10/13/2003
List of Discharge Causes:	Pipeline test failure
Material(s) Discharged:	#2 Oil
Amount of Discharges in Gallons:	Less than one (gals)
Amount That Reached Navigable Waters (if applicable):	Less than one (gals)
Effectiveness and Capacity of Secondary Containment:	not applicable
Cleanup Actions Taken:	not feasible
Steps Taken to Reduce Possibility of Reoccurrence:	N/A
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	N/A
Enforcement Actions:	N/A
Effectiveness of Monitoring Equipment:	N/A
Spill Detection:	visual inspection

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

FIGURE C-13 - REPORTABLE SPILL HISTORY*

Date of Discharge(s):	3/26/1994
List of Discharge Causes:	High wind blew oil out of containment area
Material(s) Discharged:	No. 2 oil
Amount of Discharges in Gallons:	3 (gals)
Amount That Reached Navigable Waters (if applicable):	3 (gals)
Effectiveness and Capacity of Secondary Containment:	not applicable
Cleanup Actions Taken:	not feasible
Steps Taken to Reduce Possibility of Reoccurrence:	Installed check valves on all sump systems.

Enforcement Actions:	paid \$500.00 fine from U.S. Coast Guard
Effectiveness of Monitoring Equipment:	not applicable
Spill Detection:	visual inspection

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

FIGURE C-13 - REPORTABLE SPILL HISTORY*

Date of Discharge(s):	2/25/1991
List of Discharge Causes:	leak from pump vent
Material(s) Discharged:	No. 6 oil
Amount of Discharges in Gallons:	5 (gals)
Amount That Reached Navigable Waters (if applicable):	5 (gals)
Effectiveness and Capacity of Secondary Containment:	not applicable
Cleanup Actions Taken:	contained, recovered using sorbents
Steps Taken to Reduce Possibility of Reoccurrence:	Redesign of facility to include check valves, emergency shutdowns, and increased structural integrity.
Enforcement Actions:	paid \$500.00 fine from U.S. Coast Guard
Effectiveness of Monitoring Equipment:	not applicable
Spill Detection:	visual inspection

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

FIGURE C-13 - REPORTABLE SPILL HISTORY*

Date of Discharge(s):	1/26/1989
List of Discharge Causes:	barge collision with pier resulted in total collapse of loading facility.

Material(s) Discharged:	No. 6 oil, Marine Diesel Oil, Toluene, No. 2 oil, and sump oily water mixture
Amount of Discharges in Gallons:	7,707 (gals)
Amount That Reached Navigable Waters (if applicable):	7,707 (gals)
Effectiveness and Capacity of Secondary Containment:	secondary containment collapsed with pier.
Cleanup Actions Taken:	Boomed, contained, recovered using sorbents, skimmers, vac trucks, and other mechanical techniques.
Steps Taken to Reduce Possibility of Reoccurrence:	Total redesign of facility to minimize the environmental impact by incorporating isolation valves, emergency shutdowns, and increased structural integrity.
Enforcement Actions:	paid \$400.00 fine from U.S. Coast Guard
Effectiveness of Monitoring Equipment:	not applicable
Spill Detection:	visual inspection

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

FIGURE C-13 - REPORTABLE SPILL HISTORY*

Date of Discharge(s):	1/2/1989
List of Discharge Causes:	failed gasket on stripper pump
Material(s) Discharged:	Marine Diesel Oil (MDO)
Amount of Discharges in Gallons:	5 (gals)
Amount That Reached Navigable Waters (if applicable):	5 (gals)
Effectiveness and Capacity of Secondary Containment:	not applicable
Cleanup Actions Taken:	boomed, contained, recovered using sorbents
Steps Taken to Reduce Possibility of Reoccurrence:	replaced gaskets, increased inspection frequency

Enforcement Actions:	paid \$100.00 fine from U.S. Coast Guard
Effectiveness of Monitoring Equipment:	not applicable
Spill Detection:	visual inspection

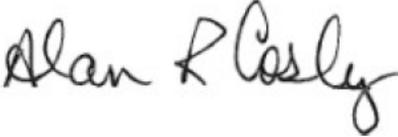
*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or a discharge into or upon the navigable waters of the United States or adjoining shorelines in harmful quantities.

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FIGURE C-14 - MANAGEMENT APPROVAL AND REVIEW

I hereby approve the contents of the Facility's Spill Prevention, Control, and Countermeasure Plan (SPCC Plan) and have the authority to commit the necessary resources to implement the SPCC Plan, as set forth in this document, in accordance with the federal requirements of 40 CFR Part 112.

Name:	Alan Cosby	Signature:	
Title:	Terminal Supervisor	Date:	3/8/2011

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FIGURE C-15 - CONTAINMENT AND DRAINAGE PLANNING

FACTORS
Available Volume of Containment
Refer to Figure C-4
Route(s) of Drainage
Refer to Figure C-6
Construction Materials Used in Drainage Troughs
There are no drainage troughs at this Terminal.
Type and Number of Valves Separators
Sump Pump Capacities
Containment Capacity of Weirs and Booms
There are no permanently installed weirs or booms at this facility
Other Clean Up Materials
Refer to Section 7.1.1

APPENDIX D Last revised: January 2005
HAZARD EVALUATION AND RISK ANALYSIS
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D.1 Facility Hazard Evaluation

D.2 Vulnerability Analysis

D.2.1 Analysis of the Potential for a Spill

D.3 Inspection and Spill Detection

Figure D.3-1 - Response Equipment Inspection

D.4 Planning Distance Calculations

Figure D.4-1 - Horizontal Range of Spill

Figure D.4-2 - Planning Distance Calculations

D.5 Discharge Scenarios

D.5.1 Small and Medium Discharge Scenarios

D.5.2 Worst Case Discharge (WCD) Scenario Discussion

D.5.3 Description of Factors Effecting Response Efforts

D.6 Planning Volume Calculations

D.7 Spill Volume Calculations

D.7.1 USCG Portion of Facility

D.7.2 EPA Portion of the Facility (non-transportation related)

D.7.3 DOT/PHMSA Portion of Pipeline/Facilities

D.8 Pipeline - Abnormal Conditions

D.9 Product Characteristics and Hazards

Figure D.9-1 - Summary of Commodity Characteristics

D.1 FACILITY HAZARD EVALUATION

A list of potential spill sources at each facility is identified in the appropriate SPCC Plan (**APPENDIX C**). This figure describes type and volumes of secondary containment areas along with tank manufacturer dates. All liquid storage tanks are visually inspected on a weekly basis. A description of facility operations is included in **FIGURE 1-3**.

D.2 VULNERABILITY ANALYSIS

A vulnerability analysis was performed to address the potential effects of an oil spill within the planning distance of facilities listed in this Plan. The following features may be impacted by a spill:

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

D.2.1 Analysis of the Potential for a Spill

The probability of a spill occurring at one of these facilities is minimal for the following reasons:

- Tanks are constructed in accordance with applicable engineering standards
- Tank age is reviewed as a potential factor (refer to **APPENDIX C**)
- Tank age is reviewed with respect to the inspection interval and frequency identified within API Standard 653, "Tank Inspection, Repair, Alteration, and Reconstruction." All field-erected storage tanks within the Company system are inspected in accordance with API Standard 653.
- The absolute tank age is less of a factor in conducting a spill analysis than the time since the last internal ("out-of-service") inspection conducted in accordance with API Standard 653. After each internal inspection, the API-certified tank inspector approves the tank as being suitable for continued service until the date of the next required internal inspection. Typically, the interval between internal inspections is between 10 and 20 years, in accordance with API Standard 653.
- All necessary repairs identified by the certified API 653 inspector during the internal inspection are completed in accordance with the repair requirements of API Standard 653. A follow-up inspection is conducted by the inspector before the tank is certified for continued service.
- The internal inspection reports prepared by the certified API 653 inspector are retained for the life of the tank.
- Truck loading facilities are equipped with concrete pads with a spill collection drain system which returns spills to the recovery system
- All trucks are monitored during tank unloading procedures
- Product transfers are monitored and only conducted when facilities are manned
- Facilities are inspected frequently for evidence of corrosion and leaks according to applicable API standards

- Personnel are trained in procedures to prevent pollution
- The horizontal range of a spill is dependent upon the topography and distance to the nearest water body described in more detail in **FIGURE D.4-1**
- Natural disasters are not likely at these facilities; however, these facilities may experience flooding, tornadoes or a lightening strike
- Company personnel prepare for natural disasters by monitoring weather reports and warnings and taking appropriate safety precautions
- The potential for a natural disaster is acknowledged, as appropriate, during drills and exercises

D.3 INSPECTION AND SPILL DETECTION

Inspection

- In accordance with 40 CFR 112.7(e)(8), each facility includes written procedures and records of inspection. The inspection shall include tanks, secondary containment, and response equipment at the facility.
- Facility self-inspection requires two steps:
 - Checklist of items to inspect
 - Method of recording the actual inspection and its findings; records must be maintained for five years.
- Facility specific procedures for transfer and secondary containment inspections are provided in the SPCC Plan (**APPENDIX C**). **FIGURE D.3-1** may be used to record equipment inspection information.

FIGURE D.3-1 - RESPONSE EQUIPMENT INSPECTION

(Other versions of this form may be used.)

ITEM	QUANTITY	LOCATION	TIME TO ACCESS/RESPOND	CONDITION	DATE USED/TESTED	SHELF LIFE	INSPECTION DATE



- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]

Visual detection by Company personnel

Patrols are conducted in a combination of ways, either aerial flights, driven or walked. The intent of the patrol is to observe the area directly over the pipeline right-of-way for leaks, exposed pipes, washes, missing markers and other unusual conditions. Construction on either side of the pipeline right-of-way is also monitored.

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

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

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

Visual detection by the public

Right-of-way marker signs are installed and maintained at road crossing and other noticeable

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

The public should call the 800 number located on the company gates which will in turn:

- Dispatch Company field personnel to the site to confirm discharge and conduct preliminary assessment, who then would
- 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 affected line segment if there is an indication of a leak
- Isolate line segment
- Depressurize line
- Start internal and external notifications
- Mobilize additional personnel as required

D.4 PLANNING DISTANCE CALCULATIONS

To evaluate the potential risk to sensitive resources in the area, should a spill occur, a planning distance was calculated based on the following characteristics of each terminal site and vicinity according to 40 CFR 112, Attachment C-III. Factors utilized are provided in **FIGURE D.4-1**.

FIGURE D.4-2 provides the planning distance calculation worksheets for each facility.

FIGURE D.4-1 - HORIZONTAL RANGE OF SPILL

FACTOR	Description
	Wilmington
Distance to the nearest body of moving water	The Delaware River is located approximately 1,500 feet east of the facility.
Distance to the nearest storm sewer	Outfall lines within the on-site retention pond connect to a storm water system.
	Located adjacent to, and on the eastern

Distance to the nearest drainage ditch or swale	perimeter of the terminal facility, is a small retention pond.
Geology	River Basin - sand/gravel silts
Topography of the terminal and surrounding area	Delaware River Basin / Flat
Prevailing weather conditions	

Wilmington

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FIGURE D.4-2 - PLANNING DISTANCE CALCULATIONS

The total planning distance equals d.

	Wilmington - Christina River / Delaware River - Tidally influenced
First receptor	n/a
First receptor location (miles)	n/a
∞ (feet)	n/a
? (miles)	n/a
s (feet/mile)	n/a
Avg. mid-channel depth (feet)	n/a
r (feet)	n/a
n	n/a
v (feet/second)	n/a
t (hours)	n/a
c (seconds per mile/hours per foot)	n/a
d (total planning distance)	15 miles

Wilmington

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FIGURE D.4-2 - PLANNING DISTANCE CALCULATION, CONTINUED

Intermediate Calculations

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

? = horizontal distance from facility to receptor (or 20 mile point) in miles

s = average stream slope = $\infty / ? / 5280$

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

n = Manning's roughness coefficient from Table B

To calculate stream velocity (in ft./sec.), use: $v = 1.48/n \times r^{2/3} \times s^{1/2}$

Calculation of **PLANNING DISTANCE**

d = calculated planning distance (miles)

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

t = spill response time interval (from Table A)

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

d = v x t x c = planning distance equation

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

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

If Tidally Influenced

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

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

D.5 DISCHARGE SCENARIOS

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

D.5.1 Small and Medium Discharge Scenarios

- The purpose of this section is to identify the sources and sizes of small and medium discharges as defined by OPA 90 regulations
- Potential spill scenarios may include tank overflow, valve failure, tank failure, pipe failure, hose failure, or pump seal failure; these spills would likely be in contained areas and would be unlikely to travel offsite
- The Company would respond to these types of incidents in the same manner as a worst case discharge, but at a level appropriate to the incident size; differences in response are described in the worst case scenario discussion described in this Appendix. The Companies' response in such an event would in no way obviate the liability of any other responsible parties.
- Oil Storage capacity for a small/medium discharge would be available either on-site or via contracted resources listed in **FIGURE 7.1-1**.
- Resources are identified in **SECTION 3**, **SECTION 7**, **APPENDIX B**, and **EMERGENCY RESPONSE PLAN (ERP) SECTION 4**
- All resources shall be capable of arriving at the Facility within the applicable response tier requirements (Tier 1 = 12 hours; Tier 2 = 36 hours; Tier 3 = 60 hours)

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

FACILITY OPERATIONS AND COMPONENTS	SMALL DISCHARGE (up to 2,100 gallons)	MEDIUM DISCHARGE (2,100 to 36,000 gallons)	WORST CASE DISCHARGE
Oil transfer operations	Hose failure	Hose failure	Not applicable
Facility maintenance operations	Leak from periodic maintenance, line not completely drained when opened	Seal failure Overfill	Not applicable
Facility piping	Flange, gasket, threaded connection	Seal failure Overfill	Not applicable
Pumps and sumps	Seal failure Overfill	Seal failure Overfill	Not applicable
Oil storage tanks	Overfill	Overfill	Catastrophic failure of largest tank
Age and condition of facility and components	Flange, gasket, threaded connector	Pipeline failure Seal failure	Catastrophic failure of largest tank

Wilmington

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The following table describes Facility Specific small and medium discharge scenarios.

A thorough engineering assessment of the Facility determined that the secondary containment structure and catchment basins on the facility would contain the majority of small and medium discharges so an offsite spill would be unlikely. Factors that increase the likelihood of a spill or affect the effectiveness of response activities include adverse weather conditions such as thunderstorms, tornadoes, icing, and flooding.

Small Discharge Scenario

The most probable location for a small discharge for this facility would be at the dock. The probability of this type of discharge may be greatest at the dock but does not preclude a spill in the terminal itself. The first discharge scenario is the spilling of product within a containment area. Examples of this type of spill would include mechanical failure (or other means) inside the dike areas or a spill at one of the two terminal loading racks. Small discharges in any of these areas would be fully contained, and would present minimal environment impact, other than contaminated soil. There is minimal probability that any of the product would travel offsite. Recovery techniques would be greatly enhanced in that no additional containment would be necessary.

The second discharge scenario would involve a spill outside a containment area. Examples of this type of spill would include mechanical failure (or other means) outside of a dike area, at the lower or upper manifolds. Small discharges in these areas would not be initially contained and could represent substantial environmental impact. As the spill volume increases, the probability that the product would travel offsite increases. Located adjacent to, and on the eastern perimeter of the terminal facility, is a small retention pond with outfall lines connected to a storm water system that outfalls in close proximity to the Delaware River. Any product that reaches the retention pond will potentially reach the Delaware River as well. Additional measures may be taken to incorporate valves into the retention pond outfall line.

SPILL INFORMATION

RESOURCES NEEDED

Volume	Oil Type	Spill Path	Collection	Personnel	Equipment
Up to 2,100 gallons	Diesel fuel, Ethanol, Heating oil, or Gasoline	The flow direction of released product would be in an easterly direction to the edge of the terminal property.	Within secondary containment or small retention pond east of the facility.	Magellan - Adsorbents, OSRO - Miller, Other	Vacuum Truck, Boom, Adsorbents, Skimmers, as needed and required

A thorough engineering assessment of the Facility determined that the secondary containment structure and catchment basins on the facility would contain the majority of small and medium discharges so an offsite spill would be unlikely. Factors that increase the likelihood of a spill or affect the effectiveness of response activities include adverse weather conditions such as thunderstorms, tornadoes, icing, and flooding.

Note: Equipment and manpower resources are detailed in **SECTION 3**, **SECTION 7** and **APPENDIX B**.

The following table describes Facility Specific small and medium discharge scenarios.

Medium Discharge Scenario					
<p>The most probable location for a medium discharge for this facility would be at the dock. The probability of this type of discharge may be greatest at the dock but does not preclude a spill in the terminal itself. The first discharge scenario is the spilling of product within a containment area. Examples of this type of spill would include mechanical failure (or other means) inside the dike areas or a spill at one of the two terminal loading racks. Medium discharges in any of these areas would be fully contained, and would present minimal environment impact, other than contaminated soil. There is minimal probability that any of the product would travel offsite. Recovery techniques would be greatly enhanced in that no additional containment would be necessary.</p> <p>The second discharge scenario would involve a spill outside a containment area. Examples of this type of spill would include mechanical failure (or other means) outside of a dike area, at the lower or upper manifolds. Medium discharges in these areas would not be initially contained and could represent substantial environmental impact. As the spill volume increases, the probability that the product would travel offsite increases. Located adjacent to, and on the eastern perimeter of the terminal facility, is a small retention pond with outfall lines connected to a storm water system that outfalls in close proximity to the Delaware River. Any product that reaches the retention pond will potentially reach the Delaware River as well. Additional measures may be taken to incorporate valves into the retention pond outfall line.</p>					
SPILL INFORMATION			RESOURCES NEEDED		
Volume	Oil Type	Spill Path	Collection	Personnel	Equipment

2,100 to 36,000 gallons	Diesel fuel, Ethanol, Heating oil, or Gasoline	The flow direction of released product would be in an easterly direction to the edge of the terminal property.	Within secondary containment or small retention pond east of the facility.	OSRO - Miller Environmental	Vacuum Truck, Boom, Skimmers, others as required
The likelihood of chain reaction failures is small but may include fire due to spilled product.					

Note: Equipment and manpower resources are detailed in **SECTION 3**, **SECTION 7** and **APPENDIX B**.

D.5.2 Worst Case Discharge (WCD) Scenario Discussion

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

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

1. The First Responder would notify the Area Supervisor/Manager of Operations and notifications would be initiated in accordance with **FIGURE 2-1**.
2. The Area Supervisor/Manager of Operations would assume the role of Incident Commander/Qualified Individual until relieved and would initiate response actions and notifications in accordance with **SECTION 2**. If this were a small spill, the local/company personnel may handle all aspects of the response. Among those actions would be to:
 - Conduct safety assessment in accordance with **FIGURE 2-1** and evacuate personnel as needed in accordance with **SECTION 2**
 - Direct facility responders to shut down ignition sources
 - Direct facility personnel to position resources in accordance with **SECTION 2.4**
 - Complete spill report form in accordance with **SECTION 3** and notify 3E Company or Environmental Specialist
 - Ensure regulatory agencies are notified
3. If this were a small or medium spill, the Qualified Individual/Incident Commander may elect for the First Responder to remain the Incident Commander or to activate selected portions of the Spill Management Team. However, for a large spill, the Qualified Individual would assume the role of Incident Commander and would activate the entire Spill Management Team in accordance with activation procedures described in **SECTION 4.2**.

4. The Incident Commander would then initiate spill assessment procedures including surveillance operations, trajectory calculations, and spill volume estimating in accordance with **SECTION 2.3**.
5. The Incident Commander would then utilize checklists in **SECTION 4.6** as a reminder of issues to address. The primary focus would be to establish incident priorities and objectives and to brief staff accordingly.
6. The Spill Management Team would develop the following plans, as appropriate (some of these plans may not be required during a small or medium spill):
 - Site Safety and Health
 - Site Security
 - Incident Action
 - Decontamination
 - Disposal
 - Demobilization

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

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

D.5.3 Description of Factors Effecting Response Efforts

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

FACTORS	CONSIDERATIONS EFFECTING RESPONSE EFFORTS
Size of spill	<ul style="list-style-type: none"> • Location of spill in relation to identified sensitivities and/or sensitive areas • Spread and spill movement
Proximity to down gradient water intakes	<ul style="list-style-type: none"> • <u>SECTION 6</u> and <u>EMERGENCY RESPONSE PLAN</u> for maps showing proximity to down gradient water intakes
Proximity to fish and wildlife and sensitive environments	<ul style="list-style-type: none"> • A release could impact fish, wildlife and sensitive environments as described in <u>SECTION 6</u> and <u>EMERGENCY RESPONSE PLAN</u>
Likelihood that discharge will travel offsite	<ul style="list-style-type: none"> • A small spill is unlikely to travel offsite • A medium spill has the potential to travel offsite via adjacent waterways • A worst case discharge has the greatest potential to travel offsite if secondary containment is breached
Location of material spilled	<ul style="list-style-type: none"> • See facility information and drainage located in <u>SECTION 1</u> and <u>APPENDIX C</u>. Facility tankage,

	<p>pipng, and transfer areas are displayed on drawings provided in <u>APPENDIX C</u> and <u>EMERGENCY RESPONSE PLAN</u></p>
Material discharged	<ul style="list-style-type: none"> • Typically Diesel , Gasoline , No. 2 Diesel fuel , Fuel Oil No. 6 , Red Dye , Denatured Ethanol , SCS F211 , • Product is considered non-persistent but not highly volatile
Weather or aquatic conditions	<ul style="list-style-type: none"> • The areas have the potential to be affected by tornadoes, flooding, and lightning strikes
Available remediation equipment	<ul style="list-style-type: none"> • The Company has response equipment available • Resources are available through oil spill response contractors in quantities sufficient to meet applicable planning standards
Probability of a chain reaction or failures	<ul style="list-style-type: none"> • Potential for a chain reaction or failure is remotely possible but not anticipated; secondary containment, response contractors and trained personnel minimize the potential of such events
Direction of spill pathway	<ul style="list-style-type: none"> • Refer to sensitivity maps in the <u>SECTION 6</u> and <u>EMERGENCY RESPONSE PLAN</u> • Wind direction and speed combined with currents, will determine spill trajectory

D.6 PLANNING VOLUME CALCULATIONS

Once the worst case discharge volume has been calculated, response resources must be identified to meet the requirements of 40 CFR 112.20(h). Calculations to determine sufficient amount of response equipment necessary to respond to a worst case discharge is described below. A demonstration of the planning volume calculations is provided below.

D.7 SPILL VOLUME CALCULATIONS

D.7.1 USCG Portion of Facility

The Worst Case Discharge was formulated assuming a release from the Marine Transportation Related portion of the Facility, as directed by 33 CFR 154.1029.

The Worst Case Discharge is based on a catastrophic failure of all piping carrying oil between the marine transfer manifold(s) and the non-transportation related portion(s) of the Facility. For the Wilmington Terminal, this volume is calculated as noted below. Actual Worst Case Discharge volumes for all facilities are provided in **FIGURE D.7-1**. Oil spill response equipment available to respond to this spill is included in **SECTION 7.1.1** and **APPENDIX B.1.1**.

• **Average Most Probable Discharge**

The Average Most Probable Discharge (AMPD) is defined by 33 CFR 154 as the lesser of 50 barrels or 1% of the Worst Case Discharge. One percent of the Worst Case Discharge is approximately _____, therefore, the average most probable discharge is **50 barrels**.

• **Maximum Most Probable Discharge**

The Maximum Most Probable Discharge (MMPD) is defined by 33 CFR 154 as the discharge of the lesser of 1,200 barrels or 10% of the volume of the Worst Case Discharge. _____ therefore, the maximum most probable discharge is **1,200 barrels**.

D.7.2 EPA Portion of the Facility (non-transportation related)

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

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

TYPE	DESCRIPTION	PRODUCT	WCD VOLUME (BBLs)
Multiple-tank with secondary containment	Catastrophic failure of largest tank #2		

TYPE	DESCRIPTION	PRODUCT	WCD VOLUME (BBLs)

EPA PLANNING VOLUME DATA

STEP	PARAMETER	Wilmington
(A)	WCD (bbls)	
(B)	Oil group	I
(C)	*Geographic area	N
(D1)	Percent lost to natural dissipation	80
(D2)	Percent recovered floating oil	20
(D3)	Percent oil onshore	10
(E1)	On water recovery (bbls)	
(E2)	Shoreline recovery (bbls)	
(F)	Emulsification Factor	1.0
(G)	On water recovery resource mobilization factor	
(G1)	Tier I	.15
(G2)	Tier II	.25
(G3)	Tier III	.40
Part II	On water recovery capacity (bbls/day)	
	Tier I	
	Tier II	
	Tier III	
Part III	Shoreline cleanup volume (bbls/day)	
Part IV	On water response capacity by operating area (bbls/day)	
(J1)	Tier I	12,500
(J2)	Tier II	25,000
(J3)	Tier III	50,000
Part V	On water amount needed to be identified, but not contracted for in advance	
	Tier I	0
	Tier II	0
	Tier III	0

* R = Rivers and canals
N = Nearshore/Inland

D.7.3 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.

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 % per the company guidelines.

Considering the volume of release from a line break compared to that of historic discharge in each 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.

The worst case discharge for each pipeline segment is the largest breakout tank. These tank volumes are as follows:

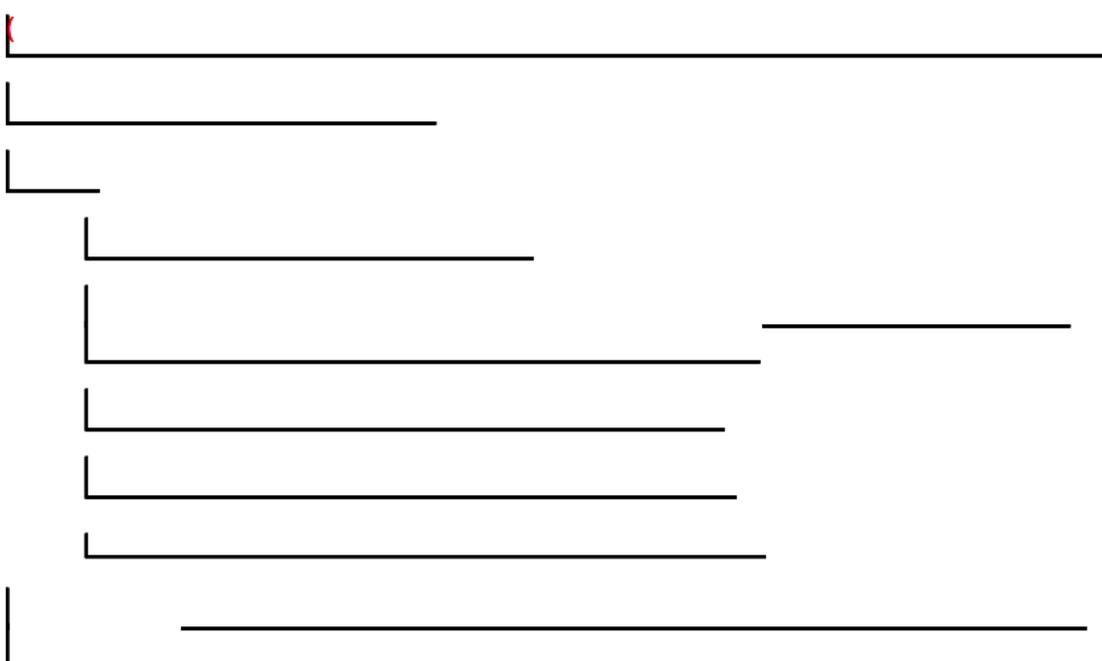
LOCATION	VOLUME (BBLs)
N/A	0.00

The worst case tank volume is calculated as follows:

$$\text{Largest tank} \times \text{Credit for containment tank standards} = \text{Tank standards credit}$$

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

$$\text{N/A } (0.00) \times = 0.00 \text{ bbls.}$$



D.8 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.

D.9 PRODUCT CHARACTERISTICS AND HAZARDS

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

- Denatured Ethanol
- Diesel
- Fuel Oil No. 6
- Gasoline
- No. 2 Diesel fuel
- Red Dye
- SCS F211

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 online through the Compass website or via fax from the MSDS Hotline (**FIGURE 3.1-3**). Telephone information concerning the potential hazards can also be obtained from the hotline.

FIGURE D.9-1 describes primary oils handled.

FIGURE D.9-1 - SUMMARY OF COMMODITY CHARACTERISTICS

COMMON NAME	MSDS NAME	HEALTH HAZARD	FLASH POINT	SPECIAL HAZARD	REACTIVITY	HEALTH HAZARD WARNING STATEMENT
Denatured Ethanol	Appropriate Product Name	2	3	C	0	Long term, repeated exposure may cause cancer, blood, kidney and nervous system damage, and contains benzene.
Diesel	Appropriate product name	1	2	C	0	Long term, repeated exposure may cause skin cancer.
						Long term, repeated

Fuel Oil No. 6	Appropriate product name	3	2	C, H2S, A	2	exposure may cause cancer, blood, kidney, liver, and nervous system damage. Aspiration hazard.
Gasoline	Appropriate product name	1	3	C	0	Long term, repeated exposure may cause cancer, blood, kidney and nervous system damage, and contains benzene.
No. 2 Diesel fuel	Appropriate product name	1	2	C	0	Long term, repeated exposure may cause skin cancer.
Red Dye	Appropriate Product Name	2	3	C, OX	0	May irritate eye, skin, respiratory tract. May cause burns, blisters, headache, dizziness, nausea, vomiting, unconsciousness, abdominal pain, and CNS effects.
SCS F211	Appropriate Product Name	2	2	None	0	Combustible liquid and vapor. May be fatal if swallowed and enters airways. Causes skin and eye irritation upon contact. Toxic if inhaled. Minor ingredients are possibly carcinogenic to humans Minor ingredients may damage fertility or an unborn child. Causes

					damage to organs (Eyes, Blood, Hematopoietic organ) through prolonged or repeated exposure. Toxic to aquatic life with long lasting effects.
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 H₂S = 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		

APPENDIX E
CROSS-REFERENCES

Last revised: August 12, 2008

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Figure E-1 - EPA / FRP Cross-Reference

Figure E-2 - EPA / SPCC Cross-Reference

Figure E-3 - EPA / RCRA Cross-Reference

Figure E-4 - USCG / FRP Cross-Reference

Figure E-5 - DOT / PHMSA 194 Cross-Reference

Figure E-6 - OSHA Cross-Reference

Figure E-7 - EPA Response Plan Cover Sheet

Figure E-8 - State Cross-Reference

FIGURE E-1 - EPA / FRP CROSS-REFERENCE

EPA FRP REQUIREMENTS	LOCATION
Facility Information	
General Information (1.0)	
• Facility Name	<u>Figure 1-3</u>
• FRP #	<u>Figure 1-3</u>
• Facility Address	<u>Figure 1-3</u>
• Facility Telephone	<u>Figure 1-3</u>
• Facility Owner	<u>Figure 1-3</u>
• Owner Address	<u>Figure 1-3</u>
• Owner Telephone	<u>Figure 1-3</u>
• Name of Protected Waterway/ Environmentally Sensitive Area	<u>Figure D.4-1, Figure D.4-2</u>
• Distance from Facility	<u>Figure D.4-1, Figure D.4-2</u>
Standard Facility Response Plan (sec. 1.0)	
Emergency Response Action Plan (ERAP) (sec. 1.1)	
Qualified Individual (QI) information (sec. 1.2) partial	<u>ERAP - Figure 3-2</u>
Emergency notification phone list (sec. 1.3.1) partial	<u>ERAP - Figure 3-2</u>
Spill response notification form (sec. 1.3.1) partial	<u>ERAP - Figure 3-1</u>
Response equipment list and location (sec. 1.3.2) complete	<u>ERAP - Figure 4-2, Figure 4-3</u>
Response equipment testing and deployment (sec. 1.3.4) complete	<u>ERAP - Figure 4-4</u>
Facility response team list (sec. 1.3.4) partial	<u>ERAP - Figure 3-2</u>
Facility evacuation plan (sec. 1.3.5) condensed	<u>ERAP - Section 2.3, Figure 5-2</u>
Immediate actions (sec. 1.7.1) complete	<u>ERAP - Section 2</u>
Facility diagrams (sec. 1.9) complete	<u>ERAP - Figure 5-1, Figure 5-2</u>
Facility Information (sec. 1.2)	
Facility name and location (sec. 1.2.1)	<u>Figure 1-3</u>
Latitude and longitude (sec. 1.2.2)	<u>Figure 1-3, Appendix C,</u>

	<u>Appendix E</u>
Wellhead protection area (sec. 1.2.3)	<u>Figure 1-3</u>
Owner/ operator (both names included, if different (sec. 1.2.4)	<u>Figure 1-3</u>
Qualified Individual (sec. 1.2.5) (name, position, home and work address, phone numbers) and specific response training experience	<u>Figure 1-3</u>
Date of oil storage start-up (sec. 1.2.6)	<u>Figure 1-3</u>
Current operation (sec. 1.2.7)	<u>Figure 1-3</u>
Date and type of substantial expansion (sec. 1.2.8)	<u>Figure 1-3</u>

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

EPA FRP REQUIREMENTS	LOCATION
Emergency Response Information (sec. 1.3)	
Notification (sec. 1.3.1)	
National Response Center phone number	<u>Figure 3.1-3</u> (Initial)
Qualified Individual (day and evening) phone numbers	<u>Figure 1-3</u> , <u>Figure 3.1-3</u>
Company Response Team (day and evening) phone numbers	<u>Figure 3.1-3</u>
Federal On-Scene Coordinator (FOSC) and/ or Regional Response Center (day and evening) phone numbers	<u>Figure 3.1-3</u> (Federal)
Local response team phone numbers (fire department/ cooperatives)	<u>Figure 3.1-3</u>
Fire marshal (day and evening) phone numbers	<u>Figure 3.1-3</u> (Fire Departments)
State Emergency Response Commission (SERC) phone number	<u>Figure 3.1-3</u> (State Agencies)
State police phone number	<u>Figure 3.1-3</u> (Police Departments)
Local Emergency Planning Committee (LEPC) phone number	<u>Figure 3.1-3</u> (Local Agencies)
Local water supply system (day and evening) phone numbers	<u>Figure 3.1-3</u> (Water Intakes)
Weather report phone number	<u>Figure 3.1-3</u> (Weather)
Local TV/ radio phone number(s) for evacuation notification	<u>Figure 3.1-3</u> (Radio/Television Stations)
Hospital phone number	<u>Figure 3.1-3</u> (Emergency Medical Services)
Spill Response Notification Form	
• Reporter's name	<u>Figure 3.1-2</u>

• Company information	Figure 3.1-2
• Incident description	Figure 3.1-2
• Materials	Figure 3.1-2
• Response actions	Figure 3.1-2
• Impact	Figure 3.1-2
Response Equipment List (Identify if Facility, OSRO, CO-OP owned by letters O, F, or C) (sec. 1.3.2)	
Equipment list	Figure 7.1-1
Equipment location	Figure 7.1-1
Release handling capabilities and limitations	Figure 7.1-1

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

EPA FRP REQUIREMENTS	LOCATION
Response Equipment Testing/ Deployment (sec. 1.3.3)	
Last inspection or equipment test date	Figure A.1-4
Inspection frequency	Figure A.1-4
Last deployment drill date	Figure A.1-4
Deployment frequency	Figure A.1-4
OSRO certification (if applicable)	Figure A.1-4
Response Personnel (sec. 1.3.4)	
Emergency response personnel list	Figure 3.1-3
Emergency response contractors	Figure 3.1-3, Figure 7.1-1, Appendix B
Evidence of response capability	Appendix B
Facility response team list (sec. 1.3.4)	Figure 3.1-3
Evacuation Plans (sec. 1.3.5)	
Facility-wide evacuation plan	Section 2.3
Reference to existing community evacuation plans (sec. 1.3.5.3)	Section 2.3
Evacuation routes shown on diagram	Figure C-7
Qualified Individual's Duties (sec. 1.3.6)	
Description of duties	Section 4.5
Consistent with requirements	Section 4.5

Hazard Evaluation (sec. 1.4)	
Hazard Identification (sec. 1.4.1)	
Schematic Diagram	
Labeled schematic drawing	<u>Figure C-6, Figure C-8</u>
Above-ground tanks identified separately	<u>Figure C-6</u>
Below-ground tanks identified separately	<u>Figure C-6</u>
Surface impoundments identified separately	N/A
Tank Form:	
Tank number	<u>Figure C-4</u>
Substance stored	<u>Figure C-4</u>
Quantity stored	<u>Figure C-4</u>
Tank type and year installed	<u>Figure C-4</u>
Maximum capacity	<u>Figure C-4</u>
Failure/ Cause	<u>Figure C-4</u>

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

EPA FRP REQUIREMENTS	LOCATION
Surface Impoundment Form:	
Surface impoundment number	N/A
Substance stored	N/A
Quantity stored	N/A
Surface area/ year	N/A
Maximum capacity	N/A
Failure/ Cause	N/A
Facility Operations Description:	
Loading and unloading procedures	<u>Figure 1-3 (Current Operations)</u>
Day to day operations	<u>Figure 1-3 (Facility Data)</u>
Secondary containment	<u>Figure C-4</u>
Daily throughput	<u>Figure 1-3 (Facility Data)</u>
Vulnerability Analysis (sec. 1.4.2)	
Vulnerability of:	
<ul style="list-style-type: none"> Water intakes 	<u>Section 6.6, Section 6.7, Appendix D.2</u>
<ul style="list-style-type: none"> Schools 	<u>Section 6.6, Section 6.7, Appendix D.2</u>

• Medical facilities	<u>Section 6.6, Section 6.7, Appendix D.2</u>
• Residential areas	<u>Section 6.6, Section 6.7, Appendix D.2</u>
• Business	<u>Section 6.6, Section 6.7, Appendix D.2</u>
• Wetlands or other environmentally sensitive areas	<u>Section 6.6, Section 6.7, Appendix D.2</u>
• Fish and wildlife	<u>Section 6.6, Section 6.7, Appendix D.2</u>
• Lakes and streams	<u>Section 6.6, Section 6.7, Appendix D.2</u>
• Endangered flora and fauna	<u>Section 6.6, Section 6.7, Appendix D.2</u>
• Recreational areas	<u>Section 6.6, Section 6.7, Appendix D.2</u>
• Transportation routes (air, land, and water)	<u>Section 6.6, Section 6.7, Appendix D.2</u>

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

EPA FRP REQUIREMENTS	LOCATION
Vulnerability Analysis (sec. 1.4.2), continued	
Vulnerability of:	
• Utilities	<u>Section 6.6, Section 6.7, Appendix D.2</u>
• Other applicable areas (List below)	<u>Section 6.6, Section 6.7, Appendix D.2</u>
• Other areas:	<u>Section 6.6, Section 6.7, Appendix D.2</u>
Analysis of Potential for a Spill (sec. 1.4.3)	
Probability of spill occurring at the facility	<u>Appendix D.2.1</u>
Incorporates Factors:	
Tank age	<u>Figure C-4</u> (Year Constructed/Installed)
Spill history	<u>Figure C-13</u>
Horizontal range of a potential spill	<u>Figure D.4-1</u>
Vulnerability to natural disaster	<u>Appendix D.2.1</u>
Facility Reportable Oil Spill History Description (sec. 1.4.4)	
Date of discharge	<u>Figure C-13</u>

List of discharge causes	Figure C-13
Materials discharged	Figure C-13
Amount discharged in gallons	Figure C-13
Amount of discharge that reached navigable waters	Figure C-13
Effectiveness and capacity of secondary containment	Figure C-13
Clean-up actions taken	Figure C-13
Steps taken to reduce possibility of reoccurrence	Figure C-13
Total oil storage capacity of tank(s) or impoundment(s) from which material is discharged	Figure C-13
Effectiveness of monitoring equipment	Figure C-13
Description of how each spill was detected	Figure C-13

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

EPA FRP REQUIREMENTS	LOCATION
Discharge Scenarios (sec. 1.5)	
Small and Medium Volume Discharges (sec. 1.5.1)	
Small Volume Discharges	
Small volume discharge calculation for a facility	Appendix D.5
Facility-specific spill potential analysis	Appendix D.5
Average most probable discharge for "complexes"	N/A
1,000 feet of boom (1 hour deployment time)	Section 7.1.1, Figure 7.1-1, Appendix B, Appendix D.5.1
Correct amount of boom for "complexes"	N/A
Oil recovery devices equal to small discharge (2 hour recovery time)	Section 7.1.1, Figure 7.1-1, Appendix B
Oil storage capacity for recovered material	Section 7.1.1, Figure 7.1-1, Appendix B
Medium Volume Discharges	
Medium volume discharge calculation for a facility	Appendix D.5
Facility-specific spill potential analysis	Appendix D.5
Maximum most probable discharge for "complexes"	N/A
Oil recovery devices equal to medium discharge	Section 7.1.1, Figure 7.1-1, Appendix B
Availability of sufficient quantity of boom	Section 7.1.1, Figure 7.1-1, Appendix B
Oil storage capacity for recovered material	Section 7.1.1, Figure 7.1-

	1, Appendix B
Worst Case Discharge (WCD) (sec. 1.5.2)	
Correct WCD calculations	Appendix D.7
Correct WCD for "complexes"	N/A
Sufficient response resources for WCD	Appendix D.7, Figure 7.1-1, Appendix B
Sources and quantity of equipment for response to WCD	Appendix D.7, Figure 7.1-1, Appendix B
Oil storage capacity for recovered material	Appendix D.7, Figure 7.1-1, Appendix B

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

EPA FRP REQUIREMENTS	LOCATION
Discharge Detection Systems (sec. 1.6)	
Discharge Detection by Personnel (sec. 1.6.1)	
Detection procedures	Appendix D.3
Discussion of facility inspections	Figure C-10, Appendix D.3
Initial response actions	Figure 2-1
Automated Discharge Detection (sec. 1.6.2)	
Equipment description	Figure C-3, Appendix D.3
Alarm verification procedures	Appendix D.3
Initial response actions	Figure 2-1
Plan Implementation (sec. 1.7)	
Response Resources (sec. 1.7.1)	
Demonstration of accessibility of proper response personnel and equipment	Appendix B
Emergency plans for spill response	Section 2
Additional training	Appendix A.2
Additional contracted help	Appendix B
Access to additional equipment/ experts	Appendix B
Ability to implement plan, including training and practice drills	Appendix A
Immediate Actions Form for small, medium, and worst-case spills	Figure 2-1
Disposal Plans (sec. 1.7.2)	
How and where materials will be disposed	Section 5.5, Section 7.3
Disposal permits	Section 5.5, Section 7.3

Containment and Drainage Planning (sec. 1.7.3)	
Incorporates Factors:	
Available volume of containment	<u>Figure C-4,</u> <u>Figure C-3 (112.8(c)(2))</u>
Route(s) of drainage	<u>Figure C-6</u>
Construction materials used in drainage troughs	<u>Figure C-3</u>
Type and number of valves separators	<u>Figure C-6,</u> <u>Figure C-8,</u> <u>Figure C-3</u>
Sump pump capacities	<u>Figure C-4,</u> <u>Figure C-6</u>
Containment capacity of weirs and booms	<u>Section 7.1.1, Appendix</u> <u>B, Section 6.8</u>
Other clean up materials	<u>Section 7.1.1, Appendix</u> <u>B, Section 6.8</u>

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

EPA FRP REQUIREMENTS	LOCATION
Self-Inspection, Drills/ Exercises, and Response Training (sec. 1.8)	
Facility Self-Inspection (sec. 1.8.1)	
Inspection checklist (with dates)	<u>Figure C-10</u>
Records maintained for five years	<u>Figure C-10, Figure C-11</u>
Tank Inspection (sec. 1.8.1.1)	
Tank leaks	<u>Figure C-10</u>
Tank foundations	<u>Figure C-10</u>
Tank piping	<u>Figure C-10</u>
Response Equipment Inspection (sec. 1.8.1.2)	
Inventory (item and quantity)	<u>Figure D.3-1</u>
Storage location (time to access and respond)	<u>Figure D.3-1</u>
Operation status/ condition	<u>Figure D.3-1</u>
Actual use/ testing (last test date and frequency of testing)	<u>Figure D.3-1</u>
Shelf life	<u>Figure D.3-1</u>
Secondary Containment Inspection (sec. 1.8.1.3)	
Dike or berm system	<u>Figure C-10</u>
Secondary containment	<u>Figure C-10</u>
Retention and drainage ponds	<u>Figure C-10</u>
Facility Drills/ Exercises (sec. 1.8.2)	

Facility drills/ exercise description	Appendix A.1
Equipment deployment exercise	Appendix A.1
Unannounced exercise	Appendix A.1
Area exercises	Appendix A.1
Qualified Individual Notification Drills	Appendix A.1
Qualified Individual Notification Drill Log (sec. 1.8.2.1) (date, company, qualified individual, other contacted, emergency scenario, evaluation)	Appendix A.1
Spill Management Team Tabletop Exercises	Appendix A.1
Spill Management Team Tabletop Drill Log (sec. 1.8.2.2) (date, company, qualified individual, participants, emergency scenario, evaluation, changes to be implemented, time table for implementation)	Appendix A.1

Wilmington

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

EPA FRP REQUIREMENTS	LOCATION
Response Training (sec. 1.8.3)	
Description of response training program (including topics)	Figure A.2-2
Personnel Response Training Logs (name, response training date/ and number of hours, prevention training date/ and number of hours)	Figure A.2-3
Discharge Prevention Meeting Log (date, attendees)	Figure C-9
Diagrams (sec. 1.9)	
Site Diagram includes:	
Entire facility to scale	Figure C-6 or Figure 1, Figure C-7 or Figure 1
Above and below-ground bulk storage tanks	Figure C-6 or Figure 1, Figure C-7 or Figure 1
Contents and capacities of bulk storage tanks	Figure C-4
Contents and capacities of drum storage areas	Figure C-4
Contents and capacities of surface impoundments	N/A
Process buildings	Figure C-6 or Figure 1, Figure C-7 or Figure 1
Transfer areas	Figure C-6 or Figure 1
Secondary containment systems	Figure C-6 or Figure 1, Figure C-7 or Figure 1
Structures where hazardous materials are used and capacity	Figure C-6 or Figure 1, Figure C-7 or Figure 1

Location of communication and emergency response equipment	Figure C-6 or Figure 1, Figure C-7 or Figure 1
Location of electrical equipment which contains oil	Figure C-6 or Figure 1
If a "complex" facility, interface between EPA and other regulating agencies	N/A

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

EPA FRP REQUIREMENTS	LOCATION
Site Drainage Diagram	
Major sanitary and storm sewers, manholes, and drains	Figure C-6 or Figure 1
Weirs and shut-off valves	Figure C-6 or Figure 1
Surface water receiving streams	Figure C-6 or Figure 1
Fire fighting water sources	Figure C-6 or Figure 1
Other utilities	Figure C-6 or Figure 1
Response personnel ingress and egress	Figure C-7 or Figure 1
Equipment transportation routes	Figure C-6 or Figure 1, Figure C-7 or Figure 1
Direction of spill flow from release points	Figure C-4, Figure C-6 or Figure 1
Site Evacuation Diagram includes:	
Site plan diagram with evacuation routes	Figure C-7 or Figure 1
Location of evacuation regrouping areas	Figure C-7 or Figure 1
Site Security (sec. 1.10)	
Emergency cut-off locations	Figure C-3, Appendix D.3
Enclosure	Figure C-3
Guards and their duties, day and night	Figure C-3
Lighting	Figure C-3
Valve and pump locks	Figure C-3
Pipeline connection caps	Figure C-3
Response Plan Cover Sheet (sec. 2.0)	
Owner/ operator of facility	Figure E-6
Facility name	Figure E-6
Facility address	Figure E-6
Facility phone number	Figure E-6
Latitude and longitude	Figure E-6

Dun and Bradstreet number	Figure E-6
North American Industrial Classification System (NAICS) Code	Figure E-6
Largest oil tank storage capacity	Figure E-6
Maximum oil storage capacity	Figure E-6
Number of oil storage tanks	Figure E-6
Worst case discharge amount	Figure E-6
Facility distance to navigable waters	Figure E-6
Applicability of substantial harm criteria	Figure E-6
Certification	Figure E-6

FIGURE E-2 - EPA / SPCC CROSS-REFERENCE

EPA SPCC REQUIREMENTS (40 CFR 112.7 and 112.8)	LOCATION
112.7 General requirements for Spill Prevention, Control, and Countermeasure Plans	
a. General requirements	
1. Include a discussion of your facility's conformance with the requirements listed in this part	<u>Appendix C</u>
3. Describe in your Plan the physical layout of the facility and include a facility diagram	<u>Figure 1-3, Figure C-6, Figure C-7</u>
i. The type of oil in each container and its storage capacity	<u>Figure C-4</u>
ii. Discharge prevention measures	<u>Section 2, Figure C-3</u>
iii. Discharge or drainage controls	<u>Figure C-6</u>
iv. Countermeasures for discharge	<u>Section 2</u>
v. Methods of disposal	<u>Section 7</u>
vi. Contact list and phone numbers	<u>Section 3</u>
4. Unless you have submitted a response plan, provide information and procedures to report a discharge	N/A
5. Unless you have submitted a response plan, describe procedures you will use when a discharge occurs	N/A
b. Prediction of the direction, rate of flow, and total quantity of	<u>Figure C-4</u>

oil which could be discharged from the facility as a result of each type of major equipment failure	
c. Provide appropriate containment	<u>Figure C-4</u>
d. If you determine that the installation of any of the structures or pieces of equipment is not practicable, you must clearly explain in your Plan why such measures are not practicable; for bulk storage containers, conduct both periodic integrity testing of the containers and periodic integrity and leak testing of the valves and piping; and, unless you have submitted a response plan under § 112.20, provide in your Plan the following:	<u>Appendix C</u>
1. An oil spill contingency plan following the provisions of part 109 of this chapter	N/A
2. A written commitment of manpower, equipment, and materials	N/A
e. Inspections, tests, and records	<u>Appendix C</u>
f. Personnel, training, and discharge prevention procedures	<u>Appendix C</u>
1. Oil-handling personnel training	<u>Appendix C</u>
2. Person accountable for discharge prevention	<u>Appendix C</u>
3. Schedule and conduct discharge prevention briefings	<u>Appendix C</u>

FIGURE E-2 - EPA / SPCC CROSS-REFERENCE, CONTINUED

EPA SPCC REQUIREMENTS (40 CFR 112.7 and 112.8)	LOCATION
112.7 General requirements for Spill Prevention, Control, and Countermeasure Plans, continued	
g. Security (excluding oil production facilities)	<u>Figure C-3</u>
1. Facility fencing	<u>Figure C-3</u>
2. Master flow, drain valves, and other valves remain in closed position	<u>Figure C-3</u>
3. Lock the starter control on each oil pump in "off" position	<u>Figure C-3</u>

4. Securely cap or blank-flange the loading/ unloading connections	Figure C-3
5. Provide facility lighting	Figure C-3
i. Discovery of discharges occurring during hours of darkness	Figure C-3
ii. Prevention of discharges occurring through acts of vandalism	Figure C-3
h. Facility tank car and tank truck loading/ unloading rack (excluding offshore facilities)	Figure C-3
1. Catchment basin, treatment facility, or quick drainage system	Figure C-3
2. Provide vehicular disconnect warning system	Figure C-3
3. Inspect for discharges of the lower most drain	Figure C-3
i. Aboveground container brittle fracture evaluation	Figure C-3
j. Discussion of conformance with the applicable requirements	Figure C-3
k. Qualified Oil-filled Operational Equipment	Figure C-3
1. Qualification Criteria - Reportable Discharge History	Figure C-3
2. Alternative Requirements to General Secondary Containment	Figure C-3
i. Establish and document the facility procedures for inspections or a monitoring program to detect equipment failure and/or a discharge; and	Figure C-3
ii. Unless you have submitted a response plan under ? 112.20, provide in your Plan the following:	Figure C-3
A. An oil spill contingency plan following the provisions of part 109 of this chapter	Figure C-3
B. A written commitment of manpower, equipment, and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful	Figure C-3

FIGURE E-2 - EPA / SPCC CROSS-REFERENCE, CONTINUED

EPA SPCC REQUIREMENTS (40 CFR 112.7 and 112.8)	LOCATION
112.8 Spill Prevention, Control, and Countermeasure Plan requirements for onshore facilities (excluding production facilities)	
b. Facility drainage	Figure C-3
1. Restrain drainage from diked storage areas except where facility systems are designed to control such discharge	Figure C-3
2. Use valves of manual, open-and-closed design, for the drainage of diked areas	Figure C-3
3. Design facility drainage systems from undiked areas with a potential for a discharge to flow into ponds, lagoons, or catchment basins designed to retain oil or return it to the facility	Figure C-3
4. Equip the final discharge of all ditches inside the facility with a diversion system that would, in the event of an uncontrolled discharge, retain oil in the facility	Figure C-3
5. Where drainage waters are treated in more than one treatment unit and such treatment is continuous, and pump transfer is needed, provide two "lift" pumps and permanently install at least one of the pumps	Figure C-3
c. Bulk storage containers	Figure C-3
1. Not use a container for the storage of oil unless its material and construction are compatible with the material stored and conditions of storage such as pressure and temperature	Figure C-3
2. Provide a secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation	Figure C-3
3. Not allow drainage of uncontaminated rainwater from the diked area into a storm drain or discharge of an effluent into an open watercourse, lake, or pond, bypassing the facility treatment system unless you:	Figure C-3

i. Normally keep the bypass valve sealed closed	<u>Figure C-3</u>
ii. Inspect the retained rainwater to ensure that its presence will not cause a discharge as described in § 112.1(b)	<u>Figure C-3</u>
iii. Open the bypass valve and reseal it following drainage under responsible supervision; and	<u>Figure C-3</u>
iv. Keep adequate records of such events, for example, any records required under permits issued in accordance with §§ 122.41(j)(2) and 122.41(m)(3) of this chapter	<u>Figure C-3</u>
4. Protect completely buried metallic storage tanks from corrosion	<u>Figure C-3</u>
5. Protect partially buried and bunkered tanks from corrosion	<u>Figure C-3</u>
6. Test each aboveground container for integrity on a regular schedule	<u>Figure C-3</u>
7. Control leakage through defective internal heating coils	<u>Figure C-3</u>

FIGURE E-2 - EPA / SPCC CROSS-REFERENCE, CONTINUED

EPA SPCC REQUIREMENTS (40 CFR 112.7 and 112.8)	LOCATION
112.8 Spill Prevention, Control, and Countermeasure Plan requirements for onshore facilities (excluding production facilities), continued	
8. Engineer or update each container installation in accordance with good engineering practice to avoid discharges. You must provide at least one of the following devices:	<u>Figure C-3</u>
i. High liquid level alarms with an audible or visual signal	<u>Figure C-3</u>
ii. High liquid level pump cutoff devices	<u>Figure C-3</u>
iii. Direct audible or code signal communication between the container gauger and the pumping station	<u>Figure C-3</u>

iv. A fast response system	<u>Figure C-3</u>
v. Regularly test liquid level sensing devices to ensure proper operation	<u>Figure C-3</u>
9. Observe effluent treatment facilities frequently enough to detect possible system upsets that could cause a discharge as described in § 112.1(b)	<u>Figure C-3</u>
10. Promptly correct visible discharges which result in a loss of oil from the container	<u>Figure C-3</u>
11. Position or locate mobile or portable oil storage containers to prevent a discharge	<u>Figure C-3</u>
d. Facility transfer operations, pumping, and facility process	<u>Figure C-3</u>
1. Provide protection of buried piping that is installed or replaced on or after August 16, 2002	<u>Figure C-3</u>
2. Cap or blank-flange the terminal connection at the transfer point	<u>Figure C-3</u>
3. Properly design pipe supports to minimize abrasion and corrosion and allow for expansion and contraction	<u>Figure C-3</u>
4. Regularly inspect all aboveground valves, piping, and appurtenances	<u>Figure C-3</u>
5. Warn all vehicles entering the facility to be sure that no vehicle will endanger aboveground piping or other oil transfer operations	<u>Figure C-3</u>

FIGURE E-3 - EPA / RCRA CROSS-REFERENCE

EPA / RCRA REQUIREMENTS (40 CFR PART 265.50 - 265.56)		LOCATION
? 265.50	Applicability	
	The regulations in this subpart apply to owners and operators of all hazardous waste facilities, except as 265.1 provides otherwise.	<u>Section 1.1</u>

? 265.51	Purpose and Implementation of Contingency Plan	
a	Each owner or operator must have a contingency plan for his facility.? The contingency plan must be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water.	<u>Section 1.1</u>
b	The provisions of the plan must be carried out immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents that could threaten human health or the environment.	<u>Section 1.1</u>
? 265.52	Content of Contingency Plan	
a	The contingency plan must describe the actions facility personnel must take to comply with 265.51 and 265.56 in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility.	<u>Section 2</u>
b	If the owner or operator has already prepared a Spill Prevention, Control, and Countermeasure (SPCC) Plan in accordance with Part 112 of this chapter, or Part 1510 of Chapter V, or some other emergency or contingency plan, he need only amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this part.	<u>Section 7.3</u>
c	The plan must describe arrangements agreed to by local police departments, fire departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services, pursuant to 265.37.	<u>Figure 3.1-3</u>
d	The plan must list names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator (see 265.55), and this list must be kept up to date.? Where more than one person is listed, one must be named as primary emergency coordinator and others must be listed in the order in which they will assume responsibility as alternates.	<u>Figure 1-3</u>
e	The plan must include a list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment), where this equipment is required.? This list must be kept up to date.? In addition, the plan must include the location and a physical description of each item on the list, and a brief outline of its capabilities.	<u>Figure 4-2</u>

FIGURE E-3 - EPA / RCRA CROSS-REFERENCE, CONTINUED

EPA / RCRA REQUIREMENTS (40 CFR PART 265.50 - 265.56)		LOCATION
? 265.52	Content of Contingency Plan, Continued	
f	The plan must include an evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan must describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes (in cases where the primary routes could be blocked by releases of hazardous waste or fires).	<u>Section 2.3</u> , Section 5- Figure 2
? 265.53	Copies of Contingency Plan	
	A copy of the contingency plan and all revisions to the plan must be:	-----
a	Maintained at the facility, and	<u>Section 1.2</u> ; <u>Figure 2.2</u>
b	Submitted to all local police departments, fire departments, hospitals, and State and local emergency response teams that may be called upon to provide emergency services.	<u>Section 1.2</u> ; <u>Figure 2.2</u>
? 265.54	Amendment of Contingency Plan	
	The contingency plan must be reviewed, and immediately amended, if necessary, whenever:	-----
a	Applicable regulations are revised;	<u>Section 1.2</u>
b	The plan fails in an emergency;	<u>Section 1.2</u>
c	The facility changes in its design, construction, operation, maintenance, or other circumstances in a way that materially increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency;	<u>Section 1.2</u>
d	The list of emergency coordinators changes; or	<u>Section 1.2</u>
e	The list of emergency equipment changes.	<u>Section 1.2</u>
? 265.55	Emergency Coordinator	
	At all times, there must be at least one employee either on the facility premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures. This emergency coordinator must be thoroughly familiar with all aspects of the facility's contingency plan, all operations and activities at the facility, the location and characteristics of waste handled, the	<u>Figure 1-3</u> ; <u>Section 4.5</u> ; <u>Appendix A</u>

location of all records within the facility, and the facility layout.? In addition, this person must have the authority to commit the resources needed to carry out the contingency plan.

[Comment: The emergency coordinator's responsibilities are more fully spelled out in 265.56. Applicable responsibilities for the emergency coordinator vary, depending on factors such as type and variety of waste(s) handled by the facility, and type and complexity of the facility].

FIGURE E-3 - EPA / RCRA CROSS-REFERENCE, CONTINUED

EPA / RCRA REQUIREMENTS (40 CFR PART 265.50 - 265.56)		LOCATION
? 265.56	Emergency Procedures	
a	Whenever there is an imminent or actual emergency situation, the emergency coordinator (or his designee when the emergency coordinator is on call) must immediately:	<u>Section 4.5</u>
a(1)	Activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and	<u>Section 4.5</u>
a(2)	Notify appropriate State or local agencies with designated response roles if their help is needed.	<u>Section 4.5</u>
b	Whenever there is a release, fire, or explosion, the emergency coordinator must immediately identify the character, exact source, amount, and a real extent of any released materials.? He may do this by observation or review of facility records or manifests and, if necessary, by chemical analysis.	<u>Section 4.5</u>
c	Concurrently, the emergency coordinator must assess possible hazards to human health or the environment that may result from the release, fire, or explosion.? This assessment must consider both direct and indirect effects of the release, fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water run-offs from water or chemical agents used to control fire and heat-induced explosions).	<u>Section 4.5</u>
d	If the emergency coordinator determines that the facility has had a release, fire, or explosion which could threaten human health, or the environment, outside of the facility, he must report his findings as follows:	<u>Section 4.5</u>

d(1)	If his assessment indicates that evacuation of local areas may be advisable, he must immediately notify appropriate local authorities.? He must be available to help appropriate officials decide whether local areas should be evacuated; and	<u>Section 4.5</u>
d(2)	He must immediately notify either the government official designated as the on-scene coordinator for that geographical area (in the applicable regional contingency plan under Part 1510 of this Title), or the National Response Center (using their 24-hour toll free number 800/424-8802).? The report must include:	<u>Section 4.5; Figure 3.1-2</u>
d(2)(i)	Name and telephone number of reporter:	<u>Figure 3.1-2</u>
d(2)(ii)	Name and address of facility;	<u>Figure 3.1-2</u>
d(2)(iii)	Time and type of incident (e.g., release, fire);	<u>Figure 3.1-2</u>
d(2)(iv)	Name and quantity of material(s) involved, to the extent known;	<u>Figure 3.1-2</u>
d(2)(v)	The extent of injuries, if any; and	<u>Figure 3.1-2</u>
d(2)(vi)	The possible hazards to human health, or the environment, outside the facility.	<u>Figure 3.1-2</u>
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FIGURE E-3 - EPA / RCRA CROSS-REFERENCE, CONTINUED

EPA / RCRA REQUIREMENTS (40 CFR PART 265.50 - 265.56)		LOCATION
? 265.56	Emergency Procedures (Cont?d)	
e	During an emergency, the emergency coordinator must take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous waste at the facility.? These measures must include, where applicable, stopping processes and operations, collecting and containing released waste, and removing or isolating containers.	<u>Section 2; Figure 2.1-1</u>
f	If the facility stops operations in response to a fire, explosion or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes or other equipment, wherever this is appropriate.	<u>Section 2; Figure 2.1-1</u>
g	Immediately after an emergency, the emergency coordinator must provide for treating, storing, or	<u>Section 7.3; Section 5.5</u>

	disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility. <i>[Comment: ? Unless the owner or operator can demonstrate, in accordance with ? 261.3(c) or (d) of this chapter, that the recovered material is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of Parts 262, 263, and 265 of this chapter].</i>	
h	The emergency coordinator must ensure that, in the affected areas(s) of the facility:	-----
h(1)	No waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and	<u>Section 7.3</u> ; <u>Section 5.5</u>
h(2)	All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.	<u>Section 5.4</u>
i	The owner or operator must notify the Regional Administrator, and appropriate State and local authorities, that the facility is in compliance with paragraph (h) of this section before operations are resumed in the affected area(s) of the facility.	<u>Figure 3.1-3</u>
j	The owner or operator must note in the operating record the time, date, and details of any incident that requires implementing the contingency plan.? Within 15 days after the incident, he must submit a written report on the incident to the Regional Administrator.? The report must include:	<u>Section 8.3</u>
j(1)	Name, address, and telephone number of the owner or operator;	<u>Section 8.3</u>
j(2)	Name, address, and telephone number of the facility;	<u>Section 8.3</u>
j(3)	Date, time, and type of incident (e.g., fire, explosion);	<u>Section 8.3</u>

FIGURE E-3 - EPA / RCRA CROSS-REFERENCE, CONTINUED

EPA / RCRA REQUIREMENTS (40 CFR PART 265.50 - 265.56)		LOCATION
? 265.56	Emergency Procedures (Cont?d)	
j(4)	Name and quantity of material(s) involved;	<u>Section 8.3</u>
j(5)	The extent of injuries, if any;	<u>Section 8.3</u>
j(6)	An assessment of actual or potential hazards to human health or the environment, where this is applicable; and	<u>Section 8.3</u>
j(7)	Estimated quantity and disposition of recovered	<u>Section 8.3</u>

material that resulted from the incident.

FIGURE E-4 - USCG / FRP CROSS-REFERENCE

USCG OPA 90 REQUIREMENTS (33 CFR 154.1035)	LOCATION IN THIS PLAN
<i>a) Introduction and Plan Content</i>	
1. Facility Name and Location (address, city, county, state, zip, phone number, fax number).	<u>Figure 1-3</u>
2. Facility Directions (including but not limited to maps, landmarks and river mile that could aid a responder and reviewer).	<u>Figure 1-3, Figure 1-4</u>
3. Name, address and procedures for contacting the facility's owner or operator on a 24 hour basis.	<u>Figure 1-3, Figure 3.1-3</u>
4. Table of contents.	<u>Table of Contents</u>
5. Period when submitted plan does not have to conform to the subpart, a cross index, if appropriate.	<u>Figure E-4</u>
6. Record of change(s) to record information on plan updates.	<u>Figure 1-1</u>
<i>b) Emergency Response Action Plan</i>	
1. Notification procedures <ul style="list-style-type: none"> • Prioritized list of facility response personnel. • Federal, State or local agencies, as required • Spill response notification forms to Federal, State, local agencies. Form must state that initial notification must not be delayed by collection of data. • Notification of the National Response Center. 	<u>Figure 3.1-1, Figure 3.1-2, Figure 3.1-3</u>
2. Facility's spill mitigation procedures <ul style="list-style-type: none"> • Describe volume and oil groups that would be involved in the following: <ul style="list-style-type: none"> • Average, maximum and worse discharge from the MTR facility. • Where applicable, the worst case discharge from the non-transportation-related facility. • Prioritized list of procedures and facility personnel (identified by job title). Procedures must address actions to be taken in the event of a discharge, 	<u>Section 2.1.1, Figure 2.1-2, Appendix D</u>

<p>potential discharge or emergency involving the following equipment and scenarios:</p> <ul style="list-style-type: none"> • Transfer equipment <ul style="list-style-type: none"> • Tank overfill or failure • Piping rupture, leak both under pressure and not under pressure • Explosion or fire • Equipment failure • Listing of equipment and the responsibilities of facility personnel to mitigate an average most probable discharge 	
3. Facility's response activities	
i. Responsibilities of facility personnel to initiate a response and supervise response resources pending arrival of qualified individuals.	<u>Figure 2-1</u>
ii. Responsibilities and authority of the qualified individual and alternate as required in § 154.1026.	<u>Section 4.5</u>

FIGURE E-4 - USCG / FRP CROSS-REFERENCE, CONTINUED

USCG OPA 90 REQUIREMENTS (33 CFR 154.1035)	LOCATION IN THIS PLAN
<p>iii. Apply the following organizational structure to manage response actions:</p> <ul style="list-style-type: none"> • Command and control • Public information • Safety • Liaison with government agencies • Spill operations • Planning • Logistics support • Finance 	<u>Section 4.6, Figure 4.5-2</u>
<p>iv. Identify oil spill removal organizations and the spill management teams to be capable of providing the following response resources:</p> <ul style="list-style-type: none"> • Equipment and supplies to meet § 154.1045, 154.1047, as appropriate • Trained personnel for response to be on hand for the first 7 days of the response • Job descriptions for each spill management team member within the organizational 	<u>Section 7.1, Appendix B</u>

structure in a response action.	
v. For mobile facilities in more than one COTP zone, oil spill removal organizations and the spill management teams must be identified from paragraph (3)(iv) and included in each COTP zone.	N/A
4. Sensitive areas	
i. Identify areas of economic importance and environmental sensitivities as identified in the ACP, which are potentially impacted by a worst case discharge.	<u>Section 6.6</u>
ii. For a worst case discharge the plan must address the following: <ul style="list-style-type: none"> List all sensitive elements identified in ACP that are potentially impacted by a discharge. Describe all response actions anticipated to protect sensitive elements. Contain map or chart that depicts each response action anticipated. 	<u>Appendix D.5</u> <u>Section 6</u>
iii. Identify appropriate equipment and personnel as described in § 154.1028 to protect sensitive elements by one of the following calculations: <ul style="list-style-type: none"> Persistent oils and non-petroleum oils discharged into non-tidal waters, the distance from the facility reached in 48 hours at maximum current. 	<u>Section 7.1, Appendix B, Appendix D</u>

FIGURE E-4 - USCG / FRP CROSS-REFERENCE, CONTINUED

USCG OPA 90 REQUIREMENTS (33 CFR 154.1035)	LOCATION IN THIS PLAN
<ul style="list-style-type: none"> Persistent and non-petroleum oils discharged into tidal waters, 15 miles from the facility down current during ebb tide and to the point of maximum tidal influence or 15 miles, whichever is less, during flood tide. Non-persistent oils discharged into non-tidal waters, the distance from the facility reached in 24 hours at maximum current. Non-persistent oils discharged into tidal waters, 5 miles from the facility down current during 	<u>Section 7.1, Appendix B, Appendix D</u>

ebb tide and to the point of maximum tidal influence or 5 miles, whichever is less, during flood tide.	
<ul style="list-style-type: none"> • Spill trajectory or model maybe substituted if acceptable to COTP. • Procedures contained in the Environmental Protection's Agency's regulations on oil pollution prevention may be substituted for non-tidal and tidal waters. • COTP may require additional sensitive elements to be protected depending on trajectory. 	
5. Disposal plan Describe actions and procedures that adhere to Federal, state or local requirements.	<u>Section 5.5, Section 7.3</u>
c) Training and Exercises	
1. Training procedures of the facility owner or operator must meet requirements of § 154.1050.	<u>Appendix A</u>
2. Drill procedures of the facility owner or operator must meet requirements of § 154.1055.	<u>Appendix A</u>
d) Plan Review and Update Procedures	
Plan review and update procedures of the facility owner or operator must meet requirements of §154.1065 and any post-discharge review of the plan to evaluate and validate its effectiveness.	<u>Section 1.2</u>
e) Appendices	
1. Facility-specific information - principal characteristics	
i. There must be a physical description of the facility including a plan of the facility showing the mooring areas, transfer locations, control stations, locations of safety equipment, and the location and capacities of all piping and storage tanks.	<u>Figure 1-3, Figure C-4, Figure C-7</u>
ii. Identify sizes, types and number of vessels the facility can transfer oil to or from simultaneously.	<u>Figure 1-3</u>

FIGURE E-4 - USCG / FRP CROSS-REFERENCE, CONTINUED

USCG OPA 90 REQUIREMENTS (33 CFR 154.1035)	LOCATION IN THIS PLAN
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<p>iii. Identify the first valve(s) on facility piping separating the transportation-related and non-transportation-related portion of the facility, if any. For piping leading to a manifold located on a dock serving tank vessels, this valve is the first valve inside the secondary containment required by 40 CFR part 112.</p>	<p><u>Figure C-6</u></p>
<p>iv. The oil(s) and hazardous material handled, stored or transported at the facility in bulk. A material safety data sheet meeting the requirements of 29 CFR 19010.1200, 33 CFR 154.310(a)(5) or an equivalent will meet this requirement. This information can be maintained separately providing it is readily available and the appendix identifies its location. This information must include:</p> <ul style="list-style-type: none"> • Generic/chemical name • Description of appearance and odor • Physical and chemical characteristics • Hazards involved with handling or discharge • Firefighting procedures and extinguishing agents for oil/hazardous materials 	<p><u>Appendix D.9</u></p>
<p>v. Other information which the facility owner or operator determines to be pertinent to an oil spill response.</p>	<p><u>Section 2</u></p>
<p>2. List of contacts must include primary and alternate personnel, personnel from paragraph (b) (3) (iv), and Federal, state and local officials.</p>	<p><u>Figure 3.1-3, Figure 3.1-4</u></p>
<p>3. Equipment list and records must include the following:</p> <ul style="list-style-type: none"> • List of equipment and facility personnel required to respond to an average most probable discharge, as defined by §154.1020 • List of equipment belonging to an oil spill removal organization as described in §154.1028; unless the organization has been classified by the Coast Guard to equal or exceed the response capability needed by the facility • When it is necessary for the appendix to contain a listing of response equipment, it shall include the following: skimmers; booms; dispersant application; in-situ burning; bioremediation equipment and supplies and other equipment used to apply other chemical agents on the NCP Product Schedule; communications, firefighting and beach cleaning equipment; boats and motors; and heavy equipment 	<p><u>Section 7, Appendix B</u></p>

FIGURE E-4 - USCG / FRP CROSS-REFERENCE, CONTINUED

USCG OPA 90 REQUIREMENTS (33 CFR 154.1035)	LOCATION IN THIS PLAN
<ul style="list-style-type: none"> • This list must also include specifications for each piece of equipment as follows: <ol style="list-style-type: none"> 1. type, make, model and year of manufacture, 2. for oil recovery devices, the effective daily recovery rate, 3. for containment boom, the overall boom height and type of end connectors, 4. spill scenario in which the equipment will be used, 5. total daily capacity for storage and disposal of recovered daily oil 6. for communication equipment, the type and amount of equipment intended for use during response activities, 7. location of equipment, and 8. date of last inspection. 	
4. Communications plan must describe the primary and alternate method of communication during discharges, including communications at the facility and at remote locations.	<u>Section 7.1.6</u>
5. Site specific safety and health plan must describe the safety and health plan to be implemented. This appendix may reference another existing plan requiring under 29 CFR 1910.120	<u>Section 5.3</u>
6. List of acronyms and definitions must include all definitions that are critical to understanding the response plan.	<u>Appendix F</u>

FIGURE E-5 - DOT / PHMSA 194 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 1-3
<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 (§194.103), listing and description of Response Zones, including county(s) and state(s) 	Figure 1-3
<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 1-3
<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 1-3
<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 1-3
<ul style="list-style-type: none"> Basis for operator's determination of significant and substantial harm 	Figure 1-3
<ul style="list-style-type: none"> The type of oil and volume of the worst case discharge 	Appendix D
<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 	Section 3
<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 priority 	Section 3.1
<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 	Section 3.1 , Figure 3.1-3
<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

FIGURE E-5 - DOT / PHMSA 194 CROSS-REFERENCE, CONTINUED

OPA 90 REQUIREMENTS (49 CFR 194)	LOCATION
<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 D.3
<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, 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-hour basis 	Figure 3.1-3, Appendix B
<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, Appendix B
Response Activities	
<ul style="list-style-type: none"> Responsibilities of, and actions to be taken by, operating 	Section 2, Section 4.5,

personnel to initiate and supervise response actions pending the arrival of the Qualified Individual or other response resources identified in the response plan	<u>Appendix B</u>
<ul style="list-style-type: none"> Qualified Individual's responsibilities and authority, including notification of the response resources identified in the response plan 	<u>Section 4.5</u>
<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 	<u>Section 4.4, Section 4.5</u>
<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 	<u>Appendix B</u>

FIGURE E-5 - DOT / PHMSA 194 CROSS-REFERENCE, CONTINUED

OPA 90 REQUIREMENTS (49 CFR 194)	LOCATION
<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 	<u>Appendix B</u>
List of Contacts	
<ul style="list-style-type: none"> List of persons the Plan requires the operator to contact 	<u>Figure 3.1-1</u>
<ul style="list-style-type: none"> Qualified individuals for the operator's areas of operation 	<u>Figure 1-3</u>
<ul style="list-style-type: none"> Applicable insurance representatives or surveyors for the operator's areas of operation 	<u>Figure 3.1-1</u>
<ul style="list-style-type: none"> Persons or organizations to notify for activation of response resources 	<u>Figure 3.1-1</u>
Training Procedures	
<ul style="list-style-type: none"> Description of training procedures and programs of the operations 	<u>Appendix A.2</u>
Drill Procedures	
<ul style="list-style-type: none"> Announced and unannounced drills 	<u>Appendix A.1</u>

<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 quarterly • Drills involving emergency actions by assigned operating or maintenance personnel and notification of qualified individual on pipeline facilities which are normally unmanned, conducted quarterly • Shore-based spill management team (SMT) tabletop drills conducted yearly • Oil spill removal organization field equipment deployment drills conducted yearly • A drill that exercises entire response plan for each Response Zone, would be conducted at least once every three years 	<u>Appendix A.1</u>
Response Plan review and update procedures	
<ul style="list-style-type: none"> • Procedures to meet §194.121 	<u>Section 1.2</u>
<ul style="list-style-type: none"> • Procedures to review plan after a worst case discharge and to evaluate and record the plan's effectiveness 	<u>Section 1.2, Appendix C</u>
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 	<u>Figure 1-3</u>
<ul style="list-style-type: none"> • Notification procedures 	<u>Section 3</u>
<ul style="list-style-type: none"> • Spill detection and mitigation procedures 	<u>Section 2.1, Appendix C</u>

FIGURE E-5 - DOT / PHMSA 194 CROSS-REFERENCE, CONTINUED

OPA 90 REQUIREMENTS (49 CFR 194)	LOCATION
<ul style="list-style-type: none"> • Name, address, and telephone number of oil spill response organization 	<u>Figure 3.1-1, 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>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 3.1-3</u>
<ul style="list-style-type: none"> Worst case discharge volume 	<u>Appendix C</u>
<ul style="list-style-type: none"> Method used to determine the worst case discharge volume, with calculations 	<u>Appendix C</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 1-4, Section 6.6, Section 6.7</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 1-3</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 D.9-1</u>

FIGURE E-6 - OSHA CROSS-REFERENCE

OSHA EMPLOYEE EMERGENCY PLANS AND FIRE PREVENTION PLANS (29 CFR 1910.38 AND 1910.39)	LOCATION
Emergency Action Plans (29 CFR 1910.38)	
(c) Minimum elements of an emergency action plan. An emergency action plan must include at a minimum:	
(c)(1) Procedures for reporting a fire or other emergency;	<u>Figure 2-1</u>
(c)(2) Procedures for emergency evacuation, including type of evacuation and exit route assignments;	<u>Figure C-7</u>

(c)(3) Procedures to be followed by employees who remain to operate critical plant operations before they evacuate;	Section 2.3
(c)(4) Procedures to account for all employees after evacuation;	Section 2.3
(c)(5) Procedures to be followed by employees performing rescue or medical duties; and	Section 2.4
(c)(6) The name or job title of every employee who may be contacted by employees who need more information about the plan or an explanation of their duties under the plan.	Figure 3.1-3 , Section 4.6
(d) Employee alarm system. An employer must have and maintain an employee alarm system. The employee alarm system must use a distinctive signal for each purpose and comply with the requirements in §1910.165.	Section 2.3
(e) Training. An employer must designate and train employees to assist in a safe and orderly evacuation of other employees.	Figure A.2-1
(f) Review of emergency action plan. An employer must review the emergency action plan with each employee covered by the plan:	
(f)(1) When the plan is developed or the employee is assigned initially to a job;	Figure A.2-1
(f)(2) When the employee's responsibilities under the plan change; and	Figure A.2-1
(f)(3) When the plan is changed.	Figure A.2-1

HAZARDOUS WASTE OPERATIONS AND EMERGENCY RESPONSE (29 CFR 1910.120)	LOCATION
(1)(2) Elements of an emergency response plan. The employer shall develop an emergency response plan for emergencies which shall address, as a minimum, the following:	
(1)(2)(i) Pre-emergency planning.	Appendix C , Appendix D
(1)(2)(ii) Personnel roles, lines of authority, training, and communication.	Section 4
(1)(2)(iii) Emergency recognition and prevention.	Section 2.1
(1)(2)(iv) Safe distances and places of refuge.	Figure C-7
(1)(2)(v) Site security and control.	Figure 2.1-1 , Section 5.6 , Section 7.2
(1)(2)(vi) Evacuation routes and procedures.	Section 2.3 , Figure C-7
(1)(2)(vii) Decontamination procedures which are not covered by the site safety and health plan.	Section 5.4
(1)(2)(viii) Emergency medical treatment and first aid.	Section 5.4

FIGURE E-6 - OSHA CROSS-REFERENCE, CONTINUED

HAZARDOUS WASTE OPERATIONS AND EMERGENCY RESPONSE (29 CFR 1910.120)	LOCATION
(1)(2)(ix) Emergency alerting and response procedures.	Section 2.3
(1)(2)(x) Critique of response and follow-up.	Section 8.3
(1)(2)(xi) PPE and emergency equipment.	Section 5.4 , Section 7.1.1
(1)(3) Procedures for handling emergency incidents.	
(1)(3)(i) In addition to the elements for the emergency response plan required in paragraph (I)(2) of this section, the following elements shall be included for emergency response plans:	
(1)(3)(i)(A) Site topography, layout, and prevailing weather conditions.	Figure 1-2 , Figure D.4-1
(1)(3)(i)(B) Procedures for reporting incidents to local, state, and federal governmental agencies.	Figure 3.1-1
(1)(3)(ii) The emergency response plan shall be a separate section of the Site Safety and Health Plan.	Section 5.3
(1)(3)(iii) The emergency response plan shall be compatible and integrated with the disaster, fire and/or emergency response plans of local, state, and federal agencies.	Section 1.1
(1)(3)(iv) The emergency response plan shall be rehearsed regularly as part of the overall training program for site operations.	Figure A.2-1
(1)(3)(v) The site emergency response plan shall be reviewed periodically and, as necessary, be amended to keep it current with new or changing site conditions or information.	Section 1.2
(1)(3)(vi) An employee alarm system shall be installed in accordance with 29 CFR 1910.165 to notify employees of an emergency situation, to stop work activities if necessary, to lower background noise in order to speed communication, and to begin emergency procedures.	Section 2.3
(1)(3)(vii) Based upon the information available at time of the emergency, the employer shall evaluate the incident and the site response capabilities and proceed with the appropriate steps to implement the site emergency response plan.	Figure 2-1 , Section 2.1

FIGURE E-7 - EPA RESPONSE PLAN COVER SHEET

Owner/ operator of facility:	Magellan Wilmington Terminal
Facility name:	Wilmington

Facility address (street address or route):	1050 Christina Avenue
City, state, and U.S. zip code	Wilmington, DE 19801
Facility mailing address:	As above
Facility phone number.:	(302) 654-3717
Latitude:	39 ° 42 ' 45.36 " N
Longitude:	75 ° 31 ' 49.08 " W
Dun & Bradstreet number:	93-823-9068
Largest above ground oil storage tank capacity (gallons):	10,912,354
Number of above ground oil storage tanks:	35 (including additive tanks)
North American Industrial Classification System (NAICS):	493190
Maximum oil storage capacity (gallons):	121,770,501
Worst case oil discharge amount (bbls.):	245,169
Facility distance to navigable water; mark the appropriate line.	
0-1/4 <input checked="" type="checkbox"/> 1/4-1/2 mile <input type="checkbox"/> 1/2 - 1 mile <input type="checkbox"/> > 1 mile <input type="checkbox"/>	
APPLICABILITY OF SUBSTANTIAL HARM CRITERIA	
Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?	
YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	
Does the facility have a total oil storage capacity greater than or equal to one million gallons and, within any storage area, does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation?	
YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	
Does the facility have a total oil storage capacity greater than or equal to one million gallons and is the facility located at a distance (as calculated using the appropriate formula in or a comparable formula) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments?	
YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	
Does the facility have a total oil storage capacity greater than or equal to one million gallons and is the facility located at a distance (using the appropriate formula in or a comparable formula) such that a discharge from the facility would shut down a drinking water intake?	
YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	
Does the facility have a total oil storage capacity greater than or equal to one million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last five years?	
YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	
CERTIFICATION	
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and that based on my inquiry of those individuals	

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

Signature: 	Date:
Name: Alan Cosby	Title: Terminal Supervisor

05/30/2007

Wilmington

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FIGURE E-8 - STATE CROSS-REFERENCE

APPENDIX F
ACRONYMS AND DEFINITIONS

Last revised: January 2005

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F.1 Acronyms

F.2 Definitions

F.1 ACRONYMS

ACP	Area Contingency Plan
AFFF	Aqueous Film Forming Foam
ASTM	American Society of Testing Materials
BBL	Barrel(s)
BLM	Bureau of Land Management (USDOI)
BPD	Barrels Per Day
BPH	Barrels Per Hour
CERCLA	Comprehensive Environmental Response, Compensation & Liability Act of 1980, as amended
CFR	Code of Federal Regulations
CO ₂	Carbon Dioxide
COTP	Captain of the Port (USCG)
CRZ	Contamination Reduction Zone
CWA	Clean Water Act of 1977 (Federal)
EAP	Emergency Action Plan
EMS	Emergency Medical Services
EOC	Emergency Operations Center
EPA	U. S. Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
ERAP	Emergency Response Action Plan
ERP	Emergency Response Plan
ERT	Emergency Response Team
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FOSC	Federal On-Scene Coordinator
FRP	Facility Response Plan
FRT	Facility Response Team
FWPCA	Federal Water Pollution Control Act of 1972
GIS	Geographic Information System
GPM	Gallons Per Minute
HAZMAT	Hazardous Materials
HMIS	Hazardous Material Information System
IC	Incident Commander
ICS	Incident Command System

JIC	Joint Information Center
LEL	Lower Explosive Limit

F.1 ACRONYMS, CONTINUED

LEPC	Local Emergency Planning Committee
LEPD	Local Emergency Planning District
LNG	Liquid Natural Gas
LPG	Liquefied Petroleum Gas
MPC	Magellan Pipeline Company, L.P.
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)

F.1 ACRONYMS, CONTINUED

SSC	Scientific Support Coordinator (NOAA)
UCS	Unified Command System
UEL	Upper Explosive Limit
USACOE	U. S. Army Corps of Engineers
USCG	U. S. Coast Guard
USDOD	U. S. Department of Defense
USDL	U. S. Department of Labor
USDOE	U. S. Department of Energy
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)

F.2 DEFINITIONS

Adverse Weather

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

Aqueous Film Forming Foam

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

Average Most Probable Discharge (USCG)

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

Barrel

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

Bleve

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

Boilover

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

Carbon Dioxide

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

Class A Fire

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

Class B Fire

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

Class C Fire

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

Class D Fire

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

F.2 DEFINITIONS, CONTINUED**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
- 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.

F.2 DEFINITIONS, CONTINUED

Demand Breathing Apparatus

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

Dispersants

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

Diversion Boom

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

Environmentally Sensitive Areas

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

Exclusion Zone

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

Explosive Range

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

Facility

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

Federal Fund

The oil spill liability trust fund established under OPA.

First Responders, First Response Agency

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

Flashover

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

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.

F.2 DEFINITIONS, CONTINUED

Hyperthermia

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

Ignition Temperature

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

Incident Commander (IC)

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

Incident Command System

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

Interim Storage Site

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

Lead Agency

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

Lead Federal Agency

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

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

Lead State Agency

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

Lower Flammable Limit

Minimum flammable concentration of a particular gas in the air.

Marine Transportation-Related Facility (MTR Facility)

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

Maximum Extent Practicable

The planning values derived from the planning criteria used to evaluate the response resources described in the response plan to provide the on-water recovery capability and the shoreline protection and 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.

F.2 DEFINITIONS, CONTINUED

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.

Overhaul

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

F.2 DEFINITIONS, CONTINUED

Owner or Operator

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

Persistent Oil

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

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

Primary Response Contractor(s)

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

Qualified Individual(s)

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

- Activating and engaging in contracting with identified oil spill removal organization(s)
- Acting as a liaison with the predesignated of Federal On-Scene Coordinator (FOCS)
- Obligating, either directly or through prearranged contracts, funds required to carry out all necessary or directed response activities

Regional Response Team

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

Reid Vapor Pressure Method

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

Responsible Party

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

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.

F.2 DEFINITIONS, CONTINUED**Skimmers**

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

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.

F.2 DEFINITIONS, CONTINUED

Unified Command

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

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

Warm (Contamination Reduction) Zone

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

Waste

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

Wildlife Rescue

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



Wilmington

Emergency Response Action Plan

Developed by:



TECHNICAL RESPONSE PLANNING
CORPORATION

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EMERGENCY RESPONSE ACTION PLAN

Last revised: July 7, 2011

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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 Environmental, Health, Safety, and Training Department (EHS&T) in conjunction with the Area Supervisor/Manager of Operations.

DATE OF CHANGE	DESCRIPTION OF CHANGE	PAGE NUMBER
5/1/2006	Change Manager Operations from Ed Fuchs to Frank Lynch and add Alan Cosby's home phone number.	Various
7/1/2006	Change primary OSRO from Clean Harbors to Miller Environmental.	Various
6/26/2006	Update various phone numbers.	Various
10/17/2007	Section 3 Figure 3.1-3, Appendix A Figure A.2-3 and ERAP Figure 3-2	
3/11/2008	Change phone numbers of various Magellan personnel	
8/11/2008	Appendix C Figure C-8	
8/12/2008	Appendix E Figure E-4	
9/3/2008	Appendix C Figure C-7 and ERAP Figure 5-2	
9/3/2008	Section 1 Figure 1-2	
9/12/2008	Appendix C Figure C-6 and ERAP Figure 5-1	
10/2/2008	Appendix C Figure C-4 and ERAP Figure 5-3	

10/2/2008	Appendix C Figure C-3	
12/18/2008	Section 7 Figure 7.1-1, Appendix B.1.1 and ERAP Figure 4-3	
1/15/2009	Section 3 Figure 3.1-3 and ERAP Figure 3-2	
1/16/2009	Section 7.1.1 and ERAP Figure 4-2	
1/23/2009	DOCK OPERATIONS MANUAL Figure 13	
2/3/2009	Section 7.1.1 and ERAP Figure 4-2	
6/10/2009	Appendix C Figure C-3	
6/10/2009	Appendix C Figure C-4 and ERAP Figure 5-3	
9/17/2009	Section 7.1.1 and ERAP Figure 4-2	
8/23/2010	Appendix D.8 and Figure D.8-1	
11/1/2010	Section 3 Figure 3.1-3, Appedix A Figure A.2-3 and ERAP Figure 3-2 from Company Personnel Import	
11/30/2010	Appendix C Figure C-8	
12/17/2010	Section 3 Figure 3.1-3, Appedix A Figure A.2-3 and ERAP Figure 3-2	
12/17/2010	Section 1 Figure 1-2	
12/20/2010	Appendix C Figure C-8	
12/22/2010	Section 3 Figure 3.1-3, Appedix A Figure A.2-3 and ERAP Figure 3-2	
1/26/2011	Appendix C Figure C-1	
2/15/2011	Appendix D.8 and Figure D.8-1	
2/24/2011	Section 3 Figure 3.1-3, Appedix A Figure A.2-3 and ERAP Figure 3-2 from Company Personnel Import	
3/8/2011	Appendix C Figure C-13	
4/5/2011	Section 3 Figure 3.1-3, Appedix A Figure A.2-3 and ERAP Figure 3-2	
4/27/2011	Section 6.7 and ERAP Section 6.0	
5/2/2011	Appendix D.8 and Figure D.8-1	
5/2/2011	Section 6.6 and ERAP Section 6.0	
5/2/2011	Section 6.7 and ERAP Section 6.0	
5/12/2011	Section 3 Figure 3.1-3, Appedix A Figure A.2-3 and ERAP Figure 3-2	
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6/21/2011	Section 3 Figure 3.1-3, Appedix A Figure A.2-3 and ERAP Figure 3-2 from Company Personnel Import	
6/21/2011	Section 3 Figure 3.1-3, Appedix A Figure A.2-3 and ERAP Figure 3-2 from Company Personnel Import	
6/21/2011	Section 3 Figure 3.1-3, Appedix A Figure A.2-3 and ERAP Figure 3-2 from Company Personnel Import	
7/6/2011	Section 3 Figure 3.1-3, Appedix A Figure A.2-3 and ERAP Figure 3-2 from Company Personnel Import	

7/7/2011	Section 3 Figure 3.1-3, Appedix A Figure A.2-3 and ERAP Figure 3-2	
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DISTRIBUTION LIST

PLAN HOLDER	ADDRESS	NUMBER OF COPIES		DISTRIBUTION DATE
		PAPER	ELECTRONIC	
EPA Region III	1650 Arch Street Philadelphia, PA 19103-2029	1	0	0
DNREC-Tank Management Branch	391 Lukens Drive New Castle, DE 19720	1	0	0
US Coast Guard, COTP, Philadelphia	One Washington Avenue Philadelphia, PA 19147	1	0	0
Response Plans Officer, Pipeline and Hazardous Material Safety	U.S. Department of Transportation 1200 New Jersey Ave SE., Room E22-210 Washington, DC 20590	2	0	

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1.0 INTRODUCTION

1.1 Purpose / Scope of Plan

This Wilmington Emergency Response Action Plan (ERAP) provides guidelines to assist in managing an emergency. The primary goal of this Plan is to provide tools to enable an efficient, coordinated, and effective response to emergencies.

The ERAP is not meant to replace common sense or actions not specifically described herein. Responders should continually evaluate the effectiveness of actions called for in this Plan and make the appropriate adjustments based on past experience and training.

This ERAP contains tactical response plans that identify site-specific potential response strategies. Response strategies, equipment and manpower requirements and site conditions are based on conditions that were present during site assessments. Actual conditions at the time of a response may vary significantly and may necessitate the need for a different strategy and/or equipment requirements. The strategies and equipment lists contained in this plan should be used as guidelines only.

This document is intended to satisfy the requirements of 29 CFR 1910.38(a)(2) and 1910.120(l)(2) (OSHA Emergency Response Plan and Emergency Action Plan) and 40 CFR Part 112.20 (EPA Emergency Response Action Plan). Cross references for these regulations are located in **APPENDIX E** of the Spill Response Plan.

1.2 Plan Review and Updating Procedures

The ERAP will be reviewed and modified as appropriate to address new information.

Plan revisions will be numbered sequentially and entered on the Record of Changes Form. The change numbers, date, and description of change will also be entered on the form. These changes are then to be distributed to all plan holders on the Distribution List.

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2.0 RESPONSE STEPS

Emergencies are unplanned, significant events or conditions that require time-urgent response from outside the immediate or affected area of the incident. Incidents that do not pose a significant safety or health hazard to employees in the immediate vicinity and that can be controlled by employees in the immediate area or affected facility are not classified as emergencies that would invoke the emergency plan.

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2.1 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	INITIALS
At a manned facility	
Evaluate the situation; approach cautiously from upwind; do not rush in	
Warnings, Notifications, and Evacuation: <ul style="list-style-type: none"> • Alert co-workers or others on-site; use alarm systems • Account for all personnel • Notify local police and fire departments (911), provide detailed information regarding material, product and equipment involved, wind direction 	

<p>Notify the Qualified Individual and Operations Control</p> <ul style="list-style-type: none"> • Notify the utility companies if on-site utilities, such as gas and electric, may be affected by the fire 	
<p>Site Control:</p> <ul style="list-style-type: none"> • Account for all personnel; use an entry/exit log that includes names, company and time • Prepare evacuation routes and monitor incident for changes requiring evacuation • Keep outside personnel from entering the facility; enlist aid from law enforcement • Establish safety zones • Meet fire personnel at gate; have copy of emergency plans and data on affected tank(s) • Establish a safe media assembly area 	
<p>Fire Fighting:</p> <ul style="list-style-type: none"> • Trained company personnel, firefighters, or fire and hazard control techs may attempt to extinguish the fire if it is in the incipient (early) stage and IF IT CAN BE DONE SAFELY; personnel should be prepared to evacuate if fire is beyond their capabilities to fight • If fire is too large for a Hazmat Tech to fight, the person sounding the alarm or making the phone call to 911 should stand by at a safe distance to direct the fire department and to keep personnel from entering the danger area 	
<p>Establish Command:</p> <ul style="list-style-type: none"> • Establish Incident Command • Establish a Command Post and lines of communication; use radios and cell phones • Provide fire department with contact numbers or facility radio • Appoint a recorder 	
<p>Additional Resources:</p> <ul style="list-style-type: none"> • Call in additional resources if on scene personnel and equipment are inadequate to handle the emergency <ul style="list-style-type: none"> • Air Monitoring contractors should be contacted for any large fire • Specialty Fire-fighting services • Oil Spill Removal Organizations (OSROs) 	
<p>Conduct a post-emergency evaluation and report</p>	

2.1 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	INITIALS
At an unmanned facility or on the pipeline right of way	
Handle the call	
<p>Warnings and Notifications:</p> <ul style="list-style-type: none"> • Notify local police and fire departments (911) • Notify the Qualified Individual and Operations Control • Notify the utility companies if on-site utilities, such as gas and electric, may be affected by the fire • Notify railroads or local emergency officials to halt traffic If roads or railroads are in the affected area 	
Go to the incident scene to evaluate the situation; approach cautiously from upwind; do not rush in	
<p>Site Control:</p> <ul style="list-style-type: none"> • Account for all personnel • Prepare evacuation routes and monitor incident for changes requiring evacuation • Keep outside personnel from entering area – enlist aid from law enforcement • Establish safety zones • Meet fire personnel at scene; have copy of emergency plans and data on affected lines 	
<p>Valves and Controls:</p> <ul style="list-style-type: none"> • If the fire/explosion is a result of a pipe rupture, isolate product release by closing valves outside the affected area • Stay in contact with Operations Control to update on valve closings 	
<p>Establish Command:</p> <ul style="list-style-type: none"> • Establish Incident Command • Establish a Command Post and lines of communication -use radios and cell phones • Provide fire department with contact numbers • Appoint a recorder 	
<p>Additional Resources:</p> <ul style="list-style-type: none"> • Call in additional resources if on-scene personnel and equipment are inadequate to handle the emergency • Air monitoring contractors should be contacted for any large fire • Specialty firefighting services • Oil Spill Removal Organizations (OSROs) 	
Conduct a post-emergency evaluation and report	

2.2 Spill

RESPONSE ACTION	PERSON TAKING ACTION (INITIALS)	DATE/TIME ACTION TAKEN
First Person to Discover Spill		
Take appropriate action to protect life and ensure safety of personnel. Contact the appropriate local emergency responders or request the office to do so.		
Obtain the information necessary to complete the Release/Spill Report Form (FIGURE 3-1) and phone this information to the Magellan Spill Reporting number to make appropriate regulatory notifications.		
Notify the Qualified Individual, and if necessary, the Operations Control Center.		
Immediately shutdown pipeline (if applicable). Remotely controlled motor operated valves will be closed by the Operations Center as soon as a leak is detected.		
<p>Secure the scene:</p> <ol style="list-style-type: none"> 1. Isolate the spill scene to assure the safety of people and the environment. Establish a SECURITY PERIMETER with barriers, roadblocks and fencing if possible. Keep non-essential personnel and onlookers outside the SECURITY PERIMETER. As soon as possible, assign security personnel to monitor roadblocks and other barriers, keep records of arriving responders, and to deny entry to unauthorized personnel. 2. Establish an EXCLUSION ZONE encompassing all free liquids, hazardous vapors, or any potential hazards such as fire or explosion. As soon as possible define the Hotline with a physical barrier (such as warning tape), and if possible upgrade the hotline to safety fencing as soon as materials are available. 3. All responders inside the SECURITY PERIMETER should wear high-visibility reflective vests for identification purposes. 4. Personnel should not be permitted to enter the EXCLUSION ZONE unless they are wearing appropriate PPE, and have been directed by the Incident Commander to cross the Hotline. 		
Qualified Individual		
Assume role of Incident Commander until relieved.		
Conduct preliminary assessment of health and safety hazards.		
Evacuate non-essential personnel, notify emergency response agencies to provide security, and evacuate surrounding area (if necessary).		
Notify Local Emergency Responders, if necessary.		
Call out spill response contractors (FIGURE 3-2).		

2.2 Spill, Continued

RESPONSE ACTION	PERSON TAKING ACTION (INITIALS)	DATE/TIME ACTION TAKEN
Qualified Individual, Continued		
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, etc. Keep drivers away from truck rack if spill occurs there.		
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.		
If safe to do so, direct facility responders to stabilize and contain the situation. This may include berming or deployment of containment and/or sorbent boom.		
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.		
If there is a potential to impact shorelines, consider lining shoreline with sorbent or diversion boom to reduce impact.		
Environmental Specialist		
Notify appropriate regulatory agencies per the state reporting matrix, and update any significant changes (FIGURE 3-2).		
Send out initial release report to Company personnel.		
Work assigned role in spill management team, as needed.		
Contact environmental contractors, as needed.		
Incident Commander/Qualified Individual		
Activate all or a portion of Spill Management Team (SMT) (as necessary). Environmental Specialist will maintain contact with notified regulatory agencies.		
Ensure the SMT has mobilized spill response contractors (if necessary). It is much better to demobilize equipment and personnel, if not needed, than to delay contacting them if they are needed.		
Document all response actions taken, including notifications, agency/media meetings, equipment and personnel mobilization and deployment, and area impacted. (Refer to SECTION 5 of the Spill Response Plan for documentation.)		
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 and SECTION 2.1.4 of the Spill Response Plan. Send photographer / videographer, if safe.		

2.2 Spill, Continued

RESPONSE ACTION	PERSON TAKING ACTION (INITIALS)	DATE/TIME ACTION TAKEN
SECONDARY RESPONSE ACTIONS (Refer to SMT job descriptions in SECTION 4.6 of the Spill Response Plan)		
FACILITY SPECIFIC RESPONSE CONSIDERATIONS (Refer to SECTION 6 of the Spill Response Plan for maps and sensitivity information).		
SITE SPECIFIC ACTIONS		
DOCUMENT ALL ACTIONS TAKEN		INITIALS
First Priority		
Account for all personnel and visitors.		
Identify and assess fire/safety hazards.		
Second Priority		
Secure spill source if possible.		
Assure all required notifications are conducted.		
Secure all drainage leading from facility.		
Third Priority		
Facility drainage and secondary containment will be adequate to contain a spill of small or medium size, preventing it from reaching a small retention pond with outfall lines connected to a storm water system that outfalls in close proximity to the Delaware River. Once the spill has been contained, resources are present at the facility to recover spilled product, safety conditions permitting.		
If unable to contain spill to facility property, refer to SECTION 6.8 of the FRP for location of booming/fill dirt strategy.		
Once deployment of response equipment has been completed, initiate recovery of product.		
Upon arrival of SMT, assure all information is accurate and complete prior to being released.		
Assure proper documentation has been completed from initial discovery of spill to finish; reference SECTION 5 in the Spill Response Plan .		

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2.2 Spill, Continued

RESPONSE ACTION	PERSON TAKING ACTION (INITIALS)	DATE/TIME ACTION TAKEN
Cold Weather Response		
PPE is essential; use a layered approach <ul style="list-style-type: none"> Base Layer - lightweight, snug fitting, and has the ability to wick perspiration away from the body (silk, polypropylene, etc.) 		

<ul style="list-style-type: none"> • Mid Layer - insulating and wicking material (fleece, wool, microfiber, etc.) • Waterproof Outer Layer - wind proof, water repellent material, breathable (nylon, gore-tex, down, etc.) • Footwear - thin socks (nylon, silk, wool), heavier socks (wool), overboots (rubber, waterproof & insulated) • Hand and Head Protection - layer with liners and waterproof shells as appropriate, 40-80% of heat loss is through the head (gore-tex, fleece, wool, down, etc.) <p>Remember the COLD method; Clean (keep insulating layers clean), Overheating (adjust layers of clothing as needed), Loose Layers (wear several layers that don't impede circulation), Dry (stay dry, avoid cotton).</p>		
<p>Watch for signs of hypothermia (shivering, apathy, slurred speech, confusion, poor coordination and unconsciousness). Call for medical assistance if symptoms are present.</p>		
<p>If spill involves a water body, assess water body conditions including:</p> <ul style="list-style-type: none"> • Location of release and product • Current and direction of movement (spill movement will be slower under ice) 		
<p>Conducting oil recovery operations on iced bodies of water can be dangerous. Only personnel or OSROs trained in cold weather response tactics should undertake this type of effort.</p>		
<p>Rules and Tactics for Ice recovery operations by trained and qualified personnel:</p> <ul style="list-style-type: none"> • Always use a buddy system and wear harnesses when working on ice. • Do not stand over slotted ice. • Determine thickness of ice (A powered auger can be used to determine ice conditions). Note: River Ice will be less stable than Lake Ice. • Slotting involves cutting and removing ice blocks at a 30 degree angle to the current. The end of the slot should be wide enough to house an oil skimmer. • Slots should be cut with a slight "J" curve to provide current slow toward the shoreline recovery area. • Effective barriers can be installed by augering holes next to each other and installing plywood sheets to divert product to a sump area. 		

2.2 Spill, Continued

RESPONSE ACTION	PERSON TAKING ACTION (INITIALS)	DATE/TIME ACTION TAKEN
Cold Weather Response		

<p>Snow can absorb released product. Depending on the moisture content of the snow, it can act as a wick, pulling product away from the release site. Impacted snow can be addressed by techniques including:</p> <ul style="list-style-type: none"> • Temporary storage in a side dump to reduce or eliminate any leakage from melting snow or product • Stockpiling under a rack so melt water and product drain to a sump • Using a “thawzall” heating system to melt snow stockpiled under a rack or in a side dump. 		
<p>Well-compacted snow lined with plastic can be used as a berming material.</p>		
<p>Employ standard spill response procedures, including:</p> <ul style="list-style-type: none"> • Establish incident command. • Making proper notifications. • Identify and Isolate the source. • Monitor weather conditions. • Use appropriate PPE. • Monitor vapors. • Establish site control. 		

2.3 Evacuation

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

2.3 Evacuation, Continued

EVACUATION FACTORS

FACTOR	DESCRIPTION
Stored material location	<ul style="list-style-type: none"> • Located in oil storage area • Identified in facility Plot Plan (SECTION 5.0)
Spilled material hazards	<ul style="list-style-type: none"> • Hazard is fire/explosion
Water currents, tides or wave conditions	<ul style="list-style-type: none"> • Not applicable
Evacuation routes	<ul style="list-style-type: none"> • Routes are summarized on Evacuation Plan Diagram (FIGURE 5-2) • Criteria for determining safest evacuation routes from facility may include: wind direction, potential exposure to toxins and carcinogens, intense heat, potential for explosion/fire, and blockage of planned route by fire, debris, or released liquid
Alternate evacuation routes	<ul style="list-style-type: none"> • Alternate routes may exist; refer to Evacuation Plan Diagram (FIGURE 5-2)
Injured personnel transportation	<ul style="list-style-type: none"> • Emergency vehicles can be mobilized to the facility
	<ul style="list-style-type: none"> • _____ • _____ • _____
Community evacuation plans	<ul style="list-style-type: none"> • Company may request local police, county sheriff and/or state police assistance. Community evacuations are the responsibility of these agencies. <ul style="list-style-type: none"> ◦ Port of Wilmington Evacuation Plan and public address and siren system
Spill flow direction	<ul style="list-style-type: none"> • Easterly toward the Delaware River • Identified in facility drainage diagram (FIGURE 5-1)
Prevailing wind direction and speed	<ul style="list-style-type: none"> • Varies from 7-10 mph from the S or WNW. • Because wind direction varies with weather conditions, consideration for evacuation routing will depend in part on wind direction
Emergency personnel/response equipment arrival route	<ul style="list-style-type: none"> • I495 to Port of Wilmington Exit (Hwy 9A) to Main port entrance, then Christina Ave. to Terminal • Directions to nearest medical facility provided below

2.3 Evacuation, Continued

EVACUATION FACTORS, CONTINUED	
FACTOR	DESCRIPTION
	<ul style="list-style-type: none"> • [Redacted] • [Redacted]
	<ul style="list-style-type: none"> • [Redacted] • [Redacted]
	<ul style="list-style-type: none"> • [Redacted] • [Redacted]
Directions to nearest medical facility	<p>Directions to St. Francis Hospital :</p> <ul style="list-style-type: none"> • Start at 1050 Christiana Ave, Wilmington going toward A ST - go 1.1 mi. Turn right on US-13 NORTH - go 0.4 mi. Continue on 4th St - go 1.5 mi. Turn right on N Clayton St - go 0.2 mi. Arrive at St. Francis Hospital, 701 N Clayton St.

[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]

2.4 Medical

MEDICAL CHECKLIST

TASK	INITIALS
Summon Emergency Medical Services (EMS) to the scene	
Do not move the patient unless a situation (such as a fire) threatens their life	
If trained, provide first aid until the EMS arrives at the scene	
As the situation warrants, try to stop the bleeding and keep the patient breathing until the EMS arrives at the scene	
<p>The rescuer's role includes:</p> <ul style="list-style-type: none"> • Removing the patient from any situation threatening their 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 	

2.5 Tornado

TORNADO CHECKLIST	
TASK	INITIALS
Use television or radio to monitor news weather reports	
When a tornado warning is issued, sound the local alarm	
<p>Tornado Watch:</p> <ul style="list-style-type: none"> • Tornado watch means conditions are favorable for tornadoes • Monitor television, radio or weather alert radio reports for approaching storms • Be prepared to take action if the watch is upgraded to a warning • Pre-Identify facility shelter locations <ul style="list-style-type: none"> • Sturdy building • Bottom floor • Innermost room with the maximum number of walls between occupants and outside • Minimum number of windows 	
<p>Tornado Warning:</p> <ul style="list-style-type: none"> • Tornado warning means a tornado has been sighted. A warning may come from emergency officials but may also come from facility personnel who site a funnel formation and hear a roar similar to a jet engine 	

<p style="text-align: center;">People in its path should take shelter immediately</p> <ul style="list-style-type: none"> • Sound the local alarm • Have location personnel report to a designated shelter area • Consider shutting down operations if it can be done safely • Account for all personnel • Take shelter; under furniture using arms to protect head and neck 	
<p>After High Winds or Tornadoes:</p> <ul style="list-style-type: none"> • Account for all personnel; check for injuries and contact emergency medical assistance, if needed • Evaluate the facility • Use caution when entering damaged buildings • Check for down power lines • Update Operations Control and the Qualified Individual/Supervisor 	
Perform Initial Response Actions functions as stated in FIGURE 2-1 of the Spill Response Plan	
Conduct post-emergency evaluation and report	

2.6 Flood

FLOOD CHECKLIST	
TASK	INITIALS
Perform continuous monitoring of the situation by listening to radio and/or television reports <ul style="list-style-type: none"> • Flash flood watch means flooding is possible • Flash flood warning means flooding is occurring or is imminent 	
Update the Qualified Individual/Supervisor and Operations Control when flooding is imminent	
Establish an evacuation plan (SECTION 2.3)	
Take preliminary actions to secure the facility before flooding and mandatory evacuation	
Consider having sandbags brought to sites that could be affected by the flooding	
Consider obtaining portable pumps and hoses from local suppliers or from other petroleum service locations in the area	
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	
Keep at least a normal bottom in all above ground tankage, more if possible	
If time allows, consider removing pumps and motors that may be affected by a flood	
Plug all rack drains and facility drains connected to the sump	
Anchor all bulk additive tanks, fuel barrels, empty drums, and propane tanks	

(if applicable)	
Monitor locations of sample bottles	
Remove all vehicles from potential flood area	
Maintain contact with OSROs before and during flooding conditions	
Locate power generators before flooding is imminent	
Update Qualified Individual/Supervisor and Operations Control on facility status	
Back up computer files	
Remove assets such as files, computers, and spare parts	
Shut off high voltage power and natural gas lines	
Close all valves on product and additive storage tanks	
Before evacuation, know where all the employees will be residing and obtain phone numbers so they can be contacted if additional emergencies occur	
Conduct a post-emergency evacuation and report	
Maintain hazards awareness: <ul style="list-style-type: none"> • Structural damage • Downed power lines • Leaking natural gas, water, and sewer lines • Poisonous snakes and other wildlife sheltering in structures, vehicles, and furniture • Avoid direct contact with flood water, mud, and animal carcasses 	

2.7 Ice/Snow Storm

ICE/SNOW STORM CHECKLIST	
TASK	INITIALS
Monitor news and weather reports on television or the radio	
Alert co-workers or others on-site that severe weather is approaching	
Be aware of the dangers posed by ice and snow falling from equipment	
Be aware of product release danger posed by ice falling on exposed piping	
Monitor ice and snow accumulation on tanks	
Obtain snow or ice removal equipment	
Obtain generators, if necessary to re-power facilities	
Use cold weather response techniques when responding to product spills as released product may flow under ice or snow	
Establish and maintain communication with personnel in remote areas	
Ensure that vehicles have a full tank of gas and are functioning (heater, windshield wipers, etc.)	
Consider limiting vehicle traffic	

2.10 FLAMMABLE VAPOR CLOUD RELEASE RESPONSE ACTION CHECKLIST

Not applicable at this facility.

2.11 HYDROGEN SULFIDE (H₂S) RELEASE

Not applicable at this facility.

3.0 NOTIFICATIONS

FIGURE 3-1 - RELEASE/SPILL REPORT FORM

Report	Date	Number	Time	Name	Title	City	State
NRC	<input type="checkbox"/>						

Call Magellan Spill Reporting at 1-877-852-0015 to report all releases (suspected or confirmed)

Is this a drill: Type of Drill: 

Reporter's Name: Report Time:
Please provide the correct spelling

Phone Number: Job Title:

Date Release Occurred:
Month Day Year State

Material: Estimated Released 0 (gallons)

CHRIS Code Estimated Discharge to Water 0 (gallons)

Estimated Free Liquids Recovered 0 (gallons)

*Released to: Estimated Amount Recovered Soil 0 (gallons)

Estimated Total Amount Recovered 0 (gallons)

Define Other: Estimated Amount Not Recovered 0 (gallons)

Note: *For a release to be contained inside of a "dike" it must be a permanent dike designed specifically to contain releases.

Was maintenance being performed at the time of the incident? Intentional Blowdown?

Release Reportable? Waterway Affected? Waterway Name:

SERC <input type="checkbox"/>							
	Was a written report requested?		Time Frame	<input type="text"/>	Days		
TNRCC <input type="checkbox"/>							
	If a written report is requested, do not provide it. Contact Environmental Specialist.						
LEPC <input type="checkbox"/>							
Other <input type="checkbox"/>							

Facility Name Release Occurred: Facility Type:

Did release occur on loading rack or non-breakout tank/piping? If yes, Ignore Pipeline Information

AND/OR

Pipeline Name Release Occurred:

Pipeline Interstate Asset?

Incident Description: (Include details of container type, and facility and container volumes in gallons, and the distance and direction from the nearest city in miles and degrees)

Response Actions:

Impact: (Include description of the medium affected and any relevant additional information; and in addition, provide the details of any evacuations, including the number of persons evacuated)

FIGURE 3-1 - RELEASE/SPILL REPORT FORM, CONTINUED

Call Magellan Spill Reporting at 1-877-852-0015 to report all releases (suspected or confirmed)			
Release Discovered by:	<input type="text"/>	Discover Time:	<input type="text"/>
Release Verified:	<input type="text"/>	Verification Time:	<input type="text"/>
		Release Stop Time:	<input type="text"/>
BU:	<input type="text"/>	District:	<input type="text"/>
		Area:	<input type="text"/>
Area Supervisor:	<input type="text"/>	Asset Integrity Contact:	<input type="text"/>
		(COM/Maint Supervisor)	

Address of Release: City:

Nearest City: County: Zip Code:

Caller's E-mail Address: Provide spelling of e-mail address.

Pipeline Address:

Section Township Range Milepost Tract #

Latitude Longitude

Engineering Stationing Number:

Origin of Release:

Cause (pre-investigation) Check all that apply:

- Third Party Damage
- Internal Corrosion
- External Corrosion
- Natural Forces
- Human Error - Contractor
- Human Error - Company Personnel
- Human Error - Driver
- Pipe or Weld Failure - Other than Corrosion
- Equipment Failure
- Unknown
- Other

Did weather affect the release in any way? Yes No If Yes, Explain:

Temp Relative Humidity Precipitation:

Cloud Cover Wind Speed Wind Direction:

Injury Fire Fatality Explosion Unconsciousness

Injury Requiring Hospitalization? Significant News Coverage:

Incident Classification: Loss/Damage Estimate:

Loss and damage estimate should include all costs associated with clean-up (maintenance, cleanup, product loss).

Environmental Contact for release:

Safety Contact for this release:

Form completed by: Completion Date:

Latest revision date for form 06/16/08

Replaces previous revision date 02/20/04

Magellan Midstream Partners, L.P. One Williams Center, P.O. Box 3102 Tulsa, OK 74172
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FIGURE 3-2 - NOTIFICATIONS AND TELEPHONE NUMBERS

*24 Hour Number

FACILITY RESPONSE TEAM		
NAME/TITLE	PHONE NUMBER	RESPONSE TIME (hours)
Alan Cosby Supv Area Qualified Individual	302/654-3717 (Office) 302/985-1891 *(Mobile) (302) 655-3209 (fax) (Pager)	0.75
Andrew Zaun Supv Maintenance II Qualified Individual	302/654-3717 (Office) 302/985-3531 *(Mobile)	.5
Dan Whitmarsh Terminal Operator Sr Qualified Individual	302/654-3717 (Office) 302/985-1881 *(Mobile)	0.50
Brad Righi Technician Sr	302/654-3717 (Office)	.75

Refer to **APPENDIX A, FIGURE A.2-3** of the Spill Response Plan for personnel training records. Refer to **FIGURE 1-1** of the Spill Response Plan for last date revised.

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FIGURE 3-2 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED

*24 Hour Number

EMERGENCY RESPONSE PERSONNEL						
NAME/TITLE	PHONE NUMBER	RESPONSE TIME (hours)	RESPONSIBILITY DURING RESPONSE ACTION	RESPONSE TRAINING TYPE ¹		
				1	2	3
Alan Cosby Supv Area Qualified Individual	302/654-3717 (Office) 302/985-1891 *(Mobile) (302) 655-3209 (fax) (Pager)	.75	Spill Management Team	x	x	x

Andrew Zaun Supv Maintenance II Qualified Individual	302/654-3717 (Office) _____ 302/985-3531 *(Mobile)	.5	Spill Management Team	x	x	x
Dan Whitmarsh Terminal Operator Sr Qualified Individual	302/654-3717 (Office) _____ 302/985-1881 *(Mobile)	.5	Spill Management Team	x	x	x
Rick Bondy ER Preparedness Prog Coordinator	918/574-7363 (Office) _____ 918/629-8207 *(Mobile)	12	SMT Coordinator	x	x	x
Amber Kistler Safety Specialist	918/574-7758 (Office) 515/408-6652 *(Mobile)		Spill Management Team	x	x	
Chris Nelson Environmental Specialist II	918/574-7380 (Office) _____ 918/706-6162 *(Mobile)	12	Agency Liason	x		
Bruce Heine Dir Government & Media Affairs	918/574-7010 (Office) _____ 918/645-8989 *(Mobile)	12	Spill management team - media relations	x	x	

EMERGENCY RESPONSE TRAINING TYPE

TYPE	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** of the Spill Response Plan for training dates.

FIGURE 3-2 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED

*24 Hour Number

EMERGENCY RESPONSE CONTRACTORS						
NAME/TITLE	PHONE NUMBER	RESPONSE TIME (hours)	RESPONSIBILITY DURING RESPONSE ACTION	RESPONSE TRAINING TYPE ¹		
				1	2	3
Miller Environmental Group	(856) 224-1100	1	Primary Response	x	x	x
Guardian Companies, Inc.	(302) 918-3070	1	Secondary Response	x	x	x
EMERGENCY RESPONSE TRAINING TYPE						
TYPE	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** of the Spill Response Plan for training dates.

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FIGURE 3-2 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED

*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Initial		
Magellan Spill Reporting	(877) 852-0015*	
National Response Center (NRC)	(800) 424-8802* (202) 267-2675*	
Recommended		
Federal Agencies		
EPA Region III, Philadelphia	(215) 814-5000	
FEMA	(800) 462-7585	
U.S.C.G. Captain of the Port, Philadelphia	(215) 271-4807	
US Coast Guard, Philadelphia	(215) 271-4800	
State Agencies		

Delaware Dept. of Natural Resources and Environmental Control (DNREC), Emergency Response Commission	(800) 662-8802	
Delaware State Police, Wilmington	(302) 573-2800	
NJ Department of Emergency Planning and Response	(609) 633-2168	
NJ Dept. of Environmental Protection	(877) 927-6337	
PA Dept of Emergency Response, Southeast Region (Delaware County)	(484) 250-5900	
PA Dept. of Environment Protection (Southeast Region)	(484) 250-5900	
State Emergency Response Committee (SERC)	(800) 662-8802	
Local Agencies		
City of Wilmington, Delaware	(302) 654-5151 or 911	
Health Department-City of Wilmington, Delaware	911	

FIGURE 3-2 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED

*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Recommended , Continued		
Local Agencies		
New Castle Co. LEPC	(302) 395-3633 (866) 274-0884	
New Castle County	911	
Police Departments		
Harbor Police-Port of Wilmington	(302) 472-7864	
Police Department-City of Wilmington, Delaware	911	
Fire Departments		
Wilmington Fire Department	911, (302) 571-4594	
Emergency Medical Services		
Ambulance Department-City of Wilmington, Delaware	911	
St. Francis Hospital	(302) 421-4100	

Wilmington Hospital (Christiana Care)	(302) 428-4181	
Service Providers		
Center for Toxicology & Environmental Health (CTEH)	(866) 869-2834*	
Delmarva Power, electric service	(302) 454-0317	
Guardian Companies, Inc.	(302) 918-3070	
HMHTTC Response Inc.	(888) 774-5571, 302-777-7403	
Williams Fire & Hazard Control (Tank Firefighting & Equipment)	281-999-0276 409-727-2347	
Wilmington Tug and Launch Service (Tug boats)	(302) 652- 1666	
USCG Classified OSRO's		
Clean Venture Inc. Clayton, NJ	(856) 863-8778, (800) 412-9794 pager	

FIGURE 3-2 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED

*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Recommended , Continued		
USCG Classified OSRO's		
Lewis Environmental Royersford, PA	(800) 258-5585, (800) 258-5585*	
Miller Environmental Group Paulsboro, NJ	(856) 224-1100	
Television Stations		
WPVI-Channel 6, Wilmington	(302) 429-6666	
Weather		
Weather Channel Forecast	www.weather.com	
Weather Underground Forecast	www.wunderground.com	
Transport Companies		
Interstate Bulk Transport (Ibt)	(856) 853-8566	

Lee Transport Incorporated LLC Elmer, NJ	(856) 358-7555	
Tipton Trucking Co. Inc.	(800) 444-7178 (610) 932-5120	
Waste Management		
Clean Harbors of Braintree	(781) 380-7100 (781) 380-7190 FAX 1-800-645-8265	
Clean Harbors of Maine, Inc.	(207) 772-2201	
Clean Harbors Woburn, MA	(781) 935-9066	
GSX	(803) 452-5003	
MSDS		
3E - MSDS Hotline	(888) 677-2370*	
Parks/Recreation Areas		
Fort Mott State Park, Killcohook National Wildlife Refuge Pennsville, New Jersey	(609) 540-6190	
Water Intakes		
United Water	(302) 633-5900	

FIGURE 3-2 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED

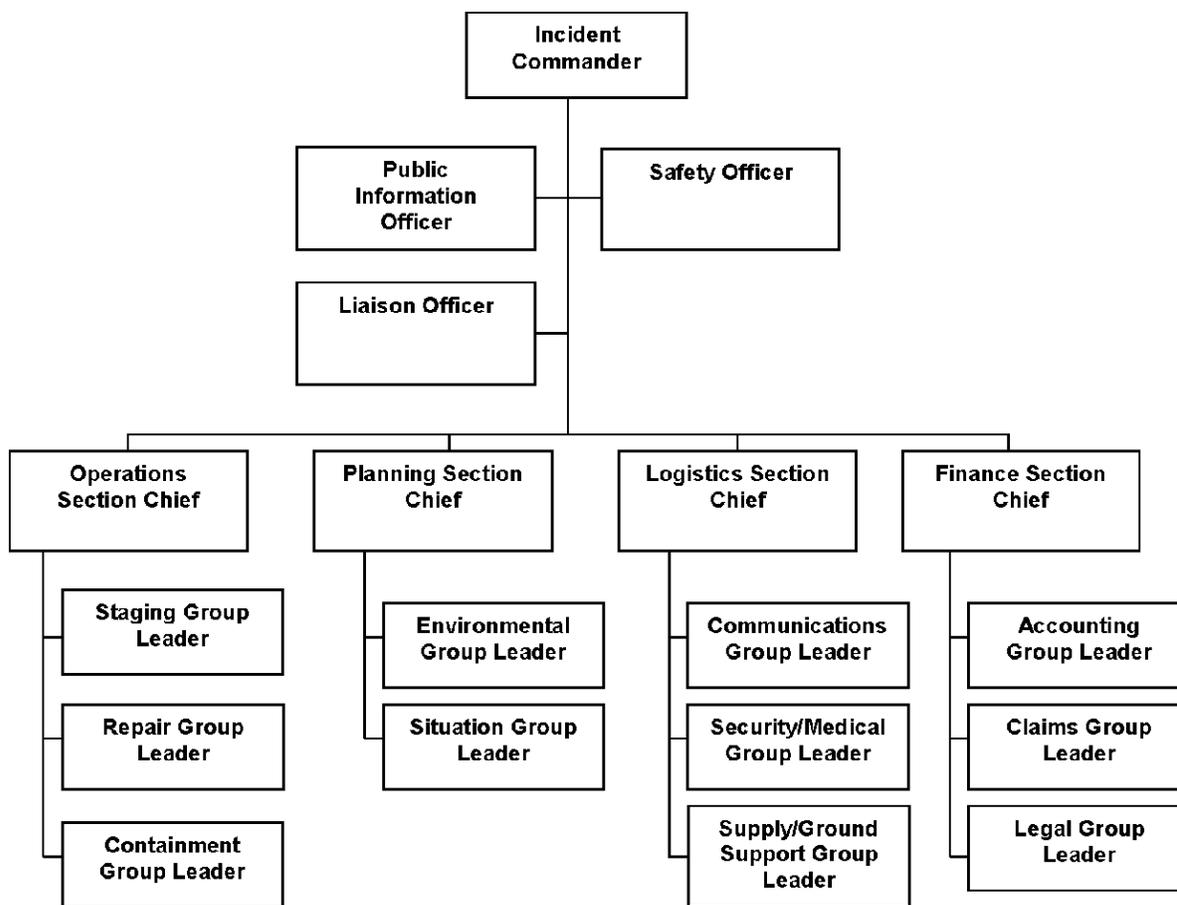
*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Recommended , Continued		
Neighboring Facilities		
Atlantic Electric	(609) 678-1730* Main Control Room	
Delmarva Power, Edgemoor	(302) 761-7099 *, main gate (302) 761-7103 *, operations	
DuPont Chambers Works	(856) 540-2222	
DuPont, Edgemoor	(302) 761-2218*,	

	Main Gate (302) 761-2579, Site Security (302) 761-2218 , Emer. Resp. Mgr.	
IKO Manufacturing	(302) 764-3100	
Salem Nuclear Power Plant	(609) 769-2959	

4.0 RESOURCES

FIGURE 4-1 - RESPONSE TEAM ORGANIZATION CHART*



*Note: Job descriptions for each SMT member are provided in the SECTION 4.6 of the Spill Response Plan.

FIGURE 4-2 - FACILITY EQUIPMENT*

						OPERATIONAL	LOCATION
--	--	--	--	--	--	-------------	----------

CATEGORY	TYPE/MODEL	QUANTITY	SIZE	YEAR PURCHASED	STATUS/ABSORPTION CAPACITY	AT FACILITY
Booms	American Boom & Barrier, Mark II-River	400 feet	18	1986-2009	Operational/250,000+ sq. ft.	400' at the dock facility
Communication	Motorola Radios XPR 6350	15	Mototurbo (Digital)	2009	Operational/ N/A	Control Buildings
Fire Detection Systems		1	N/A	Unknown	Operational/ N/A	Clean Oil Truck Rack
Fire Fighting Equipment	Aboveground Water Storage Tank	1	10,000 BBL	2004	Operational/ NA	Terminal Facility
Fire Fighting Equipment	Electric Fire Pump	1	3,000 gpm at 140psi	2004	Operational/ NA	Terminal Facility
Fire Fighting Equipment	12" underground fire water supply piping	3000 ft	12"	2008	Operational/ NA	From Terminal Facility to Dock
Fire Fighting Equipment	Foam Risers	2	6	2008	Operational / NA	Foam Tank Building at Dock
Fire Fighting Equipment	Foam Bladder Tank	1	2000 gal	2008	Operational/ NA	Foam Tank Building at Dock
Fire Fighting Equipment	Water Line on Trestle and Dock	1900 ft	4 and 6 inch	2008	Operational / NA	Trestle and Dock
Fire Fighting Equipment	Foam Solution Piping	1800 ft	8 and 6 inch	2008	Operational / NA	Trestle and Dock
Fire Fighting Equipment	Remote Controlled Oscillating Monitors	4	500 gpm	2008	Operational / NA	Dock
Fire Fighting Equipment	Manual Pull Stations	7	N/A	2008	Operational / NA	Trestle and Dock
Fire Fighting Equipment	Releasing Panel	1	N/A	2008	Operational / NA	Foam Tank Building at Dock
Fire Fighting Equipment	Remote Control Monitor Panel	1	N/A	2008	Operational / NA	Trestle
Fire Fighting Equipment	Respirators	15	N/A	Unknown	Operational/ N/A	Terminal Facility
Fire Fighting Equipment	CPK Fire Extinguishers	8	20LB	Unknown	Operational/ N/A	Dock Facility
Fire Fighting Equipment	Misc. Protective Clothing	Unknown	Varoious	Unknown	Operational/ N/A	Terminal Facility
Fire Fighting Equipment	Water Systems	2	N/A	Unknown	Operational/ N/A	Hydrant Systems
Fire Fighting Equipment	Water Systems	1	N/A	Unknown	Operational/ N/A	10,000 BBL Water Tank

Fire Fighting Equipment	Standpipes/Hydrants	1	N/A	Unknown	Operational/ N/A	Terminal Access Road Behind Control Building
Fire Fighting Equipment	Standpipes/Hydrants	1	N/A	Unknown	Operational/ N/A	Between Maint. Heaters 2 & 4
Fire Fighting Equipment	Standpipes/Hydrants	1	N/A	Unknown	Operational/ N/A	Terminal Road Behind Tank T2
Fire Fighting Equipment	Standpipes/Hydrants	1	N/A	Unknown	Operational/ N/A	Terminal Road Behind Tank T4
Fire Fighting Equipment	Standpipes/Hydrants	1	N/A	Unknown	Operational/ N/A	Inside Tank T6 Dike Area
Fire Fighting Equipment	Standpipes/Hydrants	1	N/A	Unknown	Operational/ N/A	Behind Clean Oil Manifold
Fire Fighting Equipment	Standpipes/Hydrants	1	N/A	Unknown	Operational/ N/A	Behind 10" Pipeline Pig Launcher
Fire Fighting Equipment	Standpipes/Hydrants	1	N/A	Unknown	Operational/ N/A	Terminal Entrance
Hand Tools	Shovels	15	N/A	Unknown	Operational/ N/A	Maintenance Building
Hand Tools	Rakes/Pitchforks	2/2	N/A	Unknown	Operational/ N/A	Maintenance Building
Hand Tools	Trash Pump	2	N/A	Unknown	Operational/ N/A	Maintenance Building
Hand Tools	Generator	1	N/A	Unknown	Operational/ N/A	Maintenance Building
Heavy Equipment	John Deere Backhoe	1	N/A	1999	Operational/ N/A	Shop Building
Sorbents	SPC Mobile Spill Totes SKM-XLT	3	XL Marine	2009	Operational/ N/A	Dock
Sorbents	Coastal Pak Pillows, Rolls, Spill Blanket	10		Unknown	Operational/ N/A	Terminal Storage
Sorbents	Oil Only Pads	10		Unknown	Operational/ N/A	Terminal Storage
Sorbents	Conweb sorbent boom	300'	8	2006-2009	Operational/1,050 Gal.	Terminal Facility

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

**FIGURE 4-3 - REGIONAL COMPANY AND RESPONSE CONTRACTOR'S
EQUIPMENT LIST / RESPONSE TIME**

*USCG Classified OSRO for facility

COMPANY/CONTRACTOR	EQUIPMENT	RESPONSE TIME
HMHTTC Response Inc. Wilmington, DE		0.5 hours
*Miller Environmental Group Paulsboro, NJ	Full response capabilities	1 hours
*Guardian Companies, Inc. Bear, DE		1 hours
*Clean Venture Inc. Clayton, NJ	Full response capabilities	1.25 hours
*Lewis Environmental Royersford, PA	Full response capabilities	1.75 hours

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

**FIGURE 4-4 - EPA REQUIRED RESPONSE EQUIPMENT TESTING AND DEPLOYMENT
DRILL LOG**

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)	

5.0 PLOT PLANS / TANK TABLE

FIGURE 5-1 - DRAINAGE DIAGRAM

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

This ICP is based on a database design that was intended to be maintained through a worldwide web interface. As a result, global references are made within the plan text to certain components of the plan, such as drawings, which are not titled after those database references. For example, the Drawing entitled "Evacuation Plan" is referred to within the ICP (body and cross reference) as Figure C-7, but the actual drawing is entitled "Figure 1: Evacuation Plan" on the hard copy. This is an inevitable consequence of the design of the plan. This naming convention is important to consider when using the hard copy cross reference during a regulatory review; however, when using the plan as intended or reviewing the plan on a computer, the database naming convention does not affect the utility or cogency of the plan. For further explanation please contact the plan holder or TRP.

FIGURE 5-2 - EVACUATION DIAGRAM

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

This ICP is based on a database design that was intended to be maintained through a worldwide web interface. As a result, global references are made within the plan text to certain

components of the plan, such as drawings, which are not titled after those database references. For example, the Drawing entitled "Evacuation Plan" is referred to within the ICP (body and cross reference) as Figure C-7, but the actual drawing is entitled "Figure 1: Evacuation Plan" on the hard copy. This is an inevitable consequence of the design of the plan. This naming convention is important to consider when using the hard copy cross reference during a regulatory review; however, when using the plan as intended or reviewing the plan on a computer, the database naming convention does not affect the utility or cogency of the plan. For further explanation please contact the plan holder or TRP.

FIGURE 5-3 - TANK TABLE

Container/ Source	Failure/Cause	Total Capacity (gal)	Secondary Containment Volume Type (gal)	Tank Type	Year Constructed/ Installed	Quantity Stored (gal)	Direction of Flow/Rate (See Plot Plan)	Product Stored
ABOVEGROUND CONTAINERS - Total:								
T1	Overfill/ Failure			V/ FX	1974		West/ nstantaneous	No. 6 Fuel Oil
T2	Overfill/ Failure			V/ FX	1974		West/ nstantaneous	No. 6 Fuel Oil
T3	Overfill/ Failure			V/ FX	1975		North/ nstantaneous	No. 6 Fuel Oil
T4	Overfill/ Failure			V/ FX	1975		North/ nstantaneous	No. 4 Oil
T5	Overfill/ Failure			V/ FX	1974		West/ nstantaneous	Heating Oil
T6	Overfill/ Failure			V/ FX	1976		North/ nstantaneous	No. 6 Fuel Oil
T7	Overfill/ Failure			V/ FX	1979		North/ nstantaneous	No. 6 Fuel Oil
T8	Overfill/ Failure			V/ FX	1980		West/ nstantaneous	No. 4 Oil
T9	Overfill/ Failure			V/ FX	1980		Southwest/ nstantaneous	No. 6 Fuel Oil
T10	Overfill/ Failure			V/ FX	1980		South/ nstantaneous	No. 6 Fuel Oil
T11	Overfill/ Failure			V/ FX	1980		South/ nstantaneous	Gasoline
T12	Overfill/ Failure			V/ FX	1980		South/ nstantaneous	Gasoline
T15	Overfill/ Failure			V/ FX	1991		West/ nstantaneous	Marine diesel
T16	Overfill/ Failure			V/ FX	1991		West/ nstantaneous	Heating Oil
T17	Overfill/ Failure			V/ FX	1991		West/ nstantaneous	No. 6 Oil
T18	Overfill/ Failure			V/ FX	1991		West/ nstantaneous	No. 6 Oil
T19	Overfill/ Failure			V/ FX	1991		North/ nstantaneous	No. 6 Oil

	Failure	FX		Instantaneous	Oil
T20	Overfill/ Failure	V/ FX	1991	North/ Instantaneous	No. 6 Oil
T21	Overfill/ Failure	V/ FX	2004	West/ Instantaneous	Diesel
T22	Overfill/ Failure	V/ FX	2004	West/ Instantaneous	Diesel

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

* Not in Containment Area ** Curbing and containment system

Containment Type:? 1-Earthern Berm and Floor,? 2-Concrete Berm and Floor, 3-Metal Berm and Floor, 4-Portable Containment or Inside Building, 5-Double Walled, 6-Earthern Floor and Concrete Walls

Tank / Roof Type: C =Conical or Cone, D = Dome, H = Horizontal, L = Lifter, S = Spheroid, V = Vertical, G = Geodesic,

Fx = Fixed, F = Floating, W = Welded, R = Riveted

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FIGURE 5-3 - TANK TABLE , CONTINUED

Container/ Source	Failure/Cause	Total Capacity (gal)	Secondary Containment Volume Type (gal)	Tank Type	Year Constructed/ Installed	Quantity Stored (gal)	Direction of Flow/Rate (See Plot Plan)	Product Stored
ABOVEGROUND CONTAINERS - Total:								
T29	Overfill/ Failure			V/ F	1950's		West/ Instantaneous	Diesel
T23	Overfill/ Failure			I/ FL	2008		West/ Instantaneous	Gasoline
T24	Overfill/ Failure			I/ FL	2008		West/ Instantaneous	Gasoline
T25	Overfill/ Failure			I/ FL	2008		West/ Instantaneous	Gasoline
T26	Overfill/ Failure			I/ FL	2008		West/ Instantaneous	Ethanol
T27	Overfill/ Failure			I/ FL	2008		West/ Instantaneous	Fuel Oil No. 2
T28	Overfill/ Failure			I/ FL	2008		West/ Instantaneous	Gasoline
T30	Overfill/ Failure			I/ FL	2008		West/ Instantaneous	Gasoline
T31	Overfill/ Failure			I/ FL	2008		Varies depending on release ocation/Instantaneous	Gasoline
T32	Overfill/ Failure			I/ FL	2008		South/ Instantaneous	Ethanol
T33	Overfill/ Failure			I/ FL	2008		South/ Instantaneous	Gasoline
T34	Overfill/ Failure			I/ FL	2008		South/ Instantaneous	Fuel Oil No. 2
ADDITIVE CONTAINERS -								

1A	Overfill/ Failure		Horizontal Fixed	2008		South/ Instantaneous	Gasoline Additive
2A	Overfill/ Failure		Horizontal Fixed	2008		South/ Instantaneous	Diesel Additive
DRUM STORAGE AREA -							
Drums	Spill/ Rupture		Drums	N/A		West/ Instantaneous	Maintenance Fluids
MISCELLANEOUS - Total:							
Front Truck Loading Rack	Rupture		-	N/A		East/ Instantaneous	Varies
Black Oil Truck Rack (back rack)	Rupture		-	N/A		North/ Instantaneous	Varies
Black Oil Manifold	Rupture		-	N/A		East/ Instantaneous	Varies
Transfer Pump Area	Leak/ Failure		-	N/A		East/ Instantaneous	Varies
Clean Oil Rack Sump	Overfill		H	N/A		Contained	Varies

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

* Not in Containment Area ** Curbing and containment system

Containment Type:? 1-Earthen Berm and Floor, ? 2-Concrete Berm and Floor, 3-Metal Berm and Floor, 4-Portable Containment or Inside Building, 5-Double Walled, 6-Earthen Floor and Concrete Walls

Tank / Roof Type: C =Conical or Cone, D = Dome, H = Horizontal, L = Lifter, S = Spheroid, V = Vertical, G = Geodesic, Fx = Fixed, F = Floating, W = Welded, R = Riveted

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FIGURE 5-3 - TANK TABLE , CONTINUED

Container/ Source	Failure/Cause	Total Capacity (gal)	Secondary Containment Volume Type (gal)	Tank Type	Year Constructed/ Installed	Quantity Stored (gal)	Direction of Flow/Rate (See Plot Plan)	Product Stored
MISCELLANEOUS -								
Front Rack Overflow Tank	Overfill/ Failure			Horizontal Fixed	2008		East/ Instantaneous	Varies
Foam House	Overfill/ Failure			H	Unknown		West/ Instantaneous	No. 2 Diesel Oil
Maintenance Building	Overfill/ Failure			H	Unknown		South/ Instantaneous	No. 2 Diesel Oil
Clean Oil Truck Rack	Rupture			-	Unknown		East/ Instantaneous	No. 2 Diesel Oil

UNDERGROUND CONTAINERS -							
Front Rack Sump	Overfill		H	2008		West	Varies
Facility Total:							

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

* Not in Containment Area ** Curbing and containment system

Containment Type: ? 1-Earthen Berm and Floor, ? 2-Concrete Berm and Floor, 3-Metal Berm and Floor, 4-Portable Containment or Inside Building, 5-Double Walled, 6-Earthen Floor and Concrete Walls

Tank / Roof Type: C =Conical or Cone, D = Dome, H = Horizontal, L = Lifter, S = Spheroid, V = Vertical, G = Geodesic, Fx = Fixed, F = Floating, W = Welded, R = Riveted

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6.0 ENDANGERED AND THREATENED SPECIES BY STATE AND EPA PLANNING DISTANCE AND SENSITIVITY MAPS

ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Bat, Indiana	<i>Myotis sodalis</i>	Caves, mines, upland forests	E	New Jersey
Beaked-rush, Knieskem's	<i>Rhynchospora knieskernii</i>	Edges of abandoned clay, sand, and gravel pits	T	Delaware
Dropwort, Canby's	<i>Oxypolis canbyi</i>	Pond cypress savannahs, cypress/pond pine ponds, sloughs, and wet pine savannas	E	Delaware
Joint-vetch, sensitive	<i>Aeschynomene virginica</i>	Freshwater to slightly brackish tidal marshes	T	New Jersey
Pink, swamp	<i>Helonias bullata</i>	Acidic wetlands	T	New Jersey
Pink, swamp	<i>Helonias bullata</i>	Acidic wetlands	T	Delaware
Pogonia, small whorled	<i>Isotria medeoloides</i>	Cidic soils, in dry to mesic second-growth	T	Delaware
Sea turtle, Kemp's ridley	<i>Lepidochelys kempii</i>	Shallow areas with sandy and muddy bottoms	E	Delaware
Sea turtle, Kemp's ridley	<i>Lepidochelys kempii</i>	Shallow areas with sandy and muddy bottoms	E	New Jersey
Squirrel, Delmarva Peninsula fox Entire, except Sussex Co.,	<i>Sciurus niger cinereus</i>	Edges of mixed pine-hardwood	E	Delaware

DE		forests		
Sturgeon, shortnose	<i>Acipenser brevirostrum</i>	Rivers, estuaries, and the sea	E	Delaware
Sturgeon, shortnose	<i>Acipenser brevirostrum</i>	Rivers, estuaries, and the sea	E	New Jersey
Tern, roseate northeast U.S. nesting pop.	<i>Sterna dougallii dougallii</i>	Coastal islands and beaches	E	New Jersey
Tiger beetle, northeastern beach	<i>Cicindela dorsalis dorsalis</i>	Coastal beaches	T	New Jersey
Turtle, bog (=Muhlenberg) northern	<i>Clemmys muhlenbergii</i>	Calcareous (limestone) fens, sphagnum bogs, and wet, grassy pastures	T	New Jersey
Turtle, bog (=Muhlenberg) northern	<i>Clemmys muhlenbergii</i>	Calcareous (limestone) fens, sphagnum bogs, and wet, grassy pastures	T	Delaware
Whale, finback	<i>Balaenoptera physalus</i>	Offshore ocean waters	E	Delaware

Wilmington

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6.0 ENDANGERED AND THREATENED SPECIES BY STATE AND EPA PLANNING DISTANCE AND SENSITIVITY MAPS

ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Whale, finback	<i>Balaenoptera physalus</i>	Offshore ocean waters	E	New Jersey
Whale, humpback	<i>Megaptera novaeangliae</i>	Surface of the ocean	E	New Jersey
Whale, humpback	<i>Megaptera novaeangliae</i>	Surface of the ocean	E	Delaware
Whale, right	<i>Balaena glacialis (incl. australis)</i>	Surface of the ocean	E	Delaware
Whale, right	<i>Balaena glacialis (incl. australis)</i>	Surface of the ocean	E	New Jersey

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MAP FEATURE INDEX

MAP ID#*	MAP NAME	FEATURE	NAME
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1	Sensitivity Figure 3	Transportation Route	DuPonts Landing Pier (Edgemoor 2)
2	Sensitivity Figure 3	Water Intake	Surface Water Intake: DuPont Edgemoor
3	Sensitivity Figure 3	Water Intake	Surface Water Intakes (3); Calpine-Edgemoor 1-4, Calpine-Edgemoor 5, and Calpine-Hay Road 4&8
4	Sensitivity Figure 3	Water Intake	Surface Water Intake; El DuPont-Edgemoor
5	Sensitivity Figure 3	Businesses	Unnamed pier. Snow pier.
6	Sensitivity Figure 3	Lakes and Streams	Confluence of Shellpot Creek and Delaware River
7	Sensitivity Figure 3	Recreational Area	Shore residents on east bank of Delaware River (Penns Grove), 1 mile to north and south
8	Sensitivity Figures 3 & 4	Lakes and Streams	USGS Gaging Station 01481602, Delaware River below Christina River at Wilmington, DE
9	Sensitivity Figures 3 & 4	Recreational Area	Helms Cove
10	Sensitivity Figures 3 & 4	Lakes and Streams	Confluence of Christina River and Delaware River
11	Sensitivity Figures 3 & 4	Recreational Area	Carneys Point
12	Sensitivity Figures 3 & 4	Lakes and Streams	Confluence of Hanby Creek and Delaware River
13	Sensitivity Figures 3 & 4	Lakes and Streams	Overland flow entering drainage ditch
14	Sensitivity Figures 3 & 4	Transportation Route	Flow under Allen Court
15	Sensitivity Figures 3 & 4	Transportation Route	Flow under Allen Court
16	Sensitivity Figures 3 & 4	Businesses	Unnamed pier
17	Sensitivity Figures 3 & 4	Lakes and Streams	Overland flow entering drainage ditch

18	Sensitivity Figures 3 & 4	Transportation Route	Flow under Allen Court
19	Sensitivity Figures 3 & 4	Lakes and Streams	Overland flow entering drainage ditch to Delaware River
20	Sensitivity Figure 4	Lakes and Streams	Confluence of Whooping John Creek and Delaware River
21	Sensitivity Figure 4	Lakes and Streams	Confluence of overland drainage and Delaware River
22	Sensitivity Figure 4	Recreational Area	Deepwater Point
23	Sensitivity Figure 4	Lakes and Streams	Sluice Gate
24	Sensitivity Figure 4	Recreational Area	Boat Ramp (unnamed)
25	Sensitivity Figure 4	Utilities	Above ground pipeline
26	Sensitivity Figure 4	Transportation Route	State Hwy 40, Interstate 295, Delaware Memorial Bridges tower/pier crossing over Delaware River
27	Sensitivity Figure 4	Lakes and Streams	Confluence of unnamed tributary and Delaware River
28	Sensitivity Figure 4	Lakes and Streams	Confluence of Deepwater Canal and Delaware River
29	Sensitivity Figure 4	Transportation Route	Deepwater Station Heliport (GNIS location questionable)
30	Sensitivity Figure 4	Water Intake	Surface Water Intakes (2); Calpine-Deepwater Station Powerplant & El Dupont-Chambers Works
31	Sensitivity Figure 4 & 5	Schools	Pencader Charter High School
32	Sensitivity Figure 4 & 5	Recreational Area	Shore residents on east bank of Delaware River, next 1.2 miles to south-southwest
33	Sensitivity Figure 5	Lakes and Streams	Sluice Gate

* Map ID# corresponds to sensitivities labeled on the following maps.

MAP FEATURE INDEX, CONTINUED

MAP ID#*	MAP NAME	FEATURE	NAME

34	Sensitivity Figure 5	Recreational Area	Travis Cove Jetty
35	Sensitivity Figure 5	Recreational Area	Brandiff Beach
36	Sensitivity Figure 5	Lakes and Streams	Sluice Gate
37	Sensitivity Figure 5	Recreational Area	Riverview Beach Park
38	Sensitivity Figure 5	Recreational Area	Shore residents on west bank of Delaware River (New Castle), next 0.2 mile to south-southwest
39	Sensitivity Figure 5	Endangered Flora and Fauna	NOAA Environmental Sensitivity Index Habitat Point (Bur-marigold)
40	Sensitivity Figure 5	Recreational Area	Shore residents on east bank of Delaware River (Penns and Riverview Beach), next 1.8 miles to the SW
41	Sensitivity Figure 5	Recreational Area	Battery Park and Pier
42	Sensitivity Figure 5	Endangered Flora and Fauna	NOAA Environmental Sensitivity Index Habitat Point (Bur-marigold)
43	Sensitivity Figure 5	Lakes and Streams	Confluence of Hoppemense Creek and Delaware River
44	Sensitivity Figure 5	Endangered Flora and Fauna	NOAA Environmental Sensitivity Index Habitat Point (Bur-marigold)
45	Sensitivity Figure 5	Recreational Area	Deemers Beech
46	Sensitivity Figure 5	Endangered Flora and Fauna	NOAA Environmental Sensitivity Index Habitat Point (Bur-marigold)
47	Sensitivity Figure 5	Lakes and Streams	Confluence of Army Creek and Delaware River
48	Sensitivity Figure 5	Recreational Area	Pennsville Municipal Boat Ramp
49	Sensitivity Figure 5	Lakes and Streams	Confluence of Stonebank Creek and Delaware River
50	Sensitivity Figure 5	Recreational Area	Kelly Point
51	Sensitivity Figure 5	Businesses	Unnamed pier
52	Sensitivity Figure 5	Recreational Area	Shore park on Delaware River
53	Sensitivity Figure 5	Recreational Area	Deemers Beech

54	Sensitivity Figure 5 & 6	Lakes and Streams	Confluence of Miles Creek and Delaware River
55	Sensitivity Figure 5 & 6	Lakes and Streams	Pea Patch Island Dike (submerged)
56	Sensitivity Figure 5 & 6	Lakes and Streams	Confluence of Gambles Gut and Delaware River
57	Sensitivity Figure 6	Recreational Area	Killcohook National Refuge
58	Sensitivity Figure 6	Recreational Area	Ommelanden Hunter State Safety Training Center
59	Sensitivity Figure 6	Lakes and Streams	Confluence of Tom Creek with Delaware River
60	Sensitivity Figure 6	Lakes and Streams	Concrete Pier
61	Sensitivity Figure 6	Utilities	Overhead electric tower
62	Sensitivity Figure 6	Lakes and Streams	Confluence of Red Lion Creek and Delaware River
63	Sensitivity Figure 6	Recreational Area	Fort Mott State Park and historical Military Battery
64	Sensitivity Figure 6	Lakes and Streams	Concrete Pier
65	Sensitivity Figure 6 & 7	Utilities	Pipeline pier and light to Occidental Chemical Corp. and Kuehne Chemical
66	Sensitivity Figure 6 & 7	Recreational Area	Fort Mott State Park pier

* Map ID# corresponds to sensitivities labeled on the following maps.

MAP FEATURE INDEX, CONTINUED

MAP ID#*	MAP NAME	FEATURE	NAME
67	Sensitivity Figure 6 & 7	Recreational Area	Shore residents on east bank of Delaware River, next 0.2 miles to southeast
68	Sensitivity Figure 6 & 7	Recreational Area	Fort Delaware State Park / Pea Patch Island
69	Sensitivity Figure 6 & 7	Recreational Area	Supawna Meadows National Wildlife Refuge
70	Sensitivity Figure 6 & 7	Lakes and Streams	Confluence of unnamed tributary and Delaware River
71	Sensitivity Figure 6 & 7	Fish and Wildlife	NOAA Environmental Sensitivity Index Nest (various birds, see Sensitivity Map

			Figure 2 for species)
72	Sensitivity Figure 6 & 7	Lakes and Streams	Confluence of unnamed tributary and Delaware River
73	Sensitivity Figure 7	Lakes and Streams	Confluence of Goose Pond / Goose Creek / Mill Creek and Delaware River
74	Sensitivity Figure 7	Lakes and Streams	Light and historical Military Battery
75	Sensitivity Figure 7	Water Intake	Surface Water Intake: Delaware City Refinery, Reybold Cove
76	Sensitivity Figure 7	Lakes and Streams	Confluence of Dragon Creek and Delaware River
77	Sensitivity Figure 7	Transportation Route	Delaware City
78	Sensitivity Figure 7	Endangered Flora and Fauna	NOAA Environmental Sensitivity Index Habitat Point (Bur-marigold)
79	Sensitivity Figure 7	Recreational Area	Penn-Salem Marina and boat ramp
80	Sensitivity Figure 7	Lakes and Streams	Confluence of Chesapeake and Delaware Canal with the Delaware River
81	Sensitivity Figure 7	Lakes and Streams	Confluence of Baldrige Creek and Delaware River
82	Sensitivity Figure 7	Recreational Area	Fort DuPont State Park boat launch
83	Sensitivity Figure 7	Recreational Area	Fort DuPont State Park and historical Military Battery
84	Sensitivity Figure 7	Lakes and Streams	Confluence of Salem River and Delaware River
85	Sensitivity Figure 7	Recreational Area	Shore residents on east bank of Delaware River (Oakwood Beach), next 1.7 miles to south-southwest
86	Sensitivity Figure 7 & 8	Lakes and Streams	Confluence of Chesapeake and Delaware Canal with the Delaware River, and light
87	Sensitivity Figure 7 & 8	Recreational Area	Salen Country Club on shore of Delaware River
88	Sensitivity Figure 7 & 8	Recreational Area	Chesapeake and Delaware Canal fishing pier. Canal Wildlife Area.
89	Sensitivity Figure 8	Recreational Area	C&D Canal State Wildlife Management Area
90	Sensitivity Figure 8	Recreational Area	Abbots Meadow State Wildlife Management Area
91	Sensitivity	Lakes and Streams	Confluence of St. George

	Figure 8		Creek and Delaware River
92	Sensitivity Figure 8	Lakes and Streams	Confluence of Mill Creek and Delaware River
93	Sensitivity Figure 8	Recreational Area	Augustine State Wildlife Management Area
94	Sensitivity Figure 8	Lakes and Streams	Confluence of unnamed tributary and Delaware River
95	Sensitivity Figure 8 & 9	Lakes and Streams	Sluice Gate
96	Sensitivity Figure 8 & 9	Lakes and Streams	Confluence of Straight Ditch and Delaware River
97	Sensitivity Figure 8 & 9	Recreational Area	Canadas Beach
98	Sensitivity Figure 8 & 9	Recreational Area	Reedy Island
99	Sensitivity Figure 9	Recreational Area	Augustine Beach State Fishing and Access Area

* Map ID# corresponds to sensitivities labeled on the following maps.

MAP FEATURE INDEX, CONTINUED

MAP ID#*	MAP NAME	FEATURE	NAME
100	Sensitivity Figure 9	Lakes and Streams	Confluence of Back Ditch and Delaware River
101	Sensitivity Figure 9	Recreational Area	Augustine Beach
102	Sensitivity Figure 9	Recreational Area	Augustine Beach boat landing. DE River.
103	Sensitivity Figure 9	Recreational Area	Shore residents on west bank of Delaware River (Augustine Beach), next 0.2 mile to south-southwest
104	Sensitivity Figure 9	Recreational Area	Mad Horse Creek State Wildlife Management Area
105	Sensitivity Figure 9	Utilities	Daybeacons
106	Sensitivity Figure 9	Lakes and Streams	Confluence of Alloways Creek and Delaware River
107	Sensitivity Figure 9	Lakes and Streams	Light and Reedy Island Dike
108	Sensitivity Figure 9	Utilities	Salem-Hope Creek Nuclear Power Plant - Nuclear Spoil Area at Artificial Island

109	Sensitivity Figure 9	Lakes and Streams	Confluence of Augustine Creek and Delaware River
110	Sensitivity Figure 9	Lakes and Streams	Confluence of Hope Creek and Delaware River
111	Sensitivity Figure 9 & 10	Recreational Area	Shore residents on west bank of Delaware River (Bay View Beach), next 0.4 mile to south-southwest
112	Sensitivity Figure 9 & 10	Recreational Area	Reedy Island Dike
113	Sensitivity Figure 10	Lakes and Streams	Confluence of Silver Run Creek and Delaware River
114	Sensitivity Figure 10	Utilities	Salem-Hope Creek Nuclear Power Plant
115	Sensitivity Figure 10	Lakes and Streams	Confluence of Upper Break and Delaware River
116	Sensitivity Figure 10	Lakes and Streams	Light and end of Reedy Island Dike
117	Sensitivity Figure 10	Water Intake	Surface Water Intake: Salem-Hope Creek Nuclear Power Plant - Water Intake - PSE&G Hope Creek
118	Sensitivity Figure 10	Lakes and Streams	Confluence of Lower Break and Delaware River
119	Sensitivity Figure 10	Water Intake	Surface Water Intake: Salem-Hope Creek Nuclear Power Plant - Water Filtration Plant - PSE&G Salem
120	Sensitivity Figure 10	Recreational Area	Mad Horse Creek State Wildlife Management Area
121	Sensitivity Figure 10	Lakes and Streams	Confluence of Appoquinimink River and Delaware River

* Map ID# corresponds to sensitivities labeled on the following maps.

SENSITIVITY DESCRIPTION

EXPLANATION OF THE VULNERABILITY ANALYSIS:

A Vulnerability Analysis has been conducted for the terminal using the following general methodology (in accordance with 40CFR 112, Appendix F, paragraph 1.4.2 and 1.4.3, and external references provided therein):

Hazards identified in FIGURE C-4 of this terminal Integrated Contingency Plan (ICP) are carefully reviewed for spill potential.

Worst-case, Medium and Small Spill Scenarios are developed on the basis of spill history of the terminal; vulnerability to natural disaster; the operator's knowledge and experience related to the terminal's spill history, container age and other factors; and the sensitivities identified within the calculated planning distance.

Sensitive receptors are reviewed, and Tactical Plans are developed to mitigate the risk of exposure of the identified receptors to an oil spill.

Tactical exercises and oil spill prevention meetings are conducted to increase awareness, decrease the probability of oil spills, and increase the effectiveness of mitigation techniques employed should a spill occur.

Within this ICP, the Vulnerability Analysis required under Pt 112, App. F is split across three sections in the document. APPENDIX C comprises the hazard analysis (Spill Prevention Containment and Countermeasures Plan); APPENDIX D comprises the hazard analysis continuation, scenario analysis and downstream planning distance calculations; and SECTION 6 comprises the sensitivity analysis - this is also where the detailed Tactical Site Plans are located.

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Sensitivity Map

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Sensitivity Map

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7.0 TACTICAL PLANS

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LINK FILES



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 REGION III
 1650 Arch Street
 Philadelphia, Pennsylvania 19103-2029

NOTIFICATION OF APPROVAL OF FACILITY RESPONSE PLAN

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Paul Potts
 Magellan Terminal Holdings, LP
 Wilmington DE Terminal
 P.O. Box 22186, MD 27-3
 Tulsa, OK 74121-2186

AUG 30 2007

ENVIRONMENTAL COMPLIANCE DOCUMENT

Location Wilmington State DE

<input type="checkbox"/> Air Quality	<input type="checkbox"/> Spill Control
<input type="checkbox"/> Air Inventories	<input type="checkbox"/> Waste Min.
<input type="checkbox"/> Haz Waste	<input type="checkbox"/> Water Mgmt.
<input type="checkbox"/> Non-Haz Waste	<input type="checkbox"/> Well
<input type="checkbox"/> Other _____	<input type="checkbox"/> AST
Retention _____	<input type="checkbox"/> TSCA

Re: **FRP Regional ID: DEFRP003 - Magellan Terminal Holdings, LP**
Wilmington DE Terminal
Plan Review Date: August 7, 2007

Dear Mr. Potts:

This letter is to notify you that the U.S. Environmental Protection Agency, Region III (EPA) has approved your Facility Response Plan (FRP), dated August 2007, because it meets the minimum requirements of 40 C.F.R. § 112.20. Your FRP will be maintained in this office while your facility is subject to jurisdiction under the regulations and it will be treated in accordance with 40 C.F.R. Part 2, Public Information.

When changes occur at a facility that materially affect a facility's ability to respond to a worst case discharge, the facility owner or operator is required to provide EPA with a copy of the FRP revisions that address these changes, within 60 days of each material change, as cited at 40 C.F.R. § 112.20(d)(1). Facility changes that may materially affect the response to a worst case discharge include:

- (i) A change in the facility's configuration that materially alters the information included in the response plan;
- (ii) A change in the type of oil handled, stored, or transferred that materially alters the required response resources;
- (iii) A material change in capabilities of the oil spill removal organization(s) that provide equipment and personnel to respond to discharges of oil;
- (iv) A material change in the facility's spill prevention and response equipment or emergency response procedures; and
- (v) Any other changes that materially affect the implementation of the response plan.



In addition, facilities are required to provide EPA any changes to personnel and telephone lists included in the FRP, and other changes in the oil spill removal organization(s) that do not materially affect a worst case discharge, in accordance with 40 C.F.R. § 112.2(d)(2). Please include the facility ID number referenced above on any FRP revisions and send your revisions to:

**U.S. ENVIRONMENTAL PROTECTION AGENCY
FRP COORDINATOR
OIL AND PREVENTION BRANCH (3HS61)
1650 ARCH STREET
PHILADELPHIA, PENNSYLVANIA 19103-2029**

Should you have any questions regarding this matter, please contact Linda Ziegler, Facility Response Plan Coordinator, at (215) 814-3277.

Sincerely,


for Karen Melvin, Associate Division Director
Office of Enforcement
Hazardous Site Cleanup Division

cc: Linda Ziegler (3HS61)
Mike Towle, OSC (3HS32)



Via FedEx

June 5, 2007

COTP
United States Coast Guard
Sector Delaware Bay
One Washington Ave.
Philadelphia, PA 19147
Phone: (215) 271-4864

Re: Magellan Terminal Response Plan Update
1050 Christina Ave., Wilmington Delaware

Dear Sir or Madam:

Enclosed is a copy of an updated and completely revised format of our Facility Response Plan for the above referenced terminal. These new plans are being developed to more effectively address these requirements and to be consistent among all of our facilities.

Please contact me at (918) 574-7725 or paul.potts@magellanlp.com if you have any questions or need any additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "Paul Potts", is written over a horizontal line.

Paul Potts
Sr. Environmental Specialist
Magellan Midstream Partners, LP
One Williams Center
Tulsa, OK 74172
(918) 574-7725
Paul.potts@magellanlp.com

Cc: Alan Cosby – Wilmington Terminal
Wilmington Terminal Tulsa File



U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

May 9, 2006

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

Certified Mail – 7005 1160 0004 7587 6393 Return Receipt Requested

Mr. Paul Potts
Magellan Terminals Holdings, LP
P.O. Box 22186, MD 27-3
Tulsa, OK 74121-2186

Re: OPS Plan Sequence Number 1731 (Wilmington Terminal)

Dear Mr. Potts,

The Pipeline and Hazardous Materials Safety Administration (PHMSA) has received your 31 October 2006 plan revisions to the Facility Response Plan (FRP) for the above-referenced response zone submitted with your 1 May 2006 letter. We will review the revision to determine whether the revision fully satisfy the planning standards established by 49 CFR 194, *Response Plans for Onshore Transportation-Related Oil Pipelines*. After we complete the review, we will notify you of the results, including any deficiencies that need correction to maintain the plan's compliance with the regulation.

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

Sincerely,

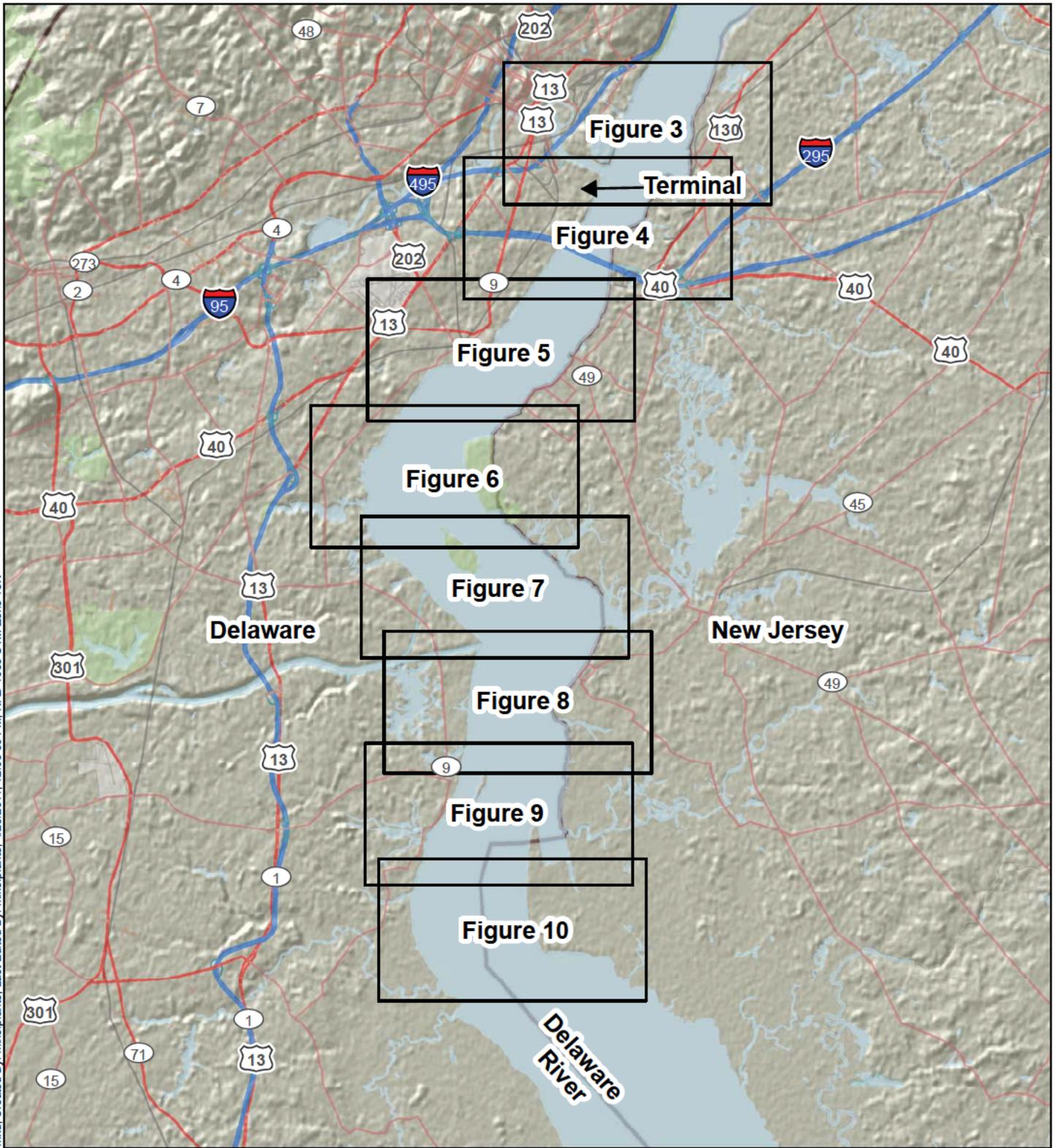
A handwritten signature in black ink, appearing to read "L. E. Herrick".

L. E. Herrick
Response Plans Officer

FIGURE 5.3-2 - PRELIMINARY SAFETY PLAN

Superseded By Revised PSP

1. Incident Name:		2. Operational Period (Date/Time): From:				3. Date:		4. Time:		Site Diagram:																		
HAZMAT RISKS (L = Low, M = Medium, H = High)					RISK MITIGATION SUGGESTIONS																							
DIVISION OR TASK GROUP	Fire/Explosion	Responder Breathing	Bystander Breathing	Dermal Contact	Drowning	Weather Conditions	Slips Trips Falls	Cold/Heat/Fatigue																				
Prepared by (Name and Position):																												
SAFETY MESSAGE:																												
<p>1. My name is _____ and I am functioning as Safety Officer for the Pipeline Company. This Safety Message will be provided to all personnel upon their arrival at this incident site, and also at the beginning of every scheduled Command Meeting.</p> <p>2. This is a hazardous material(s) incident. The material(s) of concern is (are) _____.</p> <p>3. Access to the exclusion area is restricted to all personnel unless authorized by the Incident Commander. The exclusion area consists of the area directly impacted by hazardous liquids or vapors plus a safety buffer of _____ feet added to the impacted perimeter, and a safety buffer of _____ feet added to the perimeter downwind to eliminate the risk of ignition of the material, inhalation of vapors, or direct contact with the material.</p> <p>4. The exclusion area is shown on the Site Map [show map]. The exclusion area <u>has /has not</u> been physically delineated with <u>stakes/pins/tape/fencing</u>.</p> <p>5. The Security Perimeter is shown on the site map. Access to the Security Perimeter will be controlled by Company employees or public safety personnel. Only personnel who are HAZWOPER trained and/or authorized by the Incident Commander will be permitted inside the Security Perimeter.</p> <p>6. The following minimum Personal Protective Equipment is mandatory at all times within the Security Perimeter: Level D PPE plus Hi-Vis Reflective Vests. Boom crews must wear personal flotation devices when working near water. Additional PPE _____.</p> <p>7. Breathing zone air monitoring for <u>organic vapors/hydrogen sulfide/other material (specify)</u> is mandatory for each work crew when within the exclusion area. Should monitoring indicate detections for target vapors, the Incident Commander will be notified immediately. Additional PPE will be specified by the Incident Commander as necessary.</p> <p>8. Be vigilant for trip hazards and open excavations. Be vigilant for signs of fatigue or stress induced by difficult conditions or extreme temperatures.</p> <p>9. The weather for the next operational period is expected to be:</p> <p>a. Temperature: _____ Trend for next 48 h: _____</p> <p>b. Wind Speed: _____ Direction: <u>(N S E W)</u> Trend for next 48 h: _____</p> <p>c. Precipitation: <u>None/Rain/Snow</u> Rate: <u>Lite/Med/Hvy</u> Trend for next 48 h: _____</p>																												
General Diagram Instructions:																												
															<p>A. Sketch with major feature locations (buildings, drainage paths, roads, etc.)</p> <p>B. Hazardous substance location</p> <p>C. Work zones (exclusion, contamination reduction, support)</p> <p>D. Command center and decontamination area</p> <p>E. Access and access restrictions</p> <p>F. Routes of entry</p> <p>G. Wind direction</p> <p>H. Emergency evacuation routes</p> <p>I. Assembly points</p> <p>J. First aid locations</p> <p>K. Communication system</p>													

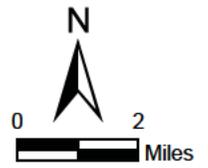
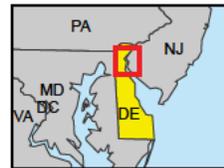


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Note: See Figure 2 for map source information.



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 (651) 490-1405



MAGELLAN TERMINAL HOLDINGS, L.P.
 WILMINGTON TERMINAL
 WILMINGTON, DELAWARE

SENSITIVITY MAP INDEX

FILE: g3wilsons01c.MXD

DATE: 4/25/2011

FIGURE: 1

Geographic Names Information System (GNIS) Point Data

Airport	Church	Park	Swamp
Area	Civil	Pillar	Tower
Bar	Cliff	Populated Place	Trail
Basin	Crossing	Post Office	Tunnel
Bay	Dam	Rapids	Valley
Beach	Falls	Reserve	Woods
Bend	Forest	Reservoir	All other values (flat, gap, gut, levee, plain, and range)
Bridge	Harbor	Ridge	
Building	Hospital	School	
Canal	Island	Sea	
Cape	Lake	Slope	
Cemetery	Locale	Spring	
Census	Military	Stream	
Channel	Mine	Summit	

NOAA Environmental Sensitivity Index Data

Airport	Historical stie
Access	Marina
Archaeological site	Recreational fishing
Boat ramp	Water intake
Coast Guard	Habitat Point (*)
Ferry	Nest (**)

Notes:

(*) Bur-marigold shrub
 (**) Black-crowned night heron, Cattle egret, Glossy bis, Great blue heron, Great egret, Little blue heron, Snowy egret, Tricolored heron, and Yellow-crowned night heron.

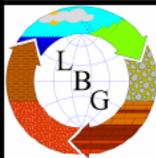
Other Map Feature Data

- Boat Ramps
- USGS Stream Gage Location
- Surface Water Intake

Data Sources

- USGS Stream Gaging Stations (<http://waterdata.usgs.gov/nwis/rt>)
- USGS Geographic Names Information System (GNIS) – Domestic Names Database (http://geonames.usgs.gov/domestic/download_data.htm)
- Shaded Relief Map - ESRI Data CDs – srtm_n_relief_w.jp2 – SRTM Mission DEM
- USGS Quadrangle Maps – Various maps from GIS Data Depot at <http://data.geocomm.com/> (select quads)
- Streets, Railroads, Landmarks, Water, Cities from ESRI Streetmap North America – ESRI dataset ArcGIS 10
- Miscellaneous Information from <http://maps.google.com/>
- Point, Line, and Area Landmarks from TIGER 2009 data (<http://data.geocomm.com/>)
- Boat Ramps from <http://www.state.nj.us/dep/fgw/pdf/delaces.pdf> and http://www.fw.delaware.gov/Fisheries/Documents/2011_Delaware_fishing_guide.pdf
- Surface Water Intakes from Delaware River Basin Commission
- NOAA Environmental Sensitivity Index map data from <http://response.restoration.noaa.gov/index.php>, Keyword: "ESI GIS data"

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 WILMINGTON, DELAWARE

SENSITIVITY MAP SYMBOL INDEX

FILE: g3wilsons01f.MXD	DATE: 4/25/2011	FIGURE: 2
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Maps and figures have been redacted in accordance with the FOIA Exemption 7(F).

Company's OriginalMaster Services Agreement
Number 08MMLP152**Master Services Agreement**

This Master Services Agreement ("Agreement") entered into on February 9th, 2009 ("Effective Date") between Magellan Midstream Partners, L.P. ("Magellan"), a Delaware limited partnership, whose address is One Williams Center, Tulsa, Oklahoma 74172 and the following "Contractor":

Name:	Center for Toxicology and Environmental Health, L.L.C.
State and Form of Organization:	AR - Limited Liability Company
Address:	5120 North Shore Dr. North Little Rock, AR 72118 501-801-8500

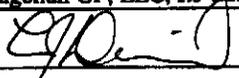
Magellan and Contractor hereinafter are referred to individually as a "Party" or collectively as the "Parties".

I. **Purpose:** Magellan and Contractor have entered into this Agreement because one or more Magellan Affiliates may engage Contractor to perform air modeling and industrial hygiene services. If a Magellan Affiliate wishes to engage Contractor, the Magellan Affiliate and Contractor will enter into a Request for Services. In this Agreement, Magellan and Contractor agree in advance to certain terms and conditions that will be applicable to any Request for Services. This Agreement does not guarantee that either Contractor or any Magellan Affiliate will enter into any Request for Services. However, once a Request for Services is executed between a Magellan Affiliate and Contractor, the terms and conditions expressed in this Agreement will govern the provision of Work under the Request for Services.

II. **Separate Obligations:** Each Request for Services will create a separate contract between Contractor and the Magellan Affiliate that executes the Request for Services. No Magellan Affiliate, other than the Magellan Affiliate that executes the Request for Services, will be liable for the obligations that arise under the Request for Services.

III. **Term:** The initial term of this Agreement will be for a period of one (1) year. This Agreement will automatically extend from month to month thereafter. Either Party may terminate this Agreement at the end of the initial term or at the end of any extension period by providing the other Party with written notice at least thirty (30) days prior to the intended termination date. The terms and conditions of this Agreement will survive and continue to apply to any Request for Services entered into between Contractor and a Magellan Affiliate that was executed prior to the termination of this Agreement.

IV. **Schedules:** The following schedules are attached hereto and incorporated herein: Schedule "A"—General Terms and Conditions; and Schedule "B"—Contractor's Rates.

Magellan Midstream Partners, L.P. By Magellan GP, LLC, Its General Partner	Center for Toxicology and Environmental Health, L.L.C.
By: 	By: 
Name: LARRY J. DAVIED	Name: Troy Chandler
Title: VP, TECHNICAL SERVICES	Title: Controller



Schedule "A"
General Terms and Conditions

1. **Definitions:** In addition to the definitions provided elsewhere in this Agreement, the following definitions will apply:
- 1.1 **"Authorized Substance(s)"** means a prescription drug for a current medical condition taken in accordance with a prescription from a licensed physician, and over-the-counter drugs for a current medical condition taken in accordance with the manufacturer's directions.
- 1.2 **"Company"** means the Magellan Affiliate that enters into a Request for Services with Contractor.
- 1.3 **"Claims"** means all causes of actions, claims, damages, judgment, settlement, penalty, fine, lien, demands, liability, costs, losses and expenses, including all expenses of litigation, court costs and reasonable attorney fees.
- 1.4 **"DOT"** means the Department of Transportation.
- 1.5 **"Hazardous Material"** means any hazardous or toxic substance, material, or waste, any pollutant or contaminant, or any other substance that is listed, defined, or regulated by applicable Law including polychlorinated biphenyl, asbestos (friable and non-friable), radon, urea, formaldehyde, gasoline, diesel, oil, and other hydrocarbons.
- 1.6 **"Intellectual Property"** means any intellectual property, including trademarks, trade dress, trade secrets, unregistered copyrights, registered copyrights, patentable inventions, and patents, eligible for protection under Law, including the Trademark Act of 1946, as superceded or amended, the Copyright Act of 1976, as superceded or amended, and the Patent Act, as superceded or amended.
- 1.7 **"Law"** means any and all laws, regulations, rules, ordinances, codes, orders and decrees of any local, state, or federal governmental authority affecting this Agreement, a Request for Services or the Work.
- 1.8 **"Magellan Affiliates"** means Magellan and any of its direct, indirect, present, and future subsidiaries and affiliates. Any entity that is controlled by or under common control with Magellan Midstream Partners, L.P. will be deemed a Magellan Affiliate.
- 1.9 **"PSM"** means Process Safety Management.
- 1.10 **"Reasonable Suspicion"** means a belief that an individual has engaged in prohibited activities based on specific, objective and articulable facts and reasonable inferences drawn from those facts in light of experience.
- 1.11 **"Request for Services"** means a fully-executed written agreement between Company and Contractor entered into pursuant to this Agreement expressing the scope of Work, compensation, commencement date, completion date, insurance requirements, and any additional terms and conditions for the performance of Work.
- 1.12 **"Unauthorized Substance(s)"** means an illegal drug, narcotic drug, controlled substance, alcohol, and any prescription or nonprescription medication that impairs ones judgment, performance, creates a depressant effect on ones central nervous system or is taken in violation of the prescribing physician's or manufacturer's directions.
- 1.13 **"Work"** means the services and/or goods to be provided by Contractor to Company pursuant to a Request for Services.
2. **Work:**
- 2.1 **Scope of Work:** The scope of Work will consist of providing those services and/or goods identified in the applicable Request for Services.

2.2 **Change Orders:** Contractor will not provide any services or goods that are not identified in the applicable Request for Services. In order to modify the scope of a Request for Services, Company and Contractor must agree to any change in writing. No change will be effective unless agreed to by the Parties in writing. If Company proposes a change, Contractor will respond within five (5) days of its receipt thereof with any proposed changes to the compensation and/or time required to perform the Work. If Contractor is unable to assemble the required information within five (5) days, Contractor will provide an explanation for the delay and identify the date on which it will respond.

2.3 **Equipment & Permits:** Unless otherwise provided in the applicable Request for Services, Contractor will furnish all services, goods, equipment, tools, and transportation necessary to perform the Work. Unless otherwise provided in the applicable Request for Services, Contractor will obtain all permits, licenses, and other authorizations and give all notices required by Law to perform the Work.

2.4 **Subcontracts:** Contractor will not subcontract the performance of the Work without the prior written consent of the Company, which will not be unreasonably withheld.

2.5 **Subcontractors:** Contractor shall identify all subcontractors prior to the commencement of the Work. Company shall have the right to veto any subcontractor proposed to be used by Contractor and to require Contractor to use a subcontractor approved by Company. Contractor shall be fully responsible to Company for the acts and/or omissions of its suppliers and subcontractors, and of persons either directly or indirectly employed by them. Contractor shall supervise all Work by its agents and subcontractors, and ensure that its agents and subcontractors meet or exceed the requirements of Contractor under this Agreement and the applicable Request for Services.

3. **Compensation:**

3.1 **Rates:** Time-and-materials Work will be performed at the rates specified in Schedule "B." Lump sum or bid Work will be performed at the rate specified in the Request for Services. Rates as specified in a Request for Services may not be changed, except in accordance with Section 2.2 herein. Any Contractor proposed change to Schedule "B" must be provided to Company in writing. No Schedule "B" rate change will be effective unless approved by Company in writing and such change will not apply to any Work under a Request for Services executed prior to the approved change. Contractor will not charge overtime or premium rates unless Company has approved such rates in writing.

3.2 **Invoicing & Payment:** Contractor will invoice Company on a monthly basis or as otherwise specified in the applicable Request for Services. **Each invoice will:** (a) be directed to the address specified in the Request for Services; (b) include the applicable Request for Services number; (c) be accompanied by supporting documentation; and (d) marked either "Partial" or "Final." Contractor's final invoice must be accompanied by a waiver of its lien rights and a waiver of each of its suppliers' and subcontractors' lien rights in a form provided by Company. Final invoices must be submitted promptly after the completion of the Work. Company will pay the undisputed amount of each invoice within thirty (30) days of its receipt thereof, unless otherwise specified in the applicable Request for Services. Contractor will retain all books and records related to the amounts charged to Company pursuant to a Request for Services for a period of two (2) years from the completion of the Work. Company may audit these books and records at Contractor's offices during normal business hours upon request.

3.3 **Taxes:** Payment of the compensation called for in this Agreement and any Request for Services shall include the amount of any taxes levied or assessed by any local, state, or federal body against Contractor, any subcontractor, or Company (except Company income taxes and sales taxes on Company-furnished items) in connection with or incident to the performance of this Agreement and any Request for Services, and Contractor shall remit such tax with the money so collected. Any tax that must be paid or withheld by Contractor shall be itemized in Contractor's invoices.

Contractor agrees to reimburse Company on demand for all taxes and governmental charges, local, state, or federal that Company may be required or deemed necessary to pay for the account of Contractor or Contractor's

employees. Contractor further agrees to furnish Company with all information and/or statements required to enable it to make any necessary reports to government entities and to pay such taxes and charges, and, at its election, Company is authorized to deduct all sums to be paid for taxes and governmental charges from such amounts as may be or become due and owing to Contractor hereunder.

3.4 **Retainage:** Company may at its option, subject to prior notification and approval, retain ten percent (10%) of the invoiced amounts due Contractor until final acceptance of the Work.

4. **Compliance:**

4.1 **Law:** Contractor shall comply and require its suppliers and subcontractors to comply with all Law applicable to the Work. Contractor represents that it is in full compliance with the Immigration and Nationality Act of 1996 and any subsequent amendments thereto, and will only provide Customer with Contractor personnel whose employment eligibility has been verified. Contractor will include this requirement in its agreements with any subcontractors providing work hereunder.

4.2 **The Environment:** Contractor will take all reasonable and necessary precautions to prevent the release of Hazardous Materials into the environment during the performance of the Work. Contractor will provide Company with a list of all Hazardous Materials that it will use during the performance of the Work. In the event of a release of any Hazardous Material by Contractor, its employees, agents, or subcontractors, Contractor will be responsible for the cost of remediation by a contractor designated by Company. Contractor will keep the Work site free of unnecessary accumulations of materials and waste resulting from the performance of the Work.

5. **Independent Contractor:** Contractor will be an independent contractor with respect to the performance of the Work, and Company will have no right to control the performance of the Work by Contractor, except in the results to be obtained. Company will have the right to inspect the Work during the course of performance to determine whether it is being performed in compliance with this Agreement and the applicable Request for Services. The Company's inspection of the Work will not waive any of Company's rights or remedies under this Agreement or any Request for Services or relieve Contractor of any of its obligations under this Agreement or any Request for Services.

6. **One Call Notification Requirements:** If excavation work of any kind is a part of the Work, Contractor shall comply with all federal, state, and local laws, rules, regulations, ordinances, agency orders, decrees, and court orders requiring advance notification to third parties whose assets and facilities may be affected by such work (collectively the "One-Call Notification System"). Contractor shall indemnify, hold harmless, and at Company's option, defend Company, its parents, affiliates, and subsidiaries and their respective officers, directors, employees, agents, and representatives from and against any and all claims, demands, damages, fines, penalties and any other costs arising from or related to Contractor's failure to comply with any and all requirements of the One-Call Notification System

7. **Warranties:**

7.1 **Goods:** CTEH is not a manufacturer of goods. CTEH hereby assigns to Company any warranties provided by the manufacturer of goods provided to Company by CTEH, and will cooperate with Company in enforcing such rights. CTEH DISCLAIMS ANY OTHER WARRANTY FOR THE SALE OF GOODS.

7.2 **Services:** For a period of twelve (12) months from the date the Work is completed in compliance with this Agreement and the applicable Request for Services, Contractor warrants that all services performed in connection with the Work have been performed in accordance with the prevailing industry standards for similar work. Contractor will re-perform, to the extent possible, any services that do not meet this warranty at its own expense and within a reasonable time. The twelve (12) month warranty period for services that are re-performed will begin on the date of their re-performance.

7.3 **Failure to meet Warranty:** Contractor will be responsible for any and all Claims resulting from its failure to meet its warranty obligations hereunder. If Contractor fails to remedy deficient or defective services or goods in a timely manner, Company shall have the right to remedy such defects at the Contractor's expense.

7.4 **Investigations:** Contractor's acceptance of a Request for Services will mean that it has fully investigated the Work to be performed, including the condition of the Work site, reasonably foreseeable complications, hazards, and risks, the availability of goods, labor, equipment, tools, and transportation. In conjunction with Contractor's investigation of the Work to be performed, Company shall disclose to Contractor "known risks and hazards" at that Work site. For purposes of this Section 7.4, "known risks and hazards" means those risks and hazards that Company knows of or should have known in the normal course of business.

8. **Liens:** If Contractor is being paid in compliance with this Agreement and the applicable Request for Services, Contractor will: (a) not file any liens, claims or encumbrances against the Company or its property; (b) shall pay as and when due all obligations incurred in the performance of the Work to Contractor's suppliers and subcontractors; (c) keep the Company's property free and clear of all liens, claims and encumbrances of Contractor's suppliers and subcontractors; and (d) upon notice from Company that any lien, claim or encumbrance has been filed against the Company or its property by Contractor's suppliers or subcontractors, cause the same to be removed by payment or by bond within thirty (30) days. Should Contractor breach this Section 8, then in addition to all other rights that Company may have under Law, Company may withhold any payments as due to Contractor in order to satisfy and cause the release of any such lien or encumbrance.

9. **Liability:**

9.1 **Contractor:** *Contractor will indemnify, defend, and hold harmless Company, its parents, affiliates, partners, and members, and its and their respective officers, directors, employees, agents, and other representatives from and against all Claims arising out of or in connection with the Work, to the extent caused by Contractor's or Contractor's subcontractor's negligence or willful misconduct.*

9.2 **Company:** *Company will indemnify, defend, and hold harmless Contractor, its parents and affiliates, and its and their respective officers, directors, employees, agents, and other representatives from and against all Claims arising out of or in connection with the Work to the extent that any such Claims are caused by the negligence, or willful misconduct of Company.*

9.3 *The indemnities expressed in this Agreement will survive the expiration or termination of this Agreement or any Request for Services.*

9.4 During the performance of the Work, Contractor shall verbally notify a Company representative immediately, with a follow-up written incident report to the identified Company representative within twenty-four (24) hours of (i) any unsafe work condition or hazard of which Contractor has knowledge, or (ii) any event or incident that resulted in or could have reasonably resulted in harm or damage to any person or property. Contractor shall cooperate fully with Company in any post-incident investigation as may be performed by Company.

10. **Insurance:** Contractor shall obtain and maintain, and shall require its subcontractors to obtain and maintain, in full force and effect during the performance of any Work the insurance coverage specified in the applicable Request for Services. Contractor shall provide Company with satisfactory certificates showing evidence of the required insurance coverage as of the effective date of the Request for Services prior to commencing the performance of any Work. The required limits are minimum limits and will not be construed to limit Contractor's liability. The cost of the required insurance will be borne by Contractor. Should the Contractor's insurance policy terminate or expire during the course of the Work, Company shall have the right to terminate the applicable Request for Services for cause and/or immediately suspend the Work.

11. **Termination:**

11.1 **Default:** Either Company or Contractor will be in default if it: (a) breaches this Agreement or the applicable Request for Services; (b) becomes insolvent; or (c) files or has filed against it a petition in

bankruptcy, for reorganization, or for appointment of a receiver or trustee. In the event of a default under (a), the non-defaulting Party will provide the defaulting Party with notice and a five (5) day opportunity to cure. If the defaulting Party fails to cure the default within the cure period, the non-defaulting Party may terminate the applicable Request for Services upon notice to the defaulting Party. In the event of a default under (b) or (c), the non-defaulting Party may terminate the applicable Request for Services upon notice to the defaulting Party.

11.2 Termination for Cause: If Company terminates a Request for Services because of the default of Contractor, Company may immediately take possession of the Work site and any goods belonging to or paid for by Company and complete the Work. If the Work cannot be completed for the total amount of compensation yet to be paid to Contractor under the Request for Services, with appropriate mitigation of damages by Company, Contractor will reimburse Company for the amount of any excess within thirty (30) days of the receipt of an invoice from Company. If Company terminates a Request for Services because of the default of Contractor, Company may also pay any of the Contractor's suppliers and subcontractors directly and deduct the amount paid from any amount due to the Contractor. If a court or arbitrator having jurisdiction determines that Company's termination for cause was wrongful, then Company's termination will be deemed to be a termination for convenience subject to subsection 11.3.

11.3 Convenience: Company may terminate a Request for Services without cause upon notice to Contractor. In the event of a termination for convenience, Contractor will comply with Company's instructions for stopping the Work. Company will pay the out-of-pocket expenses incurred by Contractor as a direct result of the termination through the fifth (5th) business day after a termination for convenience plus ten percent (10%) for overhead and profit.

- 12. Intellectual Property:** Any Intellectual Property developed by the Contractor for Company as part of the Work will be the property of the Company, and the Contractor will execute any documents necessary to assign ownership of such Intellectual Property to Company.
- 13. Confidentiality:** Except as may be necessary to enforce its rights under this Agreement or a Request for Services, as otherwise may be necessary to respond in any legal proceeding (including any deposition, interrogatory, subpoena, or civil investigative demand), or as otherwise may be necessary to procure any insurance or bonding required by this Agreement or a Request for Services, Contractor will not disclose to any third party, other than Contractor's parents, affiliates, officers, directors, employees, agents, or other representatives, the terms and conditions of this Agreement and any Request for Services or any information provided by Company to Contractor that is identified as confidential or proprietary. This section will not apply to information that was known to Contractor prior to its disclosure by Company, becomes publicly available other than by unauthorized disclosure, or is received from a third party who, to the best of Contractor's knowledge, is under no confidentiality obligation to Company. Contractor's obligations will survive the expiration or termination of this Agreement for a period of two (2) years.

14. Drug and Alcohol Policy:

14.1 The Contractor hereby acknowledges that the Company endeavors to provide a safe, healthy and productive environment and utilizes every reasonable measure to maintain a work environment free of Unauthorized Substances. The Contractor recognizes that the use of Unauthorized Substances may impair an individual's job performance and create unsafe working conditions. Contractor shall use every reasonable means to maintain an Unauthorized Substance free work environment while on Company premises or engaged in Work on behalf of Company. The Company will take all reasonable measures to ensure that the Contractor and all of Contractor's employees, agents, representatives and subcontractors performing Work on Company premises or on behalf of Company are not under the influence of Unauthorized Substances. Contractor shall also take every reasonable measure to ensure that Contractor's employees, agents, representatives and subcontractors do not possess, consume, transfer, purchase or sell Unauthorized Substances on Company premises or during the performance of Work on behalf of Company.

14.2 Contractor hereby acknowledges that Authorized Substances may be taken so long as the individual's ability to perform his/her job safely is not impaired. If an individual's use of an Authorized Substance could impair or Reasonable Suspicion exists that the substance is impairing that individual's ability to perform their

job safely, that individual must immediately be removed from that job and either (i) transferred to another job that the individual can perform safely while taking the substance or (ii) be removed from performing Work for Company until such time as the individual can perform their job safely.

14.3 Contractor shall inform its employees, agents, representatives and subcontractors of this Drug and Alcohol Policy and that their performance of any Work for Company or while on Company premises is subject to these requirements. If at any time during the performance of Work for Company or while on Company premises should Company or Contractor have Reasonable Suspicion to believe that a Contractor's employee, agent, representative or subcontractor is in violation of these requirements, Contractor shall require that individual submit to a substance or alcohol test ("Drug Test") upon determination by Company and/or Contractor that Reasonable Suspicion exists. Contractor shall also require an individual to submit to a Drug Test post-accident when Company and/or Contractor has Reasonable Suspicion that a work-related injury was sustained or Company and/or Contractor property was damaged as a result of that individual's violation of this Drug and Alcohol Policy. Any individual found in violation hereof or refusing such Drug Test shall be removed from Company's premises and suspended from the performance of any Work on behalf of Company. Any individual under Reasonable Suspicion or found in violation hereof, is subject to a personal search by Company and/or Contractor, and a search may include their work areas and personal property as located on Company's premises. All testing required hereunder shall be administered in accordance with 49 C.F.R. Part 199.

14.4 Any Drug Test performed hereunder will be conducted with due regard to the privacy of the individual being tested. Test results and information related to testing will be confidential and will not be disclosed by the Contractor to any third parties, except to the extent that Contractor shall communicate such results to Company for the purpose of compliance with this Drug and Alcohol Policy. The Company and Contractor will perform its obligations under this Drug and Alcohol Policy to the fullest extent allowed by applicable Law and any Drug Test performed hereunder will be in accordance with applicable Law.

14.5 Any violation of this Drug and Alcohol Policy shall constitute a default of the Agreement and is subject to termination for cause hereunder in Company's sole discretion.

15. DOT Regulated Work:

15.1 If Contractor performs any Work that is regulated by the DOT, Contractor shall comply and require its agents and subcontractors to comply with all applicable DOT regulations. Contractors will provide Company with a list of subcontractors performing DOT regulated Work prior to commencing the Work.

15.2 Any Contractor performing DOT-covered tasks shall furnish qualified individuals to perform the Company's covered tasks. A covered task is an activity that (a) is performed on a pipeline facility and (b) is an operation or maintenance task, and (c) is performed as a requirement of either 49 C.F.R. Part 192 or 49 C.F.R. Part 195, and (d) affects the operation or integrity of the pipeline.

15.3 Contractor shall use the process below for valuation and records retention acceptable to the Company OQ Plan Administrator and in accordance with 49 C.F.R. Part 192.807 and 195.507. Qualification records shall (1) identify the qualified individual; (2) identify the covered tasks the individual is qualified to perform; (3) dates of current qualification; and (4) qualification methods. Records supporting an individual's current qualification shall be maintained while the individual is performing the covered task. Records of prior qualification and records of individuals no longer performing covered tasks shall be retained for a period of five (5) years.

15.4 To the extent the DOT has placed pipeline transportation companies on heightened security alert, Contractor is responsible for heightened security to ensure that persons non-essential to the performance of the Work or foreign objects/items are not permitted at the Work site. Contractor shall implement security background checks for persons performing Work.

15.5 DOT Drug and Alcohol Testing: If applicable, Contractor will be responsible for complying with the DOT requirements of 49 CFR Part 199. Contractor represents and warrants that: (a) Contractor has and will

maintain an anti-drug and alcohol program that complies with the requirements of 49 CFR Part 199; (b) Contractor has performed and will continue to perform the pre-employment, random, and post-accident drug and alcohol testing as specified in 49 CFR Part 199 on all of Contractor's personnel that will perform the Work; and (c) none of Contractor's personnel that will perform the Work is prohibited by 49 CFR Part 199 from performing the Work because they have failed or refused to take a drug or alcohol test. Company may audit or have a third party audit Contractor's records to verify Contractor's compliance with 49 CFR Part 199. Contractor shall ensure compliance with these DOT requirements by its agents and subcontractors.

16. PSM Regulated Work:

16.1 If Contractor performs any Work that is regulated by PSM, Contractor shall comply and require its agents and subcontractors to comply with all applicable PSM regulations in accordance with 29 C.F.R. 1910.119. Contractor will provide Company with a list of subcontractors performing PSM regulated Work prior to commencing the Work.

16.2 Any Contractor performing PSM work shall furnish qualified individuals to perform the Company's PSM work. PSM work is (a) the process safety management of highly hazardous chemicals, (b) a process which involves a chemical at or above the specified threshold quantities listed in 29 C.F.R. 1910.119, Appendix A, and (c) a process which involves a flammable liquid or gas in a quantity of 10,000 pounds or more, except for (x) hydrocarbon fuels used solely for workplace consumption as a fuel, and (y) flammable liquids stored in atmospheric tanks or transferred which are kept below their normal boiling point without benefit of chilling or refrigeration.

17. Transportation Worker Identification Credential (TWIC): To the extent Contractor's performance of the Work requires Contractor access to secured areas of a Magellan maritime facility, then Contractor's personnel, representatives, agents and subcontractors shall have and present a valid Transportation Worker Identification Credential (TWIC) issued by the Transportation Security Administration.

18. Miscellaneous:

18.1 Notices: Any notice will be in writing either delivered by overnight courier or faxed with uninterrupted transmission confirmed by transmission report to the address set forth in the Request for Services. Either Party may change their notice address and fax number upon notice to the other Party at least ten (10) days in advance of the effective date of the change.

18.2 No Waiver: No waiver by either Company or Contractor of any right at any time will serve to waive of the same right at any future date.

18.3 Amendment: No amendment to this Agreement or any Request for Services will be effective unless made in writing and signed by both Parties.

18.4 Severability: If any provision of this Agreement or a Request for Services is partially or completely unenforceable pursuant to Law, that provision will be deemed amended to the extent necessary to make it enforceable, if possible. If not possible, then that provision will be deemed deleted. If any provision is so deleted, then the remaining provisions will remain in full force and effect.

18.5 Attorneys' Fees: If either Party institutes suit to enforce any right or obligation arising under this Agreement or a Request for Services, prevailing Party will be entitled to recover reasonable attorneys' fees from the other Party.

18.6 Assignment: Neither Party may assign this Agreement or a Request for Services, in whole or in part, without the prior written consent of the other Party. Notwithstanding the foregoing, Magellan and/or Company may assign this Agreement or a Request for Services, in whole or in part, to any Magellan Affiliates at any time without the consent of the Contractor. Any purported assignment in violation of this provision will be void.

18.7 Conflict of Interest: Neither Company nor Contractor will pay any commission, fee, or rebate to an employee of the other Party or favor an employee of the other Party with any gift or entertainment of significant value.

18.8 No Third Party Beneficiary: Nothing in this Agreement or any Request for Services is intended to provide legal rights to or create any liability for anyone not executing the applicable Request for Services.

18.9 Governing Law: *This Agreement and any Request for Services will be governed and construed in accordance with the laws of the State of Oklahoma, without reference to the choice of law principles thereof.*

18.10 Counterparts: This Agreement and any Request for Services may be executed in one or more counterparts, each of which will be deemed an original and part of one and the same document.

18.11 Entire Agreement; Conflict: This Agreement and the applicable Request for Services represent the entire agreement of Company and Contractor with respect to the matters addressed therein and supersede and replace any previous agreements, oral or written, between the parties with respect to such matters. In the event of a conflict between the terms and conditions in this Agreement and those in any Request for Services, the terms and conditions in this Agreement will control.

18.12 Miscellaneous: References in this Agreement and any Request for Services to "days," "months" or "years" means calendar days, months and years unless otherwise indicated. The word "including" does not limit the preceding words or terms. No provisions of this Agreement or any Request for Services will be construed against or interpreted to the disadvantage of any Party by reason of such Party's having drafted such provision. Except as otherwise provided herein, the remedies provided in this Agreement or any Request for Services are cumulative, not exclusive, and in addition to all other remedies at law or in equity.

--End of Schedule "A"--

Schedule "B"
Contractor's Rates

COMPANY'S ORIGINAL

Master Services Agreement
Number 08MMLP295Master Services Agreement

This Master Services Agreement ("Agreement") entered into on August 28, 2008 ("Effective Date") between Magellan Midstream Partners, L.P. ("Magellan"), a Delaware limited partnership, whose address is One Williams Center, Tulsa, Oklahoma 74172 and the following "Contractor":

Name:	Guardian Companies, Inc.
State and Form of Organization:	DE - Corporation
Address:	1280 Porter Road Bear, DE 19701
	302-834-1000

Magellan and Contractor hereinafter are referred to individually as a "Party" or collectively as the "Parties".

I. Purpose: Magellan and Contractor have entered into this Agreement because one or more Magellan Affiliates may engage Contractor to perform services and/or to provide goods. If a Magellan Affiliate wishes to engage Contractor, the Magellan Affiliate and Contractor will enter into a Request for Services. In this Agreement, Magellan and Contractor agree in advance to certain terms and conditions that will be applicable to any Request for Services. This Agreement does not guarantee that either Contractor or any Magellan Affiliate will enter into any Request for Services. However, once a Request for Services is executed between a Magellan Affiliate and Contractor, the terms and conditions expressed in this Agreement will govern the provision of Work under the Request for Services.

II. Separate Obligations: Each Request for Services will create a separate contract between Contractor and the Magellan Affiliate that executes the Request for Services. No Magellan Affiliate, other than the Magellan Affiliate that executes the Request for Services, will be liable for the obligations that arise under the Request for Services.

III. Term: The initial term of this Agreement will be for a period of one (1) year. This Agreement will automatically extend from month to month thereafter. Either Party may terminate this Agreement at the end of the initial term or at the end of any extension period by providing the other Party with written notice at least thirty (30) days prior to the intended termination date. The terms and conditions of this Agreement will survive and continue to apply to any Request for Services entered into between Contractor and a Magellan Affiliate that was executed prior to the termination of this Agreement.

IV. Schedules: The following schedules are attached hereto and incorporated herein: Schedule "A"—General Terms and Conditions; and Schedule "B"—Contractor's Rates.

Magellan Midstream Partners, L.P. By Magellan GP, LLC, Its General Partner	Guardian Companies, Inc.
By: <u>Holly Warner</u>	By: <u>Guardian Companies Inc</u>
Name: <u>Holly Warner</u>	Name: <u>Paula B. Bickel</u>
Title: <u>Project Analyst</u>	Title: <u>Executive Vice President</u>

Schedule "A"
General Terms and Conditions

1. **Definitions:** In addition to the definitions provided elsewhere in this Agreement, the following definitions will apply:

1.1 **"Authorized Substance(s)"** means a prescription drug for a current medical condition taken in accordance with a prescription from a licensed physician, and over-the-counter drugs for a current medical condition taken in accordance with the manufacturer's directions.

1.2 **"Company"** means the Magellan Affiliate that enters into a Request for Services with Contractor.

1.3 **"Claims"** means all causes of actions, claims, damages, judgment, settlement, penalty, fine, lien, demands, liability, costs, losses and expenses, including all expenses of litigation, court costs and reasonable attorney fees.

1.4 **"DOT"** means the Department of Transportation.

1.5 **"Hazardous Material"** means any hazardous or toxic substance, material, or waste, any pollutant or contaminant, or any other substance that is listed, defined, or regulated by applicable Law including polychlorinated biphenyl, asbestos (friable and non-friable), radon, urea, formaldehyde, gasoline, diesel, oil, and other hydrocarbons.

1.6 **"Intellectual Property"** means any intellectual property, including trademarks, trade dress, trade secrets, unregistered copyrights, registered copyrights, patentable inventions, and patents, eligible for protection under Law, including the Trademark Act of 1946, as superceded or amended, the Copyright Act of 1976, as superceded or amended, and the Patent Act, as superceded or amended.

1.7 **"Law"** means any and all laws, regulations, rules, ordinances, codes, orders and decrees of any local, state, or federal governmental authority affecting this Agreement, a Request for Services or the Work.

1.8 **"Magellan Affiliates"** means Magellan and any of its direct, indirect, present, and future subsidiaries and affiliates. Any entity that is controlled by or under common control with Magellan Midstream Partners, L.P. will be deemed a Magellan Affiliate.

1.9 **"PSM"** means Process Safety Management.

1.10 **"Reasonable Suspicion"** means a belief that an individual has engaged in prohibited activities based on specific, objective and articulable facts and reasonable inferences drawn from those facts in light of experience.

1.11 **"Request for Services"** means a fully-executed written agreement between Company and Contractor entered into pursuant to this Agreement expressing the scope of Work, compensation, commencement date, completion date, insurance requirements, and any additional terms and conditions for the performance of Work.

1.12 **"Unauthorized Substance(s)"** means an illegal drug, narcotic drug, controlled substance, alcohol, and any prescription or nonprescription medication that impairs ones judgment, performance, creates a depressant effect on ones central nervous system or is taken in violation of the prescribing physician's or manufacturer's directions.

1.13 **"Work"** means the services and/or goods to be provided by Contractor to Company pursuant to a Request for Services.

2. **Work:**

2.1 **Scope of Work:** The scope of Work will consist of providing those services and/or goods identified in the applicable Request for Services.

2.2 Change Orders: Contractor will not provide any services or goods that are not identified in the applicable Request for Services. In order to modify the scope of a Request for Services, Company and Contractor must agree to any change in writing. No change will be effective unless agreed to by the Parties in writing. If Company proposes a change, Contractor will respond within five (5) days of its receipt thereof with any proposed changes to the compensation and/or time required to perform the Work. If Contractor is unable to assemble the required information within five (5) days, Contractor will provide an explanation for the delay and identify the date on which it will respond.

2.3 Equipment & Permits: Unless otherwise provided in the applicable Request for Services, Contractor will furnish all services, goods, equipment, tools, and transportation necessary to perform the Work. Unless otherwise provided in the applicable Request for Services, Contractor will obtain all permits, licenses, and other authorizations and give all notices required by Law to perform the Work.

2.4 Subcontracts: Contractor will not subcontract the performance of the Work without the prior written consent of the Company, which will not be unreasonably withheld.

2.5 Subcontractors: Contractor shall identify all subcontractors prior to the commencement of the Work. Company shall have the right to veto any subcontractor proposed to be used by Contractor and to require Contractor to use a subcontractor approved by Company. Contractor shall be fully responsible to Company for the acts and/or omissions of its suppliers and subcontractors, and of persons either directly or indirectly employed by them. Contractor shall supervise all Work by its agents and subcontractors, and ensure that its agents and subcontractors meet or exceed the requirements of Contractor under this Agreement and the applicable Request for Services.

3. Compensation:

3.1 Rates: Time-and-materials Work will be performed at the rates specified in Schedule "B." Lump sum or bid Work will be performed at the rate specified in the Request for Services. Rates as specified in a Request for Services may not be changed, except in accordance with Section 2.2 herein. Any Contractor proposed change to Schedule "B" must be provided to Company in writing. No Schedule "B" rate change will be effective unless approved by Company in writing and such change will not apply to any Work under a Request for Services executed prior to the approved change. Contractor will not charge overtime or premium rates unless Company has approved such rates in writing.

3.2 Invoicing & Payment: Contractor will invoice Company on a monthly basis or as otherwise specified in the applicable Request for Services. Each invoice will: (a) be directed to the address specified in the Request for Services; (b) include the applicable Request for Services number; (c) be accompanied by supporting documentation; and (d) marked either "Partial" or "Final." Contractor's final invoice must be accompanied by a waiver of its lien rights and a waiver of each of its suppliers' and subcontractors' lien rights in a form provided by Company. Final invoices must be submitted promptly after the completion of the Work. Company will pay the undisputed amount of each invoice within thirty (30) days of its receipt thereof, unless otherwise specified in the applicable Request for Services. Contractor will retain all books and records related to the amounts charged to Company pursuant to a Request for Services for a period of two (2) years from the completion of the Work. Company may audit these books and records at Contractor's offices during normal business hours upon request.

3.3 Taxes: Payment of the compensation called for in this Agreement and any Request for Services shall include the amount of any taxes levied or assessed by any local, state, or federal body against Contractor, any subcontractor, or Company (except Company income taxes and sales taxes on Company-furnished items) in connection with or incident to the performance of this Agreement and any Request for Services, and Contractor shall remit such tax with the money so collected. Any tax that must be paid or withheld by Contractor shall be itemized in Contractor's invoices.

Contractor agrees to reimburse Company on demand for all taxes and governmental charges, local, state, or federal that Company may be required or deemed necessary to pay for the account of Contractor or Contractor's

employees. Contractor further agrees to furnish Company with all information and/or statements required to enable it to make any necessary reports to government entities and to pay such taxes and charges, and, at its election, Company is authorized to deduct all sums to be paid for taxes and governmental charges from such amounts as may be or become due and owing to Contractor hereunder.

3.4 **Retainage:** Company may, at its option, retain ten percent (10%) of the invoiced amounts due Contractor until final acceptance of the Work.

4. **Compliance:**

4.1 **Law:** Contractor shall comply and require its suppliers and subcontractors to comply with all Law applicable to the Work. Contractor represents that it is in full compliance with the Immigration and Nationality Act of 1996 and any subsequent amendments thereto, and will only provide Customer with Contractor personnel whose employment eligibility has been verified. Contractor will include this requirement in its agreements with any subcontractors providing work hereunder.

4.2 **The Environment:** Contractor will take all reasonable and necessary precautions to prevent the release of Hazardous Materials into the environment during the performance of the Work. Contractor will provide Company with a list of all Hazardous Materials that it will use during the performance of the Work. In the event of a release of any Hazardous Material by Contractor, its employees, agents, or subcontractors, Contractor will be responsible for the cost of remediation by a contractor designated by Company. Contractor will keep the Work site free of unnecessary accumulations of materials and waste resulting from the performance of the Work.

5. **Independent Contractor:** Contractor will be an independent contractor with respect to the performance of the Work, and Company will have no right to control the performance of the Work by Contractor, except in the results to be obtained. Company will have the right to inspect the Work during the course of performance to determine whether it is being performed in compliance with this Agreement and the applicable Request for Services. The Company's inspection of the Work will not waive any of Company's rights or remedies under this Agreement or any Request for Services or relieve Contractor of any of its obligations under this Agreement or any Request for Services.

6. **One Call Notification Requirements:** If excavation work of any kind is a part of the Work, Contractor shall comply with all federal, state, and local laws, rules, regulations, ordinances, agency orders, decrees, and court orders requiring advance notification to third parties whose assets and facilities may be affected by such work (collectively the "One-Call Notification System"). Contractor shall indemnify, hold harmless, and at Company's option, defend Company, its parents, affiliates, and subsidiaries and their respective officers, directors, employees, agents, and representatives from and against any and all claims, demands, damages, fines, penalties and any other costs arising from or related to Contractor's failure to comply with any and all requirements of the One-Call Notification System

7. **Warranties:**

7.1 **Goods:** For a period of twelve (12) months from the date the Work is completed in compliance with this Agreement and the applicable Request for Services, Contractor warrants that all goods supplied in connection with the Work: (a) conform to the specifications stated in the applicable Request for Services; (b) are new, of good material and workmanship, and free from defects; (c) are fit for the particular purpose for which they are intended; and (d) do not infringe on the Intellectual Property rights of any third party. Contractor will repair or replace any goods that do not meet this warranty at its own expense and within a reasonable time. The twelve (12) month warranty period for goods that are repaired or replaced will begin on the date of their repair or replacement.

7.2 **Services:** For a period of twelve (12) months from the date the Work is completed in compliance with this Agreement and the applicable Request for Services, Contractor warrants that all services performed in connection with the Work have been performed in accordance with the prevailing industry standards for similar work. Contractor will re-perform any services that do not meet this warranty at its own expense and within a

reasonable time. The twelve (12) month warranty period for services that are re-performed will begin on the date of their re-performance.

7.3 Failure to meet Warranty: Contractor will be responsible for any and all Claims resulting from its failure to meet its warranty obligations hereunder. If Contractor fails to remedy deficient or defective services or goods in a timely manner, Company shall have the right to remedy such defects at the Contractor's expense.

7.4 Investigations: Contractor's acceptance of a Request for Services will mean that it has fully investigated the Work to be performed, including the condition of the Work site, reasonably foreseeable complications, hazards, and risks, the availability of goods, labor, equipment, tools, and transportation.

- 8. Liens:** If Contractor is being paid in compliance with this Agreement and the applicable Request for Services, Contractor will: (a) not file any liens, claims or encumbrances against the Company or its property; (b) shall pay as and when due all obligations incurred in the performance of the Work to Contractor's suppliers and subcontractors; (c) keep the Company's property free and clear of all liens, claims and encumbrances of Contractor's suppliers and subcontractors; and (d) upon notice from Company that any lien, claim or encumbrance has been filed against the Company or its property by Contractor's suppliers or subcontractors, cause the same to be removed by payment or by bond within thirty (30) days. Should Contractor breach this Section 8, then in addition to all other rights that Company may have under Law, Company may withhold any payments as due to Contractor in order to satisfy and cause the release of any such lien or encumbrance.

9. Liability:

9.1 Contractor: *Contractor will indemnify, defend, and hold harmless Company, its parents, affiliates, partners, and members, and its and their respective officers, directors, employees, agents, and other representatives from and against all Claims arising out of or in connection with the Work, except to the extent that any Claims are caused by the negligence or willful misconduct of Company.*

9.2 Company: *Company will indemnify, defend, and hold harmless Contractor, its parents and affiliates, and its and their respective officers, directors, employees, agents, and other representatives from and against all Claims arising out of or in connection with the Work to the extent that any such Claims are caused by the negligence or willful misconduct of Company.*

9.3 *The indemnities expressed in this Agreement will survive the expiration or termination of this Agreement or any Request for Services.*

9.4 During the performance of the Work, Contractor shall verbally notify a Company representative immediately, with a follow-up written incident report to the identified Company representative within twenty-four (24) hours of (i) any unsafe work condition or hazard, or (ii) any event or incident that resulted in or could have reasonably resulted in harm or damage to any person or property. Contractor shall cooperate fully with Company in any post-incident investigation as may be performed by Company.

- 10. Insurance:** Contractor shall obtain and maintain, and shall require its subcontractors to obtain and maintain, in full force and effect during the performance of any Work the insurance coverage specified in the applicable Request for Services. Contractor shall provide Company with satisfactory certificates showing evidence of the required insurance coverage as of the effective date of the Request for Services prior to commencing the performance of any Work. The required limits are minimum limits and will not be construed to limit Contractor's liability. The cost of the required insurance will be borne by Contractor. Should the Contractor's insurance policy terminate or expire during the course of the Work, Company shall have the right to terminate the applicable Request for Services for cause and/or immediately suspend the Work.

11. Termination:

11.1 Default: Either Company or Contractor will be in default if it: (a) breaches this Agreement or the applicable Request for Services; (b) becomes insolvent; or (c) files or has filed against it a petition in bankruptcy, for reorganization, or for appointment of a receiver or trustee. In the event of a default under (a),

the non-defaulting Party will provide the defaulting Party with notice and a five (5) day opportunity to cure. If the defaulting Party fails to cure the default within the cure period, the non-defaulting Party may terminate the applicable Request for Services upon notice to the defaulting Party. In the event of a default under (b) or (c), the non-defaulting Party may terminate the applicable Request for Services upon notice to the defaulting Party.

11.2 Termination for Cause: If Company terminates a Request for Services because of the default of Contractor, Company may immediately take possession of the Work site and any goods belonging to or paid for by Company and complete the Work. If the Work cannot be completed for the total amount of compensation yet to be paid to Contractor under the Request for Services, Contractor will reimburse Company for the amount of any excess within thirty (30) days of the receipt of an invoice from Company. If Company terminates a Request for Services because of the default of Contractor, Company may also pay any of the Contractor's suppliers and subcontractors directly and deduct the amount paid from any amount due to the Contractor. If a court or arbitrator having jurisdiction determines that Company's termination for cause was wrongful, then Company's termination will be deemed to be a termination for convenience subject to subsection 11.3.

11.3 Convenience: Company may terminate a Request for Services without cause upon notice to Contractor. In the event of a termination for convenience, Contractor will comply with Company's instructions for stopping the Work. Company will pay the out-of-pocket expenses incurred by Contractor as a direct result of the termination through the fifth (5th) business day after a termination for convenience plus ten percent (10%) for overhead and profit.

12. Intellectual Property: Any Intellectual Property developed by the Contractor in the scope and course of the performance of the Work will be the property of the Company, and the Contractor will execute any documents necessary to assign ownership of such Intellectual Property to Company.

13. Confidentiality: Except as may be necessary to enforce its rights under this Agreement or a Request for Services, as otherwise may be necessary to respond in any legal proceeding (including any deposition, interrogatory, subpoena, or civil investigative demand), or as otherwise may be necessary to procure any insurance or bonding required by this Agreement or a Request for Services, Contractor will not disclose to any third party, other than Contractor's parents, affiliates, officers, directors, employees, agents, or other representatives, the terms and conditions of this Agreement and any Request for Services or any information provided by Company to Contractor that is identified as confidential or proprietary. This section will not apply to information that was known to Contractor prior to its disclosure by Company, becomes publicly available other than by unauthorized disclosure, or is received from a third party who, to the best of Contractor's knowledge, is under no confidentiality obligation to Company. Contractor's obligations will survive the expiration or termination of this Agreement for a period of two (2) years.

14. Drug and Alcohol Policy:

14.1 The Contractor hereby acknowledges that the Company endeavors to provide a safe, healthy and productive environment and utilizes every reasonable measure to maintain a work environment free of Unauthorized Substances. The Contractor recognizes that the use of Unauthorized Substances may impair an individual's job performance and create unsafe working conditions. Contractor shall use every reasonable means to maintain an Unauthorized Substance free work environment while on Company premises or engaged in Work on behalf of Company. The Company will take all reasonable measures to ensure that the Contractor and all of Contractor's employees, agents, representatives and subcontractors performing Work on Company premises or on behalf of Company are not under the influence of Unauthorized Substances. Contractor shall also take every reasonable measure to ensure that Contractor's employees, agents, representatives and subcontractors do not possess, consume, transfer, purchase or sell Unauthorized Substances on Company premises or during the performance of Work on behalf of Company.

14.2 Contractor hereby acknowledges that Authorized Substances may be taken so long as the individual's ability to perform his/her job safely is not impaired. If an individual's use of an Authorized Substance could impair or Reasonable Suspicion exists that the substance is impairing that individual's ability to perform their job safely, that individual must immediately be removed from that job and either (i) transferred to another job

that the individual can perform safely while taking the substance or (ii) be removed from performing Work for Company until such time as the individual can perform their job safely.

14.3 Contractor shall inform its employees, agents, representatives and subcontractors of this Drug and Alcohol Policy and that their performance of any Work for Company or while on Company premises is subject to these requirements. If at any time during the performance of Work for Company or while on Company premises should Company or Contractor have Reasonable Suspicion to believe that a Contractor's employee, agent, representative or subcontractor is in violation of these requirements, Contractor shall require that individual submit to a substance or alcohol test ("Drug Test") within at least two (2) hours of the determination by Company and/or Contractor that Reasonable Suspicion exists. Contractor shall also require an individual to submit to a Drug Test post-accident when Company and/or Contractor has Reasonable Suspicion that a work-related injury was sustained or Company and/or Contractor property was damaged as a result of that individual's violation of this Drug and Alcohol Policy. Any individual found in violation hereof or refusing such Drug Test shall be removed from Company's premises and suspended from the performance of any Work on behalf of Company. Any individual under Reasonable Suspicion or found in violation hereof, is subject to a personal search by Company and/or Contractor, and a search may include their work areas and personal property as located on Company's premises.

14.4 Any Drug Test performed hereunder will be conducted with due regard to the privacy of the individual being tested. Test results and information related to testing will be confidential and will not be disclosed by the Contractor to any third parties, except to the extent that Contractor shall communicate such results to Company for the purpose of compliance with this Drug and Alcohol Policy. The Company and Contractor will perform its obligations under this Drug and Alcohol Policy to the fullest extent allowed by applicable Law and any Drug Test performed hereunder will be in accordance with applicable Law.

14.5 Any violation of this Drug and Alcohol Policy shall constitute a default of the Agreement and is subject to termination for cause hereunder in Company's sole discretion.

15. DOT Regulated Work:

15.1 If Contractor performs any Work that is regulated by the DOT, Contractor shall comply and require its agents and subcontractors to comply with all applicable DOT regulations. Contractors will provide Company with a list of subcontractors performing DOT regulated Work prior to commencing the Work.

15.2 Any Contractor performing DOT-covered tasks shall furnish qualified individuals to perform the Company's covered tasks. A covered task is an activity that (a) is performed on a pipeline facility and (b) is an operation or maintenance task, and (c) is performed as a requirement of either 49 C.F.R. Part 192 or 49 C.F.R. Part 195, and (d) affects the operation or integrity of the pipeline.

15.3 Contractor shall use the process below for valuation and records retention acceptable to the Company OQ Plan Administrator and in accordance with 49 C.F.R. Part 192.807 and 195.507. Qualification records shall (1) identify the qualified individual; (2) identify the covered tasks the individual is qualified to perform; (3) dates of current qualification; and (4) qualification methods. Records supporting an individual's current qualification shall be maintained while the individual is performing the covered task. Records of prior qualification and records of individuals no longer performing covered tasks shall be retained for a period of five (5) years.

15.4 To the extent the DOT has placed pipeline transportation companies on heightened security alert, Contractor is responsible for heightened security to ensure that persons non-essential to the performance of the Work or foreign objects/items are not permitted at the Work site. Contractor shall implement security background checks for persons performing Work.

15.5 DOT Drug and Alcohol Testing: If applicable, Contractor will be responsible for complying with the DOT requirements of 49 CFR Part 199. Contractor represents and warrants that: (a) Contractor has and will maintain an anti-drug and alcohol program that complies with the requirements of 49 CFR Part 199; (b) Contractor has performed and will continue to perform the pre-employment, random, and post-accident drug

and alcohol testing as specified in 49 CFR Part 199 on all of Contractor's personnel that will perform the Work; and (c) none of Contractor's personnel that will perform the Work is prohibited by 49 CFR Part 199 from performing the Work because they have failed or refused to take a drug or alcohol test. Company may audit or have a third party audit Contractor's records to verify Contractor's compliance with 49 CFR Part 199. Contractor shall ensure compliance with these DOT requirements by its agents and subcontractors.

16. PSM Regulated Work:

16.1 If Contractor performs any Work that is regulated by PSM, Contractor shall comply and require its agents and subcontractors to comply with all applicable PSM regulations in accordance with 29 C.F.R. 1910.119. Contractor will provide Company with a list of subcontractors performing PSM regulated Work prior to commencing the Work.

16.2 Any Contractor performing PSM work shall furnish qualified individuals to perform the Company's PSM work. PSM work is (a) the process safety management of highly hazardous chemicals, (b) a process which involves a chemical at or above the specified threshold quantities listed in 29 C.F.R. 1910.119, Appendix A, and (c) a process which involves a flammable liquid or gas in a quantity of 10,000 pounds or more, except for (x) hydrocarbon fuels used solely for workplace consumption as a fuel, and (y) flammable liquids stored in atmospheric tanks or transferred which are kept below their normal boiling point without benefit of chilling or refrigeration.

17. Transportation Worker Identification Credential (TWIC): To the extent Contractor's performance of the Work requires Contractor access to secured areas of a Magellan maritime facility, then Contractor's personnel, representatives, agents and subcontractors shall have and present a valid Transportation Worker Identification Credential (TWIC) issued by the Transportation Security Administration.

18. Miscellaneous:

18.1 Notices: Any notice will be in writing either delivered by overnight courier or faxed with uninterrupted transmission confirmed by transmission report to the address set forth in the Request for Services. Either Party may change their notice address and fax number upon notice to the other Party at least ten (10) days in advance of the effective date of the change.

18.2 No Waiver: No waiver by either Company or Contractor of any right at any time will serve to waive of the same right at any future date.

18.3 Amendment: No amendment to this Agreement or any Request for Services will be effective unless made in writing and signed by both Parties.

18.4 Severability: If any provision of this Agreement or a Request for Services is partially or completely unenforceable pursuant to Law, that provision will be deemed amended to the extent necessary to make it enforceable, if possible. If not possible, then that provision will be deemed deleted. If any provision is so deleted, then the remaining provisions will remain in full force and effect.

18.5 Attorneys' Fees: If either Party institutes suit to enforce any right or obligation arising under this Agreement or a Request for Services, prevailing Party will be entitled to recover reasonable attorneys' fees from the other Party.

18.6 Assignment: Neither Party may assign this Agreement or a Request for Services, in whole or in part, without the prior written consent of the other Party. Notwithstanding the foregoing, Magellan and/or Company may assign this Agreement or a Request for Services, in whole or in part, to any Magellan Affiliates at any time without the consent of the Contractor. Any purported assignment in violation of this provision will be void.

18.7 Conflict of Interest: Neither Company nor Contractor will pay any commission, fee, or rebate to an employee of the other Party or favor an employee of the other Party with any gift or entertainment of significant value.

18.8 No Third Party Beneficiary: Nothing in this Agreement or any Request for Services is intended to provide legal rights to or create any liability for anyone not executing the applicable Request for Services.

18.9 Governing Law: *This Agreement and any Request for Services will be governed and construed in accordance with the laws of the State of Oklahoma, without reference to the choice of law principles thereof.*

18.10 Counterparts: This Agreement and any Request for Services may be executed in one or more counterparts, each of which will be deemed an original and part of one and the same document.

18.11 Entire Agreement; Conflict: This Agreement and the applicable Request for Services represent the entire agreement of Company and Contractor with respect to the matters addressed therein and supersede and replace any previous agreements, oral or written, between the parties with respect to such matters. In the event of a conflict between the terms and conditions in this Agreement and those in any Request for Services, the terms and conditions in this Agreement will control.

18.12 Miscellaneous: References in this Agreement and any Request for Services to "days," "months" or "years" means calendar days, months and years unless otherwise indicated. The word "including" does not limit the preceding words or terms. No provisions of this Agreement or any Request for Services will be construed against or interpreted to the disadvantage of any Party by reason of such Party's having drafted such provision. Except as otherwise provided herein, the remedies provided in this Agreement or any Request for Services are cumulative, not exclusive, and in addition to all other remedies at law or in equity.

--End of Schedule "A"--

Schedule "B"
Contractor's Rates

GUARDIAN CONSTRUCTION COMPANY, INC.LABOR RATES OF CONTRACT PERSONNEL FOR ADDITIONAL WORK

Classification	Base Hourly Wage	Straight Time Hourly rate w/Markup	Premium Time Hourly Rate w/Markup
Project Manager	\$43.80	\$69.95	\$97.93
Gen. Superintendent	\$32.54	\$52.06	\$78.10
Job Superintendent	\$30.08	\$48.12	\$72.18
Job Foreman	\$29.37	\$46.99	\$70.49
Crew Leader	\$27.92	\$44.68	\$67.02
Equipment Operator	\$27.92	\$44.68	\$67.02
Pipe Fitter	\$25.69	\$41.10	\$61.57
Mechanic	\$25.41	\$40.66	\$60.98
Truck Driver	\$24.94	\$39.91	\$59.87
Pipe Fuser/Welder	\$24.80	\$41.68	\$59.52
Finisher, Concrete	\$25.83	\$41.33	\$61.99
Labor, Skilled	\$21.80	\$34.88	\$52.32
Flagger	\$18.15	\$29.04	\$43.56

Guardian Construction Co., Inc.
Equipment Rate Schedule

Personnel are not included in these rates.

Guardian Proposes to furnish construction equipment including insurance, fuel, oil, lubricants, all necessary repairs, etc., at the following hourly rates:

1	Utility or Pickup Truck with Tools	\$21.00
2	Tool Truck or 2 Ton Stakebody with Tools	\$28.50
3	4 x 4 Backhoe or Mini Excavator	\$65.00
4	Hydraulic Excavator	\$115.00
5	Front End Loader 1 to 2 cy	\$98.00
6	Front End Loader over 2 cy	\$140.00
7	Bulldozer D4, 555, 850	\$78.00
8	Bulldozer, 1150, D7, or D8	\$140.00
9	Water Tank Truck or Drill Pump Truck/Mixer	\$95.00
10	Air Compressor w/Hose	\$49.00
11	Fusing Machine or Missile/Mole	\$58.00
12	Pipe Van Truck or Pipe/Cable Trailer	\$35.00
13	Dump Truck, Single Axle	\$40.00
14	Dump Truck Tandem Axle	\$50.00
15	Truck Tractor and Lowboy Trailer	\$90.00
16	Truck w/Crane, Lift Gate, or Winch	\$70.00
17	Large Plow Tractor or Trenchers	\$75.00
18	Tandem Grapple Truck, or Boom Truck	\$75.00
19	Mechanic or Welder Truck with Accessories	\$88.00
20	Backhoe w/ Hoe Ram or Skidsteer Hammer	\$138.00
21	Tractor w/Broom, Rake, or Blade Attachment	\$55.00
22	Pump w/20' Suction Hose and 50' Discharge Hose up to 4" diameter	\$40.00
23	Tri-axle Dump Truck or Roll-off Truck	\$72.50
24	4x4 Off Road Dump Truck, 6 to 12 Yds	\$115.00
25	Asphalt Paver Machine	\$98.00
26	Gradall, Sweeper Truck, or Crash Truck	\$99.00
27	Tag-a-long Trailer	\$25.00
28	Skid Steer Loader	\$45.00
29	Brush Cutter or Milling Attachment for Skidsteer	\$75.00
30	Vacuum Truck or Vacuum Trailer with Hoses	\$168.00
31	Tamper, Generator, Chop Saw, Jackhammer, or Rock Drill	\$48.00
32	Rammax/Roller Walk Behind	\$49.00
33	10 to 25 Ton Roller	\$60.00
34	1 to 6 Ton Roller	\$38.00
35	Directional Bore Machine with Rods	\$195.00
36	Electronic Locating Equipment for Bore Rig	\$50.00
37	Diamond Tip Saw Blade	\$80.00
38	Large Walk Behind Saw (blades additional cost)	\$78.00
39	Rodder Truck or Flusher Truck	\$125.00
40	John Deere Gator or ATV	\$35.00
41	Small Plow Tractor or Trencher	\$48.00
42	Gravelly Sweeper	\$40.00
43	Arrow Board	\$12.50
44	Portable Storage Trailer (daily rate)	\$100.00
45	Portable Light Tower (daily rate)	\$200.00
46	Roll-off Container (daily rate)	\$30.00
47	Steel Plate (daily rate)	\$50.00
48	Traffic Sign W/Stand (daily rate)	\$25.00
49	Core Bore Machine	\$97.00

All materials and subcontractors will be invoiced at cost plus 15%

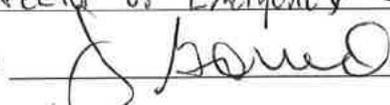
Revised 8/20/08

EXHIBIT G**ANNUAL ACKNOWLEDGEMENT OF MASTER EMERGENCY SPILL RESPONSE AGREEMENT (MESRA)**

In order to verify the status of Contractor's response teams, this acknowledgement form must be completed and signed by Contractor, and then submitted to Company not later than the 30th day of January annually.

Submittal of this form is required per MESRA paragraph 24 (c); however, failure to submit this document timely does not in any way constitute an abrogation of the terms and conditions of the MESRA.

Execution of this acknowledgement by Contractor's representative will serve as certification that Magellan Pipeline Company, L.P. has complied with the preparedness and prevention sections for securing arrangements with a hazardous materials cleanup contractor **Lewis Environmental, Inc.** as required by the Oil Pollution Act of 1990 and any related regulatory requirements.

By: Jim Gould
 Title: Director of Emergency Services
 Signature: 
 Date: 11/11/11

Complete this form annually and submit to:

Magellan Midstream Partners, L.P.
 Holly Warner – Project Analyst
 One Williams Center, MD 30
 Tulsa, Oklahoma 74172

Email: holly.warner@magellanlp.com

COMPANY'S ORIGINAL

MESRA – OSRO Classified
Contract Number 09MMLP011

**MASTER EMERGENCY
SPILL RESPONSE AGREEMENT
(OSRO Classified)**

by and between

Magellan Pipeline Company, L.P.

and

Lewis Environmental, Inc.

Contract Number MESRA 09MMLP011

Effective June 12, 2009

MASTER EMERGENCY SPILL RESPONSE AGREEMENT

THIS MASTER EMERGENCY SPILL RESPONSE AGREEMENT (“Agreement”), entered into to be effective this 12th day of June, 2009 by and between, **Lewis Environmental, Inc.**, a Pennsylvania Corporation with its principal place of business in **Royersford, Pennsylvania** (“Contractor”) and **MAGELLAN PIPELINE COMPANY, L.P.** a Delaware Limited Partnership, with its principal place of business in **Tulsa, Oklahoma** (“Company”) hereinafter jointly referred to as “Parties” or singularly as “Party”.

WHEREAS, Company operates refined petroleum products pipeline system, terminals and ammonia pipeline system and may from time to time experience a release or spill of product that requires emergency response and follow-up services to assist Company in controlling and mitigating such spills;

WHEREAS, Contractor is experienced in providing emergency response and follow-up services to spills such as the type as Company may have;

WHEREAS, Company desires Contractor to assist Company in providing emergency response and follow-up services to spills if requested, and Contractor desires to perform such services when requested; and

NOW THEREFORE, for and in consideration of the mutual promises herein contained and for other good and valuable consideration, the Parties agree as follows:

1. Definitions

- 1.1 “Company Spill Response Request” shall mean a request by Company to Contractor for Spill Response Dispatch or Spill Response Standby.
- 1.2 “Hazardous Waste (or Waste)” shall mean Product(s) and/or any material or substances contaminated with the Product(s).
- 1.3 “Laws” shall mean all applicable federal, state, county, local laws, regulations and ordinances, including without limitation, those issued under the auspices of the USCG, MMS, OPS, EPA, OPA 90, OSRO, PREP, Department of Transportation (“DOT”), the Occupational Safety and Health Administration (“OSHA”), RCRA and CERCLA or any other authority having jurisdiction over the work.
- 1.4 “OPA 90” shall mean the Oil Pollution Act of 1990.
- 1.5 “OSRO” shall mean the Oil Spill Removal Organization contained in the Guidelines for the U.S. Coast Guard OSRO Classification Program.
- 1.6 “PREP” shall mean the National Preparedness For Response Exercise Program issued under the OPA 90 jointly by the U.S. Coast Guard (“USCG”), the Environmental Protection Agency (“EPA”), the Office of Pipeline Safety (“OPS”), and the Minerals Management Services (“MMS”).

26. **Independent Contractor**

In performance of the work, the Contractor shall at all times be an independent contractor and the relation of the parties in the Agreement shall in no event be construed as constituting any other relationship.

27. **Non-Exclusivity**

Nothing in this Agreement shall require Company to solely utilize the services of Contractor or to ever utilize Contractor's services.

28. **Applicable Law**

This Agreement shall be governed by, and in accordance with, the laws of the State of Oklahoma without regard to principles of conflicts of laws.

29. **Entire Agreement**

This Agreement states the entire agreement between the parties with respect to the subject matter thereof and supersedes all prior agreements and understandings, whether oral or written, between the parties with respect to the subject matter hereof and may not be amended except by written instrument executed by the parties hereto. Release or waiver of any default or the failure to assert any right under this Agreement shall not be deemed in any case to be confirming waiver as to constitute an amendment of this Agreement. All Exhibits referenced herein and attached hereto are incorporated by reference as part of this Agreement.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed effective as of the date first above written by their duly authorized representatives below.

Magellan Pipeline Company, L.P. By: Magellan Pipeline GP, LLC, Its General Partner By: <u><i>Rick Fahrerkrog</i></u> Name: <u><i>Rick Fahrerkrog</i></u> Title: <u><i>Director, EHS & S</i></u> Date: <u><i>6-12-09</i></u>	Lewis Environmental, Inc. By: <u><i>Richard Lewis</i></u> Name: <u>Richard Lewis</u> Title: <u>President</u> Date: <u>4-29-09</u>
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Vehicle Listing

LEWIS ENVIRONMENTAL

ACTIVE

<u>Vehicle #</u>	<u>Year Make</u>	<u>Model</u>	<u>VIN #</u>	<u>Status</u>	<u>Current Meter 1</u>	<u>Current Meter 2</u>
Site: MainSite - Main Location						
001	.01 FLEET	.01	FLEET	Active	3,138.0	0.0
002	.0 Spill	SUPPLIES	SPILL SUPPLIES	Active	10.0	0.0
003	.0 HAND TOOLS	Hand Tools	HAND TOOLS	Active	10.0	0.0
004	.0 HOSES & FITTINGS	HOSES & FITTINGS	HOSES & FITTING	Active	10.0	0.0
008	2005 FORD	500SEL	1FAFP27115G125674	Active	91,336.0	0.0
009	2005 FORD	500	1FAHP26125G197932	Active	100,549.0	0.0
010	2000 GMC	SONOMA	1GTCS19W4Y8129697	Active	255,457.0	0.0
014	1995 FORD	F250 4X4	1FTHF26H0SLA90231	Active	246,446.0	0.0
014-P	1995 WESTERN	PRO PLOW	B1024860	Active	0.0	0.0
017	2005 FORD	F250 4X4	1FTNF21575EA38989	Active	133,211.0	0.0
044	2004 FORD	F450 4X4	1FDXW47P64EA10317	Active	152,689.0	0.0
045	2004 FORD	F450	1FDXW46P44EB61741	Active	161,800.0	0.0
046	2005 FORD	F450 4X4	1FDXW47P95EC08732	Active	126,492.0	0.0
047	2006 FORD	F-450	1FDXW46P96EA71617	Active	130,739.0	0.0
048	2008 FORD	F-450 4X4	1FDXW47R88EB59111	Active	77,191.0	0.0
049	2008 FORD	F-450	1FDXW46R48EB59110	Active	86,667.0	0.0
050	2008 FORD	F-250 4X4	1FTSW21Y68EE49933	Active	67,133.0	0.0
051	2008 FORD	F-250 4X4	1FTSW21Y18EE50147	Active	44,725.0	0.0
052	2010 FORD	F-350 4X4	1FTWW3BY2AEA50741	Active	27,943.0	0.0
053	2010 FORD	F-350 4X4	1FTWW3BY3AEA61182	Active	24,691.0	0.0
054	2010 FORD	F150 4X4	1FTFW1EVXAFB06456	Active	11,726.0	0.0
055	2010 FORD	F150 4X4	1FTFW1EV3AFC83222	Active	9,871.0	0.0
056	1999 GMC	6500HD	1GDJ7H1C1XJ510042	Active	141,885.0	0.0
057	2010 FORD	F-150	1FTFW1EV6AFD83170	Active	4,816.0	0.0
060	2010 FORD	F450		Active	0.0	0.0
061	2010 FORD	F-450		Active	0.0	0.0
076	2006 MACK	CT713	1M2AL02C46M002317	Active	134,890.0	0.0
077	2000 MACK	RD688S	1M2P267C6YM051093	Active	401,217.0	0.0
078	2005 MACK	GRAINET	1M2AG11C75M023950	Active	214,656.0	0.0
083	2005 FORD	F750	3FRXF75T75V184010	Active	70,794.0	0.0
086	2000 PETERBUILT	330	1NPNLD9X0YS495247	Active	239,925.0	16,590.0
086.4	2000 PRESVAC	PV750	PVB-750-R-2653	Active	0.0	15,039.0
086.5	2010 PRESSVAC	PV750	3341	Active	16,410.0	16,095.0
089	1989 FREIGHTLIN	FLC112	1FVXZWYB4KH409382	Active	44,757.0	4,132.0
089.4	1989 PRESVAC	PV750		Active	33,034.0	2,966.0
090	1997 GMC	W4	4KDB4B1R8VJ000721	Active	211,883.0	0.0

Vehicle Listing

LEWIS ENVIRONMENTAL

ACTIVE

<u>Vehicle #</u>	<u>Year</u>	<u>Make</u>	<u>Model</u>	<u>VIN #</u>	<u>Status</u>	<u>Current Meter 1</u>	<u>Current Meter 2</u>
091	2006	PETERBILT	335	2NPPLZ9X76M652787	Active	87,335.0	5,390.0
091.4	2006	PRESVAC	PV750		Active	76,240.0	4,889.0
092	2006	STERLING	LT9500	2FZMAZAV36AX05176	Active	99,957.0	4,937.0
092.4	2006	PRESVAC	PV750		Active	88,387.0	4,549.0
092.5	2006	HIBON PB	5300		Active	0.0	0.0
093	2010	PETERBILT	340 -	2NPRLNOX9AM794745	Active	6,347.0	0.0
094	2010	PETERBILT	340 -	2NPRLNOX7AM794744	Active	8,466.0	0.0
096	2006	MACK	CXN VISI	1M1AK06Y86N009021	Active	117,566.0	0.0
099	1989	MACK	RW613	1M2AY04Y5KM005876	Active	105,699.0	0.0
115	1990	ALLIED	MARATHO	1A9SPT12XLC002643	Active	10.0	0.0
115A	8 HP	HONDA	GX240	WABJ1108343	Active	10.0	0.0
117	2004	PRESVAC	F3L 913	2P9S1528641005015	Active	1,538.0	0.0
120	1989	RAM-LIN	BOAT TRL	1RLAFCR18K1000072	Active	0.0	0.0
123	2002	LOAD RITE	BOAT TRL	5A4JCVR1122050260	Active	10.0	0.0
124	1984	E Z LOADER		1ZE1LLS11EN028951	Active	0.0	0.0
125	1992	LOADRITE	BOAT TRL	4L2FPRJ12R2006358	Active	10.0	0.0
126	1992	LOADRITE	BOAT TRL	4L2FRR13P2000007	Active	0.0	0.0
128	1994	LOADRITE	BOAT TRL	4L2FPRJ13R2003646	Active	10.0	0.0
131	1994	PREMIER	BOOM TRL	1P9LS1624PH224857	Active	10.0	0.0
132	1994	PREMIER	PRES WASH	1P9LS1629RH224250	Active	10.0	0.0
133	1995	TRAFCON	ARROW BR	1095LD15531	Active	10.0	0.0
150	1996	US CARG	USC816TA	4PL500G28T1003612	Active	10.0	0.0
150-A	2006	BOILER			Active	0.0	0.0
151	1998	US CARG	AMC822TA2	4PL500K29W1013657	Active	10.0	0.0
152	1999	US CARG	24FT TRL	4PL500L27X1017917	Active	10.0	0.0
156	2001	Roadmaster	Haz SpilTr	5DT211K2311003111	Active	10.0	0.0
157	2001	Roadmaster	SPIL TRL	5DT211K2711003113	Active	10.0	0.0
158	2001	Roadmaster	Trailer	5DT211E18Y1001271	Active	10.0	0.0
159	1996	WABASH	BOX TRL	1JJV482U5TL267217	Active	10.0	0.0
160	2009	CAR MATE	Trailer	5A3C820DX9L001292	Active	3,486.0	0.0
160.1	2009	HONDA	EB5000		Active	10.0	0.0
161	2009	CAR MATE	Trailer	5A3C820D19L001293	Active	10.0	0.0
161.1	2009	HONDA	EB5000		Active	10.0	0.0
188	2005	MILLENNIUM	M6F18P	5MTPF18295A000217	Active	10.0	0.0
189	1997	Wiltco	CHallenge	1W8A11D26VS000087	Active	10.0	0.0
189-PM02	2002	BRIGGS STR	192432	0204271A	Active	10.0	0.0
190	2005	MILLENNIUM		5MTPF18275A000328	Active	124,648.0	0.0
194	2004	CAM	EQUIPMENT	5JPBU19284P008308	Active	10.0	0.0

Vehicle Listing

LEWIS ENVIRONMENTAL

ACTIVE

<u>Vehicle #</u>	<u>Year</u>	<u>Make</u>	<u>Model</u>	<u>VIN #</u>	<u>Status</u>	<u>Current Meter 1</u>	<u>Current Meter 2</u>
198	1999	EAGER BEAV	AP10	112AAH205XL052622	Active	10.0	0.0
202	1994	GRUMMAN	14 JON BO	OMCL1044K394	Active	10.0	0.0
203	1994	GRUMMAN	14 JON BO	OMCL1045K394	Active	10.0	0.0
204	1994	GRUMMAN	14 JON BO	OMCL2334I394	Active	10.0	0.0
205	1994	GRUMMAN	14 JON BO	OMCL2335I394	Active	10.0	0.0
206	1994	GRUMMAN	14 JON BO	OMCL1236J394	Active	10.0	0.0
207	1994	MIST	PONTOON	KEI01566C494	Active	10.0	0.0
208	1985	ALLISON	PREDATOR	PAZ09371G685	Active	10.0	0.0
221	1992	STARCRAFT	16 JON BO	FMCL82FNA292	Active	0.0	0.0
224	2001	EAGER BEAV	20 XPT	112H8V3232L059151	Active	10.0	0.0
250	1989	ALUMITE	AIR BOAT	AON00159E989	Active	10.0	0.0
266	2010	YAMAHA	F20MLH	6AHK-L-1025223	Active	10.0	0.0
267	2009	YAMAHA	F15CMLH	6AGK-L-1001508	Active	10.0	0.0
268	2007	HONDA	BF10DKLH	BABJ-1601341	Active	10.0	0.0
269	2007	HONDA	BF15DKLH	BALJ-1400050	Active	10.0	0.0
270	1994	EVINRUD	15HP OUT	G03641927	Active	10.0	0.0
271	1994	EVINRUD	15HP OUT	G03641951	Active	10.0	0.0
273	1994	EVINRUD	15HP OUT	G03533028	Active	10.0	0.0
274	1994	EVINRUD	15HP OUT	G03641949	Active	10.0	0.0
275	1994	EVINRUD	E15RERE	G03533955	Active	10.0	0.0
276	1992	MERCURY	25HP OUT	0D2033336	Active	10.0	0.0
277	2000	MERCURY	40HP OUT	0T008095	Active	10.0	0.0
278	2003	MERCURY	60HP OUT	0T682283	Active	0.0	0.0
299	2000	MINUTEMA	KLEENSWEEP	THM350000QP0854	Active	10.0	0.0
300	1999	KARHCEL	PRESWASH	4ZHUF1013XP000749	Active	110.0	0.0
300A	1999	KARCHER	HDS3205BE	XDK4200	Active	10.0	0.0
304	2000	HONDA	1218132	EU2000IA	Active	10.0	0.0
304.1	2008	HONDA	EM5000SXX2	SEANC-1026481	Active	10.0	0.0
304.2	2008	HONDA	EM5000SXXZ	EANC-1024698	Active	10.0	0.0
304.3	2008	HONDA	EB5000X	EAKC-1023993	Active	10.0	0.0
304.4	2008	HONDA	EB6500X	EALC-1022235	Active	10.0	0.0
306	2000	YAMAHA	YG6600D	7RH2179R03	Active	10.0	0.0
306.1	2000	YAMAHA	YG6600D	.XYMXS.3572EA	Active	10.0	0.0
306.2		SML INDUST	LR50H		Active	10.0	0.0
306.3	2010	HONDA	EB5000XK2A	EAKC-1045071	Active	10.0	0.0
308	2010	HONDA	ES6500K2A		Active	0.0	0.0
310	2001	GENERAC	7000EXL	7366875	Active	10.0	0.0
311	1996	KING	KFG50	BN51011	Active	2,574.0	0.0

Vehicle Listing

LEWIS ENVIRONMENTAL

ACTIVE

<u>Vehicle #</u>	<u>Year</u> <u>Make</u>	<u>Model</u>	<u>VIN #</u>	<u>Status</u>	<u>Current Meter 1</u>	<u>Current Meter 2</u>
312.6	2008 KARCHER	HD10-35PB	15752050-100115	Active	10.0	0.0
312.7	2008 KARCHER	HD 10/35PB	15752050-100132	Active	10.0	0.0
312.8	2009 KARCHER	K5.85MR	000245	Active	10.0	0.0
312.9	2010 KARCHER	K 5.93		Active	0.0	0.0
313	2000 SULLIVAN	D185Q.	20114A	Active	3,216.0	0.0
313.1	2008 SULLIVAN	D185Q11JD	29246	Active	546.0	0.0
313.2	2010 SULLIVAN	D185P2	100358	Active	110.0	0.0
314	2001 LINCOLN	AC-225		Active	0.0	0.0
315.D	2010 KARCHER	BR-343087E	15752020-161611	Active	10.0	0.0
316	2010 KARCHER	BR-455037e	161091	Active	0.0	0.0
317	1990 GRACO	1"PUMP	G96A	Active	0.0	0.0
319	1995 SIMMER	1"PUMP	40A56C176G5502AP	Active	10.0	0.0
319.2	2009 DAYTON	4UN80	0902610004	Active	10.0	0.0
320	1997 SEARS	1 1/2"pump	123456	Active	0.0	0.0
322	Ace	1 1/2"pump	0971	Active	0.0	0.0
323	TSURUMI	2" PUMP	B615970	Active	0.0	0.0
325	1993 RoPER	PUMP		Active	0.0	0.0
326	1996 TSURUMI	3"PUMP	12345	Active	10.0	0.0
327	HYDROM	1 1/2"pump	12091	Active	0.0	0.0
328	1993 AcME	PUMP		Active	0.0	0.0
329	1993 AcME	SKIMMER		Active	0.0	0.0
330	1989	CONVEYO		Active	0.0	0.0
332	HONDA	WT30X		Active	0.0	0.0
333.1	2010 HONDA	EB5000XK2A	0010389	Active	10.0	0.0
334	1999 FARMERS	POWERBF	32-7045	Active	0.0	0.0
335.1	00 NSF	C731-24	2002012342	Active	10.0	0.0
3389	.01 431X	DRUM METER	3389	Active	0.0	0.0
340	MILTON ROY			Active	0.0	0.0
341-1	ARO	PUMP	00101000	Active	0.0	0.0
341-2	ARO	6661B33116	C0301551	Active	0.0	0.0
341.4	ARO	650709C		Active	0.0	0.0
343	ARO	6661A3344C	L0210709	Active	0.0	0.0
344	1994 MILLER	MOB.OFFI	327045	Active	10.0	0.0
345	.01 PACER	2"PUMP	971229A	Active	10.0	0.0
347	GODWIN			Active	10.0	0.0
348	CENTRAL	DRILL		Active	0.0	0.0
348.1	DAYTON	3Z360G	991251	Active	0.0	0.0
349	2007 POULAN	WILDTHING		Active	10.0	0.0

Vehicle Listing

LEWIS ENVIRONMENTAL

ACTIVE

<u>Vehicle #</u>	<u>Year</u>	<u>Make</u>	<u>Model</u>	<u>VIN #</u>	<u>Status</u>	<u>Current Meter 1</u>	<u>Current Meter 2</u>
350	1998	WACKER	BS600	5039391	Active	0.0	0.0
351	1997	WACKER	BS500	5028057	Active	0.0	0.0
353.1	2008	TOKU	TPB-60	TPB60-8E387	Active	0.0	0.0
353.2	2008	TOKU	TPB-30	A0122	Active	0.0	0.0
354		CRAFTSMAN	CHaINSAW		Active	10.0	0.0
356	2001	DEWALT	DW402K	1068996	Active	0.0	0.0
357	2001	DEWALT	DW236K	982381	Active	0.0	0.0
359		ECHO	SRM-210	05275027	Active	10.0	0.0
360	10	TOYOTA	025FG30	75227	Active	4,334.0	0.0
361	10	HONDA	WP30X	WZBF10109	Active	10.0	0.0
362		HOMELITE	AP220C	HA2230740	Active	10.0	0.0
363		BRIGGS STR	91232	980901YA	Active	0.0	0.0
364		FLOWTEC			Active	0.0	0.0
365		GRACO	1020137	E91A	Active	0.0	0.0
369	10	MILWAUKEE	4096	798C602340049	Active	0.0	0.0
370		CRAFTSMAN	EASYFIRE	26EB	Active	0.0	0.0
370.1	2008	POWERSHOT	8000		Active	0.0	0.0
370.2	2008	POWERSHOT	8000		Active	0.0	0.0
400	2000	KAWASAKI	KAF300-C	JK1AFBC18YB517303	Active	1,986.0	0.0
401		ARO	6661A3344C	B0261960	Active	0.0	0.0
402		ARO	6661B3311C	19176972	Active	0.0	0.0
428	2005	CINCINAT	BS500S	G013730	Active	0.0	0.0
429	2005	GENERAL	SUB-E8EC		Active	0.0	0.0
429.1	2005	GENERAL	SUB-E8EC		Active	0.0	0.0
430		ALLEGRO	AIR BLOW	9505-27025	Active	10.0	0.0
433		RIDGID	AM25000	03253AA0280	Active	0.0	0.0
434		PELSUE			Active	0.0	0.0
435		COPPUSHO			Active	0.0	0.0
436		COPPUSHO	3-HP		Active	0.0	0.0
437	10	TOYOTA	CA7A	1C043	Active	0.0	0.0
439	10	COPPOSFAN	871-00		Active	10.0	0.0
450		WATER ACE	R6S		Active	0.0	0.0
490	2007	BOILER			Active	0.0	0.0
491		GSE	4206		Active	0.0	0.0
492		ARO	6662A3311C	A9245058	Active	10.0	0.0
499		JOHN DEERE	GODWIN	T04039D413297	Active	367.0	0.0
503	1994	CASE	590SL		Active	5,506.0	0.0
520	00	SKYJACK	SSU-3220	602387	Active	0.0	0.0

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550	2005	KOBOTA	KX91-3	10477	Active	2,666.0	2,266.0
602B	2000	CASE	BUCKET	2000	Active	0.0	0.0
604	2008	CAT	304CCR	OFFK05733	Active	1,150.0	0.0
701	2005	75XT	SKID STEER	JAF0380304	Active	1,488.0	0.0
750	2007	LM	3CROOMSWEE	31048	Active	10.0	0.0
760	1999	SCHMIDT	3.5CF	LG104	Active	10.0	0.0
804	1996	SEARS	BATTERY		Active	0.0	0.0
805		PNEUVAC	PNEU VAC		Active	0.0	0.0
806		EXAIR	DRUM VAC		Active	10.0	0.0
807		DRUM DOLLY			Active	10.0	0.0
808		DAYTON	DRUM VAC		Active	0.0	0.0
809		DAYTON	DRUM VAC	52714-61	Active	10.0	0.0
811	1999	ARAMSC	HEPAVAC	P98F05458	Active	0.0	0.0
811.1		NILFISK AD	01797300		Active	0.0	0.0
813		STIHL	ST400		Active	10.0	0.0
814.1	2008	STIHL	TS-420	1-68-824-385	Active	10.0	0.0
815A			POWER DR	PDHA	Active	0.0	0.0
815B			POWER DR	PDHB	Active	0.0	0.0
815C			POWER DR	PDV	Active	0.0	0.0
816		GABRIEL		P9LJ08656	Active	0.0	0.0
816.1	2010	ENVIROMASTER	P47410-HVAF-RA	P10G37954	Active	0.0	0.0
817		NEGATIVE	AIR MACH	2125	Active	10.0	0.0
820.1		RYOBI			Active	0.0	0.0
821		INGERSOLL			Active	0.0	0.0
822		HILTI	TE22P		Active	0.0	0.0
822.1		HILTI	TE22P		Active	0.0	0.0
830		MORSE	DRUMTIPF	0590	Active	0.0	0.0
832			DRUMGRA		Active	0.0	0.0
833			DRUMGRA		Active	0.0	0.0
836		DEWALT	SANDER	010969	Active	0.0	0.0
837		SKILL	DRILL	6325	Active	0.0	0.0
838		BLK&DECKER	DRILL	7190	Active	0.0	0.0
838.1		BLK&DECKER			Active	0.0	0.0
838.2	2008	CRAFTSMAN	172.108650		Active	0.0	0.0
839		MODERN	NIBBLER	5094	Active	0.0	0.0
840		BLK&DECKER	BULL	13594	Active	0.0	0.0
840.1		RYOBI			Active	0.0	0.0
840.2		MILWAUKEE			Active	0.0	0.0

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841		SKILL	DRILL	HD 6876	Active	0.0	0.0
842		CRAFTSMAN	BLOWER	257.796351	Active	0.0	0.0
844		CRAFTSMAN	WRENCH	875.199870	Active	0.0	0.0
845		BLK&DECKER	SAW	7392	Active	0.0	0.0
846		CRAFTSMAN	STAPLER		Active	0.0	0.0
847		MASTER	MM8510		Active	0.0	0.0
848		BLK&DECKER	G0213		Active	0.0	0.0
849		VAC	LID		Active	0.0	0.0
852	2005	CRAFTSMAN		172.171740	Active	0.0	0.0
852.10	.1	MILWAUKEE	6527		Active	0.0	0.0
852.2	.01	MILWAUKEE	6509-22	A17B605461166	Active	0.0	0.0
852.3	.01	MILWAUKEE	6509-22	A17B606122719	Active	0.0	0.0
852.4	.01	MILWAUKEE	6520-21	B02A507441251	Active	10.0	0.0
852.5		TIGERSAW	738		Active	10.0	0.0
852.6	.01	MILWAUKEE	6523-21	A65C607351598	Active	0.0	0.0
852.8	2008	MILWAUKEE	6538-21	B36A608231880	Active	0.0	0.0
852.9	2009	MILWAUKEE	6520-21	B02C609340223	Active	0.0	0.0
853	2005	CRAFTSMAN		G0426	Active	0.0	0.0
855	2005	DAYTON	3VE52	0308000496	Active	0.0	0.0
856	2005	FLOTEC		FPOS1300X-08	Active	0.0	0.0
857	2005	CRAFTSMAN		572-610500	Active	0.0	0.0
861	2005	BLK/DCKR		A9645	Active	0.0	0.0
862		ECHO	GT-2100	0020037	Active	10.0	0.0
863	2009	STIHL	FS55R	279414987	Active	10.0	0.0
864	2005	FLOTEC	1/6HP	FPOS1300X	Active	0.0	0.0
865	2005	NPTN/TRI	2"Y-10	31842636	Active	0.0	0.0
867	2005	FLOTEC	NOTES	FPOF360AC-08	Active	0.0	0.0
868	2005	COLEMAN	19E417	9610311A	Active	10.0	0.0
869	2005	HILTI	TE-14	04-227941	Active	0.0	0.0
871			GANG BOX		Active	0.0	0.0
872		COPPUSHO	3HP		Active	0.0	0.0
872-1		COPPUSHO	HORN		Active	0.0	0.0
872-2		COPPUSHO	HORN		Active	0.0	0.0
873	10	TITAN	AIR COMP	32664	Active	10.0	0.0
873.1		CAMPBELL			Active	10.0	0.0
873.2		AMERICAN I	AVM-A-TNT	7111	Active	0.0	0.0
873.3	2008	DEWALT	D55146		Active	10.0	0.0
876		HOTSY	950A	H24146-0293	Active	10.0	0.0

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877		DRUM TIPPE	DRUM TIPPE		Active	0.0	0.0
878		VESTIL	DRUM PICKE	S-119370	Active	0.0	0.0
879		LIFTOMATIC		22675	Active	0.0	0.0
880	.01	REDDY	HEATER	016580019	Active	10.0	0.0
880.1	.01	REDDY	.01		Active	0.0	0.0
880.2	.01	WAYNE	.01		Active	0.0	0.0
881		DAYTON	4CB57	4CB57	Active	10.0	0.0
882.1		DAYTON	4YE60	4YE60	Active	0.0	0.0
882.2	2008	DAYTON	4YE63		Active	0.0	0.0
882.3	2008	DAYTON	4YE63		Active	10.0	0.0
882.4	2008	DAYTON	4YE63		Active	0.0	0.0
882.5	2010	DAYTON	4YE63	52728.44	Active	0.0	0.0
882.6	2010	HAFCO	HV-55-2010H		Active	0.0	0.0
882.A	2008	HAFCO	HV-55-20		Active	10.0	0.0
883	2006	GIRAFFE	HIGH PRES		Active	0.0	0.0
883.1		DAYTON	1MDD9	1MDD9	Active	0.0	0.0
884		DAYTON	3P601C		Active	10.0	0.0
8841	2010	ARO	PD20A-AAS-FTT-B		Active	0.0	0.0
8842	2010	ARO	PD20A-AAS-FTT-B		Active	0.0	0.0
885	.01	BOSCH	BLAZER		Active	0.0	0.0
885.1	10	BOSCH	DRILL		Active	0.0	0.0
885.2	2010	HITACHI	FDV16VB2	92492	Active	0.0	0.0
887		CLARKE	GRINDER	041201767	Active	0.0	0.0
888.1	2008	TOKU	B-90	8G010	Active	10.0	0.0
889		AMER PNEU	115	2350	Active	10.0	0.0
890	2009	TOKU	CHIPPING H	707075	Active	0.0	0.0
891	2007	HUSQVARNA	965 03 02-	070700901	Active	10.0	0.0
892	2007	HUSQVARNA	965 03 02-	072102081	Active	10.0	0.0
900		KEYSTONE	COMPRESS		Active	0.0	0.0
901	2007	BETTS	EM46443SS	EM46443SS	Active	0.0	0.0
903	10	COATES	??		Active	10.0	0.0
904			SHOPVAC		Active	0.0	0.0
904.1			SHOPVAC		Active	0.0	0.0
904.2			SHOPVAC		Active	0.0	0.0
904.3			SHOPVAC		Active	0.0	0.0
904.4			SHOPVAC		Active	0.0	0.0
904.5			SHOPVAC		Active	0.0	0.0
904.6	2009	RIDGID	WD19560	09231 R 0281	Active	0.0	0.0

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910	2008	ROSEDALE	NC88135-ZP	207898	Active	0.0	0.0
910.1	2008	ROSEDALE	NC88135-ZP		Active	0.0	0.0
911		ROSEDALE	618ZP1150C	93617 B-N-B	Active	0.0	0.0
945	2009	HUSKY	GHM105890	136124	Active	0.0	0.0
946	2009	PORTER CAB	DRILL KIT		Active	0.0	0.0
950	10	JOHN DEERE	285	FD590-004141	Active	10.0	0.0
951		GAS BOY	GAS BOY	8046882	Active	10.0	0.0
952	2008	GASBOY			Active	0.0	0.0
960	2007	MAX FORCE	VAF-16	AF-01T-E1AZ0194-02059	Active	0.0	0.0
961	2007	MAX FORCE	VAF-16	AF-01T-E1AZ0194-02083	Active	10.0	0.0
962	2007	PHOENIX	4024920	F0682645	Active	0.0	0.0
963	2007	HEPA 500	F284	10896	Active	0.0	0.0
964	2007	HEPA 500	F284	10894	Active	0.0	0.0
980	2008	MILLERMATI	907321		Active	0.0	0.0
990	10	1	1"PUMP		Active	0.0	0.0
A1000		MSE	2005-50G	4206	Active	10.0	0.0
A1000.1		MSE	2005-50G	4207	Active	10.0	0.0
A1000.2		MSE	2005-50G	3783	Active	100.0	0.0
A2000		MILLER	M52-50G	68701V	Active	10.0	0.0
A2000.1		MILLER	M52-50G	60794V	Active	10.0	0.0
A2000.2	.01	MILLER	M52-50G	69326V	Active	10.0	0.0
A2000.3	.01	MILLER	M52-50G	86733V	Active	10.0	0.0
A2000.4	.01	MILLER	M52-50G	68703V	Active	10.0	0.0
A9000	2009	MILLER	FL11-1/11F	MFP9345963	Active	0.0	0.0
B19161		BIO SYSTEM	4GAS		Active	0.0	0.0
B19295		BIO SYSTEM	4GAS		Active	0.0	0.0
B21838		BIO SYSTEM	4GAS		Active	0.0	0.0
B28710		BIO SYSTEM	4GAS		Active	0.0	0.0
B3411		Q-RAE	MINI PID		Active	0.0	0.0
B405-348		Q-RAE	4GAS		Active	10.0	0.0
B6136	2009	MSA	ALTAIR	00006136	Active	10.0	0.0
B6139	2009	MSA	ALTAIR5	00006139	Active	0.0	0.0
B7251		Q-RAE	MINI PID		Active	0.0	0.0
B836		Q-RAE	MINI PID		Active	0.0	0.0
B840		Q-RAE	MINI PID		Active	0.0	0.0
B905-328		Q-RAE	4GAS		Active	0.0	0.0
B905-350		Q-RAE	4GAS		Active	0.0	0.0
B905-355		Q-RAE	4GAS		Active	0.0	0.0

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C2300	2007	TYPHOON	1107	CF-01T-A1A20285-02559	Active	0.0	0.0
C2301	2007	TYPHOON	1107	CF-01T-A1A20285-02569	Active	0.0	0.0
C2302	2007	TYPHOON	1107	CF-01T-A1A20285-02562	Active	0.0	0.0
D1		SCOTT	REGULATOR	19100515	Active	0.0	0.0
D10		SCOTT	REGULATOR	19200202	Active	0.0	0.0
D11		SCOTT	REGULATOR	19200243	Active	0.0	0.0
D12		SCOTT	REGULATOR	19200169	Active	0.0	0.0
D2		SCOTT	REGULATOR	19100508	Active	0.0	0.0
D3		SCOTT	REGULATOR	19100170	Active	0.0	0.0
D4		SCOTT	REGULATOR	19100130	Active	0.0	0.0
D5		SCOTT	REGULATOR	19200215	Active	0.0	0.0
D6		SCOTT	REGULATOR	19200221	Active	0.0	0.0
D7		SCOTT	REGULATOR	19100487	Active	0.0	0.0
D8		SCOTT	REGULATOR	09900072	Active	0.0	0.0
E100		CRAFTSMAN			Active	10.0	0.0
E201	2010	EARTHQUAKE	9070300	13066	Active	0.0	0.0
E202	2010	CHIPPING HAMMER	THH9B	508023	Active	0.0	0.0
E203	2010	HUSKY	HSTC4733	666629	Active	0.0	0.0
E862	2005	ECHO	GT-2100	0020037	Active	0.0	0.0
E862.1		BLK&DECKER			Active	0.0	0.0
E862.2	2009	BLACK&DECK	Tr016		Active	0.0	0.0
E863.1	2009	HUSQVARNA	125L		Active	0.0	0.0
E864	2010	ECHO	SRM-230	S73112212195	Active	10.0	0.0
E864.1	2010	ECHO	SRM-230	S73112131659	Active	0.0	0.0
F100	2008	GARMIN	NUVI	1DN154196	Active	0.0	0.0
F101	2009	GARMIN	255	1TV131082	Active	10.0	0.0
F102	2009	GARMIN	255	1TV132469	Active	10.0	0.0
F103	2009	GARMIN	255	1TV132464	Active	10.0	0.0
F104	2009	GARMIN	255	1TV132471	Active	10.0	0.0
F105	2009	GARMIN	255		Active	0.0	0.0
F106	2009	GARMIN	255	1Q6993208	Active	10.0	0.0
F107	2009	GARMIN	255	1TV000523	Active	10.0	0.0
F108	2009	GARMIN	255	1Q6992703	Active	10.0	0.0
F140	2010	TOMTOM	XL335-SE	GJ1240807379	Active	10.0	0.0
F200	.1	JOHNSON	9100/40-09	S0001002.80	Active	0.0	0.0
F210		RADIO SHAC	CB RADIO		Active	0.0	0.0
F250		MOTOROLA			Active	0.0	0.0
F250.1		MOTOROLA			Active	0.0	0.0

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F250.2		MOTOROLA			Active	0.0	0.0
F250.3		MOTOROLA			Active	0.0	0.0
F250.4		MOTOROLA			Active	0.0	0.0
F250.5		MOTOROLA			Active	0.0	0.0
F400	2008	CST/BERGER	PAL/SAL/N	M301949	Active	0.0	0.0
F410	2008	CST/BERGER			Active	0.0	0.0
F411	.01	LENGEMANN	81-0310		Active	10.0	0.0
F420	10	BERGER INS	190B	190-51544	Active	0.0	0.0
F430	2008	Nikon	AC-2S	642737	Active	0.0	0.0
F430.1	2008	22217			Active	0.0	0.0
F430.2	2008	1	CR-20	92031	Active	0.0	0.0
F440	2008	LASERMARK	LM30		Active	0.0	0.0
G100	2008	AIR-SYSTEM	89107		Active	0.0	0.0
G101	2008	AIR SYSTEM	89107		Active	0.0	0.0
H100-1		BOOM			Active	0.0	0.0
H100-10		BOOM			Active	0.0	0.0
H100-11		BOOM			Active	0.0	0.0
H100-12		BOOM			Active	0.0	0.0
H100-13		BOOM			Active	0.0	0.0
H100-14		BOOM			Active	0.0	0.0
H100-15		BOOM			Active	0.0	0.0
H100-16		BOOM			Active	0.0	0.0
H100-17		BOOM			Active	0.0	0.0
H100-18		BOOM			Active	0.0	0.0
H100-19		BOOM			Active	0.0	0.0
H100-2		BOOM			Active	0.0	0.0
H100-20		BOOM			Active	0.0	0.0
H100-21		BOOM			Active	0.0	0.0
H100-22		BOOM			Active	0.0	0.0
H100-23		BOOM			Active	0.0	0.0
H100-24		BOOM			Active	0.0	0.0
H100-25		BOOM			Active	0.0	0.0
H100-26		BOOM			Active	0.0	0.0
H100-27		BOOM			Active	0.0	0.0
H100-28		BOOM			Active	10.0	0.0
H100-29		BOOM			Active	0.0	0.0
H100-3		BOOM			Active	0.0	0.0
H100-4		BOOM			Active	0.0	0.0

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H100-5		BOOM			Active	0.0	0.0
H100-6		BOOM			Active	0.0	0.0
H100-7		BOOM			Active	0.0	0.0
H100-8		BOOM			Active	0.0	0.0
H100-9		BOOM			Active	0.0	0.0
H50-1		BOOM			Active	0.0	0.0
H50-10		BOOM			Active	0.0	0.0
H50-2		BOOM			Active	0.0	0.0
H50-3		BOOM			Active	0.0	0.0
H50-4		BOOM			Active	0.0	0.0
H50-5		BOOM			Active	0.0	0.0
H50-6		BOOM			Active	0.0	0.0
H50-7		BOOM			Active	0.0	0.0
H50-8		BOOM			Active	0.0	0.0
H50-9		BOOM			Active	0.0	0.0
J100	2009	CHAMBERS	PS400MH-C		Active	0.0	0.0
J101	2009	CHAMBERS	PS400MH-C-		Active	0.0	0.0
KX100		AMERICAN L	ACO-12KT	03D 602-2	Active	0.0	0.0
KX200	2009	MILTON BAY	501		Active	0.0	0.0
KX200.1	2009	MILTON BAY	501		Active	0.0	0.0
LEW-05	2009	GMC	ACADIA	1GKEV13D79J113600	Active	28,045.0	0.0
LEW-06	2008	CHRYSLER	TOWN & COU		Active	26,019.0	0.0
LEW-07	2002	DODGE	1500	1D7HU18Z22J127769	Active	177,929.0	0.0
LEW-08	2011	GMC	YOKON	1GKS2EEF2BR165547	Active	214.0	0.0
M105	2009	SIDEWINDER	105F		Active	10.0	0.0
M106	2009	SIDEWINDER	105FRSC	01091105	Active	10.0	0.0
N100		PROPANE TA			Active	0.0	0.0
N100.1		PROPANE TA			Active	0.0	0.0
N100.2		PROPANE TA			Active	0.0	0.0
N100.3		PROPANE TA			Active	0.0	0.0
N200		AIR LARGE			Active	0.0	0.0
N200.1		AIR LARGE			Active	0.0	0.0
N200.2		AIR LARGE			Active	0.0	0.0
N200.3		AIR LARGE			Active	0.0	0.0
N200.4		AIR LARGE			Active	0.0	0.0
N200.5		AIR LARGE			Active	0.0	0.0
N200.6		AIR LARGE			Active	0.0	0.0
N300		MED OXYGEN			Active	0.0	0.0

1/26/2011

1:52 PM

Vehicle Listing

LEWIS ENVIRONMENTAL

ACTIVE

<u>Vehicle #</u>	<u>Year</u>	<u>Make</u>	<u>Model</u>	<u>VIN #</u>	<u>Status</u>	<u>Current Meter 1</u>	<u>Current Meter 2</u>
N300.1		MED OXYGEN			Active	0.0	0.0
N400		OXYGEN			Active	0.0	0.0
N400.1		OXYGEN			Active	0.0	0.0
RO 10-01	1998	FAIRHILL	ROLLOFF	33511	Active	10.0	0.0
RO 10-02	2000	FAIRHILL	ROLLOFF	33512	Active	10.0	0.0
RO 20-01	1989	BUCKS FA	ROLLOFF		Active	0.0	0.0
RO 20-02	1989	BUCKS FA	ROLLOFF		Active	10.0	0.0
RO 20-03	1989	BUCKS FA	ROLLOFF		Active	10.0	0.0
RO 20-04	1989	BUCKS FA	ROLLOFF		Active	10.0	0.0
RO 20-05	1989	BUCKS FA	ROLLOFF		Active	10.0	0.0
RO 20-06	1989	BUCKS FA	ROLLOFF		Active	0.0	0.0
RO 20-07	1989	BUCKS FA	ROLLOFF		Active	10.0	0.0
RO 20-09	1998	FAIRHILL	ROLLOFF	33433	Active	10.0	0.0
RO 20-10	1998	FAIRHILL	ROLLOFF	33434	Active	10.0	0.0
RO 20-11	1998	FAIRHILL	ROLLOFF	33435	Active	10.0	0.0
RO 20-12	1998	FAIRHILL	ROLLOFF	33436	Active	10.0	0.0
RO 20-13	1998	FAIRHILL	ROLLOFF	33437	Active	10.0	0.0
RO 20-14	1998	FAIRHILL	ROLLOFF	33505	Active	10.0	0.0
RO 20-15	1998	FAIRHILL	ROLLOFF	33506	Active	10.0	0.0
RO 20-16	1998	FAIRHILL	ROLLOFF	33507	Active	0.0	0.0
RO 20-18	1998	FAIRHILL	ROLLOFF	33509	Active	10.0	0.0
RO 20-19	2000	EAGLE	ROLLOFF	02715	Active	10.0	0.0
RO 20-20	2000	EAGLE	ROLLOFF	02770	Active	10.0	0.0
RO 20-21	2000	EAGLE	ROLLOFF	02716	Active	10.0	0.0
RO 20-22	2000	EAGLE	ROLLOFF	02772	Active	10.0	0.0
RO 20-23	2000	EAGLE	ROLLOFF	02771	Active	10.0	0.0
RO 20-24	2000	BUCKS FA	ROLLOFF	92639	Active	10.0	0.0
RO 20-25	2000	FAIRHILL	ROLLOFF	36155	Active	10.0	0.0
RO 20-26	2000	FAIRHILL	ROLLOFF	36154	Active	10.0	0.0
RO 20-27	2000	FAIRHILL	ROLLOFF	36153	Active	10.0	0.0
RO 20-28	2000	FAIRHILL	ROLLOFF	36156	Active	10.0	0.0
RO 20-29	2000	FAIRHILL	ROLLOFF	36217	Active	10.0	0.0
RO 20-30	2000	FAIRHILL	ROLLOFF	36190	Active	10.0	0.0
RO 20-31	2000	FAIRHILL	ROLLOFF	36215	Active	10.0	0.0
RO 20-32	2000	FAIRHILL	ROLLOFF	36191	Active	10.0	0.0
RO 20-33	2000	FAIRHILL	ROLLOFF	36216	Active	10.0	0.0
RO 20-34	2000	FAIRHILL	ROLLOFF	36214	Active	10.0	0.0
RO 20-35	2000	FAIRHILL	ROLLOFF	36220	Active	10.0	0.0

Vehicle Listing

LEWIS ENVIRONMENTAL

ACTIVE

<u>Vehicle #</u>	<u>Year Make</u>	<u>Model</u>	<u>VIN #</u>	<u>Status</u>	<u>Current Meter 1</u>	<u>Current Meter 2</u>
RO 20-36	2006 AccURATE	ROLLOFF	W56331	Active	10.0	0.0
RO 20-37	2006 AccURATE	ROLLOFF	W56329	Active	10.0	0.0
RO 20-38	2006 AccURATE	ROLLOFF	W56332	Active	10.0	0.0
RO 20-39	2006 AccURATE	ROLLOFF	W56333	Active	10.0	0.0
RO 20-40	2006 AccURATE	ROLLOFF	W56330	Active	10.0	0.0
RO 30-01	2008 AccURATE	ROLLOFF	W58217	Active	10.0	0.0
RO 30-02	2008 AccURATE	ROLLOFF	W58218	Active	10.0	0.0
S001	2010 ??	SEABOX		Active	0.0	0.0
T100	2010 TOOL	??		Active	0.0	0.0
V012	2007 FORD	E350	1FBSS31L87DB10167	Active	63,836.0	0.0
V013	2006 FORD	E350	1FBSS31L66DA43695	Active	147,260.0	0.0
V014	2006 FORD	E350	1FDSS31L16DA21868	Active	53,317.0	0.0
V017	2006 FORD	E350	1FDSS31L66DA21848	Active	112,994.0	0.0
XP-162-1	2002 BROWNE	XP-162		Active	0.0	0.0
XP-162-2	2002 BROWNE	XP-162		Active	0.0	0.0

507 Vehicle(s) at MainSite - Main Location

507 Vehicle(s) Overall

LEWIS ENVIRONMENTAL

ANNUAL EQUIPMENT DEPLOYMENT CERTIFICATION REPORT

Documentation of equipment used during spill response, drills or training.

This report is used for crediting the response plan holders for OSRO equipment deployment under the Preparedness Response Exercise Program (PREP), all deployments, whether during actual spill response, training or exercise / drills must be properly documented. The contractor must certify that: 1) Response equipment is operational; 2) Personnel are capable of deploying and operating the equipment in a spill response; and 3) Response resources participate in annual deployment drills.

PLEASE PROVIDE THE FOLLOWING INFORMATION (use additional sheet(s) if necessary):

OSRO NAME: Lewis Environmental Inc.

ADDRESS: P.O. Box 639 Royersford, PA 19468

TEL (24 HR) 800-258-5585 SERVICE CENTERS: 1

MSO/COTP ZONE(S) OR EPA REGION(S) EPA Region 2, 3, 4

EQUIPMENT DEPLOYED [List all types of boom (minimum 1,000 ft of solid log flotation, air inflated, self inflated, skimmers (including vacuum trucks), boats, temporary storage devices, Command/Communications Center.)]

7650' log floatation boom, 4ea. 3000-gallon vacuum truck, 1ea. 7000-gallon tanker, 1ea 5,500-gallon vacuum tanker, 1ea. work boat

PERSONNEL: [List by category and number (supervisor, foreman, equipment operator, technician, etc.)]
6ea. supervisor, 14ea. foreman, 8ea. equipment operator, 200ea. technician

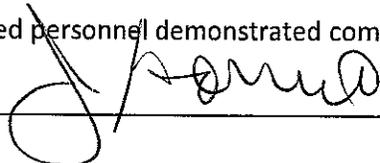
ADDITIONAL REMARKS:

Absorbent boom, sweep, pads and granular material utilized in deployment/recovery ops.

I certify that:

- 1) the equipment used is in good working order and was properly operated in the environment indicated;
- 2) the involved personnel demonstrated competency in deployment and operation of the equipment.

SIGNATURE



DATE

2/1/11



(This is an event specific verification)

EQUIPMENT DEPLOYMENT REPORT

Documentation of equipment used during spill response, drills or training.

This report is used for crediting the response plan holders for OSRO equipment deployment under the Preparedness Response Program (PREP), all deployments, whether during actual spill response, training or exercise / drills must be properly documented. The contractor must certify that: 1) Response equipment is operational; 2) Personnel are capable of deploying and operating the equipment in a spill response; and 3) Response resources participate in annual deployment drills:

PLEASE PROVIDE THE FOLLOWING INFORMATION UPON COMPLETION OF THE PROJECT

PROJECT DATE(S): 5/10-7/10 JOB#: 9975

NAME OF SUPERVISOR: Jim Gould/Brandon Smith
PHONE/FAX: 610-495-6695/610-495-6697

RESPONSIBLE PARTY: MC252

SERVICE CENTER: 1

MSO/COTP ZONE OR EPA REGION
EPA Region 4

ENVIRONMENT (CIRCLE ONE)

PROTECTED

SHELTERED

UNSHelterED

GEOGRAPHICAL DESCRIPTION (FACILITY, BODY OF WATER, MILES OFFSHORE)
Gulf of Mexico

EQUIPMENT DEPLOYED [Types of boom (minimum 1,000 ft of solid log flotation, air inflated, self inflated, skimmers, including vacuum trucks), boats, temporary storage devices, Command/Communications Center.
7,650' log flotation boom

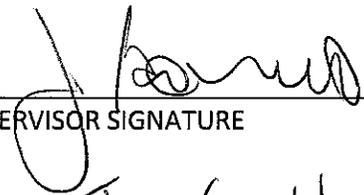
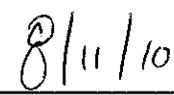
PERSONNEL: [List by category (supervisor, foreman, equipment operator, technician, etc.)]
4ea. supervisor, 14ea. foreman, 200ea. technician

ADDITIONAL REMARKS:

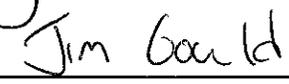


I certify that:

- 1) the equipment used is in good working order and was properly operated in the environment indicated:
- 2) the involved personnel demonstrated competency in the deployment and operation of the equipment:

SUPERVISOR SIGNATURE Date



PRINT NAME OF SUPERVISOR

**MASTER EMERGENCY
SPILL RESPONSE AGREEMENT**

by and between

Magellan Terminals Holdings, L.P.

and

Miller Environmental Group, Inc.

**Contract Number MESRA 06MMLP065
Effective April 1, 2006**

**MASTER EMERGENCY
SPILL RESPONSE AGREEMENT**

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MASTER EMERGENCY SPILL RESPONSE AGREEMENT

THIS MASTER EMERGENCY SPILL RESPONSE AGREEMENT (" Agreement"), entered into to be effective this ____ day of _____ 2006 by and between, MILLER ENVIRONMENTAL GROUP, INC., a corporation with its principal place of business in Calverton, NY ("Contractor") and MAGELLAN PIPELINE COMPANY, L.P. a Delaware corporation, with its principal place of business in Tulsa, Oklahoma ("Company") hereinafter jointly referred to as "Parties" or singularly as "Party".

WHEREAS, Company operates refined petroleum products pipeline system, terminals and ammonia pipeline system and may from time to time experience a release or spill of product that requires emergency response and follow-up services to assist Company in controlling and mitigating such spills;

WHEREAS, Contractor is experienced in providing emergency response and follow-up services to spills such as the type as Company may have;

WHEREAS, Company desires Contractor to assist Company in providing emergency response and follow-up services to spills if requested, and Contractor desires to perform such services when requested; and

NOW THEREFORE, for and in consideration of the mutual promises herein contained and for other good and valuable consideration, the Parties agree as follows:

1. Definitions

- 1.1 "Company Spill Response Request" shall mean a request by Company to Contractor for Spill Response Dispatch or Spill Response Standby.
- 1.2 "Hazardous Waste (or Waste)" shall mean Product(s) and/or any material or substances contaminated with the Product(s).
- 1.3 "Laws" shall mean all applicable federal, state, county, local laws, regulations and ordinances, including without limitation, those issued under the auspices of the USCG, MMS, OPS, EPA, OPA 90, OSRO, PREP, Department of Transportation ("DOT"), the Occupational Safety and Health Administration ("OSHA"), RCRA and CERCLA or any other authority having jurisdiction over the work.
- 1.4 "OPA 90" shall mean the Oil Pollution Act of 1990.
- 1.5 "OSRO" shall mean the Oil Spill Removal Organization contained in the Guidelines for the U.S. Coast Guard OSRO Classification Program.
- 1.6 "PREP" shall mean the National Preparedness For Response Exercise Program issued under the OPA 90 jointly by the U.S. Coast Guard ("USCG"), the Environmental Protection Agency ("EPA"), the Office of Pipeline Safety ("OPS"), and the Minerals Management Services ("MMS").

- 1.7 “Product(s)” shall mean substances for which Company provides transportation and terminal services, and which are defined or identified as hazardous substances under the Resources Conservation and Recovery Act (“RCRA”), Comprehensive Environmental Response, Compensation and Liability Act (“CERCLA”) and other applicable federal and state regulations.
- 1.8 “Authorization to Respond” shall mean those signed written agreements between Company and Contractor entered into pursuant to this Agreement which set forth the scope of work including the commencement date for the work and any other provisions agreed to by the Parties.

2. **Company Spill Response Request**

- 2.1 Upon receiving a direct telephone call at phone numbers set forth on Exhibit C from a designated Company Representative (either a Qualified Individual or an Incident Commander), Contractor shall provide one of the following spill response services (“Spill Response Request”):
- (a) Spill Response Dispatch – Contractor will dispatch the Response Team and Emergency Equipment to the scene of the spill.
 - (b) Spill Response Standby – Contractor will place the Response Team and the Emergency Equipment on standby until requested by Company to dispatch or to release from standby.
 - (c) Exercise Response Dispatch – Contractor will dispatch the Response Team and Emergency Equipment to the scene of the Exercise, in a faithful simulation of a real incident (as necessary).
- 2.2 Company will provide Contractor with the following information:
- (a) The name and title of person placing the call and a representation that she or he is acting in the capacity of a Qualified Individual or Incident Commander;
 - (b) Company’s name, address, telephone number;
 - (c) The location of the spill;
 - (d) The name or type of Product spilled and its characteristics and MSDS, if known;
 - (e) The approximate time of the spill; and
- 2.3 Company will fax or otherwise deliver an Authorization to Respond to Contractor as soon as reasonably possible confirming the Spill Response Request.

Comment [AVM1]: General comment: typically, the RFS is a follow up. What needs to be transmitted is an Authorization to Proceed/Respond (ATP/ATR). The ATR would have (in writing) the relevant spill information and the signature of a Qualified Individual to authorize the response. An RFP would then follow. We should include a blank ATR as an exhibit.

- 2.4 Prior to performing any activities at the spill site, Company and Contractor will agree upon the services to be performed by Contractor. Contractor shall perform such services until such time that Company determines that services are no longer required.
- 2.5 In the event that Contractor arrives at a spill site prior to the arrival of Company or Company's representative, Contractor shall wait for directions from Company's representative prior to undertaking any response activities.
- 2.6 Contractor shall make its own determination as to the precautions appropriate for any Product, but Contractor shall accept Company's determination in a given situation that a Product is hazardous and handle it accordingly, whether or not the particular Product involved meets the definition of hazardous waste under applicable laws and regulations.

3. **Authorization to Respond**

- 3.1 As soon as reasonably possible following issuance of a Spill Response Request Company shall provide Contractor a written Authorization to Respond that specifies a scope of work to be performed and the commencement. An Authorization to Respond shall be issued in writing by an authorized representative of Company consisting of either the Incident Commander or a Qualified Representative.
- 3.2 As part of the Authorization to Respond, Company will provide Contractor with relevant information reasonably available concerning the composition, quantity, toxicity, and potentially hazardous properties of any Product known or believed to be present at site for which services are requested.
- 3.3 The Parties agree that facsimile signatures shall have the same force and effect as original signatures.
- 3.4 If Contractor fails to sign or provide a written response identifying any objections to an Authorization to Respond within five (5) days after receiving the Authorization to Respond, the Authorization to Respond sent by the Company shall be deemed to have been accepted as if signed by the Contractor without objection.
- 3.5 Company may terminate or suspend at any time, with or without cause, in whole or in part, any Authorization to Respond by giving written notice to Contractor's representative at the release site or as provided in the Notice section hereinafter; provided, however, that if Company terminates an Authorization to Respond without cause, it shall compensate Contractor for all work performed prior to such effective date of termination. No cancellation charges of any sort shall be paid by Company.

4. **Separate Obligations**

Each Spill Response Request and its corresponding Authorization to Respond creates a separate transaction, subject to this Agreement between Contractor and the Company.

5. **Scope of Work**

- 5.1 The scope of work shall be as described in the Authorization to Respond. In the event that there is any discrepancy between the Spill Response Request and the Authorization to Respond regarding the scope of work, the Authorization to Respond shall be the sole controlling document in determining the scope of work to be performed by Contractor.
- 5.2 Company will generally coordinate and direct emergency response and remediation efforts at a spill site. Company shall designate a qualified individual ("the Qualified Individual") or an incident commander (the "Incident Commander") as its "Company Representative" at the spill site to coordinate with Contractor.
- 5.3 Contractor may be requested to provide supervision, labor, equipment, materials and other services, including without limitation, the following types of services:
- (a) Containment, neutralization, decontamination, recovery, cleanup, and repackaging of materials;
 - (b) Site assessment and site restoration;
 - (c) Transportation, storage, treatment or disposal of waste;
 - (d) Engineering and technical services, including sampling, analysis, design, engineering, construction, or any other related services;
 - (e) Environmental consulting, preparedness evaluation, emergency response planning or any other related consulting services.

6. **Contractor Warranties and Representations**

- 6.1 Contractor warrants and represents that it has the capability, experience, and means required to perform the services contemplated by this Agreement.
- 6.2 Contractor will provide all necessary supervision, labor, machinery, tools, equipment, materials, suppliers, and subcontracted items (except those furnished by Company) for the performance of services under this Agreement. Contractor will be fully responsible for all work performed by its subcontractors, however, unless specifically authorized by Company. Contractor shall not subcontract any work or services. Company authorization for subcontracting may be verbal but will be confirmed in writing in an Authorization to Respond.

- 6.3 Contractor warrants and represents, and will demonstrate on request, that its equipment is adequate and in good working order, and its personnel (including its subcontractors) are fully trained and certified, in accordance with, but not limited to, Laws, OSRO, PREP, OPA 90, the OSHA Respiratory Protection, Hazard Communication, and Hazardous Waste Operations and Emergency Response Standard (29 CFR 1910.120).
- 6.4 Contractor shall perform all work safely, carefully, and in a good and workmanlike manner consistent with accepted professional practices, all applicable and existing Laws, and Company's standards and specifications.
- 6.5 Contractor shall notify Company if (a) Contractor is served with notice of violation of any law, regulation, permit, or license which relates to its services hereunder; (b) proceedings are commenced which could lead to revocation of permits or licenses which relate to such services; (c) permits, licenses, certifications, classifications, or other governmental authorizations relating to such services are revoked; (d) litigation is commenced against Contractor which could affect such services; or (e) Contractor becomes aware that its personnel, equipment, or facilities related to such services are not in compliance with applicable Laws, permits, or licenses.

7. **Contractor Response Capabilities**

- 7.1 Contractor will provide a map of predicted response times from dispatch locations and warrants and represents that it will maintain qualified personnel stationed on 24-hour call, in the cities listed in Exhibit A (collectively known as "Response Teams"). Each Response Team will consist of individuals trained in current spill control and clean up technology and capable of administering response to spills of Products under this Agreement.
- 7.2 Contractor warrants and represents that it will maintain emergency spill control equipment ("Emergency Equipment") according to the appropriate OSRO classification requirements in the locations listed in Exhibit A. In the event that Contractor's Emergency Equipment is not available and maintained in accordance with OSRO requirements, Contractor will immediately provide Company with updated equipment lists and maintenance procedures.
- 7.3 OSRO Classifications are listed according to USCG, EPA and/or DOT response zones. Contractor warrants and represents that the Response Teams and Emergency Equipment are qualified under the applicable OSRO classifications and will respond to a Company Spill Response Request as rapidly as possible, but within the Tier 1 OSRO mandated response time requirements for the listed zones. If the Response Teams and Emergency Equipment are actively engaged on another OPA certified response clean-up, Contractor shall provide a subcontractor (with Company's approval) to perform its services to the Company Spill Response Request.

7.4 If a Contractor does not have an OSRO classification, Contractor shall submit for Company's approval the detailed de-rated personnel and equipment lists, and response times to covered facilities as required by the USCG and Laws in the absence of such classifications.

Comment [p2]: What is the significance of de-rated?

~~7.5 Contractor agrees that in the event Contractor fails to respond to a Company Spill Response Request in accordance with the above provisions, Contractor will, at Company's sole option, forfeit the Retainer Fee to Company that was paid for the current year. The forfeiture of the Retainer Fee is not in lieu of or a waiver of any other remedies in law that Company may have against Contractor.~~

*Delete 7.5
Not applicable
"Mts will make our
Best efforts"
JHO
3-28-04*

8. Contractor Record Retention Requirement

8.1 Contractor shall maintain a copy of employee's training certifications/documentation for all personnel employed by the Contractor and its subcontractors, if applicable. These records shall be made available to Company upon request.

8.2 Contractor shall maintain daily logs of its personnel, equipment, and supplies used on an Authorization to Respond, both for Contractor's employees and its subcontractors, if any. These records shall be made available to Company upon request.

8.3 Contractor shall maintain documentation of their medical surveillance program and provide such documentations to Company's representative upon request.

9. Contractor's Emergency Response Requirements

9.1 For Contractor conducting "Emergency Response" under 29 CFR 1910.120, pursuant to a Company issued Authorization to Respond, the requirements include but are not limited to:

- (a) Pre-emergency planning/coordination with outside agencies.
- (b) Pre-emergency review and familiarization with the Company's emergency response plans for all covered assets.
- (c) Developing, implementing, and documenting the incident command system for the project.
- (d) Identification of and training of Contractor's personnel regarding emergency recognition and prevention relative to the specific project.
- (e) Identifying safe distances and places of refuge relative to the specific project.
- (f) Establishing evacuation routes and procedures for specific project in coordination with Company's representative.

- (g) Establishing site security and control procedures for the specific project in coordination with Company's representative.
- (h) Establishing decontamination procedures applicable to the project.
- (i) Identifying emergency medical treatment and first aid procedures.
- (j) Identifying emergency alerting and response procedures.
- (k) Establishing personal protective equipment and emergency equipment of the project.
- (l) Preparing and submitting to Company's on-site representative a post-emergency critique for the emergency response discussing Contractor's overall response efforts and possible improvements which could be made. This critique shall be submitted to Company's representative within 30 days after completion of all work related to the project.

10. **Contractor's Post Emergency Response Requirements**

- 10.1 For Contractor conducting "Post-Emergency Clean-Up" under 29 CFR 1910.120, pursuant to a Company issued Authorization to Respond, the requirements include but are not limited to:
- (a) Contractor should review and be familiar with Company's major Product spill safety and health program for post-emergency clean-up operation.
 - (b) Contractor shall prepare a site characterization plan and analysis evaluation by a Certified Industrial Hygienist (CIH) or other qualified person mutually agreed upon by the Company and Contractor. Company may require a CIH for a major oil spill.
 - (c) Contractor shall develop a site-specific safety and health plan for the project by the site safety and health supervisor, prior to beginning work.
 - (d) Contractor shall implement site control procedures to prevent or control employee exposure to hazardous substances as identified in site safety and health plan.
 - (e) Contractor shall develop, implement, and document the following on a project-specific basis as required to comply with 29 CFR 1910.120:
 - (1) Engineering controls and work practices to be used in the clean-up activities.
 - (2) Personal protective equipment requirements.

particular services requested, and shall be periodically inspected and property maintained.

- 11.5 Company warrants that it holds clear title to or is custodian for all Hazardous Waste to be treated, stored, controlled, or disposed and is under no legal restraint or order which would prohibit the treatment, storage, or disposal of such Hazardous Waste by any transporter or disposal facility.
- 11.6 Company shall secure all approvals, easements, licenses, and right-of-way necessary for Contractor to access the work site under any Authorization to Respond. Company agrees to bear the costs of all construction, modification, repair, or restoration of any right-of-way necessary for Contractor to perform the work, except as such may result from Contractor's negligence. Contractor shall access the work site in a way that is not unreasonably burdensome to the property.

12. Compensation

- 12.1 All work performed hereunder shall be priced on a time and material basis in accordance with the rate schedule (the "Rate Schedule") set forth in Exhibit D.
- 12.2 The Rate Schedule shall include separate daily/hourly rates for work performed during the initial emergency response ("Emergency Response Rates") and separate reduced rates for work performed after the initial emergency response ("Standard Rates"). Standard Rates shall become effective when the leak is stopped and the release is contained or when as reasonably determined by Company that emergency response is no longer necessary and the Company and Contractor mutually agree that emergency response rates are no longer applicable.
- 12.3 Contractor may not less than once annually, by written notice to Company, issue an amended Rate Schedule, which shall become effective sixty (60) days after such notice; provided, however, no amended Rate Schedule shall be effective with respect to work performed under any Authorization to Respond accepted by Contractor prior to Contractor's notification to Company of such amended Rate Schedule.
- 12.4 For daily billing rates on equipment, a "day" shall include up to ~~twenty-four (24)~~ ^{twelve (12)} hours within the same calendar day. An individual performing work below the individual's classification shall be billed at the rate for the work performed and not at the rate of the classification of the individual. Vehicle rates shall be based on a daily rate that is inclusive of all mileage driven, except as specified in the Rate Schedule. JHD 3-28-06
- 12.5 Rates for work shown in the Rate Schedule shall include benefits, ~~premiums~~ ^{*}overtime, overhead, profit and applicable taxes, such as, but not limited to, state and local sales and use taxes and federal excise taxes. The rates shall also include all charges for the use of equipment on a fully maintained basis, including all fuel, oil and repairs.

- 9 - * See NOTE 2 ON page 1 of Exhibit D
Rate schedule. (overtime AND premium time).

JHD
3-28-06

12.6 Subsequent to the initial mobilization, the Contractor shall receive daily the prior approval of the Company Representative for all personnel, equipment and materials to be used. Contractor shall be responsible to receive daily written verification from the Company Representative of personnel, equipment and materials used.

13. **Payment**

13.1 For work performed pursuant to an Authorization to Respond, Contractor shall submit invoices, itemization of all expenses and charges, and supporting documentation on a monthly basis, including written verification by Company, of personnel, equipment and materials used. Subject to Company's approval of the invoices, payment shall be made within thirty (30) days from Company's receipt of the invoice and documentation. ✓

13.2 The mark up on all reimbursable expenses incurred by Contractor, including work, equipment and materials provided by subcontractors and vendors, in performance of the work shall not exceed ten percent (10%). ✓

13.3 Contractor shall provide to Company, upon completion of the services requested under each Authorization to Respond and before final payment shall become due, (a) an affidavit which provides that all payrolls, bills and material and equipment and other indebtedness connected with the services for which Company may in any way be responsible, have been paid or otherwise satisfied, and upon request (b) other documentation such as receipts, releases, and waivers of liens, establishing payment or satisfaction of all obligations. If any such obligations remain unsatisfied after all payments are made, Contractor shall reimburse Company for all monies that Company may be required to pay, including costs and expenses in discharging such obligation.

14. **Retainer Fee**

14.1 Company will pay Contractor an annual retainer fee ("Retainer Fee") for ensuring that Contractor shall provide response services to Company in accordance with this Agreement at a level meeting or exceeding that of _____ as specified under the United States Coast Guard's Oil Spill Removal Organization Guidelines (OSRO) pursuant to the Oil Pollution Act of 1990.

14.2 The Retainer Fee, which shall remain fixed for the term of this Agreement, is _____ (\$ _____) per calendar year. The Retainer Fee will be invoiced to the Company in December for the following calendar year.

14.3 If this Agreement is terminated, a portion of the Retainer Fee equal to a prorated amount for the remainder of the calendar year for which the Retainer Fee has been paid will be returned to the Company by Contractor within thirty (30) days of the termination becoming effective.

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15. **Indemnification**

- 15.1 Contractor shall indemnify, save harmless and defend Company and its parent, and their employees, officers, directors, affiliates, members and other representatives from and against all liabilities, claims, penalties, demands, fines, forfeitures, suits, causes of action, and the costs and expenses incident thereto (including, without limitation, cost of defense, settlement, and any reasonable attorney's fees) which they may incur, become responsible for, or pay out as a result of death or bodily injury to any person, damage to any tangible property, adverse effects on the environment to the extent caused by any negligent or willful act or omission of Contractor, its employees, or subcontractors, or any violation of law or breach of any term or provision of this Agreement by Contractor, its employees or subcontractors in the performance of work pursuant to this Agreement.
- 15.2 Company shall indemnify, save harmless and defend Contractor and its parent, and their employees, officers, directors, affiliates and other representatives from and against all liabilities, claims, penalties, demands, fines, forfeitures, suits, causes of action, and the costs and expenses incident thereto (including, without limitation, cost of defense, settlement, and reasonable attorney's fees) which it may incur, become responsible for, or pay out as a result of death or bodily injury to any person, damage to any tangible property, adverse effects on the environment caused by a release of Product as described herein to the extent caused by an negligent or willful act or omission of Company, its employees, or contractors (excluding Contractor), or any violation of law as breach of any term or provision of this Agreement by Company, its employees, or contractors in the performance of work pursuant to an Authorization to Respond.

16. **Insurance**

- 16.1 Contractor shall obtain, pay for and maintain insurance for the coverages and amounts of coverage not less than those set forth below. Prior to beginning work, Contractor (1) shall provide to Company certificates, in the form of the sample certificate set forth in Exhibit E, issued by insurance companies satisfactory to Company to evidence such coverages (such certificates shall provide that there shall be no termination, non-renewal, or material changes adverse to Company without thirty (30) days prior written notice to Company). Company shall be added as an additional insured under the Comprehensive General Liability and Automobile Liability policies, provided; however, that the adding of Company as an additional insured under such policies of insurance shall not be construed as providing insurance for any liabilities other than those for which Contractor has agreed to indemnify Company.
- 16.2 Workers' Compensation complying with the law of the state or states of operations, whether or not such coverage is required by law, and employer's liability insurance with limits of \$500,000 each accident, including occupational

disease coverage with a limit of \$500,000 each employee and \$500,000 disease policy limit. If work is to be performed in North Dakota, Contractor shall purchase workers' compensation in North Dakota's state fund. Stop gap coverage or employer's overhead coverage shall be purchased.

- 16.3 Automobile liability insurance with a combined single limit for bodily injury and property damage of \$1,000,000 each occurrence to include coverage for all owned, non-owned and hired vehicles.
- 16.4 Commercial general liability insurance on an occurrence form with a combined single limit for bodily and property damage of \$1,000,000 each occurrence and general and products liability aggregates of \$2,000,000 each, covering all insurable obligations or operations of Contractor. Policy shall include coverage for products/completed operations and sudden and accidental pollution. Policy shall include no modifications that reduce the standard coverage provided under commercial general liability insurance policy form.
- 16.5 Excess or umbrella liability coverage with a combined single limit for bodily injury and property damage of not less than \$1,000,000 each occurrence with an annual aggregate of \$1,000,000 to apply in excess of all insurance coverages stipulated above.
- 16.6 If watercraft are owned or chartered by Contractor, full-form Protection and Indemnity Insurance (including, but not limited to, repatriation expenses, wages, maintenance and cure) and Hull and Machinery insurances covering any such watercraft with a minimum limit of \$5,000,000 each occurrence or the actual cash value of the highest valued vessel, whichever is greater. It shall specifically include, without limitation, coverage for any pollution or contamination, including cleanup expenses, resulting from or in any way related to the operation of any watercraft. (This coverage may be contained to some extent in other insurance listed elsewhere herein.) This insurance shall provide that any action in rem against a vessel owned or chartered by Contractor shall be considered to be an action against Contractor.
- 16.7 If aircraft are owned, leased, or hired by Contractor, Aircraft Liability Insurance (including passenger liability) with a minimum limit of \$5,000,000 each occurrence.
- 16.8 Any of the insurance required above shall be regarded as primary insurance underlying any other applicable insurance.
- 16.9 Contractor shall require of all its subcontractors to provide such of the foregoing coverages, as well as any other coverages, that Contractor considers necessary. Any deficiency in coverages, policy limits or endorsements of said subcontractors shall be the sole responsibility of Contractor.

- 16.10 Company and its affiliates shall not insure or be responsible for any loss or damage to property of any kind owned or leased by Contractor or its employees, servants and agents.
- 16.11 The maintenance of insurance by the Contractor shall in no way limit or affect the extent of the Contractor's liability.

17. **Safety**

- 17.1 Contractor shall place the highest priority on safety and health while conducting work under this Agreement. Insofar as Contractor's operations for work performed hereunder are concerned, it is the Contractor's responsibility to provide and maintain a safe working environment for its personnel and to adequately protect the safety and health of Company's personnel, the public, and other third parties. Maintaining a safe work environment shall include, but not be limited to, the evaluation and/or monitoring for work place hazardous exposures associated with performance under this Agreement. All Contractor's tools, equipment, facilities, and other items used and practices employed by Contractor in accomplishing the work are considered to be part of the working environment.
- 17.2 Contractor warrants through the completion of the work, that Contractor and its employees are qualified to do the work in a safe, good and workmanlike manner; that its employees have been properly trained in accordance all relevant safety regulations and guidelines; that Contractor's employees will take all reasonable precautions and use all reasonable safety equipment to perform the work in a safe manner and to prevent employees' injuries; that Contractor understands that it has the ultimate and sole responsibility to perform the work in a safe, good, and workmanlike manner, and, that Contractor shall assume, protect, defend, indemnify and save Company harmless from and against any and all demands, costs, fines, civil suits of any kind resulting from the alleged failure to perform the work in a safe, good, and workmanlike manner and to take all reasonable precautions and use all reasonable safety equipment to perform the work in a safe manner.
- 17.3 Company shall have the right, but not the obligation, to periodically review Contractor's operation for the purpose of monitoring Contractor's compliance with the health and safety requirements of this Agreement. Such reviews shall not relieve Contractor of its responsibility for protecting the safety and health of all of Contractor's personnel, nor shall they constitute an obligation on the part of Company to enforce compliance by Contractor's employees and/or representatives.
- 17.4 Contractor agrees to comply with the Occupational Safety and Health Administration ("OSHA") Hazard Communication Standard ("HCS") 29 CFR 1910.1200 which requires employers to inform their workers of the presence, identity and hazards of workplace chemicals and measures employees should take to protect themselves through a written hazard communication program, labels,

substance lists, material safety data sheets ("MSDS"), and information and training. In addition, each party will disseminate appropriate health and safety information to their subcontractors and those who handle, use or may be exposed to such hazardous chemicals as defined by this standard.

- 17.5 The Contractor shall be responsible for it and its employees becoming familiar with and reviewing manufacturer's MSDSs for any product which Company transports, handles or may be applicable to the work, prior to beginning any work. Upon execution of the Agreement, Company shall provide to Contractor MSDSs of products transported on Company's pipelines.

18. **Notices**

Except as provided herein to the contrary, any notices of communications required or permitted to be given hereunder shall be given to the parties at the following addresses or such other addresses as may from time to time be designated in writing:

Company: Magellan Terminals Holdings, L.P.
One Williams Center – MD 27-3
Tulsa OK 74172

Attn: Melanie Little, Director of Environmental Health and Safety
(918) 574-7306

Contractor: Miller Environmental Group, Inc.
538 Edwards Avenue
Calverton, NY 11933

Attn: George Wallace
(631) 369-4900 x 241

Notices sent by properly addressed mail, certified or registered with return receipt requested, and postage prepaid, shall be effective upon receipt. Notices sent in any other manner shall be effective when received by the Parties.

19. **Improper Payments**

Contractor will not use any funds received under this Agreement for illegal or otherwise improper purposes related to the Agreement. Contractor will not pay any commissions, fees, or rebates to any employee of Company nor favor any employee of Company with gifts or entertainment of significant cost or value.

20. **Audit and Documentation**

- 20.1 Contractor shall maintain during the course of the work, and retain for not less than three years after completion thereof, complete and accurate records in support of all Contractor's charges to Company under this Agreement; and Company shall have the right, at any reasonable time, to inspect and audit those records by authorized representatives of its own or any public accounting firm selected by it.
- 20.2 At the request of Company, Contractor shall provide Company with copies of documentation that in any way relate to performance under the Agreement. Some examples of documentation that may be request include, but are not limited to:
- (a) Training records of responders,
 - (b) Drill and exercise documentation for OSRO,
 - (c) Time cards for personnel involved in a response for Company,
 - (d) Copies of vendor's invoices to Contractor for materials used in a response for Company,
 - (e) Records of equipment used in a response for Company, and
 - (f) DOT Drug and Alcohol compliance documentation.

21. **Term and Termination**

This Agreement shall be effective on the first date written above and will continue in effect until it is terminated as herein provided. Either party may terminate this Agreement at any time, with or without cause, upon thirty (30) days prior written notice to the other, provided, however, in the event Contractor terminates this Agreement, Contractor shall complete the work set forth in any outstanding Authorization to Respond.

22. **DOT Regulations**

Contractor shall comply with the provisions and the Department of Transportation's regulations as set forth in Exhibit F.

23. **Equal Employment Opportunity**

Contractor shall comply with all applicable Federal and State laws and regulations concerning equal employment opportunity, including, but not limited to, Executive Order 11246, and any amendments thereto, the Rehabilitation Act of 1973 29 U.S.C. §701 et seq., and the Veterans' Re-employment Rights Act, 38 U.S.C. §202 1 et seq. This Contract hereby incorporates by reference the following to the same extent and with the same force and effect as if set forth herein in full: (1) Paragraphs 1 through 7 of 41 C.F.R.

§60-1.4(a); (2) the clause entitled "Affirmative Action for Handicapped Workers," 41 C.F.R. §60.741.4; (3) the clause entitled "Affirmative Action for Disabled Veterans and Veterans of the Vietnam Era," 41 C.F.R. §60-250.4. Contractor certifies that it does not maintain or allow its employees to perform services at segregated facilities, as that term is defined in 41 C.F.R. §60-1.8.

24. **Confidentiality**

- (a) Contractor shall not disclose confidential information expressly identified by Company as such to anyone other than Company or its agent or counsel, except as required by subpoena, notice of deposition or other discovery request or as otherwise required by law or order of a court or regulatory agency. If any legal proceedings, including, but not limited to, any subpoenas, notices of deposition or other discovery requests are instituted against a party to this Agreement to obtain confidential information, such party shall immediately notify the other party in writing with respect thereto. Contractor shall have no obligation to oppose any legal proceedings to obtain confidential information.
- (b) Notwithstanding the provisions of Section 12.1(a), either party shall have the express right to publicly disclose the fact that it has entered into this Agreement without receipt of the other party's approval. In addition, Company shall have the express right to provide copies of Exhibits A, B, C and G to any agency or third party as may be necessary.
- (c) Under no circumstances may Company list any Contractor or its subcontractors "Dedicated OPA Equipment", or "Identifiable Resources" for the purposes of compliance with OPA 90 standards, unless Company maintains a valid Certificate of Agreement (Exhibit G) stating specific OPA 90 coverage.
- (d) Contractor will be permitted to communicate with any Federal, State, or local agency regarding the certification status of Contractor or subcontractor resources with or without prior notice to Company. In the event that Contractor intends to decertify any resources where Company had been granted prior permission to certify said resources, Contractor agrees to provide Company thirty (30) days written notice of its plans to decertify said equipment, prior to notifying government agencies.

25. **Assignments**

Neither this Agreement, nor any claim for payment of sums due or to become due, or for damage or penalty by reason of alleged breach, shall be assignable in whole or in part by Contractor or by operation of law, without the prior written consent of Company. Any purported assignment without such consent shall be void.

26. **Independent Contractor**

In performance of the work, the Contractor shall at all times be an independent contractor and the relation of the parties in the Agreement shall in no event be construed as constituting any other relationship.

27. **Non-Exclusivity**

Nothing in this Agreement shall require Company to solely utilize the services of Contractor or to ever utilize Contractor's services.

28. **Applicable Law**

This Agreement shall be governed by, and in accordance with, the laws of the State of Oklahoma without regard to principles of conflicts of laws.

29. **Entire Agreement**

This Agreement states the entire agreement between the parties with respect to the subject matter thereof and supersedes all prior agreements and understandings, whether oral or written, between the parties with respect to the subject matter hereof and may not be amended except by written instrument executed by the parties hereto. Release or waiver of any default or the failure to assert any right under this Agreement shall not be deemed in any case to be confirming waiver as to constitute an amendment of this Agreement. All Exhibits referenced herein and attached hereto are incorporated by reference as part of this Agreement.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed effective as of the date first above written by their duly authorized representatives below.

<p>Magellan Terminals Holdings, L.P.</p> <p>By: _____</p> <p>Name: _____</p> <p>Title: _____</p> <p>Date: _____</p>	<p>Miller Environmental Group, Inc.</p> <p>By:  _____</p> <p>Name: <u>JAMES H. DAVEY</u></p> <p>Title: <u>V.P.</u></p> <p>Date: <u>3-28-06</u></p>
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