

# OIL SPILL RESPONSE PLAN

## Harvest-Marks Pipeline, LLC

### JULY 2012

*Prepared for:*

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*Prepared by:*

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## ACKNOWLEDGMENT AND PLAN APPROVAL

The information and procedures in this Plan must be treated as guidelines only. The user should determine to what extent it is practical and advisable to follow them. This decision may involve considerations not discussed in this Plan.

The information and procedures contained herein are considered to be accurate as of this date and are consistent with the National Contingency Plan (NCP) and applicable Area Contingency Plans (ACP) as detailed in Section 1.5.

## CERTIFICATION OF QUALIFIED INDIVIDUAL AND ALTERNATE QUALIFIED INDIVIDUAL

Harvest-Marks Pipeline, LLC hereby certifies that the individuals identified as Qualified Individual and Alternate Qualified Individual in this Plan have the full authority in accordance with the applicable federal and state regulations and as detailed in this Plan to:

1. Activate and engage in contracting with oil spill removal organizations.
2. Act as a liaison with the pre-designated Federal On-Scene Coordinate (OSC), and
3. Obligate funds required to carry out response activities.

Plan Approved:

Brian C. Albrecht

Date: 7/13/2012

NOTE: O'Brien's Response Management Inc. (O'BRIEN'S) provided consulting and plan development services in the preparation of this Plan utilizing data provided by the owner/operator. O'BRIEN'S assumes no liability for injury, loss, or damage of any kind resulting directly or indirectly from the use of the regulatory interpretation, response planning, or information contained in this plan.

### OPERATOR'S STATEMENT – SIGNIFICANT AND SUBSTANTIAL HARM AND CERTIFICATION OF RESPONSE RESOURCES

FACILITY NAME: Harvest-Marks Pipeline, LLC  
 FACILITY ADDRESS: 3337 North Hullen St., Suite 302  
Metairie, LA 70002

Is the pipeline greater than 6 and 5/8 inches (168 mm) in outside nominal diameter, greater than 10 miles (16 km) in length? and

YES     X     NO           

1. Has any line section experienced a release greater than 1,000 barrels (159 cu. Bbl) within the previous five years? or

YES            NO     X    

2. Has any line section experienced two or more reportable releases, as defined in Sec. 195.50, within the previous five years? or

YES            NO     X    

3. Does any line section contain any electric resistance welded pipe, manufactured prior to 1970 and operates at a maximum operating pressure established under Sec. 195.406 that corresponds to a stress level greater than 50 percent of the specified minimum yield strength of the pipe? or

YES            NO     X    

4. Is any line located within a 5-mile (8 km) radius of potentially affected public drinking water intakes and could reasonably be expected to reach public drinking water intakes? or

YES            NO     X    

5. Is any line located within a 1-mile (8 km) radius of potentially affected environmentally sensitive areas and could reasonably be expected to reach these areas?

YES     X     NO           

Harvest-Marks Pipeline LLC hereby certifies to the Pipeline and Hazardous Materials Safety Administration of the Department of Transportation that we have identified and ensured, by contract or by other means, the availability of personnel and equipment to respond, to the maximum extent practicable, to a worst case discharge.

Brian C. Albrecht  
Signature

MANAGING MEMBER  
Title

BRIAN C. ALBRECHT  
Name (please type or print)

7/13/2012  
Date



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| 3, 3a<br>(2 electronic<br>copies) | Melanie Barber<br>Response Plans Officer<br>Pipeline and Hazardous Materials Safety Administration<br>U.S. DOT Office of Pipeline Safety<br>1200 New Jersey Avenue SE – E – 22 – 321<br>Washington, DC 20590 |
| 4                                 | O'Brien's Response Management Inc.<br>818 Town & Country Blvd., Suite. 200<br>Houston, TX 77024  |
| 5<br>(sent Leap File)             | O'Brien's Response Management Inc.<br>Ed.Stanton@obriensrm.com<br>Slidell, LA  |

**NOTE:** The Distribution of this Plan is controlled by the Copy Number located on the front cover. The Plan Distribution Procedures provided in Section 1.3 and the Plan Review and Update Procedures provided in Section 1.4 should be followed when making any and all changes.

\* Copy 2 will be delivered by Harvest-Marks personnel to:

Contract Operator  
Harvest-Marks Pipeline, LLC  
Grand Isle Shipyard (Shorebase Office)  
310 McDermott Road  
Venice, LA 70091

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## 1.0 INTRODUCTION AND PLAN CONTENT

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### 1.1 PLAN PURPOSE/OBJECTIVES

The purpose of this Oil Spill Response Plan (Plan) is to assist Harvest-Marks Pipeline LLC personnel to prepare for and respond quickly and safely to a discharge originating from the pipelines and associated facilities. The Plan provides techniques and guidelines for achieving an efficient, coordinated, and effective response to a discharge incident, which may occur at the Facility.

The specific objectives of the Plan are to:

- Establish Response Teams, assign individuals to fill the positions on the teams, and define the roles and responsibilities of team members.
- Define notification, activation, and mobilization procedures to be followed when a discharge occurs.
- Define organizational lines of responsibility to be adhered to during a response operation.
- Document equipment, manpower, and other resources available to assist with the response.
- Ensure compliance with the federal, state, and local oil pollution regulations.
- Ensure consistency with the National Contingency Plan and Area Contingency Plan(s) for the area of operation.

### 1.2 SCOPE OF PLAN

This Plan has been developed in accordance with the regulation published in 49 CFR Part 194. This Plan contains prioritized procedures for Company personnel to mitigate or prevent any discharge resulting from the operation of the pipeline. A description of the pipeline's details is detailed in Figure 1.1.

### 1.3 PLAN DISTRIBUTION PROCEDURES

Harvest-Marks Management is responsible for maintenance and distribution of the Plan. Distribution will be handled in the following manner:

- Distribution of the Plan is controlled by the number on the cover page. A distribution list is included in the Foreword to facilitate control.
- Company personnel who may be called upon to provide assistance during discharge response activities will have access to a copy of the plan for their use and training.
- Any person holding a copy of the Plan shall ensure that the copy is transferred to their replacement in the event of reassignment or change in responsibility.

### 1.4 PLAN REVIEW AND UPDATE PROCEDURES

#### *Annual Review/Update*

Harvest-Marks Pipeline Management will coordinate the following plan review and update procedures:

- At least once each year, review and make appropriate revisions as required by operational or organizational changes.
- At least once each year, review and make appropriate revisions as required by changes in the names and telephone numbers detailed in Section 2.0.
- Review and make appropriate revisions as required by improved procedures or deficiencies identified during response team tabletop exercises or actual emergency responses.
- Coordinate the word processing, publication, and distribution efforts to complete the revisions and maintain the Plan.

#### *Incorporation of Plan Revisions*

Upon receipt of any revisions, the **Plan Holder** shall:

- Review and insert the revised pages into the Plan.
- Discard the obsolete pages.
- Record this action on the "Revision Record" page in the Foreword.

## 1.4 PLAN REVIEW AND UPDATE PROCEDURES (Cont'd)

### *Agency Revision Requirements*

The Company shall revise and resubmit changes to the DOT/PHMSA Pipeline Response Plans Officer within 30 days of each change that would substantially affect the implementation of the response plan. Examples of changes in operating conditions that would cause a significant change to the Plan include:

### *Conditions Requiring Changes*

- An extension of the existing pipeline or construction of a new pipeline in a response zone not covered by the previously approved plan.
- Relocation or replacement of portions of the pipeline which in any way substantially affect the information included in this Plan, such as a change in the Worst Case Discharge volume.
- A change in the type of oil handled, stored, or transferred that materially alters the required response resources.
- A change in the name of the Oil Spill Removal Organization (OSRO).
- A material change in capabilities of the Oil Spill Removal Organization(s) (OSROs) that provide equipment and personnel.
- A change in emergency response procedures.
- A change in the Qualified Individual.
- A change in the NCP or an ACP that has significant impact on the equipment appropriate for response activities.
- Any other changes that materially affect the implementation of the Plan.
- As a result of post incident or drill evaluations.

DOT/PHMSA must be provided with two copies of such revisions. The Company must submit the DOT/PHMSA issued Facility Control Number with the changes (the PHMSA Control Number is listed in Figure 1.1). In addition to periodic updates, when applicable, the Facility will resubmit the response plan to DOT/PHMSA every five years from the last approval date of the Plan.

Except as provided above, amendments to the following do not require approval by DOT/PHMSA:

- Personnel and telephone number lists included in the Plan.
- OSRO(s) change which does not result in a material change in support capabilities.

## 1.5 REGULATORY COMPLIANCE

The development, maintenance, and use of this Plan implements company policy and addresses the following regulatory requirements and guidelines:

- Federal Oil Pollution Act of 1990: U.S. DOT Final Rule for Transportation Related On-shore Facilities (49 CFR Part 194).

The response zone has been reviewed for consistency with the following plans:

- National Contingency Plan (NCP)
- U.S. Environmental Protection Agency - Region 6, Regional Integrated Contingency Plan.
- U.S. Coast Guard - One Gulf Plan and Sector New Orleans Geographic Response Plan.

## FIGURE 1.1

### INFORMATION SUMMARY

| GENERAL INFORMATION                             |  |  |
|---|--|--|
| <b>Pipeline Name:</b>                           | Harvest-Marks Pipeline LLC   |  |
| <b>PHMSA OPID Number:</b>                       | 32658  |  |
| <b>Owner Name:</b>                              | <b>Physical Address</b>  | <b>Mailing Address</b>   |
|   | Harvest-Marks Pipeline, LLC<br>3337 North Hullen St., Suite 302<br>Metairie, LA 70002  | Harvest-Marks Pipeline LLC<br>3337 North Hullen St., Suite 302<br>Metairie, LA 70002 |
| <b>24 Hour Emergency Contact Phone Numbers:</b> |  |  |
| <b>Qualified Individual:</b>                    | Ed Stanton (O'Brien's Response Management Inc.)<br>(985) 781-0804 (Office)<br>(985) 285-5508 (MBL)   |  |
| <b>Alt. Qualified Individual:</b>               | Ed Turner (O'Brien's Response Management Inc.)<br>(985) 661-3320 / (985) 781-0804 (Office)<br>(985) 960-0127 (MBL)   |  |
| <b>Alt. Qualified Individual:</b>               | Bud Kline (O'Brien's Response Management Inc.)<br>(985) 639-1979 (Office)<br>(985) 960-0585 (MBL)<br><span style="background-color: black; color: red;">(b) (6)</span> |  |
| <b>Telephone/FAX:</b>                           | Additional telephone references, including 24 hour numbers for the Facility Owner/Operator are provided in Figure 2.2.   |  |
| <b>Primary SIC Code:</b>                        | 4611   |  |

**FIGURE 1.1**  
**INFORMATION SUMMARY (Cont'd)**

| <b>GENERAL INFORMATION (Cont'd)</b>  |   |
|--|---|
| <b><i>Determination of Significant and Substantial Harm (DOT/PHMSA):</i></b>   | The single response zone identified in this plan contains line sections that are greater than 6 5/8" in nominal outside diameter, greater than 10 miles in length and located within a 1 mile radius of an environmentally sensitive area. Therefore, the response zone is treated as if it is expected to cause significant and substantial harm.  |
| <b><i>Operator Statement of "Significant and Substantial Harm":</i></b>  | The Company's goal is to respond as quickly as possible to <u>all</u> uncontrolled releases of petroleum product, regardless of the source point location along the system. Based upon this goal, and the definitions provided in 49 CFR 194.103 (c)(4) & (5), the Company is compelled to consider all the active line sections listed in this section as capable of a release potentially causing "significant and substantial harm". |
| <b>PIPELINE LOCATION</b>   |   |
| <b><i>States Traversed:</i></b>  | Louisiana   |
| <b><i>Response Zones:</i></b>  | Detailed later in this Figure. Also see Figure 1.2.   |
| <b>PHYSICAL DESCRIPTION - PIPELINE</b>   |   |
| <b><i>General:</i></b>   |   |
| <ul style="list-style-type: none"> <li>● Harvest-Marks transports product from Romere Pass to Grand Bay Receiving Station.</li> <li>● Harvest-Marks transports product from Grand Bay Receiving Station to Ostrica Terminal.</li> <li>● Harvest-Marks transports product from Grand Bay Facility 12 to Grand Bay Receiving Station.</li> <li>● Harvest-Marks transports product from Main Pass 69 Terminal to Romere Pass Terminal.</li> <li>● Harvest-Marks owns an oil field inactive line that runs from Main Pass 69 Terminal to Main Pass 69 A Structure.</li> <li>● Harvest-Marks owns an inactive line that runs from Romere Pass Terminal to Ostrica Terminal.</li> <li>● As an intrastate common carrier, the Company operates under the rules and regulations of the Louisiana Public Service Commission (LPSC), while conforming with the oil pipeline regulations of the Department of Transportation (49 CFR Parts 194 &amp; 195).</li> <li>● This Plan is written in English and understood by personnel responsible for carrying out the plan.</li> </ul> |   |

**FIGURE 1.1**  
**INFORMATION SUMMARY (Cont'd)**

| PHYSICAL DESCRIPTION - PIPELINE (Cont'd)   |                    |                     |                           |
|--|--------------------|---------------------|---------------------------|
| <p><b><i>Pipeline Specifications:</i></b></p> <p>The basic specifications of the pipeline are as follows:</p> <ul style="list-style-type: none"> <li>● <b>Product Types:</b> Crude Oil</li> <li>● <b>Pipe Detail:</b> 6 - 16" (various thicknesses)</li> </ul> <p><b><i>Response Resources:</i></b></p> <p>Facility spill mitigation procedures and response guidelines are provided in Section 3.0 for discharges that could result from any of the following scenarios:</p> <ul style="list-style-type: none"> <li>● Pipeline rupture/leak</li> <li>● Explosion and/or fire</li> <li>● Failure of facility piping</li> <li>● Equipment failure (e.g. relief valve failure, etc.)</li> </ul> <p>These scenarios could result in the following discharge volume:</p> |                    |                     |                           |
| Response Zone  | Discharge Scenario | Potential Oil Group | DOT/PHMSA Planning Volume |
| 1 – Grand Bay Response Zone  | WCD                | 2,3                 | (b) (7)(F)                |

## FIGURE 1.1

## INFORMATION SUMMARY (Cont'd)

## PHYSICAL DESCRIPTION - PIPELINE (Cont'd)

***Response Resources (Cont'd):***

The worst case discharge volume is utilized in calculating the planning volume for response resources. The planning volume is used to determine the necessary on-water recovery capacity to respond within the three tiered response times. The identified oil spill recovery devices should be capable of arriving at the scene of a discharge within the time specified for the applicable response tier. The tier requirements for high volume areas are for response in 6 hours (Tier 1), 30 hours (Tier 2), and 54 hours (Tier 3). High volume areas are listed in 49 CFR 194. The tier requirements for all other areas are for response in 12 hours (Tier 1), 36 hours (Tier 2), and 60 hours (Tier 3). Appendix B of this Plan demonstrates a series of calculations and planning volume determinations based on guidance provided by the U. S. Environmental Protection Agency (EPA) in 40 CFR Part 112 *Final Rule* dated July 1, 1994 and the Department of Transportation (DOT) PHMSA regulations in 49 CFR 194.105 dated June 16, 2005. The inclusion of these calculations is for demonstration of the response planning volumes and response capability necessary for on-water and on-shore recovery requirements as the result of the discharge scenarios outlined in the table above.

**Note:** The Harvest-Marks Pipeline is located in a Non-High Volume Area and has contracted Oil Mop, an OSRO, to respond to a release within the time frames described above.

**FIGURE 1.1**  
**INFORMATION SUMMARY (Cont'd)**

| RESPONSE ZONE INFORMATION   |             |                             |                             |             |       |
|---|-------------|-----------------------------|-----------------------------|-------------|-------|
| <b>General:</b>   |             |                             |                             |             |       |
| <ul style="list-style-type: none"> <li>The Grand Bay Response Zone includes the following:</li> </ul> |             |                             |                             |             |       |
| GRAND BAY RESPONSE ZONE   |             |                             |                             |             |       |
| Name of Pipeline  | Type of Oil | Starting                    | Ending                      | Parish      | State |
| 6-Inch  | Crude       | Romere Pass (MP41 Terminal) | Grand Bay Receiving Station | Plaquemines | LA    |
| 10-Inch   | Crude       | Grand Bay Receiving Station | Ostrica Terminal            | Plaquemines | LA    |
| 6-inch  | Crude       | Grand Bay Facility 12       | Grand Bay Receiving Station | Plaquemines | LA    |
| *16-inch  | Crude       | Romere Pass Terminal        | Ostrica Terminal            | Plaquemines | LA    |
| 10-inch   | Crude       | Main Pass 69 Terminal       | Romere Pass Terminal        | Plaquemines | LA    |
| **16-inch   | Crude       | Main Pass 69 Terminal       | Main Pass 69 A Structure    | Plaquemines | LA    |

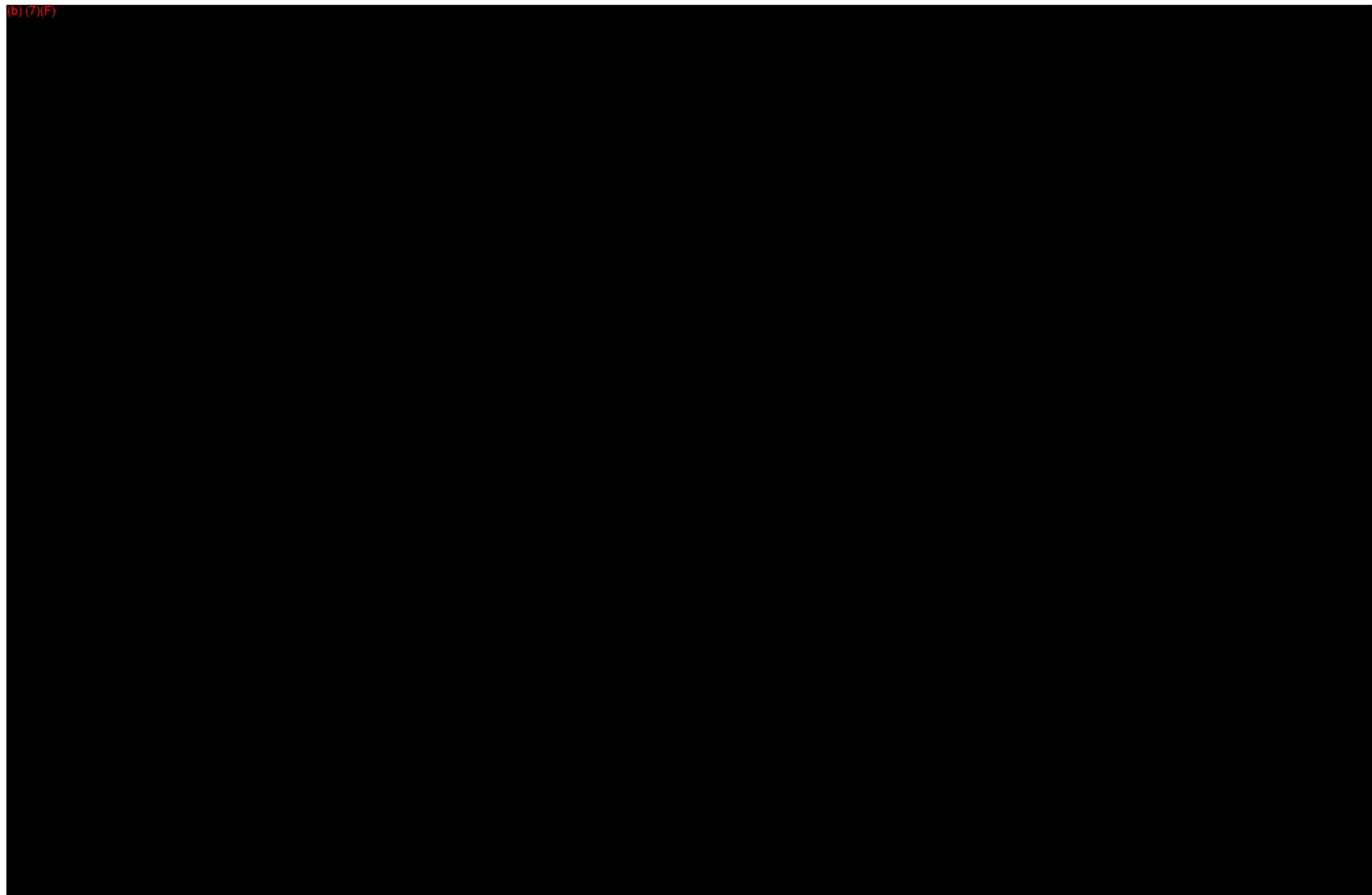
**Notes:** \*The 16" line from Romere Pass Terminal to Ostrica Terminal will remain inactive.

\*\*The 16" line from Main Pass 69 Terminal to Main Pass 69 A Structure is currently filled with oil but is inactive.

- Company personnel located at the Facility conduct all maintenance /operational functions and therefore a single Response Zone has been developed.

**FIGURE 1.2**  
**AREA MAP**

(b) (7)(F)



## 2.0 NOTIFICATION PROCEDURES

---

This section is a guide for notification procedures that should be implemented immediately after discovering a discharge incident and if possible, securing the source. Internal and external notifications are described separately for clarification purposes only. All notifications are of extreme importance and must be completed in a timely manner. Internal Notification References are included in Figure 2.2.

### 2.1 INTERNAL NOTIFICATION

The following internal notifications should be made for each emergency incident to the extent that the incident demands (telephone reference is provided in Figure 2.2). In no event shall notification be delayed because the immediate supervisor is inaccessible. Authorization is given to bypass management levels if necessary to provide timely notification to appropriate management. The typical internal notification responsibilities for each person potentially involved in the initial response are as follows:

#### Person Discovering the Discharge

- Immediately notify the **24-Hour Dispatcher**.
- Notify **Contract Operator**.

#### Contract Pipeline Operator

- Notify **Harvest-Marks Management**

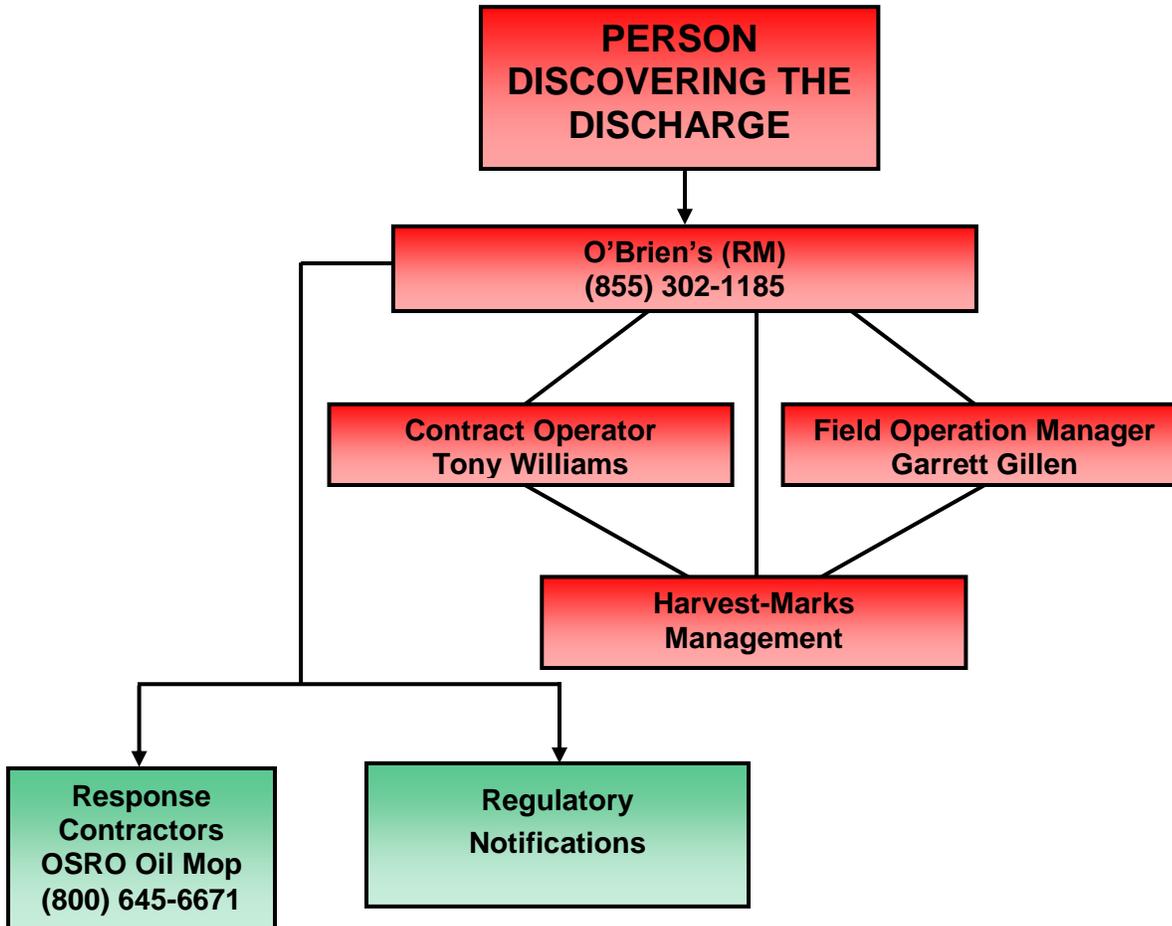
#### Harvest-Marks Management

- Notify local emergency response resources (fire, police, medical, etc.), response contractors, and notify local, state and federal emergency response agencies (Figure 2.5).

FIGURE 2.1

## INTERNAL NOTIFICATION SEQUENCE

(Phone references are provided in Figures 2.2 and 2.4)



**FIGURE 2.2**  
**INTERNAL NOTIFICATION REFERENCES**

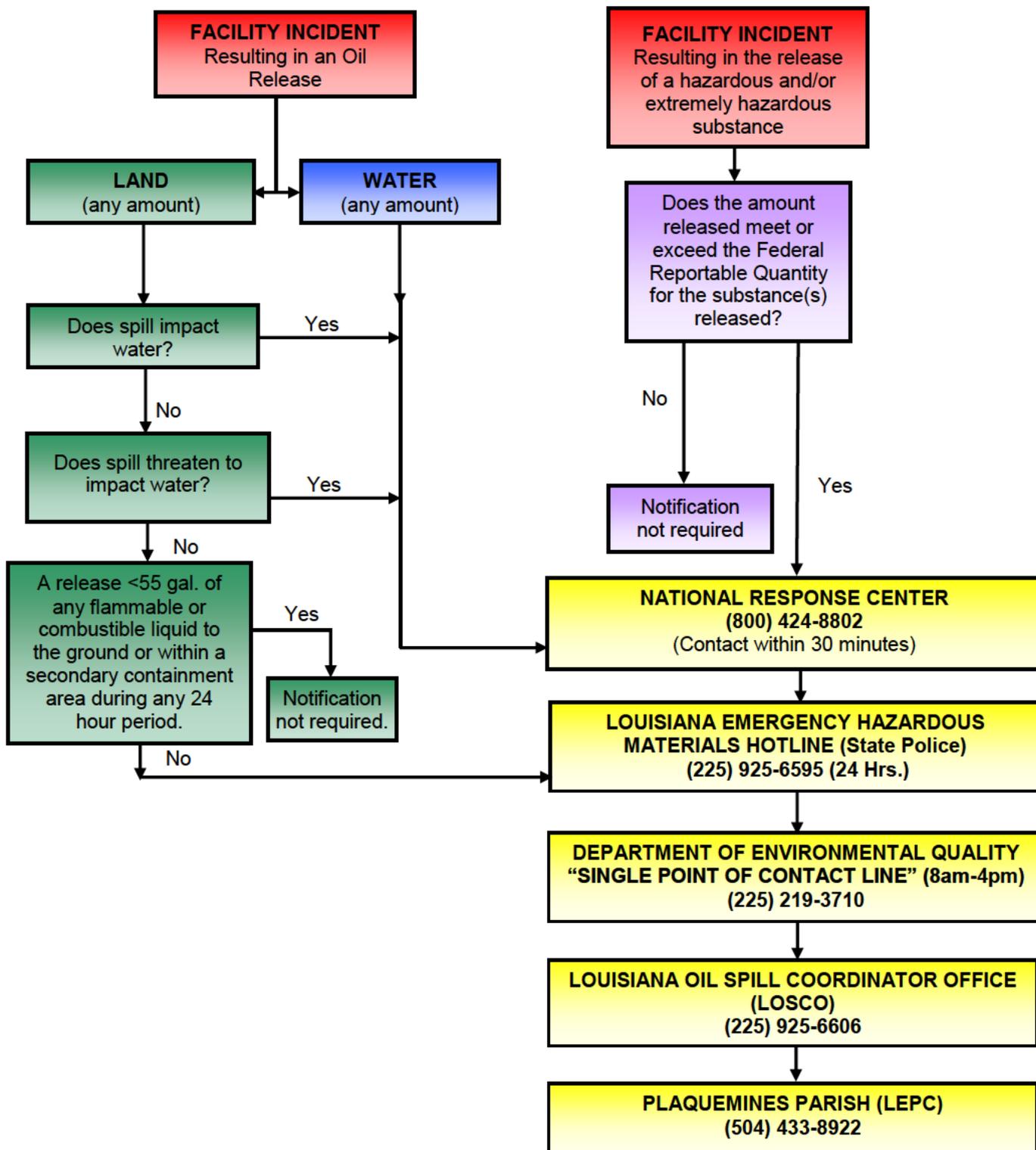
| <b>INTERNAL NOTIFICATIONS</b>              |  |                 |                |  |  |
|--|--|-----------------|----------------|--|--|
| <b>TITLE</b>                               | <b>NAME</b>  | <b>LOCATION</b> | <b>CELL</b>    | <b>OTHER</b>   | <b>EMAIL</b>   |
| Qualified Individual (O'Brien's)           | Bud Kline  | Slidell, LA     | (985) 960-0585 | O: (985) 781-0804<br>(b) (6)   | <a href="mailto:Calvin.kline@obriensrm.com">Calvin.kline@obriensrm.com</a> |
| Alternate Qualified Individual (O'Brien's) | Ed Stanton   | Slidell, LA     | (985) 285-5508 | O: (985) 781-0804<br>(b) (6)   | <a href="mailto:ed.stanton@obriensrm.com">ed.stanton@obriensrm.com</a>     |
| Field Operation Manager                    | Garrett Gillen   | Jesuit Bend     | (504) 615-6449 | GIS Dispatch Office<br>Main (504) 534-7744<br>O: (504) 534-7741<br>O: (504) 534-7743 | <a href="mailto:ggillen@harvestmarks.com">ggillen@harvestmarks.com</a>     |
| Contract Operator                          | Tony Williams  | Empire          | (504) 416-3432 | (b) (6)<br>O: (504) 322-7040   | <a href="mailto:Contractorsinc1@aol.com">Contractorsinc1@aol.com</a>       |
| Managing Member                            | Brian Albrecht   | Metairie        | (504) 427-0235 | (b) (6)<br>O: (504) 322-7040   | <a href="mailto:brian@harvestmarks.com">brian@harvestmarks.com</a>         |
|  | Everard Marks  | Harahan         | (504) 202-8515 | O: (504) 828-2565  |  |
| OSRO                                       | Oil Mop<br>Cathy Woodruff<br>(Contract # 2012-MSA-00120) | Belle Chasse    | (504) 382-6110 | (800) 645-6671   | <a href="mailto:cwoodruff@omies.com">cwoodruff@omies.com</a>               |

FIGURE 2.3

| NOTIFICATION DATA SHEET   |                         |   |                          |                        |                 |
|---|-------------------------|---|--------------------------|------------------------|-----------------|
| Date of Incident: _____   |                         | Time of Incident: _____   |                          |                        |                 |
| INCIDENT DESCRIPTION  |                         |   |                          |                        |                 |
| Reporter's Full Name: _____   |                         | Position: _____   |                          |                        |                 |
| Day Phone Number: _____   |                         | Evening Phone Number: _____   |                          |                        |                 |
| Company: Harvest-Marks Pipeline LLC   |                         | Organization Type: _____  |                          |                        |                 |
| Facility Address: 3337 North Hullen St., Suite 302<br>Metairie, LA 70002        |                         | Owner's Address: Harvest-Marks Pipeline LLC<br>3337 North Hullen St., Suite 302<br>Metairie, LA 70002 |                          |                        |                 |
| Facility Latitude: _____  |                         | Facility Longitude: _____   |                          |                        |                 |
| Incident Address/Location: _____<br>(if not at Facility): _____                 |                         |   |                          |                        |                 |
| On-Scene Weather Conditions: _____  |                         |   |                          |                        |                 |
| Responsible Party's Name: _____   |                         | Phone Number: _____   |                          |                        |                 |
| Responsible Party's Address: _____  |                         |   |                          |                        |                 |
| Source and/or cause of incident: _____  |                         |   |                          |                        |                 |
| Nearest City: _____   |                         |   |                          |                        |                 |
| County/Parish: _____  |                         | State: _____  |                          | Zip code: _____        |                 |
| Section: _____  |                         | Township: _____   |                          | Range: _____           |                 |
| Distance from City: _____   |                         | Unit of Measure: _____  |                          | Borough: _____         |                 |
| Container Type: _____   |                         | Container Storage Capacity: _____   |                          | Unit of Measure: _____ |                 |
| Facility Oil Storage Capacity: _____  |                         | Unit of Measure: _____  |                          |                        |                 |
| Were Materials Discharged? _____ (Y/N) Confidential? _____ (Y/N)                |                         |   |                          |                        |                 |
| CHRIS Code  | Total Quantity Released | Unit of Measure   | Water Impact (YES or NO) | Quantity into Water    | Unit of Measure |
|   |                         |   |                          |                        |                 |
|   |                         |   |                          |                        |                 |
|   |                         |   |                          |                        |                 |
| RESPONSE ACTION(S)  |                         |   |                          |                        |                 |
| Action(s) taken to Correct, Control, or Mitigate Incident: _____                |                         |   |                          |                        |                 |
| Number of Injuries: _____   |                         | Number of Deaths: _____   |                          |                        |                 |
| Evacuation(s): _____  |                         | (Y/N) Number Evacuated: _____   |                          |                        |                 |
| Was there any damage? _____   |                         | (Y/N) Medium Affected: _____  |                          |                        |                 |
| Description: _____  |                         |   |                          |                        |                 |
| More Information about Medium: _____  |                         |   |                          |                        |                 |
| CALLER NOTIFICATIONS  |                         |   |                          |                        |                 |
| National Response Center (NRC): 1-800-424-8802                                  |                         |   |                          |                        |                 |
| Additional Notifications (Circle all applicable): USCG EPA State Other          |                         |   |                          |                        |                 |
| Describe: _____   |                         |   |                          |                        |                 |
| NRC Incident Assigned No: _____   |                         |   |                          |                        |                 |
| ADDITIONAL INFORMATION  |                         |   |                          |                        |                 |
| Any information about the incident not recorded elsewhere in this report: _____ |                         |   |                          |                        |                 |
| Meeting Federal Obligations to Report? _____ (Y/N) Date Called: _____           |                         |   |                          |                        |                 |
| Calling for Responsible Party? _____ (Y/N) Time Called: _____                   |                         |   |                          |                        |                 |
| NOTE: DO NOT DELAY NOTIFICATION PENDING COLLECTION OF ALL INFORMATION.          |                         |   |                          |                        |                 |

FIGURE 2.4

**EXTERNAL NOTIFICATION FLOWCHART**  
(See Fig. 2.5 for more details on Agency Notification Requirements)



## 2.2 EXTERNAL NOTIFICATIONS

External notifications are those made to entities outside of the Company including federal, state and local regulatory agencies, as well as, railroad and utility companies. These notifications will be made as follows:

- ***Harvest-Marks Management***
  - National Response Center (NRC)
  - Appropriate state agency
  - Local agencies
  - All releases reported to any agency due to special agreement; and
  - USCG (as necessary).

The Notification Data Sheet (see Figure 2.3) should be used to begin the external notification process, keeping in mind that there are some strict time limits for making certain calls.

The following are guidelines to be considered when initiating external notifications:

- Receive faxed copy of Notification Data Sheet from Company employee or, at a minimum, gather pertinent incident information from the third party reporting the release.
- Do not report information that has not been verified or confirmed, usually by field personnel.
- Do not speculate as to the cause on an incident or make any statements about liability.
- Do not delay notifications because of incomplete information.
- When making notifications, document:
  - Agency notified, including telephone number
  - Date and time of notification
  - Person notified
  - Content of message
  - Incident number, if applicable

External required agency notifications contact numbers are provided in Figure 2.4.

### ***Periodic Follow-up Notification during Emergency Response***

Periodic follow-up notification must be made within the Company as well as to federal, state, and local agencies. Responsibility for periodic follow-up notifications remains with each individual as initially assigned within the notification process flowcharts provided in Figure 2.1, unless that responsibility has been transferred based on the magnitude of the response.

## FIGURE 2.5

## EXTERNAL NOTIFICATION REFERENCES

| REQUIRED NOTIFICATIONS   |   |  |
|--|---|--|
| <b>NATIONAL RESPONSE CENTER</b>  |   |  |
| <b>National Response Center</b><br>c/o United States Coast<br>Guard (G-OPF)<br>2100 2 <sup>nd</sup> Street Southwest<br>Room 2611<br>Washington, D.C. 20593-<br>0001 | (800) 424-8802 *<br>(202) 267-2675 *<br>(202) 267-2165<br>(Fax) | <b>REPORTING REQUIREMENTS</b><br><br>TYPE: For all spills that impact or threaten to impact navigable water or for any failure in a pipeline system that: <ol style="list-style-type: none"> <li>1. Caused a death or a personal injury requiring hospitalization</li> <li>2. Resulted in either a fire or explosion not intentionally set by the carrier.</li> <li>3. Caused estimated damage to the property of the carrier or others, or both, of a total of \$50,000 or more.</li> <li>4. Resulted in the pollution of any stream, river, lake, reservoir, or other similar body of water that violated applicable water or adjoining shoreline, causing a discoloration or emulsion beneath the surface of the water or upon adjoining shorelines.</li> <li>5. In the judgment of the carrier, was significant even though it did not meet the criteria of any other subparagraph of this paragraph.</li> </ol><br>NOTE: A call to the NRC must also be made for spills or releases of hazardous substances that meet or exceed their RQ.<br><br>VERBAL: Immediate notification required (within 2 hours).<br><br>WRITTEN: Not required |

\* 24-Hour Number

FEDERAL

## FIGURE 2.5

## EXTERNAL NOTIFICATION REFERENCES (Cont'd)

| REQUIRED NOTIFICATIONS   |  |  |
|--|--|--|
| DEPARTMENT OF TRANSPORTATION   |  |  |
| <p><b>US Dept. of Transportation</b><br/>           Environmental Planning Officer<br/>           Office of Pipeline Safety<br/>           Pipeline and Hazardous<br/>           Materials Safety Administration<br/>           1200 New Jersey Avenue SE-<br/>           E-22-311<br/>           Washington, DC 20590<br/>           Fax Filing: (202) 366-4566</p> | <p>(800) 424-8802*<br/>           (202) 267-2675*<br/>           (202) 267-2165<br/>           (Fax)</p> | <p><b>REPORTING REQUIREMENTS</b></p> <p>TYPE: In addition to the reporting of accidents to the NRC, a written accident report (Form PHMSA F7000-1, provided in Appendix C) must be submitted for releases resulting in any of the following:</p> <ol style="list-style-type: none"> <li>1. Explosion or fire not intentionally set by the operator.</li> <li>2. Release of 5 gallons or more of hazardous liquid or carbon dioxide, except that no report is required for a release of less than 5 barrels resulting from a pipeline maintenance activity if the release is:               <ol style="list-style-type: none"> <li>a. Not one described under the NRC's reporting conditions.</li> <li>b. Confined to Company property or pipeline right-of-way; and</li> <li>c. Cleaned up promptly.</li> </ol> </li> <li>3. Death of any person.</li> <li>4. Personal injury necessitating hospitalization.</li> <li>5. Estimated property damage, including cost of cleanup and recovery, value of lost product, and damage to the property of the operator or others, or both, exceeding \$50,000.</li> </ol> <p>VERBAL: Call to the NRC meets the required verbal notification under DOT reporting requirement.</p> <p>WRITTEN: As soon as practicable, an accident meeting any of the above criteria must be reported on DOT Form 7000-1 (included in this Figure). The report must be sent to DOT no later than 30 days after the release. Changes or additions to the original report (DOT Form 7000-1) must file a supplemental report within 30 days.</p> |

\* 24-Hour Number

FEDERAL

## FIGURE 2.5

## EXTERNAL NOTIFICATION REFERENCES (Cont'd)

| REQUIRED NOTIFICATIONS                                      |                |   |
|---|----------------|---|
| <b>OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)</b> |                |   |
| 200 Constitution Avenue<br>Washington, D.C. 20210           | (800) 321-6742 | <b>REPORTING REQUIREMENTS (29 CFR 1904.39)</b><br>TYPE: Fatality from a work related incident or the inpatient hospitalization of three (3) or more employees as a result of a work related incident.<br>VERBAL: Immediately.<br>WRITTEN: As requested by the Agency. |

FEDERAL

## FIGURE 2.5

## EXTERNAL NOTIFICATION REFERENCES (Cont'd)

| <b>REQUIRED NOTIFICATIONS</b>   |  |  |
|---|--|--|
| <b>LOUISIANA STATE POLICE; Single Point of Contact (SPOC)</b>   |  |  |
| ATTN: Emergency and Radiological Services Division - SPOC<br>"Unauthorized Discharge Notification Report"<br>P.O. Box 4312<br>Baton Rouge, LA 70821-4312  | (225) 925-6595<br>(24 Hours)   | <b>REPORTING REQUIREMENTS (LAC 33:1.3915)</b><br>TYPE: For all emergency incidents.<br>VERBAL: Immediately (within 1 hour).<br>WRITTEN: Within 7 calendar days to State Police and LADEQ.  |
| <b>LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY (LADEQ)<br/>SINGLE POINT OF CONTACT (SPOC)</b>   |  |  |
| Louisiana Department of Environmental Quality<br>P.O. Box 4312<br>Baton Rouge, LA 70821-4312<br>Attn: Office of Environmental Compliance – SPOC<br>"Unauthorized Discharge Notification Report" | (225) 219-3640<br>(Mon-Fri 8:00 am to 4:30 pm)<br>(225) 342-1234<br>(24 Hours) | <b>REPORTING REQUIREMENTS (LAC 33:1.3917)</b><br>TYPE: <u>For non-emergency</u> , unauthorized discharges that exceed a reportable quantity.<br>VERBAL: As soon as possible (within 24 hours).<br>WRITTEN: Within 7 calendar days. |

STATE

## FIGURE 2.5

## EXTERNAL NOTIFICATION REFERENCES (Cont'd)

| <b>REQUIRED NOTIFICATIONS</b>                         |   |  |
|---|---|--|
| <b>U.S. COAST GUARD – SECTOR NEW ORLEANS</b>          |   |  |
| 200 Hendee St.<br>New Orleans, LA 70114               | (504) 365-2200<br>(504) 365-2542<br>(24 Hours)                | <b>REPORTING REQUIREMENTS (40 CFR 300.300)</b><br>TYPE: Immediately for all spills that impact or threaten navigable water or adjoining shoreline.<br>VERBAL: Notification to the USCG is typically accomplished by the call to the NRC.<br>WRITTEN: As the agency may request depending on circumstances. |
| <b>U.S. ENVIRONMENTAL PROTECTION AGENCY REGION VI</b> |   |  |
| 1445 Ross Avenue, Suite 1200<br>Dallas, TX 75202      | (866) 372-7745<br>Emergencies<br>(214) 665-6444<br>Non-Emerg. | <b>REPORTING REQUIREMENTS (40 CFR 300.300)</b><br>TYPE: Immediately for all spills that impact or threaten navigable water or adjoining shoreline.<br>VERBAL: Notification to the EPA is typically accomplished by the call to the NRC.<br>WRITTEN: As the agency may request depending on circumstances.  |
| <b>PLAQUEMINES PARISH LEPC</b>                        |   |  |
| 208-C Avenue G<br>Belle Chasse, LA 70037              | (504) 433-8922  | <b>REPORTING REQUIREMENTS (40 CFR 300.300)</b><br>TYPE: Immediately for all spills that impact or threaten navigable water or adjoining shoreline.<br>VERBAL: Notification to the EPA is typically accomplished by the call to the NRC.<br>WRITTEN: As the agency may request depending on circumstances.  |

LOCAL

FIGURE 2.6

| <b>OIL SPILL REMOVAL ORGANIZATIONS<br/>(UNDER CONTRACT/AGREEMENT)</b> |                  |                              |
|---|------------------|------------------------------|
| <b>COMPANY</b>  | <b>LOCATION</b>  | <b>OFFICE/<br/>ALTERNATE</b> |
| Oil Mop   | Belle Chasse, LA | (800) 645-6671               |

## 3.0 RESPONSE ACTIONS

### 3.1 INITIAL RESPONSE ACTIONS

Initial response actions are those taken by local personnel immediately upon becoming aware of a discharge or emergency incident, before the Local Response Team (described in Section 4.0) is formed and functioning. Timely implementation of these initial steps is of the utmost importance because they can greatly affect the overall response operation.

The pages that follow discuss initial response actions for a variety of emergencies that have the possibility of occurring. These emergencies are discussed in the order listed below:

- Fire/Explosions
- Spills
- Tornado
- Flood
- Hurricane
- (b) (7)(F)

It is important to note that these actions are intended only as guidelines. The appropriate response to a particular incident may vary depending on the nature and severity of the incident and on other factors that are not readily addressed. Note that, without exception, personnel and public safety is first priority.

The first Contract Operator on scene will function as the person-in-charge until relieved by Harvest Marks Supervisor or O'Brien's Response Management QI or IC. For response operations within the control of the Contract Operator, the role of IC will be assumed and retained by the Contract Operator until relieved.

The person functioning as IC during the initial response period has the authority to take the steps necessary to control the situation and must not be constrained by these general guidelines.

#### INITIAL RESPONSE ACTIONS - SUMMARY

- Personnel and public safety is first priority
- Eliminate sources of ignition
- Isolate the source of the discharge, minimize further flow
- Make internal notifications
- Make external notifications
- Activate additional Contract Operators as necessary
- Activate response contractors and other external resources as necessary
- Monitor and control the containment and clean-up effort

In addition to the potential emergency events outlined in this section, the Company has identified several "abnormal operations" that could be expected in the pipeline. The pipeline has defined the events and established procedures to identify, eliminate or mitigate the threat of worst case discharge due to these events.

### 3.1 INITIAL RESPONSE ACTIONS (Cont'd)

#### FIRST RESPONDER

Before taking ANY action (other than calling for assistance), if the emergency may involve the release of a hazardous material, you **MUST** also be trained and familiar with the appropriate considerations and processes.

As a first responder to the site of an apparent emergency, your initial objective is **site management**. Don't become part of the problem; set the foundation for proper ongoing site management.

- \_\_\_\_\_ Isolate the area; deny entry.
- \_\_\_\_\_ If the integrity of the line is in question, call O'Brien's Response Management immediately.
- \_\_\_\_\_ Follow the appropriate "Specific Incident Response Checklist" in Figure 3.1 and "Product Specific Response Considerations" in Figure 3.2.

#### CONTRACT OPERATOR

- \_\_\_\_\_ Initiate appropriate shutdown/emergency response actions (see Company's Operations and Maintenance Manual).
- \_\_\_\_\_ Notify O'Brien's Response Management.
- \_\_\_\_\_ Assigned personnel will immediately respond to a discharge, as the situation demands.
- \_\_\_\_\_ Perform response/clean-up operations as directed or coordinated by the Incident Commander (see Appendix D for roles and responsibilities of each team member).
- \_\_\_\_\_ Assist as directed at the spill site.

#### QUALIFIED INDIVIDUAL (QI)

- \_\_\_\_\_ Evaluate the severity, potential impact, safety concerns, and response requirements based on the initial data provided by the first person on scene.
- \_\_\_\_\_ Delegate the role of Incident Commander to Contract Operator or Oil Spill Removal Organization based on severity of the response.
- \_\_\_\_\_ Ensure Incident Commander provides updates on the safety aspects at the site, including need for personal protective equipment, sources of ignition, and potential need for evacuation.
- \_\_\_\_\_ Proceed to mobile Command Post and support response and clean-up operations as required.
- \_\_\_\_\_ Ensure containment, dispersion, and/or clean-up operations are in accordance with the "Product Specific Response Considerations" provided in Figure 3.2.

## FIGURE 3.1

## SPECIFIC INCIDENT RESPONSE CHECKLIST

**Remember: Without Exception, Personnel Safety Is The First Priority. Excessive Exposure To The Vapor And Liquid Stages Of The Spilled Product Should Be Avoided.**

### INITIAL RESPONSE

#### Priorities:

- \_\_\_\_\_ Take appropriate action to protect life and ensure the safety of personnel.

The success or failure of an operation often depends on the first contract person on-scene's ability to take command of the situation and implement the *Oil Spill Response Plan*.

**Before taking ANY action (other than calling for assistance), if the emergency may involve the release of a hazardous material, you MUST also be trained and familiar with the appropriate considerations and processes.**

As a first responder to the site of an apparent emergency, your initial objective is **site management**. Don't become part of the problem; set the foundation for proper ongoing site management.

**Isolate the area; deny entry.**

**If the integrity of the line is in question, call 24-Hour Dispatcher immediately; then contact your supervisor and implement the *Oil Spill Response Plan*.**

- \_\_\_\_\_ Take appropriate action to protect life and ensure the safety of personnel.
- \_\_\_\_\_ Rescue in the HOT Zone: Attempt **only** if you are trained to the Haz Mat Tech level and these three conditions are met:
  - a. adequate personal protective equipment is available, **and**
  - b. sufficient time apparently exists to complete without endangering your own life, **and**
  - c. there is an adequate number of emergency response personnel present.

**If possible, it is best to have professional emergency response personnel perform rescue.**

- \_\_\_\_\_ Evacuation involves three steps:
  - a. notify evacuees to gather in a safe, central area, moving uphill and/or at a right angle to any migrating liquid or vapor, and if possible, upwind.
  - b. if needed, provide transportation to move evacuees to a reasonably safe area.
  - c. care for evacuees: provide water, food, clothing, shelter, and information.

## FIGURE 3.1

## SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

**INITIAL RESPONSE (Cont'd)**

Emergency response agencies will generally perform evacuation.

- \_\_\_\_\_ Administer first aid.

Perform other First Aware/First Responder activities:

- \_\_\_\_\_ Emergency alarms/signals must be distinctive, timely and appropriate to the site; personnel must be trained in the recognition and response to the alarms/signals.
- \_\_\_\_\_ Facility evacuation plans displayed on employee notice boards must include:
  - a. emergency contact numbers (local emergency response agencies and federal agencies)
  - b. facility drawing denoting exits and corridor traffic flow direction arrows and the designated meeting place
- \_\_\_\_\_ Take authorized action to protect property, including prevention of environmental damage, especially the contamination of water.
  - a. stop ongoing leaks
  - b. stabilize and contain the situation
- \_\_\_\_\_ Collect information and notify O'Brien's Response Management.
- \_\_\_\_\_ If roads or other transportation routes are present in the affected area, assist the Sheriff or local emergency officials with halting traffic.

**All personnel are reminded that outsiders other than emergency services will not be allowed in the response zone during the time of an emergency, and that no statements will be issued to the media or other interested parties except by designated Company Management. Be courteous with media representatives and direct them to the designated spokesman.**

**FIGURE 3.1****SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)****EXPLOSIONS AND/OR FIRE, SPECIFIC RESPONSE****Pipeline Right of Way**

- \_\_\_\_\_ The individual discovering the fire will:
  - Ensure that the fire department has been notified.
  - Ensure 24-Hour Dispatcher is notified by telephone.
  
- \_\_\_\_\_ Prior to the arrival of a supervisor or Oil Spill Removal Organization, the individual will remain in charge and will direct the fire department to the scene of the fire.

**FIRE / EXPLOSIONS**

## FIGURE 3.1

## SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

**LINE BREAK OR LEAK, SPECIFIC RESPONSE**

- \_\_\_\_ Notify 24-Hour Dispatcher.
- \_\_\_\_ Shutdown pipeline as outlined in Operations and Maintenance Manual.
- \_\_\_\_ Obtain all the necessary information to complete the leak report.
- \_\_\_\_ Qualified Oil Spill Removal Organization personnel should use Combustible Gas Indicator, O<sub>2</sub> meter, proper colormetric indicator and/or other air sampling measurements to ensure that areas are safe to enter for continued response operations. Refer to Safety Volume for further guidance.
  - Mitigate spreading of the product, as the situation demands. Potential containment strategies include:
    - Earthen dike/berm
    - Ditching
    - Spreading sorbent material over the spill
  - Prevent the spill from entering the waterways, sewer, etc. to the greatest extent possible.
- \_\_\_\_ If the product enters water and a safe operating environment exists, the responders will try to contain by:
  - Deploying spill response equipment (facility and/or contract) to prevent/ mitigate spill impact (spreading of spill).
  - Attempting to divert/contain the spill:
    - In quiet area or low current areas of the water.
    - Away from strong winds or in areas that could be affected by change in wind direction.
    - Away from areas of hazard to public, property water intakes, etc.
- \_\_\_\_ O'Brien's Response Management will inform local operators such as utilities, telephone company, railway as applicable.
- \_\_\_\_ The responders will review socio-economic and environmentally sensitive areas identified in Section 6.0 and the ACP. Determine which of these may be threatened by the spill and direct the response operation to these locations. Initiate protection and recovery actions.
- \_\_\_\_ The Incident Commander will determine the direction and expected duration of spill movement.
- \_\_\_\_ Qualified pipeline personnel will make all necessary repairs after the response is complete.

**FIGURE 3.1****SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)****LINE BREAK OR LEAK, SPECIFIC RESPONSE (Cont'd)**

- \_\_\_\_\_ The Oil Spill Removal Organization will clean up spilled product to eliminate any possible environmental problems.
- \_\_\_\_\_ The Contract Operator with Company Management approval will return the line to service when repairs are complete.
- \_\_\_\_\_ The Company Management will complete follow-up and written reporting, as the situation demands.

## FIGURE 3.1

## SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

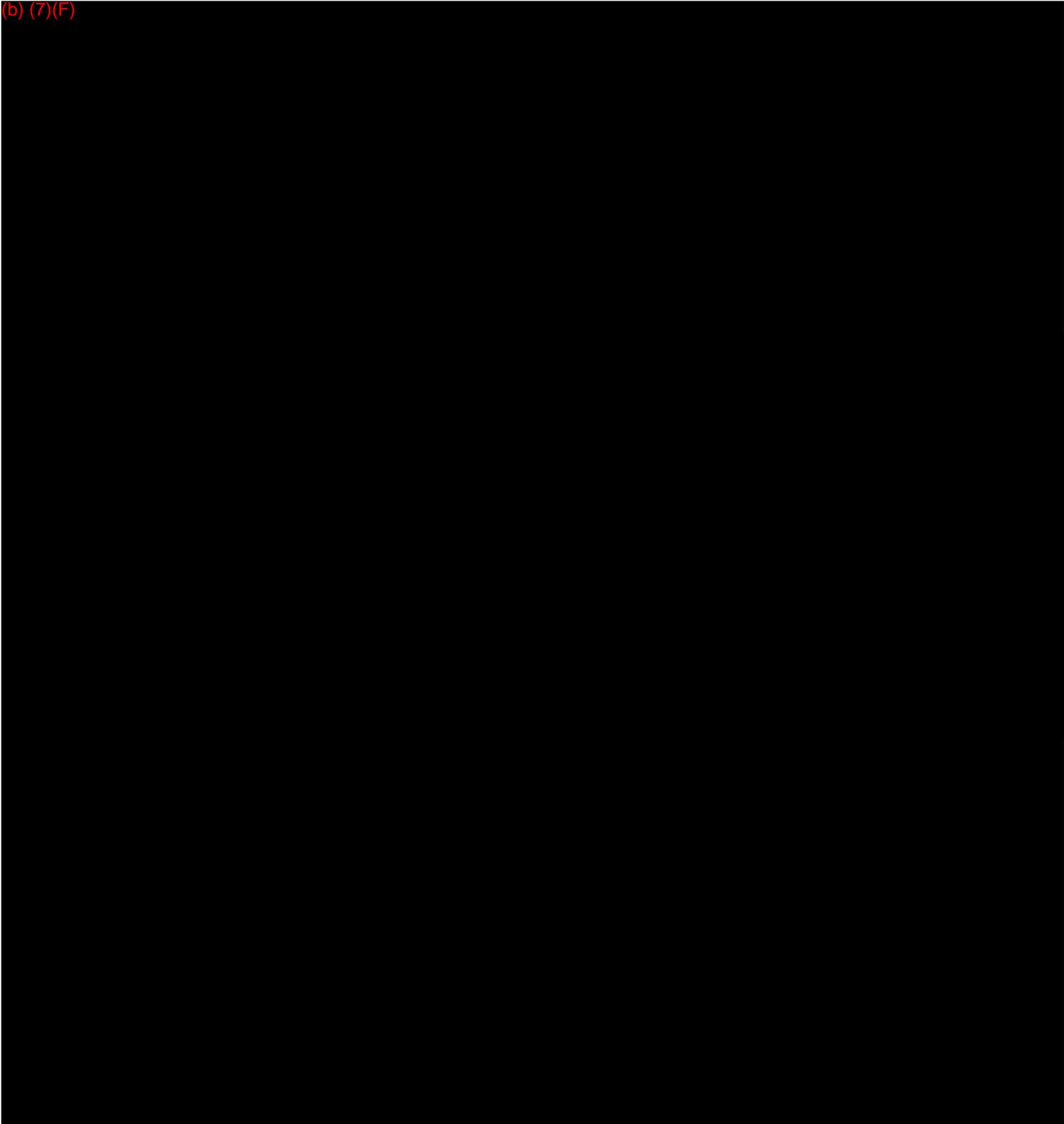
**ABNORMAL PIPELINE OPERATIONS**

- \_\_\_\_\_ If operating design limits have been exceeded (increase or decrease pressure or flow) and no emergency condition exists, stop operations and immediately investigate the pipeline.
- \_\_\_\_\_ Verify whether a true safety problem, equipment malfunction, or operator error is present.
- \_\_\_\_\_ If the situation is due to malfunctioning equipment, can transfer operations can continue safely? If yes, then bypass the faulty equipment until the completion of the transfer and make appropriate repairs. **Note: In all cases, safety to operations, the general public, and property will govern actions taken.**
- \_\_\_\_\_ If the transfer can not continue safely, make appropriate repairs before continuing operations. **Note: Corrective action will only be done by qualified personnel to perform the type of work involved.**
- \_\_\_\_\_ Monitor affected systems until normal operations are resumed.
- \_\_\_\_\_ Inform local operators such as utilities, telephone, and/or railway.
- \_\_\_\_\_ Complete follow-up and written reporting, as the situation demands.

Note: For more specific details, refer to the Company's Operations and Maintenance Manual.

**FIGURE 3.1**

(b) (7)(F)



**FIGURE 3.1**

(b) (7)(F)



## FIGURE 3.1

## SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

**MEDICAL EMERGENCY, SPECIFIC RESPONSE**

- \_\_\_\_\_ Apply appropriate first aid for both injury and shock, exercising care not to cause further injury.
- \_\_\_\_\_ If victim is unconscious and not breathing, immediately apply artificial respiration (if trained in CPR) and continue without interruption until natural breathing is restored or until relieved by another CPR-trained individual or other qualified medical personnel.
- \_\_\_\_\_ Call for ambulance or other medical evacuation resources, if appropriate.
- \_\_\_\_\_ Notify hospital of patient arrival and extent of injury.
- \_\_\_\_\_ Notify victim's immediate family.
- \_\_\_\_\_ Complete follow-up and written reporting, as the situation demands

FIGURE 3.2

| <b>FLAMMABLE LIQUIDS<br/>(Non-Polar/Water-Immiscible)</b>   |  |
|---|--|
| The following information is intended to provide the initial responder(s) with data that may be useful in making quick decisions and executing prompt response actions. <u>The information is intended for guideline purposes only.</u>   |  |
| <b>PRODUCTS</b> Crude Oil   |  |
| <b>HAZARD IDENTIFICATION / RECOGNITION</b>  |  |
| <b>GUIDE NO.<br/>128</b>  | <p><b>DANGERS</b></p> <ul style="list-style-type: none"> <li>● HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.</li> <li>● Vapors may form explosive mixtures with air.</li> <li>● Vapors may travel to source of ignition and flash back.</li> <li>● Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).</li> <li>● Vapor explosion hazard indoors, outdoors or in sewers.</li> <li>● Those substances designated with a "P" may polymerize explosively when heated or involved in a fire.</li> <li>● Runoff to sewer may create fire or explosion hazard.</li> <li>● Containers may explode when heated.</li> <li>● Many liquids are lighter than water.</li> <li>● Substance may be transported hot.</li> </ul> |
| <b>HEALTH</b>   |  |
| <ul style="list-style-type: none"> <li>● Move victim to fresh air. Call 911 or emergency medical service.</li> <li>● Apply artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult.</li> <li>● Remove and isolate contaminated clothing and shoes.</li> <li>● In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.</li> <li>● Wash skin with soap and water.</li> <li>● In case of burns, immediately cool affected skin for as long as possible with cold water. Do not remove clothing if adhering to skin.</li> <li>● Keep victim warm and quiet.</li> <li>● Ensure that medical personnel are aware of the material(s) involved, and take precautions.</li> </ul> |  |
| <b>PUBLIC SAFETY</b>  |  |
| <ul style="list-style-type: none"> <li>● Isolate spill or leak area immediately for at least 50 meters (150 feet) in all directions.</li> <li>● Keep unauthorized personnel away.</li> <li>● Stay upwind.</li> <li>● Keep out of low areas.</li> <li>● Ventilate closed spaces before entering.</li> </ul>  |  |
| <b>EVACUATION</b>   | <p><b>Large Spill</b></p> <ul style="list-style-type: none"> <li>● Consider initial downwind evacuation for at least 300 meters (1,000 feet).</li> </ul> <p><b>Fire</b></p> <ul style="list-style-type: none"> <li>● If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.</li> </ul>   |
| Information provided by the Emergency Response Guidebook 2012.  |  |

## 3.2 SAFETY AWARENESS

### Personal Protective Equipment (PPE)

The following represents OSHA/EPA designated PPE levels for responding to emergencies, post emergency cleanup sites, and/or Temporary Storage and Disposal (TSD) sites. The responder's PPE should be chosen based on his/her level of training and assigned job duties.

| Personal Protective Equipment (PPE)  |   |
|--|---|
| <p><b><u>LEVEL A</u></b></p> <ul style="list-style-type: none"> <li>● Self Contained Breathing Apparatus (SCBA) (worn inside suit)</li> <li>● Encapsulated Chemical Protective Suit</li> <li>● Chemical Protective Gloves</li> <li>● Chemical Protective Boots</li> <li>● Hard Hat</li> </ul>  | <p><b><u>LEVEL B</u></b></p> <ul style="list-style-type: none"> <li>● SCBA (worn outside suit)</li> <li>● Chemical Protective Suit w/Hood</li> <li>● Chemical Protective Boots</li> <li>● Chemical Protective Gloves</li> <li>● Hard Hat</li> </ul> |
| <p><b><u>LEVEL C</u></b></p> <ul style="list-style-type: none"> <li>● Air Purifying Respirator (APR)</li> <li>● APR ½ Face / Full Face</li> <li>● Hard Hat</li> <li>● Glasses (worn with ½ face APR)</li> <li>● Chemical Protective Boots</li> <li>● Chemical Protective Gloves</li> <li>● Chemical Protective Suit/Tyvek</li> </ul> | <p><b><u>LEVEL D</u></b></p> <ul style="list-style-type: none"> <li>● Hard Hat</li> <li>● Safety Glasses</li> <li>● Work Uniform / Clothes</li> <li>● Leather Gloves</li> <li>● Safety Boots</li> </ul>   |
| <p><b><u>MODIFIED LEVEL C</u></b><br/>Same as Level C except no APR requirements.</p>  |   |

## 3.3 EMERGENCY MEDICAL TREATMENT AND FIRST AID

On-site emergency medical response requires the same rapid assessment of the patient as any other situation, but requires the responders to be aware of other considerations that may affect the way they handle the patient. These considerations include the following:

- The potential for contamination of the patient, responders, and equipment should be addressed. Responders should arrange to treat all patients **AFTER** the injured party has been decontaminated according to the Site Safety and Health Plan.
- Site personnel should make the initial assessment of the patient and determine the severity of the injury/illness.
- If the treatment needed is critical care or "life saving" treatment, rapid decontamination of the injured/ill party should be started. Refer to the Site Safety and Health Plan for steps to be taken in an "abbreviated" decontamination for medical treatment.
- **The need for full decontamination should be carefully weighed against the need for prompt medical treatment.**

**3.3 EMERGENCY MEDICAL TREATMENT AND FIRST AID (Cont'd)**

- The ambulance responding to medical emergencies shall be contacted as soon as possible and instructed exactly where to respond when needed and the nature of the contaminant. Telephone reference is provided in Figure 2.5.
- MSDS information will be available from the Incident Commander and should be provided to medical personnel to alert them of decontamination requirements.
- If emergency medical treatment is needed, the Incident Commander, or his designated representatives, will request assistance from trained medical personnel.

## 4.0 RESPONSE TEAMS

---

### 4.1 INTRODUCTION

The Company utilizes the Incident Command System (ICS) to manage emergency response activities. The ICS is a management tool that is readily adaptable to very small incidents as well as those of considerable significance. ICS shall be implemented for all discharge incidents. The staffing levels required to meet the specific needs of the incident will be based on its size and severity.

The first response to a discharge originating from this operation will be provided by the local responders. In the event that the response operation is beyond the capability of the Contract Operator, the Contract Operator will notify O'Brien's Response Management and O'Brien's will activate the contract Spill Management Team.

A detailed explanation of the Incident Command System and the roles and responsibilities for primary members of the Spill Management Team are provided in this Section.

### 4.2 QUALIFIED INDIVIDUAL

Vital duties of the Qualified Individual (QI) include:

- Activate internal alarms and hazard communication systems to notify all Facility personnel.
- Notify all response personnel, as needed.
- Identify the character, exact source, amount, and extent of the release, as well as the other items needed for notification.
- Notify and provide necessary information to the appropriate federal, state, and local authorities with designated response roles, including the National Response Center (NRC), State Emergency Response Commission (SERC), and local response agencies.
- Serve as liaison with the On-Scene Coordinator.
- Assess the interaction of the spilled substance with water and/or other substances stored at the Facility and notify response personnel at the scene of that assessment.
- Assess the possible hazards to human health and the environment due to the release. This assessment must consider both the direct and indirect effects of the release (i.e., the effects of any toxic, irritating, or asphyxiating gases that may be generated, or the effects of any hazardous surface water runoffs from water or chemical agents used to control fire and heat-induced explosion).
- Assess and implement prompt removal actions to contain and remove the substance released.

## 4.2 QUALIFIED INDIVIDUAL (Cont'd)

- Coordinate rescue and response actions as previously arranged with all response personnel.
- Access Company funding to initiate clean-up activities.
- Direct clean-up activities until properly relieved of this responsibility.

Arrangements will be made between the QI and the Alternate Qualified Individual (AQI) to ensure that either one or the other is available on a 24-hour basis and is able to arrive at the Facility in a reasonable amount of time. The AQI shall replace the QI in the event of his absence and have the same responsibilities and authority.

## 4.3 LOCAL RESPONSE TEAM

The Contract Operator will function as the initial Incident Commander (IC) and person-in-charge until relieved by the QI (O'Brien's) who will then provide an Incident Commander, as applicable. For response operations within the control of the Contract Operator/Local Response Team (LRT), the role of IC will typically be assumed and retained by the Contract Operator.

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

The LRT should try to fill the necessary positions and request additional support from the Spill Management Team to fill/back up all the positions as the incident may dictate.

## 4.4 SPILL MANAGEMENT TEAM

For spill response operations outside the capabilities of the LRT, the QI or IC will determine the need for mobilization of the Spill Management Team (SMT). The members of the LRT will typically become members of the SMT.

The SMT, once fully staffed, is designed to cover all aspects of a comprehensive and prolonged incident response. The number of positions/personnel required to staff the SMT will depend on the size and complexity of the incident. During a prolonged response, additional personnel may be transferred in, and more than one level within the Team may be involved to sustain 24-hour operations.

#### 4.4 SPILL MANAGEMENT TEAM (Cont'd)

Led by the Incident Commander, the SMT is composed of the following principal components:

- Command
- Finance
- Logistics
- Operations
- Planning

The SMT is staffed by specially trained personnel from various facility/corporate locations and various contract resources as the situation requires. Telephone references are provided in Figure 2.2.

## 5.0 RESPONSE PLANNING

### 5.1 INCIDENT ACTION PLAN

Emergency response activities are planned and coordinated through the use of an Incident Action Plan (IAP) which is developed for each Operational Period of a response by the Incident Management Team. For small responses, an ICS 201 (Incident Briefing Form provided in this Section), may be used as the IAP and, for all incidents, the ICS 201 will serve as the initial IAP.

For larger or more complex incidents a more complete IAP will be necessary. These IAP's are generally created through the completion and compilation of several standard ICS forms. These forms include, but are not limited to:

| ICS FORM NUMBER | FORM TITLE                         | PREPARED BY*                                     |
|-----------------|------------------------------------|--|
| 201             | Incident Briefing                  | Initial Response IC                              |
| None            | ICS IAP Cover                      | Situation Unit Leader                            |
| 202             | Incident Objectives                | Planning Section Chief                           |
| 203             | Organization Assignment List       | Resources Unit Leader                            |
| 204             | Assignment List                    | Operations Section Chief & Resources Unit Leader |
| 205             | Incident Radio Communications Plan | Communications Unit Leader                       |
| 206             | Medical Plan                       | Medical Unit Leader                              |
| 207             | Incident Organization              | Resources Unit Leader                            |
| 209             | Incident Status Summary            | Incident Commander                               |
| 214             | Unit Log                           | Situation Unit Leader                            |
| 218             | Support Vehicle Inventory          | Ground Support Unit Leader                       |
| 220             | Air Operations Summary             | Air Operations Branch Director                   |
| 232             | Resources at Risk Summary          | Situation Unit Leader                            |
| SSP             | Site Safety Plan                   | Safety Officer                                   |

\* The Planning Section Chief may assign preparation of forms to other personnel on the Incident Management Team if identified position is unassigned or vacant when the IAP is produced.

## 5.1 INCIDENT ACTION PLAN (Cont'd)

Depending on the nature and severity of the emergency, additional documents may be included in the IAP. These may include:

- Sensitivity Maps (Provided in Section 6)
- Waste Management & Disposal Plans (Provided in Appendix F)
- Plans for use of Alternative Technologies (Dispersant/In-situ Burning/Bioremediation)
- Security Plans
- Decontamination Plans
- Traffic Plans

## 5.2 SITE SAFETY PLAN

Site Safety Plans (SSP) are required by OSHA (29CFR1910.120(b)(4)) for all hazardous waste operations. The SSP should address all on-site operations and hazardous as well as on-site emergency procedures. A template for use in producing an SSP is provided in this Section.

The SSP is typically prepared by the Safety Officer and approved by the Incident Commander. All personnel must be familiar with the contents of the SSP and the SSP must be updated as conditions, operations and hazards associated with the response change.

## **ICS FORMS**

NRC Incident No. # \_\_\_\_\_

|   |  |                                 |
|---|--|---------------------------------|
| <b>1. Incident Name</b>   | <b>2. Prepared by:</b> (name)<br>Date: _____ Time: _____ | INCIDENT BRIEFING<br>ICS 201-CG |
| <b>3. Map/Sketch</b> (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) |  |                                 |
| <b>4. Current Situation:</b><br><hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>   |  |                                 |

NRC Incident No. # \_\_\_\_\_

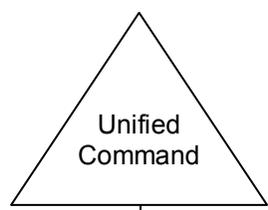
|                  |   |                                 |
|------------------|---|---------------------------------|
| 1. Incident Name | 2. Prepared by: (name)<br>Date: _____ Time: _____ | INCIDENT BRIEFING<br>ICS 201-CG |
|------------------|---|---------------------------------|

| 5. Initial Response Objectives, Current Actions, Planned Actions |  |
|--|--|
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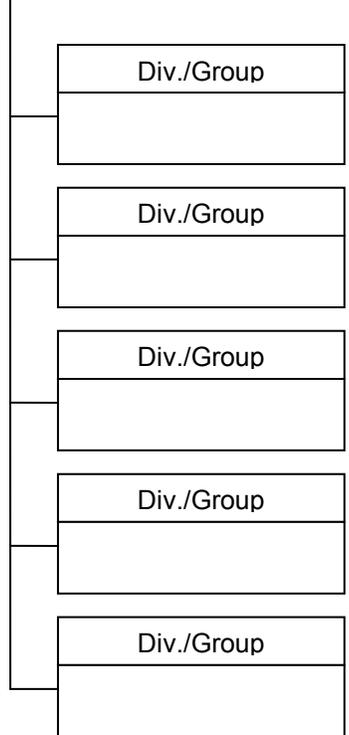
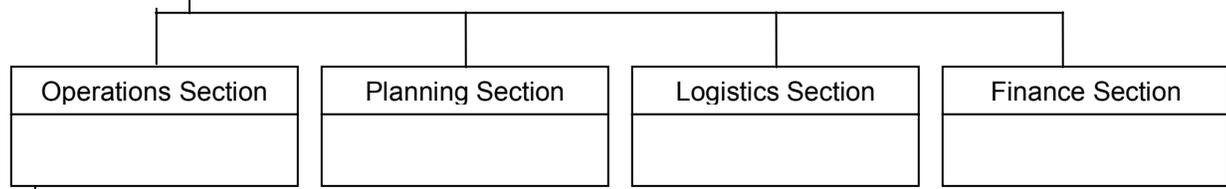
|                  |   |                                 |
|------------------|---|---------------------------------|
| 1. Incident Name | 2. Prepared by: (name)<br>Date: _____ Time: _____ | INCIDENT BRIEFING<br>ICS 201-CG |
|------------------|---|---------------------------------|

6. Current Organization



FOSC \_\_\_\_\_  
SOSC \_\_\_\_\_  
RPIC \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

— Safety Officer \_\_\_\_\_  
— Liaison Officer \_\_\_\_\_  
— Information Officer \_\_\_\_\_





NRC Incident No. # \_\_\_\_\_

|                         |  |                               |
|-------------------------|--|-------------------------------|
| <b>1. Incident Name</b> | <b>2. Operational Period to be covered by IAP (Date/Time)</b><br>From: _____ To: _____ | <b>CG IAP<br/>COVER SHEET</b> |
|-------------------------|--|-------------------------------|

**3. Approved by Incident Commander(s):**

| <u>ORG</u> | <u>NAME</u> |
|------------|-------------|
| _____      | _____       |
| _____      | _____       |
| _____      | _____       |
| _____      | _____       |
| _____      | _____       |

## INCIDENT ACTION PLAN

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

- ICS 202-CG (Response Objectives)  
\_\_\_\_\_
- ICS 203-CG (Organization List) – OR – ICS 207-CG (Organization Chart)  
\_\_\_\_\_
- ICS 204-CGs (Assignment Lists)  
One Copy each of any ICS 204-CG attachments:  
\_\_\_\_\_
- ICS 205-CG (Communications Plan)  
\_\_\_\_\_
- ICS 206-CG (Medical Plan)
- ICS 208-CG (Site Safety Plan) or Note SSP Location \_\_\_\_\_
- Map/Chart
- Weather forecast / Tides/Currents

**Other Attachments**

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

|                              |                        |
|------------------------------|------------------------|
| <b>4. Prepared by:</b> _____ | <b>Date/Time</b> _____ |
|------------------------------|------------------------|

NRC Incident No. # \_\_\_\_\_

| 1. Incident Name  | 2. Operational Period (Date/Time)<br>From: _____ To: _____ | INCIDENT OBJECTIVES<br>ICS 202-CG |
|---|--|-----------------------------------|
| 3. Objective(s)   |  |                                   |
| 4. Operational Period Command Emphasis (Safety Message, Priorities, Key Decisions/Directions) |  |                                   |
| Approved Site Safety Plan Located at:   |  |                                   |
| 5. Prepared by: (Planning Section Chief)  | Date/Time  |                                   |

NRC Incident No. # \_\_\_\_\_

| <b>1. Incident Name</b>  | <b>2. Operational Period (Date/Time)</b><br>From: _____ To: _____   | <b>ORGANIZATION<br/>ASSIGNMENT LIST<br/>ICS 203-CG</b> |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| <b>3. Incident Commander(s) and Staff</b><br>Agency            IC                                  Deputy<br><table border="1" style="width:100%; border-collapse: collapse; margin-top: 5px;"> <tr><td style="width:30%; height: 20px;"></td><td style="width:35%;"></td><td style="width:35%;"></td></tr> <tr><td style="height: 20px;"></td><td></td><td></td></tr> <tr><td style="height: 20px;"></td><td></td><td></td></tr> <tr><td style="height: 20px;"></td><td></td><td></td></tr> <tr><td style="height: 20px;"></td><td></td><td></td></tr> </table> Safety Officer: _____<br>Information Officer: _____<br>Liaison Officer: _____ |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>7. OPERATION SECTION</b><br><br>Chief _____<br>Deputy _____<br>Deputy _____<br>Staging Area Manager _____<br>Staging Area Manager _____<br>Staging Area Manager _____<br><br><b>a. Branch – Division Groups</b><br>Branch Director _____<br>Deputy _____<br>Division Group _____<br>Division Group _____<br>Division Group _____<br>Division/Group _____<br>Division/Group _____<br><br><b>b. Branch – Division/Groups</b><br>Branch Director _____<br>Deputy _____<br>Division/Group _____<br>Division/Group _____<br>Division/Group _____<br>Division/Group _____<br>Division/Group _____<br><br><b>c. Branch – Division/Groups</b><br>Branch Director _____<br>Deputy _____<br>Division/Group _____<br>Division/Group _____<br>Division/Group _____<br>Division/Group _____<br>Division/Group _____<br><br><b>d. Air Operations Branch</b><br>Air Operations Br. Dir _____<br>Helicopter Coordinator _____ |
|  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| <b>4. Agency Representatives</b><br><table border="1" style="width:100%; border-collapse: collapse; margin-top: 5px;"> <thead> <tr> <th style="width:20%;">Agency</th> <th style="width:80%;">Name</th> </tr> </thead> <tbody> <tr><td style="height: 20px;"></td><td></td></tr> </tbody> </table>   | Agency  | Name   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Agency   | Name  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| <b>5. PLANNING/INTEL SECTION</b><br>Chief _____<br>Deputy _____<br>Resources Unit _____<br>Situation Unit _____<br>Environmental Unit _____<br>Documentation Unit _____<br>Demobilization Unit _____<br>Technical Specialists _____  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>6. LOGISTICS SECTION</b><br>Chief _____<br>Deputy _____<br><b>a. Support Branch</b><br>Director _____<br>Supply Unit _____<br>Facilities Unit _____<br>Vessel Support Unit _____<br>Ground Support Unit _____<br><br><b>b. Service Branch</b><br>Director _____<br>Communications Unit _____<br>Medical Unit _____<br>Food Unit _____   | <b>8. FINANCE/ADMINISTRATION SECTION</b><br>Chief _____<br>Deputy _____<br>Time Unit _____<br>Procurement Unit _____<br>Compensation/Claims Unit _____<br>Cost Unit _____ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>9. Prepared By: (Resources Unit)</b> _____  | <b>Date/Time</b> _____  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |





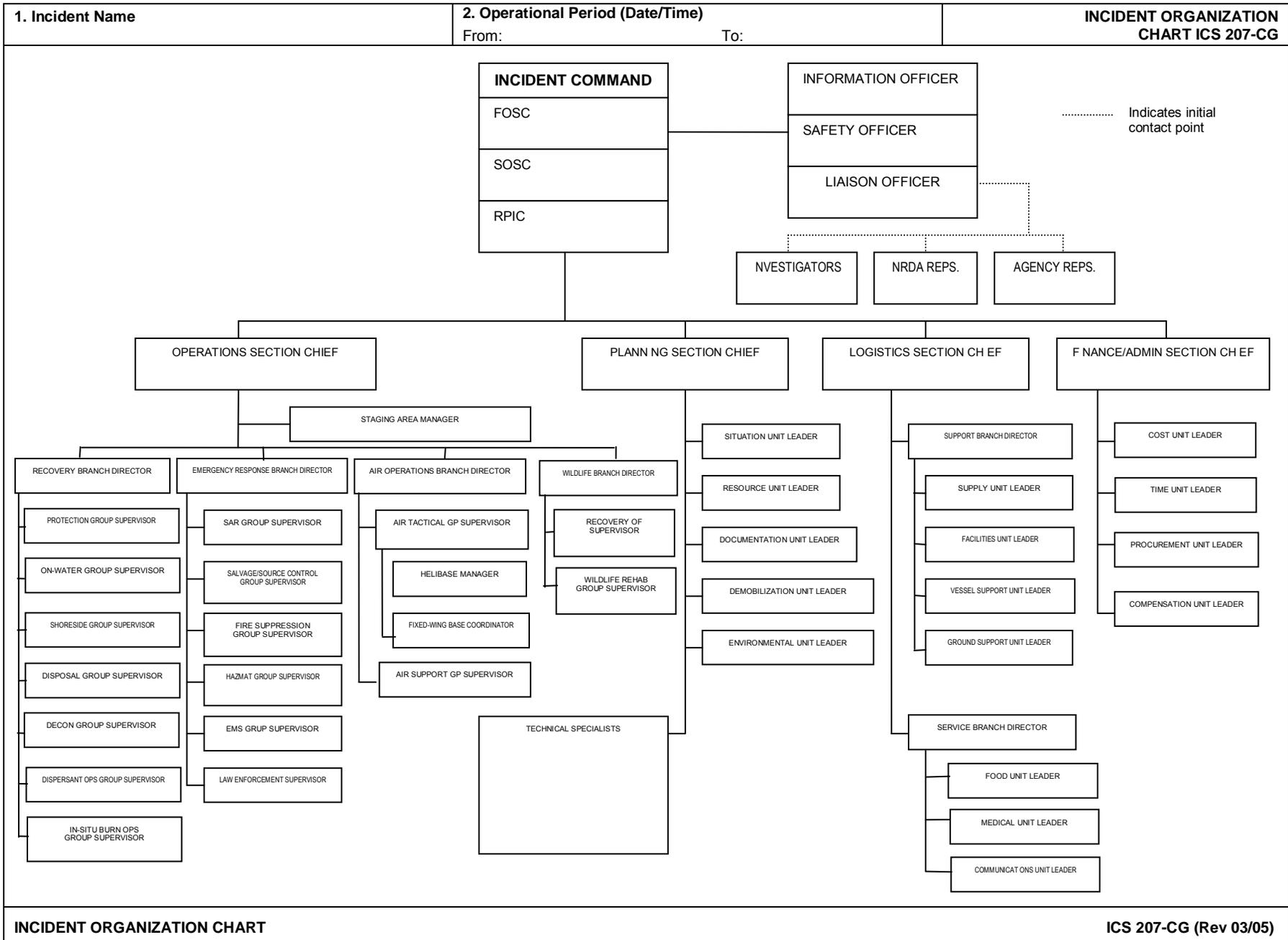
NRC Incident No. # \_\_\_\_\_

|  |  |  |                   |                                |  |
|--|--|--|-------------------|--------------------------------|--|
| 1. Incident Name   |  | 2. Operational Period (Date/Time)                        |                   | ASSIGNMENT LIST ATTACHMENT     |  |
|  |  | From: _____ To: _____                                    |                   | ICS 204a-CG                    |  |
| 3. Branch  |  |  | 4. Division/Group |                                |  |
| 5. Strike Team/Task Force/Resource (Identifier)  |  | 6. Leader  |                   | 7. Assignment Location         |  |
| 8. Work Assignment Special Instructions, Special Equipment/Supplies Needed for Assignment, Special Environmental Considerations, Special Site Specific Safety Considerations |  |  |                   |                                |  |
|  |  |  |                   |                                |  |
| Approved Site Safety Plan Located at:  |  |  |                   |                                |  |
| 9. Other Attachments (as needed)   |  |  |                   |                                |  |
| <input type="checkbox"/> Map/Chart   |  | <input type="checkbox"/> Weather Forecast/Tides/Currents |                   | <input type="checkbox"/> _____ |  |
| <input type="checkbox"/> _____   |  | <input type="checkbox"/> _____                           |                   | <input type="checkbox"/> _____ |  |
| 10. Prepared by: _____   |  | Date/Time _____  |                   | 11. Reviewed by (PSC): _____   |  |
|  |  |  |                   | Date/Time _____                |  |
|  |  |  |                   | 12. Reviewed by (OSC): _____   |  |
|  |  |  |                   | Date/Time _____                |  |











NRC Incident No. # \_\_\_\_\_

| <b>9. Equipment Resources</b>                          |       |           |             |                            |                  |
|--|-------|-----------|-------------|----------------------------|------------------|
| Kind   | Notes | # Ordered | # Available | # Assigned                 | # Out of Service |
| <b>USCG Assets</b>                                     |       |           |             |                            |                  |
| Aircraft – Helo  |       |           |             |                            |                  |
| Aircraft – Fixed Wing                                  |       |           |             |                            |                  |
| Vessels – USCG Cutter                                  |       |           |             |                            |                  |
| Vessels – Boat   |       |           |             |                            |                  |
| Vehicles – Car   |       |           |             |                            |                  |
| Vehicles – Truck                                       |       |           |             |                            |                  |
| Pollution Equip – VOSS/SORS                            |       |           |             |                            |                  |
| Pollution Equip – Portable Storage                     |       |           |             |                            |                  |
| Pollution Equip – Boom                                 |       |           |             |                            |                  |
|  |       |           |             |                            |                  |
|  |       |           |             |                            |                  |
| <b>Non-CG/Other Assets</b>                             |       |           |             |                            |                  |
| Aircraft – Helo  |       |           |             |                            |                  |
| Aircraft – Fixed Wing                                  |       |           |             |                            |                  |
| Vessels – SAR/LE Boat                                  |       |           |             |                            |                  |
| Vessels – Work/Crew Boat                               |       |           |             |                            |                  |
| Vessels – Tug/Tow Boat                                 |       |           |             |                            |                  |
| Vessels – Pilot Boat                                   |       |           |             |                            |                  |
| Vessels – Deck Barge                                   |       |           |             |                            |                  |
| Vessels –  |       |           |             |                            |                  |
| Vehicles – Car   |       |           |             |                            |                  |
| Vehicles – Ambulance                                   |       |           |             |                            |                  |
| Vehicles – Truck                                       |       |           |             |                            |                  |
| Vehicles – Fire/Rescue/HAZMAT                          |       |           |             |                            |                  |
| Vehicles – Vac/Tank Truck                              |       |           |             |                            |                  |
| Vehicles –   |       |           |             |                            |                  |
| Pollution Equip – Skimmers                             |       |           |             |                            |                  |
| Pollution Equip – Tank Vsl/ Barge                      |       |           |             |                            |                  |
| Pollution Equip – Portable Storage                     |       |           |             |                            |                  |
| Pollution Equip – OSRV                                 |       |           |             |                            |                  |
| Pollution Equip – Boom                                 |       |           |             |                            |                  |
| Pollution Equip –                                      |       |           |             |                            |                  |
|  |       |           |             |                            |                  |
| <b>10. Personnel Resources</b>                         |       |           |             |                            |                  |
| <b>Agency</b>  |       |           |             | <b>Total # of People</b>   |                  |
| USCG   |       |           |             |                            |                  |
| DHS (other than USCG)                                  |       |           |             |                            |                  |
| NOAA   |       |           |             |                            |                  |
| FBI  |       |           |             |                            |                  |
| DOD (USN Supsalv, CST, etc.)                           |       |           |             |                            |                  |
| DOI (US Fish & Wildlife, Nat Parks, BLM, etc.)         |       |           |             |                            |                  |
| RP   |       |           |             |                            |                  |
| State  |       |           |             |                            |                  |
| Local  |       |           |             |                            |                  |
|  |       |           |             |                            |                  |
| Total Personnel Resources Used From all Organizations: |       |           |             |                            |                  |
| <b>11. Prepared by:</b>                                |       |           |             | <b>Date/Time Prepared:</b> |                  |

NRC Incident No. # \_\_\_\_\_

|  |  |  |  |   |                  |          |  |     |  |                            |  |       |  |
|--|--|--|--|---|------------------|----------|--|-----|--|----------------------------|--|-------|--|
| <b>1. Incident Name</b>  |  | <b>2. Operational Period (Date / Time)</b><br>From: To: Time of Report |  | <b>ICS 209-CG OIL/HAZMAT ATTACHMENT</b> |                  |          |  |     |  |                            |  |       |  |
| <b>3. HAZMAT/Oil Spill Status (Estimated, in gallons)</b>            |  |  |  |   |                  |          |  |     |  |                            |  |       |  |
| Common Name(s):  |  |  |  |   |                  |          |  |     |  |                            |  |       |  |
| UN Number:   |  | <input type="checkbox"/> Secured                                       |  | <input type="checkbox"/> Unsecured      |                  |          |  |     |  |                            |  |       |  |
| CAS Number:  |  | Remaining Potential (bbl):   |  |   |                  |          |  |     |  |                            |  |       |  |
|  |  |  |  | Rate of Spillage (bbl/hr):              |                  |          |  |     |  |                            |  |       |  |
|  |  | Adjustments To Previous Operational Period                             |  | Since Last Report                       |                  |          |  |     |  |                            |  |       |  |
| Volume Spilled/Released  |  |  |  | Total                                   |                  |          |  |     |  |                            |  |       |  |
| <b>Mass Balance - HAZMAT/Oil Budget</b>                              |  |  |  |   |                  |          |  |     |  |                            |  |       |  |
| Recovered HAZMAT/Oil   |  |  |  |   |                  |          |  |     |  |                            |  |       |  |
| Evaporation/Airborne   |  |  |  |   |                  |          |  |     |  |                            |  |       |  |
| Natural Dispersion   |  |  |  |   |                  |          |  |     |  |                            |  |       |  |
| Chemical Dispersion  |  |  |  |   |                  |          |  |     |  |                            |  |       |  |
| Burned   |  |  |  |   |                  |          |  |     |  |                            |  |       |  |
| Floating, Contained  |  |  |  |   |                  |          |  |     |  |                            |  |       |  |
| Floating, Uncontained  |  |  |  |   |                  |          |  |     |  |                            |  |       |  |
| Onshore  |  |  |  |   |                  |          |  |     |  |                            |  |       |  |
| Total HAZMAT/Oil accounted for:                                      |  | N/A  |  | N/A                                     |                  |          |  |     |  |                            |  |       |  |
| Comments:  |  |  |  |   |                  |          |  |     |  |                            |  |       |  |
| <b>4. HAZMAT/Oil Waste Management (Estimated, Since Last Report)</b> |  |  |  |   |                  |          |  |     |  |                            |  |       |  |
|  |  | Recovered  |  | Disposed                                |                  |          |  |     |  |                            |  |       |  |
|  |  | Stored   |  |   |                  |          |  |     |  |                            |  |       |  |
| HAZMAT/Oil (bbl)   |  |  |  |   |                  |          |  |     |  |                            |  |       |  |
| Oily Liquids (bbl)   |  |  |  |   |                  |          |  |     |  |                            |  |       |  |
| Liquids (bbl)  |  |  |  |   |                  |          |  |     |  |                            |  |       |  |
| Oily Solids (tons)   |  |  |  |   |                  |          |  |     |  |                            |  |       |  |
| Solids (tons)  |  |  |  |   |                  |          |  |     |  |                            |  |       |  |
| Comments:  |  |  |  |   |                  |          |  |     |  |                            |  |       |  |
| <b>5. HAZMAT/Oil Shoreline Impacts (Estimated in miles)</b>          |  |  |  |   |                  |          |  |     |  |                            |  |       |  |
| Degree of Impact   |  | Affected   |  | Cleaned                                 |                  |          |  |     |  |                            |  |       |  |
|  |  | To Be Cleaned  |  |   |                  |          |  |     |  |                            |  |       |  |
| Light  |  |  |  |   |                  |          |  |     |  |                            |  |       |  |
| Medium   |  |  |  |   |                  |          |  |     |  |                            |  |       |  |
| Heavy  |  |  |  |   |                  |          |  |     |  |                            |  |       |  |
| Total  |  |  |  |   |                  |          |  |     |  |                            |  |       |  |
| Comments:  |  |  |  |   |                  |          |  |     |  |                            |  |       |  |
| <b>6. HAZMAT/Oil Wildlife Impacts (Since Last Report)</b>            |  |  |  |   |                  |          |  |     |  |                            |  |       |  |
|  |  |  |  |   | Died in Facility |          |  |     |  |                            |  |       |  |
| Type of Wildlife   |  | Captured   |  | Cleaned                                 |                  | Released |  | DOA |  | Euthanized                 |  | Other |  |
| Birds  |  |  |  |   |                  |          |  |     |  |                            |  |       |  |
| Mammals  |  |  |  |   |                  |          |  |     |  |                            |  |       |  |
| Reptiles   |  |  |  |   |                  |          |  |     |  |                            |  |       |  |
| Fish   |  |  |  |   |                  |          |  |     |  |                            |  |       |  |
| Total  |  |  |  |   |                  |          |  |     |  |                            |  |       |  |
| Comments:  |  |  |  |   |                  |          |  |     |  |                            |  |       |  |
| <b>7. Prepared by:</b>   |  |  |  |   |                  |          |  |     |  | <b>Date/Time Prepared:</b> |  |       |  |

NRC Incident No. # \_\_\_\_\_

| 1. Incident Name  |                   | 2. Operational Period (Date / Time)<br>From: To: Time of Report |              | ICS 209-CG<br>SAR/LE ATTACHMENT |  |
|---|-------------------|---|--------------|---------------------------------|--|
| <b>3. Evacuation Status</b>   |                   |   |              |                                 |  |
|   | Since Last Report | Adjustments To Previous<br>Operational Period                   | Total        |                                 |  |
| Total to be Evacuated   |                   |   |              |                                 |  |
| Number Evacuated  |                   |   |              |                                 |  |
| <b>4. Migrant Interdiction Status</b>                                 |                   |   |              |                                 |  |
|   | Since Last Report | Adjustments To<br>Previous Op Period                            | Total        |                                 |  |
| Vessels Interdicted   |                   |   |              |                                 |  |
| Migrants Interdicted at Sea   |                   |   |              |                                 |  |
| Migrants Interdicted Ashore   |                   |   |              |                                 |  |
| Injured   |                   |   |              |                                 |  |
| MEDEVAC'd   |                   |   |              |                                 |  |
| Deaths  |                   |   |              |                                 |  |
| Migrants Repatriated  |                   |   |              |                                 |  |
| <b>5. Sorties/Patrols Summary (List of Sorties Since Last Report)</b> |                   |   |              |                                 |  |
|   |                   |   |              |                                 |  |
|   |                   |   |              |                                 |  |
|   |                   |   |              |                                 |  |
|   |                   |   |              |                                 |  |
|   |                   |   |              |                                 |  |
| <u>Air</u>  |                   | Since Last Report   | Total        |                                 |  |
| Number of Sorties/Patrols   |                   |   |              |                                 |  |
| Area Covered (square miles)   |                   |   |              |                                 |  |
| Total Time On-Scene (In Hours)  |                   |   |              |                                 |  |
| <u>Surface</u>  |                   | Since Last Report   | Total        |                                 |  |
| Number of Sorties/Patrols   |                   |   |              |                                 |  |
| Area Covered (square miles)   |                   |   |              |                                 |  |
| Total Time On-Scene (In Hours)  |                   |   |              |                                 |  |
| <b>6. Use of Force Summary</b>  |                   |   |              |                                 |  |
| <b>Category</b>   |                   | Since Last Report   | Total        |                                 |  |
| III - Soft Empty Hand Control   |                   |   |              |                                 |  |
| IV - Hard Empty Hand Control  |                   |   |              |                                 |  |
| V - Intermediate Weapons  |                   |   |              |                                 |  |
| VI - Deadly Force   |                   |   |              |                                 |  |
| VSL - Force to Stop Vessel from Cutter/Boat                           |                   |   |              |                                 |  |
| A/C - Force to Stop Vessel From Aircraft                              |                   |   |              |                                 |  |
| Arrests   |                   |   |              |                                 |  |
| Seizures  |                   |   |              |                                 |  |
| Deaths  |                   |   |              |                                 |  |
| <b>7. Operational Controls Summary</b>                                |                   |   |              |                                 |  |
| <b>Currently In Force</b>   |                   |   |              |                                 |  |
| Type  | Initiating Unit   | Initiated Date  | Activity #   |                                 |  |
|   |                   |   |              |                                 |  |
|   |                   |   |              |                                 |  |
| <b>Removed Since Last Report</b>                                      |                   |   |              |                                 |  |
| Type  | Initiating Unit   | Initiated Date  | Date Removed | Activity #                      |  |
|   |                   |   |              |                                 |  |
|   |                   |   |              |                                 |  |
| <b>18. Prepared by:</b>   |                   |   |              | <b>Date/Time Prepared:</b>      |  |







| <b>1. Incident Name</b>   |               |                         | <b>2. Operational Period (Date / Time)</b><br>From: _____ To: _____ |                        |                        |      | <b>AIR OPERATIONS SUMMARY<br/>ICS 220-CG</b>                              |                    |                       |                        |  |  |  |
|---|---------------|-------------------------|---|------------------------|------------------------|------|---|--------------------|-----------------------|------------------------|--|--|--|
| <b>3. Distribution</b><br><input type="checkbox"/> Fixed-Wing Bases _____ <input type="checkbox"/> Helibase _____ |               |                         |   |                        |                        |      |   |                    |                       |                        |  |  |  |
| <b>4. Personnel and Communications</b>  |               |                         |   |                        |                        |      | <b>5. Remarks (Spec. Instructions, Safety Notes, Hazards, Priorities)</b> |                    |                       |                        |  |  |  |
|   |               | Air Operations Director | Air / Air Frequency   | Air / Ground Frequency |                        |      |   |                    |                       |                        |  |  |  |
| Air Operations Director   |               |                         |   |                        |                        |      |   |                    |                       |                        |  |  |  |
| Air Tactical Supervisor   |               |                         |   |                        |                        |      |   |                    |                       |                        |  |  |  |
| Air Support Supervisor  |               |                         |   |                        |                        |      |   |                    |                       |                        |  |  |  |
| Helicopter Coordinator  |               |                         |   |                        |                        |      |   |                    |                       |                        |  |  |  |
| Fixed-Wing Coordinator  |               |                         |   |                        |                        |      |   |                    |                       |                        |  |  |  |
| _____   |               |                         |   |                        |                        |      |   |                    |                       |                        |  |  |  |
| 6. Location / Function  | 7. Assignment |                         | 8. Fixed-Wing   |                        | 9. Helicopter          |      | 10. Time  |                    | 11. Aircraft Assigned | 12. Operating Base     |  |  |  |
|   |               |                         | NO.   | TYPE                   | NO.                    | TYPE | Available   | Commence           |                       |                        |  |  |  |
|   |               |                         |   |                        |                        |      |   |                    |                       |                        |  |  |  |
|   |               |                         |   |                        |                        |      |   |                    |                       |                        |  |  |  |
|   |               |                         |   |                        |                        |      |   |                    |                       |                        |  |  |  |
|   |               |                         |   |                        |                        |      |   |                    |                       |                        |  |  |  |
|   |               |                         |   |                        |                        |      |   |                    |                       |                        |  |  |  |
|   |               |                         |   |                        |                        |      |   |                    |                       |                        |  |  |  |
|   |               | <b>13. TOTALS</b>       |   |                        |                        |      |   |                    |                       |                        |  |  |  |
| <b>14. Air Operation Support Equipment</b>  |               |                         |   |                        | <b>15. Prepared by</b> |      |   | <b>Date / Time</b> |                       |                        |  |  |  |
| AIR OPERATIONS SUMMARY  |               |                         |   |                        |                        |      |   |                    |                       | ICS 220-CG (Rev.07/04) |  |  |  |

NRC Incident No. # \_\_\_\_\_

|   |          |   |                        |   |  |
|---|----------|---|------------------------|---|--|
| <b>1. Incident Name</b>                                       |          | <b>2. Operational Period (Date/Time)</b><br>From: _____ To: _____ |                        | <b>RESOURCES AT RISK SUMMARY</b><br><b>ICS 232-CG</b> |  |
| <b>3. Environmentally-Sensitive Areas and Wildlife Issues</b> |          |   |                        |   |  |
| Site #  | Priority | Site Name and/or Physical Location                                | Site Issues            |   |  |
|   |          |   |                        |   |  |
|   |          |   |                        |   |  |
|   |          |   |                        |   |  |
|   |          |   |                        |   |  |
|   |          |   |                        |   |  |
|   |          |   |                        |   |  |
|   |          |   |                        |   |  |
|   |          |   |                        |   |  |
| Narrative<br>_____<br>_____<br>_____<br>_____                 |          |   |                        |   |  |
| <b>4. Archaeo-cultural and Socio-economic Issues</b>          |          |   |                        |   |  |
| Site #  | Priority | Site Name and/or Physical Location                                | Site Issues            |   |  |
|   |          |   |                        |   |  |
|   |          |   |                        |   |  |
|   |          |   |                        |   |  |
|   |          |   |                        |   |  |
|   |          |   |                        |   |  |
|   |          |   |                        |   |  |
|   |          |   |                        |   |  |
|   |          |   |                        |   |  |
| Narrative<br>_____<br>_____<br>_____<br>_____                 |          |   |                        |   |  |
| <b>5. Prepared by: (Environmental Unit Leader)</b>            |          |   | <b>Date/Time</b>       |   |  |
|   |          |   |                        |   |  |
| RESOURCES AT RISK SUMMARY                                     |          |   | ICS 232-CG (Rev.07/04) |   |  |

NRC Incident No. # \_\_\_\_\_

## SITE SAFETY PLAN

### I. General - Spill / Release

Land     Air     Water     HAZMAT     Other: \_\_\_\_\_  
 Facility: \_\_\_\_\_  
 Location: \_\_\_\_\_  
 Objectives: \_\_\_\_\_  
 Operational Period: **Date** \_\_\_\_\_ **Time:** \_\_\_\_\_ **to** \_\_\_\_\_

### II. Hazards to be Evaluated

|  |                          |                           |                          |                          |                             |  |                          |                          |                           |                          |                          |                       |                          |                          |                      |                          |                          |                            |                          |                          |                         |                          |                          |               |                          |                          |                 |                          |                          |                             |  |
|--|--------------------------|---------------------------|--------------------------|--------------------------|-----------------------------|--|--------------------------|--------------------------|---------------------------|--------------------------|--------------------------|-----------------------|--------------------------|--------------------------|----------------------|--------------------------|--------------------------|----------------------------|--------------------------|--------------------------|-------------------------|--------------------------|--------------------------|---------------|--------------------------|--------------------------|-----------------|--------------------------|--------------------------|-----------------------------|--|
| <table border="0"> <tr> <td style="width: 50%;"><b>Y</b></td> <td style="width: 50%;"><b>N</b></td> <td></td> <td style="width: 50%;"><b>Y</b></td> <td style="width: 50%;"><b>N</b></td> <td></td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>Oxygen Deficient/Enriched</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>Chemical/MSDS # _____</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>Flammable Atmosphere</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>Physical Site Hazard _____</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>Toxic Atmosphere: _____</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>Traffic _____</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>Boat Operations</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>Other* (see comments) _____</td> </tr> </table> | <b>Y</b>                 | <b>N</b>                  |                          | <b>Y</b>                 | <b>N</b>                    |  | <input type="checkbox"/> | <input type="checkbox"/> | Oxygen Deficient/Enriched | <input type="checkbox"/> | <input type="checkbox"/> | Chemical/MSDS # _____ | <input type="checkbox"/> | <input type="checkbox"/> | Flammable Atmosphere | <input type="checkbox"/> | <input type="checkbox"/> | Physical Site Hazard _____ | <input type="checkbox"/> | <input type="checkbox"/> | Toxic Atmosphere: _____ | <input type="checkbox"/> | <input type="checkbox"/> | Traffic _____ | <input type="checkbox"/> | <input type="checkbox"/> | Boat Operations | <input type="checkbox"/> | <input type="checkbox"/> | Other* (see comments) _____ |  |
| <b>Y</b>   | <b>N</b>                 |                           | <b>Y</b>                 | <b>N</b>                 |                             |  |                          |                          |                           |                          |                          |                       |                          |                          |                      |                          |                          |                            |                          |                          |                         |                          |                          |               |                          |                          |                 |                          |                          |                             |  |
| <input type="checkbox"/>   | <input type="checkbox"/> | Oxygen Deficient/Enriched | <input type="checkbox"/> | <input type="checkbox"/> | Chemical/MSDS # _____       |  |                          |                          |                           |                          |                          |                       |                          |                          |                      |                          |                          |                            |                          |                          |                         |                          |                          |               |                          |                          |                 |                          |                          |                             |  |
| <input type="checkbox"/>   | <input type="checkbox"/> | Flammable Atmosphere      | <input type="checkbox"/> | <input type="checkbox"/> | Physical Site Hazard _____  |  |                          |                          |                           |                          |                          |                       |                          |                          |                      |                          |                          |                            |                          |                          |                         |                          |                          |               |                          |                          |                 |                          |                          |                             |  |
| <input type="checkbox"/>   | <input type="checkbox"/> | Toxic Atmosphere: _____   | <input type="checkbox"/> | <input type="checkbox"/> | Traffic _____               |  |                          |                          |                           |                          |                          |                       |                          |                          |                      |                          |                          |                            |                          |                          |                         |                          |                          |               |                          |                          |                 |                          |                          |                             |  |
| <input type="checkbox"/>   | <input type="checkbox"/> | Boat Operations           | <input type="checkbox"/> | <input type="checkbox"/> | Other* (see comments) _____ |  |                          |                          |                           |                          |                          |                       |                          |                          |                      |                          |                          |                            |                          |                          |                         |                          |                          |               |                          |                          |                 |                          |                          |                             |  |

### III. Weather

Skies: \_\_\_\_\_    Tide: \_\_\_\_\_    Water Temperature: \_\_\_\_\_  
 Temperature: \_\_\_\_\_    Current: \_\_\_\_\_ Kts.    Current Direction: \_\_\_\_\_  
 Wind Velocity: \_\_\_\_\_    Wind Direction: \_\_\_\_\_

### IV. Control Measures

Isolation & Lockout (Identify items to be locked out): \_\_\_\_\_  
 Decon: \_\_\_\_\_  
 Ventilation:     Natural     Mechanical: \_\_\_\_\_    Continuous:     No     Yes  
 Flagman/Watchman: \_\_\_\_\_

### V. Testing & Monitoring (Check required items)

*Tests are to be performed in the order listed.*

|                          |                          |                  |   |                   |
|--------------------------|--------------------------|------------------|---|-------------------|
| <b>Y</b>                 | <b>N</b>                 |                  | <b>Continuous</b>                                     | <b>Frequency</b>  |
| <input type="checkbox"/> | <input type="checkbox"/> | Oxygen Level     | <input type="checkbox"/> Y <input type="checkbox"/> N | _____ every _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | LEL              | <input type="checkbox"/> Y <input type="checkbox"/> N | _____ every _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | Hydrogen Sulfide | <input type="checkbox"/> Y <input type="checkbox"/> N | _____ every _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | Benzene          | <input type="checkbox"/> Y <input type="checkbox"/> N | _____ every _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | VOC: _____       | <input type="checkbox"/> Y <input type="checkbox"/> N | _____ every _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | Other: _____     | <input type="checkbox"/> Y <input type="checkbox"/> N | _____ every _____ |

#### ACCEPTABLE ENTRY CONDITIONS

SPECIAL WORK PRACTICES OR PPE REQUIRED    WORK EFFORTS SHOULD BE DIRECTED AT REDUCING CONCENTRATIONS

|                      |                            |                         |
|----------------------|----------------------------|-------------------------|
| 19.5 – 22.0% in air* | < 19.5% or 22.0% in air*   | <16.0 or ≥ 23.5% in air |
| < 10% in air         | ≥ 10.0 but < 20.0% in air† | ≥ 20.0% in air          |
| < 10 ppm             | ≥ 10 but < 100 ppm         | ≥ 100 ppm               |
| < 1 ppm              | ≥ 1 but < 3000 ppm         | ≥ 3000 ppm              |

As allowed by applicable standard(s)    \*Acceptable for 5325 feet of elevation and below.  
 †Hot work is not permitted when LEL is greater than 10% in air.

### VI. Required Personal Protective Equipment (Check for required use)

|   |   |   |                                      |                                  |   |                                       |
|---|---|---|--------------------------------------|----------------------------------|---|---------------------------------------|
| <b>General</b>                          | <b>Eye Prot.</b>                        | <b>Respiratory Prot.</b>  | <b>Hearing Prot.</b>                 | <b>Gloves</b>                    | <b>Footwear</b>                             | <b>Clothing</b>                       |
| <input type="checkbox"/> Hard Hat       | <input type="checkbox"/> Safety Glasses | <input type="checkbox"/> SCBA/Air Line w/Escapes                              | <input type="checkbox"/> Ear Plugs   | <input type="checkbox"/> Leather | <input type="checkbox"/> Steel-toes         | <input type="checkbox"/> FR Coveralls |
| <input type="checkbox"/> Safety Harness | <input type="checkbox"/> Goggles        | <input type="checkbox"/> Air Line   | <input type="checkbox"/> Ear Muffs   | <input type="checkbox"/> Rubber  | <input type="checkbox"/> Rubber             | <input type="checkbox"/> Level A      |
| <input type="checkbox"/> PFD            | <input type="checkbox"/> Face-shield    | <input type="checkbox"/> Air Purifying (Full Mask)                            | <input type="checkbox"/> Combination | <input type="checkbox"/> Nitrile | <input type="checkbox"/> Hip-boots          | <input type="checkbox"/> Level B      |
|   | <input type="checkbox"/> Tinted Lens    | Cartridge Type: <input type="checkbox"/> OV <input type="checkbox"/> Hepa-OVV |                                      | <input type="checkbox"/> PVC     | <input type="checkbox"/> Chemical Resistant | <input type="checkbox"/> Level C      |
|   |   |   |                                      | <input type="checkbox"/> _____   | <input type="checkbox"/> _____              | <input type="checkbox"/> Level D      |

Any other special PPE: \_\_\_\_\_

### VII. Emergency Information and Rescue Services

|                                 |                   |
|---------------------------------|-------------------|
| Emergency Contact Person: _____ | Contact by: _____ |
| Fire Department: _____          | Contact by: _____ |
| Ambulance: _____                | Contact by: _____ |
| Hospital: _____                 | Contact by: _____ |
| Rescue Services: _____          | Contact by: _____ |

*(if not provided by above)*

### VIII. Required Safety & Rescue Equipment (on site)

Lights     Fall Protection     First Aid Kit     Drinking Water     Fire Extinguisher     Tripod     Other: \_\_\_\_\_  
 Ladder     Retrieval Lines     Defibrillator     Communication Method \_\_\_\_\_

NRC Incident No. # \_\_\_\_\_

**IX. Comments or Special Work Procedures**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**X. Report All Injuries Immediately - "Notify Site Safety Officer"**

Radio Channel: \_\_\_\_\_ Radio Frequency: \_\_\_\_\_ Telephone No. \_\_\_\_\_

**Call 911 if life threatening**

| <b>XI. Monitoring Results</b> |       | Zone |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------------|-------|------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Oxygen                        | Time  |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                               | Level |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                               | By    |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| LEL                           | Time  |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                               | Level |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                               | By    |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hydrogen Sulfide              | Time  |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                               | Level |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                               | By    |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Benzene                       | Time  |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                               | Level |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                               | By    |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| VOC                           | Time  |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                               | Level |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                               | By    |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                               | Time  |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                               | Level |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                               | By    |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                               | Time  |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                               | Level |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                               | By    |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                               | Time  |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                               | Level |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                               | By    |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Equipment:      Type: \_\_\_\_\_      Mnfr: \_\_\_\_\_      Calibration / Expiration: \_\_\_\_\_  
 Type: \_\_\_\_\_      Mnfr: \_\_\_\_\_      Calibration / Expiration: \_\_\_\_\_

NRC Incident No. # \_\_\_\_\_

**XII. Work Area Diagram**

*Please include wind direction, exclusion zone, support zone, decon area and significant landmarks.*

A large empty grid for drawing a Work Area Diagram. The grid consists of 20 columns and 20 rows of small squares, forming a large rectangular area for the diagram. The grid lines are thin and black, and the interior of the grid is completely blank.



## 6.0 SPILL IMPACT CONSIDERATIONS

### 6.1 CRITICAL AREAS TO PROTECT

The critical areas to protect are classified as high, moderate, and low sensitivity to oil for non-coastal/inland environments. The Federal, State, and Local authorities will further clarify these categories at the time of the response. The categories are defined as follows:

#### HIGH SENSITIVITY

- Areas which are high in productivity, abundant in many species, extremely sensitive, difficult to rehabilitate, or inhabited by threatened/endangered species.
- Areas which consist of forested areas, brush/grassy areas, wooded lake areas, freshwater marshes, wildlife sanctuaries/refuges, and vegetated river/stream banks.

#### MODERATE SENSITIVITY

- Areas of moderate productivity, somewhat resistant to the effects of oiling.
- Areas which consist of degraded marsh habitat, clay/silt banks with vegetated margins, and gravel/cobble beaches.

#### LOW SENSITIVITY

- Areas of low productivity, man-made structures, and/or high energy.
- Areas which consist of gravel, sand, or clay material, barren/rocky riverbanks and lake edges, man-made structures, and concrete/compacted earthen drainage ditches.

### 6.2 ENVIRONMENTAL/SOCIO-ECONOMIC SENSITIVITIES

Environmental/Socio-economic sensitivities are of extreme importance when planning a response effort. The health and safety of the public and the environment, as well as the protection of the various socio-economic sensitivities, must be promptly addressed in order to mitigate the extent of damage and minimize the cost of the clean-up effort.

All environmental/socio-economic sensitivities are worthy of protection, but must be prioritized during a response effort. When making decisions on which areas to designate as collection areas and which to protect, the following sources may be consulted:

- U.S. Fish and Wildlife Service and related State agencies
- Applicable Area Contingency Plans
- Other industry and private experts

## 6.2 ENVIRONMENTAL/SOCIO-ECONOMIC SENSITIVITIES (Cont'd)

The environmental and socio-economic sensitivities in the vicinity of the Pipeline have been broken down into specific categories and identified in this Section. To further clarify the location of the sensitive areas of concern references to published Area Contingency Plans and Environmental Sensitivity Maps are also provided in this section.

## 6.3 WILDLIFE PROTECTION AND REHABILITATION

The Company will work with Federal, State, and local agency personnel to provide labor and transportation to retrieve, clean, and rehabilitate birds and wildlife affected by an oil spill, as necessary. Oversight of the Company's wildlife preservation activities and coordination with Federal, State, and Local agencies during an oil spill is the responsibility of the Incident Commander.

Special consideration should be given to the protection and rehabilitation of endangered species and other wildlife and their habitat in the event of an oil spill and subsequent response. Jurisdictional authorities should be notified and worked with closely on all response/clean-up actions related to wildlife protection and rehabilitation. Laws with significant penalties are in place to ensure appropriate protection of these species.

### 6.3.1 Endangered/Threatened Species

The U.S. Fish and Wildlife Service (USFWS) and related state agencies classify the status of various wildlife species in the potentially effected states. A summary of critical birds, reptiles, mammals, and plant species status as related to the Pipeline's operating areas (area of highest oil spill potential) is presented in Figure 6.1.

### 6.3.2 Wildlife Rescue

The Company will work with Federal, State, and Local agency personnel to provide labor and transportation to retrieve, clean, and rehabilitate wildlife affected by an oil spill, as the situation demands.

The following are items which should be considered for wildlife rescue and rehabilitation during a spill response:

- Bird relocation can be accomplished using a variety of deterrents, encouraging birds to avoid areas of spilled oil. Bird relocation can be accomplished by utilizing deterrent methods including:
  - Use of visual stimuli, such as inflatable bodies, owls, stationary figures, or helium balloons, etc.
  - Use of auditory stimuli, such as propane cannons, recorded sounds, or shell crackers.
  - Use of herding with aircraft, boats, vehicles, or people (as appropriate).
  - Use of capture and relocation.

## 6.3 WILDLIFE PROTECTION AND REHABILITATION (Cont'd)

### 6.3.3 Search and Rescue - Points to Consider

- **The Company's involvement should be limited to offering assistance as needed or requested by the agencies.**
- Prior to initiating any organized search and rescue plan, **authorization must be obtained from the appropriate federal/state agency.**
- **Initial search and rescue efforts, if needed, should be left up to the appropriate agencies.** They have the personnel, equipment, and training to immediately begin capturing contaminated wildlife.
- With or without authorization it must be anticipated that volunteer citizens will aid distressed/contaminated wildlife of their own. It is important to communicate that it may be illegal to handle wildlife without express authority from appropriate agencies. Provisions should be made to support an appropriate rehabilitator, however, **no support should be given to any unauthorized volunteer rescue efforts.**
- The regulatory agencies and response personnel should be provided the name and location of a qualified rehabilitator in the event contaminated wildlife is captured.
- Resources and contacts that can assist with wildlife rescue and rehabilitation are provided in Section 2.0. This list includes:
  - Outside rehabilitation organizations
  - Local regulatory agencies
  - Other resources

## 6.4 STAGING AREAS

When establishing personnel and equipment staging areas for a response to a Pipeline discharge, the following criteria should be evaluated:

- Access to waterborne equipment launching facilities and/or land equipment.
- Access to open space for staging/deployment of heavy equipment and personnel.
- Access to public services utilities (electricity, potable water, public phone, restroom and washroom facilities, etc.)
- Access to the environmental and socio-economically sensitive areas which are projected for impact.

## 6.5 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT

General descriptions of various specific response techniques that may be applied during a response effort are discussed below. Company responders are free to use all or any combination of these methods as incident conditions require, provided they meet the appropriate safety standards and other requirements relative to the situation encountered. Data was obtained from reports, manuals and pamphlets prepared by the American Petroleum Institute, Environmental Protection Agency and the United States Coast Guard. The most effective cleanup of a product spill will result from an integrated combination of clean-up methods. Each operation should complement and assist related operations and not merely transfer spillage problems to areas where they could be more difficult to handle.

The spill should be assessed as soon as possible to determine the source, extent and location of travel. Terrain and other physical conditions downgradient of the spill site will determine the methods of control at a point in advance of the moving product. Often, the bulk of a spill can be contained at a single location or a few key locations in the immediate vicinity of the source point. When possible the execution of this type of initial containment strategy helps confine a spill to a relatively limited area.

### 6.5.1 Spill on Land (Soil Surfaces)

- **Confinement Methods**

Product can be trapped in ditches and gullies by earth dams. Where excavating machinery is available, dams can be bulldozed to contain lakes of product. Dams, small and large, should be effectively employed to protect priority areas such as inlets to drains, sewers, ducts and watercourses. These can be constructed of earth, sandbags, absorbents, planks or any other effective method. If time does not permit a large dam, many small ones can be made, each one holding a portion of the spill as it advances. The terrain will dictate the placement of the dams. If the spill is minor, natural dams or earth absorption will usually stop the product before it advances a significant distance. Cleanup is the main concern in such situations.

In situations where vapors from a spill present a clear and present danger to property or life (possible ignition because of passing automobiles, nearby houses, or work vehicles approaching the area), spraying the surface of the spill with dispersant will greatly reduce the release of additional vapors from the product. This method is especially adapted to gasoline spills on soil surfaces.

- **Removal Methods**

The recovery and removal of free product from soil surfaces is a difficult job. The best approaches at present seem to be:

## 6.5 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

### 6.5.1 Spill on Land (Soil Surfaces) (Cont'd)

- Removal with suction equipment to tank truck if concentrated in volumes large enough to be picked up. Channels can be formed to drain pools of product into storage pits. The suction equipment can then be used.
- Small pockets may have to be dipped up by hand.
- If practicable after removal of the bulk of the spill, controlled burning presents the possibility of a fast, simple, and inexpensive method of destruction of the remainder of the product. If all other options have been executed and the site is still unsafe for further activity because explosive vapors persist, the vapors may need to be intentionally ignited to prevent an accumulation sufficient to become an explosive mixture, provided the other requirements of these guidelines for controlled burning are met.

Intentional ignition to remove released product should be utilized only if all of the following conditions are met:

- Other steps and procedures have been executed and a determination has been made that this is the safest remaining method of control.
- Intentional burning will not unduly damage the pipeline, adjacent property, or the environment.
- Controlled burning is permitted by government authorities. Local government authorities to be contacted may include city council, county board of commissioners, city or county fire chiefs, the county forestry commission or firetower, and the local environmental protection agency. In seeking permission from these authorities, be prepared to convince them that adequate safety precautions have been and will be taken during the operation.
- Controlled burning is conducted with the consent of local landowners.
- Safety must always be a prime consideration when considering controlled burning of product. Sparks and heat radiation from large fires can start secondary fires and strong winds make fire control difficult. There must be no danger of the fire spreading beyond control limits. All persons must be at a safe distance from the edge of the inflammable area. Remember that all burning must be controlled burning.

## 6.5 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

### 6.5.2 Spill on Lake or Pond (calm or slow-moving water)

- **Confinement Methods**

A lake or pond offers the best conditions for removal of product from water. Although the removal is no easy task, the lake or pond presents the favorable conditions of low or no current and low or no waves.

The movement of product on a lake or pond is influenced mainly by wind. The product will tend to concentrate on one shore, bank or inlet. Booms should be set up immediately to hold the product in the confined area in the event of a change in wind direction.

If the spill does not concentrate itself on or near a shore (no wind effect), then a sweeping action using boats and floating booms will be necessary. The essential requirement for this operation is that it be done very slowly. The booms should be moved at not more than 40 feet per minute. Once the slick is moved to a more convenient location (near shore), the normal operations of removal should begin.

If the slick is small and thin (rainbow effect) and not near the shoreline, an absorbent boom instead of a regular boom should be used to sweep the area very slowly and absorb the slick. The product may not have to be moved to the shoreline.

- **Removal Methods**

If the confined slick is thick enough, regular suction equipment may be used first; however, in most instances, a floating skimmer should be removed. If judged appropriate or useful, a surface collecting agent should be applied once the slick is isolated to facilitate the removal. The surface collecting agent will concentrate the product into a smaller area and make the floating skimmer work more efficiently. If the floating skimmer starts picking up excess water (slick becomes thin), do not stop using it if it is not removing any appreciable amount of product.

Additions of more surface collecting agent from time to time may improve the skimming efficiency of the skimmer. It will continue to concentrate the slick into a smaller area, thus making the film thickness greater. Drawing the boom closer to the bank as product is removed will also keep film of product thicker. However, when the slick becomes too thin, the skimmer should be stopped and an absorbent applied (with a boat if necessary) to remove the final amounts.

The floating skimmer (if speed is a must) or hand skimmers (if water is shallow enough) or both can be used to pick up the product-soaked absorbent. Before pumping the product-soaked absorbent with a floating skimmer, insure that the absorbent in question can be pumped and will not harm the pump.

## 6.5 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

### 6.5.2 Spill on Lake or Pond (calm or slow-moving water) (Cont'd)

Several types are nonabrasive to pump internals. If the floating skimmer is used first, the product-soaked absorbent/water mixture should be pumped into a tank truck.

A better method of retrieving the product-soaked absorbent is to draw it in as close to the shore as possible with the booms used to confine the product initially. The absorbent can then be hand skimmed from the water surface and placed in drums, on plastic sheets or in lined roll-off boxes. It should then be disposed of by acceptable means.

The final rainbow on the surface can be removed with additions of more absorbent.

### 6.5.3 Spill on Small to Medium Size Streams (relatively fast-flowing creeks)

- **Confinement Methods**

The techniques used for product containment on fast-flowing shallow streams are quite different from the ones used on lakes, ponds, or other still bodies of water. The containment and removal processes require a calm stretch of water to allow the product to separate onto the surface of the water. If a calm stretch of water does not exist naturally, a deep slow-moving area should be created by damming. The dam can be constructed by using sandbags, planks or earth. If a dam is required, it should be situated at an accessible point where the stream has high enough banks. The dam should be constructed soundly and reinforced to support the product and water pressure.

- Underflow dam - The underflow dam is one method that can be used, especially on small creeks. The water is released at the bottom, of the dam using a pipe or pipes which are laid during construction of the dam. The flow rate through the pipe must be sufficient to keep the dam from overflowing. One method is to lay the pipe at an angle through the dam (while dam is being constructed) so that the height of the downstream end of the pipe will determine the height the water will rise behind the dam.
- Overflow dam – Another method of containment is the overflow type dam. The dam is constructed so that water flows over the dam, but a deep pool is created which slows the surface velocity of the water. Therefore, the condition of a calm stretch of water is met. The overflow dam may be used where larger flow rates (medium size creeks) of water are involved. With this type dam, a separate barrier (floating or stationary boom) must be placed across the pool created by the dam. The separate barrier arrests the surface layer of product.

## 6.5 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

### 6.5.3 Spill on Small to Medium Size Streams (relatively fast-flowing creeks) (Cont'd)

At the same time, the water is flowing under the barrier and over the top of the dam. The barrier should be placed at an angle of 45 % across the pool to decrease the effective water velocity beneath it. Also, it helps to concentrate the product at the bank and not all along the barrier. A second barrier should be placed approximately 10 to 15 feet downstream of the first one as a secondary back-up.

The stationary boom type barrier should be made of wood planks or other suitable material. The stationary boom should be soundly constructed and sealed against the bank. The ends of the planks can be buried in the banks of the stream and timber stakes driven into the stream bed for support as needed. The necessary length of the boom will be approximately 1-1/2 times the width of the waterway. The plank boom should extend six to eight inches deep into the water and about two inches or higher above the water level. If the increase in velocity under the stationary boom is causing release of trapped product, it should be moved upward slightly. At no time should barrier be immersed more than 20% of the depth of the pool at the barrier location; that is, if the pool created by damming is three feet deep, do not exceed an immersion depth of seven inches with the barrier at the position the barrier is installed.

Another method used with the underflow dam is having the pipe or pipes sized to carry only a portion of the flow needed. The pipe would be placed at the bottom of the dam and level with the creek bed. The remaining flow of the creek could be siphoned or preferably pumped around the dam from a point away from the dam and from the deepest portion of the pool. The pumping or siphoning can be controlled to maintain the desired water level at the dam. The key is the removal of water through or around the dam at the lowest point in the basin. This prevents the oil from escaping with the released water.

A floating boom can be used in place of the stationary type if the created pool's size (bank to bank) and depth will permit. Since changing the depth and/or length of a standard floating boom in a small stream is difficult, the use of the separation of product and water. The advantages of using a floating boom are the speed of deployment and the fact that there is not need for additional support as with the stationary boom.

## 6.5 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

### 6.5.3 Spill on Small to Medium Size Streams (relatively fast-flowing creeks) (Cont'd)

- Multiple Impoundments – Since emergency built dams (either underflow or overflow) are seldom perfect, a series of dams is usually required. The first one or two will trap the bulk and the ones that are downstream will trap the last traces of product. Precautions should be taken to ensure that the foundations of emergency dams are not washed away by the released water. If earth is used to construct an overflow dam, a layer of earth-filled bags should be placed on top of the dam so erosion will not take place.

- **Removal Methods**

Once the containment dams are constructed, the problem of removal of the product from the water surface should be the prime consideration. The removal must be continuous or else build-up of product behind the dams or booms might lead to product escaping the traps.

The type of removal procedures used depends largely on the amount of product being trapped in a given span of time, if the amount of product moving down the stream is of sufficient quantity, the first dam or fixed boom would quite possibly trap enough for the floating skimmer to work efficiently. The skimmer will pump the product and possibly some water to a tank truck or other holding tank. Separated water may be released from the bottom of the tank truck if it becomes necessary. The absorbents (straw, ground corncobs, or other stocked absorbent) could then be used at downstream dams or booms. It is inadvisable to place an absorbent in the stream prior to or at the first dam in anticipation of the arriving product. Let the product accumulate at the first dam and use the floating skimmer to recover the product.

Disposal of gross amount of product-soaked absorbent would not then be a problem. Follow directions on use of each absorbent. Some are designed to be placed on water before product arrives (straw and other new types); others are intended only to be placed on the product after it accumulates on the water (ground corncobs and others). Plastic sheets should be used to place the product-soaked absorbent on as it is hand skimmed from the water. Alternatively, the material may be placed in drums or lined roll-off boxes.

If the amount of product in the stream is minor, a straw-bale may be constructed to filter out the product. The slowing of the water would not be necessary, but several dams might be necessary to ensure complete removal. The downstream dams would also offer protection when the upstream bales are removed, releasing traces of product. Straw-bale dams can also be used downstream from underflow and overflow dams for added protection.

## 6.5 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

### 6.5.3 Spill on Small to Medium Size Streams (relatively fast-flowing creeks) (Cont'd)

Thus, the containment and removal of spilled product on small to medium fast-flowing streams might require a combination of underflow or overflow dams, fixed booms, skimmers, absorbents, and straw-bale dams to ensure a complete cleanup.

### 6.5.4 Spill on Large Streams and Rivers

- **Confinement Methods**

The containment techniques differ considerably on large streams and rivers versus small streams. First, the smooth calm area of water necessary for product-water separation must be found along the stream or river rather than making one as with small streams. Floating booms (rather than fixed booms or dams) must be used to trap the surfaced product.

Local conditions of current and wind must be considered when selecting the site for the boom. A point with a low water velocity near the bank, sufficient depth to operate the product removal equipment, and good access are required. The fact that wind may tend to concentrate the product against one bank must be considered. A smooth, undisturbed area of water is required immediately upstream of the boom to ensure that the product has opportunity to separate out onto the surface. The boom should be positioned where the current is at a minimum. It is more effective to boom at a wide, slow position than on a narrow, fast stretch of water.

If the boom are positioned straight across a river or stream, at right angles to the flow, surface water tends to dive beneath the barrier (boom) when current velocities exceed about  $\frac{1}{2}$  knot (0.8 ft./sec.). However, if the current of the entire river is  $\frac{1}{2}$  knot or less, then a boom can be positioned straight across the river or large stream, but angled slightly in relation of the banks. By placing the boom at an angle to the banks, product on the surface is diverted along the boom to the side of the river.

The current velocity is usually much slower near the river bank than in the center and the product will move along the boom toward the bank for removal. A water-tight seal between the bank and the boom is essential. A secondary boom should be set up immediately downstream of the first one to capture the amounts that escape the upstream boom. A boom can be employed parallel to the river flow at the bank to form the seal with the booms used to trap the product.

Where the current velocity of the chosen site exceeds  $\frac{1}{2}$  knot, the boom should be positioned in two smooth curves from a point of maximum velocity (usually the center of the river) to both banks.

## 6.5 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

### 6.5.4 Spill on Large Streams and Rivers (Cont'd)

However, this double-boom required product to be removed from both sides of the river. To determine the appropriate angle of boom placement and support (mooring) needed to hold the booms in position, the current velocity should be measured by timing a floating object which is 80% submerged over a distance of 100 feet. A time of 60 seconds over this distance indicates a water current of approximately 1 knot. For currents from 1 to 2.5 knots (1.7 to 4.2 ft./sec.), the more the boom will have to be angled acute to the bank. The length of the boom will have to be such to reach the center of the river. For currents between  $\frac{1}{2}$  and 1 knot (0.8 and 1.7 ft./sec.), the angle of employment can be enlarged.

The major load on the boom is taken by the terminal moorings, particularly the one in the center of the river. However, intermediate moorings are also required both to maintain the smooth curve of the boom to prevent breaking of the boom and to assist with preventing skirt deflection. The intermediate moorings are preferably positioned every 25 feet and must be adjusted to avoid the formation of indentations in the boom profile. These trap product in pockets, prevent its deflection to the bank, and also encourage diving currents. The moorings' ropes should be five times the water depth.

In certain situations, it might be advantageous to position booms to deflect the approaching spilled product to a slower moving area. Naturally, additional booms would have to be positioned around this slower moving area prior to deflecting the product to the area. This approach has been used along river which have lagoons, etc., with a very low current action. The recovery would take place in the lagoons and not along the river bank.

- **Removal Methods**

The product collected upstream of the floating booms in a large stream or river should be removed from the water surface as it accumulates. Regular suction equipment, a floating skimmer, and/or absorbents (including absorbent booms) should be used to remove the product as appropriate to the quantity being trapped in a given span of time. If the amount moving down the stream is of sufficient quantity, the primary floating boom would possibly trap enough for the floating skimmer to work efficiently. The skimmer will pump the product and some water to a tank truck or other holing tank.

The absorbents (type that can be placed on water before product arrival straw is an example) would then be used upstream of the secondary boom to absorb the underflow from the primary boom.

## 6.5 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

### 6.5.4 Spill on Large Streams and Rivers (Cont'd)

An absorbent boom (Sea-Serpent) or other stocked absorbent boom can also be placed between the primary and secondary booms to help the other absorbents control the underflow from the primary boom. If the underflow from the primary boom is significant, then the type absorbent which can be placed on the water only after product is collected may be used. An example of this type of absorbent is ground corncobs. It is best to hand skim the saturated absorbents and place on plastic sheets. However, if the absorbent used can be pumped after product absorption and speed of removal is a necessity, the floating skimmer can be used to remove the product-soaked absorbent.

The disadvantage of pumping the product-soaked absorbent to a truck is the volume that will accumulate (skimmer will pump excess water) and the disposal problems associated with the large water/product-soaked absorbent mixture.

If the volume of product moving toward the boomed area is expected to be small, an absorbent (straw) should be placed in the river upstream of the primary and secondary booms. If regular booms are not necessary, a screen filter could be stretched across the river to contain the straw, or an absorbent boom could be constructed by tightly fastening hay bales together, forming a chain. Boats (either rented or furnished by contractors) would be necessary to retrieve the product-soaked absorbents.

### 6.5.5 Spill on Stream which Flows into Lake or Pond

There are certain locations along the pipeline where streams (small and large ones) flow into lakes or ponds at relatively short distances from the pipeline. It is conceivable that a spill that reached the streams in question could reach or almost reach the lakes before containment and recovery operations could be set up. If time permits for containment operations to be set up on the stream in question, it then would be handled as described above depending upon the stream size involved.

However, if product in the stream is near the lake site or if product is flowing into the lake with a significant amount yet to arrive, a different containment should be employed.

- **Confinement Methods**

Product on a stream flowing into a lake should be boomed as close to the entrance as possible. The boom should be positioned on the lake at an angle to the residential stream current so as to direct the surface water to a slower moving area. The area where the product is being deflected should be enclosed by booms to contain it.

## 6.5 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

### 6.5.5 Spill on Stream which Flows into Lake or Pond (Cont'd)

An additional boom for sweeping the product to the bank will be required. This area of containment should not have a current velocity of more than 1/2 knot (0.8 ft./sec.), preferably less.

- **Removal Methods**

The removal of product from the lake or pond's surface would be handled as described earlier.

For sizable releases, collected product will usually be pumped into tank trucks and transported to a storage facility. Tank trucks are available at several locations throughout.

### 6.5.6 Spill in a Mud or Tidal Flat Area

- **Confinement Method**

Shoreline boom lined with absorbent boom should be placed at the surf line to prevent oil from washing up onto the flat area. If oiling has already occurred the boom is used to prevent further oiling and keep oil that has impacted the flat from spreading.

- **Removal Methods**

Natural Recovery, Flooding and Sorbents are the three preferred methods. Any invasive type of recovery method poses a risk of driving the oil into the substrate of the flat and endangering the biologicals that live there. Invasive methods should only be used in order to protect more sensitive areas.

## 6.6 SHORELINE DESCRIPTORS AND RESPONSE CONSIDERATIONS

It is intended to offer guidance on the response considerations.

### **Salt- and Brackish-Water Marshes**

**ESI = 10A**

#### **DESCRIPTION**

- These marshes contain vegetation which tolerates water salinity down to about 5 ppt.
- Width of the marsh can vary widely, from a narrow fringe to extensive areas.
- Sediments are composed of organic-rich muds except on the margins of barrier islands where sand is abundant.
- Exposed areas are located along waterbodies with wide fetches and along busy waterways.

## 6.6 SHORELINE DESCRIPTORS AND RESPONSE CONSIDERATIONS (Cont'd)

### Salt- and Brackish-Water Marshes (Cont'd)

ESI = 10A

- Sheltered areas are not exposed to significant wave or boat wake activity.
- Resident flora and fauna are abundant with numerous species with high utilization by birds, fish, and shellfish.

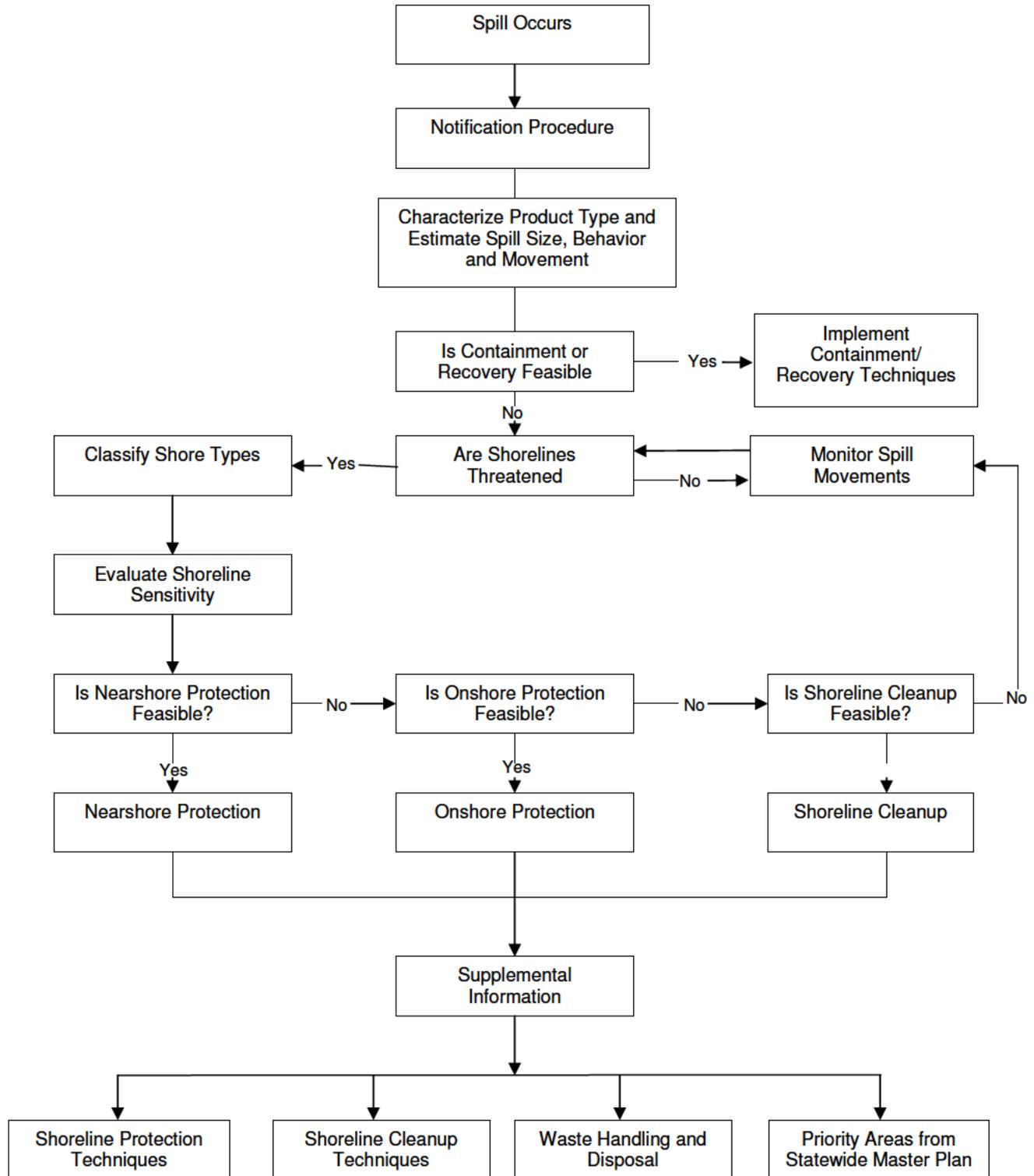
#### PREDICTED OIL BEHAVIOR

- Oil adheres readily to intertidal vegetation.
- The band of coating will vary widely, depending upon the water level at the time oil slicks are in the vegetation. There may be multiple bands.
- Large slicks will persist through multiple tidal cycles and coat the entire stem from the high-tide line to the base.
- If the vegetation is thick, heavy oil coating will be restricted to the outer fringe, although lighter oils can penetrate deeper, to the limit of tidal influence.
- Medium to heavy oils do not readily adhere to or penetrate the fine sediments, but can pool on the surface of in burrows and root cavities.
- Light oils can penetrate the top few centimeters of sediment and deeply into burrows and mud cracks (up to one meter).

#### RESPONSE CONSIDERATIONS

- Under light oiling, the best practice is to let the area recover naturally.
- Natural removal processes and rates should be evaluated prior to conducting cleanup.
- Heavy accumulations of pooled oil can be removed by vacuum, sorbents, or low-pressure flushing. During flushing, care must be taken to prevent transporting oil to sensitive areas down slope or along shore.
- Cleanup activities should be carefully supervised to avoid vegetation damage.
- Any cleanup activity must not mix the oil deeper into the sediments. Trampling of the roots must be minimized.
- Cutting of oiled vegetation should only be considered when other resources present are at great risk from leaving the oiled vegetation in place.

**FIGURE 6.1**  
**ON WATER RESPONSE FLOWCHART**



## 6.7 VULNERABILITY ANALYSIS

The thorough examination of published Area Contingency Plans (ACPs) was conducted to identify sensitive areas in all the response zones. The following resources provided detailed information on sensitivities and possibly methods for containing them:

- EPA Region 6 - Inland Area Contingency Plan: [www.epa.gov/oilspill/ncpover.htm](http://www.epa.gov/oilspill/ncpover.htm)

In the event of a spill, these resources can be accessed via the Internet.

## 6.8 ALTERNATIVE RESPONSE STRATEGIES

There are no pre-approved response options for inland spills within the United States. Any plans to use dispersants or in situ burn by the Company will be submitted to the Federal On-Scene Coordinator for Regional Response Team approval prior to such action being taken.

FIGURE 6.2

## ENDANGERED/THREATENED SPECIES LISTING - LOUISIANA

The following is a listing of the endangered and threatened animals and plants and wildlife species of special concern in the State of Louisiana.

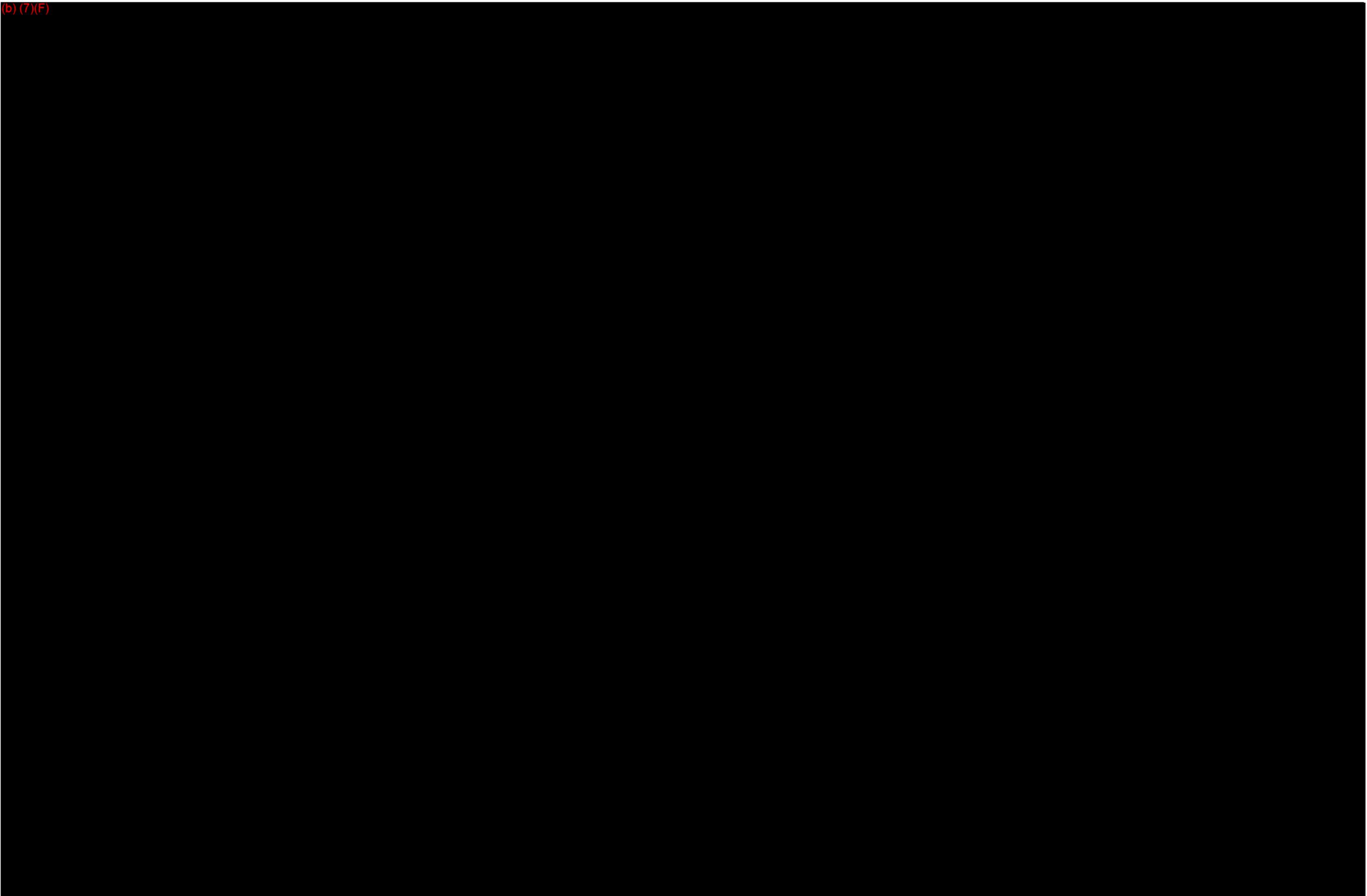
| ANIMALS   |                                     |
|---|-------------------------------------|
| COMMON NAME   | SCIENTIFIC NAME                     |
| Bear, Louisiana black   | <i>Ursus americanus luteolus</i>    |
| Beetle, American burying  | <i>Nicrophorus americanus</i>       |
| Curlew, Eskimo  | <i>Numenius borealis</i>            |
| Frog, Mississippi gopher Wherever found west of Mobile and Tombigbee Rivers in AL, MS, and LA | <i>Rana capito sevosa</i>           |
| Heelsplitter, Alabama (=inflated)   | <i>Potamilus inflatus</i>           |
| Jaguar  | <i>Panthera onca</i>                |
| Mucket, pink (pearlymussel)   | <i>Lampsilis abrupta</i>            |
| Panther, Florida  | <i>Puma (=Felis) concolor coryi</i> |
| Pearlshell, Louisiana   | <i>Margaritifera hembeli</i>        |
| Pelican, brown except U.S. Atlantic coast, FL, AL   | <i>Pelecanus occidentalis</i>       |
| Plover, piping except Great Lakes watershed   | <i>Charadrius melodus</i>           |
| Sea turtle, green except where endangered   | <i>Chelonia mydas</i>               |
| Sea turtle, hawksbill   | <i>Eretmochelys imbricata</i>       |
| Sea turtle, Kemp's ridley   | <i>Lepidochelys kempii</i>          |
| Sea turtle, leatherback   | <i>Dermochelys coriacea</i>         |
| Sea turtle, loggerhead  | <i>Caretta caretta</i>              |
| Sturgeon, gulf  | <i>Acipenser oxyrinchus desotoi</i> |
| Sturgeon, pallid  | <i>Scaphirhynchus albus</i>         |
| Tern, least interior pop.   | <i>Sterna antillarum</i>            |
| Tortoise, gopher W of of Mobile/Tombigbee Rs.   | <i>Gopherus polyphemus</i>          |
| Turtle, ringed map  | <i>Graptemys oculifera</i>          |
| Vireo, black-capped   | <i>Vireo atricapilla</i>            |
| Whale, finback  | <i>Balaenoptera physalus</i>        |
| Whale, humpback   | <i>Megaptera novaeangliae</i>       |
| Wolf, gray  | <i>Canis lupus</i>                  |
| Woodpecker, red-cockaded  | <i>Picoides borealis</i>            |

| PLANTS               |                              |
|----------------------|------------------------------|
| COMMON NAME          | SCIENTIFIC NAME              |
| Chaffseed, American  | <i>Schwalbea americana</i>   |
| Pondberry            | <i>Lindera melissifolia</i>  |
| Quillwort, Louisiana | <i>Isoetes louisianensis</i> |

\* Note: The listing of endangered, threatened, and special concern species is based on data provided.

**FIGURE 6.3**  
**ENVIRONMENTAL SENSITIVITY MAP**

(b) (7)(F)



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## APPENDIX A

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### RESPONSE RESOURCES

#### USCG CLASSIFIED OIL SPILL ORGANIZATIONS (OSROs)

Sector New Orleans.....A-2

#### COMPANY OWNED EQUIPMENT

Company Owned Spill Response Equipment .....A-3

Communications Equipment.....A-5

#### OSRO/CONTRACTOR CONTRACTS

Oil Mop .....A-6

**Appendix A****Response Resources**

The Company has identified sufficient response resources, by contract or other approved means to respond to a worst case discharge in each Response Zone identified in this Plan.

The following U.S. Coast Guard listed OSROs have been contracted to respond to spills originating from Company pipelines:

| USCG Classified Oil Spill Removal Organization (OSRO) – SECTOR NEW ORLEANS |                  |                               |    |    |    |                  |  |
|--|------------------|-------------------------------|----|----|----|------------------|--|
| OSRO Name  | Environment Type | Facility Classification Level |    |    |    | High Volume Port | Contract Responsibility  |
|  |                  | MM                            | W1 | W2 | W3 |                  |  |
| Oil Mop<br>131 Keating Drive<br>Belle Chasse, LA 70037                     | Rivers/Canals    | X                             | X  | X  | X  | Yes              | This contractor is to provide the properly trained manpower and equipment to perform containment, clean up and proper disposal of spill material per the instructions of the QI. |
|  | Inland           | X                             | X  | X  | X  |                  |  |

## COMPANY OWNED SPILL RESPONSE EQUIPMENT

Please note the facility does not own response equipment.

| <b>Skimmer / Pumps</b> |      |             |                       |                                  |                              |
|------------------------|------|-------------|-----------------------|----------------------------------|------------------------------|
| Type/Model             | Year | Quantity    | Capacity<br>(Gal/Min) | Daily Effective<br>Recovery Rate | Date Last<br>Fuel<br>Changed |
|                        |      |             |                       |                                  |                              |
|                        |      | <b>NONE</b> |                       |                                  |                              |
|                        |      |             |                       |                                  |                              |
| <b>Notes:</b>          |      |             |                       |                                  |                              |

| <b>Boom</b>   |      |             |                          |
|---------------|------|-------------|--------------------------|
| Type/Model    | Year | Quantity    | Size/Containment<br>Area |
|               |      |             |                          |
|               |      | <b>NONE</b> |                          |
|               |      |             |                          |
|               |      |             |                          |
| <b>Notes:</b> |      |             |                          |

| <b>Chemicals and Dispersant Equipment</b> |                |                       |                  |
|---|----------------|-----------------------|------------------|
| Amount                                    | Date Purchased | Treatment<br>Capacity | Storage Location |
|   |                |                       |                  |
|   |                | <b>NONE</b>           |                  |
|   |                |                       |                  |
| <b>Notes:</b>                             |                |                       |                  |

**COMPANY OWNED SPILL RESPONSE EQUIPMENT (Cont'd)**

| <b>Sorbents</b> |             |      |                    |
|-----------------|-------------|------|--------------------|
| Type/Model/Year | Quantity    | Size | Absorbent Capacity |
|                 |             |      |                    |
|                 | <b>NONE</b> |      |                    |
|                 |             |      |                    |
|                 |             |      |                    |
|                 |             |      |                    |
| <b>Notes:</b>   |             |      |                    |

| <b>Communication Equipment</b> |             |          |  |
|--------------------------------|-------------|----------|--|
| Type/Model                     | Year        | Quantity |  |
|                                |             |          |  |
|                                | <b>NONE</b> |          |  |
|                                |             |          |  |
|                                |             |          |  |

| <b>Fire Fighting Equipment and Protective Equipment</b> |                    |  |
|---|--------------------|--|
| Type  | Quantity (Approx.) |  |
|   |                    |  |
| <b>NONE</b>   |                    |  |
|   |                    |  |
|   |                    |  |
|   |                    |  |

| <b>Other (Heavy Equipment, Boats, etc.)</b> |             |                  |  |
|---|-------------|------------------|--|
| Type/Model                                  | Quantity    | Storage Location |  |
|   |             |                  |  |
|   | <b>NONE</b> |                  |  |
|   |             |                  |  |
|   |             |                  |  |
| <b>Notes:</b>                               |             |                  |  |

### COMMUNICATIONS EQUIPMENT

The following communication systems are used for daily operations as well as emergency response operations:

- Cellular phones - all field personnel have cellular phones.
- Landline phones - the manned facilities have landline phones.

As the need arises, additional communications equipment can be procured from contractors.

| <b>RADIO EQUIPMENT AVAILABLE</b> |  |
|----------------------------------|--|
| <b>OSRO</b>                      |  |
|                                  |  |
|                                  |  |
| <b>OSRO</b>                      |  |
|                                  |  |
|                                  |  |
|                                  |  |

**OIL MOP**

## OMI Environmental Solutions

131 Keating Drive  
Belle Chasse, Louisiana 70037

PHONE (504) 394-6110  
FAX (504) 393-8878

### MASTER SERVICE AGREEMENT

**CONTRACT NUMBER: 2012-MSA-00120**

This Master Service Agreement (the "Agreement"), is made this **1st** day of **June**, 2012, (the "Effective Date"), by and between **Harvest-Marks Pipeline** a Louisiana company, hereinafter sometimes called "Company", and **Oil Mop, L.L.C. d/b/a/ OMI Environmental Solutions**, a Louisiana Limited Liability Company, hereinafter sometimes called "OMIES", (Company and OMIES sometimes being referred to herein collectively as the "Parties," and individually as a "Party").

1. Authority, Purpose and Scope - The person signing this Agreement is an authorized representative of that Party. This Agreement is a master contract between Company and OMIES whereby in consideration of the covenants and provisions hereinafter provided, it shall control and govern all services performed by OMIES for Company, and the purchase from OMIES, of materials and equipment utilized in connection with such services (hereinafter the "Work").

2. Definitions –

- (a) "Affiliate" means a company owning fifty percent (50%) or more of the stock of Company or OMIES, a company in which Company or OMIES owns fifty percent (50%) or more of its stock, or a company fifty percent (50%) or more of whose stock is owned by the same company that owns fifty percent (50%) or more of the stock of Company or OMIES.
- (b) "Claim" or "Claims" means, unless specifically provided otherwise herein, all claims (including, but not limited to, those for bodily injury, personal injury, illness, disease, maintenance, cure, loss of consortium, loss of support, death, and wrongful termination of employment), damages (except consequential damages), liabilities, losses, demands, liens, encumbrances, fines, penalties, causes of action of any kind (including actions in rem or in personam), obligations, costs, judgments, interest and awards (including payment of reasonable attorneys' fees and costs of litigation) or amounts, of any kind or character (except punitive or exemplary damages), whether under judicial proceedings, administrative proceedings or otherwise, or conditions in the premises of or attributable to any person or persons or any party or parties, breach of representation or warranty (expressed or implied), under any theory of tort, contract, breach of contract (including any Claims which arise by reason of indemnification or assumption of liability contained in other contracts entered into by Company Indemnitees or OMIES Indemnitees) arising out of, or incident to or in connection with this Agreement or the performance of the Work under this Agreement.
- (c) "Company Indemnitees" and "Company's Indemnitees" means Company, its Affiliates, if any, and its and their directors, agents, representatives, employees and insurers and its and their suppliers, subcontractors, their other contractors, and their respective employees.
- (d) "OMIES Indemnitees" and "OMIES's Indemnitees" means OMIES, its Affiliates, if any, and its and their directors, agents, representatives, employees and insurers and its and their suppliers,

contractors, subcontractors, and their respective employees.

(e) "Third Party" means a person or entity other than any of the Company Indemnitees and the OMIES Indemnitees.

(f) The term "REGARDLESS OF FAULT" shall mean **WITHOUT REGARD TO THE CAUSE OR CAUSES OF ANY CLAIM, INCLUDING, WITHOUT LIMITATION, EVEN THOUGH A CLAIM IS CAUSED IN WHOLE OR IN PART BY THE NEGLIGENCE (WHETHER SOLE, JOINT, CONCURRENT, COMPARATIVE, CONTRIBUTORY, ACTIVE, PASSIVE, GROSS, OR OTHERWISE), WILLFUL MISCONDUCT, STRICT LIABILITY, OR OTHER FAULT, OF ANY MEMBER OF COMPANY'S INDEMNITEES, OMIES'S INDEMNITEES AND/OR INVITEES OR THIRD PARTIES, AND WHETHER OR NOT CAUSED BY A PRE-EXISTING CONDITION OR THE UNSEAWORTHINESS OF ANY VESSEL OR UNAIROWORTHINESS OF ANY AIRCRAFT OF A PARTY WHETHER CHARTERED, OWNED, OR PROVIDED BY COMPANY OR OMIES.**

3. Daily Reports - OMIES shall endeavor to submit daily reports on all equipment, personnel and supplies utilized during the proceeding twenty-four (24) hours to the Company. Daily reports will be submitted to the Company representative for the purpose of developing invoices. These reports are not invoices, but will be utilized as documentation for the creation of invoices as provided for herein.

4. Permits - Unless specified to the contrary in the Work Order, the Company shall obtain and pay for all necessary permits, licenses and inspection clearance for OMIES, its subcontractors, suppliers and vendors, and their respective employees, required to be obtained in their respective names in connection with the Work hereunder. The Company shall further be responsible for obtaining all necessary permits for the right of ingress or egress on private or public lands necessary to operations by OMIES. In the event operations are required in a designated remote work area, all requirements for ingress and egress shall be obtained by the Company for its account. In the event a representative of any governmental body regulating the Work finds any violation upon inspection of the job site during the performance of this Agreement, corrective action shall be taken immediately by the Company at the Company's sole expense.

5. Controlling Documents - This Agreement does not obligate the Parties to order Work from each other, nor does it obligate the Parties to accept Orders for Work, but this Agreement shall control and govern all Work accepted by and between the Parties and shall define the rights and obligations of the Parties during the term hereof.

6. Independent Contractor - The Parties agree that OMIES shall be an independent contractor with respect to all Work done and services performed hereunder, and have the status of, an independent contractor and shall not be in any way employees or agents of the Company. It is understood that by this provision, neither Party is assuming any liability for the actions or omissions of the other Party, except as is stated in this Agreement.

7. Transportation Charges & Waste Disposal - All tools, equipment and services are provided F.O.B. the nearest OMIES points. Applicable transportation charges shall apply for delivery of tools, equipment and personnel to the work site(s) and return to the point of origin, plus daily charges and cleaning, as required.

If the Company requests that OMIES handle waste disposal, all waste generated during the spill or any

other event will be handled in accordance with the Company's requirements to assure compliance with all local, state and federal rules and regulations. All waste generated during Company's spill or other event and handled by OMIES remains the property of the Company and the Company will be responsible for compliance with all storage, transportation, disposal, and record-keeping requirements including, without limitation, all manifests required for shipment and disposal. Disposal pricing and the extent of the support services provided will be compatible with the Company's disposal contracting standards.

8. Taxes and Liens - Company agrees to pay and discharge all taxes, lienable claims, charges or other impositions imposed and to be imposed by law on OMIES which arise out of, are in connection with, or result from, the Work performed hereunder.

9. Force Majeure - A delay in or failure to perform by a Party, other than the payment of money, shall not constitute a default that exposes it to liability for breach if and to the extent the delay or failure to perform is caused by an occurrence beyond the reasonable control of the Party, including, but not limited to an act of God or the public enemy; expropriation or confiscation of facilities; compliance with any order or requirement of any governmental authority; act of war, rebellion or sabotage or damage resulting therefrom; fire, flood, explosion or accident; riots or strikes or other concerted acts of workmen, whether direct or indirect; inability after diligent effort to obtain necessary licenses or permits; or any other cause, whether or not of the same class or kind as those specifically above named, which is not within the control of the Party and which, by the exercise of reasonable diligence, the Party is unable to prevent or remedy.

10. Insolvency - Should either Party become insolvent or make an assignment for the benefit of creditors or be adjudicated a bankrupt or admit in writing its inability to pay its debts generally as the same become due, or should any proceedings be instituted under any state or Federal law for relief of debtors or for the appointment of a receiver, trustee or liquidator of either Party, or should voluntary petition in bankruptcy or a reorganization or any adjudication of either Party as an insolvent or a bankrupt be filed, or should an attachment be levied upon either Party's equipment and not removed within five (5) days therefrom, then upon the occurrence of any such event, the other Party shall thereupon have the right to cancel this Agreement, without notice, and to terminate immediately all Work hereunder without further obligation. Such action by either Party does not relieve the other Party of its obligation hereunder.

11. Entire Agreement - This Agreement, its Exhibits (if any), and any applicable Work Order(s) constitute the sole and complete agreement of the Parties and supersedes all other agreements or representations of any kind, oral or otherwise, not included herein. In case of conflict or inconsistency between this Agreement, its Exhibits (if any), and any applicable Work Order(s), the Agreement shall prevail.

12. Proprietary Information - The Parties may acquire certain information with respect to each other and its respective operations. The Parties agree that they will not divulge any such information to persons not employed by the other Party without that Party's prior written consent, and the Parties will not use any such information for any purpose except as may be specifically agreed upon in writing by the other Party.

13. Public Announcements - Neither Party nor any representative, affiliate, contractor, vendor, supplier or agent of either Party shall make or issue any public announcement or statement with respect to this Agreement or any Work Order without the prior written consent of the other Party.

14. Enforceability of the Agreement - If any part or provision of this Agreement is judicially declared invalid, such declaration shall not have the effect of invalidating or voiding the remainder of this Agreement, and the Parties agree that the part or parts of this Agreement so held to be invalid, void or unenforceable shall be modified to the extent to make it enforceable, or, if necessary, the Agreement shall be deemed to be amended to delete the unenforceable part or provision, and the remainder shall have the same force and effect as if such part or provision had never been included herein.

15. Notices - All notices to be given under this Agreement shall be in writing and shall be sent to:

OMI Environmental Solutions:  
131 Keating Drive  
Belle Chasse, LA 70037  
USA

Harvest-Marks Pipeline:  
3337 North Hullen St.  
Suite 302  
Metairie, LA 70002  
USA

Fax: (504) 393-8878  
Attention: Mr. Joseph Christiana  
Vice-President

Fax:  
Attention: Brian Albrecht

The addresses given here may be changed by either Party by advising the other in writing of its new address. All notices and other communications required or permitted to be given in this Agreement shall be deemed given twenty-four (24) hours after confirmed Fax transmission (eight of which hours occur during normal business days) or five (5) days after deposit of mailing when sent by certified mail, return receipt requested, to the recipient at the address hereinabove stated.

16. Survival of Terms - Notwithstanding the suspension or termination of this Agreement or any Force Majeure event, the Parties shall continue to be bound by the provisions of this Agreement that reasonably require some action or forbearance after such termination, including but not limited to those set out in Sections 5, 8, 11, 14, 23, 25, 26 and 28.

17. Headings - Headings or other subdivisions of this Agreement are inserted for convenience of reference and shall not limit or affect the legal construction of any provision hereof.

18. Binding Authority - Each of the persons executing this Agreement represents and warrants that he or she has full right and authority to execute this instrument on behalf of Company or OMIES, as the case may be, and to bind such Party to the fulfillment of all of the provisions hereof.

19. Commencement, Modification and Term of Work - OMIES agrees to use its best efforts to commence and complete said Work within the times specified in the Work Order. If no commencement date is specified, OMIES agrees to use its best efforts to commence said Work at the time requested by Company. If no completion date is specified, OMIES agrees to complete said Work with due diligence and in a timely manner.

Nothing in this Agreement shall be construed as authorizing any employee of either Party to modify, alter, amend or waive in any manner this Agreement or any provision hereof, including, without limitation, the liability and indemnity provisions hereof. This Agreement may be amended, modified or otherwise altered or its provisions waived only by an amendment in writing signed by a designated representative of each Party. The waiver of any requirement or provision in this Agreement on any

particular occasion shall not be deemed a waiver of such requirement or provision, or serve as a precedent, for other work, service or operations under this Agreement on other occasions.

This Agreement shall be effective as of the Effective Date and shall continue in force until terminated in accordance with the provisions hereof. As a master contract with respect to potential future work, services and materials not then subject to a Work Order, this Agreement may be terminated prospectively by either Party at any time, without cause and without liability, upon thirty (30) days prior written notice to the other Party; provided, however, the terms and provisions of this Agreement shall continue to apply to all Work Orders then in existence, and neither Party shall by reason of such prospective termination of this Agreement be relieved of its respective obligations and liabilities theretofore or thereafter arising from or incident to Work performed or services rendered under any existing Work Order. Notwithstanding the above, if a Party breaches any material provision hereunder, the other Party shall have the right to immediately terminate this Agreement without notice.

20. Work Conditions: The Company or its duly authorized agent, because of uncertain and unknown conditions and incidental hazards under which the Work may be performed, shall be present whenever requested or required at designated work areas, and to ascertain conditions under which OMIES's services and/or equipment will be utilized. Conditions at the designated work area(s) which prevent performance of the Work by OMIES, or a change in plans by Company shall not relieve the Company of its obligation to pay for all Work performed, including without limitation, personnel, rental or equipment and transportation charges.

21. Response Resources Readiness and Availability - OMIES's response resources are listed within its United States Coast Guard ("USCG") Oil Spill Removal Organization ("OSRO") Classification. Resources are maintained and exercised annually in accordance with the USCG PREP and OPA 90 readiness guidelines. OMIES is listed as an MM through W3 company with the USCG. All of OMIES's response resources and maintenance records are available for inspection by Company upon request. OMIES will provide response services to Company on a first request, first served basis with response resources provided on an as-available basis. Response times will vary due to facility/vessel location. In the event OMIES is unable to provide immediate response services for any reason whatsoever, OMIES will subcontract and/or assign the Work to be performed hereunder.

22. Mobilization & Orders – Company may mobilize OMIES by contacting the following number at any time.

Primary 24-Hour Response Hotline: 1-800-645-6671

Upon Company notifying OMIES from time to time of the Work requested hereunder, OMIES will undertake the same and thereafter carry it on with due diligence to completion, subject, however, to Paragraphs 5 and 9 hereof. Each job shall be the subject of an order for work issued by Company to OMIES (the "Work Order"). The Work Order will be either written or oral with confirmation in writing, and provide, where applicable, a description of the Work to be performed; the job location; equipment, services, supplies, personnel to be provided by OMIES, material and equipment to be purchased by Company and the consideration to be paid for same. The Work Order may be in a form similar to Exhibit "A" or any other form that is agreed to by the Parties. Nothing in any Work Order, whether written or oral, shall modify or change the terms and conditions contained in this Agreement. If written confirmation of an oral Work Order is not received by OMIES within forty-eight (48) hours, Company

agrees that such oral Work Order will have the same effect as a written Work Order.

23. Choice of Law and Venue – The enforcement and application of this Agreement shall be governed by and interpreted in accordance with **THE GENERAL MARITIME LAW, IF THE GENERAL MARITIME LAW IS NOT APPLICABLE, THE LAWS OF THE STATE OF LOUISIANA (EXCLUSIVE OF ANY PRINCIPLES OF CONFLICTS OF LAWS WHICH WOULD DIRECT APPLICATION OF THE SUBSTANTIVE LAWS OF ANOTHER JURISDICTION) SHALL GOVERN.** In the event of a dispute over the meaning, interpretation or application of this Agreement, it shall be construed fairly and reasonably and neither more strongly for nor against either Party. The Parties agree and stipulate that the exclusive venue for any dispute arising out of or in connection with this Agreement shall be the United States District Court of the Eastern District of Louisiana located in New Orleans, Louisiana, federal jurisdictional requirements permitting.

24. Assignment – OMIES may, at its sole discretion, assign or subcontract this Agreement, or any part thereof, and the assignment of this Agreement, or the subcontracting of any Work to be performed hereunder, shall relieve OMIES of its obligations hereunder.

25. Compensation – The consideration to be paid by Company to OMIES shall be the amount invoiced at the prices and rates provided in the Rate Schedule, attached hereto as Exhibit “B.” This Rate Schedule is valid until superseded by OMIES. OMIES shall submit periodic invoices for Work performed, at its discretion, and shall submit its final invoice for Work performed within sixty (60) days of completion of the Work described in the applicable Work Order of Company.

In the event Company disputes one or more items in an invoice, Company shall, within ten (10) days of receipt of such invoice, notify OMIES in writing of the item or items under dispute and the reasons therefore. Payment of such disputed items may be withheld by Company until settlement of the dispute. The undisputed amount, however, shall be paid within fifteen (15) days of Company’s receipt of invoice.

All invoices are due fifteen (15) days from date of invoice. A service charge of one and one-half percent (1 1/2%) per month (18% per annum) shall be applied to all balances remaining unpaid beyond fifteen (15) days. In the event that it becomes necessary to retain the services of an attorney to collect any of the balance due, Company agrees to pay, in addition to the applicable service charge, all reasonable attorneys’ fees and costs as allowed by law. The remedies provided herein shall be in addition to any and all applicable liens, privileges and security interests (both statutory and contractual) allowed under law. Company hereby agrees that in the event of failure to pay OMIES, that OMIES shall have the right, without protest by Company, to file and record appropriate liens against any facility and/or property involved in the Work.

26. Warranty and Quality Standards - OMIES warrants the Work will be and has been completed in accordance with the Agreement for the period of thirty (30) days from the time OMIES completes said Work. This warranty extends only to the Company, and in no event shall OMIES be liable for damage sustained by a person designated by the law of any jurisdiction as a third party beneficiary of this warranty. THE WARRANTY DESCRIBED IN THIS PARAGRAPH SHALL BE THE SOLE REMEDY OF THE COMPANY AND SHALL BE IN LIEU OF ALL CLAIMS OR OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS OF USE OR FOR A PARTICULAR PURPOSE, OR ANY CLAIMS, WHETHER BASED IN TORT, CONTRACT, FAULT,

NEGLIGENCE OR STRICT LIABILITY, AS WELL AS, ANY AND ALL CLAIMS FOR ANY VICES OR DEFECTS, WHETHER OBVIOUS OR LATENT, KNOWN OR UNKNOWN, EASILY DISCOVERABLE OR HIDDEN, AND FOR ANY CLAIM(S) OR CAUSE(S) OF ACTION FOR REDHIBITION PURSUANT TO LOUISIANA CIVIL CODE ARTICLES 2520, ET SEQ., OR FOR DIMINUTION OF PURCHASE PRICE PURSUANT TO LOUISIANA CIVIL CODE ARTICLES 2541, ET SEQ., OR FOR FITNESS FOR COMPANY'S ORDINARY USE PURSUANT TO LOUISIANA CIVIL CODE ARTICLE 2524, ET SEQ. OMIES's sole liability hereunder is limited to the replacement of defective parts of the Work or the re-performance or repair thereof. NOTWITHSTANDING ANY OTHER PROVISION TO THE CONTRARY IN THIS AGREEMENT, OMIES'S MAXIMUM AGGREGATE LIABILITY FOR DEFAULT, NEGLIGENCE, FAULT, WARRANTY, OR FOR ANY BREACH OF LIABILITY ARISING OUT OF OR CONNECTED TO THIS AGREEMENT, WHETHER OR NOT THIS AGREEMENT IS TERMINATED FOR ANY REASON, SHALL BE LIMITED TO THE AGREEMENT PRICE FOR THE WORK IN QUESTION. NOTWITHSTANDING ANYTHING IN THIS AGREEMENT TO THE CONTRARY, NEITHER OMIES, NOR ITS SUBCONTRACTORS OR SUPPLIERS OR VENDORS OR THEIR RESPECTIVE UNDERWRITERS SHALL BE LIABLE (IN WARRANTY, TORT, CONTRACT OR OTHERWISE) FOR ANY INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES, INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS, LOSS OF USE OF THE GOODS OR ANY ASSOCIATED EQUIPMENT, COST OF SUBSTITUTED EQUIPMENT, FACILITIES OR SERVICES, POLLUTION, OR CLAIMS OF CUSTOMERS OF COMPANY FOR SUCH DAMAGES.

27. Insurance - As to all operations provided for herein, each Party shall carry and maintain for the benefit of the other Party, to the extent of the specific risks and liabilities assumed in the defense and indemnification provisions set out herein in this Agreement by the respective Parties, the following minimum insurance coverage with policy territory sufficient to cover the Work hereunder.

(a) Workmen's Compensation Insurance, with statutory limits in accordance with all applicable State, Federal and Maritime laws, and Employer's Liability Insurance of \$1,000,000 per accident/occurrence, including but not limited to an "Alternate Employer" or "Borrowed Servant" endorsement in favor of the other Party and its respective Company Indemnitees or OMIES Indemnitees, whichever is applicable. If the operations are over water or where the laws hereinafter mentioned apply, the Party shall carry the following additional insurance as applicable: U.S. Longshoremen's and Harbor Worker's Compensation Act Liability (including the Outer Continental Shelf Lands Act) for statutory limits, and Maritime Employer's Liability of \$1,000,000 per accident/occurrence (including but not limited to coverage for Jones Act, General Maritime Laws and Death on the High Seas Act; Transportation, Wages, Maintenance and Cure; Alternate Employer/Borrowed Servant endorsement in favor of the other Party and its respective Company Indemnitees or OMIES Indemnitees, whichever is applicable; and "In rem" endorsement).

(b) Comprehensive General Liability Insurance, with limits of \$1,000,000 per accident/occurrence and \$2,000,000 aggregate, including but not limited to coverage for public liability, bodily/personal injury, advertising injury, property damage premises coverage, contractual liability for those risks and liabilities assumed by the respective Parties in this Agreement, cross liability or severability of interest, liability for pollution and cleanup on a sudden and accidental basis, products and completed operations, and protective liability/independent subcontractors/work sublet.

(c) Automobile Liability Insurance, with limits of \$1,000,000 combined single limit per accident/occurrence for bodily/personal injury and property damage, including but not limited to coverage for all owned, hired and non-owned vehicles or automotive equipment used by or for the

respective Parties and contractual liability for those risks and liabilities assumed by the Parties in this Agreement.

(d) Property Insurance covering each Party's respective machinery and equipment for its replacement value and including removal of wreck/debris coverage.

(e) For all vessels owned, operated, chartered, or brokered by or for each Party in connection with its Work under the Agreement, each Party shall carry or require the owner or operator of such vessels to carry (including the Umbrella Excess Liability Insurance):

(1) Hull Insurance for replacement cost value, including but not limited to coverage for Collision and Tower's Liability, Removal of Wreck on a voluntary basis and/or where required by law, regulation or contract. The phrase "as owner of vessel named herein" and all similar phrases purporting to limit the insurer's liability to that of an owner shall be deleted.

(2) Protection and Indemnity Insurance, with limits of \$1,000,000 combined single limit per occurrence, including, but not limited to, coverage for contractual liability for those risks and liabilities assumed by the respective Parties in this Agreement, liability for pollution and cleanup on a sudden and accidental basis as per WQIS policy form or equivalent, full crew coverage, Collision and Tower's Liability, Cargo Legal Liability. The insurer(s) shall waive its right to limit its liability to value of vessel but only with respect to Company Indemnitees or OMIES Indemnitees, whichever is applicable.

(3) Charterer's Legal Liability Insurance, with limits of \$1,000,000 combined single limit per occurrence.

(4) The policies listed in (1) and (2) above shall provide that seaworthiness of vessels used to perform services under this Agreement is accepted by insurers (or that insurers shall waive in favor of the Company Indemnitees or OMIES Indemnitees, whichever is applicable, the vessel owner's and/or OMIES's warranty of seaworthiness).

(5) Delete the "non-owned watercraft exclusion" under the Comprehensive General Liability Insurance above.

(f) Umbrella Excess Liability Insurance, with limits of \$10,000,000 per accident/occurrence, in excess of the primary liability coverages and limits above.

(g) To the extent of the specific risks and liabilities assumed by the respective Parties in this Agreement, all of the above insurance shall be endorsed to provide that:

(1) The Party's insurers waive their right of subrogation (equitable or by assignment, express or implied, loan receipt or otherwise) against the Company Indemnitees or OMIES Indemnitees, whichever is applicable.

(2) The Party's insurers name Company Indemnitees or OMIES Indemnitees, whichever is applicable, as additional insureds (except for Worker's Compensation and Property Insurance).

(3) All said insurance policies must contain clauses to the effect that any other policies covering OMIES, its parents, affiliates and subsidiaries, and their directors, agents, representatives, employees and insurers, and their suppliers, other subcontractors, and their respective employees, are to be non-contributory and the coverage required by this Agreement is to be primary. No "other insurance" provision shall be applicable to OMIES, its parents, affiliates and subsidiaries, and their directors, agents, representatives, employees and insurers, and their suppliers, other subcontractors, and their respective employees, by virtue of having been named an additional assured under any

policy.

At the inception of this Agreement and whenever requested by a Party thereafter, the other Party shall furnish insurance certificates to evidence the insurance required herein. Each Party's insurance shall be carried with insurance companies satisfactory to the other Party and shall contain endorsements stating that insurer will give thirty (30) days' written notice to the other Party of non-renewal, cancellation or substantial amendment or alteration of such coverage. All deductible amounts, premiums, franchise amounts or other charges due with respect to each Party's required insurance herein shall be the sole obligation of the respective Party except as specifically provided for herein. Maintaining the prescribed insurance shall not relieve the Parties of any other obligation under this Agreement. Each Party will require and assure that each of its respective subcontractors, suppliers and vendors shall carry and pay for insurance in amounts and on terms necessary to cover the work and the obligations of the particular subcontractor, supplier or vendor.

28. Indemnities -

**(a) Bodily injury, death, and damage to property of Company's employees and its customers, contractors (other than OMIES), subcontractors, vendors and suppliers:**

Notwithstanding anything to the contrary in the other provisions of this Agreement, COMPANY AGREES TO BE RESPONSIBLE FOR AND ASSUME ALL LIABILITY FOR AND HEREBY AGREES TO DEFEND, RELEASE, INDEMNIFY, AND HOLD HARMLESS OMIES INDEMNITEES AGAINST CLAIMS ARISING IN CONNECTION WITH: (i) BODILY INJURY AND/OR DEATH TO COMPANY'S EMPLOYEES, COMPANY'S CUSTOMERS, VENDORS, SUPPLIERS, SUBCONTRACTORS AND OTHER CONTRACTORS AND THEIR RESPECTIVE EMPLOYEES, AND COMPANY'S INVITEES; AND/OR (ii) DAMAGE TO PROPERTY OF COMPANY'S EMPLOYEES, COMPANY'S CUSTOMERS, VENDORS, SUPPLIERS, SUBCONTRACTORS AND OTHER CONTRACTORS AND THEIR RESPECTIVE EMPLOYEES, AND COMPANY'S INVITEES; ARISING OUT OF OR RESULTING FROM OR ALLEGED TO ARISE OUT OF OR RESULT FROM THE PERFORMANCE OF THIS AGREEMENT, REGARDLESS OF FAULT. THE INDEMNITY OBLIGATIONS SET FORTH IN THIS PARAGRAPH 28(a) SHALL INCLUDE ANY MEDICAL, COMPENSATION, OR OTHER BENEFITS PAID BY OMIES OR ANY MEMBER OF OMIES INDEMNITEES AND SHALL APPLY EVEN IF THE EMPLOYEE IS DETERMINED TO BE THE BORROWED OR STATUTORY EMPLOYEE OF OMIES OR ANY OTHER MEMBER OF OMIES INDEMNITEES.

**(b) Bodily injury, death, and damage to property of OMIES's employees and its subcontractors, vendors and suppliers:**

Notwithstanding anything to the contrary in the other provisions of this Agreement, OMIES AGREES TO BE RESPONSIBLE FOR AND ASSUME ALL LIABILITY FOR AND HEREBY AGREES TO DEFEND, RELEASE, INDEMNIFY, AND HOLD HARMLESS THE COMPANY INDEMNITEES AGAINST CLAIMS ARISING IN CONNECTION WITH: (i) BODILY INJURY AND/OR DEATH TO OMIES'S EMPLOYEES, OMIES'S SUBCONTRACTORS AND VENDORS AND THEIR RESPECTIVE EMPLOYEES, AND OMIES'S INVITEES; AND/OR (ii) DAMAGE TO PROPERTY OF OMIES'S EMPLOYEES, OMIES'S SUBCONTRACTORS AND VENDORS AND THEIR RESPECTIVE EMPLOYEES, AND OMIES'S INVITEES; ARISING OUT OF OR RESULTING FROM OR ALLEGED TO ARISE OUT OF OR RESULT FROM THE PERFORMANCE OF THIS AGREEMENT, REGARDLESS OF FAULT. THE INDEMNITY OBLIGATIONS SET FORTH IN THIS PARAGRAPH 28(b) SHALL INCLUDE ANY MEDICAL, COMPENSATION, OR OTHER BENEFITS PAID BY COMPANY OR ANY MEMBER OF COMPANY INDEMNITEES AND SHALL APPLY EVEN IF THE EMPLOYEE IS DETERMINED TO BE THE BORROWED OR

**STATUTORY EMPLOYEE OF COMPANY OR ANY OTHER MEMBER OF COMPANY INDEMNITEES.**

**(c) Company's Property:**

Notwithstanding anything to the contrary in the other provisions of this Agreement, **COMPANY AGREES TO BE RESPONSIBLE FOR AND ASSUME ALL LIABILITY FOR AND HEREBY AGREES TO DEFEND, RELEASE, INDEMNIFY, AND HOLD HARMLESS OMIES INDEMNITEES FROM AND AGAINST CLAIMS ARISING IN CONNECTION WITH THE DAMAGE TO OR LOSS OR DESTRUCTION OF COMPANY'S PROPERTY AND THAT OF ITS CUSTOMERS, SUBCONTRACTORS, VENDORS, SUPPLIERS AND OTHER CONTRACTORS, REGARDLESS OF FAULT.**

**(d) OMIES's Property:**

Notwithstanding anything to the contrary in the other provisions of this Agreement, **OMIES AGREES TO BE RESPONSIBLE FOR AND ASSUME ALL LIABILITY FOR AND HEREBY AGREES TO DEFEND, RELEASE, INDEMNIFY, AND HOLD HARMLESS COMPANY INDEMNITEES FROM AND AGAINST CLAIMS ARISING IN CONNECTION WITH THE DAMAGE TO OR LOSS OR DESTRUCTION OF OMIES'S PROPERTY AND THAT OF ITS SUBCONTRACTORS AND VENDORS, REGARDLESS OF FAULT.**

**(e) Pollution and Hazardous Materials and Substances:**

Company's Responsibilities:

Subject to the indemnity obligations contained in Paragraphs 28(a)-(d), and notwithstanding anything to the contrary in the other provisions of this Agreement, **COMPANY AGREES TO BE RESPONSIBLE FOR AND ASSUME ALL LIABILITY FOR AND HEREBY AGREES TO DEFEND, RELEASE, INDEMNIFY AND HOLD HARMLESS OMIES INDEMNITEES AGAINST CLAIMS ARISING IN CONNECTION WITH DAMAGE TO PROPERTY THAT RESULTS FROM POLLUTION, INCLUDING BUT NOT LIMITED TO CONTROL, REMOVAL, RESTORATION AND CLEANUP OF ALL POLLUTION OR CONTAMINATION BY ANY CHEMICAL AND/OR PHYSICAL SUBSTANCE DEFINED UNDER ANY FEDERAL, STATE OR LOCAL LAW OR REGULATION TO BE POLLUTION OR A CONTAMINATE, ARISING FROM OR ON ACCOUNT OF POLLUTION OR CONTAMINATION WHICH ORIGINATES FROM COMPANY'S PROPERTY AND THAT OF ITS AFFILIATES, IF ANY, AND ITS AND THEIR DIRECTORS, AGENTS, REPRESENTATIVES EMPLOYEES AND INSURERS AND ITS SUPPLIERS, CUSTOMERS OTHER CONTRACTORS AND THEIR RESPECTIVE EMPLOYEES, REGARDLESS OF FAULT, AND ALTHOUGH THEIR USE OR DISPOSITION MAY BE AT OMIES'S DIRECTION.**

OMIES's Responsibilities:

Subject to the indemnity obligations contained in Paragraphs 28(a)-(d), and notwithstanding anything to the contrary in the other provisions of this Agreement, **OMIES AGREES TO BE RESPONSIBLE FOR AND ASSUME ALL LIABILITY FOR AND HEREBY AGREES TO DEFEND, RELEASE, INDEMNIFY AND HOLD HARMLESS COMPANY INDEMNITEES AGAINST CLAIMS ARISING IN CONNECTION WITH DAMAGE TO PROPERTY THAT RESULTS FROM POLLUTION, INCLUDING BUT NOT LIMITED TO CONTROL, REMOVAL, RESTORATION AND CLEANUP OF ALL POLLUTION OR CONTAMINATION, ARISING FROM OR ON ACCOUNT OF POLLUTION OR CONTAMINATION WHICH ORIGINATES FROM OMIES'S PROPERTY, REGARDLESS OF FAULT, AND ALTHOUGH THEIR USE OR DISPOSITION MAY BE AT COMPANY'S DIRECTION.**

In support of the indemnity obligations contained in Paragraphs 28(a)-(e) herein, the Parties agree to

provide coverage and amounts of liability insurance, which in no event shall be less than the minimum set out in Paragraph 27 of this Agreement PROVIDED, HOWEVER, AND NOTWITHSTANDING THE ABOVE, in the event that an injury or accident causing loss or liability occurs which is subject to jurisdiction where there is a prohibition or limitation of the Parties' ability to indemnify each other, then, if such law must be applied and only in that instance, both Parties' liability shall exist to the full extent allowed by the law of such jurisdiction, and the Parties shall be required to carry the maximum amount of insurance which may be allowed or required by the law of such jurisdiction for protection against such assumed loss or liability.

The Parties agree to immediately notify each other of any accident or incident in which physical injury occurs and to complete an accident report for each occurrence and to provide the other Party with a copy of each such accident report. Each Party agrees to promptly notify the other Party after receipt of any Claim for which it may seek indemnification.

In the event either Party fails to furnish a defense and indemnity as provided for herein or in the event either Party breaches an obligation in this Agreement, the other Party shall be entitled to receive from the offending Party, in addition to its attorneys' fees, costs, expenses and any amounts paid in judgment or settlement, all costs, expenses, and attorneys' fees incurred in the enforcement of this Agreement, including specifically, but not limited to, Claims for contractual indemnity and insurance coverage.

Notwithstanding the provisions of Paragraph 28 (a) through (e) above, neither OMIES nor Company shall indemnify or hold the other liable for its consequential, indirect, special, punitive, or exemplary damages.

Notwithstanding any other provision of this Agreement, the Parties waive and release any claim against each other (and those for which the other Party may be responsible) for indirect, special or consequential damages, however and whenever arising under this Agreement or as a result of or in connection with the Work, and whether based on negligence, unseaworthiness, breach of warranty, breach of contract, strict liability and/or other fault of the other Party or those for which the other Party may be responsible.

Consequential damages shall include, but are not limited to, loss of revenue, profit or use of capital, production delays, loss of product, reservoir loss or damage losses resulting from failure to meet other contractual commitments or deadlines, extended or increased project management costs, and downtime of owned, hired, chartered or leased facilities, vessels or equipment, including the subject of this Agreement.

THE FOLLOWING PROVISIONS APPLY WHERE WORK IS TO BE PERFORMED IN OR OFFSHORE LOUISIANA OR WHENEVER LOUISIANA LAW IS DEEMED TO APPLY, NOTWITHSTANDING ANY PROVISIONS IN THE AGREEMENT TO THE CONTRARY.

- i) Independent of the consideration herein by and between the Parties, each Party shall reimburse the other Party for the actual cost of the additional premium (if any) arising from each Party being named as an additional insured on the other Party's liability policies, including contractual liability coverage for the liabilities assumed under the Agreement and, if applicable, excess liability or umbrella policies. Each Party is obligated to notify the other Party if there is to be an additional premium for such coverage, including any renewal or replacement thereof, and supply satisfactory

documentation from their respective insurer. Each Party warrants and represents that it has communicated with its insurer(s) regarding this obligation. All notices regarding such coverage shall be in writing and sent in accordance with Paragraph 15. If a Party fails to notify the other Party of any additional premium charged for such coverage, it shall be conclusively presumed that there is no additional premium for such coverage.

- ii) Within fifteen (15) days of its receipt of notice of the additional premiums charged for such coverage, the receiving Party shall notify the sending Party whether it will pay or reimburse the sending Party for the additional premium. If the receiving Party notifies the sending Party that it does not wish to pay for this additional premium or fails to notify the sending Party within such fifteen (15) day period, the sending Party shall not be obligated to provide such coverage in favor of the receiving Party.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized representatives as of the day and year first above written.

**OMI Environmental Solutions:**

Signature: *Roxann Baudean*

By: Roxann Baudean  
Print Name

Title: Contract Administrator

Date: 6/4/12

**Harvest-Marks Pipeline:**

Signature: *Brian C. Acarajico*

By: Brian C. Acarajico  
Print Name

Title: MANAGER

Date: 6/4/12

## APPENDIX B

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### WORST CASE DISCHARGE ANALYSIS AND SCENARIO

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## INTRODUCTION

This appendix identifies potential causes for oil discharges and discusses the response efforts that are necessary for successful mitigation. Included in this appendix are hypothetical scenarios for various types of spills that have the potential to occur along the system. It is anticipated that The Company will respond to spills in a consistent manner regardless of the location. Therefore, the guidelines discussed in this appendix will apply to all spills whenever possible.

DOT/PHMSA requires that pipeline operators calculate a worst case discharge amount for each response zone. The calculations and descriptions are as follows:

| <b>DOT/PHMSA Discharge Volume Calculation</b> |  |
|---|--|
| ●   | <p><b>Worst Case Discharge</b><br/> <i>The largest volume (Bbls) of the following:</i></p> <ul style="list-style-type: none"> <li>■ <i>Pipeline's maximum release time (hrs), plus the maximum shutdown response time (hrs), multiplied by the maximum flow rate (bph), plus the largest line drainage volume after shutdown of the line section.</i></li> </ul> <p style="text-align: center;"><b>-- OR --</b></p> <ul style="list-style-type: none"> <li>■ <i>Largest foreseeable discharge for the line section is based on the maximum historic discharge, if one exists, adjusted for any subsequent corrective action or preventive action taken.</i></li> </ul> <p style="text-align: center;"><b>-- OR --</b></p> <ul style="list-style-type: none"> <li>■ <i>Capacity of the single largest breakout tank or battery of tanks within a single secondary containment system, adjusted for the capacity or size of the secondary containment system.</i></li> </ul> |

### Scenario Types

The occurrence of a Worst Case Discharge (WCD) could be the result of any number of scenarios along the pipeline system including:

- Piping rupture.
- Piping leak, under pressure and not under pressure.
- Explosion or fire.
- Equipment failure (e.g. pumping system failure, relief valve failure, or other general equipment relevant to operational activities associated with internal or external facility transfers).

The response actions to each of these scenarios are outlined in Section 3.1 and Figure 3.1. The response resources are identified in a quick reference format Appendix A. Pipeline response personnel list/telephone numbers and other internal/external resources telephone numbers are detailed in Figures 2.2 and 2.5.

## RESPONSE CAPABILITY SCENARIOS

### PIPELINE WORST CASE DISCHARGE AT GRAND BAY RESPONSE ZON

(b) (7)(F)

The worst case discharge in this Pipeline is (b) (7)(F).

#### **Description**

(b) (7)(F)

The type of material that could be discharged is crude oil.

#### **Volume**

This WCD scenario involves a line segment using the pipeline's maximum release time in hours, plus the maximum shutdown response time in hours, multiplied by the maximum flow rate expressed in barrels per hour (bph), plus the largest line drainage volume after shutdown of the line section. (b) (7)

(F)

This WCD scenario does not involve breakout tankage. Therefore single largest volume breakout tank adjustments/calculations are not considered in this WCD.

1. Maximum release time is based on the capabilities of personnel.
2. The maximum shutdown time is an estimate based on the capabilities of the automated system.
3. The maximum pumping rate of the pipeline.
4. The largest line drainage volume for the Grand Bay Response Zone is based on a break between Grand Bay Receiving Station to Ostrica Terminal.

**Note:** Adverse weather will not affect detection or shut down times.

**RESPONSE CAPABILITY SCENARIOS (Cont'd)****PIPELINE WORST CASE DISCHARGE AT GRAND BAY RESPONSE ZONE = (b) (7)(F)  
(Cont'd)*****Response Requirement***

The Company has identified sufficient response resources, by contract or other approved means, to respond to a worst case discharge to the maximum extent practicable. These response resources include:

- Resources capable of arriving at the staging area within the applicable response tier requirements for non-high volume areas (Tier 1 = 12 hours; Tier 2 = 36 hours; Tier 3 = 60 hours).
- Resources capable of oil recovery in inclement weather conditions (i.e. heavy rain).

***Notes:***

- Contracted and Company owned equipment and manpower resources are detailed in Figure 2.6 (USCG Classified OSRO) and Appendix A.
- Telephone references are provided in Figures 2.2 and 2.5.

## RESPONSE CAPABILITY SCENARIOS (Cont'd)

### BREAKOUT TANKS AT GRAND BAY RESPONSE ZONE

There are no breakout tanks at this Facility.

| <u>Spill Prevention Measures</u>   | <u>Percent Reduction Allowed</u> |
|--|----------------------------------|
| 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<br>Designed according to NFPA/API RP 2350                      | 5%                               |
| Testing/cathodic protection designed according to API Std 650/651/653.                               | 5%                               |
| Maximum allowable credit or reduction  | 70%                              |

## APPENDIX C

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### EMERGENCY PREPLANNING

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| C.2 Pipeline Leak Inspection Systems..... | C-2         |

## EMERGENCY PREPLANNING

### C.1 PIPELINE LEAK DETECTION SYSTEMS

Leak detection is accomplished by personnel surveillance. All pipelines are inspected periodically during field surveillance. Any leak will be repaired immediately.

### C.2 PIPELINE LEAK INSPECTION SYSTEMS

Visual observations during normal routine operations are made of the exposed portions of pipelines to locate signs of corrosion leaks, coating loss or excessive wear. In cases of small leaks, pipeline clamps are used for temporary repair until a more permanent repair can be made. Records on all pipeline failures are kept maintained and are available to DOT/PHMSA upon request.

Based on sound engineering judgment the pipeline is replaced or repaired as necessary.

#### C.2.A Visual Inspection

The pipeline and adjacent areas are visually inspected for leaking oil by either aerial observation or ground patrol with special attention given to locations where the pipeline crosses highways, railroad tracks, and bodies of water. These inspections are conducted periodically.

#### C.2.B Cathodic Protection

All pipelines are coated and have cathodic protection. These pipelines are subject to periodic cathodic protection inspections.

#### C.2.C External Corrosion Control

Whenever buried portions of the pipeline are exposed for any reason, the pipe will be examined for evidence of external corrosion, coating deterioration, and cathodic protection effectiveness. If corrosion is found, a detailed evaluation will be performed to determine the extent of corrosion.

Exposed portions of the pipeline are painted and/or coated for corrosion protection.

#### C.2.D Valve Maintenance

All valves are inspected annually to ensure proper working condition.

## APPENDIX D

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### TRAINING AND DRILLS

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## D.1 RESPONSE TEAM TRAINING

The Oil Spill Removal Organization through contract to the Company provides trained personnel to respond to pipeline discharges. The company contracts separately qualified personnel related to repair pipeline ruptures after the response is complete.

### All Contract personnel know:

- Their responsibilities under the Plan.
- The name, address and procedures for contacting the operator on a 24-hour basis.
- The name of, and procedures for contacting the Qualified Individual on a 24-hour basis.

### That all reporting personnel know:

- The pipelines and response zone details for the affected area (Figure 1.3).
- The telephone number of the National Response Center and other required notifications (Section 2.0).
- The notification process (Section 2.0).

### That all response personnel know:

- The characteristics and hazards of the oil discharged.
- The conditions that are likely to worsen emergencies, including the consequences of facility malfunctions, and the appropriate corrective actions.
- The steps necessary to control and accidental discharge of oil and to minimize the potential for fire, explosion, toxicity or environmental damage (Section 3.0).
- Proper use of personal protective equipment and fire-fighting procedures commensurate with their job description and level of training.

The Company requires that all response personnel, including contractors and casual labor, have the appropriate training necessary to serve on a response team during an emergency. Contract personnel will receive training in the following:

### *Facility Response Plan Review*

- All Response Team Members should review their Oil Spill Response Plan whenever their job position or responsibilities change under the Plan. A copy of this Plan will be available at all times to Team Members.

### *HAZWOPER (29 CFR 1910.120)*

- Federal and state regulations require that response team members maintain up-to-date HAZWOPER training necessary to function in their assigned positions. At a minimum, Company employees will receive "First Responder Awareness Level" training. All "Non-Company" personnel responding to an incident must satisfy the applicable HAZWOPER training requirements of 29 CFR 1910.120.

**D.1 RESPONSE TEAM TRAINING (Cont'd)****HAZWOPER (29 CFR 1910.120) (Cont'd)**

| <b>OSHA HAZWOPER TRAINING REQUIREMENTS</b>    |   |                  |
|---|---|------------------|
| <b>Responder Classification</b>               | <b>Required Training Hours</b>              | <b>Refresher</b> |
| <b>29CFR 1910.120(q) Emergency Response</b>   |   |                  |
| First Responder - Awareness Level             | 2-4 hrs demonstration of competency         | same             |
| First Responder - Operations Level            | 8 hrs                                       | 8 hrs            |
| Hazardous Materials Technician                | 24 hrs plus competency                      | 8 hrs            |
| Hazardous Materials Specialist                | 24 hrs plus competency in specialized areas | 8 hrs            |
| Incident Commander                            | 24 hrs plus competency                      | 8 hrs            |
| <b>29CFR 1910.120(e) Clean Up Sites</b>       |   |                  |
| General Site Workers                          | 40 hrs / 3 days on the job training         | 8 hrs            |
| Occasional Workers (Limited Tasks)            | 24 hrs / 1 day on the job training          | 8 hrs            |
| General Site Workers (Low Hazard)             | 24 hrs / 1 day on the job training          | 8 hrs            |
| Supervisors                                   | 8 hrs supervisor training                   | 8 hrs            |
| <b>29CFR 1910.120(p)(7)(8) RCRA TSD Sites</b> |   |                  |
| New Employees                                 | 24 hrs                                      | 8 hrs            |
| Current Employees*                            | 24 hrs                                      | 8 hrs            |

\* Previous work experience and/or training certified as equivalent by employer.

**Incident Command System**

- Contract personnel will receive ICS training and may also receive supplemental training in other, related general topics.

**Volunteers**

- The Company will not use volunteers for emergency incident response and no Company provisions exist to train them. Volunteers may be used by government response entities, as allowed by applicable policies/procedures.

**Training Records Maintenance**

- Contract personnel emergency response training records are maintained at Corporate Headquarters. Training records for response personnel will be maintained for as long as personnel have duties in this response plan.

**Contractor Training**

- The Company also recognizes that contract personnel must also have sufficient training to respond to emergency response situations. The Company communicates this training need to its key contractors during contract negotiations and often specifically spells out this requirement in its contracts. The Company also tends to use well-known spill response contractors whose reputation and experience levels help ensure personnel who respond will be trained to appropriate levels.

## D.1 RESPONSE TEAM TRAINING (Cont'd)

### *Training Qualifications*

- As no formalized method of certifying training instructors has been provided by OSHA, The Company ensures the competency of its instructors and training organizations by selecting trainers and/or organizations with professional reputations and extensive hands-on and classroom experience in their subject matter. Company personnel with responsibility to coordinate the training program also conduct periodic informal audits of training courses selected for the Company's training program to ensure their suitability for the program.

## D.2 RESPONSE TEAM EXERCISES

Contract operators, government agencies, and other resources must participate in response exercises required by Federal, state, or local regulations and as detailed in the "National Preparedness for Response Exercise Program (PREP) Guidelines". The Company will conduct announced and unannounced drills to maintain compliance, and each plan-holder must conduct at least one exercise annually. The Company Management will be responsible for the planning, carrying out and monitoring of the drill exercises. The following table lists the triennial exercise cycle for facilities (see PREP Guidelines for full details).

| Triennial Cycle  |                            |   |
|--|----------------------------|---|
| Total Number   | Frequency                  | Exercise Type/Description   |
| 12   | Quarterly                  | QI Notification Exercise  |
| 3  | Annual                     | Equipment Deployment Exercise <i>(May consist entirely of operator owned equipment, or a combination of OSRO and operator equipment).</i> |
| 3  | Annual                     | Response Team Tabletop Exercise   |
| 3  | Not more than Tri-annually | Unannounced Exercise <i>(not a separate exercise)</i><br>Actual response can be considered as an unannounced exercise.                    |
| NOTE: All response plan components must be exercised at least once in the Cycle. |                            |   |

- **Scope:** Exercise notification process between key facility personnel and the qualified individual to demonstrate the accessibility of the Qualified Individual.
- **Objective:** Contact by telephone, radio, message-pager, or facsimile and confirmation established as indicated in Response Plan.
- **General:** All personnel receiving notification shall respond to the notification and verify their receipt of the notification. Personnel who do not respond should be contacted to determine whether or not they received the notification.

## D.2 RESPONSE TEAM EXERCISES (Cont'd)

### *Annual Equipment Deployment Exercise (for facilities with equipment)*

- **Scope:** Demonstrate ability to deploy spill response equipment identified in the ICP.
  - May consist entirely of operator owned equipment, or a combination of OSRO and operator equipment.
  - The number of equipment deployment exercises conducted should be such that equipment and personnel assigned to each response zone are exercised at least one a year. If the same personnel and equipment respond to multiple zones, they need only exercise once per year. If different personnel and equipment response to various response zones, each must participate in an annual equipment deployment exercise.
- **Objective:** Demonstrate personnel's ability to deploy and operate response equipment. Ensure that the response equipment is in proper working order.
- **General:** The Facility may take credit for actual equipment deployment to a spill, or for training sessions, as long as the activities are properly documented.

### *Annual Response Team Tabletop Exercise*

- **Scope:** Demonstration of the response team's ability to organize, communication, and make strategic decisions regarding population and environmental protection during a spill event.
- **Objective:** Designated Emergency Response Team members should demonstrate the following:
  - Knowledge of the Plan.
  - Ability to organize team members effectively.
  - Communications system.
  - Interface with a unified command.
  - Coordination for response capability as outlined in Response Plan.
- **General:** Credit should be taken for an actual spill response when these objectives are met, the response is evaluated and, a proper record is generated.

## D.2 RESPONSE TEAM EXERCISES (Cont'd)

### *Government-Initiated Unannounced Exercise*

- **Scope:** Demonstrate ability to respond to a worst case discharge spill event.
- **Objectives:** Designated emergency response team members should demonstrate adequate knowledge of their Response Plan and the ability to organize, communicate, coordinate, and respond in accordance with that plan.
- **General:** Maximum of 20 unannounced PHMSA exercises conducted annually for the pipeline industry as a whole. A single owner or operator will not be required to participate in a PHMSA-initiated unannounced exercise, if they have already participated in one within the previous 36 months.

### *Exercise Documentation*

- The documentation for drill exercises will be maintained at least 3 years and located at Central Records; documentation should specify:
  - The type of exercise;
  - Date and time of the exercise;
  - A description of the exercise;
  - The objectives met in the exercise;
  - The components of the response plan exercised; and
  - Lessons learned.

## D.3 INCIDENT COMMAND SYSTEM

The Incident Command System is intended to be used as a management tool to aid in mitigating all types of emergency incidents. This system is readily adaptable to very small emergency incidents as well as more significant or complex emergencies. The Incident Command System (ICS) utilizes the following criteria as key operational factors:

- Assigns overall authority to one individual
- Provides structured authority, roles and responsibilities during emergencies
- Is simple and familiar, and is used routinely at all incidents
- Allows structured communication
- Is a structured system for response and assignment of resources
- Provides for expansion, escalation, and transfer/transition of roles and responsibilities
- Allows for "Unified Command" where outside agency involvement at the command level is required

### D.3 INCIDENT COMMAND SYSTEM (Cont'd)

Effective establishment and utilization of the ICS during response to all types of emergencies can:

- Provide for increased safety
- Shorten emergency mitigation time by providing more effective and organized mitigation
- Cause increased confidence and support from local, state, and federal emergency response personnel
- Provide a solid cornerstone for emergency planning efforts

Section D.6 provides a comprehensive list of every response team member's duty assignment.

### D.4 UNIFIED COMMAND

As a component of an ICS, the Unified Command (UC) is a structure that brings together the Incident Commanders of all major organizations involved in the incident to coordinate an effective response while still meeting their own responsibilities. The Unified Command (UC) system links the organizations responding to the incident and provides a forum for the Responsible Party and responding agencies to make consensus decisions. Under the UC, the various jurisdictions and/or agencies and responders may blend together throughout the organization to create an integrated response team. The UC process requires the UC to set clear objectives to guide the on-scene response resources.

Multiple jurisdictions may be involved in a response effort utilizing the Unified Command of the Incident Command System. These jurisdictions could be represented by any combination of:

- Geographic boundaries
- Government levels
- Functional responsibilities
- Statutory responsibilities

The participants of the UC for a specific incident will be determined by taking into account the specifics of the incident and existing response plans and/or decisions reached during the initial meeting of the UC. The UC may change as an incident progresses, in order to account for changes in the situation.

The UC is responsible for overall management of an incident. The UC directs incident activities and approves appropriation and release of resources. The UC structure is a vehicle for coordination, cooperation and communication which is essential to an effective response.

## D.4 UNIFIED COMMAND (Cont'd)

UC representatives must be able to:

- Agree on common incident objectives and priorities
- Have the capability to sustain a 24-hour-7-day-a-week commitment to the incident
- Have the authority to commit agency or company resources to the incident
- Have the authority to spend agency or company funds
- Agree on an incident response organization
- Agree on the appropriate Command and General Staff assignments
- Commit to speak with “one voice” through the Information Officer or Joint Information Center
- Agree on logistical support procedures
- Agree on cost-sharing procedures

## D.5 DISCHARGE CLASSIFICATION

The severity of a discharge will have a bearing on the level of management involvement necessary and the extent of resource mobilization. The following definitions provide guidance in the early classification of discharges:

| <b>TIER I EVENT</b>  |
|--|
| Incident Command will normally be assumed by Facility Management. Regional and Head Office support will be utilized on an as needed basis.   |
| <b>Exposure</b>  |
| The potential public and environmental exposure is moderate. The type and quantity of material released, while considering the overall nature of the incident (e.g. fire, proximity to private dwellings, etc.), will have moderate impact on the public and/or the environment. |
| <b>Degree of Control</b>   |
| The incident can be controlled in a short period of time through implementation of the local resources available to the Facility (including contract resources).   |
| <b>Governmental Involvement</b>  |
| Government involvement will be moderate and generally restricted to state and local levels.  |
| <b>Media Involvement</b>   |
| Media interest will be moderate and generally restricted to state and local levels.  |

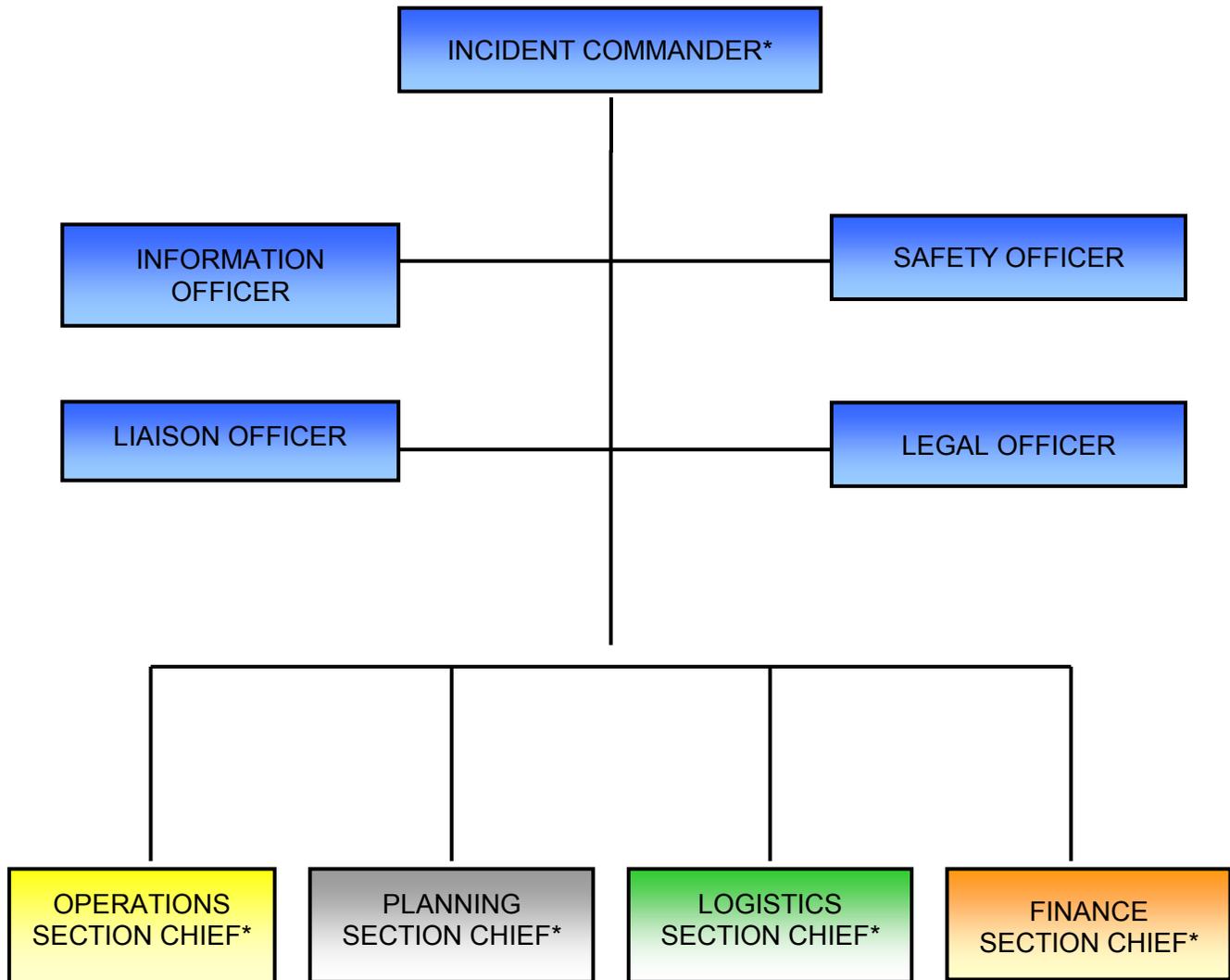
**D.5 DISCHARGE CLASSIFICATION (Cont'd)**

| <b>TIER II EVENT</b>   |
|--|
| Local Company resources may have to be supplemented with Head Office and external resources to manage the spill incident.  |
| <b>Exposure</b>  |
| The potential public and environmental exposure is moderately high. The type and quantity of material released, while considering the overall nature of the incident (e.g. fire, proximity to private dwellings, etc.), will have moderately high impact on the public and/or the environment. |
| <b>Degree of Control</b>   |
| The incident can be brought under control in a moderate period of time through implementation of local resources available to the Facility (including contract resources) with possible implementation of regional resources.  |
| <b>Governmental Involvement</b>  |
| Government involvement will be moderately high and generally restricted to regional levels.  |
| <b>Media Involvement</b>   |
| Media interest will be moderately high and generally restricted to regional levels.  |

| <b>TIER III EVENT</b>  |
|--|
| Maximum Company and external resources must be implemented to respond to the spill incident. Activation of the Crisis Management Team would be anticipated during a Tier III incident.   |
| <b>Exposure</b>  |
| The potential public and environmental exposure is significant. The type and quantity of material released, while considering the overall nature of the incident (e.g. fire, proximity to private dwellings, etc.), will have significant impact on the public and/or the environment. |
| <b>Degree of Control</b>   |
| Maximum Company and third party resources must be implemented in order to gain control of the incident.  |
| <b>Governmental Involvement</b>  |
| Government involvement will be high.   |
| <b>Media Involvement</b>   |
| Media interest will be high.   |

FIGURE D.1

## RESPONSE TEAM ORGANIZATION



\* NOTE: Spill Management Team (SMT) personnel can assume any of these positions as necessary.

## D.6 ICS ROLES AND RESPONSIBILITIES

### COMMON RESPONSIBILITIES

The following is a checklist applicable to all personnel in an ICS organization:

- Receive assignment, including:
  - Job assignment
  - Resource order number and request number
  - Reporting location
  - Reporting time
  - Travel instructions
  - Special communications instructions
- Upon arrival, check-in at designated check-in location.
- Receive briefing from immediate supervisor.
- Acquire work materials.
- Supervisors maintain accountability for assigned personnel.
- Organize and brief subordinates.
- Know your assigned radio frequency(s) and ensure communications equipment is operating properly.
- Use clear text and ICS terminology (no codes) in all communications.
- Complete forms and reports required of the assigned position and send to Documentation Unit.
- Maintain unit records, including Unit/Activity Log (Section 5.0).
- Respond to demobilization orders and brief subordinates regarding demobilization.

### UNIT LEADER RESPONSIBILITIES

In ICS, a Unit Leader's responsibilities are common to all units in all parts of the organization. Common responsibilities of Unit Leaders are listed below.

- Review common responsibilities.
- Receive briefing from Incident Commander, Section Chief or Branch Director, as appropriate.
- Participate in incident planning meetings, as required.
- Determine current status of unit activities.
- Order additional unit staff, as appropriate.
- Determine resource needs.
- Confirm dispatch and estimated time of arrival of staff and supplies.
- Assign specific duties to staff; supervise staff.
- Develop and implement accountability, safety and security measures for personnel and resources.
- Supervise demobilization of unit, including storage of supplies.
- Provide Supply Unit Leader with a list of supplies to be replenished.
- Maintain unit records, including Unit/Activity Log (Section 5.0).

## INCIDENT COMMANDER

- Assess the situation and/or obtain a briefing from the prior IC.
- Determine Incident Objectives and strategy.
  - Keep the public informed of response activities.
  - Manage a coordinated response effort.
  - Maximize protection of environmentally sensitive areas.
  - Contain and recover spilled material.
  - Recover and rehabilitate injured wildlife.
  - Remove oil from impacted areas.
  - Minimize economic impacts.
  - Keep stakeholders informed of response activities.
- Establish the immediate priorities.
  - Ensure the safety of citizens and response personnel.
  - Control the source of the spill.
- Establish an Incident Command Post (ICP).
- Brief Command Staff and Section Chiefs.
- Review meetings and briefings.
- Establish an appropriate organization.
- Ensure planning meetings are scheduled as required.
- Approve and authorize the implementation of an Incident Action Plan (IAP).
- Ensure that adequate safety measures are in place.
- Coordinate activity for all Command and General Staff.
- Coordinate with key people and officials.
- Approve requests for additional resources or for the release of resources.
- Keep Company administrator(s) informed of incident status.
- Approve the use of trainees, volunteers, and auxiliary personnel.
- Authorize release of information to the news media.
- Ensure incident Status Summary (Section 5.0) is completed and forwarded to appropriate higher authority.
- Order the demobilization of the incident when appropriate.

## INFORMATION OFFICER

- Determine from the IC if there are any limits on information release.
- Develop material for use in media briefings.
- Obtain IC approval of media releases.
- Inform media and conduct media briefings.
- Arrange for tours and other interviews or briefings that may be required.
- Obtain media information that may be useful to incident planning.
- Maintain current information summaries and/or displays on the incident and provide information on the status of the incident to assigned personnel.

## LIAISON OFFICER

- Be a contact point for agency representatives.
- Maintain a list of assisting and cooperating agencies and agency representatives. Monitor check-in sheets daily to ensure that all agency representatives are identified.
- Assist in establishing and coordinating interagency contacts.
- Keep agencies supporting the incident aware of incident status.
- Monitor incident operations to identify current or potential inter-organizational problems.
- Participate in planning meetings, providing current resource status, including limitations and capability of assisting agency resources.
- Coordinate response resource needs for Natural Resource Damage Assessment and NRDAR activities with the Operations Section during oil and HAZMAT responses.
- Coordinate response resource needs for incident investigation activities with the Operations Section.
- Ensure that all required agency forms, reports and documents are completed prior to demobilization.
- Have debriefing session with IC prior to departure.
- Coordinate activities of visiting dignitaries.

## SAFETY OFFICER

- Participate in planning meetings.
- Identify hazardous situations associated with the incident.
- Review the IAP for safety implications.
- Exercise emergency authority to stop and prevent unsafe acts.
- Investigate accidents that have occurred within the incident area.
- Assign assistants, as needed.
- Review and approve the medical plan.
- Develop the Site Safety Plan and publish Site Safety Plan summary (Section 5.0) as required.

## LEGAL OFFICER

- Participate in planning meetings, if requested.
- Advise on legal issues relating to in-situ burning, use of dispersants, and other alternative response technologies.
- Advise on legal issues relating to differences between NRDAR and response activities.
- Advise on legal issues relating to investigations.
- Advise on legal issues relating to finance and claims.
- Advise on legal issues relating to response.

## OPERATIONS SECTION CHIEF

- Develop operations portion of IAP.
- Brief and assign Operations Section personnel in accordance with the IAP.
- Attend planning meetings.
- Supervise Operations Section.
- Determine need for and request additional resources.
- Review suggested list of resources to be released and initiate recommendation for release of resources.
- Assemble and disassemble Strike Teams assigned to the Operations Section.
- Report information about special activities, events, and occurrences to the IC.
- Respond to resource requests in support of NRDAR activities.
- Resolve logistic problems reported by subordinates.
- Approve accident and medical reports originating within the Branch.

## PLANNING SECTION CHIEF

- Collect and process situation information about the incident.
- Supervise preparation of the IAP.
- Provide input to the IC and the Operations Section in preparing the IAP.
- Chair planning meetings and participate in other meetings as required.
- Reassign out-of-service personnel already on-site to ICS organizational positions as appropriate.
- Establish information requirements and reporting schedules for Planning Section Units (e.g., Resources, Situation Units).
- Determine the need for any specialized resources in support of the incident.
- If requested, assemble and disassemble Strike Teams and Task Forces not assigned to Operations.
- Establish special information collection activities as necessary (e.g., weather, environmental, toxics, etc.).
- Assemble information on alternative strategies.
- Provide periodic predictions on incident potential.
- Report any significant changes in incident status.
- Compile and display incident status information.
- Oversee preparation and implementation of the Incident Demobilization Plan.
- Incorporate plans (e.g., Traffic, Medical, Communications, Site Safety) into the IAP.

## LOGISTICS SECTION CHIEF

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

## FINANCE/ADMINISTRATION SECTION CHIEF

- Attend planning meetings, as required.
- Manage all financial aspects of an incident.
- Provide financial and cost analysis information, as requested.
- Gather pertinent information from briefings with responsible agencies.
- Develop an operating plan for the Finance/Administration Section; fill supply and support needs.
- Determine the need to set up and operate an incident commissary.
- Meet with assisting and cooperating agency representatives, as needed.
- Maintain daily contact with Company administrative headquarters on finance/ administration matters.
- Ensure that all personnel time records are accurately completed and transmitted, according to policy.
- Provide financial input to demobilization planning.
- Ensure that all obligation documents initiated at the incident are properly prepared and completed.
- Brief administrative personnel on all incident-related financial issues needing attention or follow-up prior to leaving incident.

## APPENDIX E

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### EVACUATION PLAN

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## E.1 EMERGENCY EVACUATION PROCEDURES

Minimizing contract personnel and public exposure to hazardous substances is the highest priority activity at a pipeline emergency site. Often this must be done by notifying and/or evacuating employees and nearby residents (or assisting local officials with this activity) and/or by halting or diverting traffic on roads from the emergency area.

Since each emergency is different, the size of the area to be isolated and the method of isolation will vary on a case by case basis.

In general, fenced pipeline installations such as tank farms, delivery terminals and pump stations can be isolated by controlling traffic at the installation's main gate. For situations on the pipeline right-of-way, the response team must quickly determine the size of the area potentially affected and work closely with local responders to make every effort to control all access to the area by road, rail or footpath.

In general, a potential emergency situation will be most easily isolated through the prompt enlistment of help from local responders (police, fire, etc.) to help control an area other than a fenced pipeline facility. Section 2.0 contains listings of how to contact these personnel.

## E.2 EVACUATIONS INVOLVING THE GENERAL PUBLIC

### Specific Procedure

- The Company's acting On-Scene Commander first assesses the incident and determines it is necessary to evacuate the public from the immediate affected area (local officials should be included in this decision making if time permits).
- Coordination of evacuation efforts is the responsibility of the On-Scene Commander, or the person assigned as the SMT's Liaison Officer.
- If the incident involves injured persons, refer to "Medical Emergencies" of Section 3.0.
- Local authorities such as the police, highway patrol and fire departments should be pressed into service assisting an evacuation, with the Company's On-Scene Commander or Liaison Officer acting as direct liaison to these officials.
- All nearby occupied dwellings should then be visited and the inhabitants informed of the dangers as soon as possible. Evacuation instructions to residents must insist that all open flames including pilot lights and gas burners be extinguished if possible.
- Conduct evacuation on foot if necessary.
- Warn all evacuees against activities such as smoking, operating motor vehicles, using spark-producing appliances, etc. The Company should attempt to render whatever assistance is necessary to the evacuees.
- Keep the QI and/or Safety Officer informed of any evacuation efforts so they may pass along the latest information regarding such actions to other support personnel.

## E.2 EVACUATIONS INVOLVING THE GENERAL PUBLIC (Cont'd)

### Specific Procedure (Cont'd)

- In the interest of safety, the media and other members of the general public may need to be utilized to quickly inform people in the immediate area of an ongoing evacuation effort.
- Members of the press should be advised that electronic equipment such as camera lights and flashes can be potential sources of ignition when explosive vapors are present.

### Traffic Control

If an incident occurs near a road or local traffic may need to be halted or diverted from the immediate area. The assistance of local authorities should be solicited to enforce any necessary detours of local traffic until the hazardous situation can be stabilized. Railroads should be notified so they can halt rail traffic.

### Notification of Public Officials

The Company must be prepared to coordinate the Company's response to emergencies with public officials as appropriate. The QI or other appointee will interface with public officials on the appropriate seniority levels who are concerned about an emergency response in progress. The QI will meet directly with onsite incident commanders from other agencies in order to best coordinate response efforts. The Liaison Officer will act as Company liaison with various local emergency responders during the incident. The Environmental Situation Chief will act as liaison with federal and state-level environmental responders if necessary. The Safety Officer shall act as liaison with OSHA representatives if necessary.

## APPENDIX F

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### DISPOSAL PLAN

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## OVERVIEW

A major oil spill response would generate significant quantities of waste materials ranging from oily debris and sorbent materials to sanitation water and used batteries. All these wastes need to be classified and separated (i.e., oily, liquid, etc.), transported from the site, and treated and/or disposed of at approved disposal sites. Each of these activities demands that certain health and safety precautions be taken, which are strictly controlled by federal and state laws and regulations. This section provides an overview of the applicable state regulations governing waste disposal, and a discussion of various waste classification, handling, transfer, storage, and disposal techniques. It is the responsibility of the Company's Designated Disposal Specialist to manage waste disposal needs during an oil spill cleanup.

## WASTE CLASSIFICATION

### *Oily - Liquid Wastes*

Oily liquid wastes (i.e., oily water and emulsions) that would be handled, stored, and disposed of during response operations are very similar to those handled during routine storage and transfer operations. The largest volume of oily liquid wastes would be produced by recovery operations (e.g., through the use of vacuum devices or skimmers). In addition, oily water and emulsions would be generated by vehicle operations (e.g., spent motor oils, lubricants, etc.), and equipment cleaning operations.

### *Non-Oily - Liquid Wastes*

Response operations would also produce considerable quantities of non-oily liquid wastes. Water and other non-oily liquid wastes would be generated by the storage area and stormwater collection systems, vessel and equipment cleaning (i.e., water contaminated with cleaning agents), and office and field operations (i.e., sewage, construction activities).

### *Oily - Solid/Semi-Solid Wastes*

Oily solid/semi-solid wastes that would be generated by containment and recovery operations include damaged or worn-out booms, disposable/soiled equipment, used sorbent materials, saturated soils, contaminated beach sediments, driftwood, and other debris.

### *Non-Oily - Solid/Semi-Solid Wastes*

Non-oily solid/semi-solid wastes would be generated by emergency construction operations (e.g., scrap, wood, pipe, and wiring) and office and field operations (i.e., refuse). Vessel, vehicle, and aircraft operations also produce solid wastes.

## WASTE HANDLING

A primary concern in the handling of recovered oil and oily debris is contaminating unaffected areas or recontaminating already cleaned areas. Oily wastes generated during the response operations would need to be separated by type and transferred to temporary storage areas and/or transported to incineration or disposal sites. Proper handling of oil and oily wastes is imperative to ensure personnel health and safety.

## WASTE HANDLING (Cont'd)

### *Safety Considerations*

Care should be taken to avoid or minimize direct contact with oily wastes. All personnel handling or coming into contact with oily wastes will wear protective clothing. A barrier cream can be applied prior to putting on gloves to further reduce the possibility of oily waste absorption. Safety goggles are to be worn by personnel involved in waste handling activities where splashing might occur. Any portion of the skin exposed to oily waste should be washed with soap and water as soon as possible. Decontamination zones will be set up during response operations to ensure personnel are treated for oil exposure.

### *Waste Transfer*

During response operations, it may be necessary to transfer recovered oil and oily debris from one point to another several times before the oil and oily debris are ultimately recycled, incinerated or disposed of at an appropriate disposal site. Depending on the location of response operations, any or all of the following transfer operations may occur:

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

There are four general classes of transfer systems that may be employed to affect oily waste transfer operations:

- **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:** A vacuum truck may be used to transfer viscous oils but they usually pick up a very high water/oil ratio.
- **Belt/Screw Conveyors:** Conveyors 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 (i.e., 10 feet) but are bulky and difficult to set up and operate.

## WASTE HANDLING (Cont'd)

### Waste Transfer (Cont'd)

- **Wheeled Vehicles:** Wheeled vehicles may be used to transfer liquid wastes or oily debris to storage or disposal sites. These vehicles have a limited transfer volume (i.e., 100 barrels) and require good site access.

Table F-1 provides a comparative evaluation of 16 types of transfer systems that could be available for transfer operations.

## WASTE STORAGE

Interim storage of recovered oil, oily and non-oily waste should be considered to be an available means of holding the wastes until a final management method is selected. In addition, the segregation of wastes according to type would facilitate the appropriate method of disposal. The storage method used would depend upon:

- The type and volume of material to be stored.
- The duration of storage.
- Access.

During an oil spill incident, the volume of oil that can be recovered and dealt with effectively depends upon the available storage capacity. Typical short-term storage options are summarized in Table F-2. The majority of these options can be used either onshore or offshore. If storage containers such as bags or drums are used, the container must be clearly marked and/or color-coded to indicate the type of material/waste contained and/or the ultimate disposal option. Bladder or pillow tanks are acceptable, if the available space can support the weight of both the container and the product.

Fuel barges may be the best option for temporary storage of oil recovered in open waters. Depending on size, these vessels may be able to hold up to 6,000 barrels of oil and water. The barge deck can be used as a platform for operating oil spill clean-up equipment and storing containment booms.

Empty barges have drafts of between four and six feet which would increase when these barges are filled with oil or loaded with cargo. Consequently, they may not be able to enter shallow, nearshore waters.

It may be difficult to offload recovered oil stored inside barges. Due to natural forces which affect spilled oil, recovered oil may be very viscous or emulsified, rather than free-flowing. It may be necessary to use steam to heat viscous oil before pumping it from the barge.

Steel or rubber tanks can be used to store oil recovered near the shoreline. To facilitate offloading, demulsifiers may be used to break emulsions prior to placing the recovered substance into the barges or storage tanks.

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

- Geology.
- Ground water.
- Soil type.
- Flooding.

## WASTE STORAGE (Cont'd)

- Surface water.
- Slope.
- Type of material.
- Capacity of site.
- Climatic factors.
- Land use.
- Toxic air emissions.
- Security of site.
- Access to site.
- Public accessibility.

Temporary storage sites should use the best achievable technology to protect the environment and human health. They should be set up to prevent leakage, contact, and subsequent absorption of oil by the soil. The sites should be bermed (1 to 1.5 meters high) and double lined with plastic or visqueen sheets 6-10 millimeters or greater in thickness, without joints, prior to receiving loose and bagged debris. The edges of the sheet should be weighted with stones or earth to prevent damage by wind, and the sheet should be placed on a sand layer or an underfelt thick enough to prevent piercing. A reinforced access area for vehicles at the edge of the site should be provided. In addition, the oily debris should be covered by secured visqueen or tarps and an adequate stormwater runoff collection system for the size and location of the site would be utilized. Additionally, the sites should be at least 3 meters above mean sea level.

Oily debris can be hauled to approved temporary storage sites in visqueen lined trucks or other vehicles. Burnable, non-burnable, treatable and re-usable materials can be placed in well defined separate areas at temporary storage sites.

When the last of the oily debris leaves a temporary storage site, the ground protection should be removed and disposed of with the rest of the oily debris. Any surrounding soil which has become contaminated with oil should also be removed for disposal or treatment. If the soils were removed for treatment, they may be replaced if testing proves acceptable levels have been achieved. Treatment and remediation is encouraged when feasible. The temporary storage should be returned to its original condition.

## WASTE DISPOSAL

### *Techniques for Disposal of Recovered Oil*

Recovery, reuse, and recycling are the best choices for remediation of a spill, thereby reducing the amount of oily debris to be bermed onsite or disposed of at a solid waste landfill. Treatment is the next best alternative, but incineration and burning for energy recovery have more options within the state. There are some limitations and considerations in incinerating for disposal. Environmental quality of incineration varies with the type and age of the pipeline. Therefore, when incineration becomes an option during an event, local air quality authorities would be contacted for advice about efficiency and emissions of facilities within their authority. Approval of the local air authorities is a requirement for any incineration option. Landfilling is the last option. Final disposal at a solid or dangerous waste landfill is the least environmentally sound method of dealing with a waste problem such as oily debris.

## WASTE DISPOSAL (Cont'd)

During an oil spill incident, the Company representative will consult with the federal and state On Scene Coordinators (OSCs) to identify the acceptable disposal methods and sites appropriately authorized to receive such wastes. The Company maintains a list of approved disposal sites that satisfy local, state, and federal regulations and company requirements. This identification of suitable waste treatment and disposal sites will be prepared by a Designated Disposal Specialist of the Company's Response Team in the form of an Incident Disposal Plan which must then be authorized by the U.S. Coast Guard and/or the EPA. An Incident Disposal Plan should include predesignated interim storage sites, segregation strategies, methods of treatment and disposal for various types of debris, and the locations/contacts of all treatment and disposal site selections. Onsite treatment/disposal is preferred.

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 methods are employed.

The different types of wastes generated during response operations will require different disposal methods. To facilitate the disposal of wastes, they should be separated by type for temporary storage, transport and disposal. Table F-3 lists some of the options that are available to segregate oily wastes. The table also depicts methods that can be employed to separate free and/or emulsified water from the oily liquid waste.

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

### ***Recycling***

This technique entails removing water from the oil and blending the oil with uncontaminated oil. Recovered oil can be shipped to refineries provided that it is exempt from hazardous waste regulations. There it can be treated to remove water and debris, and then blended and sold as a commercial product.

The Company's Designated Disposal Specialist is responsible for ensuring that all waste materials are disposed of at a Company internally approved disposal site.

### ***Incineration***

This technique entails the complete destruction of the recovered oil by high temperature incineration. 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. Factors to consider when selecting an appropriate site for onsite incineration include:

- Proximity to recovery locations.
- Access to recovery locations.
- Adequate fire control.
- Approval of the local air pollution control authorities.

## WASTE DISPOSAL (Cont'd)

### *In Situ Burning/Open Burning*

Burning techniques entail igniting oil or oiled debris and allowing it to burn under ambient conditions. These disposal techniques are subject to restrictions and permit requirements established by federal, state and local laws. They cannot be used to burn PCBs, waste oil containing more than 1,000 parts per million of halogenated solvents, or other substances regulated by the EPA. 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 is 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 an approved landfill in accordance with regulatory procedures. Landfill disposal of free liquids is prohibited by federal law in the United States.

With local health department approval, non-burnable debris which consists of oiled plastics, gravel and oiled seaweed, kelp, and other organic material may be transported to a licensed, lined, approved municipal or private landfill and disposed of in accordance with the landfill guidelines and regulations. Landfill designation should be planned only for those wastes that have been found to be unacceptable by each of the other disposal options (e.g., waste reduction, recycling, energy recovery). Wastes are to be disposed of only at Company-approved disposal facilities. The Company's Designated Disposal Specialist is responsible for ensuring that all waste materials are disposed of at a Company internally approved disposal site. Disposal at a non-approved facility would require approval by the Company's Designated Disposal Specialist prior to sending any waste to such a facility.

**TABLE F-1  
COMPARATIVE EVALUATION OF OIL SPILL TRANSFER SYSTEMS**

| <b>CHARACTERISTICS OF TRANSFER SYSTEMS</b> | <b>CENTRIFUGAL PUMP</b> | <b>LOBE PUMP</b> | <b>GEAR PUMP</b> | <b>INTERMESCHING SCREW</b> | <b>VALVE PUMP</b> | <b>FLEXIBLE IMPELLER</b> | <b>SCREW/AUGER PUMP</b> | <b>PROGRESSING CAVITY</b> | <b>PISTON PUMP</b> | <b>DIAPHRAGM PUMP</b> | <b>AIR CONVEYOR</b> | <b>VACUUM TRUCK</b> | <b>PORTABLE VACUUM PUMP</b> | <b>CONVEYOR BELT</b> | <b>SCREW CONVEYOR</b> | <b>WHEELED VEHICLES</b> |
|--|-------------------------|------------------|------------------|----------------------------|-------------------|--------------------------|-------------------------|---------------------------|--------------------|-----------------------|---------------------|---------------------|-----------------------------|----------------------|-----------------------|-------------------------|
| High Viscosity Fluids                      | 1                       | 5                | 5                | 5                          | 3                 | 2                        | 5                       | 5                         | 5                  | 3                     | 5                   | 4                   | 4                           | 5                    | 4                     | 5                       |
| Low Viscosity Fluids                       | 5                       | 2                | 2                | 2                          | 3                 | 4                        | 1                       | 3                         | 3                  | 4                     | 5                   | 5                   | 5                           | 1                    | 1                     | 5                       |
| Transfer Rate                              | 5                       | 2                | 1                | 1                          | 3                 | 4                        | 1                       | 2                         | 2                  | 3                     | 4                   | 5                   | 3                           | 2                    | 2                     | 2                       |
| Debris Tolerance                           |                         |                  |                  |                            |                   |                          |                         |                           |                    |                       |                     |                     |                             |                      |                       |                         |
| ◦ Silt/Sand                                | 5                       | 3                | 1                | 1                          | 1                 | 4                        | 5                       | 5                         | 3                  | 4                     | 5                   | 5                   | 5                           | 5                    | 5                     | 5                       |
| ◦ Gravel/Particulate                       | 5                       | 2                | 1                | 1                          | 1                 | 2                        | 5                       | 3                         | 2                  | 3                     | 5                   | 5                   | 4                           | 5                    | 4                     | 5                       |
| ◦ Seaweed/Stringy Matter                   | 2                       | 3                | 4                | 3                          | 2                 | 2                        | 4                       | 4                         | 3                  | 3                     | 4                   | 4                   | 3                           | 5                    | 4                     | 5                       |
| Tendency to Emulsify Fluids                | 1                       | 4                | 3                | 3                          | 3                 | 3                        | 5                       | 5                         | 2                  | 5                     | 5                   | 5                   | 5                           | 5                    | 5                     | 5                       |
| Ability to Run Dry                         | 5                       | 3                | 2                | 1                          | 2                 | 3                        | 4                       | 3                         | 3                  | 2                     | 5                   | 5                   | 5                           | 4                    | 3                     |                         |
| Ability to Operate Continuously            | 5                       | 3                | 2                | 2                          | 2                 | 3                        | 3                       | 3                         | 4                  | 4                     | 3                   | 3                   | 3                           | 3                    | 2                     | 4                       |
| Self Priming                               | 1                       | 3                | 2                | 2                          | 2                 | 5                        | 1                       | 5                         | 4                  | 4                     | 5                   | 5                   | 5                           | 5                    | 5                     |                         |
| Suction/Head                               | 2                       | 3                | 2                | 2                          | 3                 | 4                        | 1                       | 5                         | 5                  | 2                     | 5                   | 4                   | 3                           |                      |                       |                         |
| Back Pressure/Head                         | 1                       | 5                | 5                | 5                          | 4                 | 3                        | 4                       | 5                         | 2                  | 4                     | 1                   | 1                   | 1                           | 3                    | 3                     |                         |
| Portability                                | 5                       | 3                | 3                | 2                          | 4                 | 4                        | 3                       | 2                         |                    |                       |                     |                     | 2                           | 1                    | 1                     |                         |
| Ease of Repair                             | 5                       | 3                | 2                | 2                          | 3                 | 4                        | 3                       | 2                         | 3                  | 5                     | 1                   | 1                   | 2                           | 3                    | 2                     | 3                       |
| Cost                                       | 5                       | B                | 2                | 2                          | 3                 | 3                        | 1                       | 2                         | 3                  | 5                     | 1                   | 1                   | 2                           | 2                    | 2                     | 3                       |
| Comments                                   | E,J                     | B                | B                | B,J                        |                   | F                        | A                       | B                         | B,D                | A,C,D                 | F,G,I               | F,G,I               | F,G                         |                      |                       | G,H,I                   |

**KEY TO RATINGS:**

5 = Best; 1 = Worst

**KEY TO COMMENTS:**

- A. Normally require remote power sources, thus are safe around flammable fluids.
- B. Should have a relief valve in the outlet line to prevent bursting hoses.
- C. Air powered units tend to freeze up in sub-freezing temperatures.
- D. Units with work ball valves are difficult to prime.
- E. Some remotely powered types are designed to fit in a tanker's butterworth hatch.
- F. Can also pump air at low pressure.
- G. Transfer is batch-wise rather than continuous.
- H. Waste must be in separate container for efficient transfer.
- I. Transportable with its own prime mover.
- J. High shear action tends to emulsify oil and water mixtures.

**TABLE F-2**  
**TEMPORARY STORAGE METHODS**

| <b>CONTAINER</b>     | <b>ONSHORE</b> | <b>OFFSHORE</b> | <b>SOLIDS</b> | <b>LIQUIDS</b> | <b>NOTES</b>  |
|----------------------|----------------|-----------------|---------------|----------------|---|
| Barrels              | x              | x               | x             | x              | May require handling devices. Covered and clearly marked.                             |
| Tank Trucks          | x              | x               |               | x              | Consider road access. Barge-mounted offshore.   |
| Dump/Flat Bed Trucks | x              |                 | x             |                | May require impermeable liner and cover. Consider flammability of vapors at mufflers. |
| Barges               |                | x               | x             | x              | Liquids only in tanks. Consider venting of tanks.                                     |
| Oil Storage Tanks    | x              | x               |               | x              | Consider problems of large volumes of water in oil.                                   |
| Bladders             | x              | x               |               | x              | May require special hoses or pumps for oil transfer.                                  |

**TABLE F-3**  
**OILY WASTE SEPARATION AND DISPOSAL METHODS**

| TYPE OF MATERIAL                          | SEPARATION METHODS   | DISPOSAL METHODS   |
|---|--|--|
| <b>LIQUIDS</b>                            |  |  |
| Non-emulsified oils                       | Gravity separation of free water   | Incineration<br>Use of recovered oil as refinery/<br>production facility feedstock   |
| Emulsified oils                           | Emulsion broken to release water by: <ul style="list-style-type: none"> <li>● heat treatment</li> <li>● emulsion breaking</li> <li>● chemicals</li> <li>● mixing with sand</li> <li>● centrifuge</li> <li>● filter/belt press</li> </ul> | Use of recovered oil as refinery/<br>production facility feedstock   |
| <b>SOLIDS</b>                             |  |  |
| Oil mixed with sand                       | Collection of liquid oil leaching from sand during temporary storage<br>Extraction of oil from sand by washing with water or solvent<br>Removal of solid oils by sieving   | Incineration<br>Use of recovered oil as refinery/<br>production facility feedstock<br>Direct disposal<br>Stabilization with inorganic material<br>Degradation through land farming or composting |
| Oil mixed with cobbles or pebbles         | Screening<br>Collection of liquid oil leaching from materials during temporary storage<br>Extraction of oil from materials by washing with water or solvent  | Incineration<br>Direct Disposal<br>Use of recovered oil as refinery/<br>production facility feedstock  |
| Oil mixed with wood, seaweed and sorbents | Screening<br>Collection of liquid oil leaching from debris during temporary storage<br>Flushing of oil from debris with water  | Incineration<br>Direct disposal<br>Degradation through land farming or composting for oil mixed with seaweed or natural sorbents   |
| Tar balls                                 | Separation from sand by sieving  | Incineration<br>Direct disposal  |

## APPENDIX G

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### MISCELLANEOUS FORMS

Page

|   |     |
|---|-----|
| Notification Data Sheet .....   | G-2 |
| Form PHMSA F 7000-1 .....   | G-3 |
| Qualified Individual (QI) Notification Exercise - Internal Exercise Documentation ..... | G-4 |
| Spill Management Team Tabletop Exercise - Internal Exercise Documentation .....         | G-5 |

#### Forms and Exercise Documentation File Maintenance Procedures

- Forms and exercise documentation records should be maintained in a separate file in the Pipeline owner/operator office filing system.
  - These files must be available for presentation upon request by regulatory agency personnel.

**NOTIFICATION DATA SHEET**

Date: \_\_\_\_\_ Time: \_\_\_\_\_

**INCIDENT DESCRIPTION**

Reporter's Full Name: \_\_\_\_\_ Position: \_\_\_\_\_

Day Phone Number: \_\_\_\_\_ Evening Phone Number: \_\_\_\_\_

Company: \_\_\_\_\_ Organization Type: \_\_\_\_\_

Facility Address: \_\_\_\_\_ Owner's Address: \_\_\_\_\_

Facility Latitude: \_\_\_\_\_ Facility Longitude: \_\_\_\_\_

Spill Location: \_\_\_\_\_

(if not at Facility) \_\_\_\_\_

Responsible Party's Name: \_\_\_\_\_ Phone Number: \_\_\_\_\_

Responsible Party's Address: \_\_\_\_\_

Source and/or cause of discharge: \_\_\_\_\_

Present Weather Conditions: \_\_\_\_\_

Nearest City: \_\_\_\_\_

County: \_\_\_\_\_ State: \_\_\_\_\_ Zip code: \_\_\_\_\_

Section: \_\_\_\_\_ Township: \_\_\_\_\_ Range: \_\_\_\_\_ Borough: \_\_\_\_\_

Distance from City: \_\_\_\_\_ Direction from City: \_\_\_\_\_

Container Type: \_\_\_\_\_ Container Storage Capacity: \_\_\_\_\_

Facility Oil Storage Capacity: \_\_\_\_\_

Material:

| Total Quantity Released | Water Impact (YES or NO) | Quantity into Water |
|-------------------------|--------------------------|---------------------|
|                         |                          |                     |
|                         |                          |                     |
|                         |                          |                     |

**RESPONSE ACTION(S)**

Action(s) taken to Correct, Control, or Mitigate Incident: \_\_\_\_\_

Number of Injuries: \_\_\_\_\_ Number of Deaths: \_\_\_\_\_

Evacuation(s): \_\_\_\_\_ Number Evacuated: \_\_\_\_\_

Damage Estimate: \_\_\_\_\_

More information about impacted medium: \_\_\_\_\_

**CALLER NOTIFICATIONS**

National Response Center (NRC): 1-800-424-8802 or 202-267-2675

Additional Notifications (Circle all applicable): USCG EPA State Other

**ADDITIONAL INFORMATION**

Any information about the incident not recorded elsewhere in this report: \_\_\_\_\_

**NOTE: DO NOT DELAY NOTIFICATION PENDING COLLECTION OF ALL INFORMATION.**

**FORM PHMSA F 7000-1**







| PART C – ADDITIONAL FACILITY INFORMATION  |  |
|---|--|
| *1. Is the pipeline or facility:<br><input type="checkbox"/> Interstate<br><input type="checkbox"/> Intrastate  |  |
| *2. Part of system involved in Accident: <i>(select only one)</i><br><input type="checkbox"/> Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances ⇨ <input type="radio"/> Atmospheric or Low Pressure<br><span style="margin-left: 400px;"><input type="radio"/> Pressurized</span><br><br><input type="checkbox"/> Onshore Terminal/Tank Farm Equipment and Piping<br><input type="checkbox"/> Onshore Equipment and Piping Associated with Belowground Storage<br><input type="checkbox"/> Onshore Pump/Meter Station Equipment and Piping<br><input type="checkbox"/> Onshore Pipeline, Including Valve Sites<br><input type="checkbox"/> Offshore Platform/Deepwater Port, Including Platform-mounted Equipment and Piping<br><input type="checkbox"/> Offshore Pipeline, Including Riser and Riser Bend  |  |
| *3. Item involved in Accident: <i>(select only one)</i>   |  |
| <input type="checkbox"/> Pipe ⇨ Specify: <input type="radio"/> Pipe Body <input type="radio"/> Pipe Seam<br>3.a Nominal diameter of pipe (in):    /   /   //   /   /   /<br>3.b Wall thickness (in):    /   //   /   /   /<br>3.c SMYS (Specified Minimum Yield Strength) of pipe (psi):    /   /   /   //   /   /   /<br>3.d Pipe specification: _____<br>3.e Pipe Seam ⇨ Specify: <input type="radio"/> Longitudinal ERW - High Frequency <input type="radio"/> Single SAW <input type="radio"/> Flash Welded<br><span style="margin-left: 100px;"><input type="radio"/> Longitudinal ERW - Low Frequency    <input type="radio"/> DSAW    <input type="radio"/> Continuous Welded</span><br><span style="margin-left: 100px;"><input type="radio"/> Longitudinal ERW - Unknown Frequency    <input type="radio"/> Furnace Butt Welded</span><br><span style="margin-left: 100px;"><input type="radio"/> Spiral Welded ERW    <input type="radio"/> Spiral Welded SAW    <input type="radio"/> Spiral Welded DSAW</span><br><span style="margin-left: 100px;"><input type="radio"/> Lap Welded    <input type="radio"/> Seamless    <input type="radio"/> Other _____</span><br><br>3.f Pipe manufacturer: _____<br>3.g Year of manufacture:    /   /   /   /   /<br>3.h Pipeline coating type at point of Accident<br>⇨ Specify: <input type="radio"/> Fusion Bonded Epoxy <input type="radio"/> Coal Tar <input type="radio"/> Asphalt <input type="radio"/> Polyolefin<br><span style="margin-left: 100px;"><input type="radio"/> Extruded Polyethylene    <input type="radio"/> Field Applied Epoxy    <input type="radio"/> Cold Applied Tape    <input type="radio"/> Paint</span><br><span style="margin-left: 100px;"><input type="radio"/> Composite    <input type="radio"/> None    <input type="radio"/> Other _____</span><br><input type="checkbox"/> Weld, including heat-affected zone ⇨ Specify: <input type="radio"/> Pipe Girth Weld <input type="radio"/> Other Butt Weld <input type="radio"/> Fillet Weld <input type="radio"/> Other _____<br><input type="checkbox"/> Valve <input type="radio"/> Mainline ⇨ Specify: <input type="radio"/> Butterfly <input type="radio"/> Check <input type="radio"/> Gate <input type="radio"/> Plug <input type="radio"/> Ball <input type="radio"/> Globe<br><span style="margin-left: 100px;"><input type="radio"/> Other _____</span><br>3.i Mainline valve manufacturer: _____<br>3.j Year of manufacture:    /   /   /   /   /<br><br><input type="radio"/> Relief Valve<br><input type="radio"/> Auxiliary or Other Valve<br><br><input type="checkbox"/> Pump<br><input type="checkbox"/> Meter/Prover<br><input type="checkbox"/> Scraper/Pig Trap<br><input type="checkbox"/> Sump/Separator<br><input type="checkbox"/> Repair Sleeve or Clamp<br><input type="checkbox"/> Hot Tap Equipment<br><input type="checkbox"/> Stopple Fitting<br><input type="checkbox"/> Flange<br><input type="checkbox"/> Relief Line<br><input type="checkbox"/> Auxiliary Piping (e.g. drain lines)<br><input type="checkbox"/> Tubing<br><input type="checkbox"/> Instrumentation<br><input type="checkbox"/> Tank/Vessel ⇨ Specify: <input type="radio"/> Single Bottom System <input type="radio"/> Double Bottom System <input type="radio"/> Tank Shell <input type="radio"/> Chime<br><span style="margin-left: 100px;"><input type="radio"/> Roof/Roof Seal    <input type="radio"/> Roof Drain System    <input type="radio"/> Mixer    <input type="radio"/> Pressure Vessel Head or Wall</span><br><input type="radio"/> Appurtenance <input type="radio"/> Other _____<br><input type="checkbox"/> Other _____ |  |
| 4. Year item involved in Accident was installed:    /   /   /   /   /   |  |

\*5. Material involved in Accident: *(select only one)*

Carbon Steel

Material other than Carbon Steel ⇨ Specify: \_\_\_\_\_

\*6. Type of Accident involved: *(select only one)*

Mechanical Puncture ⇨ Approx. size: /\_/ /\_/ /\_/ /\_/ in. (axial) by /\_/ /\_/ /\_/ /\_/ in. (circumferential)

Leak ⇨ Select Type:  Pinhole  Crack  Connection Failure  Seal or Packing  Other

Rupture ⇨ Select Orientation:  Circumferential  Longitudinal  Other \_\_\_\_\_

Approx. size: /\_/ /\_/ /\_/ /\_/ in. (widest opening) by /\_/ /\_/ /\_/ /\_/ in. (length circumferentially or axially)

Overfill or Overflow

Other ⇨ Describe: \_\_\_\_\_

| PART D – ADDITIONAL CONSEQUENCE INFORMATION  |  |
|--|--|
| 1. Wildlife impact:  | <input type="radio"/> Yes <input type="radio"/> No   |
| 1.a If Yes, specify all that apply:  | <input type="checkbox"/> Fish/aquatic<br><input type="checkbox"/> Birds<br><input type="checkbox"/> Terrestrial  |
| *2. Soil contamination:  | <input type="radio"/> Yes <input type="radio"/> No   |
| 3. Long term impact assessment performed or planned:   | <input type="radio"/> Yes <input type="radio"/> No   |
| 4. Anticipated remediation:  | <input type="radio"/> Yes <input type="radio"/> No (not needed)  |
| 4.a If Yes, specify all that apply:  | <input type="checkbox"/> Surface water <input type="checkbox"/> Groundwater <input type="checkbox"/> Soil <input type="checkbox"/> Vegetation <input type="checkbox"/> Wildlife  |
| *5. Water contamination:   | <input type="radio"/> Yes ⇨ (Complete 5.a – 5.c below) <input type="radio"/> No  |
| *5.a Specify all that apply:   | <input type="checkbox"/> Ocean/Seawater<br><input type="checkbox"/> Surface<br><input type="checkbox"/> Groundwater<br><input type="checkbox"/> Drinking water ⇨ (Select one or both) <input type="radio"/> Private Well <input type="radio"/> Public Water Intake   |
| *5.b Estimated amount released in or reaching water:   | / / / // / / // / / / Barrels  |
| *5.c Name of body of water, if commonly known:   | _____  |
| *6. At the location of this Accident, had the pipeline segment or facility been identified as one that "could affect" a High Consequence Area (HCA) as determined in the Operator's Integrity Management Program? <input type="radio"/> Yes <input type="radio"/> No |  |
| *7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)? <input type="radio"/> Yes <input type="radio"/> No   |  |
| 7.a If Yes, specify HCA type(s): (select all that apply)   | <input type="checkbox"/> Commercially Navigable Waterway<br>Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?<br><input type="radio"/> Yes <input type="radio"/> No<br><br><input type="checkbox"/> High Population Area<br>Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?<br><input type="radio"/> Yes <input type="radio"/> No<br><br><input type="checkbox"/> Other Populated Area<br>Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?<br><input type="radio"/> Yes <input type="radio"/> No<br><br><input type="checkbox"/> Unusually Sensitive Area (USA) – Drinking Water<br>Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?<br><input type="radio"/> Yes <input type="radio"/> No<br><br><input type="checkbox"/> Unusually Sensitive Area (USA) – Ecological<br>Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?<br><input type="radio"/> Yes <input type="radio"/> No |
| *8. Estimated cost to Operator:  |  |
| 8.a Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator  | \$ / / / // / / // / / /   |
| 8.b Estimated cost of commodity lost   | \$ / / / // / / // / / /   |
| 8.c Estimated cost of Operator's property damage & repairs   | \$ / / / // / / // / / /   |
| 8.d Estimated cost of Operator's emergency response  | \$ / / / // / / // / / /   |
| 8.e Estimated cost of Operator's environmental remediation   | \$ / / / // / / // / / /   |
| 8.f Estimated other costs  | \$ / / / // / / // / / /   |
| Describe _____   |  |
| 8.g Estimated total costs (sum of above)   | \$ / / / // / / // / / /   |

| PART E – ADDITIONAL OPERATING INFORMATION  |   |
|--|---|
| *1. Estimated pressure at the point and time of the Accident (psig):   | / / / / / / / /   |
| *2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig) :  | / / / / / / / /   |
| *3. Describe the pressure on the system or facility relating to the Accident: <i>(select only one)</i>   |   |
| <input type="checkbox"/> Pressure did not exceed MOP   |   |
| <input type="checkbox"/> Pressure exceeded MOP, but did not exceed 110% of MOP   |   |
| <input type="checkbox"/> Pressure exceeded 110% of MOP   |   |
| *4. Not including pressure reductions required by PHMSA regulations (such as for repairs and pipe movement), was the system or facility relating to the Accident operating under an established pressure restriction with pressure limits below those normally allowed by the MOP? |   |
| <input type="checkbox"/> No  |   |
| <input type="checkbox"/> Yes ⇨ <i>(Complete 4.a and 4.b below)</i>   |   |
| *4.a Did the pressure exceed this established pressure restriction?  | <input type="radio"/> Yes <input type="radio"/> No  |
| *4.b Was this pressure restriction mandated by PHMSA or the State?   | <input type="radio"/> PHMSA <input type="radio"/> State <input type="radio"/> Not mandated  |
| <b>*5. Was "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend" selected in PART C, Question 2?</b>  |   |
| <input type="checkbox"/> No  |   |
| <input type="checkbox"/> Yes ⇨ <i>(Complete 5.a – 5.f below)</i>   |   |
| 5.a Type of upstream valve used to initially isolate release source:   | <input type="radio"/> Manual <input type="radio"/> Automatic <input type="radio"/> Remotely Controlled                                      |
| 5.b Type of downstream valve used to initially isolate release source:   | <input type="radio"/> Manual <input type="radio"/> Automatic <input type="radio"/> Remotely Controlled<br><input type="radio"/> Check Valve |
| 5.c Length of segment initially isolated between valves (ft):  | / / / / / / / /   |
| 5.d Is the pipeline configured to accommodate internal inspection tools?   |   |
| <input type="checkbox"/> Yes   |   |
| <input type="checkbox"/> No ⇨ Which physical features limit tool accommodation? <i>(select all that apply)</i>   |   |
| <input type="radio"/> Changes in line pipe diameter  |   |
| <input type="radio"/> Presence of unsuitable mainline valves   |   |
| <input type="radio"/> Tight or mitered pipe bends  |   |
| <input type="radio"/> Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)   |   |
| <input type="radio"/> Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)  |   |
| <input type="radio"/> Other ⇨ Describe: _____  |   |
| 5.e For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?  |   |
| <input type="checkbox"/> No  |   |
| <input type="checkbox"/> Yes ⇨ Which operational factors complicate execution? <i>(select all that apply)</i>  |   |
| <input type="radio"/> Excessive debris or scale, wax, or other wall build-up   |   |
| <input type="radio"/> Low operating pressure(s)  |   |
| <input type="radio"/> Low flow or absence of flow  |   |
| <input type="radio"/> Incompatible commodity   |   |
| <input type="radio"/> Other ⇨ Describe: _____  |   |
| 5.f Function of pipeline system: <i>(select only one)</i>  |   |
| <input type="checkbox"/> > 20% SMYS Regulated Trunkline/Transmission   | <input type="checkbox"/> > 20% SMYS Regulated Gathering   |
| <input type="checkbox"/> ≤ 20% SMYS Regulated Trunkline/Transmission   | <input type="checkbox"/> ≤ 20% SMYS Regulated Gathering   |
| <input type="checkbox"/> ≤ 20% SMYS "Unregulated" Trunkline/Transmission   | <input type="checkbox"/> ≤ 20% SMYS "Unregulated" Gathering   |

\*6. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?

No

Yes ⇨

6.a Was it operating at the time of the Accident?  Yes  No

6.b Was it fully functional at the time of the Accident?  Yes  No

6.c Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?  Yes  No

6.d Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?  Yes  No

\*7. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?

No

Yes ⇨

7.a Was it operating at the time of the Accident?  Yes  No

7.b Was it fully functional at the time of the Accident?  Yes  No

7.c Did CPM leak detection system information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?  Yes  No

7.d Did CPM leak detection system information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?  Yes  No

\*8. How was the Accident initially identified for the Operator? *(select only one)*

CPM leak detection system or SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations)

Static Shut-in Test or Other Pressure or Leak Test

Controller  Local Operating Personnel, including contractors

Air Patrol  Ground Patrol by Operator or its contractor

Notification from Public  Notification from Emergency Responder

Notification from Third Party that caused the Accident  Other \_\_\_\_\_

\*8.a If "Controller", "Local Operating Personnel, including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 8, specify the following: *(select only one)*

Operator employee  Contractor working for the Operator

\*9. Was an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a contributing factor to the Accident? *(select only one)*

Yes, but the investigation of the control room and/or controller actions has not yet been completed by the Operator *(Supplemental Report required)*

No, the facility was not monitored by a controller(s) at the time of the Accident

No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: *(provide an explanation for why the Operator did not investigate)*

\_\_\_\_\_

\_\_\_\_\_

Yes, specify investigation result(s): *(select all that apply)*

Investigation reviewed work schedule rotations, continuous hours of service (while working for the Operator) and other factors associated with fatigue

Investigation did NOT review work schedule rotations, continuous hours of service (while working for the Operator) and other factors associated with fatigue *(provide an explanation for why not)*

\_\_\_\_\_

\_\_\_\_\_

Investigation identified no control room issues

Investigation identified no controller issues

Investigation identified incorrect controller action or controller error

Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response

Investigation identified incorrect procedures

Investigation identified incorrect control room equipment operation

Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response

Investigation identified areas other than those above ⇨ Describe: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



|   |  |
|---|--|
| PART G – APPARENT CAUSE   | <i>Select only one box from PART G in the shaded column on the left representing the APPARENT Cause of the Accident, and answer the questions on the right. Describe secondary, contributing, or root causes of the Accident in the narrative (PART H).</i>  |
| <b>G1 - Corrosion Failure</b> – *only one sub-cause can be picked from shaded left-hand column  |  |
| <input type="checkbox"/> External Corrosion   | <p>*1. Results of visual examination:<br/> <input type="radio"/> Localized Pitting   <input type="radio"/> General Corrosion<br/> <input type="radio"/> Other _____</p> <p>*2. Type of corrosion: <i>(select all that apply)</i><br/> <input type="radio"/> Galvanic   <input type="radio"/> Atmospheric   <input type="radio"/> Stray Current   <input type="radio"/> Microbiological   <input type="radio"/> Selective Seam<br/> <input type="radio"/> Other _____</p> <p>*3. The type(s) of corrosion selected in Question 2 is based on the following: <i>(select all that apply)</i><br/> <input type="radio"/> Field examination   <input type="radio"/> Determined by metallurgical analysis<br/> <input type="radio"/> Other _____</p> <p>*4. Was the failed item buried under the ground?<br/> <input type="radio"/> Yes ⇒ *4.a Was failed item considered to be under cathodic protection at the time of the Accident?<br/> <input type="radio"/> Yes ⇒ Year protection started: <u>  /  /  /  /  /  </u><br/> <input type="radio"/> No</p> <p>*4.b Was shielding, tenting, or disbonding of coating evident at the point of the Accident?<br/> <input type="radio"/> Yes   <input type="radio"/> No</p> <p>*4.c Has one or more Cathodic Protection Survey been conducted at the point of the Accident?<br/> <input type="radio"/> Yes, CP Annual Survey ⇒ Most recent year conducted: <u>  /  /  /  /  /  </u><br/> <input type="radio"/> Yes, Close Interval Survey ⇒ Most recent year conducted: <u>  /  /  /  /  /  </u><br/> <input type="radio"/> Yes, Other CP Survey ⇒ Most recent year conducted: <u>  /  /  /  /  /  </u><br/> <input type="radio"/> No</p> <p><input type="radio"/> No ⇒ 4.d Was the failed item externally coated or painted?   <input type="radio"/> Yes   <input type="radio"/> No</p> <p>*5. Was there observable damage to the coating or paint in the vicinity of the corrosion?<br/> <input type="radio"/> Yes   <input type="radio"/> No</p> |
| <input type="checkbox"/> Internal Corrosion   | <p>*6. Results of visual examination:<br/> <input type="radio"/> Localized Pitting   <input type="radio"/> General Corrosion   <input type="radio"/> Not cut open<br/> <input type="radio"/> Other _____</p> <p>*7. Cause of corrosion: <i>(select all that apply)</i><br/> <input type="radio"/> Corrosive Commodity   <input type="radio"/> Water drop-out/Acid   <input type="radio"/> Microbiological   <input type="radio"/> Erosion<br/> <input type="radio"/> Other _____</p> <p>*8. The cause(s) of corrosion selected in Question 7 is based on the following: <i>(select all that apply)</i><br/> <input type="radio"/> Field examination   <input type="radio"/> Determined by metallurgical analysis<br/> <input type="radio"/> Other _____</p> <p>*9. Location of corrosion: <i>(select all that apply)</i><br/> <input type="radio"/> Low point in pipe   <input type="radio"/> Elbow   <input type="radio"/> Other _____</p> <p>*10. Was the commodity treated with corrosion inhibitors or biocides?   <input type="radio"/> Yes   <input type="radio"/> No</p> <p>11. Was the interior coated or lined with protective coating?   <input type="radio"/> Yes   <input type="radio"/> No</p> <p>12. Were cleaning/dewatering pigs (or other operations) routinely utilized?<br/> <input type="radio"/> Not applicable - Not mainline pipe   <input type="radio"/> Yes   <input type="radio"/> No</p> <p>13. Were corrosion coupons routinely utilized?<br/> <input type="radio"/> Not applicable - Not mainline pipe   <input type="radio"/> Yes   <input type="radio"/> No</p>   |
| <p>Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Tank/Vessel.</p> <p>14. List the year of the most recent inspections:</p> <p>14.a API Std 653 Out-of-Service Inspection   <u>  /  /  /  /  /  </u>   <input type="radio"/> No Out-of-Service Inspection completed</p> <p>14.b API Std 653 In-Service Inspection   <u>  /  /  /  /  /  </u>   <input type="radio"/> No In-Service Inspection completed</p> |  |

Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.

15. Has one or more internal inspection tool collected data at the point of the Accident?  
 Yes  No
- 15.a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:
- Magnetic Flux Leakage Tool      / / / / /
  - Ultrasonic      / / / / /
  - Geometry      / / / / /
  - Caliper      / / / / /
  - Crack      / / / / /
  - Hard Spot      / / / / /
  - Combination Tool      / / / / /
  - Transverse Field/Triaxial      / / / / /
  - Other \_\_\_\_\_ / / / / /
16. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?  
 Yes ⇨ Most recent year tested: / / / / /      Test pressure (psig): / / / / / /  
 No
17. Has one or more Direct Assessment been conducted on this segment?  
 Yes, and an investigative dig was conducted at the point of the Accident ⇨ Most recent year conducted: / / / / /  
 Yes, but the point of the Accident was not identified as a dig site      ⇨ Most recent year conducted: / / / / /  
 No
18. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?  
 Yes  No
- 18.a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:
- Radiography      / / / / /
  - Guided Wave Ultrasonic      / / / / /
  - Handheld Ultrasonic Tool      / / / / /
  - Wet Magnetic Particle Test      / / / / /
  - Dry Magnetic Particle Test      / / / / /
  - Other \_\_\_\_\_ / / / / /

**G2 - Natural Force Damage** - \*only one sub-cause can be picked from shaded left-hand column

|  |   |
|--|---|
| <input type="checkbox"/> Earth Movement, NOT due to Heavy Rains/Floods | 1. Specify: <input type="radio"/> Earthquake <input type="radio"/> Subsidence <input type="radio"/> Landslide<br><input type="radio"/> Other _____              |
| <input type="checkbox"/> Heavy Rains/Floods                            | 2. Specify: <input type="radio"/> Washout/Scouring <input type="radio"/> Flotation <input type="radio"/> Mudslide <input type="radio"/> Other _____             |
| <input type="checkbox"/> Lightning                                     | 3. Specify: <input type="radio"/> Direct hit <input type="radio"/> Secondary impact such as resulting nearby fires  |
| <input type="checkbox"/> Temperature                                   | 4. Specify: <input type="radio"/> Thermal Stress <input type="radio"/> Frost Heave<br><input type="radio"/> Frozen Components <input type="radio"/> Other _____ |
| <input type="checkbox"/> High Winds                                    |   |
| <input type="checkbox"/> Other Natural Force Damage                    | *5. Describe: _____   |

Complete the following if any Natural Force Damage sub-cause is selected.

\*6. Were the natural forces causing the Accident generated in conjunction with an extreme weather event?  Yes  No

\*6.a. If Yes, specify: (select all that apply)  Hurricane  Tropical Storm  Tornado  
 Other \_\_\_\_\_

| <b>G3 – Excavation Damage</b> - *only one sub-cause can be picked from shaded left-hand column   |   |
|--|---|
| <input type="checkbox"/> Excavation Damage by Operator (First Party)   |   |
| <input type="checkbox"/> Excavation Damage by Operator's Contractor (Second Party)   |   |
| <input type="checkbox"/> Excavation Damage by Third Party  |   |
| <input type="checkbox"/> Previous Damage due to Excavation Activity  | <p><b>Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.</b></p> <p>1. Has one or more internal inspection tool collected data at the point of the Accident?<br/> <input type="radio"/> Yes <input type="radio"/> No</p> <p>1.a If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:</p> <p><input type="radio"/> Magnetic Flux Leakage                    / / / / / /</p> <p><input type="radio"/> Ultrasonic                                        / / / / / /</p> <p><input type="radio"/> Geometry                                         / / / / / /</p> <p><input type="radio"/> Caliper    / / / / / /</p> <p><input type="radio"/> Crack    / / / / / /</p> <p><input type="radio"/> Hard Spot                                        / / / / / /</p> <p><input type="radio"/> Combination Tool                            / / / / / /</p> <p><input type="radio"/> Transverse Field/Triaxial                / / / / / /</p> <p><input type="radio"/> Other _____ / / / / / /</p> <p>2. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained? <input type="radio"/> Yes <input type="radio"/> No</p> <p>3. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?</p> <p><input type="radio"/> Yes ⇒ Most recent year tested: / / / / / /<br/> Test pressure (psig): / / / / / /</p> <p><input type="radio"/> No</p> <p>4. Has one or more Direct Assessment been conducted on the pipeline segment?</p> <p><input type="radio"/> Yes, and an investigative dig was conducted at the point of the Accident<br/> ⇒ Most recent year conducted: / / / / / /</p> <p><input type="radio"/> Yes, but the point of the Accident was not identified as a dig site<br/> ⇒ Most recent year conducted: / / / / / /</p> <p><input type="radio"/> No</p> <p>5. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?<br/> <input type="radio"/> Yes <input type="radio"/> No</p> <p>5.a If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:</p> <p><input type="radio"/> Radiography                                    / / / / / /</p> <p><input type="radio"/> Guided Wave Ultrasonic                    / / / / / /</p> <p><input type="radio"/> Handheld Ultrasonic Tool                 / / / / / /</p> <p><input type="radio"/> Wet Magnetic Particle Test                / / / / / /</p> <p><input type="radio"/> Dry Magnetic Particle Test                / / / / / /</p> <p><input type="radio"/> Other _____ / / / / / /</p> |
| <p><b>Complete the following if Excavation Damage by Third Party is selected as the sub-cause.</b></p> <p>6. Did the Operator get prior notification of the excavation activity? <input type="radio"/> Yes <input type="radio"/> No</p> <p>*6.a If Yes, Notification received from: (select all that apply) <input type="radio"/> One-Call System <input type="radio"/> Excavator <input type="radio"/> Contractor <input type="radio"/> Landowner</p> |   |



\*17. Description of the CGA-DIRT Root Cause (select only the one predominant first level CGA-DIRT Root Cause and then, where available as a choice, the one predominant second level CGA-DIRT Root Cause as well):

One-Call Notification Practices Not Sufficient: (select only one)

- No notification made to the One-Call Center
- Notification to One-Call Center made, but not sufficient
- Wrong information provided

Locating Practices Not Sufficient: (select only one)

- Facility could not be found/located
- Facility marking or location not sufficient
- Facility was not located or marked
- Incorrect facility records/maps

Excavation Practices Not Sufficient: (select only one)

- Excavation practices not sufficient (other)
- Failure to maintain clearance
- Failure to maintain the marks
- Failure to support exposed facilities
- Failure to use hand tools where required
- Failure to verify location by test-hole (pot-holing)
- Improper backfilling

One-Call Notification Center Error

Abandoned Facility

Deteriorated Facility

Previous Damage

Data Not Collected

Other / None of the Above (explain)

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|  |   |
|--|---|
|  | <p>7. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?<br/> <input type="radio"/> Yes <input type="radio"/> No</p> <p>7.a If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:</p> <p><input type="radio"/> Radiography <span style="float: right;">/ / / / /</span></p> <p><input type="radio"/> Guided Wave Ultrasonic <span style="float: right;">/ / / / /</span></p> <p><input type="radio"/> Handheld Ultrasonic Tool <span style="float: right;">/ / / / /</span></p> <p><input type="radio"/> Wet Magnetic Particle Test <span style="float: right;">/ / / / /</span></p> <p><input type="radio"/> Dry Magnetic Particle Test <span style="float: right;">/ / / / /</span></p> <p><input type="radio"/> Other _____ <span style="float: right;">/ / / / /</span></p> |
| <p><input type="checkbox"/> Intentional Damage</p>         | <p>8. Specify:</p> <p><input type="radio"/> Vandalism <span style="margin-left: 150px;"><input type="radio"/> Terrorism</span></p> <p><input type="radio"/> Theft of transported commodity <span style="margin-left: 100px;"><input type="radio"/> Theft of equipment</span></p> <p><input type="radio"/> Other _____</p>   |
| <p><input type="checkbox"/> Other Outside Force Damage</p> | <p>*9. Describe: _____</p>  |



| <b>G6 - Equipment Failure</b> - *only one sub-cause can be picked from shaded left-hand column   |  |
|--|--|
| <input type="checkbox"/> <b>Malfunction of Control/Relief Equipment</b>  | 1. Specify: <i>(select all that apply)</i><br><input type="radio"/> Control Valve <input type="radio"/> Instrumentation <input type="radio"/> SCADA<br><input type="radio"/> Communications <input type="radio"/> Block Valve <input type="radio"/> Check Valve<br><input type="radio"/> Relief Valve <input type="radio"/> Power Failure <input type="radio"/> Stopple/Control Fitting<br><input type="radio"/> ESD System Failure<br><input type="radio"/> Other _____ |
| <input type="checkbox"/> <b>Pump or Pump-related Equipment</b>   | 2. Specify: <input type="radio"/> Seal/Packing Failure <input type="radio"/> Body Failure <input type="radio"/> Crack in Body<br><input type="radio"/> Appurtenance Failure<br><input type="radio"/> Other _____   |
| <input type="checkbox"/> <b>Threaded Connection/Coupling Failure</b>   | 3. Specify: <input type="radio"/> Pipe Nipple <input type="radio"/> Valve Threads <input type="radio"/> Mechanical Coupling<br><input type="radio"/> Threaded Pipe Collar <input type="radio"/> Threaded Fitting<br><input type="radio"/> Other _____  |
| <input type="checkbox"/> <b>Non-threaded Connection Failure</b>  | 4. Specify: <input type="radio"/> O-Ring <input type="radio"/> Gasket <input type="radio"/> Seal (NOT pump seal) or Packing<br><input type="radio"/> Other _____   |
| <input type="checkbox"/> <b>Defective or Loose Tubing or Fitting</b>   |  |
| <input type="checkbox"/> <b>Failure of Equipment Body (except Pump), Tank Plate, or other Material</b>   |  |
| <input type="checkbox"/> <b>Other Equipment Failure</b>  | *5. Describe: _____<br>_____   |
| <p><b>Complete the following if any Equipment Failure sub-cause is selected.</b></p> <p>*6. Additional factors that contributed to the equipment failure: <i>(select all that apply)</i></p> <input type="radio"/> Excessive vibration<br><input type="radio"/> Overpressurization<br><input type="radio"/> No support or loss of support<br><input type="radio"/> Manufacturing defect<br><input type="radio"/> Loss of electricity<br><input type="radio"/> Improper installation<br><input type="radio"/> Mismatched items (different manufacturer for tubing and tubing fittings)<br><input type="radio"/> Dissimilar metals<br><input type="radio"/> Breakdown of soft goods due to compatibility issues with transported commodity<br><input type="radio"/> Valve vault or valve can contributed to the release<br><input type="radio"/> Alarm/status failure<br><input type="radio"/> Misalignment<br><input type="radio"/> Thermal stress<br><input type="radio"/> Other _____ |  |

| <b>G7 - Incorrect Operation</b> - *only one sub-cause can be picked from shaded left-hand column   |  |
|--|--|
| <input type="checkbox"/> <b>Damage by Operator or Operator's Contractor NOT Related to Excavation and NOT due to Motorized Vehicle/Equipment Damage</b>  |  |
| <input type="checkbox"/> <b>Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow</b>  | 1. Specify: <input type="radio"/> Valve misalignment <input type="radio"/> Incorrect reference data/calculation<br><input type="radio"/> Miscommunication <input type="radio"/> Inadequate monitoring<br><input type="radio"/> Other _____ |
| <input type="checkbox"/> <b>Valve Left or Placed in Wrong Position, but NOT Resulting in a Tank, Vessel, or Sump/Separator Overflow or Facility Overpressure</b>   |  |
| <input type="checkbox"/> <b>Pipeline or Equipment Overpressured</b>  |  |
| <input type="checkbox"/> <b>Equipment Not Installed Properly</b>   |  |
| <input type="checkbox"/> <b>Wrong Equipment Specified or Installed</b>   |  |
| <input type="checkbox"/> <b>Other Incorrect Operation</b>  | *2. Describe: _____  |
| <p><b>Complete the following if any Incorrect Operation sub-cause is selected.</b></p> <p>*3. Was this Accident related to: <i>(select all that apply)</i></p> <p><input type="radio"/> Inadequate procedure<br/> <input type="radio"/> No procedure established<br/> <input type="radio"/> Failure to follow procedure<br/> <input type="radio"/> Other: _____</p> <p>*4. What category type was the activity that caused the Accident:</p> <p><input type="radio"/> Construction<br/> <input type="radio"/> Commissioning<br/> <input type="radio"/> Decommissioning<br/> <input type="radio"/> Right-of-Way activities<br/> <input type="radio"/> Routine maintenance<br/> <input type="radio"/> Other maintenance<br/> <input type="radio"/> Normal operating conditions<br/> <input type="radio"/> Non-routine operating conditions (abnormal operations or emergencies)</p> <p>*5. Was the task(s) that led to the Accident identified as a covered task in your Operator Qualification Program? <input type="radio"/> Yes <input type="radio"/> No</p> <p>*5.a If Yes, were the individuals performing the task(s) qualified for the task(s)?</p> <p><input type="radio"/> Yes, they were qualified for the task(s)<br/> <input type="radio"/> No, but they were performing the task(s) under the direction and observation of a qualified individual<br/> <input type="radio"/> No, they were not qualified for the task(s) nor were they performing the task(s) under the direction and observation of a qualified individual</p> |  |
| <b>G8 – Other Accident Cause</b> - *only one sub-cause can be picked from shaded left-hand column  |  |
| <input type="checkbox"/> <b>Miscellaneous</b>  | *1. Describe:<br>_____<br>_____  |
| <input type="checkbox"/> <b>Unknown</b>  | *2. Specify: <input type="radio"/> Investigation complete, cause of Accident unknown<br><input type="radio"/> Still under investigation, cause of Accident to be determined*<br><i>(*Supplemental Report required)</i>                     |



## QUALIFIED INDIVIDUAL (QI) NOTIFICATION EXERCISE

### INTERNAL EXERCISE DOCUMENTATION

1. Date performed: \_\_\_\_\_
2. Exercise or actual response: \_\_\_\_\_
3. Person initiating exercise: \_\_\_\_\_
4. Name of person notified: \_\_\_\_\_

Is this person identified in the response plan as the:  QI  AQI

5. Time initiated: \_\_\_\_\_  
Time QI or AQI responded: \_\_\_\_\_

6. Method used to contact:
  - Telephone  Pager  Radio
  - Other \_\_\_\_\_

7. Description of notification procedure:
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_

8. Identify which components of your response plan were exercised during this particular exercise:

#### Organizational Design

- Notifications
- Staff mobilization
- Ability to operate within the response management system described in the plan

#### Response Support

- Communications
- Transportation
- Personnel support
- Equipment maintenance and support
- Procurement
- Documentation

#### Operational Response

- Discharge control
- Assessment of discharge
- Containment of discharge
- Recovery of spilled material
- Protection of economically and environmentally sensitive areas
- Disposal of recovered product

Certifying Signature: \_\_\_\_\_ Name (Printed): \_\_\_\_\_  
Date: \_\_\_\_\_

**SPILL MANAGEMENT TEAM TABLETOP EXERCISE  
INTERNAL EXERCISE DOCUMENTATION**

1. Date(s) performed: \_\_\_\_\_
2. Exercise or actual response? \_\_\_\_\_ Exercise \_\_\_\_\_ Actual Response \_\_\_\_\_  
If an exercise, announced or unannounced? \_\_\_\_\_ Announced \_\_\_\_\_ Unannounced
3. Location of tabletop: \_\_\_\_\_
4. Time started: \_\_\_\_\_ Time completed: \_\_\_\_\_
5. Response plan scenario used (check one):  
 Average most probable discharge  
 Maximum most probable discharge  
 Worst case discharge  
 Size of (simulated) spill \_\_\_\_\_
6. Describe how the following objectives were exercised:
  - a) Spill Management Team's knowledge of oil-spill response plan:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
  - b) Proper notifications:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
  - c) Communications system:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
  - d) Spill Management Team's ability to access contracted oil spill removal organizations:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
  - e) Spill Management Team's ability to coordinate spill response with On-Scene Coordinator, state, and applicable agencies:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## SPILL MANAGEMENT TEAM TABLETOP EXERCISE

### INTERNAL EXERCISE DOCUMENTATION (Cont'd)

- f) Spill Management Team's ability to access sensitive site and resource information in the Area Contingency Plan:

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7. Identify which of the 15 core components of your response plan were exercised during this particular exercise.

Organization Design:

- \_\_\_\_\_ 1. Notification  
 \_\_\_\_\_ 2. Staff Mobilization  
 \_\_\_\_\_ 3. Ability to operate within management system

Operational Response:

- \_\_\_\_\_ 4. Discharge Control  
 \_\_\_\_\_ 5. Assessment  
 \_\_\_\_\_ 6. Containment  
 \_\_\_\_\_ 7. Recovery  
 \_\_\_\_\_ 8. Protection  
 \_\_\_\_\_ 9. Disposal

Response Support:

- \_\_\_\_\_ 10. Communications  
 \_\_\_\_\_ 11. Transportation  
 \_\_\_\_\_ 12. Personnel Support  
 \_\_\_\_\_ 13. Equipment Maintenance and Support  
 \_\_\_\_\_ 14. Procurement  
 \_\_\_\_\_ 15. Documentation

8. Attach description of lesson(s) learned and person(s) responsible for follow up of corrective measures.

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Certifying Signature

Retain this form for a minimum of three (3) years (for USCG/PHMSA/MMS) or five (5) years (for EPA).

## REGULATORY CROSS REFERENCE

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PAGE

DOT/PHMSA 49 CFR Part 194 Cross Reference .....Cross Ref-2

## DOT/PHMSA 49 CFR PART 194 CROSS REFERENCE

| § 194.105   | BRIEF DESCRIPTION  | LOCATION in PLAN          |
|-------------|--|---------------------------|
| (a)         | ... determine the worst case discharge ... provide methodology, including calculations, used to arrive at the volume.  | App. B                    |
| (b)         | The worst case discharge is the largest volume, in barrels, of the following:  | ----                      |
| (b)(1)      | ... maximum release time in hours, plus the maximum shutdown response time in hours, multiplied by the maximum flow rate expressed in barrels per hour, plus the largest line drainage volume after shutdown of the line section(s) ...; or                      | App. B                    |
| (b)(2)      | The largest foreseeable discharge for the line section(s) within a response zone, expressed in barrels, based on the maximum historic discharge, if one exists, adjusted for any subsequent corrective or preventative action taken; or                          | N/A (App B)               |
| (b)(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. | N.A (App B)               |
| (b)(4)      | Operators may claim prevention credits for breakout tank secondary containment and other specific spill prevention measures as follows:...   | App B                     |
| § 194.107   | BRIEF DESCRIPTION  | LOCATION in PLAN          |
| (a)         | Each response plan must plan for resources for responding, to the maximum extent practicable, to a worst case discharge, and to a substantial threat of such a discharge.  | App A                     |
| (b)         | An operator must certify in the plan ... reviewed NCP and each applicable ACP...   | Foreword                  |
| (b)(1)      | As a minimum to be consistent with the NCP as a facility response plan must:   | ----                      |
| (b)(1)(i)   | Demonstrate an operator's clear understanding of the function of the Federal response structure...   | App D                     |
| (b)(1)(ii)  | Establish provisions to ensure the protection of safety at the response site; and  | § 5.2,<br>ICS Forms § 5.0 |
| (b)(1)(iii) | Identify the procedures to obtain any required Federal and State permissions for using alternative response strategies such as in-situ burning and dispersants...  | § 6.8                     |
| (b)(2)      | As a minimum, to be consistent with the applicable ACP the plan must:  | ----                      |
| (b)(2)(i)   | Address the removal of a worst case discharge and the mitigation or prevention of a substantial threat of a worst case discharge;  | § 3.0, App F              |
| (b)(2)(ii)  | Identify environmentally and economically sensitive areas;   | § 6.0                     |
| (b)(2)(iii) | Describe the responsibilities of the operator and operator and of Federal, State and local agencies in removing a discharge and in mitigating or preventing a substantial threat of a discharge; and   | App D                     |
| (b)(2)(iv)  | Establish the procedures for obtaining an expedited decision on use of dispersants or other chemicals.   | § 6.8                     |
| (c)         | Each response plan must include:   | ----                      |
| (c)(1)      | A core plan consisting of ...  | ----                      |
| (c)(1)(i)   | An information summary as required in § 194.113,   | Fig 1.1                   |
| (c)(1)(ii)  | Immediate notification procedures,   | § 2.0                     |
| (c)(1)(iii) | Spill detection and mitigation procedures,   | § 3.0                     |
| (c)(1)(iv)  | The name, address, and telephone number of the oil spill response organization, if appropriate,  | App A                     |
| (c)(1)(v)   | Response activities and response resources,  | § 3.0, App A              |
| (c)(1)(vi)  | Names and telephone numbers of Federal, state, and local agencies which the operator expects to have pollution control responsibilities or support,  | Fig 2.5                   |
| (c)(1)(vii) | Training procedures,   | App D                     |

**DOT/PHMSA 49 CFR PART 194  
CROSS REFERENCE (Cont'd)**

| <b>§ 194.107</b> | <b>BRIEF DESCRIPTION</b>   | <b>LOCATION in PLAN</b>       |
|------------------|--|-------------------------------|
| (c)(1)(viii)     | Equipment testing,   | App D                         |
| (c)(1)(ix)       | Drill program – an operator will satisfy the requirement for a drill program by following the National Preparedness for Response Exercise Program (PREP) guidelines. An operator choosing not to follow PREP guidelines must have a drill program that is equivalent to PREP. The operator must describe the drill program in the response plan and OPS will determine if the program is equivalent to PREP.   | App D                         |
| (c)(1)(x)        | Plan review and update procedures;   | § 1.4                         |
| (c)(2)           | An appendix for each response zone that includes the information required in paragraph (c)(1)(i)-(ix) of this section and the worst case discharge calculations that are specific to that response zone. An operator submitting a response plan for a single response zone does not need to have a core plan and a response zone appendix. The operator of a single response zone onshore pipeline shall have a single summary in the plan that contains the required information in § 194.113.7; and. | N/A                           |
| (c)(3)           | A description of the operator's response management system including the functional areas of finance, logistics, operations, planning, and command. The plan must demonstrate that the operator's response management system uses common terminology and has a manageable span of control, a clearly defined chain of command, and sufficient trained personnel to fill each position.   | App D                         |
| <b>§ 194.111</b> | <b>BRIEF DESCRIPTION</b>   | <b>LOCATION in PLAN</b>       |
| (a)              | Each operator shall maintain relevant portions of its response plan at the operator's headquarters and at other locations from which response activities may be conducted, for example, in field offices, supervisor's vehicles, or spill response trailers.   | Foreword<br>Distribution List |
| <b>§ 194.113</b> | <b>BRIEF DESCRIPTION</b>   | <b>LOCATION in PLAN</b>       |
| (a)              | The information summary for the core plan, required by § 194.107, must include:  | ----                          |
| (a)(1)           | The name and address of the operator.  | Fig 1.1                       |
| (a)(2)           | For each response zone which contains one or more line sections that meet the criteria for determining significant and substantial harm as described in § 194.103, a listing and description of the response zones, including county(s) and state(s).  | Fig 1.1                       |
| (b)              | The information summary for the response zone appendix, required in § 194.107, must include:   | ----                          |
| (b)(1)           | The information summary for the core plan.   | Fig 1.1                       |
| (b)(2)           | The names or titles and 24-hour telephone numbers of the qualified individual(s) and at least one alternate qualified individual(s);   | Fig 1.1                       |
| (b)(3)           | The description of the response zone, including county(s) and state(s), for those zones in which a worst case discharge could cause substantial harm to the environment.   | Fig 1.1                       |
| (b)(4)           | A list of line sections for each pipeline contained in the response zone, identified by milepost or survey station number, or other operator designation.  | Fig 1.1                       |
| (b)(5)           | The basis for the operator's determination of significant and substantial harm.  | Fig 1.1                       |
| (b)(6)           | The type of oil and volume of the worst case discharge.  | Fig 1.1                       |

**DOT/PHMSA 49 CFR PART 194  
CROSS REFERENCE (Cont'd)**

| <b>§ 194.115</b> | <b>BRIEF DESCRIPTION</b>  | <b>LOCATION in PLAN</b>   |
|------------------|---|---------------------------|
| (a)              | Each operator shall identify and ensure, by contract or other approved means, the resources necessary to remove, to the maximum extent practicable, a worst case discharge and to mitigate or prevent a substantial threat of a worst case discharge. | App A                     |
| (b)              | An operator shall identify in the response plan the response resources which are available to respond within the time specified, after discovery of a worst case discharge, or to mitigate the substantial threat of such a discharge.                | App A                     |
| <b>§ 194.117</b> | <b>BRIEF DESCRIPTION</b>  | <b>LOCATION in PLAN</b>   |
| (a)              | Each operator shall conduct training to ensure that:  | ----                      |
| (a)(1)           | All personnel know --   | ----                      |
| (a)(1)(i)        | Their responsibilities under the response plan  | App D                     |
| (a)(1)(ii)       | The name and address of, and the procedure for contacting, the operator on a 24-hour basis  | § 2.0, Fig 2.2            |
| (a)(1)(iii)      | The name of, and procedures for contacting, the qualified individual on a 24-hour basis   | Fig 1.1, Fig. 2.2, § 2.0, |
| (a)(2)           | Reporting personnel know --   | ----                      |
| (a)(2)(i)        | The content of the information summary of the response plan.  | Fig 1.1                   |
| (a)(2)(ii)       | The toll-free telephone number of the National Response Center  | Fig 2.4, Fig. 2.5         |
| (a)(2)(iii)      | The notification process  | § 2.0, Fig. 2.4           |
| (a)(3)           | Personnel engaged in response activities know --  | ----                      |
| (a)(3)(i)        | The characteristics and hazards of the oil discharged   | § 3.0                     |
| (a)(3)(ii)       | The conditions that are likely to worsen emergencies, including the consequences of facility malfunctions or failures, and the appropriate corrective actions.  | § 3.0                     |
| (a)(3)(iii)      | The steps necessary to control any accidental discharge of oil and to minimize the potential for fire, explosion, toxicity, or environmental damage   | § 3.0                     |
| (a)(3)(iv)       | The proper firefighting procedures and use of equipment, fire suits, and breathing apparatus  | § 3.0                     |
| (b)              | Each operator shall maintain a training record for each individual that has been trained as required by this section. These records must be maintained in the following manner as long as the individual is assigned duties under the response plan   | ----                      |
| (b)(1)           | Records for operator personnel must be maintained at the operator's headquarters  | App D                     |
| (b)(2)           | Records for personnel engaged in response, other than operator personnel, shall be maintained as determined by the operator.  | App D                     |
| (b)(3)           | Nothing in this section relieves an operator from the responsibility to ensure that all response personnel are trained to meet the OSHA standards for emergency response operations in 29 CFR 1910.120 ...  | App D                     |

**DOT/PHMSA 49 CFR PART 194  
CROSS REFERENCE (Cont'd)**

| <b>§ 194.119</b> | <b>BRIEF DESCRIPTION</b>   | <b>LOCATION in PLAN</b>            |
|------------------|--|------------------------------------|
| (a)              | Each owner shall submit two copies...  | Distribution                       |
| (b)              | ...PHMSA will notify the operator of any alleged deficiencies...   | -----                              |
| (c)              | The operator...may petition PHMSA for reconsideration within 30 days...  | -----                              |
| (d)              | ...PHMSA will approve the Response Plan...   | -----                              |
| (e)              | ...The operator may submit a certification to PHMSA...that the operator has obtained, through contract or other approved means, the necessary private personnel and equipment to record, to the maximum extent practicable, to a worst case discharge... | Foreword<br>(Operator's Statement) |
| (f)              | ...PHMSA may require an operator to provide a copy of the response plan to the OSC...  | -----                              |

## GLOSSARY OF TERMS / ACRONYMS

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## Glossary of Terms/Acronyms

This glossary contains definitions of terms that will be used frequently during the course of response operations.

**Abandon Pipeline:** A pipeline or pipeline segment which has met the criteria of an Out-Of-Service pipeline (purged, sealed and disconnected from an operating system) but will not be maintained to minimum USDOT inspection and maintenance standards.

**Activate:** The process of mobilizing personnel and/or equipment within the response organization to engage in response operations.

**Activator:** An individual in the response organization whose responsibilities include notifying other individuals or groups within the organization to mobilize personnel and/or equipment.

**Active Pipeline:** A pipeline or pipeline segment which is in service whether or not the pipeline is fully operational. This includes pipelines which may have been utilized to transport hazardous liquids but are currently static or unused.

**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 within the Captain of the Port (COTP) zone in which the systems or equipment are intended to function.

**Agency Representative:** Individual assigned to an incident from an agency who has been delegated full authority to make decisions on all matters affecting that agency's participation in response operations.

**Alert:** Means an incident has occurred at the terminal which has the potential to affect off-site locations.

**Area Committee:** As defined by Sections 311(a)(18) and (j)(4) of CWA, as amended by OPA, means the entity appointed by the President consisting of members from Federal, State, and local agencies with responsibilities that include preparing an Area Contingency Plan for the area designated by the President. The Area Committee may include ex-officio (i.e., non-voting) members (e.g., industry and local interest groups).

**Area Contingency Plan:** As defined by Sections 311(a)(19) and (j)(4) of CWA, as amended by OPA, means the plan prepared by an Area Committee, that, in conjunction with the NCP, shall address the removal of a discharge including a worst-case discharge and the mitigation or prevention of a

substantial threat of such a discharge from a vessel, offshore facility, or onshore facility operating in or near an area designated by the President.

**Average Most Probable Discharge:** A discharge of the lesser of 50 barrels or 1% of the volume of the worst case discharge.

**Barrel (bb):** Measure of space occupied by 42 U.S. gallons at 60 degrees Fahrenheit.

**Bioremediation Agents:** Means microbiological cultures, enzyme additives, or nutrient additives that are deliberately introduced into an oil discharge and that will significantly increase the rate of biodegradation to mitigate the effects of the discharge.

**Boom:** A piece of equipment or a strategy used to either contain free floating oil to a confined area or protect an uncontaminated area from intrusion by oil.

**Booming Strategies:** Strategic techniques which identify the location and quantity of boom required to protect certain areas. These techniques are generated by identifying a potential spill source and assuming certain conditions which would affect spill movement on water.

**Breakout Tank:** Means a tank used to (a) relieve surges in a hazardous liquid pipeline system or (b) receive and store hazardous liquid transported by a pipeline for reinjection and continued transportation by pipeline.

**Bulk:** Material that is stored or transported in a loose, unpackaged liquid, powder, or granular form capable of being conveyed by a pipe, bucket, chute, or belt system.

**Captain of the Port Zone (COTP):** Means a zone specified in 33 CFR Part 3 and the seaward extension of that zone to the outer boundary of the exclusive economic zone (EEZ).

**CERCLA:** Means the Comprehensive Environmental Response, Compensation Liability Act regarding hazardous substance releases into the environment and the cleanup of inactive hazardous waste disposal sites.

**Chemical Agents:** Means those elements, compounds, or mixtures that coagulate, disperse, dissolve, emulsify, foam, neutralize, precipitate, reduce, solubilize, oxidize, concentrate, congeal, entrap, fix, make the pollutant mass more rigid or viscous, or otherwise facilitate the mitigation of deleterious effects or the removal of the oil pollutant

## Glossary of Terms/Acronyms

from the water. Chemical agents include biological additives, dispersants, sinking agents, miscellaneous oil spill control agents, and burning agents, but do not include solvents.

**CHEMTREC:** Means the Chemical Transportation Emergency Center operated by Chemical Manufacturers Association. Provides information and/or assistance to emergency responders. Can be reached 24 hours a day by calling 800-424-9300.

**Clean-up Contractor:** Persons contracted to undertake a response action to clean up a spill.

**Cleanup:** For the purposes of this document, cleanup refers to the removal and/or treatment of oil, hazardous substances, and/or the waste or contaminated materials generated by the incident. Cleanup includes restoration of the site and its natural resources.

**Coastal Waters:** For the purpose of classifying the size of discharges, means the waters of the coastal zone except for the Great Lakes and specified ports and harbors on inland rivers.

**Coastal Zone:** As defined for the purpose of the NCP, means all United States waters subject to the tide, United States waters of the Great Lakes, specified ports and harbors on inland rivers, waters of the contiguous zone, other waters of the high seas subject to the NCP, and the land surface or land substrata, ground waters, and ambient air proximal to those waters. The term coastal zone delineates an area of federal responsibility for response action. Precise boundaries are determined by EPA/USCG agreements and identified in federal regional contingency plans.

**Coast Guard District Response Group (DRG):** As provided for by CWA sections 311(a)(20) and (j)(3), means the entity established by the Secretary of the department in which the USCG is operating within each USCG district and shall consist of: the combined USCG personnel and equipment, including firefighting equipment, of each port within the district; additional prepositioned response equipment; and a district response advisory team.

**Command:** The act of controlling manpower and equipment resources by virtue of explicit or delegated authority.

**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.

**Communications Equipment:** Equipment that will be utilized during response operations to maintain communication between the Company employees, contractors, Federal/State/Local agencies. (radio/ telephone equipment and links)

**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.

**Contingency Plan:** (1) A document used by federal, state, and local agencies to guide their planning and response procedures regarding spills of oil, hazardous substances, or other emergencies; and/or (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:** For OPA 90, a written contract with a response contractor; certification by the facility owner or operator that personnel and equipment are owned, operated, or under the direct control of the facility, and available within the stipulated times; active membership in a local or regional oil spill removal organization; and/or the facility's own equipment.

**Critical Areas to Monitor:** Areas which if impacted by spilled oil may result in threats to public safety or health.

**Cultural Resources:** Current, historic, prehistoric and archaeological resources which include deposits, structures, ruins, sites, buildings, graves, artifacts, fossils, or other objects of antiquity which provide information pertaining to the historical or prehistorical culture of people in the state as well as to the natural history of the state.

**Damage Assessment:** The process of determining and measuring damages and injury to the human environment and natural resources, including cultural resources. Damages include differences between the conditions and use of natural resources and the human environment that would have occurred without the incident, and the conditions and use that ensued following the incident. Damage assessment includes planning for restoration and determining the costs of restoration.

**Decontamination:** The removal of hazardous substances from personnel and their equipment necessary to prevent adverse health effects.

**Discharge:** Any spilling, leaking, pumping, pouring, emitting, emptying, or dumping.

## Glossary of Terms/Acronyms

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**Dispersants:** Means those chemical agents that emulsify, disperse, or solubilize 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 floatation/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.

**Drinking Water Supply:** As defined by Section 101(7) of CERCLA, means any raw or finished water source that is or may be used by a public water system (as defined in the Safe Drinking Water Act) or as drinking water by one or more individuals.

**Economically Sensitive Areas:** Those areas of explicit economic importance to the public that due to their proximity to potential spill sources may require special protection and include, but are not limited to: potable and industrial water intakes; locks and dams; and public and private marinas.

**Emergency Planning Zone:** Means the area designated by the jurisdiction boundaries of those communities which are within a radial distance of one-half mile from the terminal.

**Emergency Response:** Means the response to any occurrence which results, or is likely to result, in a release of a hazardous substance due to an event.

**Emergency Service:** Those activities provided by state and local government to prepare for and carry out any activity to prevent, minimize, respond to, or recover from an emergency.

**Emulsion:** Suspension of oil in water.

**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.

**Exclusive Economic Zone:** Means the zone contiguous to the territorial sea of the United States extending to a distance up to 200 nautical miles from the baseline from which the breadth of the territorial sea is measured.

**Facility (DOT):** Means new and existing pipe, rights-of-way and any equipment, facility, or building used in the transportation of hazardous liquids or carbon dioxide.

**Facility (EPA/USCG):** Either an onshore facility or an offshore facility and includes, but is not limited to structures, equipment, and appurtenances thereto, used or capable of being used to transfer oil to or from a vessel or a public vessel. A facility includes federal, state, municipal, and private facilities.

**Facility That Could Reasonably Be Expected To Cause Significant And Substantial Harm:** Means any fixed MTR on-shore facility (including piping and any structures that are used for the transfer of oil between a vessel and a facility) that is capable of transferring oil, in bulk, to or from a vessel of 250 barrels or more, and a deepwater port. This also includes any facility specifically identified by the COTP.

**Facility That Could Reasonably Be Expected To Cause Substantial Harm:** Means any mobile MTR facility that is capable of transferring oil to or from a vessel with a capacity of 250 barrels or more. This also includes any facility specifically identified by the COTP.

**Facility Operator:** The person who owns, operates, or is responsible for the operation of the facility.

**Federal Fund:** The spill liability trust fund established under OPA.

**Federal Regional Response Team (RRT):** 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.

**Federal Response Plan (FRP):** Means the agreement signed by 25 federal departments and agencies in April 1987 and developed under the authorities of the Earthquake Hazards Reduction Act of 1977 and the Disaster Relief Act of 1974, as amended by the Stafford Disaster Relief Act of 1988.

**First Responders, First Response Agency:** A public health or safety agency (e.g., 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.

**General Emergency:** Means an incident has occurred and the affected community is implementing protective actions.

**Handle:** To transfer, transport, pump, treat, process, store, dispose of, drill for, or produce.

## Glossary of Terms/Acronyms

**Harmful Quantity Of Oil:** The presence of oil from an unauthorized discharge in a quantity sufficient either to create a visible film or sheen upon or discoloration of the surface of the water or a shoreline, tidal flat, beach, or marsh, or to cause a sludge or emulsion to be deposited beneath the surface of the water or on a shoreline, tidal flat, beach, or marsh.

**Hazardous Chemicals:** Means all chemicals which constitute a physical hazard or a health hazard as defined by 29 CFR 1910.1200, with the exceptions listed in section 311(e). This term comprises approximately 90 percent of all chemicals.

**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 designated as such by the Administrator of the EPA pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act; regulated pursuant to Section 311 of the Federal Water Pollution Control Act, or discharged by the SERC.

**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 Resource 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.

**HAZMAT:** Hazardous materials or hazardous substances, exposure to which may result in adverse effects on health or safety of employees.

**HAZWOPER:** Hazardous Waste Operations and Emergency Response Regulations published by OSHA to cover worker safety and health aspects of

**Health Hazard:** Means a chemical for which there is statistically significant evidence based on at least one study conducted in accordance with established scientific principals that acute or chronic health effects may occur in exposed employees.

**Heat Stress:** Dangerous physical condition caused by over exposure to extremely high temperatures.

**Hypothermia:** Dangerous physical condition caused by over exposure to freezing temperatures.

**Incident:** Any event that results in a spill or release of oil or hazardous materials. Action by emergency service personnel may be required to prevent or minimize loss of life or damage to property and/or natural resources.

**Incident Briefing Meeting:** Held to develop a comprehensive, accurate, and up-to-date understanding of the incident, nature of status of control operations, and nature and status of response operations; ensure the adequacy of control and response operations; begin to organize control and response operations; and prepare for interactions with outside world.

**Incident Command Post (ICP):** That location at which all primary command functions are executed.

**Incident Command System (ICS):** The combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure, with responsibility for the management of assigned resources at an incident.

**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.

**Indian Tribe:** As defined in OPA section 1001, means any Indian tribe, band, nation, or other organized group or community, but not including any Alaska Native regional or village corporation, which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians and has governmental authority over lands belonging to or controlled by the Tribe.

**Initial Cleanup:** Remedial action at a site to eliminate acute hazards associated with a spill. An initial clean-up action is implemented at a site when a spill of material is an actual or potentially imminent threat to public health or the environment, or difficulty of cleanup increases significantly without timely remedial action. All sites must be evaluated to determine whether initial cleanup is total cleanup, however, this will not be possible in all cases due to site conditions (i.e., a site where overland transport or flooding may occur).

**Initial Notification:** The process of notifying the necessary Company personnel and Federal/State/Local agencies that a spill has occurred, including all pertinent available information surrounding the incident.

## Glossary of Terms/Acronyms

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**Initial Response Actions:** The immediate actions that are to be taken by the spill observer after detection of a spill.

**Inland Area:** means the area shoreward of the boundary lines defined in 46 CFR part 7; in the Gulf of Mexico, it means the area shoreward of the lines of demarcation (COLREG lines) as defined in §80.740 through 80.850 of this chapter. The inland area does not include the Great Lakes.

**Inland Waters:** State waters not considered coastal waters; lakes, rivers, ponds, streams, underground water, et. al.

**Inland Zone:** Means the environment inland of the coastal zone excluding the Great Lakes, and specified ports and harbors on inland rivers. The term inland zone delineates an area of federal responsibility for response action. Precise boundaries are determined by EPA/USCG agreements and identified in federal regional contingency plans.

**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.

**Internally Reported Event:** An incident that does not meet the reporting criteria established for notification of off-site authorities. No evacuation has occurred.

**Lead Agency:** The government agency that assumes the lead for directing response activities.

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

- **U.S. Coast Guard:** Oil and chemically hazardous materials incidents on navigable waters.
- **Environmental Protection Agency:** Oil and chemically hazardous materials incidents on inland waters.

**Lead State Agency:** The agency which coordinates state support to federal and/or local governments or assumes the lead in the absence of federal response.

**Line Section:** Means a continuous run of pipe between adjacent pressure pump stations, between a pressure pump station and terminal or breakout

tanks, between a pressure pump station and a block valve, or between adjacent block valves.

**Light Oil Terminal Operations:** Means the storage and distribution of gasoline and diesel fuel to wholesale customers.

**Loading:** Transfer from Facility to vehicle.

**Local Emergency Planning Committee (LEPC):** A group of local representatives appointed by the State Emergency Response Commission (SERC) to prepare a comprehensive emergency plan for the local emergency planning district, as required by the Emergency Planning and Community Right-to-Know Act (EPCRA).

**Local Response Team:** Designated Facility individuals who will fulfill the roles determined in the oil spill response plan in the event of an oil or hazardous substance spill. They will supervise and control all response and clean-up operations.

**Lower Explosive Limit:** Air measurement utilized to determine the lowest concentration of vapors that support combustion. This measurement must be made prior to entry into a spill area.

**Marinas:** Small harbors with docks, services, etc. for pleasure craft.

**Marine Transportation Related Facility (MTR FACILITY):** Means an on-shore 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:** Means the planning values derived from the planning criteria used to evaluate the response described in the response plan to provide the on-water recovery capability and the shoreline protection and cleanup capability to conduct response activities for a worst case discharge from a facility in adverse weather.

**Maximum Most Probable Discharge:** Means a discharge of the lesser of 1,200 barrels or 10 percent of the volume of a worst case discharge.

**Medium Discharge:** Means a discharge greater than 2,100 gallons (50 Bbls) and less than or equal to 36,000 gallons (85+ Bbls) or 10% of the capacity of the largest tank, whichever is less and not to exceed the WCD.

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**National Contingency Plan:** The plan prepared under the Federal Water Pollution Control Act (33 United State 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.

**National Pollution Funds Center (NPFC):** Means the entity established by the Secretary of Transportation whose function is the administration of the Oil Spill Liability Trust Fund (OSLTF). Among the NPFC's duties are: providing appropriate access to the OSLTF for federal agencies and states for removal actions and for federal trustees to initiate the assessment of natural resource damages; providing appropriate access to the OSLTF for claims; and coordinating cost recovery efforts.

**National Response System (NRS):** Is the mechanism for coordinating response actions by all levels of government in support of the OSC. The NRS is composed of the NRT, RRTs, OSC, Area Committees, and Special Teams and related support entities.

**National Strike Force (NSF):** Is a special team established by the USCG, including the three USCG Strike Teams, the Public Information Assist Team (PIAT), and the National Strike Force Coordination Center. The NSF is available to assist OSCs in their preparedness and response duties.

**National Strike Force Coordination Center (NSFCC):** Authorized as the National Response Unit by CWA section 311(a)(23) and (j)(2); the entity established by the Secretary of the Department of Transportation through which the USCG, operating from Elizabeth City, North Carolina, is responsible for administration of the USCG Strike Teams, maintenance of response equipment inventories and logistic networks, and conducting a national exercise program.

**Natural Resource:** Land, fish, wildlife, biota, air, water, ground water, drinking water supplies, and other such resources belonging to, managed by, held in trust by, appertaining to or otherwise controlled by the state, federal government, private parties, or a municipality.

**Navigable Waters:** As defined by 40 CFR 110.1 means the waters of the United States, including the territorial seas. The term includes:

All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide;

Interstate waters, including interstate wetlands;

All other waters such as interstate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, and wetlands, the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters;

That are or could be used by interstate or foreign travelers for recreational or other purposes;

From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; and

That are used or could be used for industrial purposes by industries in interstate commerce. All impoundments of waters otherwise defined as navigable waters under this section;

Tributaries of waters identified in paragraphs (a) through (d) of this definition, including adjacent wetlands; and

Wetlands adjacent to waters identified in paragraphs (a) through (e) of this definition: Provided, that waste treatment systems (other than cooling ponds meeting the criteria of this paragraph) are not waters of the United States.

Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act jurisdiction remains with EPA.

**Nearshore Area:** For OPA 90, 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 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:

1. At least 50% of which by volume, distill at a temperature of 340 degrees C (645 degrees F);
2. At least 95% of which volume, distill at a temperature of 370 degrees C (700 degrees F).

**Ocean:** The open ocean, offshore area, and nearshore area as defined in this subpart.

**Offshore area:** The area up to 38 nautical miles seaward of the outer boundary of the nearshore area.

## Glossary of Terms/Acronyms

**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 Liability Trust Fund:** Means the fund established under section 9509 of the Internal Revenue Code of 1986 (26 U.S.C. 9509).

**Oil Spill Removal Organization (OSRO):** Means an entity that provides response resources.

**Oily Waste:** Product-contaminated waste resulting from a spill or spill response operations.

**On-Scene Coordinator (OSC):** Means the federal official predesignated by the EPA or the USCG to coordinate and direct response under subpart D.

**On-site:** Means the areal extent of contamination and all suitable areas in very close proximity to the contamination necessary for implementation of a response action.

**Open Ocean:** means the area from 38 nautical miles seaward of the outer boundary of the nearshore area, to the seaward boundary of the exclusive economic zone.

**Operating Area:** Refers to 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:** Refers to rivers and canals, inland, Great Lakes, or ocean. These terms are used to define the conditions in which response equipment is designed to function.

**Out of Service (OOS) Pipeline:** A pipeline or pipeline segment which has been effectively cleaned of all hazardous liquids, filled with water or inert gas and blinded or otherwise isolated from an active pipeline system.

**Owner or Operator:** Any person, partnership, corporation, association, governmental unit or public or private organization of any character that owns, operates pipelines, facilities, or is involved in the transportation of oil.

**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:

1. Group II specific gravity less than .85
2. Group III specific gravity between .85 and less than .95
3. Group IV specific gravity .95 and including 1.0
4. Group V specific gravity greater than 1.0

**PHMSA:** Pipeline and Hazardous Materials Safety Administration (replaced RSPA)

**Pipeline System:** Means all parts of a pipeline facility through which a hazardous liquid or carbon dioxide moves in transportation, including but not limited to, line pipe, valves, and other appurtenances connected to line pipe, pumping units, fabricated assemblies associated with pumping units, metering and delivery stations and fabricated assemblies therein, and breakout tanks.

**Plan Holder:** The plan holder is the industry transportation related facility for which a response plan is required by federal regulation to be submitted by a vessel or facility's owner or operator.

**Post Emergency Response:** The phase of a response performed after the immediate threat of a release has been stabilized or eliminated and cleanup of the sites has begun.

**Primary Response Contractors or Contractors:** 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 (QI):** That person or entity who has authority to activate a spill cleanup contractor(s), act as liaison with the "On-Scene Coordinator" and obligate funds required to effectuate response activities.

**Recreation Areas:** Publicly accessible locations where social/sporting events take place.

**Regional Response Team (RRT):** The Federal response organization (consisting of representatives from selected federal and state agencies) which acts as a regional body responsible for overall planning and preparedness for oil and hazardous materials releases and for providing advice to the OSC in the event of a major or substantial spill.

**Remove or Removal:** As defined by section 311(a)(8) of the CWA, refers to containment and removal of oil or hazardous substances from the water and shorelines or the taking of such other actions as may be necessary to minimize or mitigate damage to the public health or welfare (including, but

## Glossary of Terms/Acronyms

not limited to, fish, shellfish, wildlife, public and private property, and shorelines and beaches) or to the environment. For the purpose of the NCP, the term also includes monitoring of action to remove discharge.

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

**Response Contractors:** Persons/companies contracted to undertake a response action to contain and/or clean up a spill.

**Response Guidelines:** Guidelines for initial response that are based on the type of product involved in the spill, these guidelines are utilized to determine clean-up methods and equipment.

**Response Plan:** A practical manual used by industry for responding to a spill. Its features include: (1) identifying the notifications sequence, responsibilities, response techniques, etc. in a easy to use format; (2) using decision trees, flowcharts, and checklists to ensure the proper response for spills with varying characteristics; and (3) segregating information needed during the response from data required by regulatory agencies to prevent confusion during a spill incident.

**Response Priorities:** Mechanism used to maximize the effective use of manpower and equipment resources based upon their availability during an operational period.

**Response Resources:** All personnel and major items of equipment available, or potentially available, for assignment to incident tasks on which status is maintained.

**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.

**Restoration:** The actions involved in returning a site to its former condition.

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

**RSPA:** Research and Special Programs Administration (replaced by PHMSA)

**Securing the Source:** Steps that must be taken to stop discharge of oil at the source of the spill.

**Sinking Agents:** Means those additives applied to oil discharges to sink floating pollutants below the water surface.

**Site Characterization:** An evaluation of a cleanup site to determine the appropriate safety and health procedures needed to protect employees from identified hazards.

**Site Conditions:** Details of the area surrounding the facility, including shoreline descriptions, typical weather conditions, socioeconomic breakdowns, etc.

**Site Emergency:** Means an incident has occurred and the entire terminal, with the exception of critical employees has been sheltered on-site or evacuated.

**Site Safety and Health Plan:** A site specific plan developed at the time of an incident that addresses:

- Safety and health hazard analysis for each operation.
- Personal protective equipment to be used.
- Training requirements for site workers.
- Medical surveillance requirements.
- Air monitoring requirements.
- Site control measures.
- Decontamination procedures.
- Emergency response procedures.
- Confined space entry procedures.

**Site Security and Control:** Steps that must be taken to provide safeguards needed to protect personnel and property, as well as the general public, to ensure an efficient clean-up operation.

**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.

**Snare Boom:** Oil will adhere to the material of which this boom is made of and thus collect it.

**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.

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**Spill:** An unauthorized discharge of oil or hazardous substance into the waters of the state.

**Spill Observer:** The first Facility individual who discovers a spill. This individual must function as the first responder and person-in-charge until relieved by an authorized supervisor.

**Spill of National Significance (SONS):** Means a spill which due to its severity, size, location, actual or potential impact on the public health and welfare or the environment, or the necessary response effort, is so complex that it requires extraordinary coordination of federal, state, local, and responsible party resources to contain and cleanup the discharge.

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

**Spill Response:** All actions taken in responding to spills of oil and hazardous materials, e.g.: receiving and making notifications, information gathering and technical advisory phone calls, preparation for and travel to and from spill sites, direction of clean-up activities; damage assessments, report writing, enforcement investigations and actions, cost recovery, and program development.

**Spill Response Personnel:** Federal, state, local agency, and industry personnel responsible for participating in or otherwise involved in spill response. All spill response personnel will be pre-approved on a list maintained in each region.

**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 Re-authorization Act of 1986 (SARA). The SERC approves the State Oil and Hazardous Substance Discharge Prevention and Contingency Plan and Local Emergency Response Plans.

**Substantial Threat of a Discharge:** Means any incident or condition involving a facility that may create a risk of discharge of fuel or cargo oil. Such incidents include, but are not limited to storage tank or piping failures, above ground or underground leak, fires, explosions, flooding spills contained within the facility, or other similar occurrences.

**Surface Collecting Agents:** Means those chemical agents that form a surface film to control the layer thickness of oil.

**Surface Washing Agent:** Is any product that removes oil from solid surfaces, such as beaches and rocks, through a detergency mechanism and does not involve dispersing or solubilizing the oil into the water column.

**Tanker:** A self-propelled tank vessel constructed or adapted primarily to carry oil or hazardous material in bulk in the cargo spaces.

**Tidal Current Tables:** Tables which contain the predicted times and heights of the high and low waters for each day of the year for designated areas.

**Toxic Substances:** Any substances which have the capacity to produce personal injury or illness to man through ingestion, inhalation, or absorption through any body surface.

**Trajectory Analysis:** Estimates made concerning spill size, location, and movement through aerial surveillance or computer models.

**Transfer:** Any movement of oil to, from, or within a vessel by means of pumping, gravitation, or displacement.

**Trustee:** Means an official of a federal natural resources management agency designated in subpart G of the NCP or a designated state official or Indian tribe or, in the case of discharges covered by the OPA, a foreign government official, who may pursue claims for damages under section 1006 of the OPA.

**Underwriter:** An insurer, a surety company, a guarantor, or any other person, other than an owner or operator of a vessel or facility, that undertakes to pay all or part of the liability of an owner or operator.

**Unified Command:** The method by which local, state, and federal agencies and the responsible party 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.

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## Glossary of Terms/Acronyms

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**Unified or Coordinated Command Meeting:** Held to obtain agreement on strategic objectives and response priorities, review tactical strategies, engage in joint planning, integrate response operations, maximize use of resources, and minimize resolve conflicts.

**Unusual Event:** Means an incident has occurred which is noticeable and dramatic from the Terminal perimeter; however, no outside assistance is required and no evacuation outside the incident scene has occurred.

**Volunteers:** An individual who donates their services or time without receiving monetary compensation.

**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.

**Waters of the U.S.** - See Navigable Waters.

**Wetlands:** Those areas that are inundated or saturated by surface or groundwater at a frequency or duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include playa lakes, swamps, marshes, bogs, and similar areas such as sloughs, prairie potholes, wet meadows, prairie river overflows, mudflats, and natural ponds (40 CFR 112.2(y)).

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

**Worst Case Discharge:** The largest foreseeable discharge under adverse weather conditions. For facilities located above the high water line of coastal waters, a worst case discharge includes those weather conditions most likely to cause oil discharged from the facility to enter coastal waters.

## Glossary of Terms/Acronyms

|                   |  |                   |  |
|-------------------|--|-------------------|--|
| <b>AC</b>         | - Area Committee   | <b>CGA</b>        | - Compressed Gas Association                         |
| <b>ACP</b>        | - Area Contingency Plan  | <b>CH</b>         | - Cargo Hold   |
| <b>ADAPTS</b>     | - Air Deliverable Anti-Pollution Transport                             | <b>CHEMTREC</b>   | - Chemical Transportation Emergency Center           |
| <b>AFFF</b>       | - Aqueous Film Forming Foam  | <b>CHRIS</b>      | - Chemical Hazards Response Information System       |
| <b>AGT</b>        | - Any Gross Tonnage (TONS)   | <b>CMA</b>        | - Chemical Manufacturers Association                 |
| <b>AOR</b>        | - Area of Responsibility   | <b>CNG</b>        | - Compressed Natural Gas                             |
| <b>API</b>        | - American Petroleum Institute   | <b>CO</b>         | - Commanding Officer                                 |
| <b>AQI</b>        | - Alternate Qualified Individual                                       | <b>COA</b>        | - Certificate of Adequacy                            |
| <b>ARPA</b>       | - Automatic Radar Plotting Aid   | <b>COC</b>        | - Certificate of Compliance                          |
| <b>AST</b>        | - Aboveground Storage Tank   | <b>COE</b>        | - U. S. Army Corps of Engineers                      |
| <b>ASTM</b>       | - American Society for Testing and Materials                           | <b>COF</b>        | - Certificate of Fitness                             |
| <b>AT</b>         | - Airtight   | <b>COFR</b>       | - Certificate of Financial Responsibility            |
| <b>ATSDR</b>      | - Agency for Toxic Substances and Disease Registry                     | <b>COI</b>        | - Certificate of Inspection                          |
| <b>AWG</b>        | - American Wire Gauge  | <b>COIL</b>       | - Central Oil Identification Laboratory              |
| <b>B</b>          | - Beam   | <b>COMDTINST</b>  | - Commandant Instruction                             |
| <b>BIA</b>        | - Bureau of Indian Affairs   | <b>COMDTNOTE-</b> | - Commandant Notice                                  |
| <b>BBL</b>        | - Barrel (Unit of Volume Equal to 42 Gallons)                          | <b>COMDTPUB</b>   | - Commandant's Publication                           |
| <b>BLM</b>        | - Bureau of Land Management  | <b>CONUS</b>      | - Continental United States                          |
| <b>BPD</b>        | - Barrels Per Day  | <b>COPH</b>       | - Cargoes of Particular Hazard                       |
| <b>BPH</b>        | - Barrels Per Hour   | <b>CORE</b>       | - Contingency Response                               |
| <b>BOD</b>        | - Biological Oxygen Demand   | <b>COTP</b>       | - Captain of the Port Zone                           |
| <b>BOM</b>        | - Bureau of Mines  | <b>COW</b>        | - Crude Oil Washing                                  |
| <b>C</b>          | - Degrees Centigrade   | <b>CRZ</b>        | - Contamination Reduction Zone                       |
| <b>C3</b>         | - Command, Control, and Communications                                 | <b>CS</b>         | - General Cargo Ship                                 |
| <b>C &amp; R</b>  | - Cargoes and Restriction (List)                                       | <b>CSA</b>        | - Canada Standards Association                       |
| <b>CAER</b>       | - Community Awareness and Emergency Response                           | <b>CSC</b>        | - International Convention for Safe Containers, 1972 |
| <b>CERCLA</b>     | - Comprehensive Environmental Response, Compensation and Liability Act | <b>CT</b>         | - Cargo Tank   |
| <b>CCR</b>        | - California Code of Regulations                                       | <b>C/V</b>        | - Container Vessel                                   |
| <b>CDB</b>        | - Continuous Discharge Book  | <b>CVS</b>        | - Commercial Vessel Safety Program                   |
| <b>CDG</b>        | - Subcommittee on the Carriage of Dangerous Goods                      | <b>CWA</b>        | - Clean Water Act (Federal - Public Law 100-4)       |
| <b>CEQ</b>        | - Council on Environmental Quality                                     | <b>CWS</b>        | - Community Water System                             |
| <b>CFM</b>        | - Cubic Feet per Minute  | <b>CZM</b>        | - Coastal Zone Management                            |
| <b>CFR</b>        | - Code of Federal Regulations  | <b>DECON</b>      | - Decontamination                                    |
| <b>CG or USCG</b> | - Coast Guard  | <b>DEQ</b>        | - Department of Environmental Quality                |
|                   |  | <b>DL</b>         | - Decision Letters                                   |
|                   |  | <b>DOC</b>        | - Department of Commerce                             |

## Glossary of Terms/Acronyms

|              |  |                 |   |
|--------------|--|-----------------|---|
| <b>DOD</b>   | - Department of Defense  | <b>FEMA</b>     | - Federal Emergency Management Agency                                       |
| <b>DOE</b>   | - Department of Energy   | <b>FMC</b>      | - Federal Maritime Commission   |
| <b>DOI</b>   | - Department of Interior   | <b>FOIA</b>     | - Freedom of Information Act  |
| <b>DOJ</b>   | - Department of Justice  | <b>FOIL</b>     | - Field Oil Identification Laboratory                                       |
| <b>DOL</b>   | - Department of Labor  | <b>FOSC</b>     | - Federal On-Scene Coordinator  |
| <b>DOS</b>   | - Department of State  | <b>FP</b>       | - Flashpoint  |
| <b>DOSC</b>  | - Deputy On-Scene Coordinator  | <b>FPN</b>      | - Federal Project Number  |
| <b>DOT</b>   | - Department of Transportation   | <b>FR</b>       | - Federal Register  |
| <b>DSHO</b>  | - Designated Safety and Health Official                                    | <b>FRDA</b>     | - Freshwater Resource Damage Assessment                                     |
| <b>DWT</b>   | - Deadweight Tons  | <b>FRF</b>      | - Federal Revolving Fund  |
| <b>EBS</b>   | - Emergency Broadcast System   | <b>FT</b>       | - Fuel Tank   |
| <b>EEBA</b>  | - Emergency Escape Breathing Apparatus                                     | <b>FTJ</b>      | - Failure to Join   |
| <b>EEl</b>   | - Essential Elements of Information  | <b>FWPCA</b>    | - Federal Water Pollution Control Act (as amended) (33 U.S.C. 1251 et seq.) |
| <b>EERU</b>  | - Environmental Emergency Response Unit                                    | <b>GIS</b>      | - Geographic Information System   |
| <b>EG</b>    | - Emergency Generator Room   | <b>GMT</b>      | - Greenwich Mean Time   |
| <b>EHS</b>   | - Extremely Hazardous Substance  | <b>GPM</b>      | - Gallons Per Minute  |
| <b>EIS</b>   | - Environmental Impact Statement   | <b>GSA</b>      | - General Services Administration   |
| <b>EMA</b>   | - Emergency Management Agency  | <b>GT</b>       | - Gross Tons  |
| <b>EMS</b>   | - Emergency Medical Service  | <b>HAZMAT</b>   | - Hazardous Materials   |
| <b>EMT</b>   | - Emergency Medical Technician   | <b>HAZWOPER</b> | - Hazardous Waste Operations and Emergency Response                         |
| <b>EO</b>    | - Executive Order  | <b>HHS</b>      | - Department of Health and Human Services                                   |
| <b>EOC</b>   | - Emergency Operations Center  | <b>HP</b>       | - High Pressure   |
| <b>EOD</b>   | - Explosive Ordnance Disposal  | <b>IC</b>       | - Incident Commander  |
| <b>EP</b>    | - Estimated Position   | <b>ICS</b>      | - Incident Command System   |
| <b>EPA</b>   | - U. S. Environmental Protection Agency                                    | <b>IDLH</b>     | - Immediately Dangerous to Life - or Health                                 |
| <b>EPCRA</b> | - The Emergency Planning and Right-to-Know Act of 1986 (Title III of SARA) | <b>IG</b>       | - Inert Gas   |
| <b>EQ</b>    | - Environmental Quality  | <b>IGS</b>      | - Inert Gas System  |
| <b>ERT</b>   | - Environmental Response Team  | <b>IOPP</b>     | - International Oil Pollution Prevention Convention                         |
| <b>ESA</b>   | - Endangered Species Act   | <b>IS</b>       | - Inherently Safe   |
| <b>ESD</b>   | - Emergency Shutdown   | <b>JRT</b>      | - Joint Response Team   |
| <b>ETA</b>   | - Estimated Time of Arrival  | <b>KW</b>       | - Kilowatt  |
| <b>ETF</b>   | - Emergency Task Force   | <b>LEL</b>      | - Lower Explosive Limit   |
| <b>FAA</b>   | - Federal Aviation Administration  | <b>LEPC</b>     | - Local Emergency Planning Committee  |
| <b>FAX</b>   | - Facsimile Machine  | <b>LFL</b>      | - Lower Flammable Limit   |
| <b>FCC</b>   | - Federal Communications Commission  | <b>LNG</b>      | - Liquefied Natural Gas   |
| <b>FCL</b>   | - Flammable Cryogenic Liquid   | <b>LOA</b>      | - Length Overall  |
|              |  | <b>LOC</b>      | - Letter of Compliance  |
|              |  | <b>LOP</b>      | - Line of Position  |

## Glossary of Terms/Acronyms

|               |   |  |               |   |  |
|---------------|---|--|---------------|---|--|
| <b>LOSC</b>   | - | Local On-Scene Coordinator   | <b>OPA</b>    | - | Oil Pollution Act  |
| <b>LOX</b>    | - | Liquefied Oxygen   | <b>OPS</b>    | - | Office of Pipeline Safety (DOT)                          |
| <b>LP</b>     | - | Low Pressure   | <b>ORB</b>    | - | Oil Record Book  |
| <b>LPG</b>    | - | Liquefied Petroleum Gas  | <b>OSC</b>    | - | On-Scene Coordinator                                     |
| <b>LRT</b>    | - | Local Response Team  | <b>OSHA</b>   | - | Occupational Safety and Health Administration (USDH)     |
| <b>MAWP</b>   | - | Maximum Allowable Working Pressure                                       | <b>OSLTF</b>  | - | Oil Spill Liability Trust Fund                           |
| <b>MBL</b>    | - | Mobile   | <b>OSPRA</b>  | - | Oil Spill Prevention and Response Act                    |
| <b>MEP</b>    | - | Marine Environmental Protection  | <b>OSRL</b>   | - | Oil Spill Response Limited                               |
| <b>MOU</b>    | - | Memorandum of Understanding  | <b>OSRO</b>   | - | Oil Spill Response Organization                          |
| <b>MSDS</b>   | - | Material Safety Data Sheet   | <b>OT</b>     | - | Oil Tight  |
| <b>MSO</b>    | - | Marine Safety Office   | <b>OVA</b>    | - | Organic Vapor Analyzer                                   |
| <b>MSU</b>    | - | Marine Safety Unit   | <b>OWS</b>    | - | Oily Water Separator                                     |
| <b>N/A</b>    | - | Not Applicable   | <b>PCB</b>    | - | Polychlorinated Biphenyls                                |
| <b>NC</b>     | - | Not Certified  | <b>PFD</b>    | - | Personal Flotation Device                                |
| <b>NCP</b>    | - | National Contingency Plan  | <b>PGR</b>    | - | Pager  |
| <b>NCWS</b>   | - | Non-Community Water System   | <b>PHMSA</b>  | - | Pipeline and Hazardous Materials Safety Administration   |
| <b>NEPA</b>   | - | National Environmental Policy Act  | <b>PIAT</b>   | - | Public Information Assist Team                           |
| <b>NIIMS</b>  | - | National Interagency Incident Management System                          | <b>POLREP</b> | - | Pollution Report   |
| <b>NIOSH</b>  | - | National Institute for Occupational Safety and Health                    | <b>PPE</b>    | - | Personal Protective Equipment                            |
| <b>NLS</b>    | - | Noxious Liquid Substances  | <b>PPM</b>    | - | Parts Per Million  |
| <b>NM</b>     | - | Nautical Mile  | <b>PSD</b>    | - | Prevention of Significant Deterioration                  |
| <b>NMFS</b>   | - | National Marine Fisheries Service  | <b>QDC</b>    | - | Quick Disconnect Coupling                                |
| <b>NMT</b>    | - | Not More Than  | <b>QI</b>     | - | Qualified Individual                                     |
| <b>NOAA</b>   | - | National Oceanic and Atmospheric Administration (Department of Commerce) | <b>RACT</b>   | - | Reasonably Achievable Control Technology                 |
| <b>NPDES</b>  | - | National Pollution Discharge Elimination System                          | <b>RCP</b>    | - | Regional Contingency Plan                                |
| <b>NPFC</b>   | - | National Pollution Funds Center  | <b>RCRA</b>   | - | Resource Conservation and Recovery Act                   |
| <b>NPRM</b>   | - | Notice of Proposed Rulemaking  | <b>RECON</b>  | - | Reconnaissance   |
| <b>NPS</b>    | - | National Park Service  | <b>RQ</b>     | - | Reportable Quantity                                      |
| <b>NRC</b>    | - | National Response Center   | <b>RSPA</b>   | - | Research and Special Programs Administration (DOT - OPS) |
| <b>NRDA</b>   | - | Natural Resource Damage Assessment                                       | <b>SARA</b>   | - | Superfund Amendments and Reauthorization Act             |
| <b>NRS</b>    | - | National Response System   | <b>SCBA</b>   | - | Self Contained Breathing Apparatus                       |
| <b>NRT</b>    | - | National Response Team   | <b>SDWA</b>   | - | Safe Drinking Water Act                                  |
| <b>NSF</b>    | - | National Strike Force  | <b>SERC</b>   | - | State Emergency Response Commission                      |
| <b>NSFCC</b>  | - | National Strike Force Coordination Center                                | <b>SI</b>     | - | Surface Impoundment                                      |
| <b>NTNCWS</b> | - | Non-Transient Non-Community Water System                                 | <b>SIC</b>    | - | Standard Industrial Classification                       |

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**Glossary of Terms/Acronyms**

|                |  |               |   |
|----------------|--|---------------|---|
| <b>SKIM</b>    | - Spill Cleanup Equipment Inventory            | <b>U.S.</b>   | - United States                                 |
| <b>SMT</b>     | - Spill Management Team                        | <b>USACOE</b> | - U.S. Army Corps of Engineers                  |
| <b>SONS</b>    | - Spill of National Significance               | <b>U.S.C.</b> | - United States Code                            |
| <b>SOP</b>     | - Standard Operating Procedure                 | <b>USCG</b>   | - U.S. Coast Guard                              |
| <b>SPCC</b>    | - Spill Prevention Control and Countermeasures | <b>USDA</b>   | - U.S. Department of Agriculture                |
| <b>SSC</b>     | - Scientific Support Coordinator (NOAA)        | <b>USDL</b>   | - U.S. Department of Labor                      |
| <b>STEL</b>    | - Short Term Exposure Limits                   | <b>USDOD</b>  | - U.S. Department of Defense                    |
| <b>SUPSALV</b> | - United States Navy Supervisor of Salvage     | <b>USDOE</b>  | - U.S. Department of Energy                     |
| <b>SWD</b>     | - Salt Water Disposal                          | <b>USDW</b>   | - Underground Source of Drinking Water          |
| <b>TLV</b>     | - Threshold Limit Value                        | <b>USFWS</b>  | - U. S. Fish and Wildlife Services              |
| <b>TSCA</b>    | - Toxic Substances Control Act                 | <b>USGS</b>   | - U. S. Geological Survey                       |
| <b>TSDF</b>    | - Treatment, Storage or Disposal Facility      | <b>USPCI</b>  | - United States Pollution Control, Incorporated |
| <b>UCS</b>     | - Unified Command System                       | <b>UST</b>    | - Underground Storage Tank                      |
|                |  | <b>WCD</b>    | - Worst Case Discharge                          |
|                |  | <b>WT</b>     | - Water Tight                                   |

**REGULATORY AGENCY CORRESPONDENCE  
AND OTHER AGENCY REQUIREMENTS**

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