INTEGRATED CONTINGENCY PLAN

Key Pipelines, LTD.

Amarillo Pipeline Response Zone

This Plan satisfies the following regulations:

- DOT 49 CFR 194 (PHMSA)
- OSHA 29 CFR 1910.38(a) (Emergency Action Plan)
- OSHA 29 CFR 1910.120 (HAZWOPER)
- TAC Title 16 Part 1, Chapter 8

Prepared for:

KEY PIPELINES, LTD.
P.O. Box 1388
Keller, Texas 76244

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.

Plan Approved:

_____

Justin Kehoe
Incident Commander (IC)
Key Pipelines, LTD.

Date: _____

NOTE: Witt O'Brien's provided consulting and plan development services in the preparation of this plan utilizing data provided by Key Pipelines, LTD. Witt 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

FACILITY NAME: Key Pipelines, LTP. - Amarillo Pipeline
FACILITY ADDRESS: P.O. Box 76244
Keller, TX 76244

Is the pipeline greater than 6 and 5/8 inches (168 mm) in outside nominal diameter, greater than 10 miles (16.1 km) in length? and

YES ____ NO X

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

YES ____ NO X

2. Has any line section experienced two or more reportable releases, as defined in Sec. 195.5, 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 (1.6 km) radius of potentially affected environmentally sensitive areas and could reasonably be expected to reach these areas?

YES ____ NO X

Based on the diameter of the pipeline, which is less than 6 and 5/8 inches (168mm) and the length of the pipeline, which is than 10 miles (16.1km), the Facility is identified as a "Substantial Harm Facility".

_____	Pipeline Operator
Signature	Title
Justin Kehoe	_____
Name (please type or print)	Date

DISTRIBUTION LIST

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

COPY NUMBER	PLAN HOLDER (Entire Plan)	LOCATION
1	Justin Kehoe 6617 Ridgetop Dr. Fort Worth TX 76148	Fort Worth, TX
2	Key Pipelines, LTD P.O. Box 1388 Keller, TX 76244	Keller, TX
3, 4 (electronic copy)	Melanie Barber Response Plans Officer US DOT Office of Pipeline Safety 1200 New Jersey Avenue SE (East Bldg.) E-22-231 Washington, D.C. 20590	Washington, D.C.
5	Witt | O'Brien's 818 Town & Country Blvd., Suite 200 Houston, Texas 77024	Houston, TX

REVISION RECORD

It is the responsibility of the holder of this Plan to ensure that all changes and updates are made. The holder shall:

- Remove and discard obsolete pages.
- Replace obsolete pages with the updated pages.
- Initial once completed.

Change Date	Affected Page Number(s)	Description of Change(s)	Initial
August 2005	Entire Plan	Issuance of Plan	
August 2007	Updates	Updates	
August 2013	i – vi, 1-1 thru 1-7, Section 2.0, 4-10, 4-11, C-1, C-2 & inserts, Appendix G, K-7, K-8, L-3, L-10	Updates	

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SECTION 1.0 INTRODUCTION AND PLAN CONTENT

1.1 PLAN PURPOSE/OBJECTIVES

The purpose of this Oil Spill Response Contingency Plan Key Pipelines, LTD., and Amarillo Pipeline System (Integrated Contingency Plan) (hereinafter referred to as "Plan") is to assist Key Pipelines, LTD., and Amarillo Pipeline System personnel prepare for and respond quickly and safely to a discharge originating from the pipeline (hereinafter referred to as “Pipeline”). The Plan provides techniques and guidelines for achieving an efficient, coordinated, and effective response to a discharge incident which may occur at the Pipeline.

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 under the general guidance published in the Federal Register “The National Response Team’s Oil Spill Response Contingency Plan (Integrated Contingency Plan)” (61 FR 28642). The NRT guidance was developed in conjunction with the Environmental Protection Agency, Department of Transportation (U.S. Coast Guard, Research and Special Programs Administration), Department of the Interior (Minerals Management Service), and the Department of Labor (Occupational Safety and Health Administration). The Plan is organized into Contingency Planning Sections, Facility Specific Information, and Appendices.

This guidance also provides for state and local contingency planning requirements to be incorporated into the Plan. A summary of the applicable regulations and the facilities effected by each regulation is provided in Section 1.5.

1.2 SCOPE OF PLAN (Cont'd)

This Plan contains prioritized procedures for Company personnel to mitigate or prevent any discharge resulting from Pipeline operations. A description of the operations conducted at the Pipeline has been detailed in Figure 1.1 with additional information provided in the Facility-specific sections and the appendices. Company spill mitigation procedures and response guidelines are provided in Section 3.0 for discharges that could result from any of the following scenarios:

- Pipeline rupture/leak
- Explosion and/or fire

These scenarios could result in the following discharge volume:

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

This 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 G 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 and the Department of Transportation (DOT) PHMSA regulations in 49 CFR 194.105. 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.

1.3 PLAN DISTRIBUTION PROCEDURES

Key Pipelines, LTD. shall have the responsibility 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 Distribution and Revisions Section 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.

1.3 PLAN DISTRIBUTION PROCEDURES (Cont'd)

- It is the responsibility of any person holding a copy of the Plan to ensure that the copy is transferred to their replacement in the event of reassignment or change in responsibility.
- Various regulatory agencies will also be distributed a copy of the Plan. The list of agencies is detailed in the Distribution List located in the Distribution and Revisions Section.

1.4 PLAN REVIEW AND UPDATE PROCEDURES

Annual Review/Update

Key Pipelines, LTD. 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.
- Coordinate the word processing, publication, and distribution efforts to complete the revisions and maintain the Plan.
- Plan review opportunities may occur during response team tabletop exercises or actual emergency responses.

Incorporation of Plan Revisions

The **Plan Holder**, immediately upon receipt of any revisions, 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 of this Plan.

Agency Revision Requirements

The Pipeline 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.

1.4 PLAN REVIEW AND UPDATE PROCEDURES (Cont'd)

Conditions Requiring Changes (Cont'd)

- 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.
- A change in the Pipeline's configuration that materially alters the information included in the Plan (i.e. new construction).
- 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 material change in the Company's spill prevention and response procedures.
- Any other changes that materially affect the implementation of the Plan.
- As a result of post incident or drill evaluations.

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.

PHMSA must be provided with two copies of such revisions. The Pipeline must submit the DOT/PHMSA issued Facility Control Number with the changes (the Facility Control Number is listed in Figure 1.1). In addition to periodic updates, when applicable, the Pipeline will resubmit the Response Plan to PHMSA every five (5) years from the last submission of the Plan.

1.5 REGULATORY COMPLIANCE

The development, maintenance, and utilization 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).
- OSHA's Emergency Action Plan Regulation, 29 CFR 1910.38(a).
- Texas Administrative Code Title 16 Part 1, Chapter E.

The applicable Area Contingency Plans for the Pipeline are:

- U.S. Environmental Protection Agency - Region VI, Regional Integrated Contingency Plan.

The applicable National Contingency Plan for the Pipeline is:

- U.S. Environmental Protection Agency; National Oil and Hazardous Substances Pollution Contingency Plan; Final Rule.

1.6 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:

CLASS I EVENT
Incident Command will normally be assumed by Local/Area Management. Corporate support will be utilized on an as needed basis.
Exposure
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.
Degree of Control
The incident can be controlled in a short period of time through implementation of the local resources available (including contract resources).
Governmental Involvement
Government involvement will be moderate and generally restricted to State and Local levels.
Media Involvement
Media interest will be moderate and generally restricted to State and Local levels.

1.6 DISCHARGE CLASSIFICATION (Cont'd)

CLASS II EVENT
Local Company resources may have to be supplemented with Corporate and external resources to manage the spill incident.
Exposure
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.
Degree of Control
The incident can be brought under control in a moderate period of time through implementation of local resources available (including contract resources) with possible implementation of Corporate resources.
Governmental Involvement
Government involvement will be moderately high and generally restricted to Regional levels.
Media Involvement
Media interest will be moderately high and generally restricted to Regional levels.

CLASS III EVENT
Maximum Company and external resources must be implemented to respond to the spill incident. Activation of the Spill Management Team would be anticipated during a Class III incident.
Exposure
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.
Degree of Control
Maximum Company and third party resources must be implemented in order to gain control of the incident.
Governmental Involvement
Government involvement will be intense.
Media Involvement
Media interest will be intense.

FIGURE 1.1

PIPELINE INFORMATION

GENERAL INFORMATION	
Facility Name:	Amarillo Pipeline System - Texas
PHMSA Control Number(s):	**TBA**
Owner Name:	***Mailing Address*** Key Pipelines, LTD. P.O. Box 1388. Keller, TX 76244 (817) 718-3119
Incident Commander/ Qualified Individuals:	Mr. Justin Kehoe – Amarillo Response Zone (817) 718-3119 (Cell)
Alt. Qualified Individuals:	Mrs. Elizabeth Kehoe – Amarillo Response Zone (817) 907-0804 (Cell)
Telephone/FAX:	Additional telephone references, including 24-hour numbers, for the Pipeline, Owner, and QI/AQI are provided in Figure 2.2.
Determination of Significant And Substantial Harm DOT/PHMSA)	This Pipeline does not have any line sections that meet the criteria for "significant and substantial harm" to the environment in the event of a discharge of oil into or on the navigable waters or adjoining shorelines for the following reasons: • There are no sections of pipeline that are greater than 6 5/8 inches (168 millimeters) in outside nominal diameter and greater than 10 miles (16 kilometers) in length. • The pipeline has not experienced a release greater than 1,000 barrels (159 cubic meters) within the previous five years. • The pipeline has not experienced two or more reportable releases, as defined in 49 CFR 195.50, within the previous five years. • The pipeline does not contain electric resistance welded pipe, manufactured prior to 1970, operating at a maximum operating pressure established under 49 CFR 195.406 that corresponds to a stress level greater than 50 percent of the specified minimum yield strength of the pipe. • The pipeline is not located within a 5 mile (8 kilometer) radius of potentially affected public drinking water intakes and could not reasonably be expected to reach public drinking water intakes, or • The pipeline is not located within a 1 mile (1.6 kilometer) radius of potentially affected environmentally sensitive areas, and could not reasonably be expected to reach these areas.

FIGURE 1.1

PIPELINE INFORMATION (Cont'd)

PIPELINE LOCATION	
States/Counties:	The Key Pipelines, LTD., Amarillo Pipeline System covers one (1) specific Response Zone covering one (1) county specifically detailed in this Figure 1.1
States Traversed:	Texas (Texas Response Zone)
Response Zone:	See Figure 1.2

Pipeline Specifications:

The basic specifications of the Pipeline in the zone are as follows:

- **Product Type:** Diesel
- **Pipe Detail:** Amarillo Response Zone 4-inch (2.77 miles).

Response Resources:

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

Contracted Resources:

- Agreement numbers and classifications are detailed in Appendix C.

General:

- This Plan is written in English and understood by personnel responsible for carrying out the Plan.

FIGURE 1.1

PIPELINE INFORMATION (Cont'd)

AMARILLO RESPONSE ZONE INFORMATION

General:

- The **Amarillo Response Zone** (PHMSA Control Number __TBA__) includes Key Pipelines, LTD. assets in Texas.
- The Pipeline is approximately 2.77 miles long and is located within Potter County, Texas
- Potentially Affected Counties:
  - Potter

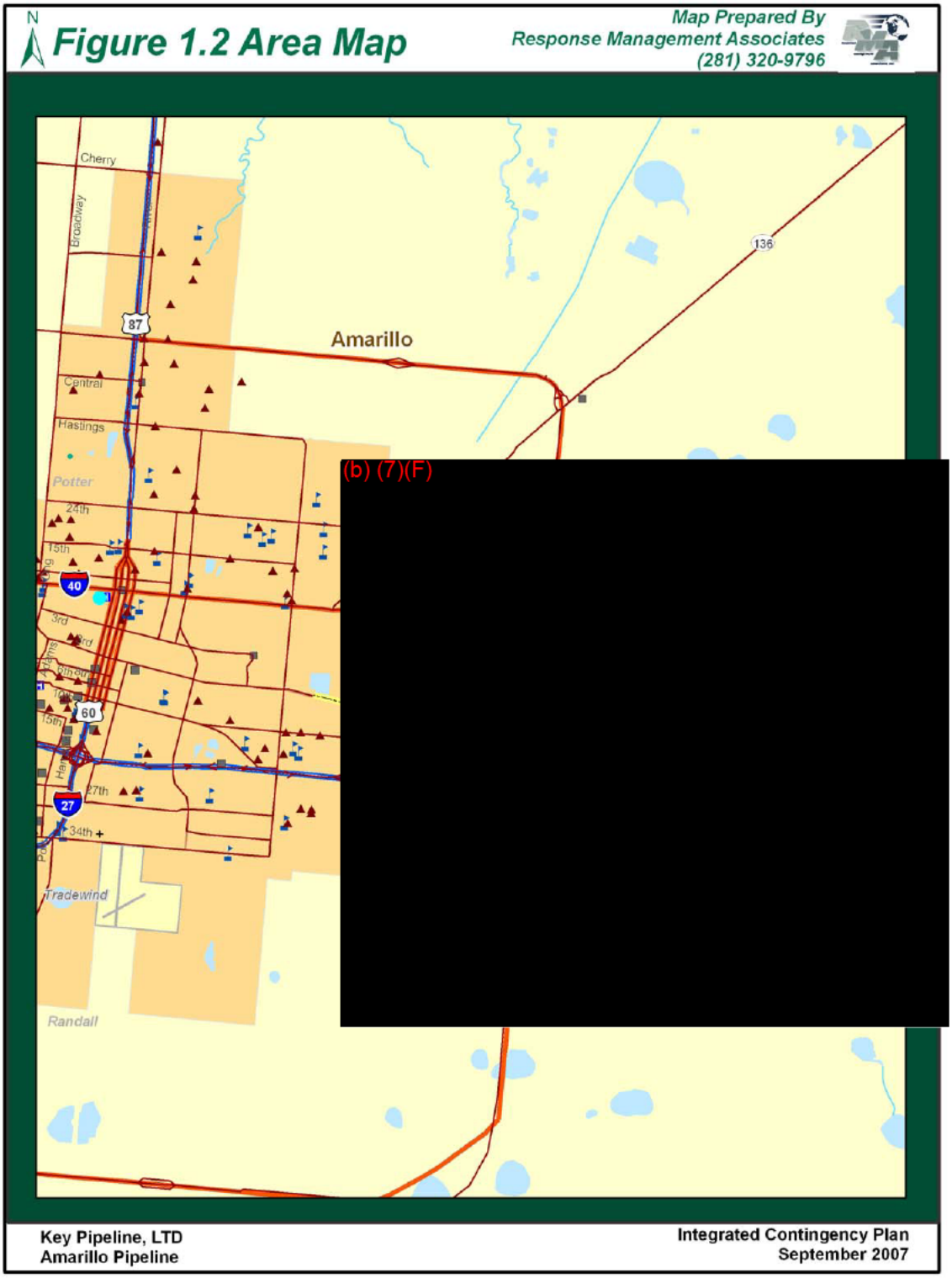
Pipeline Description:

The Key Amarillo Pipeline System consist of 2.77 miles (14,651 feet) of 4-inch diameter pipeline running adjacent to the Burlington Northern Santa Fe (BNSF) Railroad and in Southeast Amarillo. It includes the following:

- 1.04 miles (5,533 feet) of idle 4-inch diameter pipe, extending from near the intersection of S.E. 3rd Avenue and Grand Street to near the intersection of S.E. 3rd Avenue and Eastern Street. This line segment has been purged of product and laid down in nitrogen.
- 1.73 miles (9,118 feet)of 4-inch diameter pipe in Diesel service, extending from near the intersection of S.E. 3rd Avenue and Eastern Street to the Burlington Northern Santa Fe Railyard near the intersection of S.E. 3rd Avenue and State Route 335.
- The line originates and terminates within Potter County, Texas

FIGURE 1.2

AREA MAP



2.0 NOTIFICATION PROCEDURES

This Section is a guide for notification procedures that should be implemented immediately after discovering a discharge incident. 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.

2.1 INTERNAL NOTIFICATION

The following internal notifications should be made for each emergency incident to the extent that the incident demands (Internal Notification Sequence and Internal Notification References (telephone list) are provided in Figures 2.1 and 2.2 respectively). In no event shall notification be delayed because the immediate supervisor is inaccessible. Authorization is given to bypass management levels if necessary to provide immediate notification to upper management. The Company Spill Management Team will consist of members of the Regional Response Team, as well as contract personnel as the situation demands. The typical internal notification responsibilities for each person potentially involved in the initial response are as follows:

First Key Pipelines, LTD. Person Notified/On-Scene

☐ Immediately notify the **Qualified Individual (QI)**. (See Figure 2.2).

Qualified Individual

☐ Notify **Alternate Qualified Individual**.

Activation of Company Response Teams and Oil Spill Response Organizations (OSROs) will be discussed and decided upon by the On-Scene Incident Commander and the **QI**. Generally, the **QI** will activate the OSRO(s) and the On-Scene Incident Commander will activate Company Response Teams.

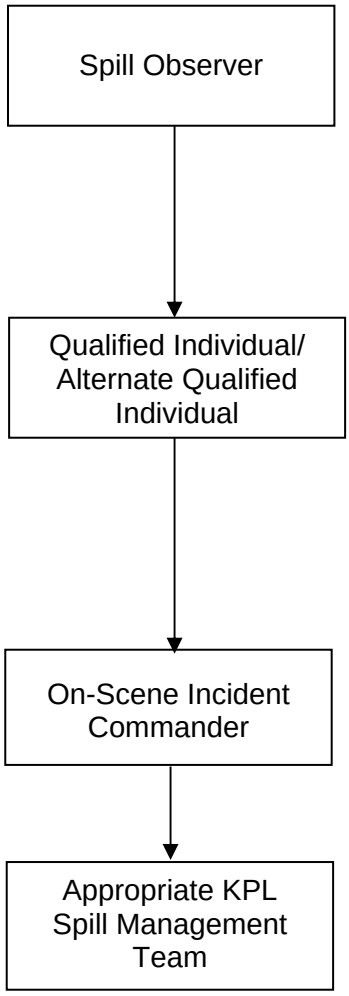
If the spill appears likely to impact other stakeholders such as neighbors, adjacent businesses and downstream activities (parks, marinas, other public or private facilities), the potential effects will also be discussed. Generally, the notifications of potentially impacted stakeholders will be made by the On-Scene Incident Commander or by local emergency agencies (police, fire departments, etc.).

Additional internal notifications shall be made in accordance with Company policy, as rehearsed during spill drills. The internal notification numbers are listed in Figure 2.2.

NOTE: Any media requests for information should be referred to the Public Relations Officer.

FIGURE 2.1

Internal Notifications



Note: Many of the internal and external notifications and initial response actions should occur simultaneously.

FIGURE 2.2

OIL SPILL NOTIFICATION REFERENCES
AMARILLO PIPELINE SYSTEM

GENERAL FACILITY			
FACILITY AREA	**ADDRESS**	**OFFICE**	**FAX NUMBER**
Amarillo	Along the Burlington Northern Santa Fe Railroad in southeast Amarillo		

INTERNAL NOTIFICATIONS - REGIONAL RESPONSE TEAM					
POSITION / TITLE	**NAME**	**LOCATION**	**OFFICE**	**HOME**	**OTHER**
Qualified Individual (QI) Pipeline Operator	Justin Kehoe	Fort Worth, TX	(817) 718-3119	(b) (6)	(817) 718-3119 (MBL) (24 Hour)
Alternate Qualified Individual/AQI Pipeline Operator	Elizabeth Kehoe	Forth Worth, TX	(817) 907-0804		(817) 907-0804 (MBL) (24 Hour)

SPILL RESPONSE OPERATING TEAM (SROT)				
COMPANY	**ADDRESS**	**24-HOUR PHONE NUMBER**	**PERSON NOTIFIED**	**TIME OF CALL**
Witt O'Brien's	**Primary Command Center:** 2000 Old Spanish Trail Suite 210 Slidell, LA 70458	(985) 781-0804 (24 Hr Command Center) (985) 781-0580 Fax		
	Alternate Command Center: 818 Town & Country Blvd. Suite 200 Houston, TX 77024	(281) 320-9796 OFC (281) 320-9700 Fax		

NOTE: All of the personnel listed above are trained as detailed in Section 4.6 of this Plan.

FIGURE 2.2

OIL SPILL NOTIFICATION REFERENCES
AMARILLO PIPELINE SYSTEM (Cont'd)

SMT MEMBERS			
NAME	**EMAIL**	**OFFICE**	**MOBILE**
Incident Commander			
Ed Stanton	estanton@wittobriens.com	(985) 781-0804	(985) 285-5508
Bud Kline	ckline@wittobriens.com	(985) 781-0804	(985) 960-0585
Ed Turner	eturner@wittobriens.com	(985) 781-0804	(985) 960-0127
Paul Fredrick	pfrederick@wittobriens.com	(985) 781-0804	(985) 960-3843
Aaron Holton	aholton@wittobriens.com	(985) 781-0804	(985) 290-6634
Gil Berkins	gberkins@wittobriens.com	(985) 781-0804	(985) 285-8646
Safety Officer			
Aaron Holton	aholton@wittobriens.com	(985) 781-0804	(985) 290-6634
Gil Berkins	gberkins@wittobriens.com	(985) 781-0804	(985) 285-8646
Bud Kline	ckline@wittobriens.com	(985) 781-0804	(985) 960-0585
Trent Sehlinger	trentsehlinger@hotmail.com	(985) 781-0804	(504) 382-3503
Information Officer			
Tim O'Leary	toleary@wittobriens.com	(281) 379-7173	(281) 352-7740
Liaison Officer			
TBD			
Operations Section Chief			
Ed Turner	eturner@wittobriens.com	(985) 781-0804	(985) 960-0127
Bud Kline	ckline@wittobriens.com	(985) 781-0804	(985) 960-0585
Gil Berkins	gberkins@wittobriens.com	(985) 781-0804	(985) 285-8646
Paul Fredrick	pfrederick@wittobriens.com	(985) 781-0804	(985) 960-3843
Aaron Holton	aholton@wittobriens.com	(985) 781-0804	(985) 290-6634
Jason Bergeron	Jbergeron@wittobriens.com	(281) 414-7742	(281) 414-7742
Planning Section Chief			
Bud Kline	ckline@wittobriens.com	(985) 781-0804	(985) 960-0585
Ed Turner	eturner@wittobriens.com	(985) 781-0804	(985) 960-0127
Paul Fredrick	pfrederick@wittobriens.com	(985) 781-0804	(985) 960-3843
Gil Berkins	gberkins@wittobriens.com	(985) 781-0804	(985) 285-8646
Aaron Holton	aholton@wittobriens.com	(985) 781-0804	(985) 290-6634
Jason Bergeron	Jbergeron@wittobriens.com	(281) 414-7742	(281) 414-7742
Logistics Section Chief			
Ed Turner	eturner@wittobriens.com	(985) 781-0804	(985) 960-0127
Aaron Holton	aholton@wittobriens.com	(985) 781-0804	(985) 290-6634
Gil Berkins	gberkins@wittobriens.com	(985) 781-0804	(985) 285-8646
Paul Fredrick	pfrederick@wittobriens.com	(985) 781-0804	(985) 960-3843
Jason Bergeron	Jbergeron@wittobriens.com	(281) 414-7742	(281) 414-7742

FIGURE 2.2

OIL SPILL NOTIFICATION REFERENCES
AMARILLO PIPELINE SYSTEM (Cont'd)

SMT MEMBERS (Cont'd)			
NAME	**EMAIL**	**OFFICE**	**MOBILE**
Finance Section Chief			
Keith Towler	ktowler@wittobriens.com	(985) 781-0804	(985) 502-0030
Don Costanzo	dcostanzo@wittobriens.com	(281) 320-9796	(713) 503-6367
Source Control Section Chief			
TBD			

2.2 EXTERNAL NOTIFICATION

The external notifications should be made in accordance with federal, state, and local regulations for all reportable discharges. The "Key Pipelines, LTD., Spill Telephonic Notice – Notification Form" (Figure 2.3), should be used to facilitate documentation and data retrieval for these notifications. The **Qualified Individual (QI)** shall, depending upon the specifics of the release, decide who shall make subsequent notifications. Generally, the **QI** will handle the local, state, and federal notifications, as necessary (LEPC, fire department, police, etc.). Telephone reference is provided in Figure 2.5 and the typical state reporting flowcharts are demonstrated in Figure 2.4.

Required Notifications

☐ **Response Resources**

Immediately for all spills that exceed local response capabilities.
Figure 5.1 details the non-Company response resources with their respective response times and Figure 2.5 details the non-Company response resource phone references for 24 hour contact.

☐ **National Response Center (NRC)**

Verbal
Immediately for all spills that impact or threaten navigable water.

(800) 424-8802 (24 hour)
(202) 267-2675 (Alternate)

Written
Only as directed by Federal On-Scene Coordinator.

☐ **Railroad Commission of Texas**

Verbal
Immediately for all spills which enter or threaten to enter waters of the state. Note: waters of the state include surface and underground water.

(512) 463-6788 (24 hr)

Written
As requested by the agency.

☐ **State of Texas Spill Reporting Hotline (SERC)**

Verbal
Immediately for all spills which exceed 25 gallons of refined product or 5 barrels of crude oil.

(800) 832-8224 (24 hr)

Written
As requested by the agency.

2.2 EXTERNAL NOTIFICATION (Cont'd)

Required Notifications (Cont'd)

☐ **Office of the State Oil and Gas Supervisor**

Verbal
Immediately for all oil or hazardous substance spills that enter or threaten to enter waters of the State.

(806) 665-1653 (Pampa, TX)

Written
Within 15 days of the spill or discharge.

☐ **Local Emergency Planning Committee (LEPC)**

Verbal
For any spill which escapes the boundary of the Facility.

(806) 378-3004 Potter County

Written
As requested by the Agency.

Other Notifications

☐ **Occupational Safety and Health Administration (OSHA)**

Immediately for incidents involving three (3) or more hospitalizations or one (1) or more deaths.

☐ **U.S. Environmental Protection Agency (EPA)**

Immediately for all spills that impact or threaten navigable water or adjoining shoreline. Notification to the EPA is typically accomplished by the call to the NRC.

☐ **Local Emergency Services**

Immediately for all Police, Fire, and Medical Emergencies

Dial 911

2.2 EXTERNAL NOTIFICATION (Cont'd)

Other Notifications (Cont'd)

☐ **Wildlife Rehabilitation Resources**

Tri-State Bird Rescue (Newark, DE)

(302) 737-9543

International Bird Rescue Center (Fairfield, CA)

(707) 207-0380

☐ **Neighbors**

Directly or with assistance from local police and fire agencies, inform all adjacent businesses and private citizens that might be immediately impacted.

SPILL REPORTING GUIDELINES

- Never include information which has **not been verified.**
- **Never speculate** as to the cause of an incident or make any acknowledgment of liability.
- **DOCUMENT:**
  - ☐ Agency notified
  - ☐ Time agency notified
  - ☐ Person notified
  - ☐ Content of message given
- **DO NOT DELAY** reporting due to incomplete information.

FIGURE 2.3
NOTIFICATION DATA SHEET

NOTIFICATION DATA SHEET

Date: ***Time:***

INCIDENT DESCRIPTION

Reporter's Full Name: ***Position:***
Day Phone Number: ***Evening Phone Number:***
Company: Key Pipelines, LTD. ***Organization Type:***
Facility Address: Amarillo Pipeline System (Along Burlington Northern Santa Fe Railroad) ***Owner's Address:*** Key Pipelines, LTD. 6109 Comstock Circle Keller, TX 76244

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Spill Location (if not at Facility):
Responsible Party's Name ***Phone Number:***
Responsible Party's Address:
Source and/or cause of discharge (Description):

Nearest City: Amarillo ***Distance from City:*** ***Unit of Measure:***
County: Potter ***State:*** TX ***Zip code:***
Section: ***Township:*** ***Range:*** ***Borough:***
Distance from City: ***Direction from City:***
Container Type: ***Container Storage Capacity:***
Facility Oil Storage Capacity: ***Unit of Measure:***
Were Materials Discharged? ***(Y/N) Confidential?*** ***(Y/N) Material:***

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): ***Number Evacuated:***
Damage in Dollars (approximate):
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

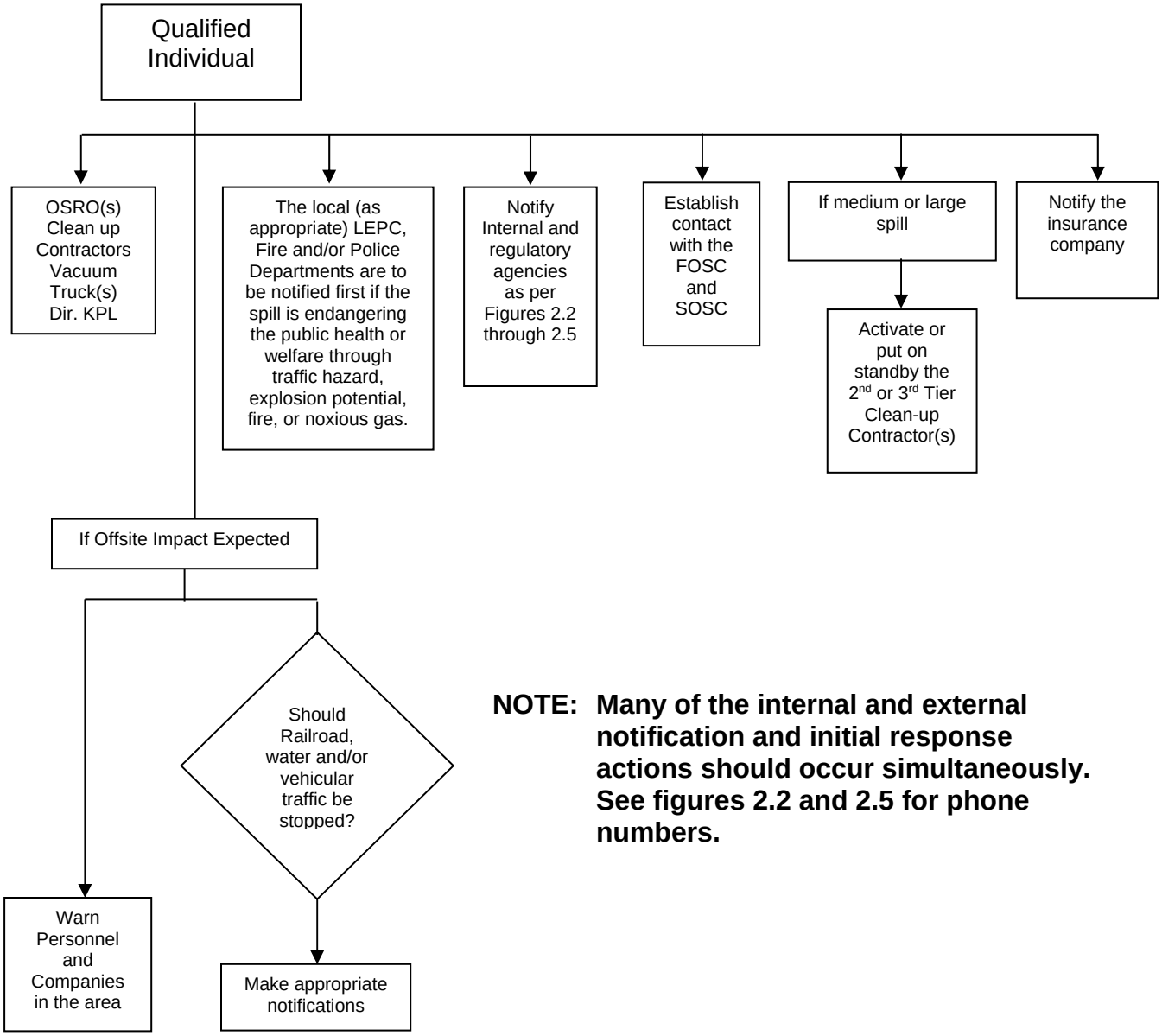
Any information about the incident not recorded elsewhere in this report:

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 TELEPHONIC NOTIFICATIONS - OVERVIEW



NOTE: Many of the internal and external notification and initial response actions should occur simultaneously. See figures 2.2 and 2.5 for phone numbers.

FIGURE 2.5

OIL SPILL NOTIFICATION REFERENCES
AMARILLO PIPELINE SYSTEM

REQUIRED EXTERNAL NOTIFICATIONS			
AGENCY	**LOCATION**	**OFFICE**	**ALTERNATE**
National Response Center (NRC)	Washington, D.C.	(800) 424-8802	(202) 267-2675
Potter County / Amarillo / Potter/Randall Department of Emergency Management	Amarillo, TX	(806) 378-3004	

REGULATORY NOTIFICATIONS - ASSISTANCE/ADVISORY (outside resources)			
AGENCY	**LOCATION**	**OFFICE**	**ALTERNATE**
OSHA (For Reportable Injury or Death)	Washington, D.C.	(800) 321-6742	
EPA Regional Office – Region VI	Dallas, TX	(866) 372-7745	(214) 665-6444
U.S. Fish and Wildlife Service (USFWS) Southwest Region	Albuquerque, NM	(817) 277-1100	
National Weather Service (Recorded Forecast)	Amarillo, TX	(806) 354-2278	
Texas Game and Fish Department	Austin, TX	(512) 389-4800	(800) 792-1112
City of Amarillo	Amarillo, TX	(806) 378-3000	
Texas Department of State Health	Austin, TX	(512)-458-7111	
City of Amarillo Department of Environmental Health	Amarillo, TX	(806) 378-9472	
Amarillo Public Health	Amarillo, TX	(806) 351-7220	
City of Amarillo Fire Department	Amarillo, TX	(806) 378-9360	
Potter County Sheriff	Amarillo, TX	(806) 379-2900	
Amarillo Police Department	Amarillo, TX	(806) 378-3038	
Radio – KZRK / KPUR	Amarillo, TX	(806) 342-5200	
KDJW	Amarillo, TX	(806) 331-3153	
KRGN	Amarillo, TX	(806) 376-5746	
KACV	Amarillo, TX	(806) 371-5222	
KXGL / KAEZ	Amarillo, TX	(806) 351-2345	
Tri State Bird Rescue	Newark, DE	(302) 737-9543	
International Bird Rescue Center	Berkeley, CA	(510) 841-9086	

OIL SPILL RESPONSE ORGANIZATION (OSRO)			
AGENCY	**LOCATION**	**OFFICE**	**ALTERNATE**
Conestoga Rovers & Associates	Dallas, TX	(866) 812-9565 (24 Hr.)	

LOCAL EMERGENCY SERVICES			
SERVICE	**LOCATION**	**OFFICE**	**ALTERNATE**
Triumph Hospital	Amarillo, TX	(806) 351-1600	
Physicians Surgical Hospital	Amarillo, TX	(806) 354-6100	
Texas Tech Medical Center	Amarillo, TX	(806) 356-5360	
Panhandle Emergency Medical Ambulance Service	Amarillo, TX	(806) 358-8511	
Amarillo Medical Service Ambulance Service	Amarillo, TX	(806) 358-7111	

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 Spill Management 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.

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

The person functioning as **Incident Commander** 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 the Spill Management Team 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, Key Pipelines, LTD. 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. In compliance with 49 CFR 195.402(d), these procedures are defined in the Key Pipelines, LTD., Operations and Maintenance Manual, Section 5.

3.1 INITIAL RESPONSE ACTIONS (Cont'd)

FIRST COMPANY PERSON NOTIFIED/ON SCENE

- _____ Follow the appropriate ***"Specific Incident Response Checklist"*** in Figure 3.1 and ***"Product Specific Response Considerations"*** in Figure 3.2.
- _____ Notify **Company Management** of the incident.
- _____ Utilize local emergency services as necessary (police, fire, medical).
- _____ Notify Pipeline Control Center, as appropriate.

COMPANY MANAGEMENT

- _____ **Evaluate the Severity**, Potential Impact, Safety Concerns, and Response Requirements based on the initial data provided by the first person on scene.
- _____ Assume the role of **Incident Commander**.
- _____ **Confirm safety** aspects at site, including need for personal protective equipment, sources of ignition, and potential need for evacuation.
- _____ Activate the **Spill Management Team and primary response contractors**, as the situation demands.
- _____ Coordinate/perform **activation of additional spill response contractors,** as the situation demands (telephone reference is provided in Figure 2.5).
- _____ Perform notifications as set out in Figure 2.1.
- _____ Coordinate/perform **regulatory agency notification,** as the situation demands (notification procedures and telephone references are provided in Figure 2.5).
- _____ Proceed to spill site and **coordinate response and clean-up operations.**
- _____ Direct containment, dispersion, and/or clean-up operations in accordance with the Product Specific Response Considerations provided in Figures 3.2.

SPILL MANAGEMENT TEAM

- _____ Assigned personnel will immediately respond to a discharge from the Pipeline, as the situation demands.
- _____ Perform response/clean-up operations as directed or coordinated by the Incident Commander.
- _____ Assist as directed at the spill site.

INITIAL RESPONSE

FIGURE 3.1

SPECIFIC INCIDENT RESPONSE CHECKLIST

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

INITIAL RESPONSE

- _____ Take appropriate personal protective measures.
  - Leave the area immediately on foot.
  - Use the most direct evacuation route then proceed upwind/uphill away from area.
- _____ Call for emergency assistance and control center to activate Company Response.
- _____ Restrict access to the spill site and adjacent area except by emergency personnel. Take any other steps necessary to minimize any threat to personal, public, and safety.
- _____ Shut down Pipeline System and Isolate emergency site from pipeline system.
  - Verify that Pipeline Control has shutdown transfer through the system
  - Close, tag, and lock upstream and downstream block valves if removed from potentially hazardous area.
  - Attempt to drain line section, as the situation permits.
- _____Contact appropriate authorities to isolate known public water supply intakes from emergency if necessary.
- _____ If possible, verify the type of product and quantity released (Material Safety Data Sheets are retained separately).
- _____ Use testing and sampling equipment to determine potential safety hazards, as the situation demands.
- _____ Take necessary fire response actions.
- _____ Eliminate possible sources of ignition in the near vicinity of the spill.
- _____ Notify Company Management of the Incident.

FIGURE 3.1 (Cont'd)

SPECIFIC INCIDENT RESPONSE CHECKLIST

LINE BREAK OR LEAK, SPECIFIC RESPONSE

- _____ Initiate shut down of pumping operations.
- _____ Close upstream and downstream block valves.
- _____ Utilize Combustible Gas Indicator, O_2 meter, proper colormetric indicator and other air sampling measurements to assure that areas are safe to enter for continued response operations.
- _____ Mitigate spreading of the product, as the situation demands. Potential containment strategies include:
  - Earthen dike/berm
  - Ditching
  - Spreading sorbent material over the spill
- _____ Prevent the spill from entering the waterways, sewer, etc. to the greatest extent possible.
- _____ Determine the direction and expected duration of spill movement. Refer to the maps in Section 6.0.
- _____ Drain the line section, as the situation demands.
- _____ Make all necessary repairs.
- _____ Return the line to service, when repairs are completed and test reports approved.
- _____ Clean up spilled product to eliminate any possible environmental problems. Be alert for underground cables.
- _____ If the spill escapes the immediate area, review the location of socio-economic and environmentally sensitive areas identified in Section 6.0. Determine which of these may be threatened by the spill and direct the response operation to these locations. Initiate protection and recovery actions.
- _____ Inform local operators such as utilities, telephone company, railway.
- _____ Complete follow-up and written reporting, as the situation demands.

FIGURE 3.1 (Cont'd)

SPECIFIC INCIDENT RESPONSE CHECKLIST

EXPLOSIONS AND/OR FIRE, SPECIFIC RESPONSE

Individual Discovering the Fire - (All Employees)

- _____ Call the Fire Department (911). Be certain to clearly state your name, company, location and the type and extent of the emergency. Stay on the phone until instructed to hang up.
- _____ Sound the nearest fire alarm.
- _____ Initiate shut down of pumping operations.
- _____ Notify the Company Management.
- _____ Return to the scene of the fire and, if practical, utilize applicable firefighting capability after conducting safety assessment of the area.
- _____ In the event the fire is too large for an individual to fight alone, the individual sounding the alarm or making the phone call should stand by at a safe distance to direct the fire department to the scene of the fire and keep personnel and vehicles from entering the danger area.
- _____ Evacuate area, as the situation demands.

FINAL RESPONSE

- _____ Clean up product spill to eliminate any possible environmental problems.
- _____ Make all necessary repairs.
- _____ Return the line/tank to service when repairs are complete.
- _____ Complete follow-up and written reporting, as the situation demands.

VAPOR CLOUD

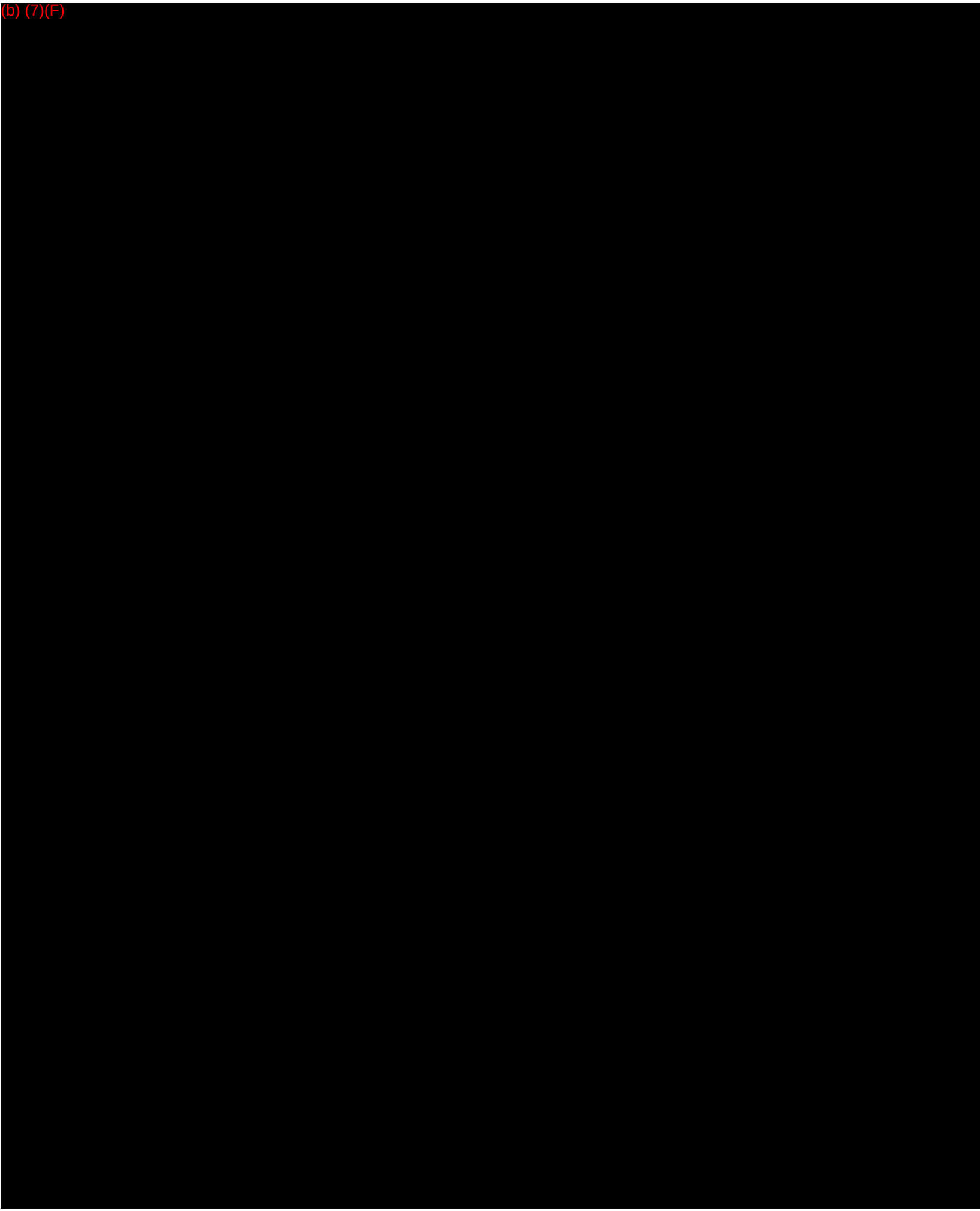
FIGURE 3.1 (Cont'd)

SPECIFIC INCIDENT RESPONSE CHECKLIST

VAPOR CLOUD (from a massive spill, line rupture, etc.), SPECIFIC RESPONSE

- _____ The person who discovers the vapor cloud will sound the alarm and notify the supervisor on duty and vacate the area.
- _____ **Remember: the only proper action in the presence of a vapor cloud is to get away from it. Do not shut off electrical equipment.**
- _____ Vapor may travel to source of ignition and cause "flash back" fire.
- ____ Vapor explosion hazard is confined spaces (indoor, outdoor, or sewer).
- _____ All personnel will report to the evacuation muster point for roll call and further instructions.
- _____ After all personnel have been accounted for, Company Management will initiate the following actions as deemed necessary:
    1. Shut down pipeline.
    2. Evacuation of adjacent property.
    3. Only the fire department will be permitted to enter the area.
- _____ Contact the appropriate agencies and potentially affected neighbors (refer to Figure 2.5).

(b) (7)(F)



(b) (7)(F)

FIGURE 3.1 (Cont'd)

SPECIFIC INCIDENT RESPONSE CHECKLIST

NATURAL DISASTER (Tornado and Severe Storms), SPECIFIC RESPONSE

Although many disasters cannot be prevented or predicted, preparation can significantly reduce losses. In the event of a severe weather condition or a natural disaster, the most senior member present will be the emergency coordinator.

- _____ **Be Aware of Changing Weather Conditions**

  1. Tornado watch - conditions are right for the formation of a tornado.
  2. Tornado warning - a tornado has been sighted but is not in the area at this time.
  3. Tornado alert - a tornado has been sighted in the immediate area - take cover immediately.

- _____ **If Severe Weather Conditions Threaten**

  1. Sound fire alarm.
  2. Alert terminal / pump station personnel of condition.
  3. If time permits, all personnel should assemble at the terminal / pump station warehouse or in an inside room in the office for shelter.
  4. If time does not permit, seek shelter in low level area away from glass.
  5. Make certain terminal / pump station personnel are aware of the condition.
  6. Stay in shelter until "**all clear**" has been issued.

- _____ **Immediately After the Storm**

  1. Account for all personnel.
  2. Survey for damages to terminal / pump station property.
  3. Initiate team for any repairs if needed (i.e. high tank alarms, lighting, etc.).
  4. Refer to this Plan for additional response guidance regarding fires, spills, etc., as needed.

FIGURE 3.1 (Cont'd)

SPECIFIC INCIDENT RESPONSE CHECKLIST

MEDICAL EMERGENCY, SPECIFIC RESPONSE

- _____ DO NOT ENDANGER YOURSELF ATTEMPTING A RESCUE. Call 911 or rescue squad instead.
- _____ If victim can be reached safely and can be moved, move them to fresh air.
- _____ 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 relieved by other CPR trained personnel 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. Refer to Company policy for further guidance.
- _____ In case of contact with released material:
  - Immediately flush eyes with running water for at least 15 minutes.
  - Wash skin with soap and water.
  - Remove and isolate contaminated clothing and shoes at the site.

FIGURE 3.2

PRODUCT SPECIFIC RESPONSE CONSIDERATIONS for DIESEL FUEL SPILLS

Flash Point Range: Above 100°F

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

Suggested physical response actions for these products are detailed below. It is important to note however, that each situation is unique and must be individually responded to. These procedures are considerations only. Actual circumstances may dictate that the procedures followed may differ somewhat from those listed below. ***The following are intended for guideline purposes only.***

These materials are not extremely flammable and the preferred response is containment and mechanical recovery.

___ Identify source and stop discharge if possible.

___ Obtain explosimeter and other air sampling measurements to assure that areas are safe to enter for continued response operations.

___ Deploy spill response equipment and personnel in an attempt to contain and recover as much product as possible.

___ Advise people in the area of any potential threat and/or initiate evacuation. Inform local operators such as utilities, telephone company, and railway as the situation demands.

___ Recover the product and affected soil. Be alert for underground cables and water bearing formations. Remember that product may penetrate deeper if impermeable natural layers are disturbed.

___ Determine the direction and expected duration of spill movement. Refer to the maps provided in Figure 6.1 for an overview of the area.

___ Request local authorities to establish traffic control in the area, as the situation demands.

___ Review the location of socio-economic and environmentally sensitive areas identified in Section 6.0. Determine which of these may be threatened by the spill and direct the response operation to these locations. Initiate protection and recovery actions.

3.2 STABILIZATION OF EMERGENCY SITE

Once the emergency phase of the response has been initiated and the response operations stabilized, the continuing response operations will be prioritized in such a way as to minimize the release volume and the extent of the impacted area while maintaining adequate responder and public safety. Repairs to the pipeline system that primarily serve to isolate the release source and prevent release of additional product shall take precedence over repairs which primarily serve to restore pipeline service. The above recommended practice is not intended to restrict repair activities which can accomplish both goals simultaneously.

3.2.1 Initial Entry Into Potentially Hazardous Areas

Consult the Emergency Response Site Safety and Health Plan (Appendix K) as needed.

- Using Level B Personal Protective Equipment and the Buddy System, have properly trained employees conduct an air monitoring survey of potentially hazardous areas for:
  - Oxygen levels. No personnel shall enter a confined space with Oxygen levels below 19.5% or above 23.5% unless a confined space entry permit has been issued.
  - Explosive vapors. NO PERSONNEL SHALL ENTER ANY AREA WITH EXPLOSIVE VAPORS OVER 10% LEL. No personnel shall enter a confined space area with explosive vapors over 10% LEL unless the activity has been approved by the On-Scene Commander.
  - Benzene and total hydrocarbon levels (Note: in areas where oxygen levels are within acceptable levels, this portion of the initial entry survey may be conducted using Level C Personal Protective Equipment).
- Establish "Warm" Zone(s) by marking the outer perimeter (include all areas above 10% LEL) with yellow safety ribbon, signs or barricades whenever practical.
- Establish "Hot" Zone(s), if needed, within the Warm Zone based upon the results of the initial air monitoring survey. Isolate Hot Zones to the extent possible with red safety ribbon, signs or barricades
- Install portable windsocks or streamers to assist in monitoring for possible changes in wind direction.
- Establish "Cold" Zone(s) for site security. Control access with blue safety ribbon, signs or barricades if useful.
- Assign Safety Coordinator overall responsibility for controlling Warm and Hot Zone access. Request assistance as needed from local responders for controlling Cold Zone access. All responders except essential trained personnel should remain outside Hot and Warm Zones.

3.2 STABILIZATION OF EMERGENCY SITE (Cont'd)

3.2.1 Initial Entry Into Potentially Hazardous Areas (Cont'd)

- Establish Forward Command Center upwind and upgrade of Warm Zone(s).
- If evacuation has occurred, make arrangements for transportation and accommodations of evacuees as needed.

3.2.2 Containment Activities

- Discuss with work crews before entering Warm or Hot Zones:
  - Work plan
  - Emergency Response Site Safety and Health Plan
  - Evacuation signals and routes
  - Fire safety precautions
  - Other site safety considerations
- Place air driven blowers on the upwind side of Hot Zones to purge explosive vapors and contaminated air from work site, if necessary, before entering without SCBA protection. Refer to Vapor Control Procedures as needed for further precautionary activities (Section 3.7).
- Contain product.
- Allow only trained and permitted personnel and needed equipment to enter and work in the designated Hot, Warm and Cold Zones
- Assign relief personnel to the emergency site as needed.

3.3 ISOLATION OF RELEASE SOURCE POINT

3.3.1 Excavation

- Contact "one call" center. If one call center cannot be reached, directly notify any known utility or foreign pipeline owners so they can locate their underground facilities.
- Periodically monitor air at appropriate intervals to ensure safety of personnel working in the immediate vicinity of the excavation site. Refer to Vapor Control Procedure below as needed for further precautionary activities (Section 3.7).
- Man fire extinguishers upwind and around the sides of the active work area.
- Excavate with caution to prevent possible damage to unknown and unidentified underground facilities.

3.3 ISOLATION OF RELEASE SOURCE POINT (Cont'd)

3.3.1 Excavation (Cont'd)

- Place excavated spoils that may contain hydrocarbon liquids or vapors downwind and handle in a manner that prohibits migration of vapors back into the work area if possible.
- Place spoils on plastic sheeting to prevent additional migration of hydrocarbons into the ground. Also, cover soil with plastic sheeting to prevent rainfall from washing released product away.
- Slope or shore trench in accordance with current Company standards.
- If repair work must be performed within a confined space, all work must be performed in accordance with Corporate Procedures.
- Whenever safely possible, make temporary repairs (without welding or torch cutting) to stop the release of product. Permanent repairs requiring welding and cutting shall be delayed until containment (free product cleanup and vapor dissipation) has been completed in the immediate surrounding area.
- Use mechanical pipe cutters. Use bonding cables. Refer to Vapor Control Procedure for further precautionary activities (Section 3.7).
- Remove free product and saturated soil from the source point excavation and adjacent areas prior to welding. Spread 6 to 12 inches of uncontaminated soil on bottom of excavation. Do not weld if atmosphere exceeds 10% LEL.

3.4 POST-STABILIZATION ACTIVITIES

3.4.1 Demobilization of Response Team

Once the Response Team has gained control of the incident, there is typically a strong incentive to remove personnel from the response organization as quickly as possible in order to return them to their regular duties. This action can have the unintended consequence of undermining the Response Team's ability to bring the incident to its most rapid and successful conclusion if not conducted in a coordinated fashion. As activities wind down in some functions of the response organization, the response can often be further supported by reassigning personnel to other functions within the ICS organization until the entire response is adequately completed. It is the responsibility of the On-Scene Commander to assure that Response Team demobilization occurs at a pace that best supports the successful conclusion of all aspects of the response. This is best achieved by gaining a consensus of the various Incident Command System Section Chiefs prior to the release of personnel from their response duties.

3.4 POST-STABILIZATION ACTIVITIES (Cont'd)

3.4.2 Clean-up Activities

- Complete the recovery of free product and dispose of contaminated soil and absorbent materials in an environmentally acceptable and safe manner (consult with the Environmental Situation Chief).
- Ensure that proper decontamination procedures are adhered to during release recovery as needed by site personnel.

3.4.3 Restoration of Pipeline Service

- Obtain approval of completed repairs from the appropriate Supervisor for which the incident occurred.
- Advise Control Center of completed repairs and need to prepare for start up.
- Refer to Operations Manual for required management approvals prior to start-up. Obtain needed approvals.
- Open and lock line block valves. Remove tags.
- Start up at reduced rate.
- Vent air from the pipeline, if necessary, into a tank truck.
- Check all repairs during pipeline start-up to ensure they are satisfactory.
- Turn on rectifiers.
- Complete onsite leak documentation and required inspection reports prior to backfilling excavations.
- Backfill excavations with uncontaminated soil.

3.5 SITE DISCONTINUATION

- Notify all appropriate parties of intention to discontinue emergency response activities.
- Continue long-term clean-up and site remediation efforts, if necessary, as part of normal maintenance activities.

3.6 RESCUE

3.6.1 General

If a Pipeline emergency occurs involving injuries, it is possible that rescues may become necessary. Decisions concerning rescue require careful judgment on the part of the potential rescuer. There is no benefit gained from a rescue attempt that results in additional injuries to the rescued or to the rescuers. There can be several reasons not to attempt a rescue:

- Explosive atmosphere levels exceeding 20%.
- Confined space / unknown airborne hazards.
- Proper personal protective equipment unavailable for site hazards.
- Not enough time to complete the rescue without endangering any lives.
- Inadequate number of trained personnel available.
- Lack of familiarity with the safety requirements to affect rescue at a hazardous site.

Ultimately, rescue decisions must be based on individual judgment. This judgment should never unduly endanger additional lives. Before any rescue attempt is made, the conditions that caused a rescue to become necessary must be identified and corrected or controlled. Rescues should not be attempted unless the situation has been carefully evaluated and potential rescuer feels quite certain the rescue can be safely attempted.

3.6.2 Local Responders

Time permitting, it is always preferable to have local responders (fire, EMS, etc.) perform rescue work. These personnel will almost always be the best option in terms of adequate training and proper equipment to perform rescue work. Time permitted, this option should always be exercised. The appropriate local responders should always be summoned to incidents involving injuries, as well as notified of incidents in progress, where the threat to public safety is unusually high.

3.6.3 Further Considerations

If a rescue becomes necessary, potential rescuers must always remember to be prepared in case the situation deteriorates. If time or the number of victims prevent potential rescuers from moving them to an area of complete safety, it may be wise to at least move them to a less hazardous area. Those victims who are easiest to rescue should be removed first, even if there are other victims who are injured more severely or who are exposed to a greater threat. This is a general rule observed by fire departments and other response agencies. The safety and well being of rescue personnel is the highest concern.

3.7 VAPOR CONTROL PROCEDURES

Caution must be utilized at all times to minimize the possibility of unnecessary creation or accidental ignition of vapors during emergencies as well as during routine maintenance of facilities. During routine maintenance activities involving potential fuel sources (liquids and vapors) and/or heat sources (flame and sparks), engineering controls and other safety devices can, in most cases, be utilized to minimize the likelihood of accidental ignition or exposure.

It is always good practice to pre-select an evacuation route for each work location where the potential exists for petroleum products or vapors to collect and/or be accidentally ignited. This includes discussing evacuation plans with all personnel planning to enter the area and a procedure for accounting for all personnel after evacuation occurs.

3.7.1 Spill Avoidance

An important first step in reducing the possibility of accidental ignition is in avoidance of spills (uncontrolled releases of petroleum products). This includes additional or unnecessary spills at a pipeline emergency site. Good practices that will help avoid spills include:

All Activities

- Follow lockout/tagout and other appropriate procedures for isolating work area from the system prior to commencing work.
- Place adequately sized containers under pipe openings to catch product that may seep or drip from openings in spite of the prior precautions.
- Care must be taken to avoid spilling products. Do not handle products in leaking containers or use damaged hoses or fittings.
- Tank filling, product transfer, and other operations that involve exposure of product to air shall be carried out away from all possible ignition sources.
- Tank dike drain valves must be kept closed except when water is actually being drained from the dike area.
- If products are spilled, care must be taken to avoid physical contact with the spilled material. Employees must use their own judgment to determine the appropriate response to a spill, with this judgment always erring on the side of prudence and safety.
- Based on the size and volatility of a spill (and potential for explosive vapors to arise), employees must determine whether evacuation is necessary and/or whether the assistance of the Spill Management Team or local responders (fire & police) are needed. Spilled products must be contained in the immediate area and prevented from entering storm drains and other underground intakes to the extent that safety considerations will allow.

3.7 VAPOR CONTROL PROCEDURES (Cont'd)

Maintenance and Emergency Response

- Estimate volumes conservatively when planning maintenance involving "drain-up" of petroleum products. An adequate number of tank trucks or other suitable containers should be arranged for in advance to collect all quantities of product anticipated to be removed from the system during maintenance.

- Always drain, displace or pump as much product from the line or appurtenance as possible before unbolting, cutting, or removing a section of pipe or equipment.

- After removal of product, close all valves that will prevent refilling of the drained section. Seal off any line where seepage occurs using spheres, plugs, or other approved sealing methods or devices. Proper lockout/tagout practices should be followed to protect against the accidental opening of valves or start up of units.

3.7.2 Vapor Avoidance

A second important step in minimizing the possibility of accidental ignition is the prevention or minimization of explosive vapors. Good practices that will reduce or eliminate these vapors include:

All Activities

- Action shall be taken whenever possible to prevent products from being released into the atmosphere in the form of a spray or mist.

- Product-soaked materials such as rags or clothing shall be stored well away from possible ignition sources.

Maintenance and Emergency Response

- All work shall commence only after providing an adequate means of ventilation to disperse any vapors concentrated at levels above 10% LEL or remove them from areas with potential ignition sources. Never use an ordinary electric fan for ventilation purposes. Care shall be taken to minimize spark-producing activities (discussed later) in areas with vapor levels above 10% LEL. Petroleum products are heavier than air and will settle in any depression such as a trench or ditch and can migrate for long distances to areas of lower elevation.

- Material excavated from a release area should be stockpiled downwind of the work area and ventilated, as necessary.

- Petroleum products shall not be used for cleaning purposes (clothes, floors, paint brushes) nor for killing grass, weeds or insects.

- Product samples shall be stored in sample storage buildings.

3.7 VAPOR CONTROL PROCEDURES (Cont'd)

3.7.3 Vapor Detection

Under certain atmospheric conditions, a release of petroleum products will form a visible "vapor cloud" of misted product. All employees shall be made aware of the dangers of a vapor cloud situation. The only proper action in the presence of a vapor cloud is to get away from it and monitor the situation from a safe and prudent distance. Never enter a vapor cloud for any reason.

It is important to understand that unsafe atmospheric conditions can exist even when no visible vapor cloud is present. Thus, another vital step in minimizing the likelihood of an accidental ignition is the diligent use of explosive atmosphere detectors to detect explosive vapors seen or unseen.

Portable Vapor Detectors

Portable vapor detectors should be diligently used at all work sites where the potential exists for an uncontrolled release of petroleum products. Knowledge of the presence of explosive vapors is imperative in reducing the possibilities of accidental ignition. If an explosive atmosphere reading of 10% LEL (10% within a confined space) or greater is registered on a portable vapor detector, personnel are to evacuate the affected area until the vapors subside or can be otherwise dispersed.

3.7.4 Spark and Flame Avoidance

When working around petroleum products or the vapors they can generate, it is important to take care in avoiding the creation of sparks or open flames that may result in accidental ignition.

Good practices that will help avoid spark or flame include:

All Activities

- Proper and functional fire extinguishing equipment must be on hand when released products are encountered or products are to be handled in the open.
- Remove all potential ignition sources (operating vehicles, electrical power sources, gasoline-powered appliances, open flames, pilot lights, etc.) from a release area, provided they can be eliminated without endangering human life. Electrical switches or power cords in the hazardous area should not be parted or unplugged, as these activities can generate an unwanted spark.
- Open flames are forbidden in areas above 10% LEL.
- Smoking is forbidden; or permitted only in specific pre-designated areas.

3.7 VAPOR CONTROL PROCEDURES (Cont'd)

3.7.4 Spark and Flame Avoidance (Cont'd)

- Matches, cigarette lighters and torch lighters are not permitted in fenced areas or areas above 10% LEL.
- Always use spark-resistant tools and explosion-proof equipment where appropriate. To the maximum extent possible, avoid striking tools together and avoid striking rocks and stones with tools.
- Do not allow flash photography, video cameras or other spark-producing electronic devices to be used in a work area where explosive atmosphere conditions may exist.
- Sparks originating from static electricity discharge shall be avoided by:
  - Use bonding cables during the cutting, removal or replacement of pipe. Install the bonding cable across a section of pipe to be cut or removed. Leave the bonding cables in place until the pipe is rejoined. Turn off local cathodic protection rectifiers when a situation requires use of bonding cables.
  - For activities that involve removal and/or addition of product to the Pipeline system (such as drain-ups), metal containers and hose nozzles should be properly bonded to the vessels supplying and receiving the product.
  - Rags of silk, wool, rayon or synthetic fabrics that can build up a static charge shall not be used in or near areas where petroleum product vapors are present. Avoid wearing clothing made of such materials in hazardous areas, if possible.

Maintenance and Emergency Response

- Always approach a suspected uncontrolled release area from a higher elevation and/or upwind. Keep all nonessential vehicles and motorized equipment from the release site. Keep essential motorized equipment on the windward side and as far away as practical. Never attempt to start or drive a vehicle or other motorized equipment into or out of a vapor cloud.
- Take necessary steps (including enlisting the assistance of local law enforcement agencies if necessary) to warn and/or evacuate all persons in the release area and to stop all traffic (foot, motor and rail) through or into the release area. Arrange detours as is necessary. Unauthorized personnel should be kept out of the release area, if possible, until the situation can be stabilized.
- A flow of carbon dioxide or other inert gas, water, or good grade of cutting oil should be used be eliminate sparks when cutting pipe.

3.7 VAPOR CONTROL PROCEDURES (Cont'd)

3.7.4 Spark and Flame Avoidance (Cont'd)

Maintenance and Emergency Response (Cont'd)

- The following precautions should be taken when making emergency welding repairs to damaged facilities:
  - A safety meeting specific to the planned welding activities at hand shall be conducted with all personnel involved at the work being assigned specific duties and having a definite understanding of what to do in case of fire or accident.
  - Where possible, delay making permanent welding repairs to damaged facilities until vapors have had ample time to dissipate.
  - If possible, clear the area of all product, then cover soil and bottom of bell hole with product-free dirt.
  - Once a "bell-hole" is found to be gas-free by a portable vapor detector, the hole should be double-checked with a lighted torch prior to welding. This shall be done from the top of the hole prior to entry, and the person conducting the test shall not extend his/her body over the hole while holding the torch.
  - Monitoring of the area by a portable vapor detector shall be conducted while welding is in progress. If vapor levels of 10% LEL or higher are detected, welding shall cease until the area is properly ventilated to reduce these levels.
  - Care must be taken that welding sparks are prevented from causing fires.
  - Fire extinguishers shall be manned and readily available during welding operations.

Operations and Tank Cleaning

- Keep water bottoms at a minimum on a tank that is being filled.
- Never take a product sample, then pour it freely back into the gauge hatch or tank. Ropes made of nylon or other synthetic fiber shall not be used as rope for sample containers.
- Before using a hose and water to wash down a tank, attach a bonding cable to the tank and the hose nozzle.
- Tank gauge lines shall remain in contact with the edge or side of the gauging hatch at all times including raising and lowering.
- Care in general shall be taken around all tanks that contain or have recently contained petroleum products. Tanks shall not be entered by Company employees until they have been properly declared lead and gas-free.

3.8 EMERGENCY MEDICAL TREATMENT AND FIRST AID

The Company has arrangements for medical emergencies and first aid. Local ambulance services and hospitals will be utilized for the transportation and care of injured employees. This information can also be found on the bulletin boards at the various locations.

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.**
- 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 will request assistance from trained medical personnel.

3.9 DOCUMENTATION OF INITIAL RESPONSE ACTIONS

It is difficult, particularly during the first few minutes of an initial response operation, to think about the importance of documentation. A log should be maintained which documents the history of the events and communications that occur during the response.

When recording this information, it is important to remember that the log may become instrumental in legal proceedings, therefore:

- Record only facts; do not speculate.
- Do not criticize the efforts and / or methods of other people / agencies.
- Do not speculate on the cause of the spill.
- Do not skip lines between entries or make erasures. If an error is made, draw a line through it, add the correct entry above or below it, and initial the change.
- Record the recommendations, instructions, and actions taken by government / regulatory officials.
- Document conversations, (telephone or in person) with government / regulatory officials with date, time, and name/title of persons.
- **Request that government / regulatory officials document and sign their recommendations or orders (especially if Company personnel do not agree with the suggestions, instructions, or actions).**

4.0 RESPONSE TEAMS

4.1 INTRODUCTION

The Company utilizes the National Incident Management System (NIMS)-Incident Command System (ICS) (Figure 4.1) to manage emergency response activities. The NIMS-ICS is a management tool which is readily adaptable to very small incidents as well as those of considerable significance and will be implemented for all discharge incidents with staffing levels adjusted as required to meet the specific needs (size and severity) of the incident.

First response to a discharge originating from the Pipeline will be provided by the Local Response Team (Figure 4.2). **In the event that the response operation is beyond the capability of Local Response Team,** the Incident Commander will consult with Management to evaluate the severity of the situation and determine whether activation of the
Spill Management Team is necessary.

The Company has adapted the NIMS-ICS-based Spill Management Team to facilitate a rapid and efficient assessment of the situation and transition from reactive to proactive response operations. The activation, notification and roles and responsibilities of key Spill Management Team members are included within this Plan.

The goal of incident and crisis response operations is the restoration of normal operations while minimizing impacts to people, property, the environment, and the Company. To achieve this goal, response personnel must be able to move from a reactive to a proactive mode of operations by establishing and maintaining command and control over the situation. For incident response operations, this objective should be addressed by observing standard operating procedures that allow response personnel to rapidly and efficiently determine and communicate effectively about the incident and what is being done to address the incident.

During crisis operations, crisis managers should address this objective by analyzing the information generated by incident response personnel and determining the implications of the incident on the Company. The analysis should focus on human resource, financial, business, legal, and external affairs issues.

If an incident escalates to require significant NIMS-ICS staffing, then additional support resources may be activated. Corporate management may activate supplemental teams to travel to the site to evaluate the incident, report back and to provide staffing to the NIMS-ICS, if required. Additional support can be established at a Command Center to provide technical, logistical and operational support. Finally, a team of Corporate Management and staff can be formed to provide a focal point for communications and coordination. This group coordinates policies, procedures, and develops and selects appropriate strategies.

A detailed explanation of the NIMS-ICS and the roles and responsibilities for primary members of the Spill Management Team is provided in Appendix B.

4.2 QUALIFIED INDIVIDUAL

Vital duties of the Qualified Individual (QI) include:

- Activate internal alarms and hazard communication systems to notify all 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 (fire, police).
- 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.
- Coordinate rescue and response actions as previously arranged with all response personnel.
- Activate and engage in contracting with oil spill removal organizations.
- Use authority to immediately access Company funding to initiate clean-up activities.
- Direct clean-up activities until properly relieved of this responsibility.

4.3 LOCAL RESPONSE TEAM (TIER I AND II)

- The first person on scene will function as the Incident Commander and person-in-charge until relieved by an authorized supervisor.
- Once the Director of Key Pipelines, LTD. arrives on-scene, he will assume the position of Incident Commander (IC). Transfer of command will take place as more senior management respond to the incident.
- The number of positions/personnel required to staff the Local Response Team will depend on the size and complexity of the incident. The duties of each position may be performed by the IC directly or delegated as the situation demands. The IC is always responsible for directing the response activities and will assume the duties of all the primary positions until the duties can be delegated to other qualified personnel.
- A typical area Spill Management Team is detailed in Figure 4.2. Job descriptions are detailed in Appendix B for the primary Spill Management Team positions.

4.4 SPILL MANAGEMENT TEAM (TIER II AND III)

For spill response operations outside the capabilities of the Local Response Team, the QI/AQI and Incident Commander (IC) will determine the need for mobilization of the Spill Management Team (SMT). The members of the Local Response Team will become members of the Spill Management Team. The number of positions/personnel required to staff the Spill Management Team will depend on the size and complexity of the incident. A typical Spill Management Team is detailed in Figure 4.3.

Organization

The Spill Management Team includes five (5) functional areas: Command, Operations, Planning, Logistics, and Finance. The functional areas are illustrated in Figure 4.3.

Responsibilities

The responsibilities of the Spill Management Team are as follows:

- Operations, Planning, Logistics, and Finance report directly to Command.
- When IC does not assign the position, IC retains that responsibility.
- The five (5) functional areas of the Team are modular in design and can be expanded with additional staff, reporting under the main areas, to meet the requirements of large scale or complex emergencies.
- The IC can set up functional groups or assign groups that are assigned to geographical areas.

The Spill Management Team job positions are described in Appendix B.

4.5 RESPONSE TEAM TRAINING

The Company provides training related to discharge prevention, testing and response, including measures to repair pipeline ruptures and mitigate discharges. The training methods address oil discharges from the Pipeline from several perspectives: human health and safety, rupture control and repair operations, pollution control, and overall (crisis) management of the emergency. The Director of Key Pipelines, LTD. is responsible for implementation and records maintenance of the emergency response training program. The training section is also responsible for the coordination of employee schedules and location of the training sessions throughout the year and retention of training records.

The competency of each training program is closely monitored by the Training Section through observation of and/or participation in actual training sessions.

Through the various training methods described below the Company's training program is intended to ensure the following results:

4.5 RESPONSE TEAM TRAINING (Cont'd)

That all response personnel know:

- The characteristics and hazards of the oil discharged (Section 3.0).
- The conditions that are likely to worsen emergencies, including the consequences of Pipeline malfunctions, and the appropriate corrective actions.
- The steps necessary to control any accidental discharge of oil and to minimize the potential for fire, explosion, toxicity or environmental damage (Section 3.0).

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

Integrated Contingency Plan Review

- All Local Response Team Members should review their Integrated Contingency 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 Spill Management 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.

OSHA HAZWOPER TRAINING REQUIREMENTS

Responder Classification	Required Training Hours	Refresher
29 CFR 1910.120(q) Emergency Response		
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
29 CFR 1910.120(e) Clean Up Sites		
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
29 CFR 1910.120(p)(7)(8) RCRA TSD Sites		
New Employees	24 hrs	8 hrs
Current Employees*	24 hrs	8 hrs

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

4.5 RESPONSE TEAM TRAINING (Cont'd)

Incident Command System

- Spill Management Team Members 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.

Supervisor/Team Meetings

- Periodic Supervisor/Team meetings are conducted by the various teams with essential personnel assigned to the Spill Management Team in attendance. These meetings typically include a review of various emergency response procedures contained in this Plan. The standard agenda could include some or all of the following:
  - Overview of emergency response.
  - Review and discussion of the Company Response Procedures (with a focus on notification, assessment of severity of the event, functional activities/roles, and organization structure).
  - Review of the emergency response equipment and site plans.
  - A tabletop emergency response exercise.

Training Records Maintenance

- Emergency response training records are maintained at the Company's Corporate Headquarters for all employees that have duties related to spill response and/or clean up. Records will be maintained as long as the employees are part of the Spill Management Team.

Contractor Training

- The Company also recognizes that contract personnel must also have sufficient training to response to emergency response situations. At a minimum, contractors are required to be trained in accordance with 29 CFR 1910.120. 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. Contractors are required to submit training records to the Company that are maintained as long as they are listed in the Plan as being able to respond to a discharge.

4.5 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. The 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.

4.6 RESPONSE TEAM EXERCISES

Local and Spill Management Team members, government agencies, contractors, 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 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	Response Team Tabletop Exercise
3	Annual	Equipment Deployment Exercise *(facilities with OSRO-owned equipment)*
3	Annual	Unannounced Exercise *(Emergency procedures, tabletop, or equipment deployment, not a separate exercise)* Actual response can be considered as an unannounced exercise. **For facilities without equipment to deploy, an unannounced exercise could be accomplished during the QI Notification by randomly asking the QI what he/she would initiate in response to a particular scenario and then document the scenario and response.
NOTE: All Response Plan components must be exercised at least once in the Cycle.		

Quarterly QI Notification Exercise

- **Scope:** Exercise notification process between Key Pipeline 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 the 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.

4.6 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 Pipeline may take credit for actual equipment deployment to a spill, or for training sessions, as long as the activities are properly documented.

Annual Spill Management Team Tabletop Exercise

- **Scope:** Demonstration of the Spill Management Team's ability to organize, communication, and make strategic decisions regarding population and environmental protection during a spill event.
- **Objective:** Designated Emergency Spill Management 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.

Government-Initiated Unannounced Exercise

- **Scope:** Demonstrate ability to respond to a worst case discharge spill event.
- **Objectives:** Designated Spill Management Team members should demonstrate adequate knowledge of their Response Plan and the ability to organize, communicate, coordinate, and respond in accordance with the 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.

4.6 RESPONSE TEAM EXERCISES (Cont'd)

Exercise Documentation

- All exercises should be documented and maintained for a minimum of three (3) years; 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.

4.7 SITE SAFETY AND HEALTH PLAN(S) DEVELOPMENT

The Safety Officer will be responsible for preparing a Site Safety and Health Plan (SSHP) that will establish site specific policies, practices, and procedures to protect workers and the public from coming into contact with potential chemical and/or physical hazards. The SSHP must be available at the site for worker and government review (upon request). Workers entering the site for the first time must review the SSHP prior to entry. Daily SSHP briefings should be conducted. The SSHP must be modified as necessary and address multiple work environments, if applicable. The SSHP will contain the following information:

- Guidance on who is responsible for monitoring site safety.
- A characterization of the risks associated with each operation that will be conducted in the area covered by the Plan.
- A description of known chemical and physical hazards and the measures that have been instituted to eliminate the hazards or reduce them to an acceptable level.
- Guidance on the level of HAZWOPER training required for workers commensurate with their job responsibilities.
- A definition of site control measures, including a site map.
- A description of decontamination procedures for personnel and equipment. The following should be included:
  - Contaminated Personnel Protective Equipment (PPE) cleaning and removal Procedures
  - Contaminated PPE cleaning precautions for laundering.
  - Decontamination locations at the site that include "dirty" and "clean" areas.

FIGURE 4.1
NATIONAL INCIDENT MANAGEMENT SYSTEM
INCIDENT COMMAND SYSTEM
(NIMS – ICS)

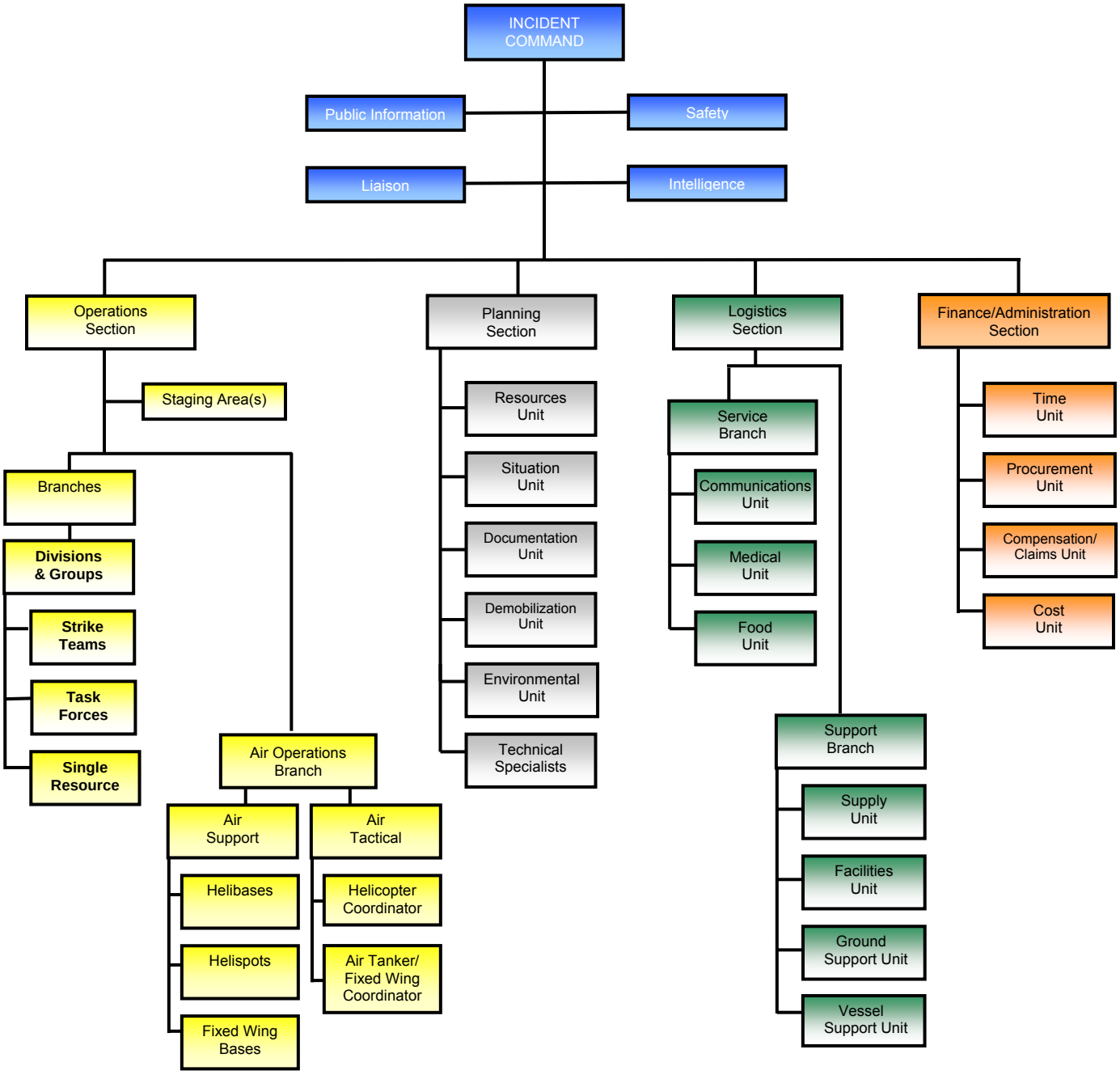


FIGURE 4.2

LOCAL RESPONSE TEAM

(Tier I and Tier II Spills)

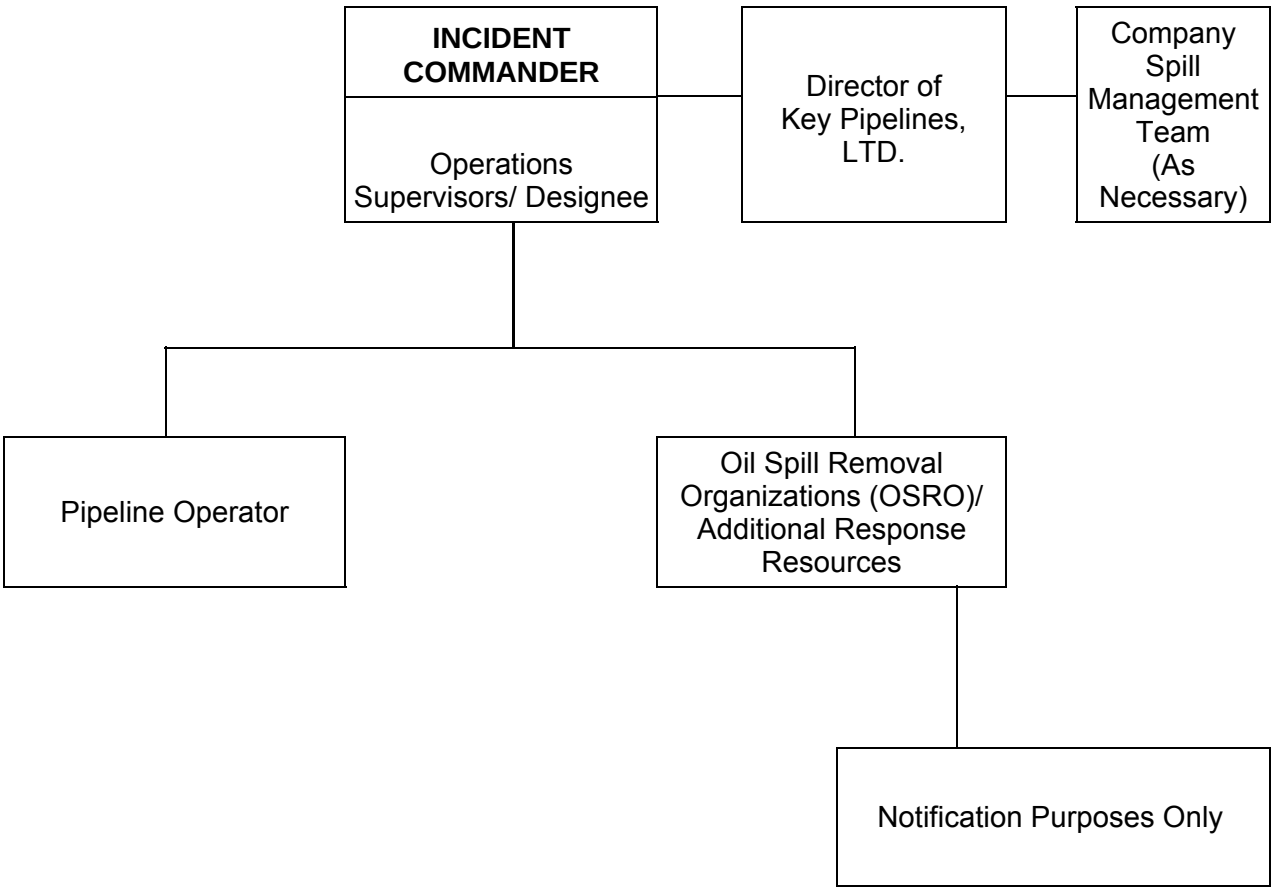
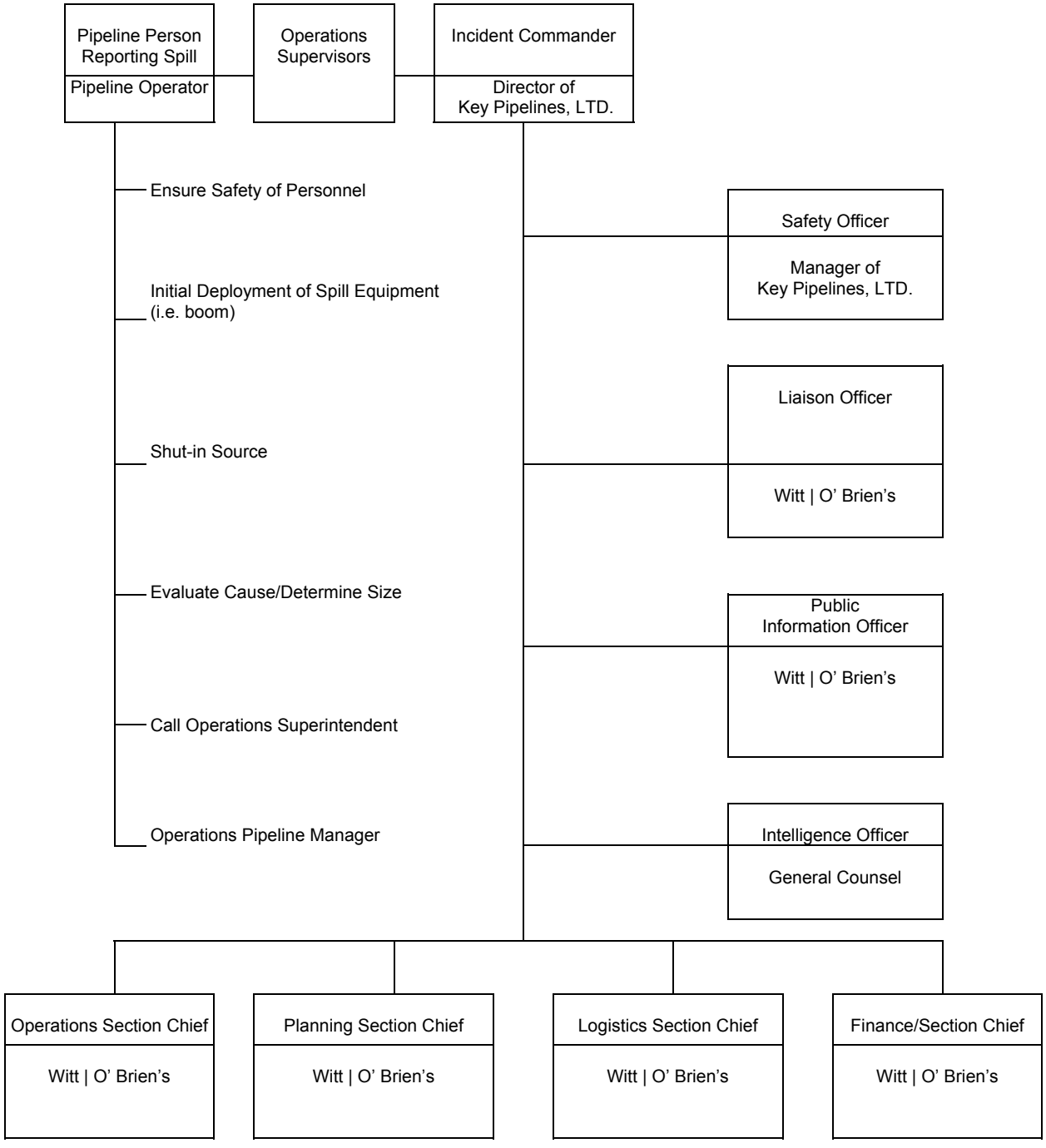


FIGURE 4.3

SPILL MANAGEMENT TEAM

(Tier II and Tier III)

(For incidents beyond the response capability of the Local Response Team.)



5.0 RESPONSE EQUIPMENT/RESOURCES

The following Sections outline the various response equipment/resources available from the Pipeline and other outside resources.

5.1 COMPANY RESPONSE EQUIPMENT

Key Pipelines, LTD. currently owns no spill response equipment. However, the Company has contracts in place with clean-up contractors for response to a discharge. Appendix C lists the Company's contracted companies available to the company in the event of a spill.

The Qualified Individual has the authority to activate these and other Company resources or that of private contractors, Oil Spill Removal Organizations (OSROs), and other experts and consultants, as the situation demands.

5.2 EQUIPMENT TESTING

Key Pipelines, LTD. conducts regular maintenance testing of all equipment along the system as part of its scheduled maintenance program.

System Equipment

- Line maintenance personnel conduct a scheduled inspection of all equipment in accordance with either 49 CFR Part 195.420 (for DOT regulated items such as valves) or Company policy.
- Discharge prevention and mitigation equipment, including block valves, are included in the scheduled maintenance program.

Emergency Response Equipment

- Response equipment is checked by the Contractor personnel.
- Motorized equipment (compressors, generators, boat motors, etc.) are also checked.

5.3 CONTRACT RESOURCES

In the event of a discharge that is beyond the initial response capabilities of the local responders and response equipment, contract manpower and equipment resources can be obtained through non-USCG classified OSROs. These contractors can provide manpower and containment/clean-up equipment for the response operation on land, water, or adjacent shorelines. Notification/implementation of these resources will typically be handled by the Qualified Individual (QI). Equipment inventories is provided in Appendix C. **Telephone reference is provided in Figure 2.5.** (Note: Key Pipelines, LTD has a program in place to ensure that each spill response contractor has a comprehensive maintenance program and applicability training/drills program in place).

5.4 EXPERTS AND CONSULTANTS

The Company maintains a relationship with various environmental and technical consultants that can provide support in the event of an emergency incident. These consultants can provide expertise and support in the areas of emergency response management, environmental services, site assessment, permitting, waste treatment, recycling, dewatering, hazardous waste disposal, and remediation. Implementation of these services should be coordinated through the Incident Commander. Various telephone references are provided in Section 2.

5.5 VOLUNTEERS

Volunteers will not be utilized for responding to spills. All volunteers will be referred to the State or Federal On-Scene Coordinator.

5.6 COMMUNICATIONS

Effective and efficient communications systems are essential for emergency response at every level. The communications system will be utilized to gather information and current status reports as well as to provide coordination and direction to widely separated work groups involved in search, containment/ diversion, repair, traffic control, public control or evacuation, and restoration.

Lines of communication between the Incident Commander, local responders, and the Emergency Response Team members are demonstrated in the organization charts provided at the end of this section. Communication of the overall spill response operation between the Company and the responsible government agencies in the Federal Regional Response Team (RRT) will occur between the Incident Commander and the Federal On-Scene Coordinator. Appendix J provides additional detail on the Federal Response Organization.

5.6.1 Central Communications System

Prearranged communication channels are of the utmost importance in dealing with system emergencies. The notification procedures and telephone contacts documented in Section 2 will be reviewed in accordance with the earlier documented updating procedures. The predetermined communications channels include the following:

- A list of emergency telephone numbers for internal management and emergency response personnel (Figure 2.2).
- A list of emergency telephone numbers for various external resources such as the fire and police department, medical, and regulatory agencies (Figure 2.5).
- A list of emergency telephone numbers for contract response resources (Figure 2.5).

5.6 COMMUNICATIONS (Cont'd)

5.6.2 Communications Equipment

Field communications during a spill response to a small or medium discharge will be handled via the existing system communications network. This network will utilize existing radios, telephones, beepers, FAX machines, and computers and will be maintained by system personnel. In the event of a Worst Case Discharge, field communications will be enhanced with other Company and contract resources as the situation demands.

5.6.3 Communication Types

Telephone (Conventional) - Conventional land-line telephones are the most effective means of communication for regulatory and advisory notifications during a spill response operation. Additional telephone lines can be installed in the event of a prolonged response operation.

Telephone (Cellular) - Cellular telephones allow for added mobility and response effectiveness. Cellular phones are commonly maintained by certain Pipeline personnel. Additional cellular phones can be secured in the event of a prolonged response operation.

Pagers - Pagers are used for rapid notification to field personnel when radio and telephone resources are limited. Most Response Team members carry a pager.

FAX Machines - FAX machines allow for a rapid transfer of urgent information/ documentation such as status reports/updates, written notifications, and purchase orders.

Computers - Computers are commonly used in networks that allow access to various other locations and Company personnel. Computers also speed the consolidation of information and preparation of written reports.

Hand-Held Radios - Radios will be furnished by the spill response contractors. Each contractor list of hand-held radios is furnished in Appendix C.

FIGURE 5.1

EXTERNAL RESPONSE RESOURCES

Additional Response Resources		
Contractor Name	**Contract**	**Response/Mobilization Time**
Conestoga – Rovers & Associates	Yes	Within (6) hours

Note: Equipment Lists are provided in Appendix C. Telephone numbers are provided in Figure 2.5

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 Field Environmental Engineer/Scientist will provide technical assistance to the Incident Commander on critical areas to protect. The categories are defined as follows:

HIGH SENSITIVITY
• Areas that are high in productivity, abundant in many species, extremely sensitive, difficult to rehabilitate, or inhabited by threatened / endangered species. • Areas that 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 that 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 that 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
- Environmental Sensitivity Maps located in the "Site Specific Plans"
- Other industry and private experts

The environmental and socio-economic sensitivities in the vicinity of the Pipeline can be divided into a number of categories. The following environmental/socio-economic sensitivity summary describes these categories that may be impacted by a discharge and should be addressed in the response:

Environmental

- Environmentally sensitive areas are prevalent throughout any marine and/or terrestrial environment and may be affected by any potential discharge incident.
- Environmentally sensitive areas subjected to stress and sudden change may be severely damaged. All means of exclusion/diversion should be utilized during a response effort to minimize the impact on these areas.
- There are no environmentally sensitive areas located within the surveyed area.

Historical Areas

- Properties listed in the National Register of Historic Places and Natural Landmarks are included in this category.
- These areas may need to be boomed off or otherwise protected to minimize impact.
- There are no historical areas located within the surveyed area.

Major Recreational Areas

- A discharge affecting these areas may pose a public safety/health risk during a response effort.
- There are no major recreational areas located within the surveyed area.

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

Residential Areas

- These are areas with high public impact and may warrant evacuation in extreme cases.
- Cleanup must be performed with extreme caution due to extensive public exposure.
- The residential areas located within the surveyed area should not be affected by a release, due to the direction of flow. However, those areas will be examined and protected in the event of a release.

Commercial Farming/Ranching Areas

- There are no commercial farming / ranching areas within the surveyed area.

Water Intake Points

- There are no water intake points located within the surveyed area.

Wildlife Management Areas and Refuges:

- There are no wildlife management areas or refuges within the surveyed area.

6.3 WILDLIFE PROTECTION AND REHABILITATION

Key Pipelines, LTD. 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. Contractors specializing in wildlife protection will provide the Incident Commander with guidance on the proper handling of impacted wildlife and the necessary permits required for such efforts.

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 Fig. 6.1.

6.3.2 Wildlife Rescue

Key Pipelines, LTD. 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 that 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. 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 incident, the following criteria should be evaluated:

- 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 that are projected for impact.

6.5 SPILL VOLUME ESTIMATES

Quality spill volume estimates are required in order to evaluate the equipment and manpower requirements necessary to handle the response. The primary and most accurate method of estimating the spill volume is from pump rate estimates (depending on the type of incident which caused the spill). In the event that Pipeline or pump estimates are not available, the secondary method of visual estimation can be performed by analyzing the color and size of the slick and converting that data utilizing Figure 6.3.

6.6 TRAJECTORY ANALYSIS

Oil spilled on land will migrate with the geography and topography of the land. The oil will tend to spread to a thin layer under the influence of gravity (primary) and chemical (secondary) forces. Oil will tend to permeate into soil. The amount of permeation will depend on soil type.

6.7 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT

General descriptions of various specific response techniques that may be applied during a response effort are discussed below. Key Pipelines, LTD. 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 down gradient 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.

6.7 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

6.7.1 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:

  - 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.

6.7 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

6.7.1 Spill on Land (Soil Surfaces) (Cont'd)

- **Removal Methods (Cont'd)**

  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.

6.7.2 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.

6.7 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

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

- **Confinement Methods (Cont'd)**

  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. 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.

6.8 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 6.1

ENVIRONMENTAL SENSITIVITY MAP

The following Environmental Sensitivity Map has been prepared as a reference to use during a spill event. This map is to be utilized as guidelines only. During a real response effort federal, state, and local agencies should be contacted to provide further assistance in the proper identification and protection of the various environmental and socio-economic sensitive areas.

(b) (7)(F)

[redacted]

FIGURE 6.2

ENDANGERED/THREATENED SPECIES LISTING

TEXAS

The following is list of endangered and threatened species for the State of Texas:

Animals

Status	***Species Name***	***Scientific Name***
E	Amphipod, Peck's cave	Stygobromus (=Stygonectes) pecki
E	Bat, Mexican long-nosed	Leptonycteris nivalis
T	Bear, Louisiana black	Ursus americanus luteolus
E	Beetle, American burying	Nicrophorus americanus
E	Beetle, Coffin Cave mold	Batrisodes texanus
E	Beetle, Comal Springs dryopid	Stygoparnus comalensis
E	Beetle, Helotes, mold	Batrisodes venyivi
E	Beetle, Kretschmarr Cave mold	Texamaurops reddelli
E	Beetle, Tooth Cave ground	Rhadine persephone
E	Crane, whooping except where XN	Grus americana
E	Curlew, Eskimo	Numenius borealis
E	Darter, fountain	Etheostoma fonticola
E	Falcon, nothern aplomado	Falco femoralis septentrionalis
E	Flycather, southwestern willow	Empidonax traillii extimus
E	Gambusia, Big Bend	Gambusia gaigei
E	Gambusia, Clear Creek	Gambusia heterochir
E	Gambusia, Pecos	Gambusia nobilis
E	Gambusia, San Marcos	Gambusia georgei
E	Ground beetle [unnamed]	Rhadine exilis
E	Ground beetle, [unnamed]	Rhadine infernalis
E	Harvestman, Bee Creek Cave	Texella reddelli
E	Harvestman, Bone Cave	Texella reyesi
E	Harvestman, Cokendolpher Cave	Texella cokendolpheri
E	Jaguar	Panthera onca
E	Jaguarundi, Gulf Coast	Herpailurus (=Felis) pardalis
E	Manatee, West Indian	Trichechus manatus
E	Margay Mexico southward	Leopardus (=Felis) wiedii
E	Meshweaver, Braken Bat Cave	Cicurina venii
E	Meshweaver, Government Canyon Bat Cave	Cicurina vespera
E	Meshweaver, Madla's Cave	Cicurina madla
E	Meshweaver, Robber Baron Cave	Cicurina baronia
T	Minnow, Devils River	Dionda diaboli
E	Minnow, Rio Grande silvery	Hybognathus amarus
E	Ocelot	Leopardus (=Felis) pardalis
T	Owl, Mexican spotted	Strix occidentalis lucida
E	Pelican, brown except U.S Atlantic coast, FL, AL	Pelecanus occidentalis

FIGURE 6.2

ENDANGERED/THREATENED SPECIES LISTING (Cont'd)

Animals

Status	***Species Name***	***Scientific Name***
T	Plover, piping except Great Lakes watershed	Charadrius melodus
E	Prairie-chicken, Attwater's greater	Tympanuchus cupido attwateri
E	Pseudoscorpion, Tooth Cave	Tartarocreagris texana
E	Pupfish, Comanche Springs	Cyprinodon elegans
E	Pupfish, Leon Springs	Cyprinodon bovinus
E	Salamander, Barton Springs	Eurycea sosorum
T	Salamander, San Marcos	Eurycea nana
E	Salamander, Texas blind	Typhlomolge rathbuni
E	Sawfish, smalltooth	Pristis pectinata
T	Sea turtle, green except where endangered	Chelonia mydas
E	Sea turtle, hawksbill	Eretmochelys imbricata
E	Sea turtle, Kemp's ridley	Lepidochelys kempii
E	Sea turtle, Leatherback	Dermochelys coriacea
T	Sea turtle, loggerhead	Caretta caretta
T	Shiner, Arkansas River Arkansas R. Basin	Notropis girardi
E	Snail, Pecos assiminea	Assiminea pecos
T	Snake, Concho water	Nerodia paucimaculata
E	Spider, Government Canyon Bat Cave	Neopeptoneta microps
E	Spider, Tooth Cave	Leptoneta myopica
E	Tern, least interior pop.	Sterna antillarum
E	Toad, Houston	Bufo houstonensis
E	Vireo, black-capped	Vireo atricapilla
E	Warbler (=wood), golden-cheeked	Dendroica chrysoparia
E	Whale, finback	Balaenoptera physalus
E	Whale, humpback	Megaptera novaeangliae
E	Wolf, gray Lower 48 States, except where delisted, where XN; and New Mexico	Canis lupus
E	Wolf, red except where XN	Canis rufus
E	Woodpecker, red-cockaded	Picoides borealis

Plants

Status	***Species Name***	***Scientific Name***
E	Ambrosia, south Texas	Ambrosia cheiranthifolia
E	Anyenia, Texas	Ayenia limitaris
E	Bladderpod, white	Lesquerella pallida
E	Bladderpod, Zapata	Lesquerella thamnophila
E	Cactus, black lace	Echinocereus reichenbachii var. albertii
T	Cactus, Chisos Mountain hedgehog	Echinocereus chisoensis var. chisoensis
T	Cactus, Lloyd's Mariposa	Echinocereus mariposensis
E	Cactus, Nellie cory	Coryphantha minima
E	Cactus, Sneed pincushion	Coryphantha sneedii var. sneedii

FIGURE 6.2

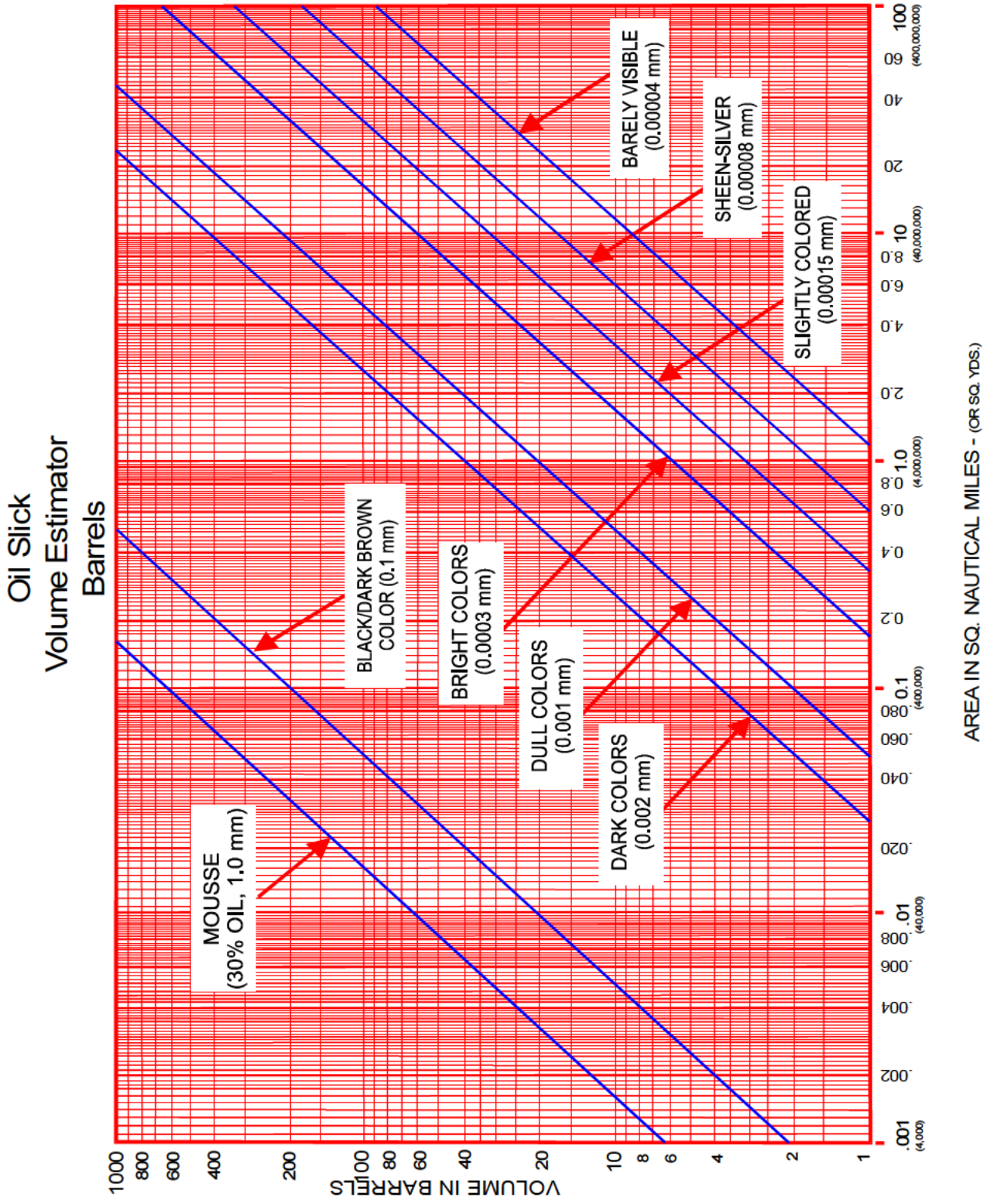
ENDANGERED/THREATENED SPECIES LISTING (Cont'd)

Plants

Status	***Species Name***	***Scientific Name***
E	Cactus, star	Astrophytum asterias
E	Cactus, Tobusch fishhool	Ancistrocactus tobuschii
E	Cat's eye, Terlingua Creek	Cryptantha crassipes
T	Cory cactus, bunched	Coryphantha ramillosa
E	Dawn-flower, Texas prairie	Hymenoxys texana
E	Dogweed, ashy	Thymophylla tephroleuca
E	Frankenia, Johnston's	Frankenia johnstonii
E	Ladies'-tresses, Navasota	Spiranthes parksii
E	Manioc, Walker's	Manihor walkerae
T	Oak, Hinckley	Quercus hinckleyi
E	Phlox, Texas trailing	Phlox nivalis ssp. texensis
E	Pitaya, Davis' green	Echinocereus viridiflorus var. davishii
E	Pondweed, Little Aguja (=Creek)	Potamogeton clystocarpus
E	Rush-pea, slender	Hoffmannseggia tenella
E	Sand-verbena, large-fruited	Abronia macrocarpa
E	Snowbells, Texas	Styrax texanus
T	Sunflower, Pecos (=puzzle =paradox)	Helianthus paradoxus
E	Wild-rice, Texas	Zizania texana

E = Endangered
T = Threatened

FIGURE 6.3


Oil Slick
Volume Estimator
Barrels
BARELY VISIBLE (0.00004 mm)
SHEEN-SILVER (0.00008 mm)
SLIGHTLY COLORED (0.00015 mm)
BLACK/DARK BROWN COLOR (0.1 mm)
BRIGHT COLORS (0.0003 mm)
DULL COLORS (0.001 mm)
DARK COLORS (0.002 mm)
MOUSSE (30% OIL, 1.0 mm)
VOLUME IN BARRELS
1000
800
600
400
200
100
80
60
40
20
10
8
6
4
2
1
AREA IN SQ. NAUTICAL MILES - (OR SQ. YDS.)
100 (400,000,000)
60
40
20
10 (40,000,000)
8.0
6.0
4.0
2.0
1.0 (4,000,000)
0.8
0.6
0.4
0.2
0.1 (400,000)
.080
.060
.040
.020
.01 (40,000)
.008
.006
.004
.002
.001 (4,000)

APPENDIX A

GENERAL INFORMATION

PAGE

DOT/PHMSA 49 CFR Part 194 Cross Reference A-2

OSHA 29 CFR 1910.38(a), 1910.119 (Emergency Action Plan and Process Safety) A-6

OSHA 29 CFR 1910.120 (HAZWOPER) A-7

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.	§ 1.2, Fig 1.1, App G
(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) ...	App G
(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.	App G
(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
(b)(4)	Operators may claim prevention credits for breakout tank secondary containment and other specific spill prevention measures as follows…	N/A

§ 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.	§ 5, App C, G
(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…	§ 4, App J
(b)(1)(ii)	Establish provisions to ensure the protection of safety at the response site; and	§ 4.7, App K
(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, 5, App F, G
(b)(2)(ii)	Identify environmentally and economically sensitive areas;	§ 2
(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 B
(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
(c)(1)(iii)	Spill detection and mitigation procedures,	§ 3, App I
(c)(1)(iv)	The name, address, and telephone number of the oil spill response organization, if appropriate,	Fig 2.5, App C
(c)(1)(v)	Response activities and response resources,	§ 3, 5 App C
(c)(1)(vi)	Names and telephone numbers of Federal, state, and local agencies which the operator expects to have pollution control responsibilities or support,	§ 2.2, Fig 2.5
(c)(1)(vii)	Training procedures,	§ 4.5

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

§ 194.107	BRIEF DESCRIPTION CONTINUED	LOCATION in PLAN
(c)(1)(viii)	Equipment testing,	§ 5.2
(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.	§ 4.6
(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.	Fig 1.1
(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.	§ 4, App B

§ 194.111	BRIEF DESCRIPTION	LOCATION in PLAN
(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 Distribution List

§ 194.113	BRIEF DESCRIPTION	LOCATION in PLAN
(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, App G
(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 name and telephone number of the qualified individual available on a 24-hour basis.	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

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

§ 194.113	BRIEF DESCRIPTION	LOCATION in PLAN
(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

§ 194.115	BRIEF DESCRIPTION	LOCATION in PLAN
(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.	§ 5, App C
(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.	§ 5, App C

§ 194.117	BRIEF DESCRIPTION	LOCATION in PLAN
(a)	Each operator shall conduct training to ensure that:	-----
(a)(1)	All personnel know --	-----
(a)(1)(i)	Their responsibilities under the response plan	§ 4
(a)(1)(ii)	The name and address of, and the procedure for contacting, the operator on a 24-hour basis	§ 2, Fig 1.1, Fig 2.2
(a)(1)(iii)	The name of, and procedures for contacting, the qualified individual on a 24-hour basis	§ 2, Fig 1.1, Fig. 2.2
(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	§ 2.2, Fig. 2.5
(a)(2)(iii)	The notification process	§ 2, Fig. 2.4
(a)(3)	Personnel engaged in response activities know --	-----
(a)(3)(i)	The characteristics and hazards of the oil discharged	§ 3
(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, App G
(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
(a)(3)(iv)	The proper firefighting procedures and use of equipment, fire suits, and breathing apparatus	§ 3, App D

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

§ 194.117	BRIEF DESCRIPTION	LOCATION in PLAN
(b)	Each operator shall maintain a training record for each individual that has been trained as required by this section. Theses 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	§ 4.6
(b)(2)	Records for personnel engaged in response, other than operator personnel, shall be maintained as determined by the operator.	§ 4.6
(c)	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 ...	§ 4.6

§ 194.119	BRIEF DESCRIPTION	LOCATION in PLAN
(a)	Each owner shall submit two copies...	Foreword Distribution List
(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 (Operator's Statement)
(f)	...PHMSA may require an operator to provide a copy of the response plan to the OSC...	-----

OSHA - EMERGENCY ACTION PLANS & PROCESS SAFETY
29 CFR 1910.38(a), 29 CFR 1910.119
CROSS REFERENCE

29 CFR	BRIEF DESCRIPTION	LOCATION
1910.38(a)	***Emergency action plan:***	
(1)	Scope and applicability	§1
(2)	Elements:	-----
(i)	Emergency escape procedures and emergency escape route assignments.	App. D
(ii)	Procedures to be followed by employees who remain to operate critical Plant operations before they evacuate.	§3
(iii)	Procedures to account for all employees after emergency evacuation has been completed.	App. D
(iv)	Rescue and medical duties for those employees who are to perform them.	§3, App. K
(v)	The preferred means of reporting fires and other emergencies.	§2, 3
(vi)	Names or regular job titles of persons or departments who can be contacted for further information or explanation of duties under the plan.	Figure 2.2
(3)	Alarm system	App. D
(4)	Evacuation	App. D
(5)	Training	§4.0
1910.165	***Employee alarm systems:***	-----
(b)	General requirements	App. D
(b)(1)	Purpose of alarm system	App. D
(b)(4)	Preferred means of reporting emergencies	§2, 3
(d)	Maintenance and testing	App. D

OSHA – HAZWOPER 29 CFR 1910.120 CROSS REFERENCE

29 CFR	BRIEF DESCRIPTION	LOCATION
1910.120(q)	***Emergency response to hazardous substance releases:***	-----
(1)	Emergency response plan	Entire Plan
(2)	Elements of an emergency response plan:	-----
(i)	Pre-emergency planning and coordination with outside parties	App I
(ii)	Personnel roles, lines of authority, training, and communication	§ 2, 4
(iii)	Emergency recognition and prevention	§ 3, App. G
(iv)	Safe distances and places of refuge	App. D
(v)	Site security and control	§ 3, App. D
(vi)	Evacuation routes and procedures	App. D
(vii)	Decontamination procedures	§ 3
(viii)	Emergency medical treatment and response procedures	§ 3.8
(ix)	Emergency alerting and response procedures	§2, 3
(x)	Critique of response and follow-up	App. E
(xi)	PPE and emergency equipment	§3, App. K
(xii)	Emergency response plan coordination and integration	§1, 4
(3)	Procedures for handling emergency response:	-----
(i)	The senior emergency response official responding to an emergency shall become the individual in charge of a site-specific Incident Command System (ICS).	§4
(ii)	The individual in charge of the ICS shall identify, to the extent poss ble, all hazardous substances or conditions, present and shall address as appropriate site analysis, use of engineering controls, maximum exposure limits, hazardous substance handling procedures, and use of any new technologies.	§3, 4
(iii)	Implementation of appropriate emergency operations and use of PPE.	§3, App. K (SSP)
(iv)	Employees engaged in emergency response and exposed to hazardous substances presenting an inhalation hazard or potential inhalation hazard shall wear positive pressure self-contained breathing apparatus while engaged in emergency response.	§3, App. K
(v)	The individual in charge of the ICS shall limit the number of emergency response personnel at the emergency site, in those areas of potential or actual exposure to incident or site hazards, to those who are actively performing emergency operations.	§3, 4, App. K
(vi)	Backup personnel shall stand by with equipment ready to provide assistance or rescue.	§3, 4, App. K
(vii)	The individual in charge of the ICS shall designate a safety official, who is knowledgeable in the operations being implemented at the emergency response site.	§3, 4
(viii)	When activities are judged by the safety official to be an IDLH condition and/or to involve an imminent danger condition, the safety official shall have authority to alter, suspend, or terminate those activities.	§3, App. K
(ix)	After emergency operations have terminated, the individual in charge of the ICS shall implement appropriate decontamination procedures.	§3, App. K
(x)	When deemed necessary for meeting the tasks at hand, approved self-contained compressed air breathing apparatus may be used with approved cylinders from other approved self-contained compressed air breathing apparatus provided that such cylinders are of the same capacity and pressure rating.	§3, App. K
(4)	Skilled support personnel	§4
(5)	Specialist employees	§4
(6)	Training	§4
(7)	Trainers	§4
(8)	Refresher training	§4
(9)	Medical surveillance and consultation	§3.8, App. K
(10)	Chemical protective clothing	§3, App. K
(11)	Post-emergency response operations	§3.4, App. K, E

APPENDIX B

RESPONSE TEAM JOB DESCRIPTIONS

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Incident Command System B-2

Unified Command B-3

NIMS ICS Organization and Job Duties B-4

B.1 INCIDENT COMMAND SYSTEM

The Incident Command System is intended to be used as an emergency 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 utilizes the following criteria as key operational factors:

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

Effective establishment and utilization of the Incident Command System 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 public sector emergency response personnel
- Provide a solid cornerstone for emergency planning efforts.

B.2 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 UC 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 ICS 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 Unified Command. These jurisdictions could be represented by any combination of:

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

The participants of Unified Command for a specific incident will be determined 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 and releases resources. The UC structure is a vehicle for coordination, cooperation and communication that is essential to an effective response.

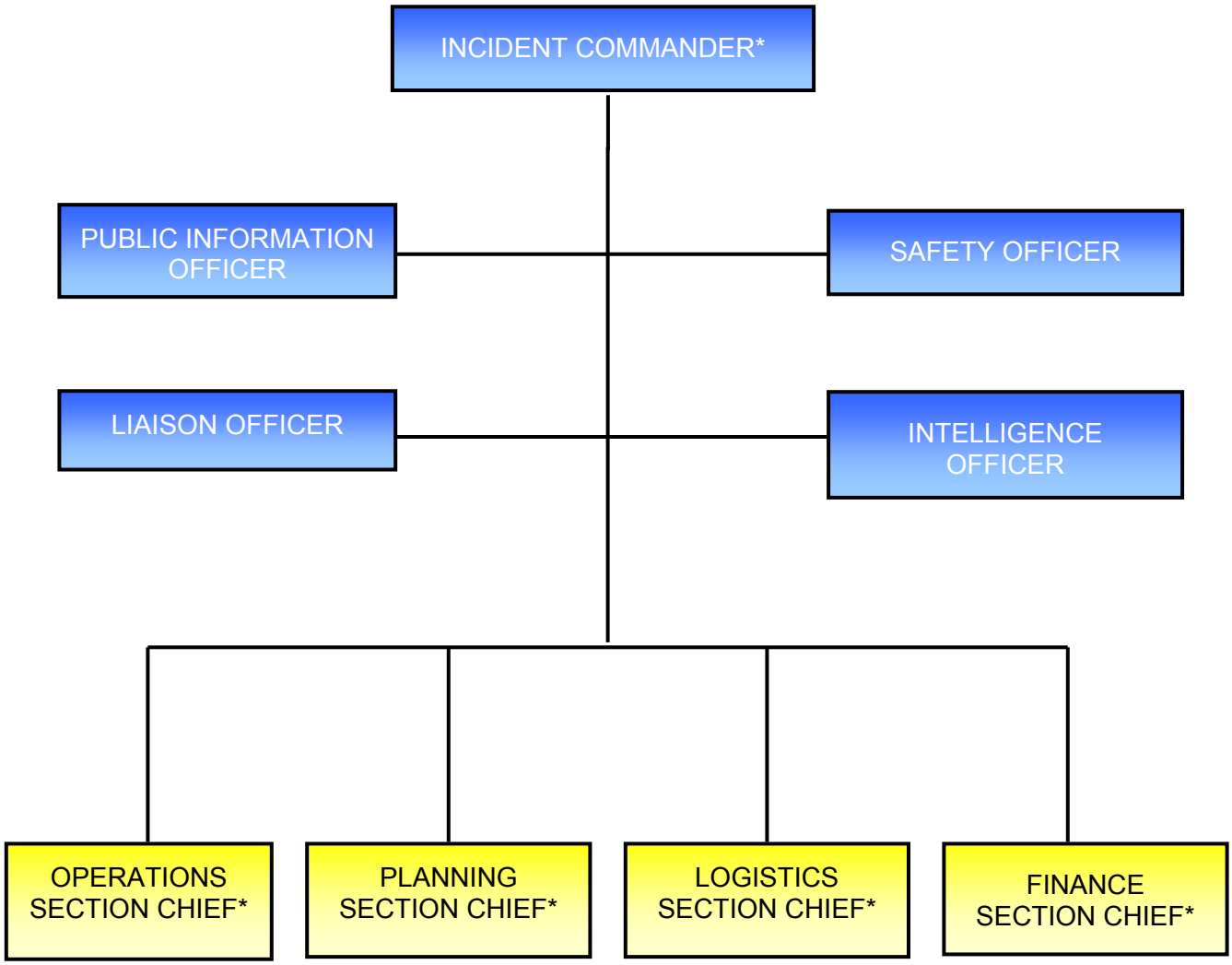
UC representatives must be able to:

- Agree on common incident objectives and priorities
- Have the capability to sustain a 24-hours-7-days-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.

FIGURE B.1

LOCAL RESPONSE TEAM

(For Initial Response and Tier I & II Incidents)

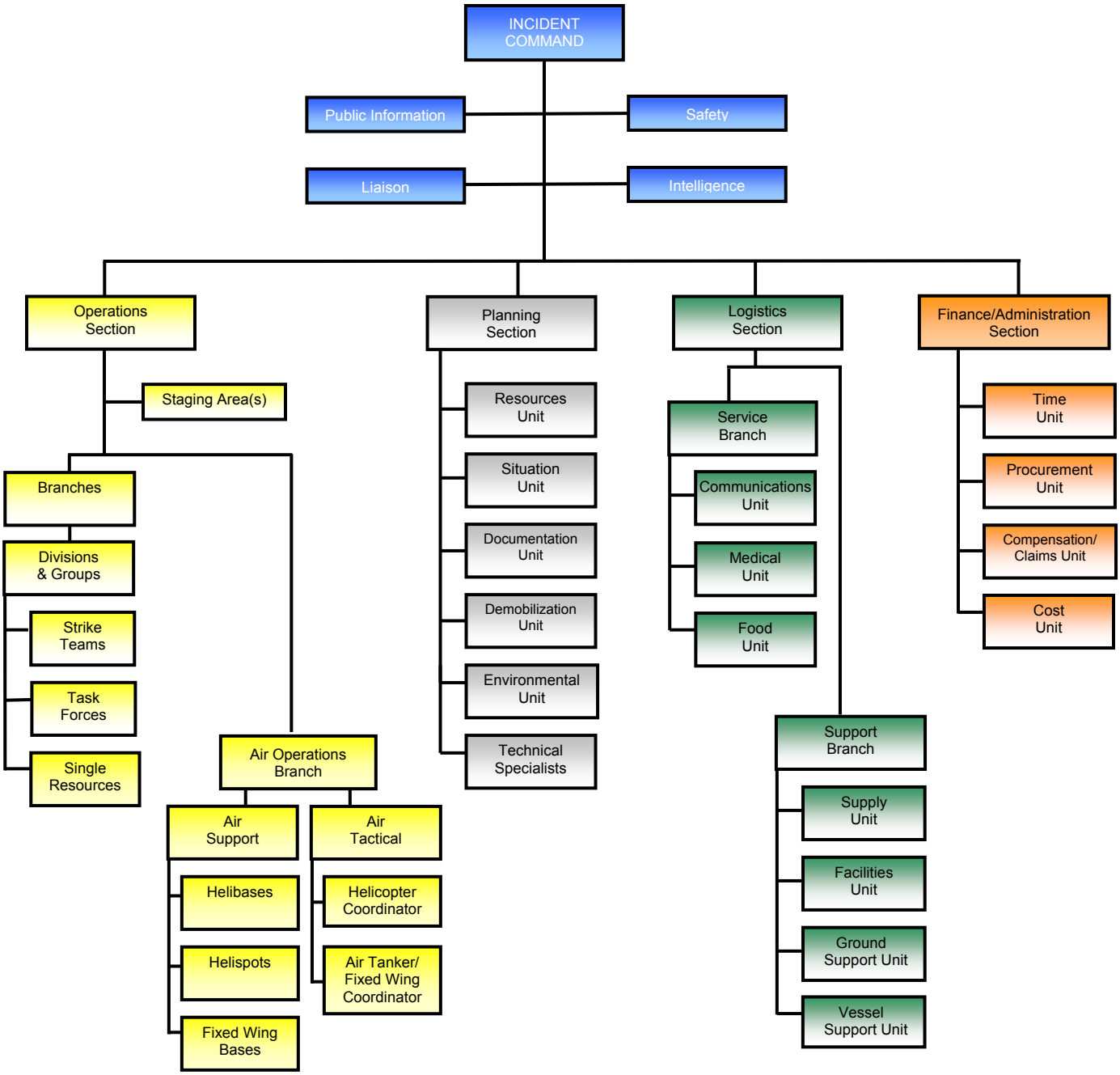


* NOTE: Local Response Team (LRT) personnel can assume any of these positions as necessary.

FIGURE B.2

SPILL MANAGEMENT TEAM

(For incidents beyond the response capability of the Local Response Team)



B.3 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 (ICS Form 214).
- Response 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 (ICS Form 214).

COMMAND

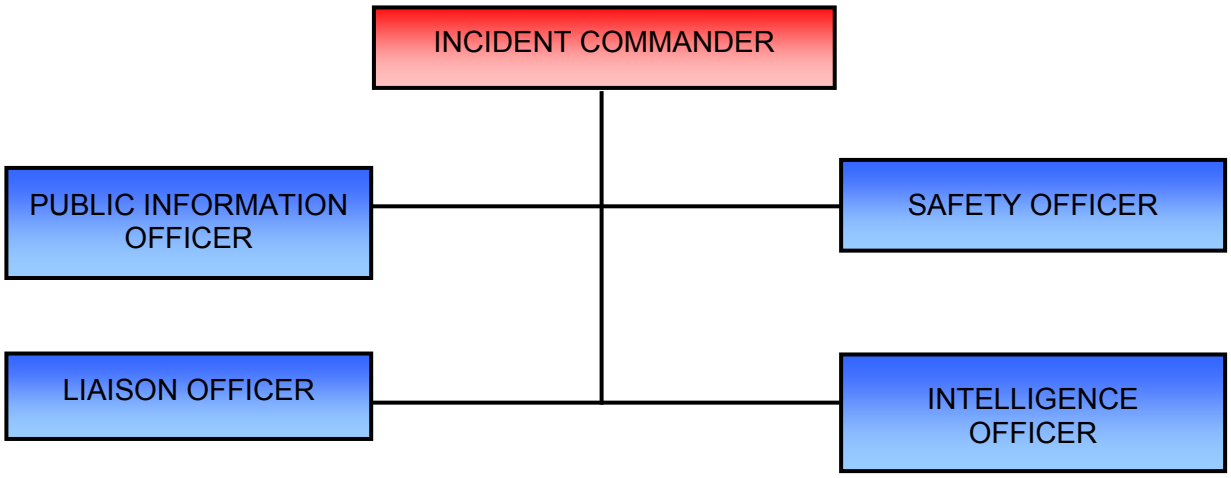
Incident Commander B-8

Public Information Officer B-8

Liaison Officer B-9

Safety Officer B-9

Intelligence Officer B-9



INCIDENT COMMANDER

- Assess the situation and/or obtain a briefing from the prior IC.
- Determine Incident Objectives and strategy.
- Establish the immediate priorities.
- Establish an 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 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 agency administrator 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 (ICS Form 209) is completed and forwarded to appropriate higher authority.
- Order the demobilization of the incident when appropriate.

PUBLIC 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 Restoration (NRDAR) activities with the OPS during oil and HAZMAT responses.
- Coordinate response resource needs for incident investigation activities with the OPS.
- Ensure that all required agency forms, reports and documents are completed prior to demobilization.
- 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.
- Review and approve the medical plan.
- Develop the Site Safety Plan and publish Site Safety Plan summary (ICS Form 208) as required.

INTELLIGENCE OFFICER

- Participate in meetings and briefings as required.
- Collect and analyze incoming intelligence information from all sources.
- Determine the applicability , significance, and reliability of incoming intelligence information.
- As requested, provide intelligence briefings to the IC/UC.
- Review the IAP for intelligence implications.
- Answer intelligence questions and advise Command and General Staff as appropriate.
- Supervise, coordinate, and participate in the collection, analysis, processing, and dissemination of intelligence.
- Establish liaison with all participating law enforcement agencies including the CGIS, FBI/JTTF, State and Local police departments.
- Prepare all required intelligence reports and plans.
- Ensure that all required agency forms, reports and documents are completed prior to demobilization.

OPERATIONS

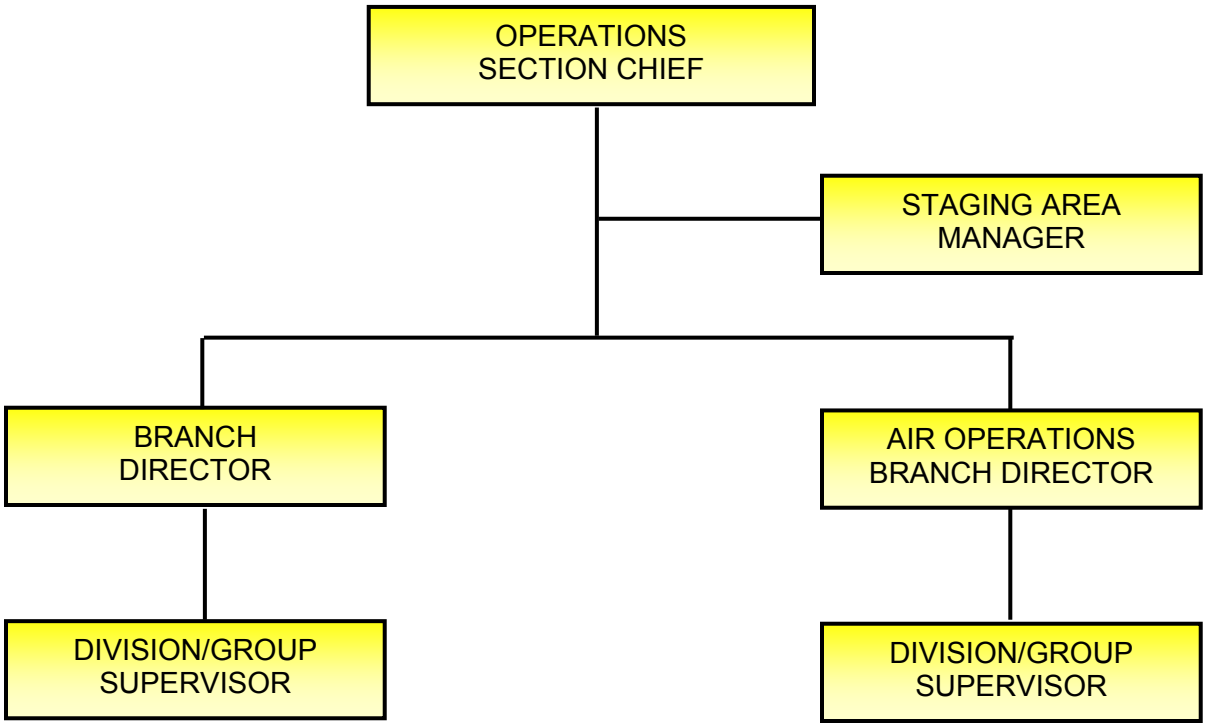
Operations Section Chief B-11

Branch Director B-11

Division/Group Supervisor B-11

Staging Area Manager B-12

Air Operations Branch Director B-12



OPERATIONS SECTION CHIEF

- Develop operations portion of IAP.
- Brief and assign Operations Section personnel in accordance with the IAP.
- Supervise Operations Section.
- Determine need 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.

BRANCH DIRECTOR

- Develop with subordinates alternatives for Branch control operations.
- Attend planning meetings at the request of the OPS.
- Review Division/Group Assignment Lists (ICS Form 204) for Divisions/Groups within the Branch. Modify lists based on effectiveness of current operations.
- Assign specific work tasks to Division/Group Supervisors.
- Supervise Branch operations.
- Resolve logistic problems reported by subordinates.
- Report to OPS when: the IAP is to be modified; additional resources are needed; surplus resources are available; or hazardous situations or significant events occur.
- Approve accident and medial reports originating within the Branch.

DIVISION/GROUP SUPERVISOR

- Implement IAP for Division/Group.
- Provide the IAP to Strike Team Leaders, when available.
- Identify increments assigned to the Division/Group.
- Review Division/Group assignments and incident activities with subordinates and assign tasks.
- Ensure that the IC and/or Resources Unit is advised of all changes in the status of resources assigned to the Division/Group.
- Coordinate activities with adjacent Division/Group.
- Determine need for assistance on assigned tasks.
- Submit situation and resources status information to the Branch Director or the OPS.
- Report hazardous situations, special occurrences, or significant events (e.g., accidents, sickness, discovery of unanticipated sensitive resources) to the immediate supervisor.
- Ensure that assigned personnel and equipment get to and from assignments in a timely and orderly manner.
- Resolve logistics problems within the Division/Group.
- Participate in the development of Branch plans for the next operational period.

STAGING AREA MANAGER

- Establish Staging Area layout.
- Determine any support needs for equipment, feeding, sanitation and security.
- Establish check-in function as appropriate.
- Post areas for identification and traffic control.
- Request maintenance service for equipment at Staging Area as appropriate.
- Respond to request for resource assignments
- Obtain and issue receipts for radio equipment and other supplies distributed and received at Staging Area.
- Determine required resource levels from the OPS.
- Advise the OPS when reserve levels reach minimums.
- Maintain and provide status to Resource Unit of all resources in Staging Area.
- Demobilize Staging Area in accordance with the Incident Demobilization Plan.

AIR OPERATIONS BRANCH DIRECTOR

- Organize preliminary air operations.
- Request declaration (or cancellation) of restricted air space
- Participate in preparation of the IAP through the OPS. Insure that the air operations portion of the IAP takes into consideration the Air Traffic Control requirements of assigned aircraft.
- Perform operational planning for air operations.
- Prepare and provide Air Operations Summary Worksheet (ICS Form 220) to the Air Support Group and Fixed-Wing Bases.
- Determine coordination procedures for use by air organization with ground Branches, Divisions, or Groups.
- Coordinate with appropriate Operations Section personnel.
- Supervise all air operations activities associated with the incident.
- Evaluate helibase locations.
- Establish procedures for emergency reassignment of aircraft.
- Schedule approved flights of non-incident aircraft in the restricted air space area.
- Coordinate with the Operations Coordination Center (OCC) through normal channels on incident air operations activities.
- Inform the Air Tactical Group Supervisor of the air traffic situation external to the incident.
- Consider requests for non-tactical use of incident aircraft.
- Resolve conflicts concerning non-incident aircraft.
- Coordinate with FAA.
- Update air operations plans.
- Report to the OPS on air operations activities.
- Report special incidents/accidents.
- Arrange for an accident investigation team when warranted.

PLANNING

Planning Section Chief..... B-14

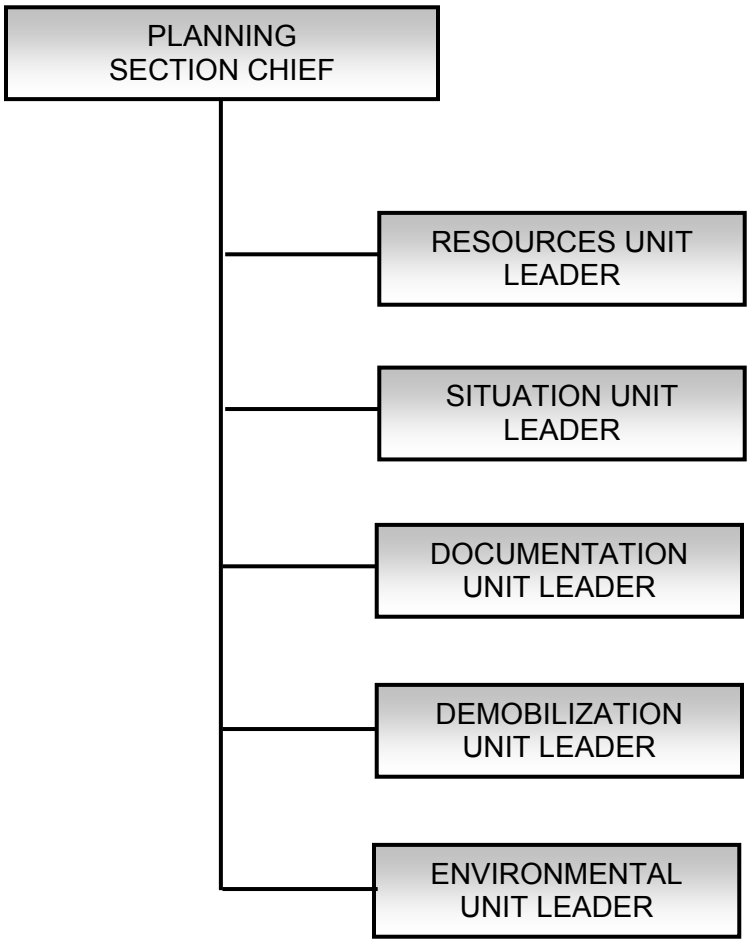
Resources Unit Leader B-14

Situation Unit Leader B-14

Documentation Unit Leader B-15

Demobilization Unit Leader..... B-15

Environmental Unit Leader B-16



PLANNING SECTION CHIEF

- Collect and process situation information about the incident.
- Supervise preparation of the IAP.
- Provide input to the IC and the OPS 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.

RESOURCES UNIT LEADER

- Establish the check-in function at incident locations.
- Prepare Organization Assignment List (ICS Form 203) and Organization Chart (ICS Form 207).
- Prepare appropriate parts of Division Assignment Lists (ICS Form 204).
- Prepare and maintain the ICP display (to include organization chart and resource allocation and deployment).
- Maintain and post the current status and location of all resources.
- Maintain master roster of all resources checked in at the incident.

SITUATION UNIT LEADER

- Begin collection and analysis of incident data as soon as possible.
- Prepare, post, or disseminate resource and situation status information as required, including special requests.
- Prepare periodic predictions or as requested by the PSC.
- Prepare the Incident Status Summary Form (ICS Form 209).
- Provide photographic services and maps if required.

DOCUMENTATION UNIT LEADER

- Set up work area; begin organization of incident files.
- Establish duplication service; respond to requests.
- File all official forms and reports.
- Review records for accuracy and completeness; inform appropriate units of errors or omissions.
- Provide incident documentation as requested.
- Store files for post-incident use.

DEMOBILIZATION UNIT LEADER

- Participate in planning meetings as required.
- Review incident resource records to determine the likely size and extent of demobilization effort.
- Based on the above analysis, add additional personnel, workspace, and supplies as needed.
- Coordinate demobilization with Agency Representatives.
- Monitor the on-going Operations Section resource needs.
- Identify surplus resources and probable release time.
- Develop incident check-out function for all units.
- Evaluate logistics and transportation capabilities to support demobilization.
- Establish communications with off-incident facilities, as necessary.
- Develop an Incident Demobilization Plan detailing specific responsibilities and release priorities and procedures.
- Prepare appropriate directories (e.g., maps, instructions, etc.) for inclusion in the demobilization plan.
- Distribute demobilization plan (on and off-site).
- Provide status reports to appropriate requestors.
- Ensure that all Sections/Units understand their specific demobilization responsibilities.
- Supervise execution of the Incident Demobilization Plan.
- Brief the PSC on demobilization progress.

ENVIRONMENTAL UNIT LEADER

- Participate in Planning Section meetings.
- Identify sensitive areas and recommend response priorities.
- Following consultation with natural resource trustees, provide input on wildlife protection strategies (e.g., removing oiled carcasses, pre-emptive capture, hazing, and/or capture and treatment).
- Determine the extent, fate and effects of contamination.
- Acquire, distribute and provide analysis of weather forecasts.
- Monitor the environmental consequences of cleanup actions.
- Develop shoreline cleanup and assessment plans. Identify the need for, and prepare any special advisories or orders.
- Identify the need for, and obtain, permits, consultations, and other authorizations including Endangered Species Act (ESA) provisions.
- Following consultation with the FOSC's Historical/Cultural Resources Technical Specialist identify and develop plans for protection of affected historical/cultural resources.
- Evaluate the opportunities to use various response technologies.
- Develop disposal plans.
- Develop a plan for collecting, transporting, and analyzing samples.

LOGISTICS

Logistics Section Chief B-18

Service Branch Director B-18

Communications Unit Leader B-19

Medical Unit Leader B-19

Food Unit Leader B-19

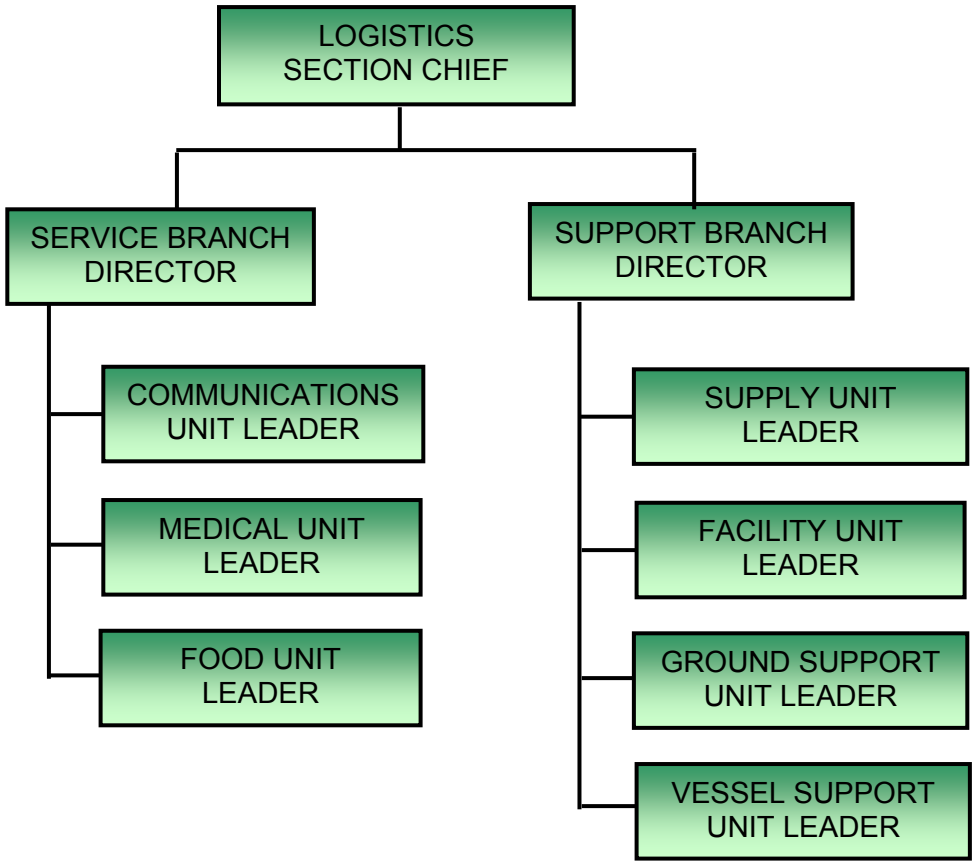
Support Branch Director B-20

Supply Unit Leader B-20

Facility Unit Leader B-20

Ground Support Unit Leader B-21

Vessel Support Unit Leader B-21



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.

SERVICE BRANCH DIRECTOR

- Determine the level of service required to support operations.
- Confirm dispatch of Branch personnel.
- Participate in planning meetings of Logistics Section personnel.
- Review the IAP.
- Organize and prepare assignments for Service Branch personnel.
- Coordinate activities of Branch Units.
- Inform the LSC of Branch activities.
- Resolve Service Branch problems.

COMMUNICATIONS UNIT LEADER

- Prepare and implement the Incident Radio Communications Plan (ICS Form 205).
- Ensure the Incident Communications Center and the Message Center is established.
- Establish appropriate communications distribution/maintenance locations within the Base/Camp(s).
- Ensure communications systems are installed and tested.
- Ensure an equipment accountability system is established.
- Ensure personal portable radio equipment from cache is distributed per Incident Radio Communications Plan.
- Provide technical information as required on:
  - Adequacy of communications systems currently in operation.
  - Geographic limitation on communications systems.
  - Equipment capabilities/limitations.
  - Amount and types of equipment available.
  - Anticipated problems in the use of communications equipment.
- Supervise Communications Unit activities.
- Maintain records on all communications equipment as appropriate.
- Ensure equipment is tested and repaired.
- Recover equipment from Units being demobilized.

MEDICAL UNIT LEADER

- Participate in Logistics Section/Service Branch planning activities.
- Prepare the Medical Plan (ICS Form 206).
- Prepare procedures for major medical emergency.
- Declare major emergency as appropriate.
- Respond to requests for medical aid, medical transportation, and medical supplies.
- Prepare and submit necessary documentation.

FOOD UNIT LEADER

- Determine food and water requirements.
- Determine the method of feeding to best fit each facility or situation.
- Obtain necessary equipment and supplies and establish cooking facilities.
- Ensure that well-balanced menus are provided.
- Order sufficient food and potable water from the Supply Unit.
- Maintain an inventory of food and water.
- Maintain food service areas, ensuring that all appropriate health and safety measures are being followed.
- Supervise caterers, cooks, and other Food Unit personnel as appropriate.

SUPPORT BRANCH DIRECTOR

- Determine initial support operations in coordination with the LSC and Service Branch Director.
- Prepare initial organization and assignments for support operations.
- Assemble and brief Support Branch personnel.
- Determine if assigned Branch resources are sufficient.
- Maintain surveillance of assigned units work progress and inform the LSC of their activities.
- Resolve problems associated with requests from the Operations Section.

SUPPLY UNIT LEADER

- Participate in Logistics Section/Support Branch planning activities.
- Determine the type and amount of supplies en route.
- Review the IAP for information on operations of the Supply Unit.
- Develop and implement safety and security requirements.
- Order, receive, distribute, and store supplies and equipment.
- Receive and respond to requests for personnel, supplies, and equipment.
- Maintain an inventory of supplies and equipment.
- Service reusable equipment.
- Submit reports to the Support Branch Director.

FACILITY UNIT LEADER

- Review the IAP.
- Participate in Logistics Section/Support Branch planning activities.
- Determine requirements for each facility, including the ICP.
- Prepare layouts of incident facilities.
- Notify Unit Leaders of facility layout.
- Activate incident facilities.
- Provide Base and Camp Managers and personnel to operate facilities.
- Provide sleeping facilities.
- Provide security services.
- Provide facility maintenance services (e.g., sanitation, lighting, clean up).
- Demobilize Base and Camp facilities.
- Maintain facility records

GROUND SUPPORT UNIT LEADER

- Participate in Support Branch/Logistics Section planning activities.
- Develop and implement the Traffic Plan.
- Support out-of-service resources.
- Notify the Resources Unit of all status changes on support and transportation vehicles.
- Arrange for and activate fueling, maintenance, and repair of ground resources.
- Maintain Support Vehicle Inventory and transportation vehicles (ICS Form 218).
- Provide transportation services, IAW requests from the LSC or Support Branch Director.
- Collect information on rented equipment.
- Requisition maintenance and repair supplies (e.g., fuel, spare parts).
- Maintain incident roads.
- Submit reports to Support Branch Director as directed.

VESSEL SUPPORT UNIT LEADER

- Participate in Support Branch/Logistics Section planning activities.
- Coordinate development of the Vessel Routing Plan.
- Coordinate vessel transportation assignments with the Protection and Recovery Branch or other sources of vessel transportation.
- Coordinate water-to-land transportation with the Ground Support Unit, as necessary.
- Maintain a prioritized list of transportation requirements that need to be scheduled with the transportation source.
- Support out-of-service vessel resources, as requested.
- Arrange for fueling, dockage, maintenance and repair of vessel resources, as requested.
- Maintain inventory of support and transportation vessels.

FINANCE/ADMINISTRATION

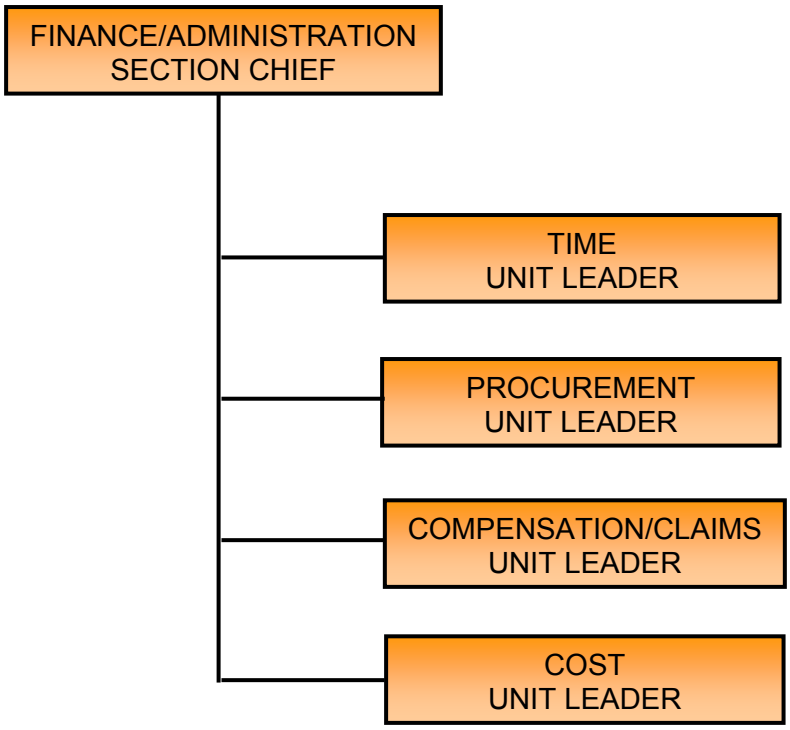
Finance/Administration Section Chief B-23

Time Unit Leader B-23

Procurement Unit Leader B-24

Compensation/Claims Unit Leader B-24

Cost Unit Leader B-25



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 agency(s) 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.

TIME UNIT LEADER

- Determine incident requirements for time recording function.
- Determine resource needs.
- Contact appropriate agency personnel/representatives.
- Ensure that daily personnel time recording documents are prepared and in compliance with policy.
- Establish time unit objectives.
- Maintain separate logs for overtime hours.
- Establish commissary operation on larger or long-term incidents as needed.
- Submit cost estimate data forms to the Cost Unit, as required.
- Maintain records security.
- Ensure that all records are current and complete prior to demobilization.
- Release time reports from assisting agency personnel to the respective Agency Representatives prior to demobilization.
- Brief the Finance/Administration Section Chief on current problems and recommendations, outstanding issues, and follow-up requirements.

PROCUREMENT UNIT LEADER

- Review incident needs and any special procedures with Unit Leaders, as needed.
- Coordinate with local jurisdiction on plans and supply sources.
- Obtain the Incident Procurement Plan.
- Prepare and authorize contracts and land-use agreements.
- Draft memoranda of understanding as necessary.
- Establish contracts and agreements with supply vendors.
- Provide for coordination between the Ordering Manager, agency dispatch, and all other procurement organizations supporting the incident.
- Ensure that a system is in place that meets agency property management requirements. Ensure proper accounting for all new property.
- Interpret contracts and agreements; resolve disputes within delegated authority.
- Coordinate with the Compensation/Claims Unit for processing claims.
- Coordinate use of impress funds, as required.
- Complete final processing of contracts and send documents for payment.
- Coordinate cost data in contracts with the Cost Unit Leader.
- Brief the Finance/Administration Section Chief on current problems and recommendations, outstanding issues, and follow-up requirements.

COMPENSATION/CLAIMS UNIT LEADER

- Establish contact with the incident SO and LO (or Agency Representatives if no LO is assigned).
- Determine the need for Compensation for Injury and Claims Specialists and order personnel as needed.
- Establish a Compensation for Injury work area within or as close as possible to the Medical Unit.
- Review Incident Medical Plan (ICS Form 206).
- Ensure that Compensation/Claims Specialists have adequate workspace and supplies.
- Review and coordinate procedures for handling claims with the Procurement Unit.
- Brief the Compensation/Claims Specialists on incident activity.
- Periodically review logs and forms produced by the Compensation/Claims Specialists to ensure that they are complete, entries are timely and accurate and that they are in compliance with agency requirements and policies.
- Ensure that all Compensation for Injury and Claims logs and forms are complete and routed appropriately for post-incident processing prior to demobilization.
- Keep the Finance/Administration Section Chief briefed on Unit status and activity.
- Demobilize unit in accordance with the Incident Demobilization Plan.

COST UNIT LEADER

- Coordinate cost reporting procedures.
- Collect and record all cost data.
- Develop incident cost summaries.
- Prepare resources-use cost estimates for the Planning Section.
- Make cost-saving recommendations to the Finance/Administration Section Chief.
- Ensure all cost documents are accurately prepared.
- Maintain cumulative incident cost records.
- Complete all records prior to demobilization.
- Provide reports to the Finance/Administration Section Chief.

APPENDIX C

RESPONSE RESOURCES

NON OSRO CLASSIFIED CONTRACTORS

Conestoga-Rovers & Associates C-2

NON OSRO CLASSIFIED CONTRACTORS

Hull Environmental Services, Inc. C-3

CONESTOGA-ROVERS & ASSOCIATES

Conestoga-Rovers & Associates has been contracted to provide oil spill cleanup in case of a discharge. The following equipment list shows the types of equipment owned by Conestoga-Rovers & Associates. Also provided is a list of equipment which could be provided by subcontracted companies. All listed equipment could be on-scene within 6 hours. If further equipment is needed, Conestoga-Rovers & Associates would subcontract with a USCG certified OSRO, Hull, described later in this section.

Reference No. 016199-97

AGREEMENT FOR PROFESSIONAL SERVICES

THIS Agreement for Professional Services (hereinafter "Agreement") is effective this 30 day of September 2007, between Conestoga-Rovers & Associates, Inc. (hereinafter "CRA") and Cascade Pipelines, LLC (hereinafter "Client"). In consideration of the mutual promises set forth herein, CRA and Client agree as follows:

1. CRA shall perform the work assigned to it by Client's contract representative. The Proposed Work Tasks are set forth in Exhibit "A" attached hereto and made a part of this Agreement.

2. (a) Client shall pay CRA for services rendered on a time plus expense basis in accordance with the fee schedule set forth in Exhibit "B" attached hereto and made a part of this Agreement. CRA's rates as set forth in the fee schedule are subject to revision on an annual basis. Personnel rates are all inclusive, including overhead and profit, and apply to all hours expended with no premium charged for overtime hours.

   (b) CRA shall be reimbursed for all expenses incurred in connection with its services hereunder, including but not limited to reasonable travel and living expenses; long distance telephone charges; information technology; telecopy charges; printing and reproduction costs; photographic expenses; advertising for bids; special delivery and express charges; costs of providing and maintaining site offices, supplies and equipment; and all necessary and incidental costs associated with subcontracts where appropriate.

3. (a) Unless otherwise agreed, CRA will invoice Client monthly. Payment of CRA invoices shall be due upon receipt by Client and are past due 30 days from invoice date. Invoices not paid within 30 days shall be subject to an assessed interest charge of eighteen percent (18%) per year, calculated monthly. In the event that Client disputes an invoice, Client shall notify CRA in writing within 30 days of the invoice date identifying the cause of the dispute, and paying when due that portion of the invoice not in dispute. If the parties are unable to resolve the dispute within 60 days of filing the notice of dispute, the parties may elect to settle the dispute by arbitration. Interest shall not accrue on any disputed amount.

   (b) In addition to the above interest charges, a surcharge of ten percent (10%) will be applied on subcontractor invoices which remain unpaid 45 days following CRA's invoice date to Client for such services.

4. CRA carries the insurance coverage set forth in Exhibit "C" attached hereto and made a part of this Agreement.

5. (a) Client shall be responsible for, and CRA may rely upon, the accuracy and completeness of all requirements, programs, instructions, reports, data, and other information furnished by Client to CRA pursuant to this Agreement. CRA may use such Client-furnished information in performing services.

   (b) Client shall, if requested by CRA, review any designs, drawings, plans, specifications, reports, bids, proposals and other information provided by CRA. Client shall make decisions within a reasonable time and carry out its other responsibilities in a timely manner so as not to delay the work of CRA. Client shall give prompt written notice to CRA

whenever Client observes or otherwise becomes aware of any development that may affect scope or timing of CRA's services, or any defect in the work by CRA.

(c) At the request of CRA, Client shall provide CRA with the following information to the extent such information is in Client's possession and is pertinent to the services:

i) all criteria and full information as to Client's requirements; copies of all design and construction standards which Client will require to be included in CRA's work; copies of Client's standard terms, conditions, and related documents for CRA to include in bidding documents, when applicable; and

ii) any other available information pertinent to the project, including reports and data relative to previous designs or investigations; environmental, geological, and geotechnical conditions of the project site and all surrounding area at or adjacent to the project site; and insofar as such information is not available, Client agrees to pay CRA for the cost of obtaining the same.

(d) Client shall be responsible for determining the location of all subsurface structures including but not limited to pipes, tanks, sewer and utilities (power, phone, cable, gas, water, etc.).

6. (a) CRA shall be responsible for the technical accuracy of its services and documents resulting therefrom, and Client shall not be responsible for discovering deficiencies therein. CRA shall correct such deficiencies without additional compensation, except to the extent such action is directly attributable to deficiencies in information provided by Client or the project site owner and CRA relied on such information.

(b) CRA shall have the primary responsibility of determining if known or potential health or safety hazards exist on or near the project site upon which services are to be performed by CRA or its subcontractors, with particular reference to hazardous substances or conditions. To the extent that such information is in its possession, Client shall disclose it to CRA prior to the commencement of work. If hazardous conditions or substances are discovered by CRA during the performance of its services which it could not have reasonably discovered prior to the commencement of work, or which Client had in its possession and failed to disclose, and if the existence of such substances or conditions materially changes the nature or conduct of CRA's work or responsibilities at the project site, Client and CRA shall seek to agree on an equitable adjustment to CRA's work to reflect such changes. If the parties are unable to agree on such adjustments, this Agreement may be terminated by CRA in accordance with the termination provisions of this Agreement.

7. CRA shall not disclose any confidential information relating to Client without the prior written consent of Client, except as required by applicable law, regulation, or legal process, or as may be required by emergency situations. In the event CRA is requested pursuant to, or required by applicable law, regulation, or legal process to disclose any confidential information, CRA will notify Client of the circumstances requiring such disclosure and will refrain from such disclosure for the maximum period of time allowed by law so that Client may seek a protective order or other appropriate remedy to protect the confidentiality of the information.

8. The parties acknowledge and agree that CRA shall be an independent contractor and shall have responsibility for and control over the means of providing its services. CRA shall have the right to use subcontractors as CRA deems necessary to assist in the performance of services. CRA shall not be required to employ any subcontractor unacceptable to CRA.

9. Client shall provide right-of-entry and access as needed by CRA and necessary permissions in order for CRA to perform work under this Agreement. In the event that Client does not own or control the project site, Client shall obtain permission from the project site owner for a right-of-entry as needed by CRA, and its employees, agents and subcontractors to perform the services called for in this Agreement. CRA and its employees, agents and subcontractors will comply with all known health and safety requirements of the project site owner which may be imposed upon CRA as a condition of its right-of-entry.

10. In the event CRA performs any services for Client that involves the taking of samples, CRA shall preserve such samples obtained from the project site as it deems necessary for the project, but not longer than 45 days after the issuance of any document that includes data obtained from such samples. CRA shall arrange for the disposal of samples on behalf of the Client, which may consist of returning the samples to the project site and Client agrees to pay CRA for the cost of disposing of such samples. Samples shall remain the property of the Client.

11. CRA warrants that its services shall be performed, within the limits prescribed by Client, in the manner consistent with the level of care and skill ordinarily exercised by members of CRA's profession under similar circumstances. No other warranties or representations of any kind, either expressed or implied, are included or intended by this Agreement or in any proposal, contract, report, opinion or other document in connection with this project.

12. (a) CRA Indemnity:

Subject to the limitations of subparagraph 12(c) below, CRA agrees to indemnify and hold harmless Client (including its officers, directors, employees and agents) from and against any and all losses, damages, liabilities and expenses (including reasonable legal fees and reasonable costs of investigation) resulting from or arising out of (a) failure of CRA to comply in material respects with federal, state, and local laws and regulations applicable to services undertaken by CRA hereunder; (b) breach by CRA of warranties or other provisions hereunder; or (c) any injury or death of any person (including employees and agents of Client and CRA), or damage or loss or destruction of any property (including property of Client and CRA and their respective employees and agents) resulting from or arising out of negligence or willful misconduct on the part of CRA in performing services hereunder, except to the extent any losses, damages, liabilities or expenses result from, are attributable to, or arise out of (i) any negligence or willful misconduct of Client; (ii) any delay attributable to Client's conduct; or (iii) any breach by Client of any warranties or other provisions hereunder.

(b) Client Indemnity:

Subject to the limitations of subparagraph 12(c) below, Client agrees to indemnify and hold harmless CRA (including its officers, directors, employees, agents, and subcontractors) from and against any and all losses, damages, liabilities and expenses (including legal fees and reasonable costs of investigation) resulting from or arising out of (a) any negligence or willful misconduct of Client; (b) any breach by Client of any warranties or other provisions hereunder; or (c) any condition existing at the project site prior to the arrival of CRA of which CRA had no actual knowledge and over which CRA had no control; provided, however, that such indemnification shall not apply to the extent any losses, damages, liabilities or expenses result from or arise out of (i) any negligence or willful misconduct of CRA; (ii) any delay attributable to CRA's conduct; or (iii) any breach by CRA of any warranties or other provisions hereunder.

(c) Limitation of Liability:

For any damage caused by negligence, including errors, omissions or other acts; or for any damages based in contract or for any other cause of action; CRA's liability, including that of its employees, agents, directors, officers and subcontractors, shall not exceed $1,000,000, except as to damage resulting from the gross negligence or willful misconduct of CRA.

Client's liability to CRA, except as to damage resulting from Client's gross negligence or willful misconduct, including that of its employees, agents, directors, officers and contractors, will be limited to $1,000,000.

(d) CRA and Client recognize and agree that CRA has neither created nor contributed to the existence of any hazardous, radioactive, toxic, irritant, pollutant or otherwise dangerous substance or condition at the project site. Accordingly, in the event of any claim against CRA arising out of such pre-existing conditions or alleged conditions, Client agrees to defend, indemnify and hold CRA harmless from and against such claim(s), unless such claims arise out of the gross negligence or willful misconduct of CRA, including that of its employees, agents, directors, officers or subcontractors.

13. (a) Client reserves the right to terminate the project at any time. In the event of such termination, Client shall pay CRA for all services performed and expenses incurred to the effective date of termination. In addition, Client shall pay CRA a reasonable amount for services and expenses directly attributable to termination, such as costs of terminating subcontracts, demobilization costs, and other related close-out costs.

(b) CRA shall have the right to terminate its obligations pursuant to this Agreement under the following circumstances:

i) in the event of a breach of any obligation of Client, except payment of disputed amounts as provided in paragraph 3 of this Agreement; or

ii) if CRA is unable, for any reason beyond its control, to perform its obligations pursuant to this Agreement in a safe, lawful or professional manner.

(c) In the event that either circumstance described in subparagraphs 13(b)(i) or 13(b)(ii) above occurs, CRA shall notify Client of pertinent conditions and recommend appropriate action. If within 30 days of such notice the circumstances described in subparagraphs 13(b)(i) or 13(b)(ii) above have not been remedied or cured, CRA may terminate its Agreement hereunder. In the event of termination, CRA shall be paid for services performed to the date of termination plus reasonable termination expenses.

14. Client shall have the right, upon reasonable advance notice, to audit all records associated with the services performed and with the charges invoiced to Client pursuant to this Agreement. Such records shall be open to inspection and audit by authorized representatives of Client during normal business hours at the place where such records are kept until the completion or termination of this Agreement and for a minimum of 3 years thereafter. CRA shall require its subcontractors to similarly maintain records and to permit the inspection and audit of such records by Client upon similar conditions and time periods.

15. Notices pertaining to this Agreement shall be in writing and deemed to have been duly given if delivered in person, by overnight courier, or by facsimile with electronic confirmation to the

respective party designated below, or at such other address as may be changed by either party by giving written notice thereof to the other pursuant to this paragraph:

CRA:

Conestoga-Rovers & Associates, Inc.

Attention:	Philip Hurley
Address:	2270 Springlake Rd.
	Suite 800
	Dallas, Texas 75234
Telephone:	(972) 331-8500
Facsimile:	(972) 331-8501

CLIENT: Cascade Pipeline, LLC

Attention:	Laurel Miller
Address:	355 Ashland Loop Rd
	Ashland, OR 97520
Telephone:	(541) 973-9363
Facsimile:	(541) 488-2920

16. This Agreement, including all attached Exhibits and documents referenced in those Exhibits, constitutes the complete and final Agreement between CRA and Client. It supersedes all prior or contemporaneous communications, representations, undertakings or understandings of the parties, whether oral or written, relating to the scope of work or services and subject matter of this Agreement, except to the extent that such prior communications have explicitly been incorporated into the Agreement or one of the attached Exhibits. Modifications of this Agreement shall not be binding unless made in writing and signed by an authorized representative of each party.

17. This Agreement shall be governed by the laws of the State in which the project site is located.

IN WITNESS WHEREOF, CRA and Client have caused this Agreement to be executed by their duly authorized representatives effective the day and year first written above:

CRA:

CONESTOGA-ROVERS & ASSOCIATES, INC.

Signature

Michael Staffileno

Printed Name

VP

Title

CLIENT:

Cascade Pipeline, LLC

Signature

Laurel Miller

Printed Name

Manager

Title

Conestoga-Rovers & Associates
Emergency Response Equipment List
Aug-07

Equipment Description
Trimble GIS/GPS Survey Equipment
Field Screening - PID
Field Screening - FID
Field Screening - IR
Decon. Equipment (pool)
PPE (level A&B)
PPE (level C&D)
6"x 6" skirted river boom
6"x 9" skirted river boom
3" floating skimmer
"T" skimmer
Drum skimmer
String trimmer
Hand-held Radios
Long Range Hand-held Radios
Life jacket
Waders
Blowers
Pressure washer
Chain Saw
4 x 4 ATV (including fuel)
3" pump (diaphragm)
2" pump (diaphragm)
2" Wash down Pump
4" trash pump (including fuel)
3" trash pump (including fuel)
4" discharge hose (50' section)
3" discharge hose (50' section)
2" discharge hose (50' section)
4" suction hose (20' section)
3" suction hose (20' section)
2" suction hose (20' section)
4000 Watt Light Tower
Generator 5000 Watt (including fuel)
Generator 25 KVA diesel (including fuel)
Generator 125-149 KW (including fuel)
Small tools (shovel, rakes, etc.)
14', 15', 16' Motorized aluminum boats
20' Motorized boat
26' Motorized boat
Haul trucks and trailer
1/2 ton truck + Mileage
1 ton truck w/tools + Mileage
Spill trailer (15')
Spill trailer (20')
Spill trailer (45')
16' to 20' trailer
8' - 10' trailer
130 bbl. Vacuum truck, operated
120 bbl. Vacuum truck, operated
60 or 70 bbl. Vacuum truck
20 yd. Roll-off Box
30 yd. Roll-off Box
500 bbl Frac Tank
D-7 Dozer, including fuel
D-6 Dozer LGP, including fuel
D-6 Dozer, including fuel
D-5 Dozer, including fuel

Conestoga-Rovers & Associates
Emergency Response Equipment List
Aug-07

Equipment Description
D-4 Dozer, including fuel
330 Excavator, including fuel
325 Excavator, including fuel
320 Excavator, including fuel
315 Excavator, including fuel
312 Excavator, including fuel
416 Backhoe. Including fuel
416 Backhoe 4x4, including fuel
926 Loader AWD, including fuel
928F Loader AWD, including fuel
950 Loader AWD, including fuel
963 Tracked Loader, including fuel
Off road dump truck, including fuel
Pulvimixer, including fuel

CRA Certified Sub-Contractor - Amarillo, Texas
Emergency Response Equipment List
Aug-07

Equipment
Description

860 Case Trencher / Cable Plow
7337 Jetco / 850 Capitol Ditching Machine Rock + Teeth
Cleveland Ditching Machine (Dirt) 320
Jetco Chain Ditchin Machine Rock + Teeth
JD 790 Excavator with Shaker Bucket
JD 790 Excavator with Hydraulic Hammer
JD 790 Excavator
John Deere Backhoe
John Deere Loader / Forklift
John Deere Combination 450 Tractor / Sideboom
561 Cat / 750 JD Sideboom
D-7 Cat / 850 JD Tractor with Angle Dozer
572 Cat Sideboom
Tractor with seeder or shredder
Mulcher
750 Tracto with Ozzie Padder
Motorgrader / Maintainer
Gradall Combination Forklift / Cherry Picker
1720 DW Directional Bore Machine
4020 DW Directional Bore Machine
Laney Road Boring Machine
Carpenter Truck with tools
Kill / Pump Truck
Truck with Lowboy
Truck with float
135 Bbl Transport
Truck with 30 Bbl water tank
Hydro-vac trailer
Welding unit
1300 Air Compressor with Truck
2" thru 6" Fusing Machine
8" thru 12" Fusing Machine
14"-16"-18" Fusing Machine
Dual Drum Roller Compactor
6" Cetrifugal Fill pump; skid mounted
Jack Hammer
Masonry Drill
Generators
RD-6 Line Finder
8-12" Beveling Machine
Grid Roller
2" Water Pump
Hydro Test Trailer complete with equipment
Portable Fabrication Shed
H2S Monitor-Personal
H2S Monitor-3 way
Hot Tapping Machine
583 Horsepower Cat Sideboom Pipe layyer
594 Horsepower Cat Sideboom Pipe layyer
100 ton Hyrdraulic Crane
100 ton Hi-Rail Crane
980F Loader
966F Loader
977 Track Loader
963 Track Loader
853 Bobcat Skidloader
Salvage Drums
Base and Fill Material (Caliche, Lime, Cold Mix, Hot Mix)

CRA Certified Sub-Contractor - Amarillo, Texas
Emergency Response Equipment List
Aug-07

Equipment Description
Sheeps Foot Roller
Bobtail Dump Truck
Hotshot Rig
Tahoe 4x4
Blazer 4x4
4x4 Utility Vehicle with winch
Boom Truck-15 and 6 ton
Crawler Dozers
Track Tractors-80 and 140 horsepower
Mud Tanks
Turbine Meter
Ditch Pump
Trench Boxes
Pipe Calipers, Cold Cutters, and Cradles

HULL ENVIRONMENTAL SERVICES, INC.

Hull Environmental Services, Inc. is a USCG certified OSRO. They are classified on Rivers/Canals and Inland to respond to a maximum most probable discharge of oil. They have proven the capability to provide 6,000 feet of protection boom, have an effective daily recovery capacity of 2,400 bbls a day, have a temporary storage capacity of 2,400 bbls, and can be on-scene with 12 hours of the discovery of a discharge.

HULL'S
Environmental Service, Inc.
www.hullsenvironmental.com
1144 8th Street
Wilson, OK 73463
Office: 580-668-3456 Fax: 580-668-3460

November 9, 2007

Ms. Laurel Miller
CASCADE PIPELINES, LLC
355 Ashland Loop Rd.
Ashland, OR 97520

Re: OPA-90 Compliance
Deployment Inspection and Maintenance

Dr. Ms. Miller:

Hull's Environmental Service, Inc. acknowledges that it has successfully deployed a representative sample of our spill response equipment during the last 12 months. Attached you will find documentation regarding deployment drills and/or actual responses conducted in the last 12 months. The balance of our response equipment not deployed has been properly inspected, maintained and documented in accordance with our maintenance program.

In addition, all of our spill response personnel have received the necessary training, which includes 29 CFR 1910.120 OSHA HAZWOPER to safely and effectively respond to an oil spill. Personnel training records are kept on file for at least three years and are available for review upon request.

In conclusion, Hull's Environmental Services, Inc. certifies that our files are current and in compliance with OPA-90 regulations pertaining to Oil Spill Removal Organizations (OSRO). The United States Coast Guard OSRO Classification listing for Hulls Environmental is also attached for you reference.

If you have any questions or require additional information, Please do not hesitate to contact Hull's Environmental at (580) 668-3456.

Sincerely,

Michael W. Carter
Operations Manager

CC: Mr. Phil Hurley, Conestoga-Rovers and Associates, Inc. – Dallas, Texas

HULL'S ENVIRONMENTAL SERVICE, INC.
SUMMARY OF DEPLOYMENT DRILLS AND RESPONSES
2007

March 2007 – Love County, OK (Hickory Creek)
HES responded to a crude oil release in Hickory Creek in Love County, OK. HES deployed 6"X9" containment boom in Hickory creek using air boats and 20 foot motorized flat bottom boats. HES also deployed absorbent booms and pads, vacuum trucks and drum skimmers to remove crude oil from Hickory Creek.

March 2007 – Deployment Drill – Healdton Lake, Healdton, OK
HES conducted boom deployment drills using 6" x 12" containment boom and boom deployment boats. Training included proper boom deployment, spill containment, open water anchoring and boom recovery.

May 2007 – Coal County, OK
HES responded to an oil based drilling mud release in Coal County, OK. HES deployed 6"X6" containment boom in an unnamed creek to prevent migration of the oil based drilling mud. HES deployed tracked excavators, backhoes, vacuum trucks and absorbent materials to remediate the release.

May 2007 – Grayson County, Texas (Lake Texoma)
HES responded to a crude oil release in Lake Texoma in Grayson County, Texas. HES deployed 6"X9" containment boom in Lake Texoma 20 foot motorized flat bottom boats. HES also deployed absorbent booms and pads, vacuum trucks and skimmers to remove crude oil from Lake Texoma.

June 2007 – Seminole County, OK (Little River)
HES responded to a diesel release in the Little River in Seminole County, OK. HES deployed 6"X6" containment boom in the Little River using air boats and 20 foot motorized flat bottom boats. HES also deployed absorbent booms and pads.

July 2007 – Grayson County, TX (Lake Texoma)
HES deployed and maintained 6"X9" containment boom and absorbent boom around production locations during flooding conditions at Lake Texoma. The booms were deployed and maintained using 20 foot motorized flat bottom boats. The booms were maintained for approximately 2 months until flood waters receded.

September 2007 – Deployment Drill – Healdton Lake, Healdton, OK
HES conducted boom deployment drills using 6" x 9" containment boom, air boats and boom deployment boats. Training included proper boom deployment, spill containment, skimmer operation, vacuum truck operation, proper decontamination procedures and boom recovery.

October 2007 – Coal County, OK
HES responded to a brine water release in Coal County, OK. HES deployed vacuum trucks and misc. pumps to facilitate the flushing and recovery of the released materials. HES also deployed tracked excavators, loaders, and haul trucks to remediate the remnants of the release.

Alphabetical OSRO Classifications by Company

Facilities *Vessels*

0148 Hull's Environmental Services

COTP: HOUSTON-GALVESTON

☑ *High Volume Port*

Alternate City:

	Facilities MM	Facilities W1	Facilities W2	Facilities W3	Vessels MM	Vessels W1	Vessels W2	Vessels W3
River/Canal	☐	☐	☐	☐	☒	☐	☐	☐
Inland	☐	☐	☐	☐	☒	☐	☐	☐
Open Ocean	☐	☐	☐	☐	☐	☐	☐	☐
Offshore	☐	☐	☐	☐	☐	☐	☐	☐
Nearshore	☐	☐	☐	☐	☐	☐	☐	☐
Great Lakes	☐	☐	☐	☐	☐	☐	☐	☐

COTP: LOWER MISSISSIPPI(Formerly MEMPHIS)

☐ *High Volume Port*

Alternate City:

	Facilities MM	Facilities W1	Facilities W2	Facilities W3	Vessels MM	Vessels W1	Vessels W2	Vessels W3
River/Canal	☐	☐	☐	☐	☒	☐	☐	☐
Inland	☐	☐	☐	☐	☒	☐	☐	☐
Open Ocean	☐	☐	☐	☐	☐	☐	☐	☐
Offshore	☐	☐	☐	☐	☐	☐	☐	☐
Nearshore	☐	☐	☐	☐	☐	☐	☐	☐
Great Lakes	☐	☐	☐	☐	☐	☐	☐	☐

COTP: MORGAN CITY

☐ *High Volume Port*

Alternate City:

	Facilities MM	Facilities W1	Facilities W2	Facilities W3	Vessels MM	Vessels W1	Vessels W2	Vessels W3
River/Canal	☐	☐	☐	☐	☒	☐	☐	☐
Inland	☐	☐	☐	☐	☒	☐	☐	☐
Open Ocean	☐	☐	☐	☐	☐	☐	☐	☐
Offshore	☐	☐	☐	☐	☐	☐	☐	☐
Nearshore	☐	☐	☐	☐	☐	☐	☐	☐
Great Lakes	☐	☐	☐	☐	☐	☐	☐	☐

COTP: PORT ARTHUR

☑ *High Volume Port*

Alternate City:

	Facilities MM	Facilities W1	Facilities W2	Facilities W3	Vessels MM	Vessels W1	Vessels W2	Vessels W3
River/Canal	☐	☐	☐	☐	☒	☐	☐	☐
Inland	☐	☐	☐	☐	☒	☐	☐	☐
Open Ocean	☐	☐	☐	☐	☐	☐	☐	☐
Offshore	☐	☐	☐	☐	☐	☐	☐	☐
Nearshore	☐	☐	☐	☐	☐	☐	☐	☐
Great Lakes	☐	☐	☐	☐	☐	☐	☐	☐

APPENDIX D

EVACUATION PLAN

D.1 EMERGENCY EVACUATION PROCEDURES

Minimizing employee 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 and railroads from the emergency area.

This Section is a general procedure for response to a vapor cloud or other hazardous vapor release situations and is intended for use in conjunction with Fire Plans, Site Specific Plans, Site Safety and Health Plans, and other plans and procedures applicable to the work area.

In the event that a hazardous vapor situation is detected, evacuation of all persons in the affected area may well be the highest priority course of action depending on the circumstances. Large-scale evacuations may require the efforts of entire Response Team and/or assistance from local emergency responders, dependent on site conditions. Phone numbers for local emergency responders are located in Section 2.

D.1.A Isolation of Potential Emergency Site

For all potential emergency situations, isolation of the area affected by the emergency situation from employees and the general public will always be an immediate priority. Since each emergency is different, the size area to be isolated and the method of isolation will vary on a case-by-case basis.

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. Figure 2.5 contains listings of how to contact these personnel.

D.1.B Pipeline Facility Evacuations

It is often difficult to determine when the quantity of vapors present constitute a hazard severe enough to warrant shutdown of operations and maintenance and the evacuation of the work site or area, even when hazardous atmosphere detectors are in use.

Employees must ultimately use their own judgment based on the available information plus previous experience and training in making this decision. In all cases, these judgments should be conservative, i.e., they should err on the side of safety and caution.

The protection of human life must always take precedence over the protection of physical property or equipment.

D.1 EMERGENCY EVACUATION PROCEDURES (Cont'd)

D.1.C Remote System Locations; Right-of-way Locations

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

- The Operator will notify the QI/AQI to start the response to the event. Dependent on the situation, the QI/AQI shall send the appropriate personnel to the affected location to investigate.

- Personnel responding to the affected location should always make an initial assessment of the site from a safe and prudently distant location from the likely source point of the release. If the source point cannot be isolated without entering a vapor cloud or other hazardous situation, the investigating personnel should stay out of the hazardous area. A call for immediate assistance should be made to the QI/AQI to begin notification of the appropriate members of the Spill Management Team, who are properly equipped to approach and isolate a release of this nature.

- The QI/AQI has responsibility for contacting the appropriate local officials for assistance in evacuating and isolating all persons from the affected area and controlling traffic and spectators, if needed.

D.2 EVACUATIONS INVOLVING THE GENERAL PUBLIC

D.2.A Specific Procedure

- The Company's acting On-Scene Commander assesses the incident and determines if it is necessary to evacuate the public from the immediate affected area (local officials shall 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 Spill Management Team's Liaison Officer, with assistance of the entire Spill Management Team, if needed.

- If the incident involves injured persons, refer to "Medical Emergencies" of Section 3.

- Local civil 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 shall 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.

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

D.2.A Specific Procedure (Cont'd)

- Warn all evacuees against activities such as smoking, operating motor vehicles, spark-producing appliances, etc. The Company should attempt to render whatever assistance is necessary to the evacuees.

- Keep the QI/AQI and or Safety Officer informed of any evacuation efforts in order that they may pass along the latest information regarding such actions to other support personnel.

- 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.

D.2.B Traffic Control

If an incident occurs near a road or railroad, local traffic may need to be halted or diverted from the immediate area. The assistance of local civil 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 may halt rail traffic.

D.2.C Notification of Public Officials

The Company must be prepared to coordinate the Company's response to emergencies with public officials, as appropriate. The QI/AQI or other appointee shall interface with public officials on the appropriate seniority levels who are concerned about an emergency response in progress. The QI/AQI shall interface directly with on-site incident commanders from other agencies in order to best coordinate response efforts. The Liaison Officer shall act as Company liaison with various local emergency responders during an emergency. The Safety Officer shall act as liaison with OSHA representatives, if necessary.

APPENDIX E

RESPONSE ACTION CRITIQUE

In the event of a discharge covered under this Plan, the Company will review the Plan to evaluate and validate its effectiveness. Input on the effectiveness of the Plan will be sought from management, Operations personnel, the Spill Management Team, regulatory agencies, and others as deemed necessary. Based on the review, amendments to the Plan may be necessary.

APPENDIX F

DISPOSAL PLAN

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Waste Handling F-2

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Table F-2 Temporary Storage Methods F-9

Table F-3 Oily Waste Separation and Disposal Methods F-10

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 at approved disposal sites. Each of these activities demands that certain health and safety precautions be taken that 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 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 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.

Safety Considerations

Care would be taken to avoid or minimize direct contact with oily wastes. All personnel handling or coming into contact with oily wastes would 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 would be worn by personnel involved in waste handling activities where splashing might occur. Any portion of the skin exposed to oily waste would be washed with soap and water as soon as possible. Decontamination zones would 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 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 truck to a barge.
- 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.

WASTE HANDLING (Cont'd)

Waste Transfer **(Cont'd)**

- **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.
- **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 would 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 would be acceptable, if the available space can support the weight of both the container and the product.

Vacuum trucks may be the best option for temporary storage of recovered oil. Oil can then be transported to other storage or disposal.

WASTE STORAGE (Cont'd)

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.
- Flooding.
- Surface water.
- Slope.
- Covered material.
- Capacity.
- Climatic factors.
- Land use.
- Toxic air emissions.
- Security.
- Access.
- Public contact.

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 under-felt 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.

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 would be removed and disposed with the rest of the oily debris. Any surrounding soil which has become contaminated with oil would 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 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 facility. 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. Land-filling 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.

During an oil spill incident, Key Pipelines LTD. would consult with the Federal and State On-Scene Coordinator (OSC) to identify the acceptable disposal methods and sites appropriately authorized to receive such wastes. Key Pipelines LTD. 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 would be prepared by a Disposal Specialist of the Key Pipelines LTD.'s Response Team in the form of an Incident Disposal Plan that must be authorized by the OSC. An Incident Disposal Plan would 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 will be 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 would 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 would be available to segregate oily wastes. The table also depicts methods that may 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.

Key Pipelines LTD.'s Disposal Specialist is responsible for ensuring that all waste materials be disposed at a Company internally approved disposal site.

WASTE DISPOSAL (Cont'd)

Incineration

This technique entails the complete destruction of the recovered oil by high temperature thermal oxidation reactions. There are licensed incineration facilities as well as portable incinerators that may be brought to a spill site. Incineration may require the approval of the local Air Pollution Control Authority. Factors to consider when selecting an appropriate site for onsite incineration would include:

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

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 would not 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 would be appropriate only when atmospheric conditions will allow the smoke to rise several hundred feet and rapidly dissipate. Smoke from burning oil will normally rise until its temperature drops to equal the ambient temperature. Afterwards, it will travel in a horizontal direction under the influence of prevailing winds.

Landfill Disposal

This technique entails burying the recovered oil in 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 in accordance with the landfill guidelines and regulations. Landfill designation would 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 would be disposed only at Company-approved disposal facilities. Key Pipelines LTD.'s Disposal Specialist is responsible for ensuring that all waste materials are disposed at a Company internally approved disposal site. Disposal at a non-approved facility would require approval by Key Pipelines LTD.'s Disposal Specialist prior to sending any waste to such a facility.

TABLE F-1
COMPARATIVE EVALUATION OF OIL SPILL TRANSFER SYSTEMS

CHARACTERISTICS OF TRANSFER SYSTEMS	CENTRIFUGAL PUMP	LOBE PUMP	GEAR PUMP	INTERMESCHING SCREW	VALVE PUMP	FLEXIBLE IMPELLER	SCREW/AUGER PUMP	PROGRESSING CAVITY	PISTON PUMP	DIAPHRAGM PUMP	AIR CONVEYOR	VACUUM TRUCK	PORTABLE VACUUM PUMP	CONVEYOR BELT	SCREW CONVEYOR	WHEELED VEHICLES
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

CONTAINER	ONSHORE	OFFSHORE	SOLIDS	LIQUIDS	NOTES
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
LIQUIDS		
Non-emulsified oils	Gravity separation of free water	Incineration Use of recovered oil as refinery/production facility feedstock
Emulsified oils	Emulsion broken to release water by: ● heat treatment ● emulsion breaking chemicals ● mixing with sand ● centrifuge ● filter/belt press	Use of recovered oil as refinery/production facility feedstock
SOLIDS		
Oil mixed with sand	Collection of liquid oil leaching from sand during temporary storage Extraction of oil from sand by washing with water or solvent Removal of solid oils by sieving	Incineration Use of recovered oil as refinery/production facility feedstock Direct disposal Stabilization with inorganic material Degradation through land farming or composting
TYPE OF MATERIAL	**SEPARATION METHODS**	**DISPOSAL METHODS**
Oil mixed with cobbles or pebbles	Screening Collection of liquid oil leaching from materials during temporary storage Extraction of oil from materials by washing with water or solvent	Incineration Direct Disposal Use of recovered oil as refinery/production facility feedstock
Oil mixed with wood, seaweed and sorbents	Screening Collection of liquid oil leaching from debris during temporary storage Flushing of oil from debris with water	Incineration Direct disposal Degradation through land farming or composting for oil mixed with seaweed or natural sorbents
Tar balls	Separation from sand by sieving	Incineration Direct disposal

APPENDIX G

WORST CASE DISCHARGE ANALYSIS AND SCENARIOS

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Worst Case Discharge G-3

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 their Response Zone. The calculations and descriptions are as follows:

DOT/PHMSA Discharge Volume Calculation

- **Worst Case Discharge**
  The largest volume (Bbls) of the following:
  - *Pipeline's maximum release time (hrs), plus the maximum shutdown response time (hrs), multiplied by the maximum flow rate (Bbls/hr.), plus the largest line drainage volume after shutdown of the line section.*

    -- OR --
  - *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.*

    -- OR --
  - *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.*

Scenario Types

The occurrence of a worst case discharge 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 Pipeline.

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 in Figure 5.1 with additional detail on equipment and manpower provided in Appendix C. Response personnel list/telephone numbers and other internal/external resources telephone numbers are detailed in Figures 2.2 and 2.5.

RESPONSE CAPABILITY SCENARIOS

(b) (7)(F)

A worst case discharge at this Pipeline is considered to be discharge that does not exceed (b) (7)(F)

Description

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

- Pipeline Rupture
- Explosion or Fire

The type of material that could be discharged is Diesel.

Volume

The Amarillo Pipeline System does not use inline or breakout tanks.

A worst case discharge would originate from a section of the Pipeline. The calculation from the Pipeline is as follows:

(b) (7)(F)

RESPONSE CAPABILITY SCENARIOS (Cont'd)

Amarillo Response Zone Worst Case (b) (7)(F)

1. Maximum release time is based on a best estimate of how long it would take the operator to recognize a catastrophic pipeline failure. The pipeline control monitors pressure in the line. Each hour the pressure is documented. If there is a significant drop in pressure, indicating a pipeline rupture, the transfer is terminated and the flow of product can be stopped immediately using remote closer devices.

2. The remotely controlled closer devices will terminate the flow of product immediately upon activation.

3. The maximum pumping rate of the pipeline.

4. The line drainage for the Key Pipeline, LTD Amarillo Pipeline System is based on a break anywhere in the pipeline. The loss is calculated using a loss of the entire contents of the buried 4-inch pipeline. In addition, the contents of the entire upstream 6-inch Pipeline owned by Cascade Pipeline has also been added, since drainage from that Pipeline would enter the Key Pipeline, LTD Amarillo Pipeline System until a block valve between the two Pipelines could be closed. Since that time frame could vary greatly, it has been assumed, for this worst case discharge, that the valve could not be closed prior to entire line drainage.

Prevention

For a worst case discharge caused by a natural disaster, preparedness is more appropriate than prevention. Company employees receive training periodically on the proper procedures to deal with a natural disaster. Employees are also trained in steps to follow if any of the facilities must be evacuated (due to a fire or other emergency).

In addition, prevention maintenance pipeline are performed at regularly scheduled intervals (to ensure that any weaknesses are discovered).

RESPONSE CAPABILITY SCENARIOS (Cont'd)

Amarillo Response Zone Worst Case Discharge = (b) (7)(F)

Response Requirement

The Company shall identify sufficient response resources, by contract or other approved means, to respond to a worst case discharge to the maximum extent practicable. The response resources shall, as appropriate, include:

- All resources shall be capable of arriving at the location within the applicable response tier requirements (Tier 1 = 12 hours; Tier 2 = 36 hours; Tier 3 = 60 hours).
- Resources capable of oil recovery in inclement weather conditions (i.e. snow, ice).

Facility Response Resources/Capability

The response resources will be capable of arriving within the required response tiers and will include:

- A full deployment of the Company Spill Management Team (SMT). Depending on current operations, QI may be on-scene or traveling from Fort Worth, Texas. Estimated time for his arrival on-scene from Fort Worth is 4-6 hours.
- Contractors would be notified within the first hour of the response. For the given scenario Conestoga-Rovers and Associates would be mobilized. Arrival time of first responders would be within 1 hour. Other recovery equipment and temporary storage would arrive within 6 hours.
- Equipment to contain the product, whether on land or water, will arrive within 1 hour.
- The total temporary storage capacity exceeds 3,200 Bbls.
- A detailed list of available equipment, including vac trucks, is provided in Appendix C.

Notes:

- Equipment and manpower resources are detailed in Sections 2.0, 4.0, 5.0, Figure 5.1, and Appendix C.
- Telephone references are provided in Figures 2.2 and 2.5.

APPENDIX H

RESERVED

APPENDIX I

EMERGENCY PREPLANNING

I.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.

I.2 PIPELINE LEAK INSPECTION SYSTEMS

Visual observations during normal daily routine 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 maintained and are available to DOT/PHMSA upon request.

Based upon good engineering judgment, the Pipeline is replaced or repaired as necessary.

I.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 and bodies of water. These inspections are conducted periodically.

I.2.B Cathodic Protection

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

I.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.

I.2.D Valve Maintenance

All valves are inspected annually to ensure proper working condition.

APPENDIX J

NATIONAL RESPONSE SYSTEM

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NATIONAL RESPONSE SYSTEM

National Response Plan

The National Response Plan (NRP) is an all-discipline, all-hazards plan that establishes a single, comprehensive framework for the management of domestic incidents. It provides the structure and mechanisms for the coordination of Federal support to State, local and tribal incident managers and for exercising direct Federal authorities and responsibilities.

Emphasis on Local Response

All incidents are handled at the lowest possible organizational and jurisdictional level. Police, fire, public health and medical, emergency management, and other personnel are responsible for incident management at the local level. For those events that rise to the level of an Incident of National Significance, the Department of Homeland Security provides operational and/or resource coordination for Federal support to on-scene incident command structures.

Proactive Federal Response to Catastrophic Events

The National Response Plan provides mechanisms for expedited and proactive Federal support to ensure critical life-saving assistance and incident containment capabilities are in place to respond quickly and efficiently to catastrophic incidents. These are high-impact, low-probability incidents, including natural disasters and terrorist attacks that result in extraordinary levels of mass casualties, damage, or disruption severely affecting the population, infrastructure, environment, economy, national morale, and/or government functions.

Multi-Agency Coordination Structures

The National Response Plan establishes multi-agency coordinating structures at the field, regional and headquarters levels. These structures:

- Enable the execution of the responsibilities of the President through the appropriate Federal department and agencies;
- Integrate Federal, State, local, tribal, nongovernmental Organization, and private-sector efforts; and
- Provide a national capability that addresses both site-specific incident management activities and broader regional or national issues, such as impacts to the rest of the country, immediate regional or national actions required to avert or prepare for potential subsequent events, and the management of multiple incidents.

New Coordinating Mechanisms Include

Homeland Security Operations Center (HSOC)

The HSOC serves as the primary national-level multi-agency situational awareness and operational coordination center. The HSOC includes elements of the Department of Homeland Security and other Federal departments and agencies.

NATIONAL RESPONSE SYSTEM (Cont'd)

Homeland Security Operations Center (HSOC) (Cont'd)

- *National Response Coordination Center (NRCC)*

  The NRCC, a functional component of the HSOC, is a multi-agency center that provides overall Federal response coordination.

- *Regional Response Coordination Center (RRCC)*

  The NRCC, a functional component of the HSOC, is a multi-agency center that provides overall Federal response coordination.

  At the regional level, the RRCC coordinates regional response efforts and implements local Federal program support until a Joint Field Office is established

Interagency Incident Management Group (IIMG)

A tailored group of senior level Federal interagency representatives who provide strategic advice to the Secretary of Homeland Security during an actual or potential Incident of National Significance.

Joint Field Office (JFO)

A temporary Federal facility established locally to provide a central point for Federal, State, local, and tribal representatives with responsibility for incident support and coordination.

Principal Federal Official (PFO)

A PFO may be designated by the Secretary of Homeland Security during a potential or actual Incident of National Significance. While individual Federal officials retain their authorities pertaining to specific aspects of incident management, the PFO works in conjunction with these officials to coordinate overall Federal incident management efforts.

National Contingency Plan

In 1968, the National Oil and Hazardous Substance Pollution Contingency Plan (NCP) was established to coordinate Federal activities for preventing oil spills and mitigating environmental damages when spills occur. During June 1970, this plan was incorporated as part of the Code of Federal Regulations and applied to all navigable waters and adjoining shorelines of the United States. The plan was recently modified (September 1994) to implement changes made to the Clean Water Act by the Oil Pollution Act of 1990. The NRP requires modification to the NCP to ensure proper alignment with NRP coordinating structures, processes and protocols.*

To ensure adequate preplanning and provisions for responding to oil spills, the National Contingency Plan established the National Response Center, the National Response Team, the Regional Response Center, Regional Response Teams and the On-Scene Coordinator (Figure J1.1).

NATIONAL RESPONSE SYSTEM (Cont'd)

National Response Team (NRT)

National planning and coordination for oil spill response is the responsibility of the National Response Team (NRT). The NRT is responsible for evaluating methods for responding to oil spills and hazardous substances spills, and recommending changes to the National Contingency Plan. The NRT also develops procedures to coordinate activities for federal, state and local governments, and private response organizations.

The NRT consists of representatives from each of the agencies shown in Figure J1.2. Normally, the NRT is chaired by the EPA representative while the USCG representative serves as the vice-chairman. If it is activated for spills within the coastal zone of the United States, the USCG representative will hold the chair.

The NRT can be activated when an oil spill exceeds the capability of the Regional Response Team in which it occurs, crosses national boundaries, or presents a significant threat to a population, national policy, property, or national resources; or when requested by any NRT member.

Once activated, the NRT may:

1. Monitor the spill, evaluate reports from the On-Scene Coordinator (OSC), and recommend appropriate actions for abating the spill.

2. Request oil spill response resources from federal, state, and local governments or private agencies.

3. Coordinate the supply of equipment, personnel, or technical advice to the affected region from other regions or districts.

* Since the NCP is a regulation subject to notice and comment requirements, modifications will require future rulemaking not available at this time.

FIGURE J-1.1

NATIONAL RESPONSE PLAN COORDINATION

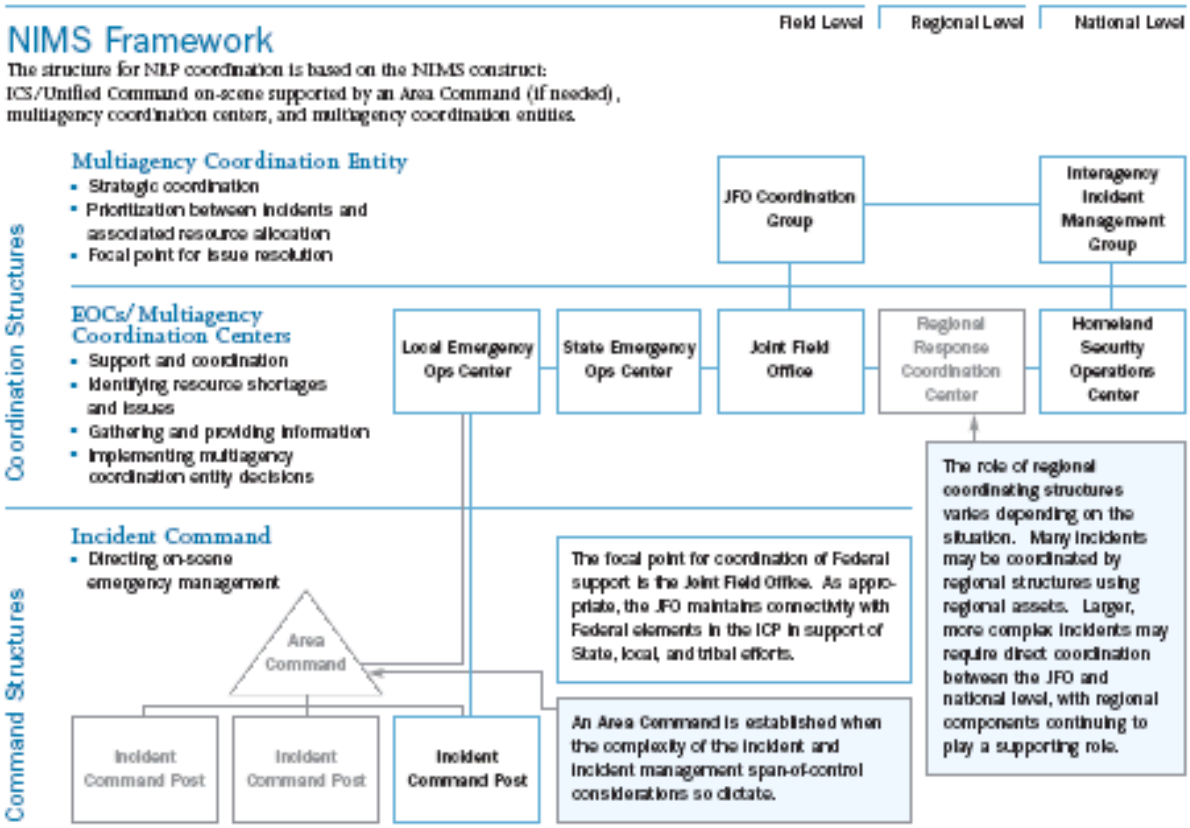
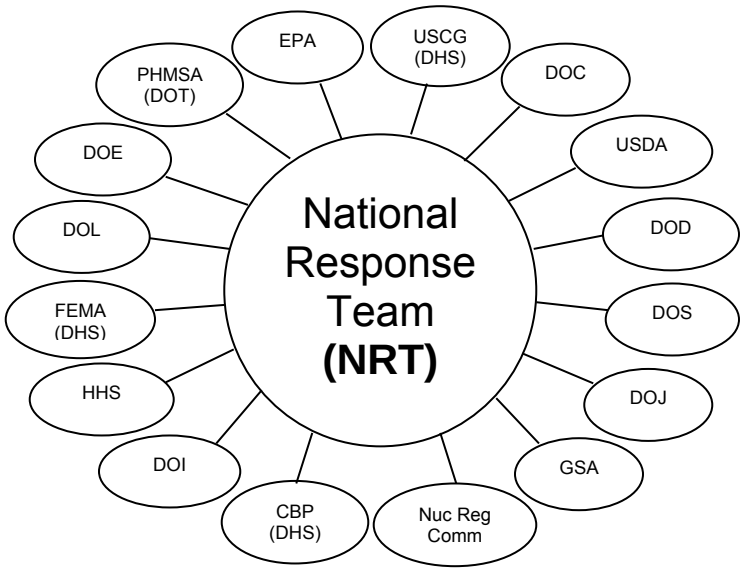


FIGURE J-1.2

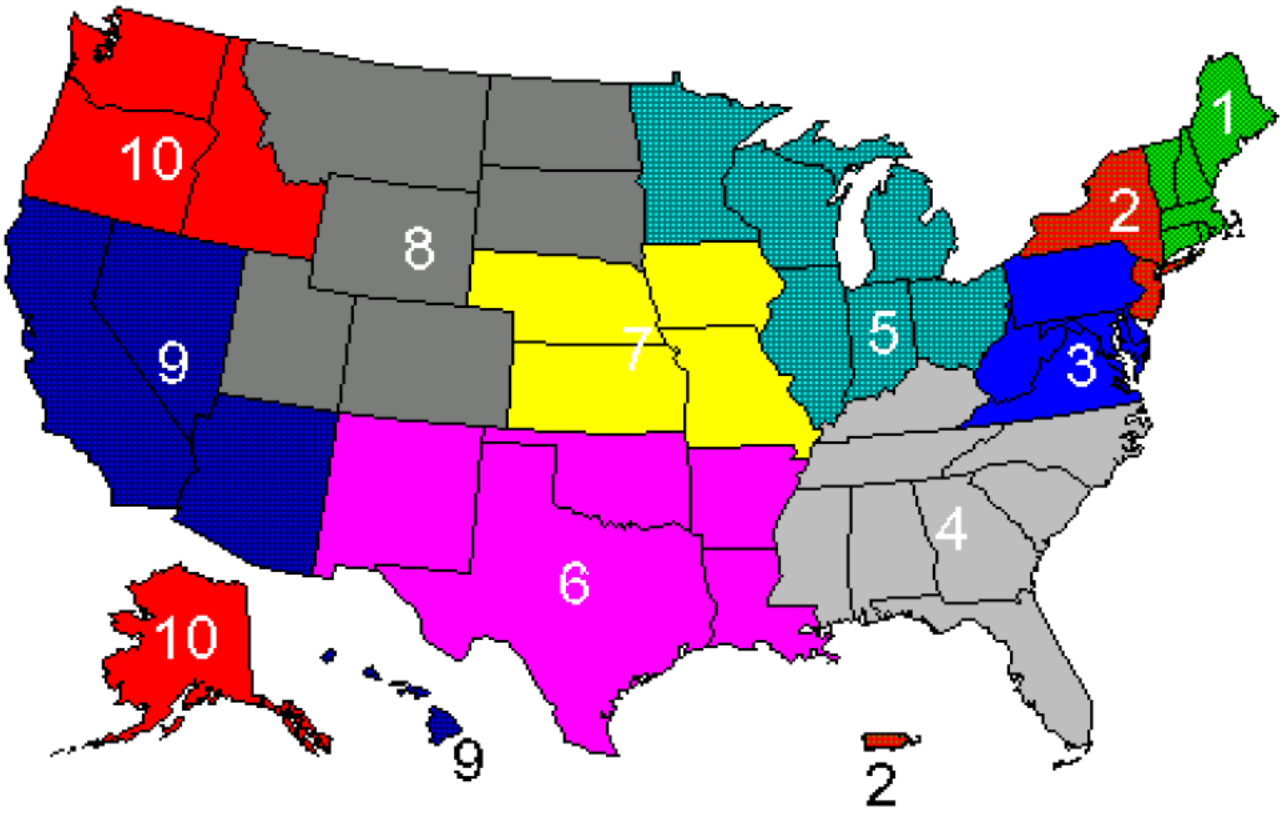
FEDERAL REPRESENTATION ON NATIONAL RESPONSE TEAM



CBP (DHS)	**Customs and Border Protection** Assists with the safe and swift movement of equipment and personnel across the U.S. border	**EPA**	**Environmental Protection Agency** Information on environmental impact of spills & provide scientific support coordination
DHS	**Department of Homeland Security** Lead, manage and coordinate the national response to acts of terrorism, natural disasters or other emergencies	**FEMA**	**Federal Emergency Management Agency** Coordinate civil emergency planning & mitigation efforts
DOC	**Department of Commerce** Scientific expertise from NOAA for marine mammals & oil spill response	**GSA**	**General Services Administration** Provides logistical and telecommunications support to federal agencies
DOD	**Department of Defense** Oil spill response equipment, ship salvage, and boarding & diving	**HHS**	**Department of Health and Human Services** Assists with the assessment, preservation, and protection of human health and helps ensure the availability of essential human services
DOE	**Department of Energy** Removal & disposal of radioactive contamination	**PHMSA**	**Pipeline and Hazardous Materials Safety Administration** Expertise on all modes of transporting oil & hazardous substances
DOI	**Department of Interior** Expertise on fish & wildlife	**USCG**	**United States Coast Guard** Establishes spill contingency planning requirements for vessels and facilities, and OSC responsibilities for wasteful zone
DOJ	**Department of Justice** Answer legal questions on spills & response actions	**USDA**	**United States Department of Agriculture** Input on the effect of soil contamination by hazardous and oil spills
DOL	**Department of Labor** Expertise needed to minimize exposure to hazardous material during response operation		

FIGURE J-1.3

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) REGIONAL OFFICES

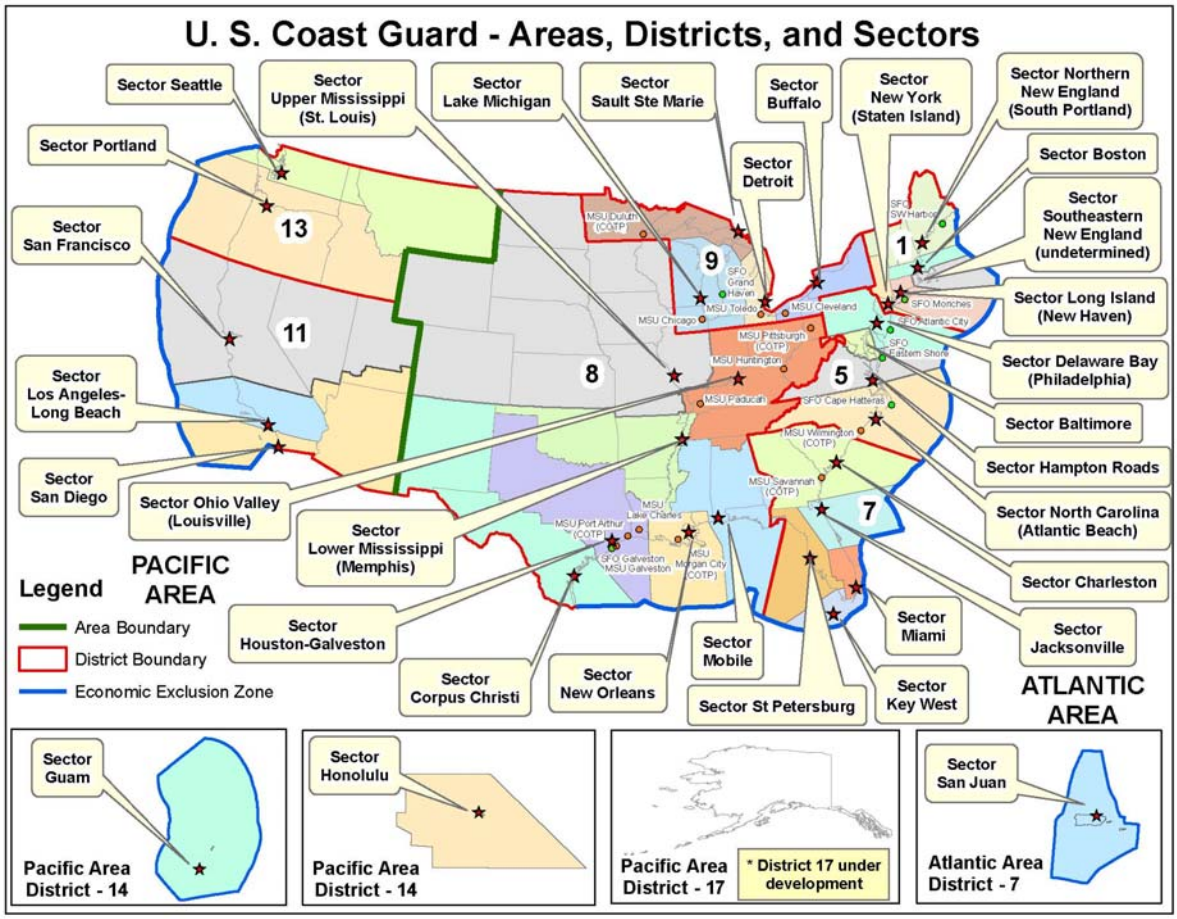


EPA Region 1 Office 1 Congress Street, Suite 1100 Boston, MA 02114-2023	EPA Region 2 Office 290 Broadway, 19th Floor New York, NY 10007-1866	EPA Region 3 Office 1650 Arch Street Philadelphia, PA 19103-2029
EPA Region 4 Office 61 Forsythe Street, SW, 11th Floor Atlanta, GA 30303-3104	EPA Region 5 Office 77 West Jackson Blvd. Chicago, IL 60604	EPA Region 6 Office 1445 Ross Avenue, Suite 1200 Dallas, TX 75202
EPA Region 7 Office 901 N. 5th Street Kansas City, KS 66101	EPA Region 8 Office 999 18th Street, Suite 300 Denver, CO 80202-2466	EPA Region 9 Office Public Information Center 75 Hawthorne Street San Francisco, CA 94105
EPA Region 10 Office 1200 6th Avenue Seattle, WA 98101	U.S. EPA Office of Solid Waste 401 M Street SW Washington, DC 20460-5101	RCRA / Superfund Hotline (800) 424-9346 (in Washington, DC, (202) 879-2693)

* Note: These addresses may differ from those listed on the Distribution List.

FIGURE J-1.4

U.S. COAST GUARD (USCG) DISTRICTS



v4.3

1st Coast Guard District Commander 408 Atlantic Avenue Boston, MA 02110-3350 (617) 223-8125	11th Coast Guard District Coast Guard Island Building 51-1 Alameda, CA 94501-5100 (510) 437-3700
5th Coast Guard District Federal Building 431 Crawford Street Portsmouth, VA 23704-5004 (804) 398-6272	13th Coast Guard District Jackson Federal Building 915 2nd Avenue, Suite #3352 Seattle, WA 98174-1067 (206) 220-7237
7th Coast Guard District Federal Building 909 S.E. 1st Ave., Room #954 Miami, FL 33131-3050 (305) 536-5641	14th Coast Guard District Prince PJKK Federal Building 300 Ala Moana Blvd., Room 9212 Honolulu, HI 96850-4982 (808) 541-2121
8th Coast Guard District Hale Boggs Federal Building 501 Magazine Street, Room 1328 New Orleans, LA 70130-3396 (504) 589-6198	17th Coast Guard District P.O. Box 25517 Juneau, AK 99802 (907) 463-2065-5517
9th Coast Guard District 1240 E. 9th Street Cleveland, OH 44199-2060 (216) 902-6020	

* Note: These addresses may differ from those listed on the Distribution List.

APPENDIX K

MISCELLANEOUS FORMS

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Caller Characteristics Checklist K-12
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ICS Forms ..... K-14 a.b.c.
Site Safety Forms ..... K-15 a.b.c.

Forms and Exercise Documentation File Maintenance Procedures

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

QUALIFIED INDIVIDUAL (QI) NOTIFICATION EXERCISE- INTERNAL EXERCISE DOCUMENTATION

Date of Exercise: _____ Quarter: [ ] 1st [ ] 2nd [ ] 3rd [ ] 4th Year:_____

Note: This exercise is intended to evaluate the Facility's ability to quickly contact the designated QI (or an alternate) as necessary following a spill incident. The person conducting the exercise should attempt to contact the QI listed in the OPA '90 Facility Response Plan. Use the phone number or pager number for the QI listed in the Plan and establish contact with him/her. If the QI cannot be contacted within 15 minutes, contact one of the alternate QIs listed in the Plan. Fill all the applicable blanks below to document the exercise.

Qualified Individual(s) contacted (check one):

[ ] Primary: _____
[ ] Secondary: _____
[ ] Alternate: _____

Method of Contact (check one):

[ ] Telephone Number used: _____
[ ] Pager Number used: _____
[ ] Radio Channel used: _____

Time Exercise Began: [ ] AM [ ] PM

QI Contacted: _____

Contact made at: [ ] AM [ ] PM

Is the QI available for response? [ ] Yes [ ] No

QI Response Time to Refinery: _____

From Where? _____

Time Exercise Ended: [ ] AM [ ] PM

_____
Signature of Person Conducting Exercise

INTERNAL EXERCISE DOCUMENTATION FORM

SPILL MANAGEMENT TEAM TABLETOP EXERCISE & QI NOTIFICATION DRILL

1. Date performed:_____

2. Exercise or actual response?_____
   If an exercise, announced or 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:

   _____
   _____
   _____
   _____
   _____

Spill Management Team Tabletop Exercise (Cont'd)

d) Spill management team's ability to access contracted oil spill removal organizations:

e) Spill management term's ability to coordinate spill response with On-Scene Coordinator, state and applicable agencies:

f) Spill management team's ability to access sensitive site and resource information in the Area Contingency Plan:

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

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

Certifying Signature

Internal Exercise Documentation Form

Equipment Deployment Exercise

1. Date(s) performed:

2. Exercise or actual response? _____
   If exercise, announced or unannounced? _____

3. Deployment location(s):

   _____

   _____

4. Time started: _____ Time completed: _____

5. Equipment deployed was: ___ Facility-owned
   ___ Oil Spill Removal Organization. If OSRO, which _____
   ___ Both

6. List type and amount of all equipment (e.g., boom and skimmers) deployed and number of support personnel employed:

   _____

   _____

7. Describe goals of the equipment deployment and list any Area Contingency Plan strategies tested. (Attach a sketch of equipment deployments and booming strategies):

   _____

   _____

   _____

Equipment Deployment Exercise (Cont'd)

8. For deployment of facility-owned equipment, was the amount of equipment deployed at least the amount necessary to respond to your facility's average most probable spill?

Was equipment deployed in its intended operating environment? _____

9. For deployment of OSRO-owned equipment, was a representative sample (at least 1000 feet of each boom type and at least one of each skimmer type) deployed? _____

10. Are all facility personnel that are responsible for response operations involved in a comprehensive training program, and all pollution response equipment involved in a comprehensive maintenance program? _____

If so, describe the program:_____

Date of last equipment inspection: _____

11. Was the equipment deployed by personnel responsible for its deployment in the event of an actual spill? _____

12. Was all deployed equipment operational? If not, why not?

Equipment Deployment Exercise (Cont'd)

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

_____

_____

_____

_____

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

_____
Certifying Signature

Retain this form and other documentation related to this exercise on file for a minimum of 3 years (for USCG/PHMSA/BSEE) or a minimum of 5 years (for EPA).

NOTIFICATION DATA SHEET

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 (Description): _____

Nearest City: _____ *Distance from City:* _____ *Unit of Measure:* _____
County: _____ *State:* _____ *Zip code:* _____
Section: _____ *Township:* _____ *Range:* _____ *Borough:* _____
Distance from City: _____ *Direction from City:* _____
Container Type: _____ *Container Storage Capacity:* _____
Facility Oil Storage Capacity: _____ *Unit of Measure:* _____
Were Materials Discharged? _____ *(Y/N) Confidential?* _____ *(Y/N) Material:* _____

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): _____ *Number Evacuated:* _____
Damage in Dollars (approximate): _____
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.

PERSONNEL RESPONSE TRAINING LOG - SAMPLE

Name	Response Training/ Date and number of hours	Prevention Training/ Date and number of hours

DISCHARGE PREVENTION MEETING LOG - SAMPLE

Date:	
Attendees:	

Subject/Issue	Required Action	Implementation

(b) (7)(F)

(b) (7)(F)

Valero Terminaling and Distirbution

PL SYSTEM: _____
LOCATION: _____
CRUDE ☐ PRODUCTS ☐

STORAGE TANK INSPECTION REPORT

Route "ORIGINAL" as follows:		Initials	Date
SUPERVISOR			
SUPERINTENDENT			
MANAGER			
MGR. ENGINEERING			
PL SAFETY			

REPORT INFORMATION

RECORD RETENTION – 3 YEARS

REPORT FREQUENCY – 12 MONTHS

DUE DATES – MAY OR JUNE

Tank No. _____ **Nominal Capacity:** _____ **Barrels**

Tank Type: _____ **Tank Service:** _____

CHECK APPLICABLE ANSWER

TANK APPURTENANCES	YES	NO
Relief Valve Vent Screens Clean	☐	☐
Can Pallets Move Freely to Open or Closed Position	☐	☐
Tank Gauge Satisfactory Condition	☐	☐
Water Drain Valve in Satisfactory Condition	☐	☐

Additional Comments _____

TANK ROOF	YES	NO
Is Gauge Hatch in Satisfactory Condition	☐	☐
Is Roof Paint in Satisfactory Condition	☐	☐
Is Roof Free of Any Leaks	☐	☐

Additional Comments _____

FLOATING ROOF TANKS	YES	NO
Does Roof Drain Well	☐	☐
Is Roof Travel Apparently Free at all Positions	☐	☐
Roof Drains Clear of Debris	☐	☐
Primary Seal Inspected	☐	☐
Secondary Seal Inspected	☐	☐
Seals in Satisfactory Condition		
Primary	☐	☐
Secondary	☐	☐
If Not, How much is bad _____ft.		
Is Fabric Free of Dirt and Scale	☐	☐
Are Seal Hangers in Satisfactory Condition	☐	☐
Are Bonding Shunts Installed	☐	☐
Are Shunts in Good Condition	☐	☐
Does Combustible Gas Indicator Reveal Leaks in Pontoons	☐	☐

Additional Comments _____

PRESSURE TANKS	YES	NO
Relief Valve Stacks free of Obstructions	☐	☐
Any Foundation Settlement	☐	☐
Any Evidence of External Corrosion		
Shell	☐	☐
Seams	☐	☐
Condition of Paint Satisfactory	☐	☐

Additional Comments _____

SHELL	YES	NO
Shell Free of Leaks	☐	☐
Shell Plates Above Ground Level	☐	☐
Wind Girder Satisfactorily Guarded From Corrosion	☐	☐
Stairs & Platforms Satisfactory	☐	☐
Conditions of Paint Satisfactory	☐	☐

Additional Comments _____

BOTTOM	YES	NO
Bottom Apparently Free of Leaks	☐	☐
Is Storm Water Drained Away From the Tank	☐	☐
Has Settlement Apparently Been Uniform	☐	☐

Additional Comments _____

FIRE PROTECTION	YES	NO
Foam Lines & Joints Satisfactory	☐	☐
Foam Chambers Clean & Clear	☐	☐
Does Dike Drain Satisfactorily	☐	☐
Are Portable Fire Extinguishers Adequate & Been Checked	☐	☐
Has Dike Been Maintained to Original Design Capacity	☐	☐

Additional Comments _____

Inspector's Signature: _____ Date _____

NOTE: IF REQUIRED, COMPLETE ANNUAL SEAL INSPECTION REPORT AND SEND IT TO ENVIRONMENTAL DEPT – SAN ANTONIO

ICS FORMS

NRC Incident No. #_____

1. Incident Name	**2. Prepared by:** (name) Date: Time:	INCIDENT BRIEFING ICS 201-CG

3. Map/Sketch (include sketch, showing the total area of operations, the incident site/area, overflight results, trajectories, impacted shorelines, or other graphics depicting situational and response status)

4. Current Situation:

NRC Incident No. #_____

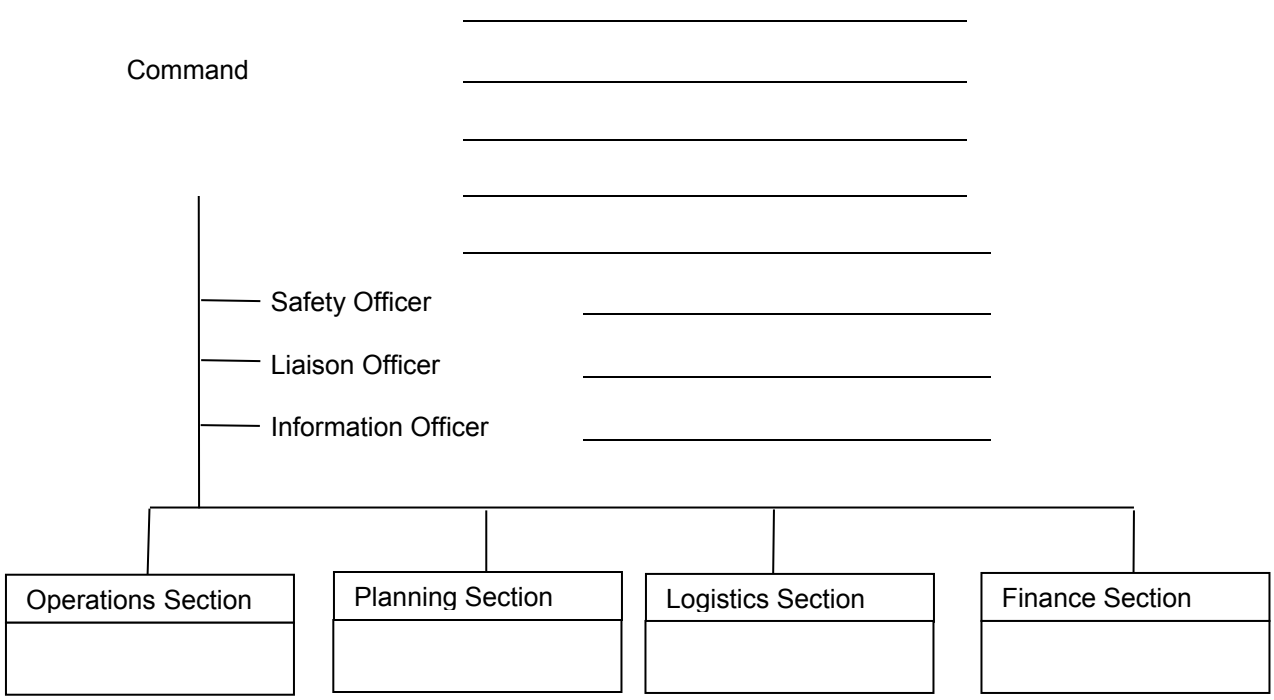
1. Incident Name	**2. Prepared by:** (name) Date: Time:	INCIDENT BRIEFING ICS 201-CG

5. Initial Response Objectives, Current Actions, Planned Actions

NRC Incident No. #_____

1. Incident Name	2. Prepared by: (name) Date: Time:	INCIDENT BRIEFING ICS 201-CG

6. Current Organization (fill in additional appropriate organization)



1. **Incident Name**	2. **Prepared by:** (name) Date: Time:	INCIDENT BRIEFING ICS 201-CG

7. Resources Summary

Resource	Resource Identifier	Date Time Ordered	ETA	On-Scene (X)	NOTES: (Location/Assignment/Status)

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

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

3. Incident Commander(s) and Staff

Agency	IC	Deputy

Safety Officer:	
Information Officer:	
Liaison Officer:	

4. Agency Representatives

Agency	Name

5. PLANNING/INTEL SECTION

Chief	
Deputy	
Resources Unit	
Situation Unit	
Intel Unit	
Scientific Unit	
Documentation Unit	
Demobilization Unit	
Technical Specialists	

6. LOGISTICS SECTION

Chief	
Deputy	
a. Support Branch	
Director	
Supply Unit	
Facilities Unit	
Transportation Unit	
Vessel Support Unit	
Ground Support Unit	
b. Service Branch	
Director	
Communications Unit	
Medical Unit	
Food Unit	

7. OPERATION SECTION

Chief		
Deputy		
Deputy		
Staging Area Manager		
Staging Area Manager		
Staging Area Manager		
a. Branch – Division Groups		
Branch Director		
Deputy		
Division Group		
Division Group		
Division Group		
Division/Group		
Division/Group		
b. Branch – Division/Groups		
Branch Director		
Deputy		
Division/Group		
Division/Group		
Division/Group		
Division/Group		
Division/Group		
c. Branch – Division/Groups		
Branch Director		
Deputy		
Division/Group		
Division/Group		
Division/Group		
Division/Group		
Division/Group		
d. Air Operations Branch		
Air Operations Br. Dir		
Helicopter Coordinator		

8. FINANCE/ADMINISTRATION SECTION

Chief	
Deputy	
Time Unit	
Procurement Unit	
Compensation/Claims Unit	
Cost Unit	

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

1. Incident Name	2. Operational Period (Date/Time) From: To:	**Assignment List** **ICS 204-CG**
3. Branch	**4. Division/Group/Staging**	

5. Operations Personnel Name Affiliation Contact # (s)

Operations Section Chief: _____

Branch Director: _____

Division/Group Supervisor/STAM: _____

6. Resources Assigned "X" indicates 204a attachment with additional instructions

Strike Team/Task Force/Resource Identifier	Leader	Contact Info. #	# Of Persons	Reporting Info/Notes/Remarks	▼
					☐
					☐
					☐
					☐
					☐
					☐
					☐
					☐
					☐
					☐
					☐

7. Work Assignments

8. Special Instructions

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

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

Emergency Communications

Medical _____ Evacuation _____ Other _____

10. Prepared by: Date/Time	11. Reviewed by (PSC): Date/Time	12. Reviewed by (OSC): Date/Time

1. Incident Name	2. Operational Period (Date / Time) From: To:	INCIDENT RADIO COMMUNICATIONS PLAN ICS 205-CG

3. BASIC RADIO CHANNEL USE

SYSTEM / CACHE	CHANNEL	FUNCTION	FREQUENCY	ASSIGNMENT	REMARKS

4. Prepared by: (Communications Unit) **Date / Time**

INCIDENT RADIO COMMUNICATIONS PLAN

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

3. Medical Aid Stations

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

4. Transportation

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

5. Hospitals

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

6. Special Medical Emergency Procedures

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

1. Incident Name	2. Operational Period (Date/Time) From: To:	**UNIT LOG** **ICS 214-CG**
3. Unit Name/Designators	**4. Unit Leader (Name and ICS Position)**	

5. Personnel Assigned

NAME	ICS POSITION	HOME BASE

6. Activity Log (Continue on Reverse)

TIME	MAJOR EVENTS

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

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

3. Environmentally-Sensitive Areas and Wildlife Issues

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

Narrative

4. Archaeo-cultural and Socio-economic Issues

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

Narrative

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

SITE SAFETY PLAN

SITE SAFETY PLAN

I. General

☐ Tank Farm Spill ☐ Pipeline Spill ☐ Spill to Water ☐ Excavation ☐ Other: _____ AFE # _____

Facility: _____

Location: _____

Work to be performed: _____

Issuing Date: _____ Time: _____
Temperature: ____° Wind Direction: ___
Humidity: _____

II. Hazards to be Evaluated

Y	N		Y	N		SPECIFIC HAZARDS	
☐	☐	Oxygen Deficient/Enriched	☐	☐	Ingestion / Skin Absorption	☐	☐
☐	☐	Flammable Atmosphere (Explosion Fire)	☐	☐	Frostbite (LPG Spills)	☐	☐
☐	☐	Toxic Atmosphere: _____	☐	☐	Chemical/MSDS # _____ (Must be attached)	☐	☐
☐	☐	Boat Operations	☐	☐	Physical Hazard _____	☐	☐
☐	☐	Confined Space	☐	☐	Traffic _____	☐	☐
			☐	☐	Vapor Cloud	☐	☐
						☐	☐ Other* (see comments) _____

III. Testing & Monitoring (Check required items)

Tests are to be performed in the order listed.

Y	N		Continuous		Frequency
☐	☐	Oxygen Level	☐ Y ☐ N	_____	every _____
☐	☐	LEL	☐ Y ☐ N	_____	every _____
☐	☐	Hydrogen Sulfide	☐ Y ☐ N	_____	every _____
☐	☐	Benzene	☐ Y ☐ N	_____	every _____
☐	☐	Total Hydrocarbons	☐ Y ☐ N	_____	every _____
☐	☐	Other: _____	☐ Y ☐ N	_____	every _____

ACCEPTABLE ENTRY CONDITIONS		
	SPECIAL WORK PRACTICES OR PPE REQUIRED	PPLC ERT LEAVE AREA WORK EFFORTS SHOULD BE DIRECTED AT REDUCING CONCENTRATIONS
19.5 – 23 0% in air	< 19.5% or 23.0% 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
< .5 ppm	≥ .5 but < 10 ppm	≥ 10 ppm
< 300 ppm	≥ 300 but < 750 ppm	≥ 750 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.

IV. Required Personal Protective Equipment (Check for required use) NOTE: PPLC EMPLOYEES DO NOT USE SCBA'S A RLINE RESP

General	Eye Prot.	Respiratory Prot.	Hearing Prot.	Gloves	Footwear	Clothing
☐ Hard Hat	☐ Safety Glasses	☐ SCBA/Air Line w/Escape	☐ Ear Plugs	☐ Leather	☐ Steel-toes	☐ FR Coveralls
☐ Safety Harness	☐ Goggles	☐ Air Line	☐ Ear Muffs	☐ Rubber	☐ Rubber	☐ Tyvek
☐ PFD	☐ Face-shield	☐ Air Purifying (Full Mask)	☐ Combination	☐ Nitrile	☐ Hip-boots	☐ Coated Tyvek
	☐ Tinted Lens	Cartridge Type: ☐ OV ☐ Hepa-OVV		☐ PVC	☐ _____	☐ Saranyx
				☐ _____		☐ _____

Any other special PPE: _____

V. 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)

SITE SAFETY PLAN (Cont'd)

VI. Required Safety & Rescue Equipment (on site)

☐ Lights ☐ Fall Protection ☐ First Aid Kit ☐ Drinking Water ☐ Fire Extinguisher ☐ Tripod ☐ Other:_____
☐ Ladder ☐ Retrieval Lines ☐ Resuscitator ☐ Communication Method _____

VII. Comments or Special Work Procedures

VIII. Report All Injuries Immediately

IX. Control Measures

- Isolation & Lockout (identify items to be locked out)
- Establish Work Zones when completed
  - ☐ Hot Zone = Red Ribbon
  - ☐ Warm Zone = Yellow Ribbon
  - ☐ Cold Zone = Blue Ribbon
- Ventilation ☐ Natural ☐ Mechanical
  Continuous ☐ No ☐ Yes
- Flagman / Watchman ☐
- Confined Space – Safety Watch ☐
  (See Exhibit "B" for Permit)
- Evacuation Routes – (Identify on Map)
  - ☐ Air Horn – Emergency
  - ☐ Primary Route
  - ☐ Secondary Route

X. Monitoring Results

	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													

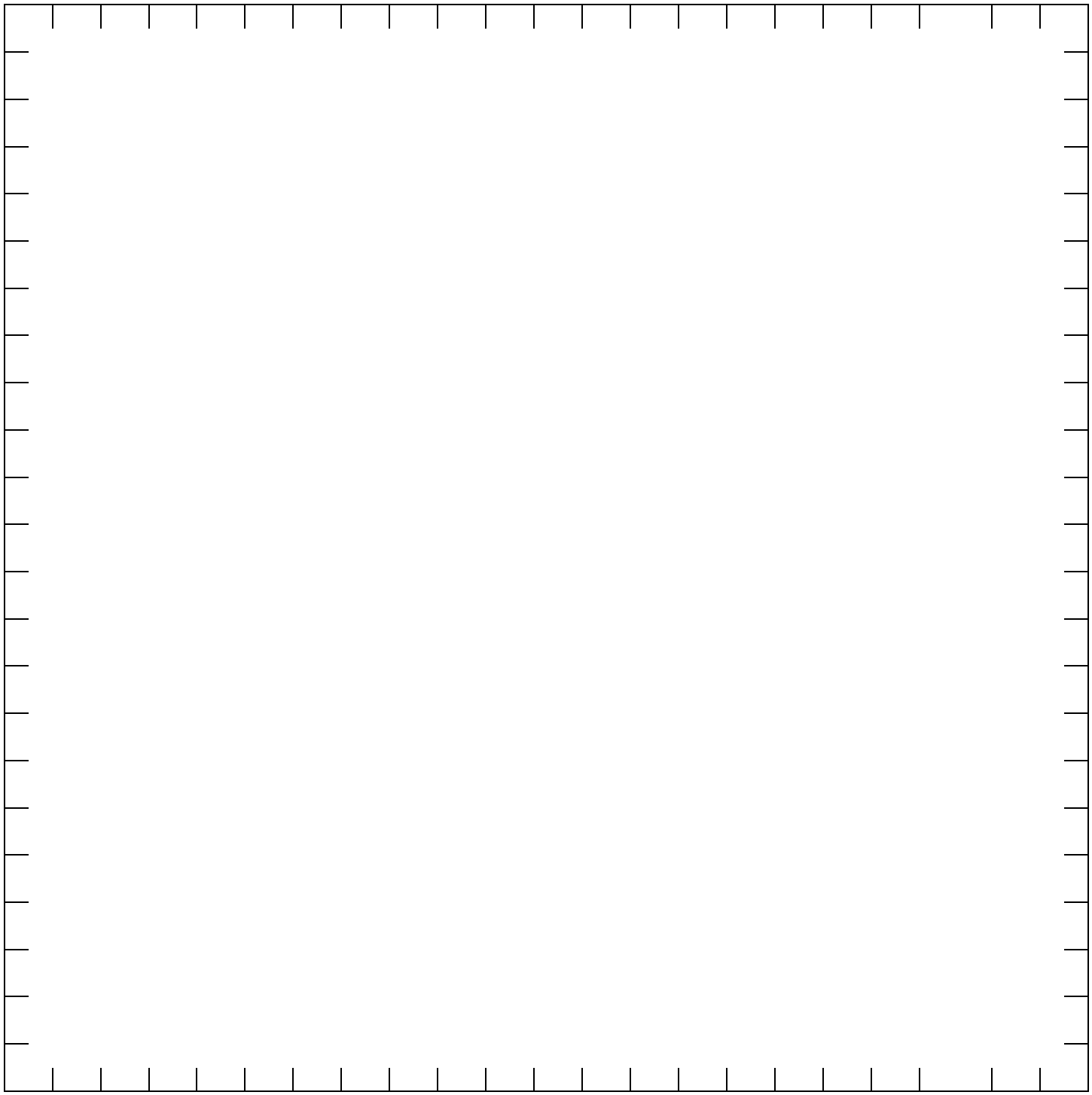
SITE SAFETY PLAN (Cont'd)

	Time													
	Level													
	By													
	Time													
	Level													
	By													
	Time													
	Level													
	By													

Equipment: Type: _____ Mfger: _____ Calibration / Expiration: _____
Type: _____ Mfger: _____ Calibration / Expiration: _____

XI. Work Area Diagram Map

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



EMPLOYEE CERTIFICATION PAGE

XII. Work Site Signatures

	Signature
Incident Commander	
Safety Officer	

Other Site Personnel	Signature	Other Site Personnel	Signature

XIII. Authorizing Signature

Site Safety Manager: **Printed Name:** _____ **Signature:** _____

I hereby acknowledge and authorize the above work to be performed in accordance with the conditions ou lined on this permit. If the work procedures or conditions change creating any unsafe conditions, then this permit is void and work is to be suspended. I understand and affirm that the conditions of this work permit will be followed prior to and during entry into a confined space. I also agree to order the work to be stopped and he confined space evacuated in the event that conditions of he permitted work area fail to meet the permit requirements.

APPENDIX L

GLOSSARY OF TERMS / ACRONYMS

PAGE

Glossary of Terms.....L-2

Acronyms.....L-10

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

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.

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.

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 (bbl): 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.

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.

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

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

Contract or Other Approved Means: 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.

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.

EM: Emergency Management serves as the focal point for senior management support of an incident.

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

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.

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.

Facility: 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 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 '90.

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

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.

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

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

Hazardous Substance: Any substance designed as such by the Administrator of 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 response operations.

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 necessary the Company personnel and Federal/ State/Local agencies that a spill has occurred, including all pertinent available information surrounding the incident.

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, except that 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.

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.

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.

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.

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), means the entity established by the Secretary of the department in which the USCG is operating at Elizabeth City, North Carolina, with responsibilities that include 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 lease 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.

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).

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.

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

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

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

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 portion of a response performed after the immediate threat of a release has been stabilized or eliminated and cleanup of the sites has begun.

Post Emergency: The phase of response operations conducted after the immediate threat of the release has been stabilized, and cleanup operations have 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 contractors, 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 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 insure 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 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.

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.

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.

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 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.

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

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.

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.

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 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.

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.

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.

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, page G-11.

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.

AC	-	Area Committee
AOR	-	Area of Review
AQI	-	Alternate Qualified Individual
BPD	-	Barrels Per Day
BOD	-	Biological Oxygen Demand
BOM	-	Bureau of Mines
BSEE	-	Bureau of Safety and Environmental Enforcement
CAER	-	Community Awareness and Emergency Response
CBP		Customs and Border Patrol
CERCLA	-	Comprehensive Environmental Response, Compensation and Liability Act
CFR	-	Code of Federal Regulations
CHEMTREC	-	Chemical Transportation Emergency Center
COE	-	U. S. Army Corps of Engineers
CRZ	-	Contamination Reduction Zone
CWA	-	Clean Water Act (Federal - Public Law 100-4)
CWS	-	Community Water System
CZM	-	Coastal Zone Management
DECON	-	Decontamination
DRG	-	District Response Group
EBS	-	Emergency Broadcast System
EHS	-	Extremely Hazardous Substance
EMA	-	Emergency Management Agency
EMS	-	Emergency Medical Service
EOC	-	Emergency Operations Center
EPA	-	U. S. Environmental Protection Agency
EPCRA	-	The Emergency Planning and Community Right-to-Know Act of 1986 (Title III of SARA)
EQ	-	Environmental Quality
ERT	-	Environmental Response Team
ESA	-	Endangered Species Act
FAX	-	Facsimile Machine
FCC	-	Federal Communications Commission
FEMA	-	Federal Emergency Management Agency
FOSC	-	Federal On-Scene Coordinator
FR	-	Federal Register
GIS	-	Geographic Information System
GSA	-	General Services Administration
HAZWOPER	-	Hazardous Waste Operations and Emergency Response
HHS	-	Department of Health and Human Services
IBRRC	-	International Bird Rescue Research Center
LEPC	-	Local Emergency Planning Committee
LFL	-	Lower Flammable Limit
LOSC	-	Local On-Scene Coordinator
LRT	-	Local Response Team
MBL	-	Mobile
MER	-	Marine Emergency Response
MMT	-	Marine Management Team
MSDS	-	Material Safety Data Sheet
MSO	-	Marine Safety Office
MSRC	-	Marine Spill Response Corporation
NCP	-	National Contingency Plan
NEPA	-	National Environmental Policy Act
NIOSH	-	National Institute for Occupational Safety and Health
NMFS	-	National Marine Fisheries Service
NOAA	-	National Oceanic and Atmospheric Administration (Department of Commerce)
NPDES	-	National Pollution Discharge Elimination System
NPS	-	National Park Service
NRC	-	National Response Center
NRDA	-	Natural Resource Damage Assessment
NRS		National Response System
NRT	-	National Response Team
NSF	-	National Strike Force
NSFCC	-	National Strike Force Coordination Center
OPA	-	Oil Pollution Act
OPS	-	Office of Pipeline Safety (DOT)
OSC	-	On-Scene Coordinator
OSHA	-	Occupational Safety and Health Administration (USDL)
OSLTF	-	Oil Spill Liability Trust Fund
OSPRA	-	Oil Spill Prevention and Response Act
OSRO	-	Oil Spill Response Organization
PCB	-	Polychlorinated Biphenyls
PFD	-	Personal Flotation Device
PGR	-	Pager

PHMSA - Pipeline and Hazardous Material Safety Administration (replaced RSPA)
PIAT - Public Information Assist Team
POLREP - Pollution Report
PPE - Personal Protective Equipment
PPM - Parts Per Million
PSD - Prevention of Significant Deterioration
QI - Qualified Individual
RACT - Reasonably Achievable Control Technology
RCP - Regional Contingency Plan
RCRA - Resource Conservation and Recovery Act
RECON - Reconnaissance
REP - Radiological Emergency Preparedness
RERT - Radiological Emergency Response Team
RQ - Reportable Quantity
RRT - Regional Response Team
RSPA - Research and Special Programs Administration (DOT - OPS) (replaced by PHMSA)
SARA - Superfund Amendments and Reauthorization Act
SCBA - Self Contained Breathing Apparatus
SDWA - Safe Drinking Water Act
SERC - State Emergency Response Commission
SIC - State Implementation Plan
SMT - Spill Management Team
SONS - Spill of National Significance
SOP - Standard Operating Procedure
SPCC - Spill Prevention Control and Countermeasure
SSC - Scientific Support Coordinator (NOAA)
STEL - Short Term Exposure Limits
SWD - Salt Water Disposal
TSCA - Toxic Substances Control Act
TSDF - Treatment, Storage or Disposal Facility
UCS - Unified Command System
USACOE - U.S. Army Corps of Engineers
USCG - U.S. Coast Guard
USDW - Underground Source of Drinking Water
USFWS - U. S. Fish and Wildlife Services
USGS - U. S. Geological Survey
WCD - Worst Case Discharge

APPENDIX M

[RESERVED]

APPENDIX N

REGULATORY AGENCY CORRESPONDENCE AND OTHER AGENCY REQUIREMENTS