

EMERGENCY RESPONSE ACTION PLAN

Gulf of Mexico Region - West Response Zone



Prepared for:

Shell Pipeline Company LP (SPLC)
777 Walker Street
Two Shell Plaza
Houston, Texas 77002
(800) 922-3459

Prepared by:

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FIGURE 1.1
FACILITY INFORMATION

| GENERAL INFORMATION | | | | | | | | | |
|--|--|-------------------------|--------------------------|-------------------|-------------------|-----------------|-----------------|----------------------|----------------------|
| Facility Name: | Gulf of Mexico Region - West Response Zone | | | | | | | | |
| DOT/PHMSA Control Number: | 137 & 146 & TX10112 & TX10197 | | | | | | | | |
| Operator Name: | Shell Pipeline Company LP (SPLC) | | | | | | | | |
| Address: | <table style="width: 100%; border: none;"> <thead> <tr> <th style="text-align: left;">Physical Address</th> <th style="text-align: left;">Operators Address</th> </tr> </thead> <tbody> <tr> <td>777 Walker Street</td> <td>777 Walker Street</td> </tr> <tr> <td>Two Shell Plaza</td> <td>Two Shell Plaza</td> </tr> <tr> <td>Houston, Texas 77002</td> <td>Houston, Texas 77002</td> </tr> </tbody> </table> | Physical Address | Operators Address | 777 Walker Street | 777 Walker Street | Two Shell Plaza | Two Shell Plaza | Houston, Texas 77002 | Houston, Texas 77002 |
| Physical Address | Operators Address | | | | | | | | |
| 777 Walker Street | 777 Walker Street | | | | | | | | |
| Two Shell Plaza | Two Shell Plaza | | | | | | | | |
| Houston, Texas 77002 | Houston, Texas 77002 | | | | | | | | |
| Mainline Number: | (800) 922-3459 (24 Hours) | | | | | | | | |
| Contact Person: | Carrie Hodgins, HSSE Manager | | | | | | | | |
| Primary NAICS Code: | | | | | | | | | |
| Determination of Significant and Substantial Harm (DOT / PHMSA): | This Response Zone has been determined to meet the significant and substantial harm classification because at least one (1) line section within the response zone is greater than 6 5/8" in nominal outside diameter, 10 miles or longer and has met at least one of the criteria listed in 49 CFR 194.1032(c)(1). | | | | | | | | |
| Operator Statement of (DOT / PHMSA) "Significant and Substantial Harm": | The Company's goal is to respond as quickly as possible to all uncontrolled releases of petroleum product, regardless of the source point location along the system. Based upon this goal, and the definitions provided in 49 CFR 194.103 (c)(4) & (5), the Company is compelled to consider all the active line sections listed in this section as incapable of a release potentially causing "significant and substantial harm". | | | | | | | | |

QUALIFIED INDIVIDUAL

Certification: The Company grants full authority to the designated Qualified and Alternate Qualified Individuals to implement the Facility Response Plan and to:

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

Qualified Individual:

Greg Smith General Manager Operations GOM-QI/IC

(b) (6)

(Home)
(Cellular)

Alt. Qualified Individual:

Jill Derise Manager Control Center (AQI)

(Home)
(Cellular)

| PIPELINE LOCATION | |
|---|--|
| <i>States/Counties:</i> | Texas/ Brazoria, Chambers, Galveston, Hardin, Harris Jefferson, Liberty, Orange, Polk |
| <i>Pipeline System Overview Diagram:</i> | See Figure 1.2 |

PHYSICAL DESCRIPTION - PIPELINE

Response Zone(s):

- Gulf of Mexico - West Response Zone

The table below lists the states and counties that are in the Gulf of Mexico - West Response Zone.

Texas

| Gulf of Mexico Region - West Response Zone - Texas | |
|--|-----------|
| Brazoria | Jefferson |
| Chambers | Liberty |
| Galveston | Orange |
| Hardin | Polk |
| Harris | |

General:

- This plan includes pipeline sections described below as well as supporting equipment and facilities.
- This Plan is written in English and understood by personnel responsible for carrying out the Plan.

Pipeline Specifications:

- **Products Type:**

Crude Oil
 Natural Gas
 Ethylene
 Ethane
 Propylene
 Dry Gas
 Butylene
 Effluent Water
 Oxidized Caustic
 Butane
 Naptha and Olefins
 Refined Products

- **Pipe Detail:** The pipeline system consists of the following pipeline section(s) with the indicated diameters.

| Pipeline Specifications | | | |
|---|--|-------|-------------------|
| LOCATION | TYPE OF OIL | STATE | COUNTY |
| 3" Deer Park Rohm Haas #2 | Acetone | TX | Harris |
| 3" Deer Park Rohm Haas #1 | Acetone | TX | Harris |
| 4" Deer Park Rohm Haas #3 | Acetone | TX | Harris |
| DPMC - BASF | BASF Raffinate | TX | Harris |
| 4" Deer Park ITC | Benzene | TX | Harris |
| 8" Crown-Witter | Deer Park Dry Gas | TX | Harris |
| 8" Manchester - Deer Park | Deer Park Dry Gas | TX | Harris |
| LCR Lateral | Deer Park Dry Gas | TX | Harris |
| 12" Deer Park Olefins | Deer Park Olefins Feed | TX | Harris |
| 24" Deer Park Olefins | Deer Park Olefins Feed | TX | Harris |
| 12" Dry Gas | Texas Bay Area Pipeline Dry Gas | TX | Galveston, Harris |
| 6" Marathon Dry Gas Lateral | Texas City Dry Gas | TX | Harris |
| 6" Isopropene | ITC to Deer Park Connection Isopropene | TX | Harris |
| 24" Deer Park Olefins Lateral | Deer Park Olefins Feed | TX | Harris |
| 4" Witter St - Deer Park (Manchester Propylene) | Idle (Nitrogen) | TX | Harris |
| 4" Witter St - Crown (Manchester Propylene) | Idle (Nitrogen) | TX | Harris |
| 4" Manchester - Deer Park | Propylene | TX | Harris |
| 12" Spare Kilgore Crossing | Ship Channel Olefins Feed Lines | TX | Harris |
| 12" Main Kilgore Crossing (Ship Channel) | Idle | TX | Harris |
| 10" Sheldon - Deer Park (Ship Channel) | Idle | TX | Harris |
| 8" Deer Park Refinery - ITC | Butadiene | TX | Harris |
| 8" Fairmont Take Off-Nova/Fina | Ethylene | TX | Harris |
| 8" Fairmont Take Off-Nova/Fina | Ethylene | TX | Harris |
| 8/10 Jct - Fairmont | Ethylene | TX | Harris |
| 8" Sunoco Lateral | Idle (Nitrogen) | TX | Harris |
| Mont Belvieu - 8/10 Junction | Ethylene | TX | Harris / Chambers |
| Tidal Td - 8/10 Jct | Ethylene | TX | Harris |
| 8/10 Jct. - Solvay | Ethylene | TX | Harris |
| 6" Arco Delivery - Miller Cut Off Road | Idle (Nitrogen) | TX | Harris |
| 10" Ethylene to/from DPMC | Ethylene | TX | Chambers |

| Pipeline Specifications (Cont'd) | | | |
|--|-------------------------|-------|---|
| LOCATION | TYPE OF OIL | STATE | COUNTY |
| 10" Ethylene from Exxon Dryer | Ethylene | TX | Chambers |
| 10" Ethylene to/from Chevron Mont Belvieu | Ethylene | TX | Chambers |
| 8" Arco-Mont Belvieu (Equistar to Mt. Belvieu) | Ethylene | TX | Chambers |
| 8" Basell Lateral | Ethylene | TX | Harris |
| 4" Lateral to Solvary | Ethylene | TX | Harris |
| 6" Texas City Sterling Delivery | Idle (Nitrogen) | TX | Galveston |
| 6" Fairmont - BASF Underwood | Propylene | TX | Harris |
| Union Carbide 4, 6 & 8" Lateral | Propylene | TX | Galveston |
| 6" Deer Park Mont Belvieu | Propylene | TX | Harris & Chambers |
| 6" Fairmont - Arco Bayport | Propylene | TX | Harris |
| 4" Phillips-Shell Propylene | Idle (Nitrogen) | TX | Harris |
| 6" Rohm & Haas Lateral | Propylene | TX | Harris |
| 6" Arco Delivery- Miller Cut Off Road | Idle (Nitrogen) | TX | Harris |
| 6" Crossover to Chocolate Bayou from Rohm & Haas Lateral | Propylene | TX | Harris |
| 8" Propylene to/from DPMC | Propylene | TX | Chambers |
| 10" Propylene to Exxon Green Lake | Propylene | TX | Chambers |
| 8" Propylene from Exxon Dryer | Idle (Nitrogen) | TX | Chambers |
| 8" Propylene to Exxon Cavern/Dryer | Idle (Nitrogen) | TX | Chambers |
| 6" Amoco Lateral | Idle (Nitrogen) | TX | Galveston |
| 6" Arcadia Jct - Texas City | Propylene | TX | Galveston |
| 4" Deer Park - Aristech Propylene | Idle (Nitrogen) | TX | Harris |
| Louisiana / Texas State Line to Mont Belvieu | Ethylene | TX | Orange, Jefferson, Chambers & Liberty |
| Beaumont Lateral | Idled w/ Nitrogen | TX | Jefferson |
| 6" Webster Crude Butadiene | Crude Butadiene | TX | Harris |
| Battleground Crude Isoprene | Crude Isoprene | TX | Harris |
| HFOTCO - Deer Park | Crude | TX | Harris |
| Sabine River - East Houston | Crude | TX | Orange, Jefferson, Chambers, Liberty & Harris |
| Y Jct - Motiva Port Arthur | Empty / Nitrogen Purged | TX | Jefferson |
| Lateral to Unocal/Sun | Crude | TX | Jefferson |
| Idle 10" to Oil Tanking | Idle (Nitrogen) | TX | Jefferson |

| Pipeline Specifications (Cont'd) | | | |
|---|-------------------------|-------|-------------------|
| LOCATION | TYPE OF OIL | STATE | COUNTY |
| Port Neches - Port Arthur | Crude | TX | Jefferson |
| Port Neches - Port Arthur 12" Idle North | Empty / Nitrogen Purged | TX | Jefferson |
| Port Neches - Port Arthur 12" Idle South | Empty / Nitrogen Purged | TX | Jefferson |
| Port Neches - Fina 12" | Crude | TX | Jefferson |
| Sunshine Lateral | Idle Nitrogen Purged | TX | Polk |
| 8" Webster Junction - Texas City | Nitrogen | TX | Galveston, Harris |
| Colex West to Spider Web No. 9 (12") | Multiple Products | TX | Harris |
| Colex West to Deer Park Rail Car 10 (16") | Multiple Products | TX | Harris |
| Colex West to Colonial No. 11 (36") | Multiple Products | TX | Harris |
| Colex West to Colonial No. 12 (36") | Multiple Products | TX | Harris |
| Colex West to Explorer No. 13 (30") | Multiple Products | TX | Harris |
| Colex West to Explorer No. 14 (30") | Multiple Products | TX | Harris |
| Colonial to Colex West No. 15 (16") | Multiple Products | TX | Harris |
| Colonial to Colex West No. 16 (16") | Multiple Products | TX | Harris |
| Colex West to Spider Web No. 19 (16") | Multiple Products | TX | Harris |
| Colex West to Deer Park Rail Car No. 18 (12") | Multiple Products | TX | Harris |
| Colex East to Colex West No. 17 (16") | Multiple Products | TX | Harris |
| Colex West to Grand Central No. 20 (12") | Multiple Products | TX | Harris |
| PAR - PAPS 12" Gasoline No. 1 | Gasoline | TX | Jefferson |
| PAR - PAPS 12" Gasoline No. 1 | Empty | TX | Jefferson |
| Shell - Ex 30" Gasoline | Gasoline | TX | Jefferson |
| PAR - PAPS 12" Fuels No. 2 | Distillate | TX | Jefferson |
| Shell - EX 30" Fuels | Distillate | TX | Jefferson |
| PAPS - El Vista 12" Gasoline (Premcor) | Gasoline | TX | Jefferson |
| El Vista - PAPS 36" Gasoline (Premcor) | Gasoline | TX | Jefferson |
| Premcor 8" | Mothballed | TX | Jefferson |
| 10" Marketing Jct - Pasadena Plant | Multiple Products | TX | Harris |
| 10" Sinco Station - Market Jct | Multiple Products | TX | Harris |
| 14" Sinco - Colex | Multiple Products | TX | Harris |
| 10" Sinco Station - Lyondell | Multiple Products | TX | Harris |

| Pipeline Specifications (Cont'd) | | | |
|---|-------------------|-------|-------------------------------|
| LOCATION | TYPE OF OIL | STATE | COUNTY |
| 12" Lyondell - East Houston | Multiple Products | TX | Harris |
| 8" Sinco Station - Market Junction | Idle | TX | Harris |
| 12" Blackwell Jct. to Galena Park Station (SINCO 8" & 10") | Multiple Products | TX | Harris |
| Sinco 10" to Colex Terminal 10" | Multiple Products | TX | Harris |
| 12" Crossing of Houston Ship Channel | Idle | TX | Harris |
| Colex Terminal to Sinco 10" | Multiple Products | TX | Harris |
| 8" Hess to Rancho | Idle | TX | Harris |
| Sinco 8 to Colex Terminal 12" | Multiple Products | TX | Harris |
| Unocal - Pine Street 12" | Idle w/ Nitrogen | TX | Jefferson |
| Explorer - Pine Street 10" | Idle w/ Nitrogen | TX | Jefferson |
| Pine Street - PAPS 10" | Multiple Products | TX | Jefferson |
| Phillips Rd. North to Phillips Road South -Colex Terminal | Multiple Products | TX | Harris |
| Colex West to HL&P No. 21 (16") | Multiple Products | TX | Harris |
| #16 Lateral to Explorer | Multiple Products | TX | Harris |
| #15 Lateral to Explorer (Colex Terminal) | Multiple Products | TX | Harris |
| Chocolate Bayou Tk off / Faimont / Arc Jct. / Dow Solutia | Propylene | TX | Brazoria, Galveston, & Harris |
| Fairmont Station 6" Suction | Propylene | TX | Harris |
| Fairmont Station 6" Discharge | Propylene | TX | Harris |
| Premcor El Vista - Explorer 30" Gasoline (Port Arthur Products) | Refine Products | TX | Jefferson |
| PAPS - Explorer 30" Oil (Port Arthur Products) | Refined Products | TX | Jefferson |
| Magellan Mainline to Grand Central Junction No. 22 (16") | Refined Products | TX | Harris |
| 8" Sinco Market Jct to Lyondell (Sinco-Colex Products) | Idle | TX | Harris |
| Unocal-Pine Street 12" (Smith Bluff) | Idle | TX | Jefferson |
| Explorer to Fina Connection - Smith Bluff | Idle | TX | Jefferson |
| 10" Sinco Market Jct - Lyondell (Sinco-Colex Products) | Idle | TX | Harris |

RESPONSE ZONE INFORMATION

Response Resources:

Facility 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
- Failure of facility piping
- Equipment failure (e.g. pumping system failure, relief valve failure, etc.)

These scenarios could result in the following discharge volumes (additional details in Appendix B):

Worst Case Discharge (WCD):

| Response Zone | Discharge Scenario | Potential Oil Group | Planning Volume |
|---------------------|--------------------|---------------------|-----------------|
| (b) (7)(F), (b) (3) | | | |

FIGURE 2.1**INTERNAL NOTIFICATION SEQUENCE**

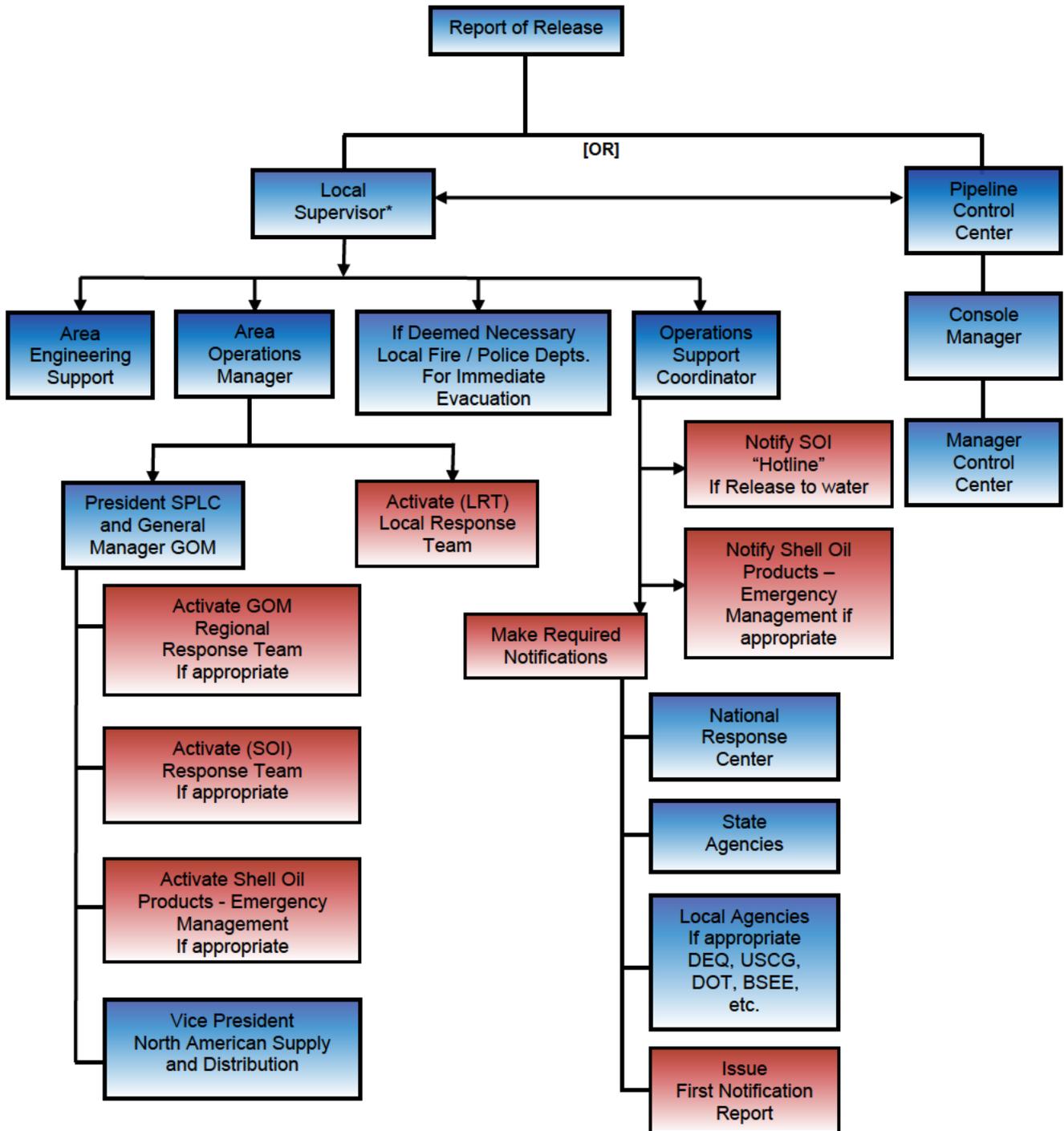
Internal Notification Sequence

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Notification of Company Personnel

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INTERNAL NOTIFICATION SEQUENCE



* For internal reporting procedures, refer to HSSE Incident Reporting and Investigation Procedure (including First Notification Form). West Response Zone. Please note that during an emergency, the Control Center could be relocated to the backup site.

When an incident occurs or is suspected, notify the Control Center immediately. The following diagram shows the line of notification for incidents. Refer to figure 2.2 for specific notification information.

If an individual is not available, contact the immediate supervisor.

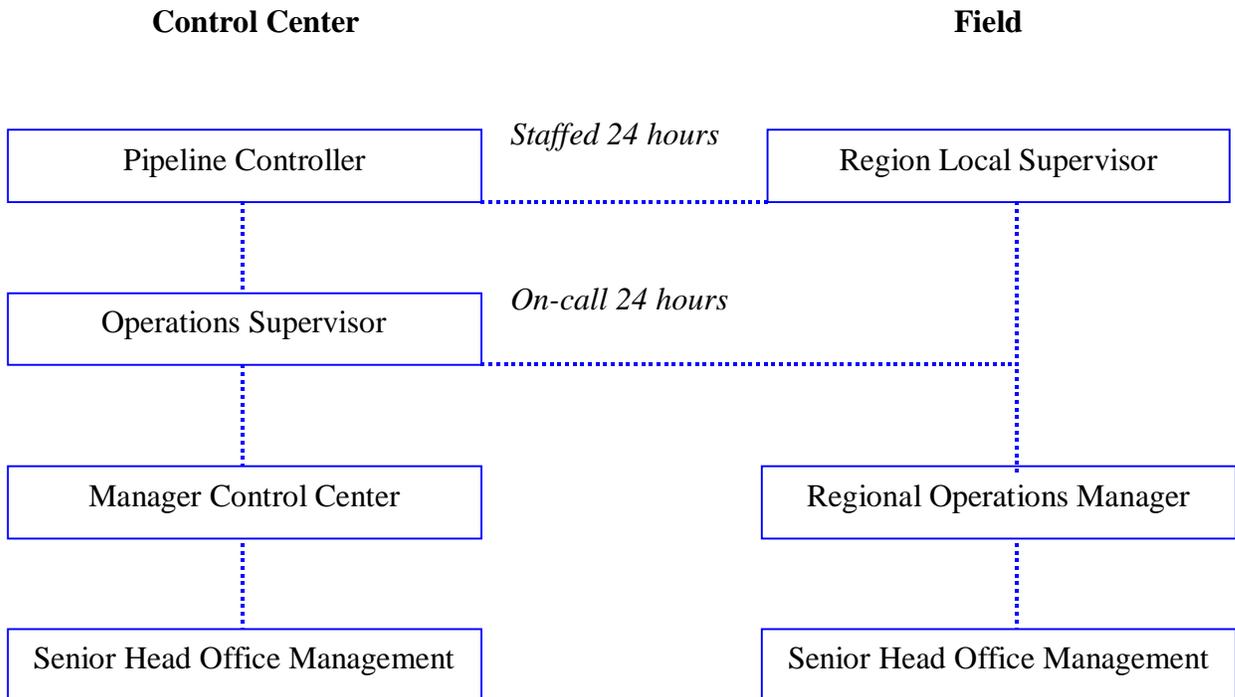


FIGURE 2.2
INTERNAL NOTIFICATION REFERENCES

| INTERNAL NOTIFICATIONS - INCIDENT MANAGEMENT TEAM | | | | |
|---|-------------------|----------------|---------|-------|
| POSITION/TITLE | NAME | OFFICE | HOME | OTHER |
| General Manager Operations GOM-QI/IC | Greg Smith | (504) 728-4474 | (b) (6) | |
| Manager Control Center (AQI) | Jill Derise | (713) 241-9859 | | |
| EOR Facility Manager | Gerald Yandell | (713) 906-6387 | | |
| LA Onshore Facility Manager | Dennis Cazenave | (985) 873-3454 | | |
| US Operations Support Manager | Larry Lamaison | (504) 728-3246 | | |
| Sr. US Operations SupportCoordinator | Alan Hunsberger | (225) 746-2410 | | |
| Manager HSSE Americas | Carrie Hodgins | (713) 241-2838 | | |
| Safety Officer | Greg Kaul | (713) 423-3345 | | |
| Safety Officer | Michael Marciante | (504) 728-8536 | | |
| Operations Supervisor - (Colex East / West) | Ronnie Brian | (713) 423-3362 | | |
| Operations Supervisor (East Houston) | James Espinoza | (713) 423-3360 | | |
| Operations Supervisor - Port Arthur | Phillip Swenson | (409) 984-7003 | | |
| Asset Supervisor (Mont Belvieu) | Rebecca Weber | (281) 385-0660 | | |
| Operations Assistant (Colex) | Larry Belcher | (281) 620-5115 | | |
| Operations Assistant - (Port Arthur) | Mike Biddle | (409) 984-7008 | | |

| INTERNAL NOTIFICATIONS - INCIDENT MANAGEMENT TEAM (Cont'd) | | | | |
|--|-------------------------------|----------------|---------|-------|
| POSITION/TITLE | NAME | OFFICE | HOME | OTHER |
| Maintenance Supervisor | Gerald Carabajal (Colex West) | (713) 423-3384 | (b) (6) | |
| Area Maintenance Supervisor | David Janwich (Port Arthur) | (409) 984-7009 | | |
| Craft Support (PAPS) | Hansel Lemoine | (337) 373-3204 | | |

| INTERNAL NOTIFICATIONS - QUALIFIED INDIVIDUAL | | | | |
|---|------------|----------------|---------|-------|
| POSITION/TITLE | NAME | OFFICE | HOME | OTHER |
| General Manager Operations GOM-QI/IC | Greg Smith | (504) 728-4474 | (b) (6) | |

| INTERNAL NOTIFICATIONS - ALTERNATE QUALIFIED INDIVIDUAL | | | | |
|---|-------------|----------------|---------|-------|
| POSITION/TITLE | NAME | OFFICE | HOME | OTHER |
| Manager Control Center (AQI) | Jill Derise | (713) 241-9859 | (b) (6) | |

| INTERNAL NOTIFICATIONS - CORPORATE RESPONSE PERSONNEL / OTHER COMPANY CONTACTS | | | | |
|--|--|---------------------------------|---------|-------|
| POSITION/TITLE | NAME | OFFICE | HOME | OTHER |
| GM Trading & Supply Operations AM | Helen Theoret | (403) 384-5577 | (b) (6) | |
| US Maintenance Manager | Karen McCray | (713) 423-3371 | | |
| Asset Integrity & PL Mtce Manager | Scott Anderson | (504) 728-4196 | | |
| | Shell Refinery Deer Park (South Main Gate) | (713) 246-7301 / (713) 246-7402 | | |
| | Motiva Norco Refinery | (504) 465-7342 | | |
| | Motiva Convent Refinery | (225) 562-7681 | | |
| | CHEM-TEL | | | |
| | Shell Media Hotline | (713) 241-4544 | | |
| Head of US MF Communications | Johan Zaayman | (713) 246-6151 | | |
| Comms Advisor | Natalie Mazey | (713) 241-3862 | | |
| Legal Counsel - Environmental | Brian Faulkner | (713) 241-2383 | | |
| 24 Hours | Shell Corporate Security | (713) 241-4773 | | |
| S&D Security Advisor | Tracey Cline | (713) 385-4200 | | |
| Downstream Security Manager | Robert Schoen | (713) 241-6072 | | |
| Land & Permitting Manager | Kyle Webster | (713) 241-5147 | | |

| INTERNAL NOTIFICATIONS - CORPORATE RESPONSE PERSONNEL / OTHER COMPANY CONTACTS (Cont'd) | | | | |
|---|---|----------------|---------|-------|
| POSITION/TITLE | NAME | OFFICE | HOME | OTHER |
| Sr. Land Agent- (Colex) | Steven Van Stone | (713) 241-0174 | (b) (6) | |
| Community Awareness (Colex) | Phil Barker | (713) 423-3382 | | |
| Procurement Mgr GOM | Rachel Gauthier | (504) 425-4602 | | |
| | Shell Corporate Aviation | (713) 241-7075 | | |
| Aviation Contract Manager | Patrick Riley | (985) 858-2632 | | |
| Aviation Advisor | Mark Adolph | (713) 241-7707 | | |
| | Shell Aviation | (713) 241-3490 | | |
| 24 Hours | Shell Corporate Medical | (800) 524-7747 | | |
| | Shell Oil Products Emergency Management Hotline | (877) 242-7400 | | |

FIGURE 2.3
OIL SPILL REMOVAL ORGANIZATIONS

| USCG CLASSIFIED OIL SPILL REMOVAL ORGANIZATIONS (OSRO) | | | |
|---|----------------------|----------------------------|-------------------------|
| COMPANY | RESPONSE TIME | LOCATION | TELEPHONE |
| Oil Mop, Inc. | 1 HR | Belle Chase, Louisiana | (800) 645-6671 |
| Environmental Safety & Health Consulting Services | 1 Hour | Houma, Louisiana | (888) 422-3622 |
| Garner Environmental Services (Houston, TX) | 60 MIN MAX | Deer Park, Texas | (800) 424-1716 (24 Hr.) |
| Marine Spill Response Corporation (MSRC) | <12 Hours | Herndon, Virginia | |
| Eagle - SWS | 1 HRS | Panama City Beach, Florida | (800) 852-8878 |
| United States Environmental Services | 1 HR | Meraux, Louisiana | (888) 279-9930 (24 Hr.) |

NOTIFICATION DATA SHEET

| NOTIFICATION DATA SHEET | | |
|---|------------------------------------|---------------------|
| Date: _____ | Time: _____ | |
| INCIDENT DESCRIPTION | | |
| Reporter's Full Name: _____ | Position: _____ | |
| Day Phone: _____ | Evening Phone: _____ | |
| Company: Shell Pipeline Company LP (SPLC) | Organization Type: _____ | |
| Facility Address: 777 Walker Street | Owner's Address: 777 Walker Street | |
| Two Shell Plaza | Two Shell Plaza | |
| Houston, Texas 77002 | Houston, Texas 77002 | |
| 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: _____ | | |
| Nearest City: _____ | | |
| County: _____ | State: Texas | Zip Code: 77002 |
| Section: _____ | Township: _____ | Range: _____ |
| Distance from City: _____ | Direction from City: _____ | |
| Container Type: _____ | Container Storage Capacity: _____ | |
| Facility Oil Storage Capacity: _____ | | |
| Material: _____ | | |
| Total Quantity Released | Water Impact (YES or NO) | Quantity into Water |
| | | |
| | | |
| RESPONSE ACTION(S) | | |
| Action(s) taken to Correct, Control, or Mitigate Incident: _____ | | |
| Number of Injuries: _____ | Number of Deaths: _____ | |
| Evacuation(s): _____ | Number Evacuated: _____ | |
| Damage Estimate: _____ | | |
| More information about impacted medium: _____ | | |
| CALLER NOTIFICATIONS | | |
| National Response Center (NRC): | 1-800-424-8802 | |
| Additional Notifications (Circle all applicable): USCG EPA State OSHA Other _____ | | |
| NRC Incident Assigned No.: _____ | | |
| ADDITIONAL INFORMATION | | |
| Any information about the incident not recorded elsewhere in this report: _____ | | |
| | | |
| | | |
| NOTE: DO NOT DELAY NOTIFICATION PENDING COLLECTION OF ALL INFORMATION. | | |

FIGURE 2.5**EXTERNAL NOTIFICATION FLOWCHART**

External Notification
[Click to view](#)

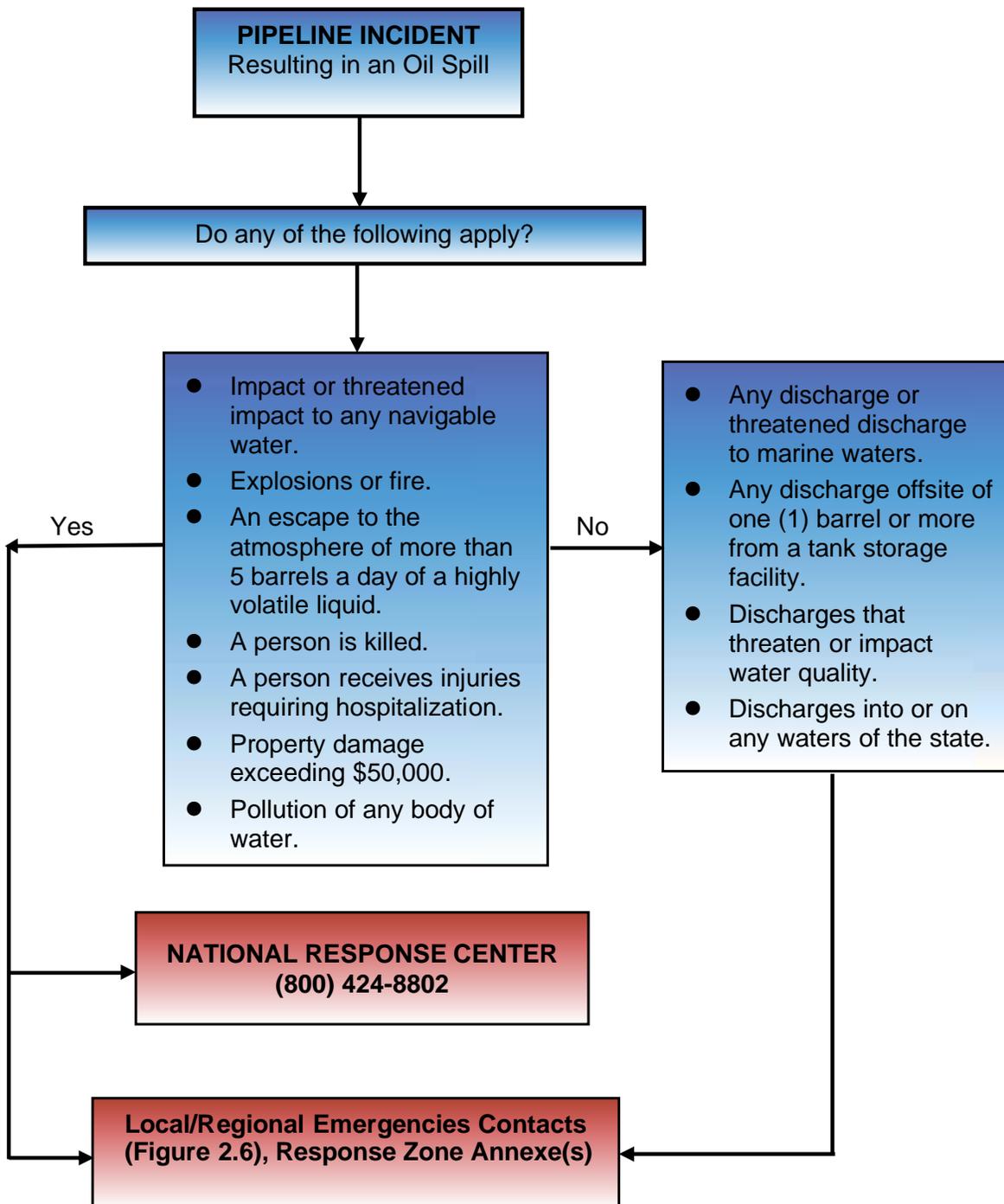
EXTERNAL NOTIFICATION FLOWCHART

FIGURE 2.6
EXTERNAL NOTIFICATION REFERENCES

| REQUIRED NOTIFICATIONS | | |
|---|----------------------------------|--|
| AGENCY | LOCATION | TELEPHONE |
| National Response Center (NRC) | Washington, District Of Columbia | (800) 424-8802 (24 Hr.) (202) 267-2675 (Day Phone) |
| U.S. Coast Guard - Sector New Orleans | New Orleans, Louisiana | (504) 365-2200 (24 Hr.) (504) 365-2390 (Response Dept.) (Day Phone) |
| U.S. Coast Guard - Sector Houston / Galveston | Houston, Texas | (713) 671-5100 (24 Hr.) (713) 671-5113 (Day Phone) |
| U.S. Coast Guard - MSU Port Arthur, TX | Port Arthur, Texas | (409) 723-6500 (24 Hr.) (409) 719-5000 (Day Phone) |
| Texas General Land Office Environmental Hotline | | (800) 832-8224 (24 Hr.) |
| Texas Railroad Commission (TRRC) | Houston, Texas | (512) 463-6788 (24 Hr.) (713) 869-5001 (Day Phone) |
| Texas Parks and Wildlife Rehab 24 Hr Communication | Austin, Texas | (512) 389-4848 (24 Hr.) (512) 389-4726 (Day Phone) |

| ADDITIONAL RESPONSE RESOURCES | | |
|---|---------------------|---------------------------------|
| Planning and Incident Support | | |
| COMPANY | LOCATION | TELEPHONE |
| Valero | Port Arthur, Texas | (409) 988-8330 |
| Motiva Refinery | Port Arthur, Texas | (409) 989-3501 |
| Motiva Refinery (24-Hour Emergency Response (Main | Port Arthur, Texas | (409) 985-4316 / 800-955-5530 |
| Test America | Houston, Texas | (713) 690-4444 |
| Accutest | Houston, Texas | (713) 271-4700 |
| Motiva | Port Arthur, Texas | (409) 989-7632 |
| ERA Helicopters | Houma, Louisiana | (800) 655-1414 |
| VIH Cougar Helicopters Inc.* | Galliano, Louisiana | (985) 475-4534 / (888) 757-4828 |
| Industrial Emergency Services (IES) | Houma, Louisiana | (800) 862-0466 |
| Wildlife Rehab and Education | Houston, Texas | (281) 731-8826 |
| Wildlife Response Services LLC | Seabrook, Texas | (713) 705-5897 |
| Valero Refinery Port Arthur Fire (Main) | Port Arthur, Texas | (409) 985-1201 |
| Tri- State Bird Rescue Newark, Delaware | Newark, Delaware | (302) 737-7241 |
| Williams Fire & Hazard Control, Inc. | Mauriceville, Texas | (409) 727-2347 / (800) 231-4613 |

| LOCAL EMERGENCY SERVICES | | |
|-------------------------------------|---------------------|--|
| COMPANY | LOCATION | TELEPHONE |
| Brazoria County Sheriff | Texas | (979) 864-2392 |
| Brazoria County LEPC | | (979) 864-1801 |
| American Red Cross Brazoria County | | (979) 849-6439 |
| Angleton Police Department | | (979) 849-2383 |
| Chambers County Sheriff | | (409) 267-8318 |
| Chambers County LEPC | | (409) 267-2445 |
| Mont Belvieu Police Department | Mont Belvieu, Texas | 911 / (281) 576-2417 |
| Baytown American Red Cross | | (281) 424-1300 |
| Houston American Red Cross | | (713) 526-8300 |
| San Jacinto Methodist Hospital | Baytown, Texas | (281) 420-8600 / (281) 420-6100 Patient Access Svc |
| Trinity River Authority | Huntsville, Texas | (936) 295-5485 |
| Galveston Sheriff's Department | Texas | (409) 766-2300 |
| Galveston County LEPC | | (281) 996-3335 |
| Galveston County American Red Cross | | (409) 945-7200 |
| Alta Loma/Arcadia Police | | (409) 925-2000 |

| LOCAL EMERGENCY SERVICES (Cont'd) | | |
|---|-----------------|---|
| COMPANY | LOCATION | TELEPHONE |
| Dickinson Fire Department | | (281) 534-3031 |
| La Marque Fire Department | | (409) 938-9260 |
| City of Texas City Police Dept. | | 911 / (409) 948-2525 |
| City of Texas City Fire Dept. | | (409) 643-5700 |
| Harris County Sheriff's Department | Houston, Texas | (713) 221-6000 |
| Harris County LEPC | Houston, Texas | (713) 881-3300 (H.C. Emergency Mngmt) |
| Harris County OEM | | (713) 881-3100 (Emer) / (713) 881-3100 |
| Harris County American Red Cross | | (713) 526-8300 |
| Harris County Fire Marshall | Houston, Texas | (281) 436-8000 |
| Harris County Environmental of Public Health | | (713) 920-2831 |
| Aldine Fire Department | | (281) 847-3300 (Dispatch) |
| Bay Area LEPC (Taylor Lake Village City Hall) | | (281) 326-2843 |
| Baytown Police Department | | (281) 422-8371 |
| Baytown Fire/Rescue | | (281) 422-2311 |
| Baytown LEPC | | (281) 420-6556 (EOC) |

| LOCAL EMERGENCY SERVICES (Cont'd) | | |
|--|--------------------|--|
| COMPANY | LOCATION | TELEPHONE |
| Brookshire Fire (Police) | | (281) 375-5000 |
| Channelview Fire Department | | (281) 452-5782 |
| Deer Park LEPC | Deer Park, Texas | (281) 479-1511 24 HRS/ (281) 478-7247 |
| Deer Park Fire Department | Deer Park, Texas | (281) 478-7281 |
| Shell Deer Park Refining Emergency Response Team | Deer Park, Texas | (713) 246-7301 (Main Gate) (713) 246-7402 |
| Galena Park Fire Dept. | Galena Park, Texas | 911 / (713) 674-5311 |
| Galena Park Police Dept. | Galena Park, Texas | 911 / (713) 675-3471 |
| Galena Park LEPC | Galena Park, Texas | (713) 675-3471 |
| Highlands Fire Depart. | Highlands, Texas | (281) 847-3362 / 911 |
| Houston Police Department | Houston, Texas | (713) 884-3131 |
| Houston Fire Department | Houston, Texas | (713) 884-3144 |
| Houston LEPC | Houston, Texas | (713) 884-4500 (emergency) |
| U.S. Fish and Wildlife Service | Houston, Texas | (800) 344-9453 |
| Wildlife Rehab & Education (Sharon Schmalz) | Houston, Texas | (281) 332-8319 |
| ABM Security Services | Houston, Texas | (713) 926-4453 |

| LOCAL EMERGENCY SERVICES (Cont'd) | | |
|---|--------------------|---|
| COMPANY | LOCATION | TELEPHONE |
| Huffman Fire Department | Huffman, Texas | (281) 324-2111 |
| Katy Fire Department | Katy, Texas | (281) 391-3500 |
| Katy LEPC | Katy, Texas | (281) 391-3500 |
| Fort Bend County Local Emergency Planning Committee | Katy, Texas | (281) 391-4848 |
| LaPorte Police/Fire | LaPorte, Texas | (281) 471-2141 / (281) 471-3607 (fire non emer) |
| LaPorte Police Department | LaPorte, Texas | (281) 471-2141 |
| LaPorte LEPC | LaPorte, Texas | (281) 471-3810 (emer) / (281) 471-2141 |
| League City Police | League City, Texas | 911 / (281) 332-2566 |
| League City Fire Department | League City, Texas | (281) 332-2566 |
| Mt. Belvieu Police/Fire | Baytown, Texas | (281) 576-2417 |
| North Channel (Galena Park Area) LEPC | Galena Park, Texas | (713) 675-3471 |
| Pasadena Police Department | Pasadena, Texas | 911 / (713) 477-1221 |
| Pasadena Volunteer Fire Department | Pasadena, Texas | (713) 477-1221 / (713) 475-5554 (non-emer) |
| Pasadena LEPC | Pasadena, Texas | (713) 477-1511 |
| Bayshore Medical Center - Pasadena | Pasadena, Texas | (713) 359-2000 |

| LOCAL EMERGENCY SERVICES (Cont'd) | | |
|--|----------------------|--------------------------------|
| COMPANY | LOCATION | TELEPHONE |
| South Houston Police | South Houston, Texas | (713) 944-1910 (non-emergency) |
| South Houston Fire Department | South Houston, Texas | (713) 944-1910 |
| South Houston LEPC | South Houston, Texas | (713) 944-1910 |
| Webster Police | Webster, Texas | (281) 332-2426 |
| Webster Fire | Webster, Texas | (281) 332-2426 |
| Webster Medical Screening Clinic | Pasadena, Texas | (713) 944-9830 |
| Jefferson Co. Sheriff | Texas | (409) 835-8418 |
| Jefferson Co. Sheriff (Beaumont Office) | Pasadena, Texas | (409) 835-8411 |
| Jefferson Co Sheriff (Mid-County - Jail) | Beaumont, Texas | (409) 726-2500 |
| Jefferson Co. LEPC | Beaumont, Texas | (409) 835-8757 |
| Jefferson Co Ambulance | Texas | (409) 729-9300 |
| Jefferson Co. State Police | Beaumont, Texas | (409) 924-5400 |
| Jefferson Co. American Red Cross | Beaumont, Texas | (409) 832-1644 |
| Port Arthur Fire Department | Port Arthur, Texas | (409) 983-8700 |
| Port Arthur Emergency Management Coordinator | Port Arthur, Texas | (409) 983-8600 |

| LOCAL EMERGENCY SERVICES (Cont'd) | | |
|--|--------------------|------------------|
| COMPANY | LOCATION | TELEPHONE |
| Port Arthur Police Department | Port Arthur, Texas | (409) 983-8600 |
| Valero Refinery Port Arthur Fire (Main) | Port Arthur, Texas | (409) 985-1201 |
| Port Arthur City-Police Department | Port Arthur, Texas | (409) 983-8600 |
| Christus St. Mary Hospital | Port Arthur, Texas | (409) 985-7431 |
| Groves Fire Department | Groves, Texas | (409) 962-4469 |
| Groves Police Department | Port Arthur, Texas | (409) 983-8600 |
| Renaissance Hospital | Groves, Texas | (409) 962-5733 |
| Port Neches Fire Department | Port Neches, Texas | (409) 722-5885 |
| Port Neches Police Department | Port Neches, Texas | (409) 722-1424 |
| Medical Center of Southeast Texas | Port Arthur, Texas | (409) 724-7389 |
| Nederland Fire Department | Nederland, Texas | (409) 723-1531 |
| Nederland Police Department | Nederland, Texas | (409) 722-4965 |
| Beaumont Fire Department | Beaumont, Texas | (409) 880-3901 |
| Beaumont Police Department | Beaumont, Texas | (409) 832-1234 |
| St. Elizabeth Hospital | Beaumont, Texas | (409) 892-7171 |

| LOCAL EMERGENCY SERVICES (Cont'd) | | |
|--|----------------------------|------------------|
| COMPANY | LOCATION | TELEPHONE |
| Baptist Hospital | Beaumont, Texas | (409) 212-5000 |
| Labelle Fire Department | LaBelle, Texas | (409) 794-1441 |
| LaBelle County Sheriff Department | Labelle, Texas | (409) 835-8411 |
| LaBelle Fire Department | LaBelle, Tennessee | (409) 794-1441 |
| Liberty County Sheriff | Liberty, Texas | (936) 336-4500 |
| Liberty County LEPC | Liberty, Texas | (936) 334-3219 |
| Liberty County American Red Cross | Houston, Texas | (713) 526-8300 |
| North Liberty Volunteer Fire Department | Romayor, Texas | (319) 626-5717 |
| Romayor Fire Department | Texas | 911 |
| Tarkington Prairie Fire Department | Texas | 911 |
| Tarkington Volunteer Fire Department | Cleveland, Texas | (281) 592-7800 |
| Federal Bureau of Investigation (FBI) | Houston / Galveston, Texas | (409) 832-8571 |
| Bridge City/Orange County Sheriff's Department | Orange, Texas | (409) 883-2612 |
| Orange County LEPC | Orange, Texas | (409) 882-6209 |
| TX Dept. of Public Safety - Beaumont District | Beaumont, Texas | (409) 924-5400 |

| LOCAL EMERGENCY SERVICES (Cont'd) | | |
|--|--------------------|------------------|
| COMPANY | LOCATION | TELEPHONE |
| Orange County Red Cross | Orange, Texas | (409) 883-2322 |
| Bridge City Fire Department | Bridge City, Texas | (409) 735-2419 |
| Bridge City Police | Bridge City, Texas | (409) 735-5028 |
| Vidor Fire Department | Vidor, Texas | (409) 769-6241 |
| Vidor Police Department | Vidor, Texas | (409) 769-4561 |
| Polk County Sheriff | Livingston, Texas | (936) 327-6810 |
| Polk County Local Emergency Planning Committee | Livingston, Texas | (936) 327-6826 |
| Polk County American Red Cross | Livingston, Texas | (936) 327-6867 |
| Corrigan Police and Fire Department | Corrigan, Texas | (936) 398-2551 |
| Goodrich Fire Department | Goodrich, Texas | (936) 365-2121 |
| ABM Security Services | Dallas, Texas | (214) 267-5600 |
| Texas Railroad Commission / Oil and Gas Division | Austin, Texas | (512) 463-6788 |
| Livingston County American Red Cross | Livingston, Texas | (936) 327-6867 |
| Livingston County Local Emergency Planning Comm | Livingston, Texas | (936) 327-6826 |

| MEDIA NOTIFICATIONS | | |
|----------------------------|-----------------|------------------|
| AGENCY | LOCATION | TELEPHONE |
| KTRH 740 AM | Houston, Texas | (713) 212-8740 |
| KUHF 88.7 FM | Houston, Texas | (713) 743-0887 |
| KOVE-FM 106.5 | Houston, Texas | (713) 965-2400 |
| KPRC-TV Channel 2 | Houston, Texas | (713) 222-6397 |
| KHOU Channel 11 | Houston, Texas | (713) 526-1111 |
| KTRK Channel 13 | Houston, Texas | (713) 666-0713 |
| KRIV TV Channel 26 | Houston, Texas | (713) 479-2600 |
| KTMD Channel 48 | Houston, Texas | (713) 974-4848 |

NOTIFICATION REQUIREMENTS

National Response Center

For all facilities, immediately report all discharges of oil or refined petroleum product into, or likely to reach, navigable waters of the United States (including streams, lakes, rivers, and reservoirs.)

Notification of the regional Coast Guard Captain of the Port is also recommended if release has affected or might affect a navigable waterway.

Discharges of Hazardous Liquids or CO₂ From Pipeline

CFR §195.50; 195.52; 195.54; 195.402(c)(2)

Advisory Bulletin (ADB-02-04)

For a DOT pipeline or facility, immediately report (within 2 hours of discovery) any release of a hazardous liquid or carbon dioxide that:

- results in an unintentional fire or explosion
- causes a death or personal injury requiring hospitalization
- causes property damage, including clean up costs exceeding \$50,000
- is significant in other respects, or
- is 5 gallons* or more.

*However, the First Notification Form is required for internal reporting of all releases of 3 gallons or more to land, including releases to secondary containment.

When notifying the NRC, please provide the most accurate release volume estimate available at the time.

Prompt follow-up reports during the emergency phase of a response are required for the following significant changes:

- An increase or decrease in the number of previously reported injuries or fatalities;
- A revised estimate of the product release amount that is at least 10 times greater than the amount reported;
- A revised estimate of the property damage that is at least 10 times greater than the reported property damage estimate.

An operator should tell the NRC representative if a previous report was filed for the incident and provide the NRC Report Number of the original telephonic.

Releases of Natural or Other Gases

CFR §191.3 and §191.5

For a DOT pipeline or facility, immediately report (within 2 hours of discovery) any event that involved a release of gas from a pipeline that results in one or more of the following consequences:

- A death, or personal injury necessitating in-patient hospitalization;
- Estimated property damage of \$50,000 or more, including loss to the operator or others, or both, but excluding cost lost;
- Unintentional estimated gas loss of three million cubic feet or more; or
- Is significant in other respects.

CERCLA Reporting

Immediately report any release of a CERCLA hazardous substance exceeding the reportable quantity (RQ). 40 CFR 302.4 lists the CERCLA hazardous substances with RQ's. MSDS's may also be used to determine if a spilled substance is reportable under CERCLA.

Under the CERCLA petroleum exclusion, refined petroleum product and crude oil spills do not have to be reported even though these products may contain hazardous substances.

Department of Transportation (DOT)

Written Requirements

For DOT pipelines or facilities, a written report (DOT Form 7000-1) must be filed with the DOT within 30 days after discovery of the accident (fire or explosion, death or personal injury requiring hospitalization and estimated property damage including clean up costs exceeding \$50,000). This form must also be filed within 30 days for any spill that results in a loss of 5 or more gallons of hazardous liquid, carbon dioxide, except for releases of less than 5 barrels (0.8 cubic meters) resulting from a pipeline maintenance activity if the release is:

- Not otherwise reportable
- Does not impact a body of water
- Confined to company property or ROW, and
- Cleaned up promptly

Be sure to review incident for possible employee drug and alcohol testing.

TYPE: In addition to the reporting of accidents to the NRC, a written accident report may be required for incidents.

VERBAL: Call to the NRC meets the required verbal notification under DOT reporting requirement.

WRITTEN: As soon as practicable, an accident meeting any of the requisite criteria must be reported on PHMSA Form 7000-1.

Texas Railroad Commission

Verbal Requirements

For all incidents that are reportable to the National Response Center, notification to the Texas Railroad Commission (TRRC) of the emergency must also be made at the earliest practicable moment (within two hours).

Written Requirements

For releases of crude oil, a written form H-8 must be completed and submitted to the Oil and Gas Division of the Commission within 30 days of discovery of the incident. For releases of hazardous liquids other than crude oil and reportable gas release incidents, a copy of the form completed for the DOT needs to be submitted to the Gas Division of the TRRC within 30 days of discovery of the incident.

Texas General Land Office

TYPE: Oil Spill Notification and Wildlife Protection/Rehabilitation

VERBAL: Immediately (refer to the TGLO Oiled Wildlife Response Information Guide located in Appendix H for additional information)

WRITTEN: As the agency may request depending on circumstances.

Louisiana Department of Environmental Quality

TYPE: Spills that impact or threaten navigable waters or adjoining shoreline.

VERBAL: Calls made to the Louisiana State Police HAZMAT will suffice for this.

WRITTEN: Provide a written report of a reportable release within 7 days of discovery.

U.S. Coast Guard - Sector New Orleans

TYPE: Immediately for all spills that impact or threaten navigable water or adjoining shoreline.

VERBAL: Notification to the USCG is typically accomplished by the call to the NRC.

WRITTEN: As the agency may request depending on circumstances.

Environmental Protection Agency - Region 6

TYPE: Immediately for all spills that impact or threaten navigable water or adjoining shoreline.

VERBAL: Notification to the EPA is typically accomplished by the call to the NRC.

WRITTEN: As the agency may request depending on circumstances.

U.S. Fish and Wildlife Services

TYPE: Wildlife Protection/Rehabilitation

VERBAL: Immediately.

WRITTEN: As the agency may request depending on circumstances.

Occupational Safety and Health Administration (OSHA)

TYPE: Fatality from a work related incident or the inpatient hospitalization of three (3) or more employees as a result of a work related incident.

VERBAL: Immediately.

WRITTEN: As requested by the agency.

BSEE Spill Reporting Requirements (OCS Pipeline Operations)

Bureau of Safety and Environmental Enforcement (BSEE)
1201 Elmwood Park Boulevard
New Orleans, LA 70123-2394
(800) 200-4853
(504) 736-2814 - office
(504) 736-2408 - fax

- Immediately notify the National Response Center (NRC)
- Notify the BSEE Pipeline Section orally without delay in the event of a spill of one (1) bbl or more, all fatalities, all injuries that require evacuation of the injured person(s), all fires and explosions, and all collisions that result in property or equipment damage greater than \$25,000.
- A written follow-up report (hard copy or electronically transmitted) is required within 15 days of the incident.

FIGURE 3.1**SPECIFIC INITIAL RESPONSE CHECKLIST**

Remember, without exception, personnel safety is the first priority. excessive exposure to the vapors and liquid stage of the spilled product should be avoided.

The following figures describe initial response activity for specific types of incidents. They are intended as guidelines. Each individual responsible for a response action must evaluate each action to ensure Personal Safety Prior to conducting that action.

Initial Response Actions

Company Personnel

PERSONNEL RESPONSIBILITIES

Pipeline Controller

After identifying an incident, the Pipeline Controller should follow these steps.

1. Shutdown the pipeline and secure the facility to the extent possible.

Note: For more detailed information concerning "abnormal operations," refer to the Operations Manual for Controllers.

2. Notify the area supervisor or his designated alternate.
3. Notify the Operations Supervisor or his designated alternate.
4. Notify the National Response Center (NRC).

Operations Supervisor

After notification of an incident, the Operations Supervisor should contact:

- Regional Operations Manager (or his designated alternate), and
- Manager Control Center (or his designated alternate).

Area Personnel Responsibilities

After notification of an incident, area personnel should:

The area personnel's general response plan consists of the following four stages which may overlap or occur concurrently:

- Making an initial response
- Defining the problem
- Controlling the situation, and
- Cleaning up and repairing the damage.

Actions

1. Dispatch one or more area/contract employees to the release site and establish the Incident Command System (ICS).
2. Complete a Site Safety Plan. See Appendix H Site Safety Plan

3. Secure the area for safety concerns:

- o Human life
- o Explosion (including rectifiers)
- o Fire, and
- o Health (vapors, water contamination, etc.).

If additional site security help is needed, get assistance from Federal, State, and local officials.

4. Assemble response equipment and personnel. Dispatch resources to the release site.

5. Define the problem.

- o Locate the head (leading end) of the release.
- o Monitor the area to identify all existing hazards and extent of the exposed area.
- o Monitor the area to identify any environmental impact (wildlife, water supplies, etc.).
- o Determine the necessary personal protective equipment and precautions [oxygen, deficiencies, thermal exposure, high Lower Explosive Limit (LELs), and Permissible Exposure Limit (PELs)].

6. Control the situation.

- o Secure the manual valves.
- o Take measures to prevent accidents associated with product movement, vapor clouds, or fire.

In highly populated areas:

- o Eliminate potential sources of ignition, and
- o Use police, fire department, and utility groups to help with evacuation, security, and protection.

In high traffic areas:

- o Divert or stop all traffic in the immediate area, and
- o Use police, fire department, and utility groups to help with traffic or crowd control.

7. Activate contract employees and equipment as needed.

8. Determine if assistance is needed from an oil spill cooperative (if available) or Local Response Team (LRT). Activate them if needed.

9. Collect the released material into containment sites as quickly as possible.

10. Locate additional containment sites, if needed.
11. Evaluate resources to confirm sufficient personnel and equipment.
12. Clean up to minimize damage to public health and the environment.
13. Repair the damage to the system.

Regional Operations Manager

After notification of an incident, the Regional Operations Manager should do the following.

Actions

1. Determine the class of the incident.
2. Activate the Location Response Team (LRT), if needed.
3. Coordinate additional regulatory calls (after the NRC call).
4. Determine if Head Office assistance is needed.
5. Advise Pipeline or Facility Owner if applicable, if the Owner is other than Shell.

Initial Response Action

The goal of the initial response is to reduce the adverse impacts of the incident.

Making an initial response includes the following.

- Shut the system down.
- Notify the appropriate SPLC personnel and governmental agencies.
- Evaluate system's potential for public hazards and identify immediate response areas utilizing
 - HCA data
 - Risk assessment data
 - Local knowledge
 - Feedback from public officials
- Use the Incident Command System.
- Ensure sufficient response resources are obtained.
- Emphasize to all response personnel the potential dangers of each task and to put safety first. Verify that all workers are trained and equipped for the hazards to which they are exposed. Verify compliance with all applicable Office of Safety and Health (OSHA) Hazardous Waste Operations and Emergency Response Regulations (HAZWOPER) requirements.

Initial Responder Guidelines

First Responder Awareness Level

The following guidelines should be observed by the first person(s) on scene at a release who would be classified as First Responder Awareness Level.

- Approach the release site safely and cautiously. Remain calm. (Your goal is release verification and personal and public safety.)
 - Observe wind direction in case of evacuation.
 - Approach from upwind direction.
 - Do not enter an area with heavy fumes or vapors.
 - Get only close enough to visually assess the area.
 - Attempt to locate the leading edge of the release. Without coming in contact with the product or vapor cloud, take steps to reduce the spread of the release if possible.
- If possible, eliminate source of release (keeping in mind that your goal is release verification and personal and public safety).
- Notify the Control Center of your findings.
- Call your supervisor and get help.
- The senior SPLC representative on site is to assume the role of Incident Commander and utilize the Incident Command System.
- Secure the area for safety reasons.
- Use local authorities to protect life and property. Divert or stop all traffic in the immediate area if necessary and assess the need for evacuation.
- Keep ignition sources away. DO NOT start vehicles in the vicinity of the vapors.
- If the chemical is on fire, remain at a safe distance on site. DO NOT attempt to extinguish the fire.

For HVLs:

- DO NOT ENTER the vapor cloud area, and
- Observe the wind conditions and determine the most likely direction of the vapor cloud movement.

For CARBON DIOXIDE:

- DO NOT ENTER the vapor cloud area
- Observe the wind conditions and determine the most likely direction of the vapor cloud movement, and
- DO NOT ENTER any low lying areas.

First Responder Operations Level

In addition to following all guidelines pertaining to First Responder Awareness Level, the first person (s) on scene at a release who would be classified as First Responder Operations Level may additionally attempt to contain the release from a safe distance, keep it from spreading, and prevent exposures.

First Responder HAZMAT Technician Level

The following guidelines should be observed by the first person(s) on scene at a release who would be classified as First Responder HAZMAT Technician Level.

The following guidelines apply to all releases for facilities that handle crude oil, refined products, or chemicals.

- Do not enter the "Hot Zone" unless personal protective equipment is used along with the "Buddy System" and the responders are enrolled in the respiratory protection program.
- Minimum Personal Protective Equipment (PPE) required (however additional levels may be required depending upon the exposure potential):
 - Self contained breathing apparatus
 - Chemical resistant jacket (hip length, with hood)
 - Chemical pants and chemical resistant boots (or boot covers)
 - Chemical resistant gloves (taped)
 - Hard hat

Required monitoring equipment:

- Gas monitor(s) for measuring LEL, O₂, and if necessitated by release type H₂S, and
- Manual sampling pump with benzene tubes/chips.
- Approach the release site safely and cautiously.
- Continuously check the site with a monitor and immediately evacuate the hot zone area if any alarm sounds.
- Take benzene readings at various locations to define exposure levels and "zones".
- Document all monitoring data.
- Evaluate the monitoring data to determine exclusion, decontamination and safe zones and communicate results to IC for safety briefings, and future monitoring schedules.

Fire / Explosion Incidents

Fire and/or Explosion

Responding to a Fire

In the event of a fire at or near any of the SPLC facilities, SPLC personnel must take action as appropriate to protect employees and public safety.

Fire Control By Onsite Personnel

Contact local firefighting authorities. Fire containment and mitigation (e.g., shutting off the fuel or ignition sources, extinguishing the fire, etc.) may be initiated by onsite personnel only if it is safe to engage in such activities. If fire is in the incipient stage, trained personnel may utilize the facility fire extinguishers if safe to do so. Facility personnel are trained only to the incipient stage.

Guidelines

When a fire occurs, consider these guidelines.

- See "Initial Responder Guidelines" heading above.

People Related:

- Call for fire and medical assistance.
- Consider evacuating the area if there are nearby residential or commercial dwellings.
- Assist the emergency rescue personnel with injured and/or trapped individuals.

Fire Related:

- Determine when the fire started.
- Prevent secondary problems due to flame impingement, or spills and runoff. Spray other nearby tanks and structures with cool water to avoid ignition.
- Consult with local firefighting authorities for method of dealing with fire.

Tank Related:

- Determine the tank status (inactive, pumping in or out, gauge level, tank/roof condition).
- Isolate the tank from connecting lines and facilities if possible.
- Determine the tank contents (material and characteristics).
- Determine the type of roof (cone, external floater, internal floater, seal material) on the tank. If the tank has a cone roof, determine if it is equipped with flame arresters, emergency vent shutoffs, snuffers, or other types of fire prevention equipment.

- Review the fire wall area, drainage (dike drains), proximity of the equipment, and exposed piping.

Responding to Explosions Near or at a Pipeline Facility

In the event of an explosion at or near any of the SPLC facilities, SPLC personnel must take action as appropriate to protect employees and public safety.

Damage Assessment / Control By Onsite Personnel

Contact local firefighting authorities and police. Damage assessment/control may be initiated by on site personnel only if it is safe to engage in such activities.

Guidelines

When an explosion occurs, consider these guidelines.

- See "Initial Responder Guidelines" heading above.

People Related:

- Call for fire and medical assistance if necessary.
- Account for personnel known to be working at or near the facility.

Explosion Related:

- Survey the facility for damage.
- Try to determine if there is an obvious source of the explosion. For example, ignition of vapors, rapid release of gas or liquid, outside source (collision, bomb, etc.), electrical equipment (transformers, distribution panels, etc.).
- Considering the source of the explosion and damage if any, isolate the facility to limit additional fuel or fire or explosions.

Product or Hazardous Material Release

Oil on Water

Guidelines

If there is an oil release on water, consider these guidelines.

- See "[Initial Responder Guidelines](#)" heading above.
- Cease pumping and close valves to prevent any further release.
- Determine the release source and prevent any further flow from the pipeline. Contain the oil and prevent any further contact with water.
- Remember that flammable vapor concentrations can exist near spilled oil. (For example, as much as 50% of the original volume of gasoline can evaporate in 10 minutes at 60.5°F.) Use explosive meters and safety precautions to prevent fire, explosions, asphyxiation, or health risks to response personnel.
- Eliminate possible sources of ignition.
- Determine the actual speed of the oil on water. Remember that oil on water may not travel at the same velocity as the river or stream (due to wind, oil gravity). Use this knowledge for boom placement.
- Set booms considering river speeds and oil pickup points. Consider cascading booms (several layers) if necessary.
- Contact the Emergency Management Teams and other marine response cooperatives for emergency response assistance, if needed.
- Consider accessing the release sites by boat rather than land vehicles to protect shorelines and other sensitive areas.
- Close water intakes.

Tracking Oil

A number of techniques will be used to track the movement of an oil slick, including:

- Direct observation from aircraft, vessels, or elevated areas
- Buoy tracking systems
- Radiometric oil spill surveillance systems (ROSSS), and
- Spill trajectory predictions.

Buoy and ROSSS tracking systems could be accessed through response cooperatives. Trajectories could be generated by the Scientific Support Coordinator (i.e., through Unified Command) or by local personnel using the vector addition analysis method. The vector addition analysis method involves plotting the two primary factors that influence the movement of the slick

(i.e., surface currents and wind) to determine the estimated trajectory of the slick.

Cleanup, Storage, Handling, and Disposal

To clean up, store, handle, and dispose of the oil on water, consider these guidelines.

- Use skimmers to remove the oil from the water surface.
- Use sorbent pads and sorbent booms to remove the oil sheen from the water surface.
- Try to limit the amount of water picked up with the oil when recovering oil.
- Consider alternatives to vacuum trucks for on-scene storage of recovered oil.
- Only use dispersants with agency approval and if advised by the Head Office Environmental Group.
- Make sure that the removal and disposal of oil, water, and debris is consistent with regulatory requirements. Consult a Company environmental representative.

Oil on Land

Guidelines

If a release of oil occurs on land, consider these guidelines.

- See "[Initial Responder Guidelines](#)" heading above.
- Cease pumping and close valves to prevent any further release of oil.
- Determine the release source and prevent further flow from the pipeline.
- Remember that flammable vapor concentrations can exist near spilled oil. (For example, as much as 50% of the original volume of gasoline can evaporate in 10 minutes at 60°F.) Use explosive meters and safety precautions to prevent fire, explosions, and asphyxiation or health risks to the response personnel.
- Eliminate possible sources of ignition. Do not start vehicles in the vicinity of volatile materials that have been released.
- To avoid vapor ignition, divert or stop traffic if the release impacts a roadway.
- Prevent oil from entering into drainage or sewer systems, water courses, irrigation channels, or culverts. Block drains, dam ditches, and boom water courses and irrigation channels.

Response Strategies

Oil either spreads out or penetrates downward when released on land. When the oil penetration is rapid and the depth of groundwater is shallow, the preferable strategy may be to let the oil spread. If the land surface is impermeable, the desirable strategy may be to allow or cause the oil to collect in pools. If oil collects in pools in a contained area, consider using water as a layer between the oil and the ground.

Cleanup, Storage, Handling, and Disposal

Consult with a Company environmental representative for guidance on cleanup, storage, handling and disposal. If possible, treat soil on site.

Estimating Volumes

The following describes several recommended methods that can be used to estimate the volume of material released during an incident. Each incident is considered unique and requires its own solution to determine the volume of released material, therefore, other methods not described below may also be used with the approval of the Head Office Environmental Support Group.

Method Determination

If possible, use more than one method for classified incidents. For most unclassified incidents, Method 1 should be adequate.

Note: Management reviews the volume estimated for regulatory reporting.

Method 1

In Method 1, the first foreman/Incident Commander arriving on the scene performs the estimate. The details of Method 1 are:

| Detail | Description |
|---------------|---|
| Determination | Experience based and estimated by observed impact |
| Purpose | <ul style="list-style-type: none"> Volume estimate to determine an order of magnitude on which to classify release event Volume estimate for initial regulatory reporting |
| Estimate | Visual, determined by viewing the area covered and pooled oil (typically done without numerical calculation) |

Method 2

Method 2 is an instrumentation-based calculation for classified incidents. Area personnel and Transportation Engineering personnel perform the estimate by using Control Center or other system instrumentation data. The details of Method 2 are:

| Detail | Description |
|---------------|---|
| Determination | Calculated volume estimate |
| Purpose | <ul style="list-style-type: none"> A release volume estimate calculated using data from system instrumentation and real time events Confirmation of release volume estimate for Method 1 |
| Estimate | $VR = [FR \times (DT + RT)] + DV$ VR = volume released FR = flow rate DT = detection time RT = response time (time to shut in and close valves) DV = drainage volume (including pressure release volume and line drainage volume) |

Method 3

Method 3 is a calculation of the volume recovered and the loss of the material to the air, ground, and water. The Area and Transportation Engineering personnel perform the estimate with input from Control Center, Head Office Environmental Support Group and field survey data. The details of Method 3 are:

| Detail | Description |
|---------------|--|
| Determination | A calculated volume estimate |
| Purpose | <ul style="list-style-type: none"> Confirmation of release volume estimate for Methods 1 or 2, or Calculated volume released when instrumentation data is insufficient |
| Estimate | $VR = VV + (SV \times SR) + PV$ VR = volume released VV = volatilized volume (calculated by E&T Environmental) SV = soil volume (field mapped to identify surface area covered and depth of penetration) SR = saturation ratio (field determined with Environmental Support - Transportation Engineering) PV = pooled volume (field determined) |

Method 4

Method 4 is a line balance calculation from inventory and meter reading loss/gain changes following system restart and stabilization. Line balance is defined as: (Opening Inventory + Receipts) - (Closing Inventory + Deliveries). Area personnel and Transportation Engineering personnel perform the estimate with startup Control Center data or location data (as appropriate). The details of Method 4 are:

| Detail | Description |
|---------------|--|
| Determination | System repack volume |
| Purpose | A confirmation of volume lost estimate for follow-up reporting |
| Estimate | $VR = LB_{post} - LB_{prior} - LR_{vol}$ VR = volume released LB _{post} = system imbalance following system startup and stabilization LB _{prior} = system imbalance prior to release occurrence LR _{vol} = line repair volume removed |

The accuracy of this method depends upon:

- The amount of line drainage that occurs following the release
- How well the system was purged of air during restart
- System complexity
- Temperature changes, and
- Product batches in the system.

Method 5

Method 5 is a calculation based on the beginning batch size versus the delivered batch size. Area personnel, measurement and engineering personnel in Transportation Engineering perform the estimate with Control Center and/or field data defining batch loss/gain. The details of Method 5 are:

| Detail | Description |
|---------------|---|
| Determination | Batch volume loss |
| Purpose | <ul style="list-style-type: none"> Confirmation of release volume estimate for Methods 1 or 2, or Calculated volume released when instrumentation data is insufficient |
| Estimate | $VR = VV + (SV \times SR) + PV$ VR = volume released VV = volatilized volume (calculated by E&T Environmental) SV = soil volume (field mapped to identify surface area covered and depth of penetration) SR = saturation ratio (field determined with Environmental Support - Transportation Engineering) PV = pooled volume (field determined) |

Note: Only use this method if batch operations are occurring and the released material has been batch-identified. The spreading of batch interfaces during system downtime may be significant. This occurrence reduces the accuracy of this method.

Method 6

Method 6 is an executable program that may be used to calculate spill volumes on water. The program determines the volume of a spill based on the surface area of the oil on the water and color of the sheen. The program may be executed by clicking on the MMS Pipeline Leak Estimator program.

Method 7

Method 7 is a calculation for determining the amount of oil contained in contaminated soil. This calculation is based on the volume of the soil contaminated and pore space of the soil.

| Detail | Description |
|---------------|--|
| Determination | A calculated volume estimate based on volume of soil contaminated and pore space of soil |
| Purpose | Confirmation of volume lost estimate for Method 1 |
| Estimate | <ol style="list-style-type: none"> 1. Measure the volume of the soil contaminated. <i>width x length x depth = cubic feet</i> 2. Determine average pore space between the soil grains--15% to 26% (pure sand). 3. Determine the cubic feet of oil contained in the soil by multiplying the result of step 2 by result of step 1. 4. Determine the gallons of oil contained in the soil by multiplying the result of step 3 by 7.48 (gallons/cubic feet). 5. Determine the barrels of oil contained in the soil by dividing the result of step 3 by 42 (gallons/barrel). |
| Example | <p>You have a release site are of 30 feet by 25 feet by six inches. Determine the amount of oil in barrels contained in the soil. Assume the pore space to be 20%.</p> <ol style="list-style-type: none"> 1. Volume of soil contaminated=$30 \times 25 \times .5 = 375$ cubic feet 2. Average pore space=.20 3. Oil contained in the soil(in cubic feet)=$375 \times .20 = 75$ cubic feet 4. Oil contained in the soil (in gallons)=$75 \times 7.48 = 555$ gallons 5. Oil contained in the soil (barrels)=$555 / 42 = 13.2$ barrels |

Gas Detection & Confirmation by On Site Personnel

In the event of gas being detected in a building on or near SPLC facilities, SPLC personnel should take action as appropriate to protect employees and public safety.

Contact the gas utility companies and/or other gas pipeline operations in the immediate area. Begin leak detection procedures and mitigation procedures (e.g., shutting off the gas and ignition sources, etc.) only if it is safe to engage in such activities.

Guidelines

When gas is detected in or near a building, consider these guidelines.

- See "[Initial Responder Guidelines](#)" heading above.

People Related

- Consider evacuating the area if there are nearby residential or commercial dwellings.

Release Related

- Determine the location and source of the gas release.
- If a vapor cloud has developed, assess the extent and coverage of the vapor cloud and determine the hazardous areas.
- Refer to guidelines under the "Responding to Vapor Clouds" heading below.

Gasoline Containing MTBE on Land

Additional precautions are required during response and cleanup of gasoline containing MTBE because of its greater potential impact, than most other traditional components, upon the environment. Significant MTBE release characteristics are:

- It moves about 20 times faster in the underground than benzene
- It is about 24 times more soluble in water than benzene
- It degrades very slowly in the environment, and
- Groundwater remediation projects are 1.5 to 5 times more expensive.

Guidelines

If a release of gasoline occurs on land, follow these guidelines.

- See "Initial Responder Guidelines" heading above.
- Cease pumping and close valves to prevent any further release of gasoline.
- Determine the release source and prevent further flow from the pipeline.
- Remember that flammable vapor concentrations can exist near spilled gasoline. Use explosive meters and safety precautions to prevent fire, explosions, and asphyxiation or health risks to the response personnel.
- Eliminate possible sources of ignition. Do not start vehicles in the vicinity of volatile materials that have been released.
- To avoid vapor ignition, divert or stop traffic if the release impacts a roadway.
- Prevent gasoline from entering into drainage or sewer systems, water courses, irrigation channels, or culverts. Block drains, dam ditches, and boom water courses and irrigation channels.
- Make appropriate notifications to regulatory agencies, internal SPLC management, and Environmental Support.

Response Strategies

The following strategies are recommended for response to a gasoline release containing MTBE in order of normal occurrence.

- Minimize area of surface soil impacted by free product (e.g., damming). Contact with surface runoff or standing water should be prevented, whenever possible.
- Recover pooled hydrocarbon as soon as possible. Free hydrocarbons may be floated with water to aid recovery if increase vapors and agitation can be avoided. The water will act as barrier to reduce further infiltration of pure hydrocarbon into the soil. This water will later have to be removed and probably treated. If free hydrocarbon IS NOT present, do not add water to the impacted area.
- Recover all free water in contact with the release area.
- Remove heavily impacted soil (saturated with hydrocarbons, very strong hydrocarbon smell) as soon as possible after product/water removal. Place in a bin/rolloff or a waste pile lined on the bottom and covered on the top with plastic sheeting to prevent contact with rainwater and contamination of other areas. Drums may be used for very small spill cleanups.

If removal of heavily-impacted soil is delayed or contaminated soil is left in place pending final disposition, the follow action should be taken if the possibility of rain exists to minimize contact with rainfall.

- Cover area with plastic sheeting, overlap seams, weigh down with sandbags.
- Use shallow ditches to divert rainwater around contaminated site.
- Promptly remove any rain water that does accumulate on the site.

The following steps should be taken working together with environmental support to minimize long term risk from the site:

- Sample contaminated soil still in place
- Characterize and dispose of removed soil
- Estimate proper cleanup target
- Remove and dispose of more soil, if necessary
- Install groundwater monitoring wells or monitor existing wells if necessary, and
- Provide follow-up communication with regulatory agencies if necessary.

MTBE Characteristics

The following lists general facts associated with MTBE:

| Item | Property |
|---------------------------|-------------------------|
| Appearance | clear, colorless liquid |
| Concentration in gasoline | up to 15% |
| Flash point | -15 to -20 °F |
| TLV-TWA | 40 ppm (proposed) |
| Odor threshold | 20-50 ppm (in water) |
| Boiling point | 130 °F |
| Solubility in water | 4.3% |
| RQ - CERCLA | 1,000 pounds |
| Liquid specific gravity | 0.74 |
| Vapor density | 3 times air |

Vapor Cloud

Individual Who Discovers the Emergency

If an incident occurs when the pipeline is transporting gas or highly volatile liquids (HVLs) or refined products, there is a strong possibility of vapor cloud formation.

Material Specific Gravity

When an incident occurs, the specific gravity of the vapor material is relevant. Vapors that are heavier than air seek low spots, such as ditches and depressions in the ground. Therefore, the higher specific gravity of a material released, the more likely its vapor cloud would hug the ground.

The following table lists the specific gravities of possible release materials using the specific gravity for air as a base.

| Material | Specific Gravity |
|-------------|------------------|
| Acetone | 0.791 |
| Air | 1.00 |
| Benzene | 0.8835 |
| Butadiene | 0.63 |
| Butane | 2.04 |
| Ethane | 1.04 |
| Ethylene | 0.98 |
| Gasoline | 3.00 |
| Hydrogen | 0.07 |
| Natural Gas | 0.55 |
| Propane | 1.56 |
| Propylene | 1.45 |

Weather

Wind and general weather conditions can affect vapor clouds. Such conditions can cause the boundary area to move and enlarge. If an incident occurs, determine the most likely direction of vapor cloud movement based on the wind direction.

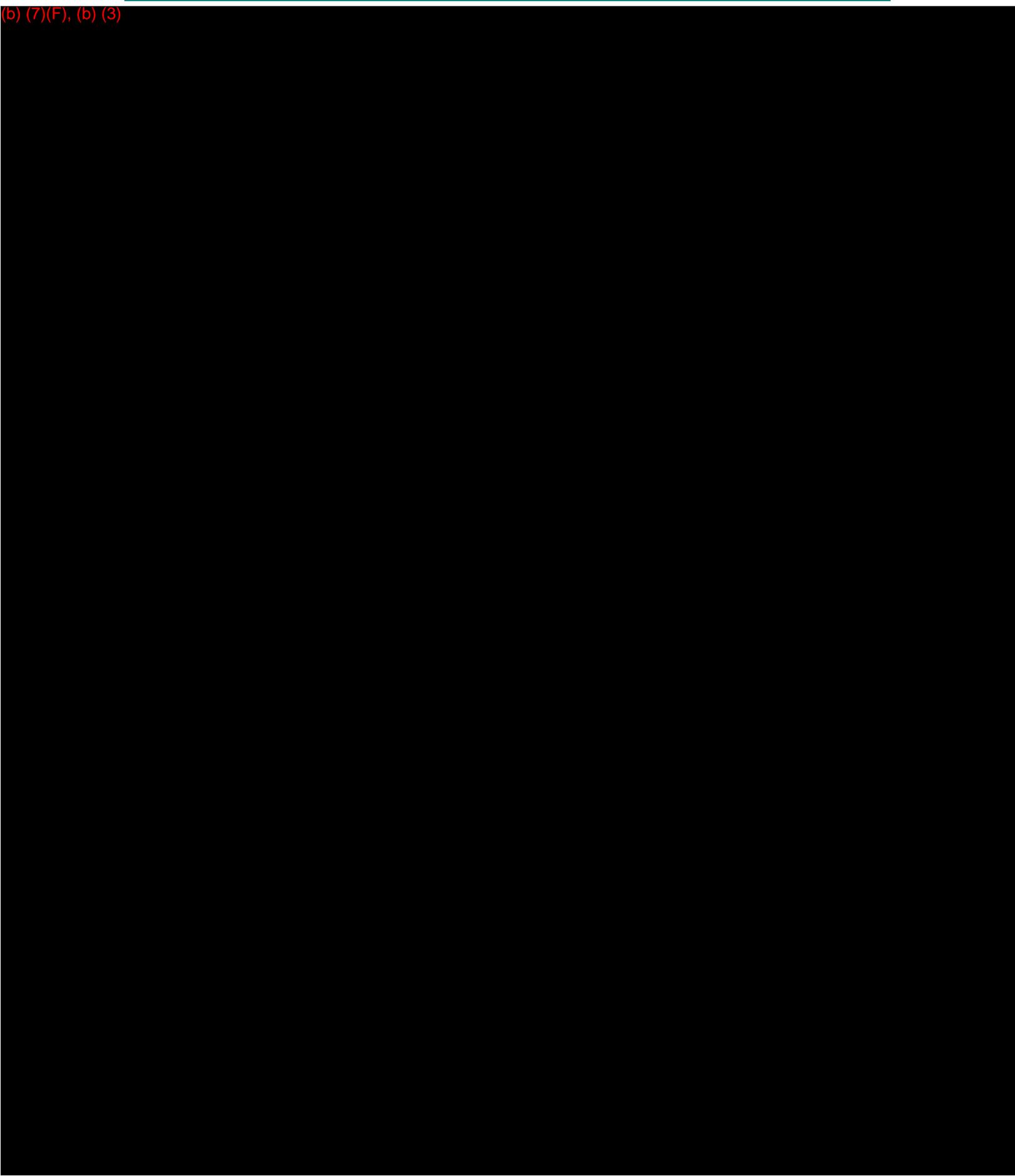
Response Actions

This table describes the procedure to follow if an incident causes a vapor cloud formation.

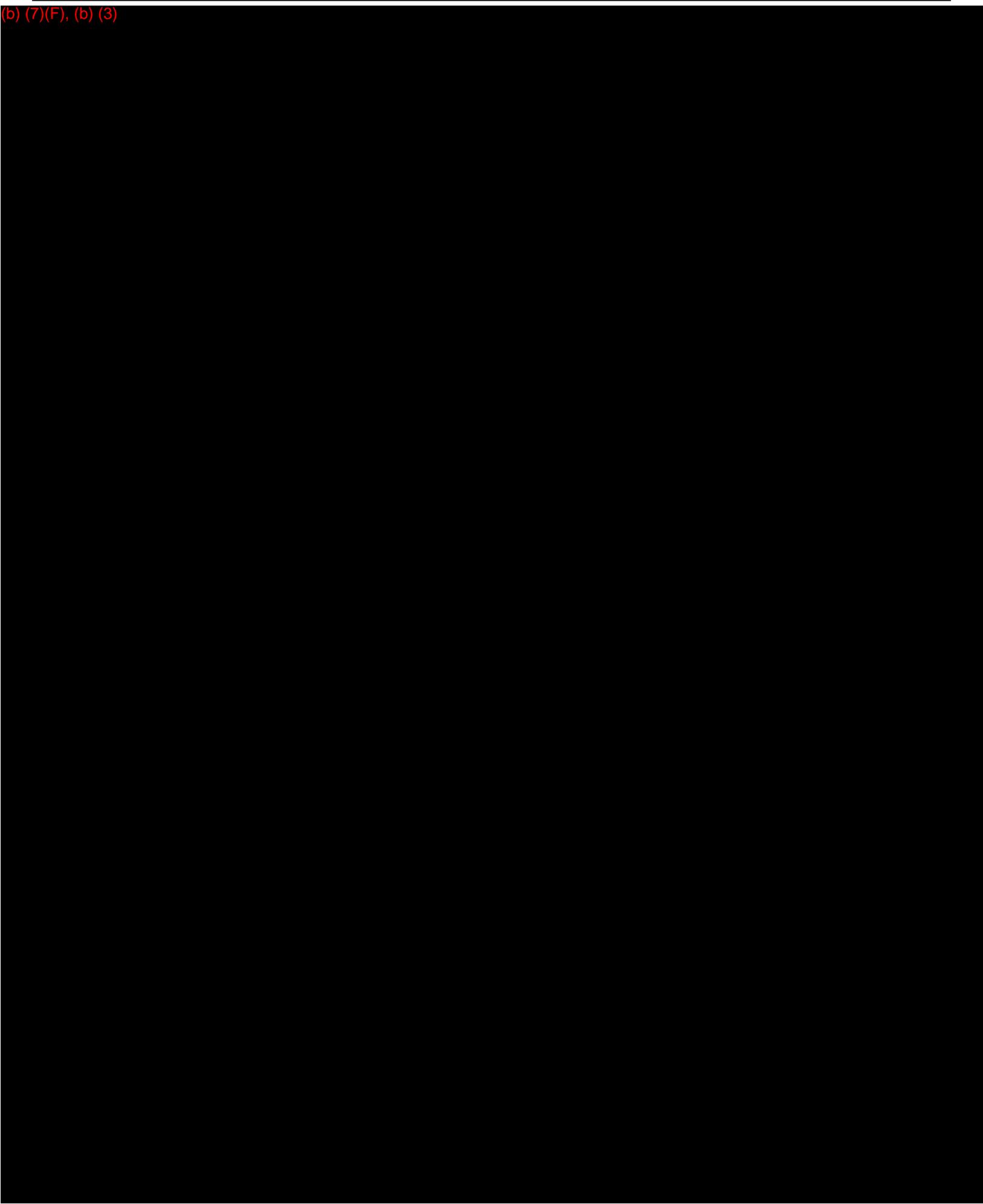
| Step | Action | | | | | | |
|---------|--|----------------|---------|--------|--|---------|---|
| 1 | <p>The Initial Responder:</p> <ul style="list-style-type: none"> ● Discovers the vapor cloud ● Determines the material causing the vapor cloud, and ● Notifies the Controller and maintenance crew. <p>See "Initial Responder Guidelines" listed previously in this section.</p> | | | | | | |
| 2 | <p>The Controller:</p> <ul style="list-style-type: none"> ● Isolates the pipeline by closing the remotely-operated valves | | | | | | |
| 3 | The maintenance crew isolates the pipeline by closing the manually operated valves. | | | | | | |
| 4 | The Initial Responder determines: | | | | | | |
| | <table border="1"> <thead> <tr> <th>IF there is...</th> <th>THEN...</th> </tr> </thead> <tbody> <tr> <td>A fire</td> <td>Remain at a safe distance on site, until relieved.</td> </tr> <tr> <td>No fire</td> <td>Keep ignition sources away and work with fire department to disperse the vapor cloud.</td> </tr> </tbody> </table> | IF there is... | THEN... | A fire | Remain at a safe distance on site, until relieved. | No fire | Keep ignition sources away and work with fire department to disperse the vapor cloud. |
| | IF there is... | THEN... | | | | | |
| A fire | Remain at a safe distance on site, until relieved. | | | | | | |
| No fire | Keep ignition sources away and work with fire department to disperse the vapor cloud. | | | | | | |
| No fire | Keep ignition sources away and work with fire department to disperse the vapor cloud. | | | | | | |
| 5 | <p>The Initial Responder:</p> <ul style="list-style-type: none"> ● Determines the boundary area of the vapor cloud and the vapor concentration using explosimeter or Draeger tube ● Barricades or identifies the boundary area ● Identifies the affected area that exists 1,500 feet outside of boundary area and the areas downwind of the vapor cloud ● Determines the people and facilities within the affected area, and ● Notifies the police to evacuate the affected area (including areas downwind of the vapor cloud, outside of the affected area). | | | | | | |
| 6 | Police evacuate the boundary area. | | | | | | |
| 7 | Fire department disperses the vapor cloud with a sustained flow of water spray. | | | | | | |
| 8 | <p>The Initial Responder stays on site until:</p> <ul style="list-style-type: none"> ● Relief arrives ● Vapor cloud is completely dispersed, or ● Fire is burned out and the vapor cloud no longer exists. | | | | | | |

Security Incidents

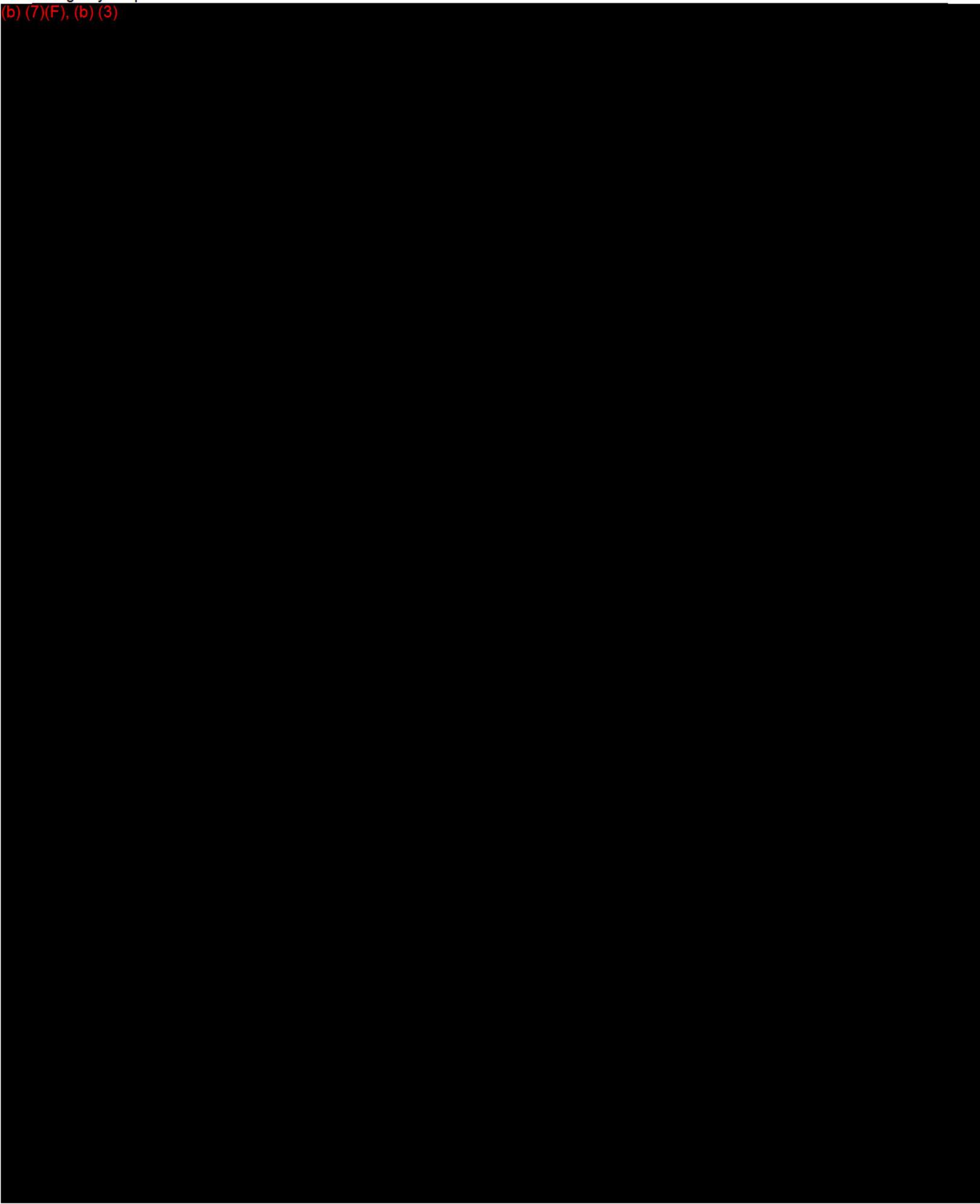
(b) (7)(F), (b) (3)



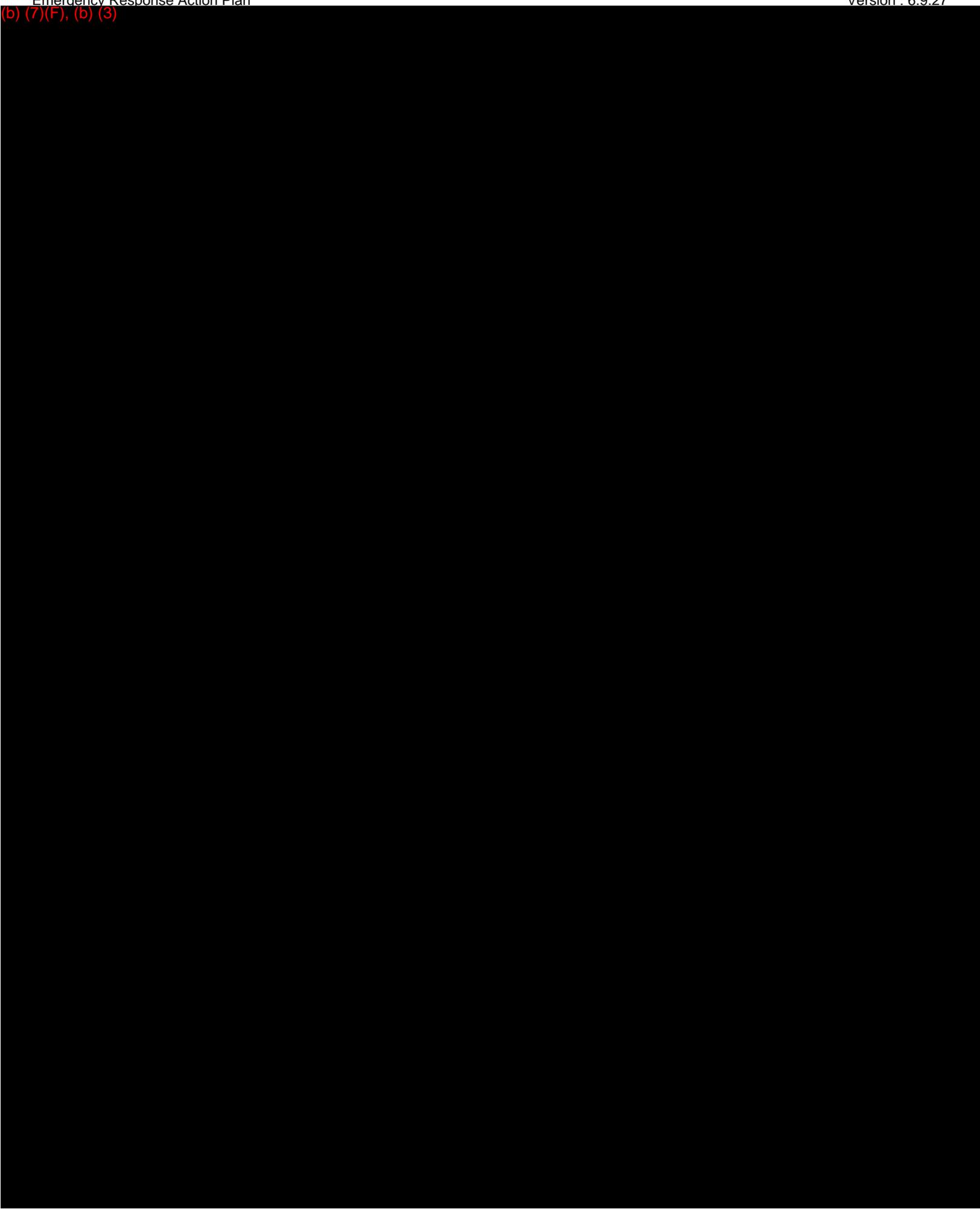
(b) (7)(F), (b) (3)



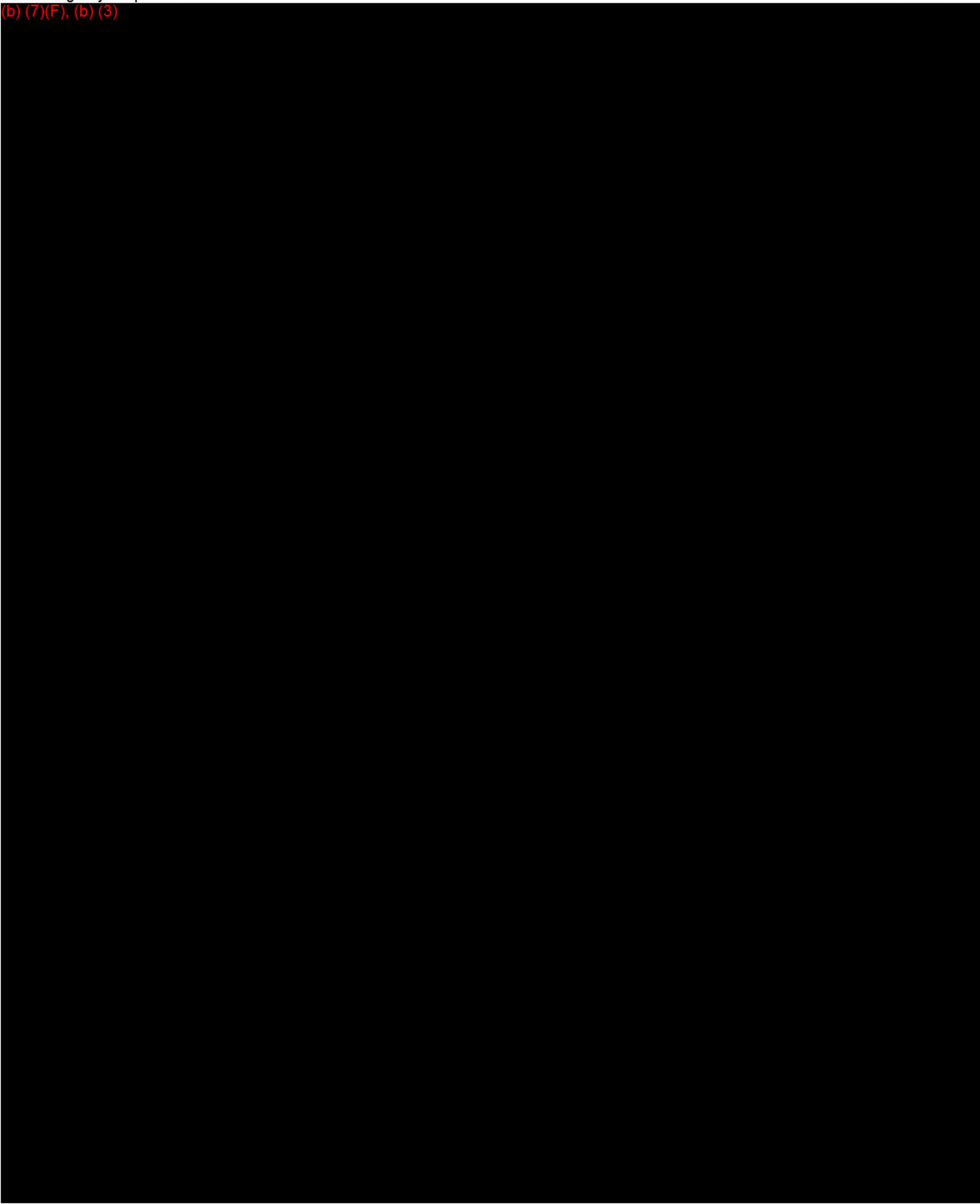
(b) (7)(F), (b) (3)



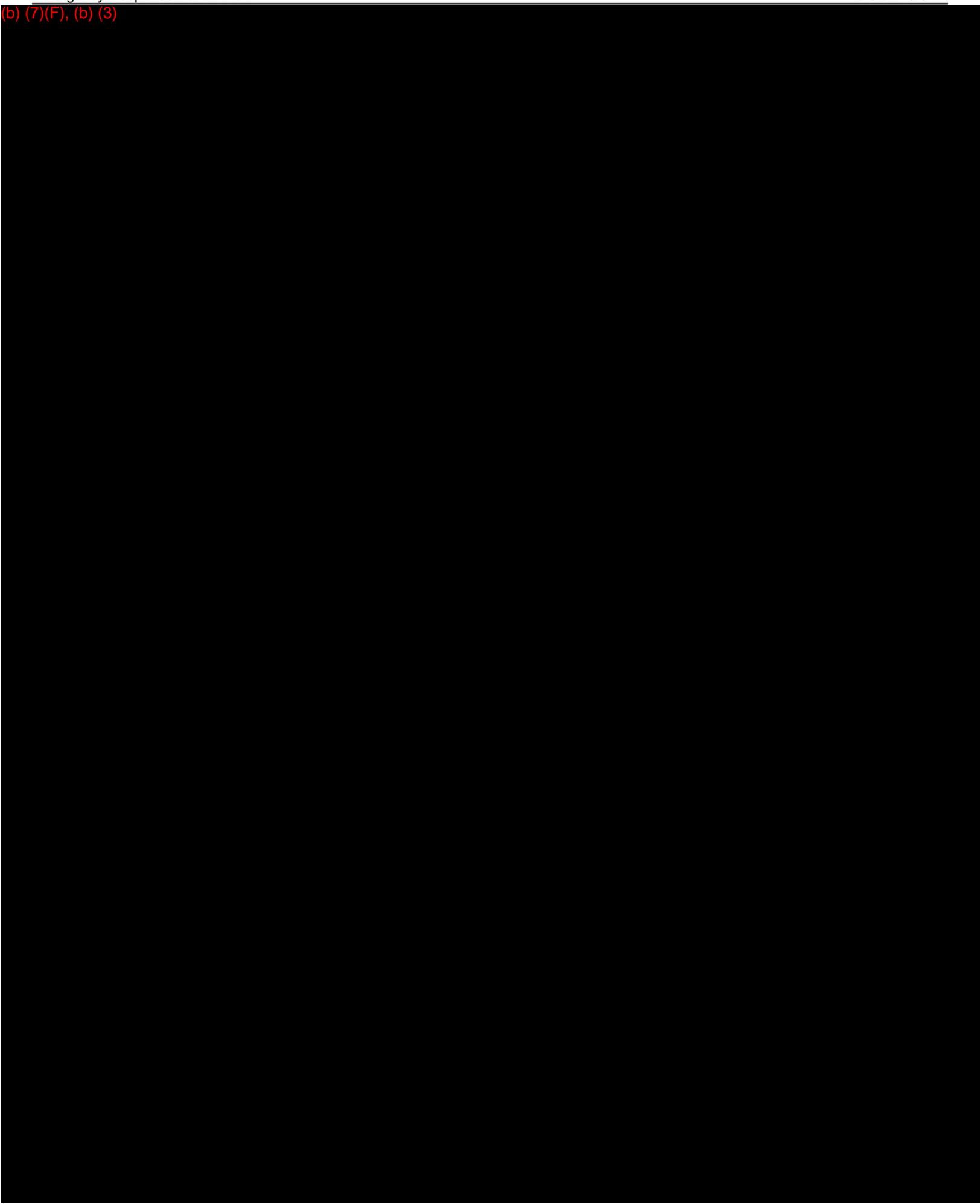
(b) (7)(F), (b) (3)



(b) (7)(F), (b) (3)



(b) (7)(F), (b) (3)



Hurricane

Hurricane Response

When a hurricane threatens:

- monitor news reports to plot movement of the hurricane
- determine which pipeline facilities will be affected by the hurricane, and
- contact appropriate Company personnel.

Note: Company management will decide whether the pipeline facility will be attended and/or operated during the hurricane. Refer to the GOM Hurricane Response Plan for further guidance.

For pipeline facilities which will be affected by the hurricane:

- secure equipment that will be susceptible to damage from high winds
- board or tape windows
- arrange for first aid, drinking water, emergency lighting and food if management decides to have the facility attended during the hurricane, and
- maintain adequate inventory in tanks to prevent tanks from floating.

When a hurricane hits:

- monitor the progress of the hurricane, and
- monitor SCADA system for indications of leaks.

After a hurricane hits, correct any damage to the facility and restart operations after obtaining proper approval.

Natural Disaster Incidents

Tornado or Severe Storms

A tornado may be monitored and detected by:

- listening to news reports--know the difference between tornado watch and tornado warning
- sighting of a funnel formation on the ground or in the clouds, or
- hearing a roar that sounds like a jet or a locomotive.

If a tornado is a direct threat to a pipeline facility:

- notify appropriate Company personnel
- shut down the pipeline facility
- inform others and take appropriate shelter, and
- after the tornado passes, correct any damage to the facility and restart operations after obtaining proper approval.

Note: Circumstances may require changing the order in which these guidelines are performed.

Flooding

Flooding Response

Special Considerations

Below are the special considerations to take into account, depending on the magnitude of the flooding, amount of damage, and prevalent conditions.

- Be alert to areas of flooding and have personnel available for emergency response actions such as shutdown, isolation, and containment.
- Consider extending regulator vents and relief stacks above the level of anticipated flooding as appropriate.
- Evaluate the accessibility of pipeline facilities, such as valve setting needed to isolate water crossings or other sections of pipeline that might be jeopardized.
- Perform frequent patrols to evaluate right-of-way conditions at water crossings during flooding and after waters subside. Determine if flooding has exposed and/or undermined pipelines as a result of forming new channels or erosion of riverbeds.
- Coordinate with other pipeline companies in the flood area and provide personnel to emergency response centers to act as a liaison for pipeline issues. Provide maps and information on pipeline location and condition to emergency responders.

Determine if normally aboveground facilities (valves, regulator and relief sets, etc.) that have become submerged could be struck by craft operating in flooded areas and supply maps to emergency response centers and mark with buoys, as appropriate.

- Perform surveys to determine the depth of cover over pipelines and notify landowners of reduced cover. Agricultural agencies may be helpful in reminding farmers of the potential hazard of reduced cover over pipelines.
- Assure that line markers are still in place and remind contractors, highway departments, and others involved in excavation and clearing activities associated with flood clean-up of the presence of pipelines and the operating hazards that could occur due to reduced pipeline cover.

Ground, Marine and Air Traffic

Traffic Control Needs

The first responder or IC will evaluate the release site to determine whether or not ground and marine traffic will hamper the spill response. The FOSC may evaluate air traffic. In the event that control is required before local state, or federal agencies arrive, the first responder or IC will follow the guidelines presented in the table below.

| Traffic Control Needed | Response Requirements |
|------------------------|---|
| Ground | <p>Call 911 and describe the location and nature of the release.</p> <p>Request highway patrol, sheriff, police, or fire department assistance.</p> <p>If manpower permits:</p> <ul style="list-style-type: none"> ● cordon off the area with hazard cones and yellow hazard tape ● consider temporary use of vehicles to barricade streets if vehicular traffic is in danger, and ● keep pedestrians away from the site. |
| Marine | <p>In the event that such a spill reaches marine waters:</p> <ul style="list-style-type: none"> ● notify the Coast Guard immediately ● request the Captain of the Port to provide assistance for controlling marine vessels, and ● to the extent possible, warn vessels and boats that traversing the release area may be dangerous and may jeopardize response operations. <p>Leave patrolling and control activities to the direction of Coast Guard or the Captain of the Port.</p> |
| Air | <p>Contact the Federal Aviation Administration (FAA) if it appears that air traffic control will be required. (Upon approval, the FAA will immediately issue a Notice to Airmen ("NOTAM")).</p> <p>Be prepared to describe the geographical location, or if known, the latitude and longitude of the release.</p> |

FIGURE 3.3

PRODUCT SPECIFIC RESPONSE CONSIDERATIONS

| FLAMMABLE LIQUIDS (Non-Polar/Water-Immiscible) | |
|---|--|
| <p>The following information provides the initial responder(s) with data that may be useful in making quick decisions and executing prompt response actions. <u>The information is intended for guideline purposes only.</u></p> | |
| HEALTH | |
| GUIDE NO. 128 | <ul style="list-style-type: none"> ● Inhalation or contact with material may irritate or burn skin and eyes. ● Fire may produce irritating, corrosive and/or toxic gases. ● Vapors may cause dizziness or suffocation. ● Runoff from fire control or dilution water may cause pollution. |
| FIRST AID | |
| <ul style="list-style-type: none"> ● Move victim to fresh air. ● Call 911 or emergency medical service. ● Give artificial respiration if victim is not breathing. ● Administer oxygen if breathing is difficult. ● Remove and isolate contaminated clothing and shoes. ● In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes. ● Wash skin with soap and water. ● In case of burns, immediately cool affected skin for as long as possible with cold water. Do not remove clothing if adhering to skin. ● Keep victim warm and quiet. ● Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed. ● Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. | |
| PUBLIC SAFETY | |
| <ul style="list-style-type: none"> ● Isolate spill or leak area immediately for at least 50 meters (150 feet) in all directions. ● Keep unauthorized personnel away. ● Stay upwind. ● Keep out of low areas. ● Ventilate closed spaces before entering. | |
| EVACUATION | <p>Large Spill</p> <ul style="list-style-type: none"> ● Consider initial downwind evacuation for at least 300 meters (1,000 feet). <p>Fire</p> <ul style="list-style-type: none"> ● If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions. |
| Information provided by the Emergency Response Guidebook 2008. | |

| FLAMMABLE LIQUIDS (Polar/Water-Miscible) | |
|--|--|
| The following information provides the initial responder(s) with data that may be useful in making quick decisions and executing prompt response actions. <u>The information is intended for guideline purposes only.</u> | |
| HEALTH | |
| GUIDE NO. 127 | <ul style="list-style-type: none"> ● Inhalation or contact with material may irritate or burn skin and eyes. ● Fire may produce irritating, corrosive and/or toxic gases. ● Vapors may cause dizziness or suffocation. ● Runoff from fire control or dilution water may cause pollution. |
| FIRST AID | |
| <ul style="list-style-type: none"> ● Move victim to fresh air. ● Call 911 or emergency medical service. ● Give artificial respiration if victim is not breathing. ● Administer oxygen if breathing is difficult. ● Remove and isolate contaminated clothing and shoes. ● In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes. ● Wash skin with soap and water. ● In case of burns, immediately cool affected skin for as long as possible with cold water. Do not remove clothing if adhering to skin. ● Keep victim warm and quiet. ● Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves | |
| PUBLIC SAFETY | |
| <ul style="list-style-type: none"> ● CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover. ● As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. ● Keep unauthorized personnel away. ● Stay upwind. ● Keep out of low areas. ● Ventilate closed spaces before entering. | |
| EVACUATION | <p>Large Spill</p> <ul style="list-style-type: none"> ● Consider initial downwind evacuation for at least 300 meters (1,000 feet). <p>Fire</p> <ul style="list-style-type: none"> ● If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions. |
| Information provided by the Emergency Response Guidebook 2008. | |

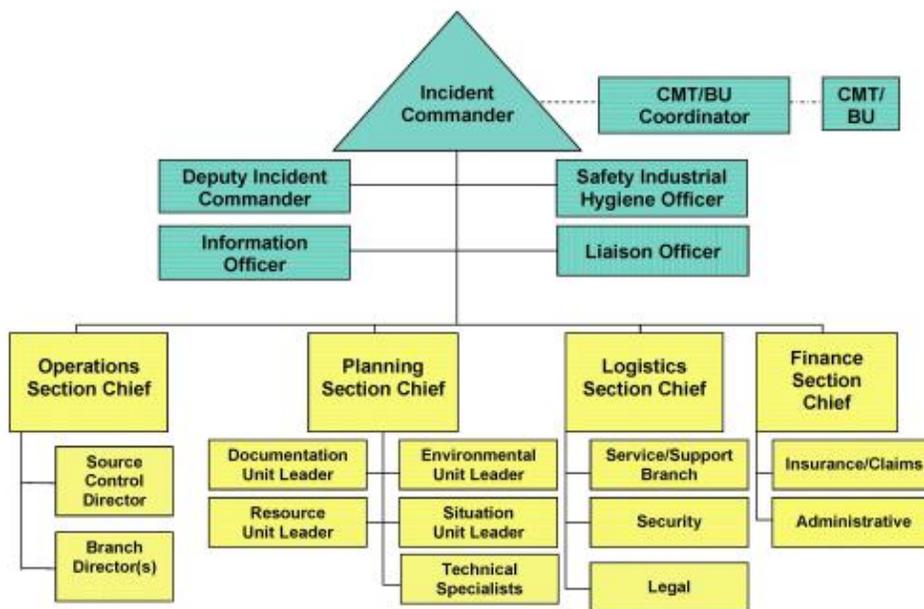
| FLAMMABLE LIQUIDS - TOXIC | |
|--|--|
| The following information provides the initial responder(s) with data that may be useful in making quick decisions and executing prompt response actions. The information is intended for guideline purposes only. | |
| HEALTH | |
| GUIDE NO. 131 | <ul style="list-style-type: none"> ● TOXIC; may be fatal if inhaled, ingested or absorbed through skin. ● Inhalation or contact with some of these materials will irritate or burn skin and eyes. ● Fire will produce irritating, corrosive and/or toxic gases. ● Vapors may cause dizziness or suffocation. ● Runoff from fire control or dilution water may cause pollution. |
| FIRST AID | |
| <ul style="list-style-type: none"> ● Move victim to fresh air. ● Call 911 or emergency medical service. ● Give artificial respiration if victim is not breathing. ● Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. ● Administer oxygen if breathing is difficult. ● Remove and isolate contaminated clothing and shoes. ● In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes. ● Wash skin with soap and water. ● In case of burns, immediately cool affected skin for as long as possible with cold water. Do not remove clothing if adhering to skin. ● Keep victim warm and quiet. ● Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed. ● Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. | |
| PUBLIC SAFETY | |
| <ul style="list-style-type: none"> ● CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover. ● As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. ● Keep unauthorized personnel away. ● Stay upwind. ● Keep out of low areas. ● Ventilate closed spaces before entering | |
| EVACUATION | <p>Large Spill</p> <ul style="list-style-type: none"> ● See the Emergency Response Guidebook Table 1 for evacuation distances. <p>Fire</p> <ul style="list-style-type: none"> ● If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions. |
| Information provided by the Emergency Response Guidebook 2008. | |

COMPANY OWNED RESPONSE EQUIPMENT

| Company Owned Response Equipment | | |
|---|-----------------|--------------------|
| NAME | LOCATION | DESCRIPTION |
| | | |
| | NONE | |
| | | |

INCIDENT MANAGEMENT TEAM - INCIDENT COMMAND STRUCTURE

COMMAND STAFF



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.

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.

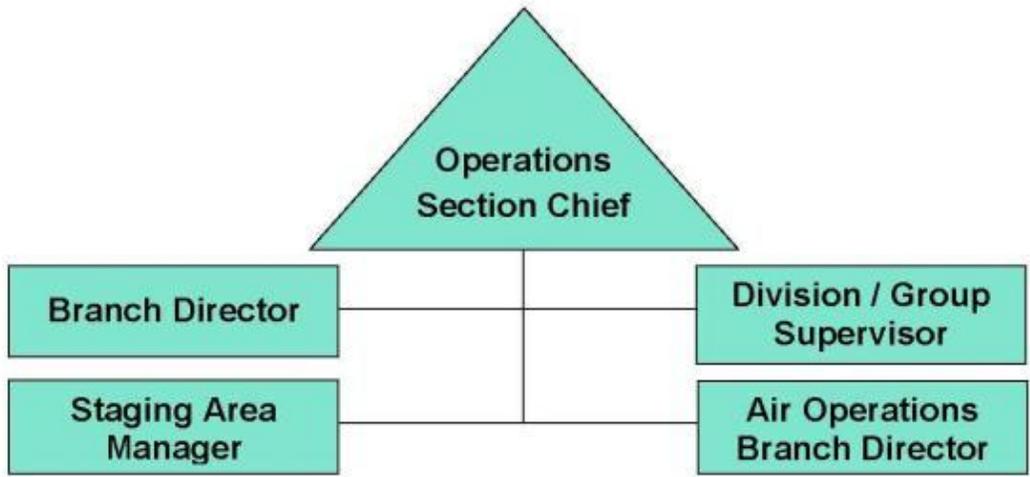
Safety Industrial Hygiene Officer

- 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.

Legal Officer

- Participate in planning meetings, if requested.
- Advise on legal issues relating to in-situ burning, use of dispersants, and other alternative response technologies.
- Advise on legal issues relating to differences between Natural Resource Damage Assessment Restoration (NRADR) and response activities.
- Advise on legal issues relating to investigations.
- Advise on legal issues relating to finance and claims.
- Advise on legal issues relating to response.

OPERATIONS SECTION



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 medical 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. Coordinate activities with adjacent Division/Group.
- 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.

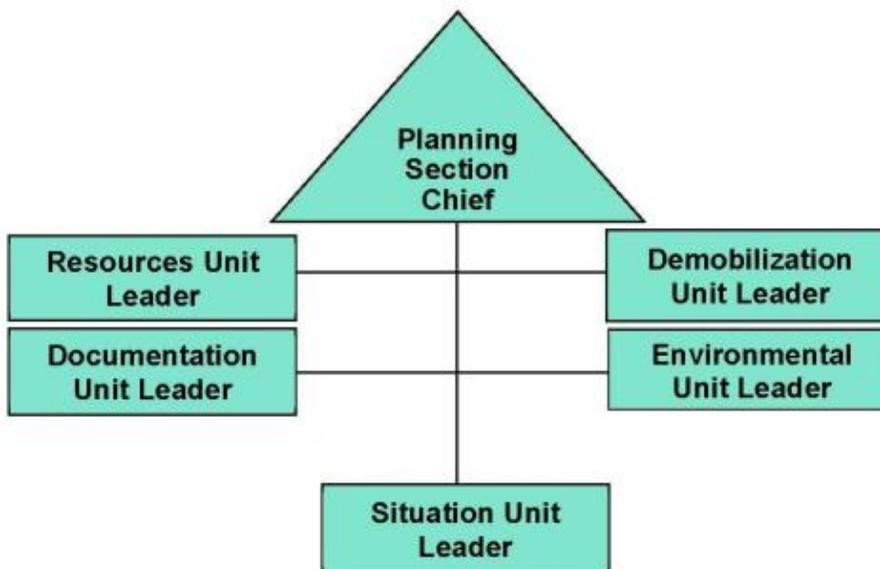
Staging Area Manager

- 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 SECTION

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

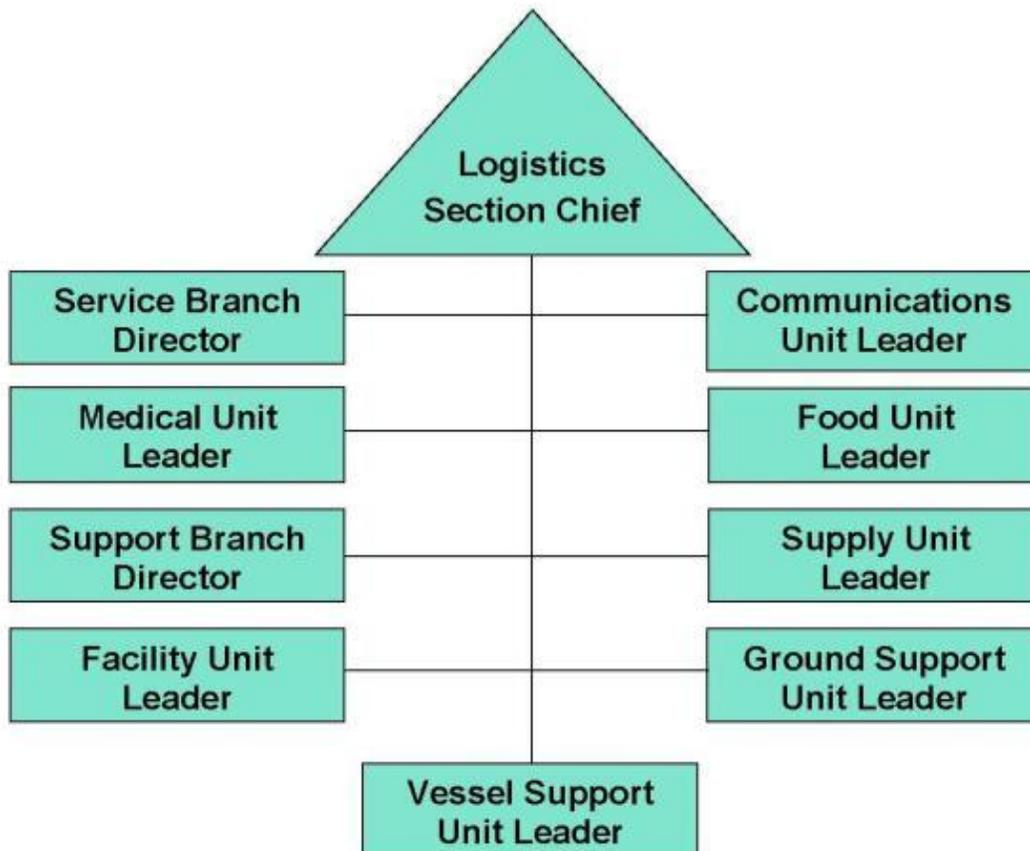
- Set up work area; begin organization of incident files.
- Establish duplication service; respond to requests.
- File all official forms and reports.
- Review records for accuracy and completeness; inform appropriate units of errors or omissions.
- Provide incident documentation as requested.
- Store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

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.

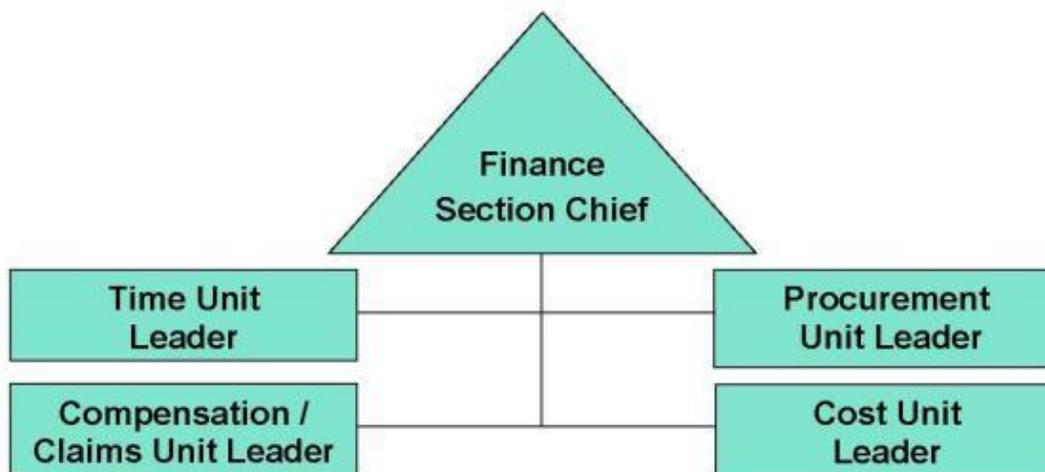
Ground Support Unit Leader

- 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 SECTION



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

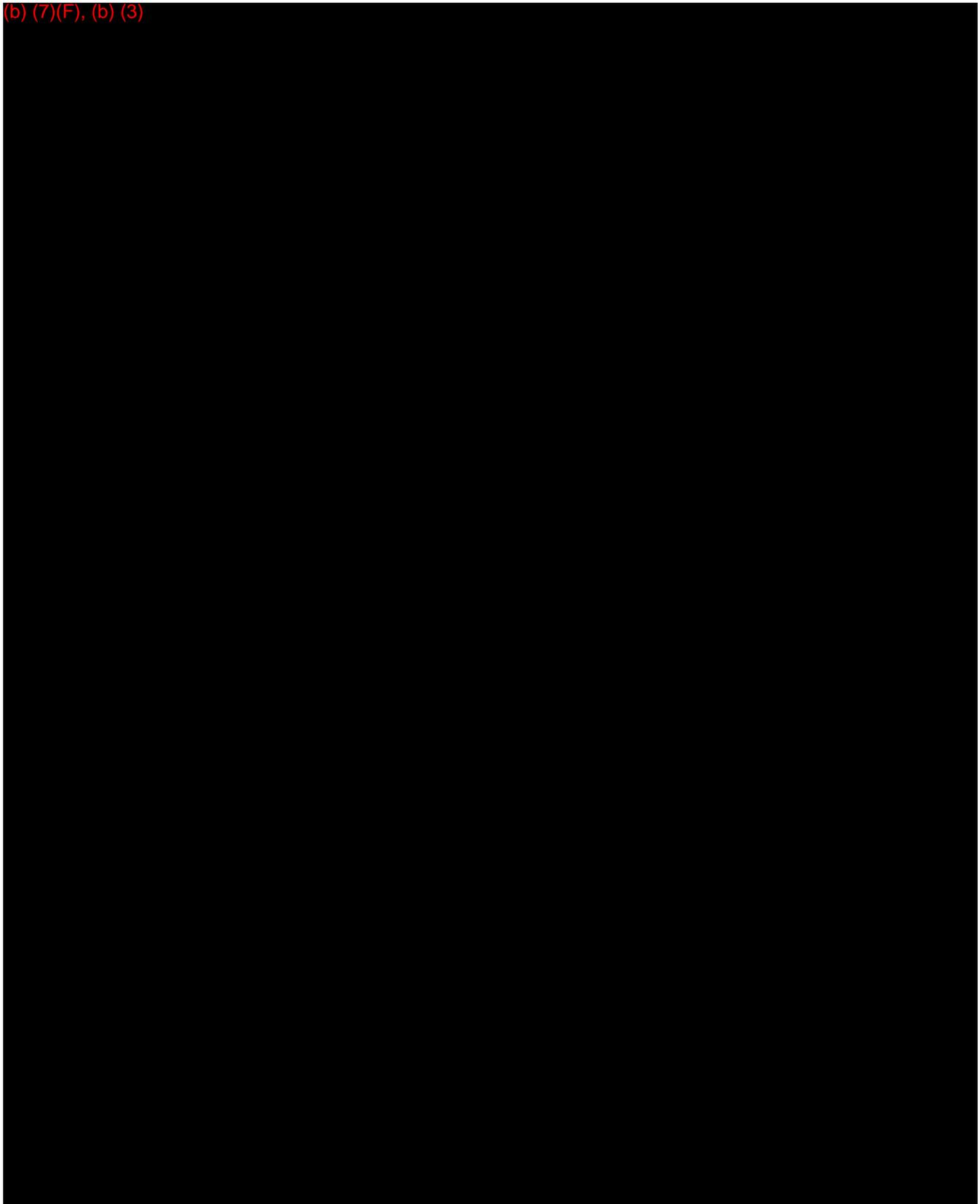
- Establish contact with the incident SO and LO (or Agency Representatives if no LO is assigned).
- Determine the need for Compensation for Injury and Claims Specialists and order personnel as needed.
- Establish a Compensation for Injury work area within or as close as possible to the Medical Unit.
- 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.

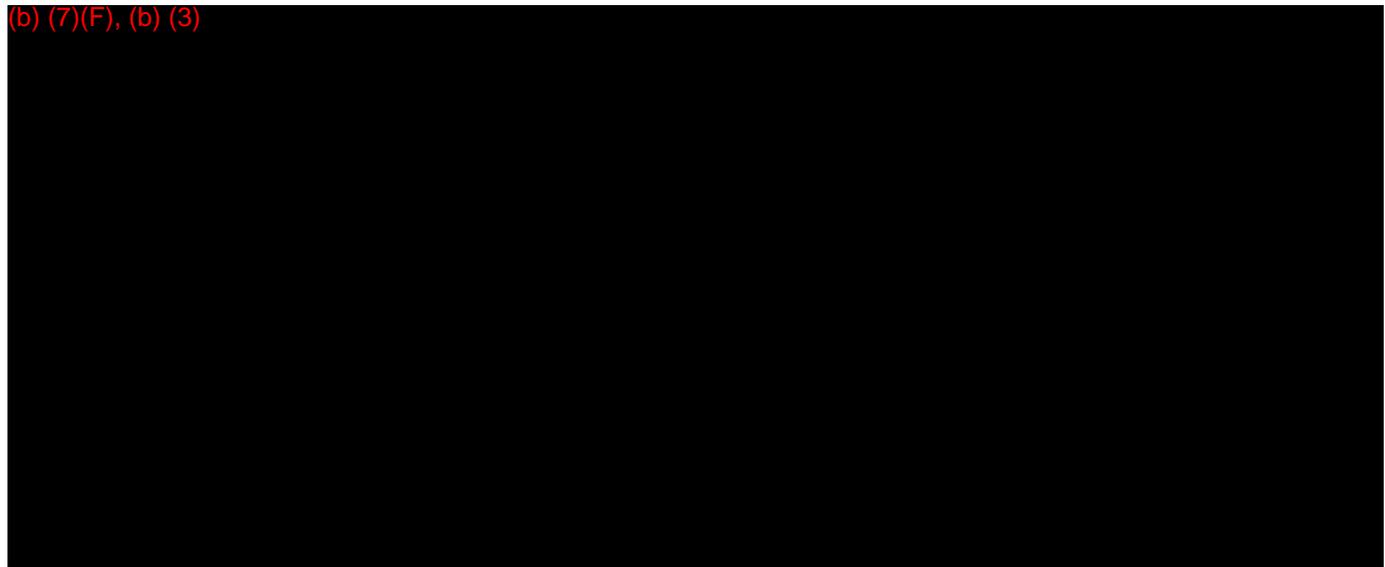
D.1 EVACUATION

(b) (7)(F), (b) (3)



Tracking

(b) (7)(F), (b) (3)



Evacuation Diagram

OIL SPILL RESPONSE PLAN

Gulf of Mexico Region - West Response Zone



Prepared for:

Shell Pipeline Company LP (SPLC)
777 Walker Street
Two Shell Plaza
Houston , Texas 77002

Prepared by:

O'Brien's Response Management Inc.
818 Town & Country Blvd., Suite 200
Houston, TX 77024-4564
Phone: (281) 320-9796 | Fax: (281) 320-9700
www.obriensrm.com

ACKNOWLEDGMENT AND PLAN APPROVAL

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

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

CERTIFICATION OF QUALIFIED INDIVIDUAL AND ALTERNATE QUALIFIED INDIVIDUAL

Shell Pipeline Company LP (SPLC) hereby certifies that the individuals identified as Qualified Individual and Alternate Qualified Individual in this Plan have the full authority in accordance with the applicable United States Federal and State regulations and as detailed in this Plan to:

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

Plan Approved:



GM Operations GOM

Signature

Title

Greg Smith

09/03/2012

Name (please type or print)

Date

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

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

FACILITY NAME: Gulf of Mexico Region - West Response Zone
777 Walker Street
 CORPORATE ADDRESS: Two Shell Plaza
Houston, Texas 77002

1. 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
2. Has any line section experienced a release greater than 1,000 barrels (159 cubic meters) within the previous five years? or Yes No[✓]
3. Has any line section experienced two or more reportable releases, as defined in 49 CFR 195.50, within the previous five years? or Yes[✓] No
4. Does any line section contain any electric resistance welded pipe, manufactured prior to 1970 and operates 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? or Yes[✓] No
5. 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
6. 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

Shell Pipeline Company LP (SPLC) hereby certifies to the Pipeline and Hazardous Materials Safety Administration of the U.S. Department of Transportation that we have identified and ensured, by contract or by other means, the availability of personnel and equipment to respond, to the maximum extent practicable, to a worst case discharge.



GM Operations GOM

Signature

Title

Greg Smith

09/03/2012

Name (please type or print)

Date

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

- Remove and discard obsolete pages.
- Replace obsolete pages with the updated pages.

| REVISION RECORD | | |
|------------------------|--|---|
| CHANGE DATE | AFFECTED PAGE NUMBER(S) | DESCRIPTION OF CHANGE(S) |
| September, 2012 | All | Re-Issued Entire New Plan |
| March, 2013 | ERAP, Foreword, Section 2, Appendix H and Response Zone | Annual Review and ERAP-20, ERAP-21, ERAP-22, ERAP-23, ERAP-25, ERAP-26, ERAP-31, ERAP-43, ERAP-44, FWD-2, FWD-3, FWD-4, FWD-5, 2-9, 2-10, 2-11, 2-12, 2-14, 2-15, 2-20, 2-24, 2-25, H-2, RESP ZONE-2, RESP ZONE-3, RESP ZONE-4, RESP ZONE-5 (ePlanPro Version 3.13.76) |
| June, 2013 | ERAP, Foreword, Section 1, Section 2, Cross Reference, Response Zone | Updated 49 CFR 192.615, Pipelines, Maps, Personnel, and Distribution on pages ERAP-1, ERAP-3 through ERAP-89, FWD-4, FWD-5, 1-7, 1-12 through 1-24, 2-9, 2-10, Cross-1, Cross-5 through Cross-7, RESP ZONE-2, RESP ZONE-3, RESP ZONE-15 through RESP ZONE-18 (ePlan Pro Version 4.8.10) |
| February, 2014 | ERAP, Foreword, Sections 1, 2, 4, and 6, Appendices B and H, Response Zone | Annual Review Jan. 2014 including updates to Distribution List, Internal Notification personnel, TRRC Reporting Requirements, ICS Response Map, Pipeline Assets, Environmental Sensitivity mapping references, historical Worst Case Discharge calculations, QI/AQI Certification and Response Preparedness documents and TRRC Form H-8 on pages ERAP 13-87, FWD-4, FWD-5, 1-18, 1-19, 1-22, 1-25, 2-9 thru 2-23, 4-7, 6-3, 6-16, B-4 H-2 and Resp Zone 2-18 (ePlanPro Version 6.9.27). |

| DISTRIBUTION LIST | |
|--|---|
| COPY NUMBER | PLAN HOLDER |
| 1 | Removed from Distribution Electronic Access |
| 2 | Shell Pipeline Company LP Larry Belcher Colex West Facility 404 Jefferson Pasadena, Texas 77506 |
| 3 | Shell Pipeline Company LP Rebecca Weber P.O. Box 651 (10030 FM 1942) Mont Belvieu, Texas 77580 |
| 4, 5 | Shell Pipeline Company LP Mike Biddle 5300 Old West Port Arthur Road Port Arthur, Texas 77640 |
| 6 | Railroad Commission of Texas Mary McDaniel, Director of Safety 1701 N. Congress, Room 9-160 Austin, Texas 78701 |
| (2) CDs (Sequence #:137/146; Operator ID 31174) | US DOT Office of Pipeline Safety Response Plans Officer Pipeline and Hazardous Material Safety Admin. 1200 New Jersey Avenue SE - E - 22- 321 District of Columbia, Washington 20590 |
| Electronic Copy | Texas General Land Office Compliance UPDATE WEB SITE ONLY: http://www.glo.texas.gov/cf/facilities-database/index.cfm PW for Shell Pipeline Port Arthur Response Area is 90068 |

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



1.0 INTRODUCTION AND PLAN CONTENT

- 1.1 [Plan Purpose/Objectives](#)
 - 1.2 [Scope of Plan](#)
 - 1.3 [Controlled Plan Distribution Procedures](#)
 - 1.4 [Plan Review and Update Procedures](#)
 - 1.5 [Regulatory Compliance](#)
- Figure 1.1 [Facility Information](#)
- Figure 1.2 [Piping System Overview](#)

1.1 PLAN PURPOSE/OBJECTIVES

The purpose of this Oil Spill Response Plan (Plan) is to assist Shell Pipeline Company LP (SPLC) personnel in preparing for and responding quickly and safely to emergencies originating from the pipelines and associated facilities. The Plan provides techniques and guidelines for achieving an efficient, coordinated, and effective response to emergencies which may occur along 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.
- Ensure compliance with federal, state, and local oil pollution regulations.
- Document equipment, manpower, and other resources available to assist with the response.
- Ensure compliance with the U.S. National Oil and Hazardous Substances Contingency Plan and associated Area Contingency Plan(s) for the area of operation.

1.2 SCOPE OF PLAN

This Plan has been developed in accordance with the regulation published in 49 CFR Part 194 - Response Plans for Onshore Oil Pipelines.

This Plan contains prioritized procedures for Company personnel to prevent or mitigate emergencies resulting from the operation of the pipeline. A description of the Pipeline's details is presented in Figure 1.1 with additional information provided in the sections, appendices and annexes.

1.3 CONTROLLED PLAN DISTRIBUTION PROCEDURES

The Response Plan Coordinator (RPC) is responsible for maintenance and distribution of the Plan. Distribution will be handled in the following manner:

- Distribution of controlled Plans is determined by the copy number assigned to agency and designated corporate Plan Holders. A distribution list is included in the Foreword.
- Company personnel who may be called upon to provide assistance during discharge response activities will have access to a copy of the Plan for their use and training.
- Any person holding a controlled copy of the Plan shall 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 controlled copy of the Plan. The list of agencies is detailed in the Distribution List located in the Foreword.

1.4 PLAN REVIEW AND UPDATE PROCEDURES

Review/Update

The Plan resides as a web-based document, which permits authorized Corporate and field staff access to make:

- Appropriate revisions as required by operational or organizational changes.
- Appropriate revisions as required by changes in the names and phone numbers detailed in Section 2.0.
- Appropriate revisions as required by improved procedures or deficiencies identified during response team tabletop exercises or actual emergency responses.

Incorporation of Plan Revisions

Email notification allows Authorized Plan Holders to update hard copy Plans as changes occur.

The Individual Plan Holder shall:

- Review and insert the revised pages into the Plan.
- Discard or archive the obsolete pages.

Agency Revision Requirements

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

Conditions Requiring Changes

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

NCP & ACP REVIEW

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

- National Contingency Plan (NCP)
- EPA Region 6 - Regional Integrated Contingency Plan
- One Gulf Plan and its MSO New Orleans/MSD Baton Rouge GRP
- MSO Port Arthur GRP
- MSO Morgan City GRP

How Often to Review

SPLC shall review the Response Plan to verify the information contained within is up-to-date and current at least as follows:

- Once every 15 months (but at least once per calendar year), per federal (49 CFR Part 192 and 195) and Texas OSPR regulations
- Once every five years from the last approval date per Federal (49 CFR Part 194) regulations. The Plan must be re-submitted to Pipeline and Hazardous Materials Safety Administration (PHMSA) for approval following this review.

If the Plan is found to be current after conducting the five year review, the Plan does not have to be re-submitted to PHMSA. However, a letter must be sent to PHMSA stating that the Plan was reviewed and that the Plan was determined to be current.

Who is Responsible

SPLC's Response Plans Coordinator (RPC) has the overall responsibility of maintaining the OSRP. The information below describes the responsibilities associated with reviewing the OSRP.

| Who Does It | What Happens |
|-----------------------------|---|
| RPC | Reviews the overall plan to verify that it is consistent with the NCP and ACP. |
| Regional Operations Manager | Verifies that all local copies of the OSRP are reviewed and current. (The Regional Operations Manager may delegate this responsibility.) |
| Control Center Manager | Ensures that all Control Center copies of the OSRP are reviewed and current. (The Control Center Manager may delegate this responsibility.) |
| RPC | Verifies that the Head Office copies of the OSRP are reviewed and current. (The RPC may delegate this responsibility.) |
| Plan holder | Signs and dates the OSRP Review Log in the front of the manual for each review. Updates the plan. |

Each Regional Operations Manager must make sure that the RPC is notified of all changes in the area that meet any of the criteria listed. (The Regional Operations Manager may delegate this responsibility.)

Procedure for Revising

The information below describes the detailed process for revising the OSRP.

| Stage | Who Does It | What Happens |
|-------|---|---|
| 1 | Regional Operations Support Coordinator | The Regional Operations Support Coordinator sends proposed revisions to the Response Plans Coordinator. |
| 2 | Response Plans Coordinator | The Response Plans Coordinator: <ul style="list-style-type: none"> • Reviews all proposed revisions and routes within applicable SPLC organizations for comment • Has all necessary revisions drafted and dated • Sends all drafted revisions to the Region Environmental Representative in each Region and the Control Center as appropriate. |
| 3 | Regional Operations Support Coordinator | The Regional Operations Support Coordinator distributes the revisions to all manual holders to update their copies. |
| 4 | Manual Holder | The Manual Holder updates the manual accordingly. |
| 5 | Response Plans Coordinator | The Response Plans Coordinator sends the appropriate regulatory agencies copies of all significant revisions. |

1.5 REGULATORY COMPLIANCE

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

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

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

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

- Federal Oil Pollution Act of 1990: U.S. DOT Final Rule for Transportation Related On-shore Facilities (49 CFR Part 194).
- DOT/PHMSA 49 CFR Part 192

The response zones have been reviewed for consistency with the following plans:

- U.S. National Oil and Hazardous Substances Contingency Plan (NCP)

FIGURE 1.1
FACILITY INFORMATION

| GENERAL INFORMATION | | | | | | | | | |
|--|--|-------------------------|--------------------------|-------------------|-------------------|-----------------|-----------------|----------------------|----------------------|
| Facility Name: | Gulf of Mexico Region - West Response Zone | | | | | | | | |
| U.S. DOT/PHMSA Control Number: | 137 & 146 & TX10112 & TX10197 | | | | | | | | |
| Operator Name: | Shell Pipeline Company LP (SPLC) | | | | | | | | |
| Address: | <table style="width: 100%; border: none;"> <thead> <tr> <th style="text-align: left; border: none;">Physical Address</th> <th style="text-align: left; border: none;">Operators Address</th> </tr> </thead> <tbody> <tr> <td style="border: none;">777 Walker Street</td> <td style="border: none;">777 Walker Street</td> </tr> <tr> <td style="border: none;">Two Shell Plaza</td> <td style="border: none;">Two Shell Plaza</td> </tr> <tr> <td style="border: none;">Houston, Texas 77002</td> <td style="border: none;">Houston, Texas 77002</td> </tr> </tbody> </table> | Physical Address | Operators Address | 777 Walker Street | 777 Walker Street | Two Shell Plaza | Two Shell Plaza | Houston, Texas 77002 | Houston, Texas 77002 |
| Physical Address | Operators Address | | | | | | | | |
| 777 Walker Street | 777 Walker Street | | | | | | | | |
| Two Shell Plaza | Two Shell Plaza | | | | | | | | |
| Houston, Texas 77002 | Houston, Texas 77002 | | | | | | | | |
| Mainline Number: | (800) 922-3459 (24 Hours) | | | | | | | | |
| Contact Person: | Carrie Hodgins, HSSE Manager | | | | | | | | |
| Primary NAICS Code: | | | | | | | | | |
| Determination of Significant and Substantial Harm (U.S. DOT PHMSA): | This Response Zone has been determined to meet the significant and substantial harm classification because at least one (1) line section within the response zone is greater than 6 5/8" in nominal outside diameter, 10 miles or longer and has met at least one of the criteria listed in 49 CFR 194.1032(c)(1). | | | | | | | | |
| Operator Statement of (U.S.DOT PHMSA) "Significant and Substantial Harm": | The Company's goal is to respond as quickly as possible to all uncontrolled releases of petroleum product, regardless of the source point location along the system. Based upon this goal, and the definitions provided in 49 CFR 194.103 (c)(4) & (5), the Company is compelled to consider all the active line sections listed in this section as incapable of a release potentially causing "significant and substantial harm". | | | | | | | | |

QUALIFIED INDIVIDUAL

Certification: The Company grants full authority to the designated Qualified and Alternate Qualified Individuals to implement the Facility Response Plan and to:

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

Qualified Individual:

Greg Smith General Manager Operations GOM-QI/IC

(b) (6)

(Home)
(Cellular)

Alt. Qualified Individual:

Jill Derise Manager Control Center (AQI)

(Home)
(Cellular)

PIPELINE LOCATION

States/Counties: Texas/ Brazoria, Chambers, Galveston, Hardin, Harris Jefferson, Liberty, Orange, Polk

Pipeline System Overview Diagram: [See Figure 1.2](#)

PHYSICAL DESCRIPTION - PIPELINE

Response Zone(s):

- Gulf of Mexico - West Response Zone

The table below lists the states and counties that are in the Gulf of Mexico - West Response Zone.

Texas

| Gulf of Mexico Region - West Response Zone - Texas | |
|---|-----------|
| Brazoria | Jefferson |
| Chambers | Liberty |
| Galveston | Orange |
| Hardin | Polk |
| Harris | |

General:

- This plan includes pipeline sections described below as well as supporting equipment and facilities.
- This Plan is written in English and understood by personnel responsible for carrying out the Plan.

Pipeline Specifications:

- **Products Type:**

Crude Oil
 Natural Gas
 Ethylene
 Ethane
 Propylene
 Dry Gas
 Butylene
 Effluent Water
 Oxidized Caustic
 Butane
 Naptha and Olefins
 Refined Products

- **Pipe Detail:** The pipeline system consists of the following pipeline sections with the indicated diameters.

| Pipeline Specifications | | | | | | |
|------------------------------------|---------------------------------|--------------------|---------------------------|-------------------------|-------------------|--------------|
| Chemical Systems | | | | | | |
| System Name | Name of Pipeline | Type of Oil | Starting Mile Post | Ending Mile Post | County | State |
| Acetone | 3in Deer Park-Rohm Haas #2 | Acetone | 0.00 | 0.078 | Harris | TX |
| Acetone | 3in Deer Park-Rohm Haas #1 | Acetone | 0.00 | 0.33 | Harris | TX |
| Acetone | 4in Deer Park-Rohm Haas #3 | Acetone | 0.00 | 1.32 | Harris | TX |
| BASF Raffinate | DPMC - BASF | Raffinate | 0.00 | 2.98 | Harris | TX |
| Benzene | 4in Deer Park-ITC | Benzene | 0.00 | 2.05 | Harris | TX |
| Deer Park Dry Gas | 8in Crown-Witter | Dry Gas | 0.00 | 0.26 | Harris | TX |
| Deer Park Dry Gas | 8in Manchester-Deer Park | Dry Gas | 0.00 | 8.03 | Harris | TX |
| Deer Park Dry Gas | LCR Lateral | Dry Gas | 0.00 | 0.52 | Harris | TX |
| Deer Park Dry Gas | 12in. Deer Park Olefins | Olefins Feed | 0.00 | 1.24 | Harris | TX |
| Deer Park Dry Gas | 24in. Deer Park Olefins | Olefins Feed | 0.00 | 1.45 | Harris | TX |
| Texas Bay Area Pipeline | 12in. Dry Gas | Dry Gas | 0.00 | 34.25 | Galveston, Harris | TX |
| Texas City Dry Gas | 6 in. Marathon Dry Gas Lateral | Dry Gas | 0.00 | 0.22 | Harris | TX |
| ITC to Deer Park Connection | 6in. Isopropene | Isopropene | 0.00 | 3.28 | Harris | TX |
| Deer Park Olefins | 24in. Deer Park Olefins Lateral | Olefins Feed | 0.00 | 0.10 | Harris | TX |
| Manchester Propylene | 4in. Witter St - Deer Park | Idle (Nitrogen) | 0.00 | 1.76 | Harris | TX |
| Manchester Proplene | 4in. Witter St - Crown | Idle (Nitrogen) | 0.00 | 0.41 | Harris | TX |

| | | | | | | |
|--------------------------------|-------------------------------|-----------|------|------|--------|----|
| Manchester Proplene | 4in.Manchester - Deer Park | Propylene | 0.00 | 7.40 | Harris | TX |
|--------------------------------|-------------------------------|-----------|------|------|--------|----|

| Pipeline Specifications (Cont'd) | | | | | | |
|---|--|--------------------|---------------------------|-------------------------|-------------------|--------------|
| Chemical Systems Cont'd | | | | | | |
| System Name | Name of Pipeline | Type of Oil | Starting Mile Post | Ending Mile Post | County | State |
| Ship Channel Olefins Feed Lines | 12in. Spare Kilgore Crossing | Olefins Feed | 0.00 | 0.82 | Harris | TX |
| Ship Channel Olefins Feed Lines | 12in. Main Kilgore Crossing | Idle | 0.00 | 0.82 | Harris | TX |
| Ship Channel Olefins Feed Lines | 10in. Sheldon - Deer Park | Idle | 0.00 | 2.24 | Harris | TX |
| Texas Butadiene | 8in. Deer Park Refinery-ITC | Butadiene | 0.00 | 1.92 | Harris | TX |
| Texas Ethylene | Fairmont 8in. Take Off - Nova/Fina | Ethylene | 0.00 | 5.33 | Harris | TX |
| Texas Ethylene | Fairmont 8in. Take Off - Nova/Fina | Ethylene | 0.00 | 5.33 | Harris | TX |
| Texas Ethylene | 8/10 Jct-Fairmont | Ethylene | 0.00 | 7.54 | Harris | TX |
| Texas Ethylene | 8in. Sunoco lateral | Idle (Nitrogen) | 0.00 | 2.6 | Harris | TX |
| Texas Ethylene | Mont Belvieu-810 Junction | Ethylene | 0.00 | 15.02 | Harris & Chambers | TX |
| Texas Ethylene | Tidal Rd-8/10 Jct. | Ethylene | 0.00 | 3.64 | Harris | TX |
| Texas Ethylene | 8/10 Jct.-Solvay | Ethylene | 0.00 | 1.91 | Harris | TX |
| Texas Ethylene | 6in. Arco Delivery - Miller Cut Off Road | Idle (Nitrogen) | 0.00 | 0.16 | Harris | TX |

| Pipeline Specifications (Cont'd) | | | | | | |
|---|---|--------------------|---------------------------|-------------------------|-------------------|--------------|
| Chemical Systems Cont'd | | | | | | |
| System Name | Name of Pipeline | Type of Oil | Starting Mile Post | Ending Mile Post | County | State |
| Texas Ethylene | 10" Ethylene to/from DPMC | Ethylene | 0.00 | 0.57 | Chambers | TX |
| Texas Ethylene | 10" Ethylene from Exxon Dryer | Idle (Nitrogen) | 0.00 | 0.41 | Chambers | TX |
| Texas Ethylene | 10" Ethylene to/from Chevron Mont Belvieu | Ethylene | 0.00 | 0.41 | Chambers | TX |
| Texas Ethylene | 8in Arco-Mont Belvieu (Equistar to Mt. Belvieu) | Ethylene | 0.00 | 0.98 | Chambers | TX |
| Texas Ethylene | 8in Basell lateral | Ethylene | 0.00 | 0.425 | Harris | TX |
| Texas Ethylene | lateral to Solvary 4in | Ethylene | 0.00 | 0.8.13 | Harris | TX |
| Texas Propylene | 6in Texas City Sterling Delivery | Idle (Nitrogen) | 0.00 | 2.06 | Galveston | TX |
| Texas Propylene | 6in Fairmont - BASF Underwood | Propylene | 0.00 | 1.77 | Harris | TX |
| Texas Propylene | Union Carbide 4, 6 & 8in Lateral | Propylene | 0.00 | 0.58 | Galveston | TX |
| Texas Propylene | 6in Deer Park - Mont Belvieu | Propylene | 0.00 | 18.15 | Harris & Chambers | TX |
| Texas Propylene | 6in Fairmont-Arco Bayport | Propylene | 0.00 | 2.16 | Harris | TX |

| Pipeline Specifications (Cont'd) | | | | | | |
|---|---|--------------------|---------------------------|-------------------------|---------------------------------------|--------------|
| Chemical Systems Cont'd | | | | | | |
| System Name | Name of Pipeline | Type of Oil | Starting Mile Post | Ending Mile Post | County | State |
| Texas Propylene | 4in Phillips-Shell Propylene | Idle (Nitrogen) | 0.00 | 0.05 | Harris | TX |
| Texas Propylene | 6in Rohm & Haas Lateral | Propylene | 0.00 | 0.05 | Harris | TX |
| Texas Propylene | 6in Crossover to chocolate Bayou from Rohm & Haas Lateral | Propylene | 0.00 | 0.08 | Harris | TX |
| Texas Propylene | 8in Propylene to/from DPMC | Propylene | 0.00 | 0.43 | Chambers | TX |
| Texas Propylene | 10in Propylene to Exxon Green lake | Propylene | 0.00 | 0.41 | Chambers | TX |
| Texas Propylene | 8in Propylene to Exxon Dryer | Idle (Nitrogen) | 0.00 | 0.43 | Chambers | TX |
| Texas Propylene | 8in Propylene to Exxon Cavern/Dryer | Idle (Nitrogen) | 0.00 | 0.43 | Chambers | TX |
| Texas Propylene | 6in Amoco Lateral | Idle (Nitrogen) | 0.00 | 0.22 | Galveston | TX |
| Texas Propylene | 6in Arcadia Jct-Texas City | Propylene | 0.00 | 12.48 | Galveston | TX |
| Texas Propylene | 4in Deer Park - Aristech Propylene | Idle (Nitrogen) | 0.00 | 0.50 | Chambers | TX |
| Texas-Louisiana Ethylene | Louisiana/Texas State Line To Mont Belvieu | Ethylene | 0.00 | 76.0 | Orange, Jefferson, Chambers & Liberty | TX |

| Pipeline Specifications (Cont'd) | | | | | | |
|---|-----------------------------|--------------------|---------------------------|-------------------------|---------------|--------------|
| Chemical Systems Cont'd | | | | | | |
| System Name | Name of Pipeline | Type of Oil | Starting Mile Post | Ending Mile Post | County | State |
| Webster Crude Butadiene | 6in Webster Crude Butadiene | Crude Butadiene | 0.00 | 18.74 | Harris | TX |
| Battleground Crude Isoprene | Battleground Crude Isoprene | Crude Isoprene | 0.00 | 3.8 | Harris | TX |

| Pipeline Specifications (Cont'd) | | | | | | |
|---|---------------------------------------|-----------------------|------|--------|---|----|
| Crude Oil System | | | | | | |
| HFOTCO Crude | HFOTCO-Deer Park | Crude | 0.00 | 3.25 | Harris | TX |
| Ho-Ho Erath-East Houston | Sabine River - East Houston | Crude | 0.00 | 104.00 | Orange, Jefferson, Chambers, Liberty & Harris | TX |
| Ho-Ho Erath-East Houston Crude | Y Jct - Pt Arthur | Empty/Nitrogen Purged | 0.00 | 3.64 | Jefferson | TX |
| Ho-Ho Erath-East Houston Crude | Lateral to Unocal/Sun | Crude | 0.00 | 10.97 | Jefferson | TX |
| Ho-Ho Erath-East Houston Crude | Idle 20in. to Oil Tanking | Idle (Nitrogen) | 0.00 | 0.95 | Jefferson | TX |
| Ho-Ho Port Neches - Port Arthur | Pt. Neches-Pt. Arthur | Crude | 0.00 | 5.52 | Jefferson | TX |
| Ho-Ho Port Neches - Port Arthur | Pt Neches - Pt Arthur 12in Idle North | Empty/Nitrogen Purged | 0.00 | 0.49 | Jefferson | TX |
| Ho-Ho Port Neches - Port Arthur | Pt Neches - Pt Arthur 12in Idle South | Empty/Nitrogen Purged | 0.00 | 4.92 | Jefferson | TX |
| Ho-Ho Port Neches-Fina | Pt Neches - Fina 12in | Crude | 0.00 | 1.50 | Jefferson | TX |

| Pipeline Specifications (Cont'd) | | | | | | |
|---|------------------------------|---------------|------|-------|-------------------|----|
| Crude Oil System (Cont'd) | | | | | | |
| Sunshine Lateral | Sunshine Lateral | Idle Nitrogen | 1.7 | 8.90 | Polk | TX |
| Webster-Texas City | 8in Webster Jct - Texas City | Nitrogen | 0.00 | 19.19 | Galveston, Harris | TX |

| Pipeline Specifications (Cont'd) | | | | | | |
|---|---|-------------------|------|------|--------|----|
| Product Systems | | | | | | |
| Colex Terminal | Colex West to Spider Web No. 9 (12in.) | Multiple Products | 0.00 | 1.37 | Harris | TX |
| Colex Terminal | Colex West to Deer Park Rail Car 10 (16in.) | Multiple Products | 0.00 | 3.97 | Harris | TX |
| Colex Terminal | Colex West to Colonial No. 11 (36in.) | Multiple Products | 0.00 | 0.75 | Harris | TX |
| Colex Terminal | Colex West to Colonial No. 12 (36in.) | Multiple Products | 0.00 | 0.70 | Harris | TX |
| Colex Terminal | Colex West to Explorer No. 13 (30in.) | Multiple Products | 0.00 | 0.78 | Harris | TX |
| Colex Terminal | Colex West to Explorer No. 14 (30in.) | Multiple Products | 0.00 | 0.79 | Harris | TX |
| Colex Terminal | Colonial to Colex West No. 15 (16in.) | Multiple Products | 0.00 | 0.88 | Harris | TX |
| Colex Terminal | Colonial to Colex West No. 16 (16in.) | Multiple Products | 0.00 | 0.85 | Harris | TX |
| Colex Terminal | Colex West to Spider Web No. 19 (16in.) | Multiple Products | 0.00 | 1.37 | Harris | TX |
| Colex Terminal | Colex West to Deer Park Rail Car No. 18 (12in.) | Multiple Products | 0.00 | 3.99 | Harris | TX |

| Pipeline Specifications (Cont'd) | | | | | | |
|---|--|-------------------|------|------|-----------|----|
| Product Systems (Cont'd) | | | | | | |
| Colex Terminal | Colex East to Colex West No. 17 (16in.) | Multiple Products | 0.00 | 0.70 | Harris | TX |
| Colex Terminal | Colex West to Grand Central No. 20 (12in.) | Multiple Products | 0.00 | 1.49 | Harris | TX |
| Port Arthur Products | PAR - PAPS 12in. Gaso No1 | Gasoline | 0.00 | 1.77 | Jefferson | TX |
| Port Arthur Products | PAR - PAPS 12in. Future | Empty | 0.00 | 1.00 | Jefferson | TX |
| Port Arthur Products | Shell - Ex 30in Gasoline | Gasoline | 0.00 | 1.62 | Jefferson | TX |
| Port Arthur Products | PAR - PAPS 12in. Fuels No2 | Distillate | 0.00 | 1.87 | Jefferson | TX |
| Port Arthur Products | Shell - Ex 30in. Fuels | Distillate | 0.00 | 1.62 | Jefferson | TX |
| Port Arthur Products | PAR - El Vista 12in. Gaso (Premcor) | Gasoline | 0.00 | 1.12 | Jefferson | TX |

| Pipeline Specifications (Cont'd) | | | | | | |
|---|--|-------------------|------|------|-----------|----|
| Product Systems (Cont'd) | | | | | | |
| Port Arthur Products | El Vista - PAPS 36in. Gaso (Premcor) | Gasoline | 0.00 | 0.86 | Jefferson | TX |
| Premcor Pipelines | Premcor 9in. | Mothballed | 0.00 | 8.01 | Jefferson | TX |
| Sinco-Colex Products | 10in. Marketing Jct-Pasadena Plant | Multiple Products | 0.00 | 0.17 | Harris | TX |
| Sinco-Colex Products | 10in. Sinco Station-Mkt Jct. | Multiple Products | 0.00 | 5.90 | Harris | TX |
| Sinco-Colex Products | 14in. Sinco - Colex | Multiple Products | 0.00 | 3.17 | Harris | TX |
| Sinco-Colex Products | 10in. Sinco Station - Lyondell | Multiple Products | 0.00 | 6.14 | Harris | TX |
| Sinco-Colex Products | 12in. Lyondell - East Houston | Multiple Products | 0.00 | 8.61 | Harris | TX |
| Sinco-Colex Products | 8in. Sinco Sta - Mkt Jct | Idle | 0.00 | 5.77 | Harris | TX |
| Sinco-Colex Products | 12in. Blackwell Jct. To Galena Park Station (SINCO 8" & 10") | Multiple Products | 0.00 | 0.99 | Harris | TX |
| Sinco-Colex Products | Sinco10 to colex Terminal 10in. | Multiple Products | 0.00 | 0.14 | Harris | TX |
| Sinco-Colex Products | 12in. Crossing of Houston Ship Channel | Idle | 0.00 | 0.54 | Harris | TX |
| Sinco-Colex Products | Colex Terminal to Sinco 10in | Multiple Products | 0.00 | 0.14 | Harris | TX |
| Sinco-Colex Products | 8in Hess to Rancho | Idle | 0.00 | 0.37 | Harris | TX |
| Sinco-Colex Products | Sinco8 to Colex Terminal 12in | Multiple Products | 0.00 | 0.15 | Harris | TX |
| Smith Bluff | Unocal - Pine Street 12in | Idle W/Nitrogen | 0.00 | 4.16 | Jefferson | TX |

| Pipeline Specifications (Cont'd) | | | | | | |
|---|---|----------------------|------|------|-----------------------------------|----|
| Product Systems (Cont'd) | | | | | | |
| Smith Bluff | Explorer - Pine Street 10in | Idle W/Nitrogen | 0.00 | 0.75 | Jefferson | TX |
| Smith Bluff | Pine Street - PAPS 10in | Multiple Products | 0.00 | 7.74 | Jefferson | TX |
| Colex Terminal | Phillips Rd. North to Phillips Road South | Multiple Products | 0.00 | 0.13 | Harris | TX |
| Colex Terminal | Colex West to HL&P No. 21 (16in) | Multiple Products | 0.00 | 0.09 | Harris | TX |
| Colex Terminal | #16 Lateral to Explorer | Multiple Products | 0.00 | 0.06 | Harris | TX |
| Colex Terminal | #15 Lateral to Explorer | Multiple Products | 0.00 | 0.05 | Harris | TX |
| Texas Propylene | Choc. Bayou Tk off/Fairmont/Arc Jct./Dow- Solutia | Propylene | 0.00 | 38.7 | Brazoria, Galveston, Harris | TX |
| Texas Propylene | Fairmont Station 6in Suction | Propylene | 0.00 | 0.09 | Harris | TX |
| Texas Propylene | Fairmont Station 6in Discharge | Propylene | 0.00 | 0.09 | Harris | TX |
| Port Arthur Products | Premcor El Vista-Explorer 30in Gaso | Refined Products | 0.00 | 0.38 | Jefferson | TX |
| Port Arthur Products | PAPS-Explorer 30in Oil | Refined Products | 0.00 | 1.38 | Jefferson | TX |
| Colex Terminal | Magellan Mainline to Grand Central Junction No. 22 (16in) | Refined Products | 0.00 | 0.04 | Harris | TX |
| SINCO-COLEX B Products | 8in Sinco Mkt Jct to Lyondell | Idle | 0.00 | 0.19 | Harris | TX |
| Smith Bluff | Unocal-Pine Street 12in | Idle | 0.00 | 4.15 | Jefferson | TX |
| Smith Bluff | Explorer to Fina Connection | Idle | 0.00 | 0.47 | Jefferson | TX |
| Sinco-Colex Products | 10in Sinco Mkt Jct-Lyondell | Idle | 0.00 | 0.2 | Harris | TX |

RESPONSE ZONE INFORMATION

Response Resources:

Facility 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
- Failure of facility piping
- Equipment failure (e.g. pumping system failure, relief valve failure, etc.)

These scenarios could result in the following discharge volumes (additional details in Appendix B):

Worst Case Discharge (WCD):

| Response Zone | Discharge Scenario | Potential Oil Group | Planning Volume |
|---------------------|--------------------|---------------------|-----------------|
| (b) (7)(F), (b) (3) | | | |

FIGURE 1.2

PIPING SYSTEM OVERVIEW

Gulf of Mexico West Response Zone Pipelines Overview Map

[Click to view](#)

Deer Park Dry Gas System Map

[Click to view](#)

Texas Dry Gas Overview Map

[Click to view](#)

Texas Dry Gas System Map

[Click to view](#)

(b) (7)(F), (b) (3)

(b)

)
)
)
)
)

-  Pipeline
-  Tactical Plans
-  Response Zone

**Click on a
Tactical Response
Plan Location to
view the book**

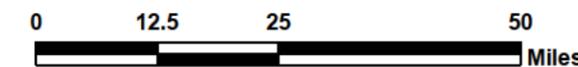


Map Prepared by;
O'Brien's Response Management
6620 Cypresswood Dr., Spring, Tx.
281-320-9796
Updated: March 27, 2009

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

Overview Map Showing Gulf of Mexico West Response Zone

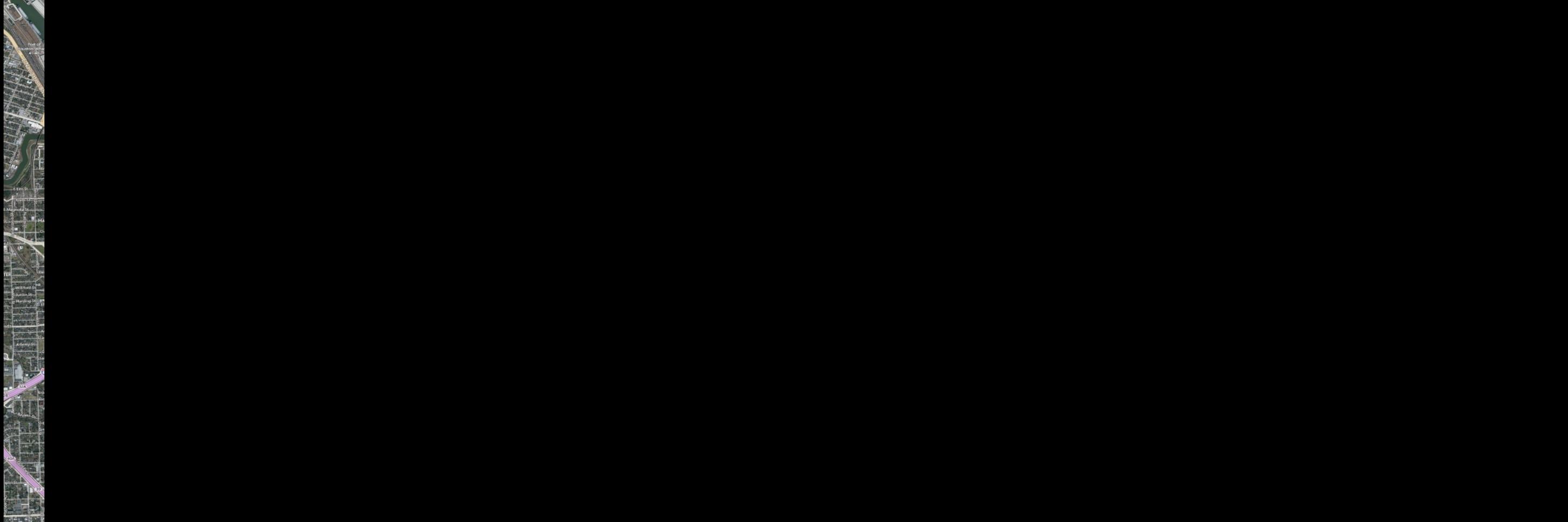


(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)



(b) (7)(F), (b) (3)



(b) (7)(F), (b) (3)

Path: V:\Integrity Management Program\

- ● 295, Manchester-Deer Park
- ● 841, Crown-Witter
- ● 854130, Lyndell Crown Refinery Lateral

System Map

Deer Park Dry Gas

Gulf of Mexico Region
Shell Assets - Dry Gas

System Map
Shell Pipeline Company

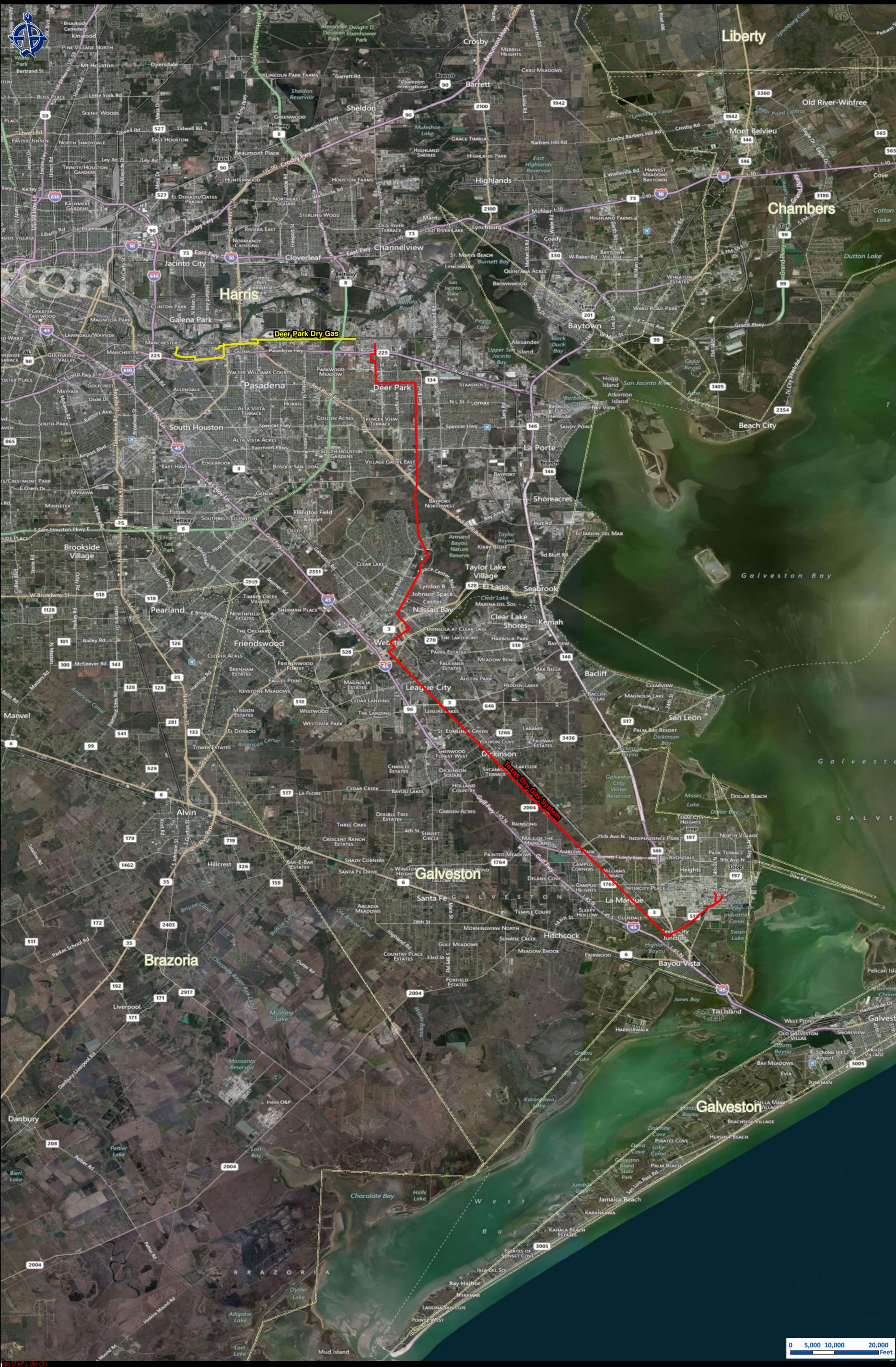
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Scale: 1" = 2,000'
Drawing By: AA

Date: 5/21/2013

MD130520-C

Revision
00



Overview Map Texas Dry Gas Pipelines

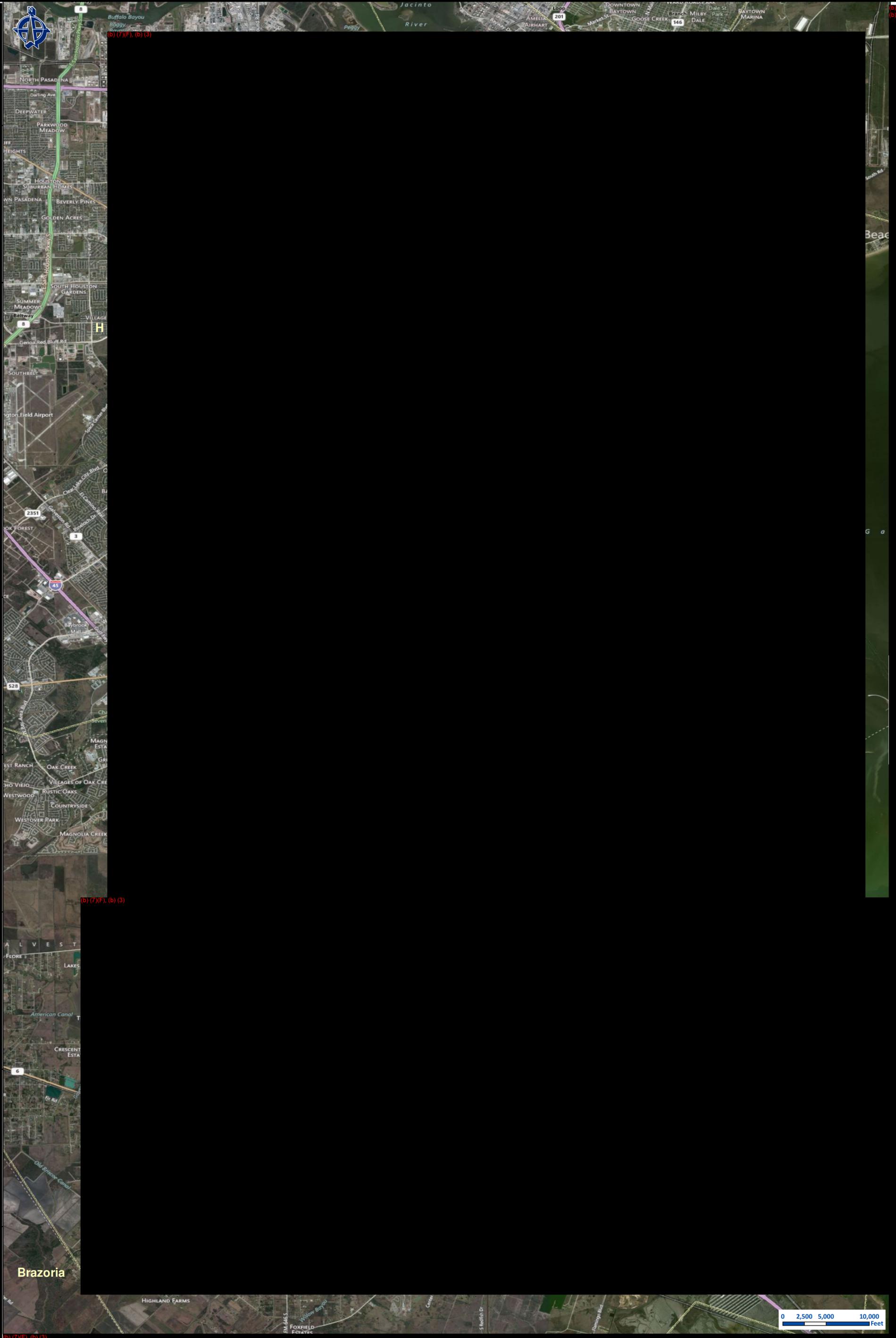
| | | | |
|---|---------------------|------------------------|--------------|
| Gulf of Mexico Region | | Overview Map | |
| Shell Assets - Dry Gas | | Shell Pipeline Company | |
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| Drawing By: AA | MD130520-A | | 00 |

(b) (7)(F), (b) (3)



(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)



(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

System Map Texas Dry Gas System

Gulf of Mexico Region

Shell Assets - Dry Gas

System Map

Shell Pipeline Company

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Date: 5/21/2013

MD130520-B

Revision 00

Drawing By: AA

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North: Wright Management



2.0 NOTIFICATION PROCEDURES

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This Section is a guide for notification procedures that should be implemented immediately after discovering an emergency 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 NOTIFICATIONS

The following internal notifications should be made for each emergency incident to the extent that the incident demands. In no event shall notification be delayed because the immediate supervisor is inaccessible. Authorization is given to bypass management levels if necessary to provide timely notification to appropriate management. The typical notification responsibilities for each person potentially involved in the initial response are listed below.

Initial Response

The goal of the initial response is to reduce the adverse impacts of the incident.

Making an initial response includes the following.

- Shut the system down.
- Notify the appropriate SPLC personnel and governmental agencies.
- Evaluate system's potential for public hazards and identify immediate response areas utilizing.
 - HCA data
 - Risk assessment data
 - Local knowledge
 - Feedback from public officials
 - Use the Incident Command System.
 - Ensure sufficient response resources are obtained.
 - Emphasize to all response personnel the potential dangers of each task and to put safety first. Verify that all workers are trained and equipped for the hazards to which they are exposed. Verify compliance with all applicable Occupational Safety and Health Administration (OSHA) Hazardous Waste Operations and Emergency Response (HAZWOPER) requirements.

Communications

SPLC recognizes the media's legitimate interest in emergency situations and benefits from cooperation with them. This cooperation promotes rapid and accurate reporting of the facts, and dispels rumors and exaggerated accounts which can frequently occur.

When to Notify

Communications should be contacted when there is:

- A fatality or serious injury
- The potential for significant environmental damage
- A potential need to evacuate

- Substantial property damage
- News media involvement or the possibility to attract media attention
- Inconvenience to the public
- A charge of SPLC negligence, and/or
- A need for Communications support, as determined by the Incident Commander.

Responsibility

The Communications contact:

- Provides advice and counsel to the Incident Commander
- Assists in determining the need for on-scene Communications support
- Uses information obtained from the Incident Commander to write a holding statement (if necessary), and
- Coordinates press conferences (if necessary).

Insurance Activation

The following describes how insurance is activated. There are three categories of insurance:

- Liability
- Property damage
- Third Party bodily injury, property damage or both

Who Handles

Shell Financial Services - Risk & Insurance (SFS - R&I) is solely responsible for notifying the appropriate insurance underwriters after a significant event. Any incident may give rise to a third party claim for bodily injury, property damage or both. If after an event has occurred claims have been filed, or for any reason a claim may arise out of an event, SFS - R&I should be contacted immediately. Based on the assessment of the situation, SFS - R&I will arrange to provide an "800" claims telephone number and if necessary activate the ESIS Catastrophe Response Team to manage claim activity.

When to Activate

The land agent should activate insurance within 48 hours of the incident. When an incident occurs, insurance activation is secondary. Primary responsibility is shutting down the pipeline, repairing the problem, and cleaning up the release.

Insurance Carrier

SPLC is covered by a master insurance program comprised of property and liability coverages. Under the property coverage of this program Shell is subject to a \$10,000,000 self-insured retention (per event, per occurrence). The liability coverage is subject to a \$20,000,000 self-insured retention (per event, per occurrence). These retentions must be individually exhausted before any insurance claim will be considered by the appropriate underwriter.

Emergency Classification

The following describes the Emergency Classification System used by SPLC to judge the seriousness of incidents. The seriousness depends on:

- Geographical impact, and/or
- Potential harm to human health and the environment.

Classification

SPLC classifies incidents to help determine:

- The level at which the crisis should be managed, and
- Involvement of the Head Office Emergency Management Team.

Incidents are classified as follows:

| Class | Impact |
|--------------|---|
| Unclassified | Unlikely potential harm to the public and environmental |
| Class I | Likelihood potential harm to the public and environmental |
| Class II | Moderate potential harm to public and environment |
| Class III | Significant potential harm to public and environment |

Unclassified Incident

An unclassified incident involves a release/event that is below required government notification limits.

The information below describes unclassified incidents:

| Responsibility/Involvement | Impact |
|-----------------------------|-----------------|
| Head Office and Area Office | None or little |
| Cleanup | Local resources |
| Government | Limited, if any |
| Media | None or little |

Class I Incident

A Class I incident involves a release/event with state and local implications.

The information below describes Class I incidents:

| Responsibility/Involvement | Impact |
|-----------------------------|--|
| Response Teams | Response by Local Response Team |
| Head Office and Area Office | Support provided as needed |
| Cleanup | Local and third-party resources |
| Government | Moderately high, primarily at state and local levels |
| Media | Moderately high, primarily at state and local levels |

Class II Incident

A Class II incident involves a release/event with at least regional implications.

The information below describes Class II incidents:

| Responsibility/Involvement | Impact |
|-----------------------------|--|
| Response Teams | Response by Local Response Team and possibly Equiva Emergency Management Team and Head Office Crisis Leadership Team |
| Head Office and Area Office | Support normally on the scene |
| Cleanup | Local SPLC resources, and possibly third-party resources and head office management |
| Government | Moderately high, primarily at a regional level |
| Media | Moderately high, primarily at a regional level |

Class III Incident

A Class III incident involves a release/event with national or global implications.

The information below describes Class III incidents:

| Responsibility/Involvement | Impact |
|-----------------------------------|--|
| Head Office and Area Office | Significant resources committed |
| Cleanup | Maximum SPLC and third-party resources |
| Government | Intense |
| Media | Intense |

FIGURE 2.1
INTERNAL NOTIFICATION SEQUENCE

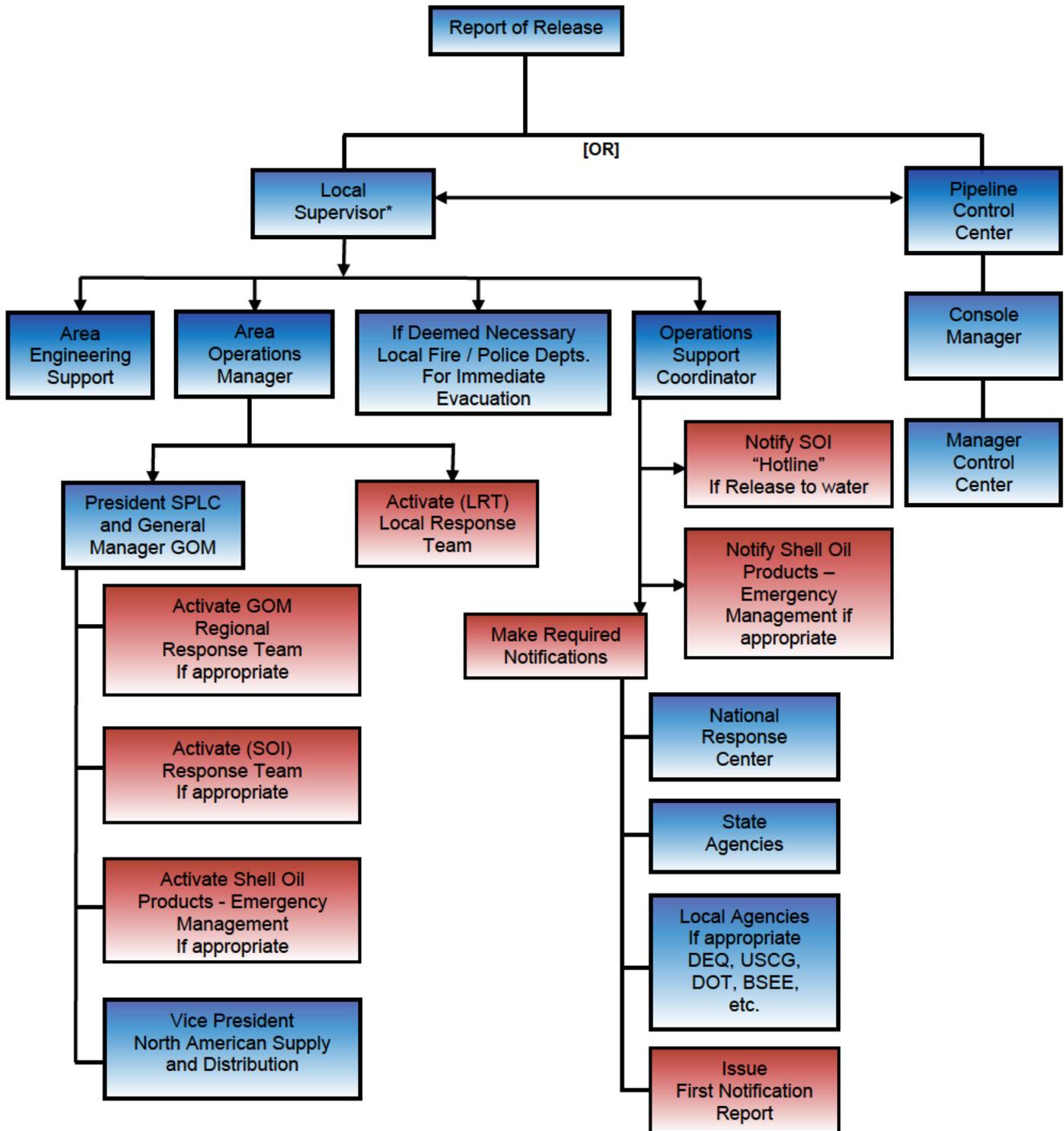
Internal Notification Sequence

[Click to view](#)

Notification of Company Personnel

[Click to view](#)

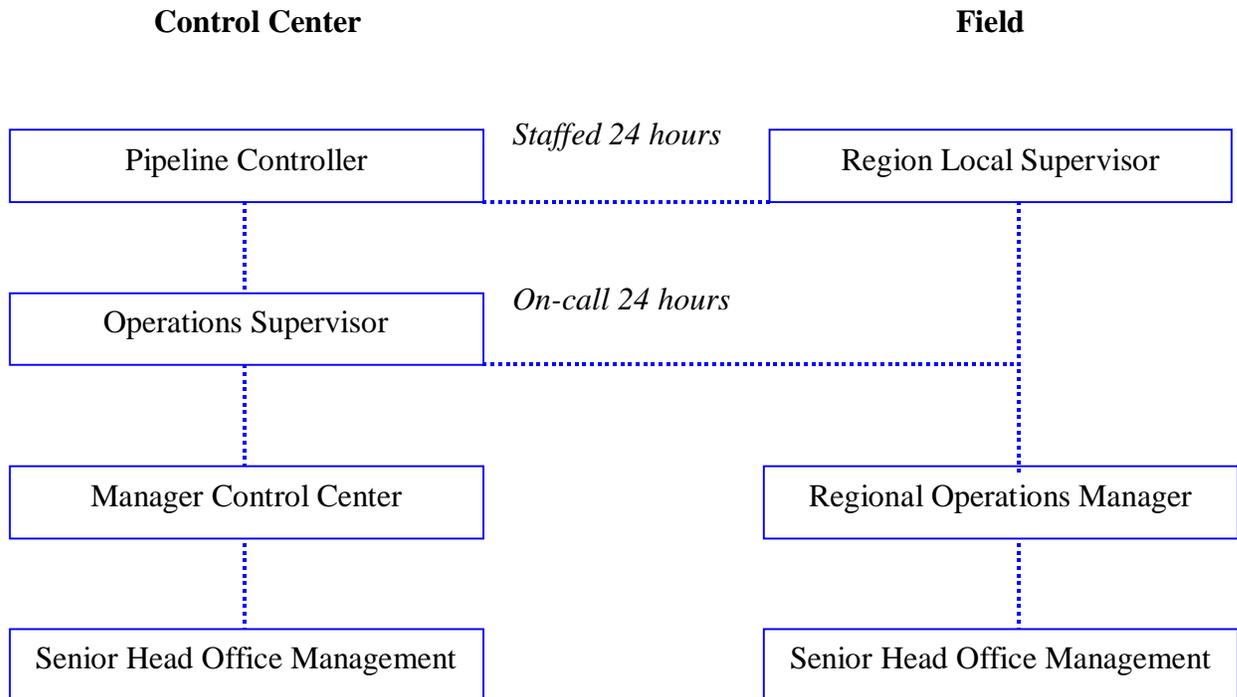
INTERNAL NOTIFICATION SEQUENCE



* For internal reporting procedures, refer to HSSE Incident Reporting and Investigation Procedure (including First Notification Form). West Response Zone. Please note that during an emergency, the Control Center could be relocated to the backup site.

When an incident occurs or is suspected, notify the Control Center immediately. The following diagram shows the line of notification for incidents. Refer to figure 2.2 for specific notification information.

If an individual is not available, contact the immediate supervisor.



2.2 EXTERNAL NOTIFICATIONS

Depending on the type and level of incident, certain external notification may be necessary. Responsibilities for each person potentially involved in the external notifications are listed below.

FIGURE 2.2
INTERNAL NOTIFICATION REFERENCES

| INTERNAL NOTIFICATIONS - INCIDENT MANAGEMENT TEAM | | | | |
|---|-------------------|----------------|---------|-------|
| POSITION/TITLE | NAME | OFFICE | HOME | OTHER |
| General Manager Operations GOM-QI/IC | Greg Smith | (504) 728-4474 | (b) (6) | |
| Manager Control Center (AQL) | Jill Derise | (713) 241-9859 | | |
| EOR Facility Manager | Gerald Yandell | (713) 906-6387 | | |
| LA Onshore Facility Manager | Dennis Cazenave | (985) 873-3454 | | |
| US Operations Support Manager | Larry Lamaison | (504) 728-3246 | | |
| Sr. US Operations SupportCoordinator | Alan Hunsberger | (225) 746-2410 | | |
| Manager HSSE Americas | Carrie Hodgins | (713) 241-2838 | | |
| Safety Officer | Greg Kaul | (713) 423-3345 | | |
| Safety Officer | Michael Marciante | (504) 728-8536 | | |
| Operations Supervisor - (Colex East / West) | Ronnie Brian | (713) 423-3362 | | |
| Operations Supervisor (East Houston) | James Espinoza | (713) 423-3360 | | |
| Operations Supervisor - Port Arthur | Phillip Swenson | (409) 984-7003 | | |
| Asset Supervisor (Mont Belvieu) | Rebecca Weber | (281) 385-0660 | | |
| Operations Assistant (Colex) | Larry Belcher | (281) 620-5115 | | |
| Operations Assistant - (Port Arthur) | Mike Biddle | (409) 984-7008 | | |

| INTERNAL NOTIFICATIONS - INCIDENT MANAGEMENT TEAM (Cont'd) | | | | |
|--|-------------------------------|----------------|---------|-------|
| POSITION/TITLE | NAME | OFFICE | HOME | OTHER |
| Maintenance Supervisor | Gerald Carabajal (Calex West) | (713) 423-3384 | (b) (6) | |
| Area Maintenance Supervisor | David Janwich (Port Arthur) | (409) 984-7009 | | |
| Craft Support (PAPS) | Hansel Lemoine | (337) 373-3204 | | |

| INTERNAL NOTIFICATIONS - QUALIFIED INDIVIDUAL | | | | |
|---|------------|----------------|---------|-------|
| POSITION/TITLE | NAME | OFFICE | HOME | OTHER |
| General Manager Operations GOM-QI/IC | Greg Smith | (504) 728-4474 | (b) (6) | |

| INTERNAL NOTIFICATIONS - ALTERNATE QUALIFIED INDIVIDUAL | | | | |
|---|-------------|----------------|---------|-------|
| POSITION/TITLE | NAME | OFFICE | HOME | OTHER |
| Manager Control Center (AQI) | Jill Derise | (713) 241-9859 | (b) (6) | |

| INTERNAL NOTIFICATIONS - CORPORATE RESPONSE PERSONNEL / OTHER COMPANY CONTACTS | | | | |
|--|--|---------------------------------|---------|-------|
| POSITION/TITLE | NAME | OFFICE | HOME | OTHER |
| GM Trading & Supply Operations AM | Helen Theoret | (403) 384-5577 | (b) (6) | |
| US Maintenance Manager | Karen McCray | (713) 423-3371 | | |
| Asset Integrity & PL Mtce Manager | Scott Anderson | (504) 728-4196 | | |
| | Shell Refinery Deer Park (South Main Gate) | (713) 246-7301 / (713) 246-7402 | | |
| | Motiva Norco Refinery | (504) 465-7342 | | |
| | Motiva Convent Refinery | (225) 562-7681 | | |
| | CHEM-TEL | | | |
| | Shell Media Hotline | (713) 241-4544 | | |
| Head of US MF Communications | Johan Zaayman | (713) 246-6151 | | |
| Comms Advisor | Natalie Mazey | (713) 241-3862 | | |
| Legal Counsel - Environmental | Brian Faulkner | (713) 241-2383 | | |
| 24 Hours | Shell Corporate Security | (713) 241-4773 | | |
| S&D Security Advisor | Tracey Cline | (713) 385-4200 | | |
| Downstream Security Manager | Robert Schoen | (713) 241-6072 | | |
| Land & Permitting Manager | Kyle Webster | (713) 241-5147 | | |

| INTERNAL NOTIFICATIONS - CORPORATE RESPONSE PERSONNEL / OTHER COMPANY CONTACTS (Cont'd) | | | | |
|--|---|----------------|---------|-------|
| POSITION/TITLE | NAME | OFFICE | HOME | OTHER |
| Sr. Land Agent- (Colex) | Steven Van Stone | (713) 241-0174 | (b) (6) | |
| Community Awareness (Colex) | Phil Barker | (713) 423-3382 | | |
| Procurement Mgr GOM | Rachel Gauthier | (504) 425-4602 | | |
| | Shell Corporate Aviation | (713) 241-7075 | | |
| Aviation Contract Manager | Patrick Riley | (985) 858-2632 | | |
| Aviation Advisor | Mark Adolph | (713) 241-7707 | | |
| | Shell Aviation | (713) 241-3490 | | |
| 24 Hours | Shell Corporate Medical | (800) 524-7747 | | |
| | Shell Oil Products Emergency Management Hotline | (877) 242-7400 | | |

FIGURE 2.3**OIL SPILL REMOVAL ORGANIZATIONS**

| USCG CLASSIFIED OIL SPILL REMOVAL ORGANIZATIONS (OSRO) | | | |
|---|----------------------|----------------------------|-------------------------|
| COMPANY | RESPONSE TIME | LOCATION | TELEPHONE |
| Oil Mop, Inc. | 1 HR | Belle Chase, Louisiana | (800) 645-6671 |
| Environmental Safety & Health Consulting Services | 1 Hour | Houma, Louisiana | (888) 422-3622 |
| Garner Environmental Services (Houston, TX) | 60 MIN MAX | Deer Park, Texas | (800) 424-1716 (24 Hr.) |
| Marine Spill Response Corporation (MSRC) | <12 Hours | Herndon, Virginia | |
| Eagle - SWS | 1 HRS | Panama City Beach, Florida | (800) 852-8878 |
| United States Environmental Services | 1 HR | Meraux, Louisiana | (888) 279-9930 (24 Hr.) |

FIGURE 2.4 NOTIFICATION DATA SHEET

| NOTIFICATION DATA SHEET | | |
|--|---|----------------------------|
| Date: _____ | Time: _____ | |
| INCIDENT DESCRIPTION | | |
| Reporter's Full Name: _____ | Position: _____ | |
| Day Phone: _____ | Evening Phone: _____ | |
| Company: Shell Pipeline Company LP (SPLC) | Organization Type: _____ | |
| Facility Address: 777 Walker Street | Owner's Address: 777 Walker Street | |
| Two Shell Plaza | Two Shell Plaza | |
| Houston, Texas 77002 | Houston, Texas 77002 | |
| 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: _____ | | |
| Nearest City: _____ | | |
| County: _____ | State: Texas | Zip Code: 77002 |
| Section: _____ | Township: _____ | Range: _____ |
| Distance from City: _____ | Direction from City: _____ | |
| Container Type: _____ | Container Storage Capacity: _____ | |
| Facility Oil Storage Capacity: _____ | | |
| Material: _____ | | |
| Total Quantity Released | Water Impact (YES or NO) | Quantity into Water |
| | | |
| | | |
| RESPONSE ACTION(S) | | |
| Action(s) taken to Correct, Control, or Mitigate Incident: _____ | | |
| Number of Injuries: _____ | Number of Deaths: _____ | |
| Evacuation(s): _____ | Number Evacuated: _____ | |
| Damage Estimate: _____ | | |
| More information about impacted medium: _____ | | |
| CALLER NOTIFICATIONS | | |
| National Response Center (NRC): | 1-800-424-8802 | |
| Additional Notifications (Circle all applicable): | USCG EPA State OSHA Other _____ | |
| NRC Incident Assigned No.: _____ | | |
| ADDITIONAL INFORMATION | | |
| Any information about the incident not recorded elsewhere in this report: _____ | | |
| NOTE: DO NOT DELAY NOTIFICATION PENDING COLLECTION OF ALL INFORMATION. | | |

FIGURE 2.5
EXTERNAL NOTIFICATION FLOWCHART

External Notification
[Click to view](#)

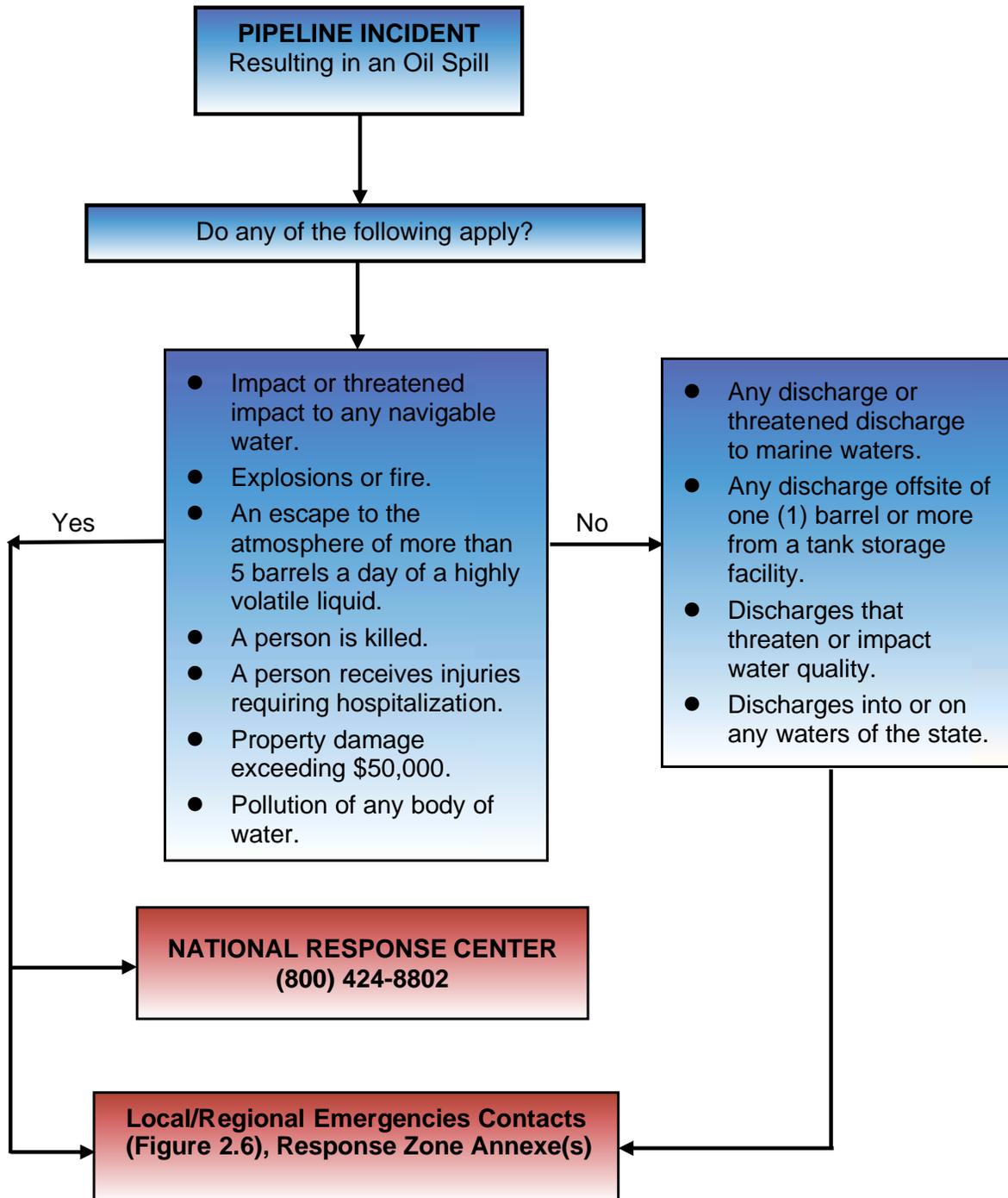
EXTERNAL NOTIFICATION FLOWCHART

FIGURE 2.6
EXTERNAL NOTIFICATION REFERENCES

| REQUIRED NOTIFICATIONS | | |
|---|----------------------------------|--|
| AGENCY | LOCATION | TELEPHONE |
| National Response Center (NRC) | Washington, District Of Columbia | (800) 424-8802 (24 Hr.) (202) 267-2675 (Day Phone) |
| U.S. Coast Guard - Sector New Orleans | New Orleans, Louisiana | (504) 365-2200 (24 Hr.) (504) 365-2390 (Response Dept.) (Day Phone) |
| U.S. Coast Guard - Sector Houston / Galveston | Houston, Texas | (713) 671-5100 (24 Hr.) (713) 671-5113 (Day Phone) |
| U.S. Coast Guard - MSU Port Arthur, TX | Port Arthur, Texas | (409) 723-6500 (24 Hr.) (409) 719-5000 (Day Phone) |
| Texas General Land Office Environmental Hotline | | (800) 832-8224 (24 Hr.) |
| Texas Railroad Commission (TRRC) | Houston, Texas | (512) 463-6788 (24 Hr.) (713) 869-5001 (Day Phone) |
| Texas Parks and Wildlife Rehab 24 Hr Communication | Austin, Texas | (512) 389-4848 (24 Hr.) (512) 389-4726 (Day Phone) |

| ADDITIONAL RESPONSE RESOURCES | | |
|---|---------------------|---------------------------------|
| Planning and Incident Support | | |
| COMPANY | LOCATION | TELEPHONE |
| Valero | Port Arthur, Texas | (409) 988-8330 |
| Motiva Refinery | Port Arthur, Texas | (409) 989-3501 |
| Motiva Refinery (24-Hour Emergency Response (Main | Port Arthur, Texas | (409) 985-4316 / 800-955-5530 |
| Test America | Houston, Texas | (713) 690-4444 |
| Accutest | Houston, Texas | (713) 271-4700 |
| Motiva | Port Arthur, Texas | (409) 989-7632 |
| ERA Helicopters | Houma, Louisiana | (800) 655-1414 |
| VIH Cougar Helicopters Inc.* | Galliano, Louisiana | (985) 475-4534 / (888) 757-4828 |
| Industrial Emergency Services (IES) | Houma, Louisiana | (800) 862-0466 |
| Wildlife Rehab and Education | Houston, Texas | (281) 731-8826 |
| Wildlife Response Services LLC | Seabrook, Texas | (713) 705-5897 |
| Valero Refinery Port Arthur Fire (Main) | Port Arthur, Texas | (409) 985-1201 |
| Tri- State Bird Rescue Newark, Delaware | Newark, Delaware | (302) 737-7241 |
| Williams Fire & Hazard Control, Inc. | Mauriceville, Texas | (409) 727-2347 / (800) 231-4613 |

| MEDIA NOTIFICATIONS | | |
|----------------------------|-----------------|------------------|
| AGENCY | LOCATION | TELEPHONE |
| KTRH 740 AM | Houston, Texas | (713) 212-8740 |
| KUHF 88.7 FM | Houston, Texas | (713) 743-0887 |
| KOVE-FM 106.5 | Houston, Texas | (713) 965-2400 |
| KPRC-TV Channel 2 | Houston, Texas | (713) 222-6397 |
| KHOU Channel 11 | Houston, Texas | (713) 526-1111 |
| KTRK Channel 13 | Houston, Texas | (713) 666-0713 |
| KRIV TV Channel 26 | Houston, Texas | (713) 479-2600 |
| KTMD Channel 48 | Houston, Texas | (713) 974-4848 |

2.3 NOTIFICATION REQUIREMENTS

National Response Center

For all facilities, immediately report all discharges of oil or refined petroleum product into, or likely to reach, navigable waters of the United States (including streams, lakes, rivers, and reservoirs.)

Notification of the regional Coast Guard Captain of the Port is also recommended if release has affected or might affect a navigable waterway.

Discharges of Hazardous Liquids or CO₂ From Pipeline

CFR §195.50; 195.52; 195.54; 195.402(c)(2)

Advisory Bulletin (ADB-02-04)

For a DOT pipeline or facility, immediately report (within 2 hours of discovery) any release of a hazardous liquid or carbon dioxide that:

- results in an unintentional fire or explosion
- causes a death or personal injury requiring hospitalization
- causes property damage, including clean up costs exceeding \$50,000
- is significant in other respects, or
- is 5 gallons* or more.

*However, the First Notification Form is required for internal reporting of all releases of 3 gallons or more to land, including releases to secondary containment.

When notifying the NRC, please provide the most accurate release volume estimate available at the time.

Prompt follow-up reports during the emergency phase of a response are required for the following significant changes:

- An increase or decrease in the number of previously reported injuries or fatalities;
- A revised estimate of the product release amount that is at least 10 times greater than the amount reported;
- A revised estimate of the property damage that is at least 10 times greater than the reported property damage estimate.

An operator should tell the NRC representative if a previous report was filed for the incident and provide the NRC Report Number of the original telephonic.

Releases of Natural or Other Gases

CFR §191.3 and §191.5

For a DOT pipeline or facility, immediately report (within 2 hours of discovery) any event that involved a release of gas from a pipeline that results in one or more of the following consequences:

- A death, or personal injury necessitating in-patient hospitalization;
- Estimated property damage of \$50,000 or more, including loss to the operator or others, or both, but excluding cost lost;
- Unintentional estimated gas loss of three million cubic feet or more; or
- Is significant in other respects.

CERCLA Reporting

Immediately report any release of a CERCLA hazardous substance exceeding the reportable quantity (RQ). 40 CFR 302.4 lists the CERCLA hazardous substances with RQ's. MSDS's may also be used to determine if a spilled substance is reportable under CERCLA.

Under the CERCLA petroleum exclusion, refined petroleum product and crude oil spills do not have to be reported even though these products may contain hazardous substances.

Department of Transportation (DOT)

Written Requirements

For DOT pipelines or facilities, a written report (DOT Form 7000-1) must be filed with the DOT within 30 days after discovery of the accident (fire or explosion, death or personal injury requiring hospitalization and estimated property damage including clean up costs exceeding \$50,000). This form must also be filed within 30 days for any spill that results in a loss of 5 or more gallons of hazardous liquid, carbon dioxide, except for releases of less than 5 barrels (0.8 cubic meters) resulting from a pipeline maintenance activity if the release is:

- Not otherwise reportable
- Does not impact a body of water
- Confined to company property or ROW, and
- Cleaned up promptly

Be sure to review incident for possible employee drug and alcohol testing.

TYPE: In addition to the reporting of accidents to the NRC, a written accident report may be required for incidents.

VERBAL: Call to the NRC meets the required verbal notification under DOT reporting requirement.

WRITTEN: As soon as practicable, an accident meeting any of the requisite criteria must be reported on PHMSA Form 7000-1.

Texas Railroad Commission

Verbal Requirements

For all incidents that are reportable to the National Response Center, notification to the Texas Railroad Commission (TRRC) of the emergency must also be made at the earliest practicable moment (within two hours).

Written Requirements

For releases of crude oil, a written form H-8 must be completed and submitted to the Oil and Gas Division of the Commission within 30 days of discovery of the incident. For releases of hazardous liquids other than crude oil and reportable gas release incidents, a copy of the form completed for the DOT needs to be submitted to the Gas Division of the TRRC within 30 days of discovery of the incident.

Texas General Land Office

TYPE: Oil Spill Notification and Wildlife Protection/Rehabilitation

VERBAL: Immediately (refer to the TGLO Oiled Wildlife Response Information Guide located in Appendix H for additional information)

WRITTEN: As the agency may request depending on circumstances.

Louisiana Department of Environmental Quality

TYPE: Spills that impact or threaten navigable waters or adjoining shoreline.

VERBAL: Calls made to the Louisiana State Police HAZMAT will suffice for this.

WRITTEN: Provide a written report of a reportable release within 7 days of discovery.

U.S. Coast Guard - Sector New Orleans

TYPE: Immediately for all spills that impact or threaten navigable water or adjoining shoreline.

VERBAL: Notification to the USCG is typically accomplished by the call to the NRC.

WRITTEN: As the agency may request depending on circumstances.

Environmental Protection Agency - Region 6

TYPE: Immediately for all spills that impact or threaten navigable water or adjoining shoreline.

VERBAL: Notification to the EPA is typically accomplished by the call to the NRC.

WRITTEN: As the agency may request depending on circumstances.

U.S. Fish and Wildlife Services

TYPE: Wildlife Protection/Rehabilitation

VERBAL: Immediately.

WRITTEN: As the agency may request depending on circumstances.

Occupational Safety and Health Administration (OSHA)

TYPE: Fatality from a work related incident or the inpatient hospitalization of three (3) or more employees as a result of a work related incident.

VERBAL: Immediately.

WRITTEN: As requested by the agency.

BSEE Spill Reporting Requirements (OCS Pipeline Operations)

Bureau of Safety and Environmental Enforcement (BSEE)
1201 Elmwood Park Boulevard
New Orleans, LA 70123-2394
(800) 200-4853
(504) 736-2814 - office
(504) 736-2408 - fax

- Immediately notify the National Response Center (NRC)
- Notify the BSEE Pipeline Section orally without delay in the event of a spill of one (1) bbl or more, all fatalities, all injuries that require evacuation of the injured person(s), all fires and explosions, and all collisions that result in property or equipment damage greater than \$25,000.
- A written follow-up report (hard copy or electronically transmitted) is required within 15 days of the incident.



3.0 RESPONSE ACTIONS

- 3.1 [Initial Response Actions](#)
- 3.2 [Documentation of Initial Response Actions](#)
- 3.3 [Oil Containment, Recovery and Disposal/Waste Management](#)
- 3.4 [Storage/Disposal](#)
- 3.5 [Sampling and Waste Analysis Procedures](#)
- 3.6 [Safety Awareness](#)
- 3.7 [Emergency Medical Treatment and First Aid](#)

Figure 3.1 [Specific Incident Response Checklist](#)

- [Initial Response Actions](#)
- [Fire / Explosion Incidents](#)
- [Product Or Hazardous Material Release](#)
- [Vapor Cloud](#)
- [Security Incidents](#)
- [Hurricane](#)
- [Natural Disaster Incidents](#)
- [Flooding](#)
- [Ground, Marine And Air Traffic](#)

Figure 3.2 [Product Specific Response Considerations](#)

3.1 INITIAL RESPONSE ACTIONS

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

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

- o Initial Response Actions
- o Fire / Explosion Incidents
- o Product Or Hazardous Material Release
- o Vapor Cloud
- o Security Incidents
- o Hurricane
- o Natural Disaster Incidents
- o Flooding
- o Ground, Marine And Air Traffic

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, employees and public safety is first priority**.

The first Company person on scene will function as the Incident Commander (IC) until relieved by an authorized supervisor who will assume the IC position. Transfer of command will take place as more senior management respond to the incident. For response operations within the control of the Local Response Team, the role of IC will typically be assumed and retained by area 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 | |
|---|--|
| <u>PERSONNEL AND PUBLIC SAFETY IS FIRST PRIORITY</u> | |
| CONTROL | <ul style="list-style-type: none">• Eliminate sources of ignition• Isolate the source of the discharge, minimize further flow |
| NOTIFY | <ul style="list-style-type: none">• Make internal and external notifications• Activate local Company personnel as necessary• Activate response contractors and other external resources as necessary |
| CONTAIN | <ul style="list-style-type: none">• Begin spill mitigation and response activities• Monitor and control the containment and clean-up effort• Protect the public and environmental sensitive areas |

In addition to the potential emergency events outlined in this Section, the Company has identified several "abnormal operations" that could occur at the pipeline facilities. The Company has defined the events and established procedures to identify, eliminate or mitigate the threat of a worst case discharge due to these events. In compliance with 49 CFR 195.402(d), these procedures are defined in the Company's Operations Manual.

Working with the Media

The following explains how to work with the media. When an incident occurs, you must know how to work appropriately with the media, the public, and other external audiences.

Note: SPLC seeks to maintain an open line of communication with the media, communities, customers, employees, and the general public. An adverse impression may occur if the public thinks that a company is unresponsive, confused, inept, reluctant, or unable to provide reliable information.

Objectives

The table below describes the primary objectives for working with the public and news media.

| IF... | THEN... |
|-----------------------------|--------------------------------------|
| Dealing with the crisis | Minimize the short-term effects. |
| Working with the news media | Minimize the long-term consequences. |

Research has proven that the more media coverage given to an incident, the more important the public considers it. The media seeks and processes information, and then passes its version on to the general public. Therefore, the media can set the agenda for public discussion. It is important to make sure that the media gets the proper information.

Cooperating with the Media

In crisis situations, it is difficult for corporate people to "win" when they compete with the media, because the battle is always waged on the media's terms. It is easier for corporations to win when they collaborate with the media. When dealing with the media, corporate representatives should be:

- Accessible
- Up front
- Straightforward
- Responsive to the media's needs, and
- A resource before, during, and after a crisis.

Deadlines

The news business is driven by media deadlines. Be aware of deadlines and make them your targets. Knowing their deadlines makes dealing with the media easier. The following table describes the way the various news businesses operate.

| Media Type | Description |
|------------|--|
| Newspaper | <ul style="list-style-type: none"> ● Reporters need time to write their stories in final form. ● A copy editor reviews the story. ● Editors write the headlines and place the articles, not the reporter. |
| Radio | <ul style="list-style-type: none"> ● Stations need time to assemble and edit the interview for broadcast. |
| Television | <ul style="list-style-type: none"> ● Stations must edit the tape into final broadcast form. ● If the incident is a crisis, expect live coverage from the scene and additional in-depth reports during scheduled newscasts. |

What To Do

The following table describes the actions to take in preparation for media response.

| Step | Action |
|------|--|
| 1 | <p>Notify top management and Shell Oil Products Communications and Public Affairs.</p> <ul style="list-style-type: none"> ● Include at least "what happened" and "where." ● Use Shell Oil Products Communications and Public Affairs as an advisor. ● Indicate all the information that is significant at this point. |
| 2 | <p>Send inquiries to a designated Company spokesperson.</p> <ul style="list-style-type: none"> ● Make the reporters want to question the Company sources. ● Be well-informed, reliable, and responsive. |
| 3 | <p>Set up a news center to:</p> <ul style="list-style-type: none"> ● Give verified information directly to the media ● Improve efficiency by gathering, verifying, organizing, and delivering information, and ● Lessen the confusion for individuals dealing with the actual crisis. |
| 4 | <p>Make impact projections.</p> <ul style="list-style-type: none"> ● Help foresee potential problems. ● Send messages relevant to the incident. ● Be aware of all the possible implications of a crisis (chain reactions). |

| Step | Action |
|------|---|
| 5 | Gather a response team. Assemble people to: <ul style="list-style-type: none"> ● Answer phones ● Maintain a media contact log ● Track crisis events ● Verify factual information ● Interpret and analyze technical aspects, and ● Consider the Company-wide implications. |
| 6 | Make a dry run. Maintain training programs to keep potential emergency responders (including the spokesperson) informed of: <ul style="list-style-type: none"> ● Communicating with the media, and ● Current technology in dealing with spills, fires, and explosions. |

Role of Public Affairs

Shell Oil Products Corporate Affairs - Public Affairs personnel are responsible for writing new media releases, staging news conferences, and coordinating most other media-related activities.

Insurance Activation

Activation Process

The table below describes the insurance activation process.

| Person/Group Handling | Action |
|---|--|
| Field land agent | <ul style="list-style-type: none"> ● Notifies the SPLC insurance (optional) and Shell Pipeline Company corporate insurance departments. ● Maintains communication with the Shell Pipeline Company LP corporate insurance department. |
| Alliance corporate insurance department | <ul style="list-style-type: none"> ● Alerts appropriate carrier. ● Maintains communication with the field land agent. |
| Insurance carrier | <ul style="list-style-type: none"> ● Provides claims and investigating services through its SFS - R&I subsidiary (ACE). ● Coordinates claim if another carrier is involved. |

No Activation

Insurance is not activated when the cost of the incident is less than the insurance deductible. Then, land agents determine the fair market value of the property damaged and make settlements with the individual(s) involved.

FIGURE 3.1**SPECIFIC INCIDENT RESPONSE CHECKLIST**

Remember, without exception, personnel safety is the first priority, excessive exposure to the vapor and liquid stages of the spilled product should be avoided.

The following figures describe initial response activity for specific types of incidents. They are intended as guidelines. Each individual responsible for a response action must evaluate each action to ensure Personal Safety prior to conducting that action.

Initial Response Actions

Company Personnel

PERSONNEL RESPONSIBILITIES

Pipeline Controller

After identifying an incident, the Pipeline Controller should follow these steps.

1. Shutdown the pipeline and secure the facility to the extent possible.

Note: For more detailed information concerning "abnormal operations," refer to the Operations Manual for Controllers.

2. Notify the area supervisor or his designated alternate.
3. Notify the Operations Supervisor or his designated alternate.
4. Notify the National Response Center (NRC).

Operations Supervisor

After notification of an incident, the Operations Supervisor should contact:

- Regional Operations Manager (or his designated alternate), and
- Manager Control Center (or his designated alternate).

Area Personnel Responsibilities

After notification of an incident, area personnel should:

The area personnel's general response plan consists of the following four stages which may overlap or occur concurrently:

- Making an initial response
- Defining the problem
- Controlling the situation, and
- Cleaning up and repairing the damage.

Actions

1. Dispatch one or more area/contract employees to the release site and establish the Incident Command System (ICS).
2. Complete a Site Safety Plan. See Appendix H Site Safety Plan

3. Secure the area for safety concerns:

- Human life
- Explosion (including rectifiers)
- Fire, and
- Health (vapors, water contamination, etc.).

If additional site security help is needed, get assistance from Federal, State, and local officials.

4. Assemble response equipment and personnel. Dispatch resources to the release site.

5. Define the problem.

- Locate the head (leading end) of the release.
- Monitor the area to identify all existing hazards and extent of the exposed area.
- Monitor the area to identify any environmental impact (wildlife, water supplies, etc.).
- Determine the necessary personal protective equipment and precautions [oxygen, deficiencies, thermal exposure, high Lower Explosive Limit (LELs), and Permissible Exposure Limit (PELs)].

6. Control the situation.

- Secure the manual valves.
- Take measures to prevent accidents associated with product movement, vapor clouds, or fire.

In highly populated areas:

- Eliminate potential sources of ignition, and
- Use police, fire department, and utility groups to help with evacuation, security, and protection.

In high traffic areas:

- Divert or stop all traffic in the immediate area, and
- Use police, fire department, and utility groups to help with traffic or crowd control.

7. Activate contract employees and equipment as needed.

8. Determine if assistance is needed from an oil spill cooperative (if available) or Local Response Team (LRT). Activate them if needed.

9. Collect the released material into containment sites as quickly as possible.

10. Locate additional containment sites, if needed.

11. Evaluate resources to confirm sufficient personnel and equipment.
12. Clean up to minimize damage to public health and the environment.
13. Repair the damage to the system.

Regional Operations Manager

After notification of an incident, the Regional Operations Manager should do the following.

Actions

1. Determine the class of the incident.
2. Activate the Location Response Team (LRT), if needed.
3. Coordinate additional regulatory calls (after the NRC call).
4. Determine if Head Office assistance is needed.
5. Advise Pipeline or Facility Owner if applicable, if the Owner is other than Shell.

Initial Response Action

The goal of the initial response is to reduce the adverse impacts of the incident.

Making an initial response includes the following.

- Shut the system down.
- Notify the appropriate SPLC personnel and governmental agencies.
- Evaluate system's potential for public hazards and identify immediate response areas utilizing
 - HCA data
 - Risk assessment data
 - Local knowledge
 - Feedback from public officials
- Use the Incident Command System.
- Ensure sufficient response resources are obtained.
- Emphasize to all response personnel the potential dangers of each task and to put safety first. Verify that all workers are trained and equipped for the hazards to which they are exposed. Verify compliance with all applicable Office of Safety and Health (OSHA) Hazardous Waste Operations and Emergency Response Regulations (HAZWOPER) requirements.

Initial Responder Guidelines

First Responder Awareness Level

The following guidelines should be observed by the first person(s) on scene at a release who would be classified as First Responder Awareness Level.

- Approach the release site safely and cautiously. Remain calm. (Your goal is release verification and personal and public safety.)
 - Observe wind direction in case of evacuation.
 - Approach from upwind direction.
 - Do not enter an area with heavy fumes or vapors.
 - Get only close enough to visually assess the area.
 - Attempt to locate the leading edge of the release. Without coming in contact with the product or vapor cloud, take steps to reduce the spread of the release if possible.
- If possible, eliminate source of release (keeping in mind that your goal is release verification and personal and public safety).
- Notify the Control Center of your findings.
- Call your supervisor and get help.
- The senior SPLC representative on site is to assume the role of Incident Commander and utilize the Incident Command System.
- Secure the area for safety reasons.
- Use local authorities to protect life and property. Divert or stop all traffic in the immediate area if necessary and assess the need for evacuation.
- Keep ignition sources away. DO NOT start vehicles in the vicinity of the vapors.
- If the chemical is on fire, remain at a safe distance on site. DO NOT attempt to extinguish the fire.

For HVLs:

- DO NOT ENTER the vapor cloud area, and
- Observe the wind conditions and determine the most likely direction of the vapor cloud movement.

For CARBON DIOXIDE:

- DO NOT ENTER the vapor cloud area
- Observe the wind conditions and determine the most likely direction of the vapor cloud movement, and
- DO NOT ENTER any low lying areas.

First Responder Operations Level

In addition to following all guidelines pertaining to First Responder Awareness Level, the first person (s) on scene at a release who would be classified as First Responder Operations Level may additionally attempt to contain the release from a safe distance, keep it from spreading, and prevent exposures.

First Responder HAZMAT Technician Level

The following guidelines should be observed by the first person(s) on scene at a release who would be classified as First Responder HAZMAT Technician Level.

The following guidelines apply to all releases for facilities that handle crude oil, refined products, or chemicals.

- Do not enter the "Hot Zone" unless personal protective equipment is used along with the "Buddy System" and the responders are enrolled in the respiratory protection program.
- Minimum Personal Protective Equipment (PPE) required (however additional levels may be required depending upon the exposure potential):
 - Self contained breathing apparatus
 - Chemical resistant jacket (hip length, with hood)
 - Chemical pants and chemical resistant boots (or boot covers)
 - Chemical resistant gloves (taped)
 - Hard hat

Required monitoring equipment:

- Gas monitor(s) for measuring LEL, O₂, and if necessitated by release type H₂S, and
- Manual sampling pump with benzene tubes/chips.
- Approach the release site safely and cautiously.
- Continuously check the site with a monitor and immediately evacuate the hot zone area if any alarm sounds.
- Take benzene readings at various locations to define exposure levels and "zones".
- Document all monitoring data.
- Evaluate the monitoring data to determine exclusion, decontamination and safe zones and communicate results to IC for safety briefings, and future monitoring schedules.

Fire / Explosion Incidents

Fire and/or Explosion

Responding to a Fire

In the event of a fire at or near any of the SPLC facilities, SPLC personnel must take action as appropriate to protect employees and public safety.

Fire Control By Onsite Personnel

Contact local firefighting authorities. Fire containment and mitigation (e.g., shutting off the fuel or ignition sources, extinguishing the fire, etc.) may be initiated by onsite personnel only if it is safe to engage in such activities. If fire is in the incipient stage, trained personnel may utilize the facility fire extinguishers if safe to do so. Facility personnel are trained only to the incipient stage.

Guidelines

When a fire occurs, consider these guidelines.

- See "Initial Responder Guidelines" heading above.

People Related:

- Call for fire and medical assistance.
- Consider evacuating the area if there are nearby residential or commercial dwellings.
- Assist the emergency rescue personnel with injured and/or trapped individuals.

Fire Related:

- Determine when the fire started.
- Prevent secondary problems due to flame impingement, or spills and runoff. Spray other nearby tanks and structures with cool water to avoid ignition.
- Consult with local firefighting authorities for method of dealing with fire.

Tank Related:

- Determine the tank status (inactive, pumping in or out, gauge level, tank/roof condition).
- Isolate the tank from connecting lines and facilities if possible.
- Determine the tank contents (material and characteristics).
- Determine the type of roof (cone, external floater, internal floater, seal material) on the tank. If the tank has a cone roof, determine if it is equipped with flame arresters, emergency vent shutoffs, snuffers, or other types of fire prevention equipment.

- Review the fire wall area, drainage (dike drains), proximity of the equipment, and exposed piping.

Responding to Explosions Near or at a Pipeline Facility

In the event of an explosion at or near any of the SPLC facilities, SPLC personnel must take action as appropriate to protect employees and public safety.

Damage Assessment / Control By Onsite Personnel

Contact local firefighting authorities and police. Damage assessment/control may be initiated by on site personnel only if it is safe to engage in such activities.

Guidelines

When an explosion occurs, consider these guidelines.

- See "Initial Responder Guidelines" heading above.

People Related:

- Call for fire and medical assistance if necessary.
- Account for personnel known to be working at or near the facility.

Explosion Related:

- Survey the facility for damage.
- Try to determine if there is an obvious source of the explosion. For example, ignition of vapors, rapid release of gas or liquid, outside source (collision, bomb, etc.), electrical equipment (transformers, distribution panels, etc.).
- Considering the source of the explosion and damage if any, isolate the facility to limit additional fuel or fire or explosions.

Product or Hazardous Material Release

Oil on Water

Guidelines

If there is an oil release on water, consider these guidelines.

- See "Initial Responder Guidelines" heading above.
- Cease pumping and close valves to prevent any further release.
- Determine the release source and prevent any further flow from the pipeline. Contain the oil and prevent any further contact with water.
- Remember that flammable vapor concentrations can exist near spilled oil. (For example, as much as 50% of the original volume of gasoline can evaporate in 10 minutes at 60.5°F.) Use explosive meters and safety precautions to prevent fire, explosions, asphyxiation, or health risks to response personnel.
- Eliminate possible sources of ignition.
- Determine the actual speed of the oil on water. Remember that oil on water may not travel at the same velocity as the river or stream (due to wind, oil gravity). Use this knowledge for boom placement.
- Set booms considering river speeds and oil pickup points. Consider cascading booms (several layers) if necessary.
- Contact the Emergency Management Teams and other marine response cooperatives for emergency response assistance, if needed.
- Consider accessing the release sites by boat rather than land vehicles to protect shorelines and other sensitive areas.
- Close water intakes.

Tracking Oil

A number of techniques will be used to track the movement of an oil slick, including:

- Direct observation from aircraft, vessels, or elevated areas
- Buoy tracking systems
- Radiometric oil spill surveillance systems (ROSSS), and
- Spill trajectory predictions.

Buoy and ROSSS tracking systems could be accessed through response cooperatives. Trajectories could be generated by the Scientific Support Coordinator (i.e., through Unified Command) or by local personnel using the vector addition analysis method. The vector addition analysis method involves plotting the two primary factors that influence the movement of the slick (i.e., surface currents and

wind) to determine the estimated trajectory of the slick.

Cleanup, Storage, Handling, and Disposal

To clean up, store, handle, and dispose of the oil on water, consider these guidelines.

- Use skimmers to remove the oil from the water surface.
- Use sorbent pads and sorbent booms to remove the oil sheen from the water surface.
- Try to limit the amount of water picked up with the oil when recovering oil.
- Consider alternatives to vacuum trucks for on-scene storage of recovered oil.
- Only use dispersants with agency approval and if advised by the Head Office Environmental Group.
- Make sure that the removal and disposal of oil, water, and debris is consistent with regulatory requirements. Consult a Company environmental representative.

Oil on Land

Guidelines

If a release of oil occurs on land, consider these guidelines.

- See "Initial Responder Guidelines" heading above.
- Cease pumping and close valves to prevent any further release of oil.
- Determine the release source and prevent further flow from the pipeline.
- Remember that flammable vapor concentrations can exist near spilled oil. (For example, as much as 50% of the original volume of gasoline can evaporate in 10 minutes at 60°F.) Use explosive meters and safety precautions to prevent fire, explosions, and asphyxiation or health risks to the response personnel.
- Eliminate possible sources of ignition. Do not start vehicles in the vicinity of volatile materials that have been released.
- To avoid vapor ignition, divert or stop traffic if the release impacts a roadway.
- Prevent oil from entering into drainage or sewer systems, water courses, irrigation channels, or culverts. Block drains, dam ditches, and boom water courses and irrigation channels.

Response Strategies

Oil either spreads out or penetrates downward when released on land. When the oil penetration is rapid and the depth of groundwater is shallow, the preferable strategy may be to let the oil spread. If the land surface is impermeable, the desirable strategy may be to allow or cause the oil to collect in pools. If oil collects in pools in a contained area, consider using water as a layer between the oil and the ground.

Cleanup, Storage, Handling, and Disposal

Consult with a Company environmental representative for guidance on cleanup, storage, handling and disposal. If possible, treat soil on site.

Estimating Volumes

The following describes several recommended methods that can be used to estimate the volume of material released during an incident. Each incident is considered unique and requires its own solution to determine the volume of released material, therefore, other methods not described below may also be used with the approval of the Head Office Environmental Support Group.

Method Determination

If possible, use more than one method for classified incidents. For most unclassified incidents, Method 1 should be adequate.

Note: Management reviews the volume estimated for regulatory reporting.

Method 1

In Method 1, the first foreman/Incident Commander arriving on the scene performs the estimate. The details of Method 1 are:

| Detail | Description |
|---------------|---|
| Determination | Experience based and estimated by observed impact |
| Purpose | <ul style="list-style-type: none"> Volume estimate to determine an order of magnitude on which to classify release event Volume estimate for initial regulatory reporting |
| Estimate | Visual, determined by viewing the area covered and pooled oil (typically done without numerical calculation) |

Method 2

Method 2 is an instrumentation-based calculation for classified incidents. Area personnel and Transportation Engineering personnel perform the estimate by using Control Center or other system instrumentation data. The details of Method 2 are:

| Detail | Description |
|---------------|---|
| Determination | Calculated volume estimate |
| Purpose | <ul style="list-style-type: none"> A release volume estimate calculated using data from system instrumentation and real time events Confirmation of release volume estimate for Method 1 |
| Estimate | $VR = [FR \times (DT + RT)] + DV$ VR = volume released FR = flow rate DT = detection time RT = response time (time to shut in and close valves) DV = drainage volume (including pressure release volume and line drainage volume) |

Method 3

Method 3 is a calculation of the volume recovered and the loss of the material to the air, ground, and water. The Area and Transportation Engineering personnel perform the estimate with input from Control Center, Head Office Environmental Support Group and field survey data. The details of Method 3 are:

| Detail | Description |
|---------------|--|
| Determination | A calculated volume estimate |
| Purpose | <ul style="list-style-type: none"> Confirmation of release volume estimate for Methods 1 or 2, or Calculated volume released when instrumentation data is insufficient |
| Estimate | $VR = VV + (SV \times SR) + PV$ VR = volume released VV = volatilized volume (calculated by E&T Environmental) SV = soil volume (field mapped to identify surface area covered and depth of penetration) SR = saturation ratio (field determined with Environmental Support - Transportation Engineering) PV = pooled volume (field determined) |

Method 4

Method 4 is a line balance calculation from inventory and meter reading loss/gain changes following system restart and stabilization. Line balance is defined as: (Opening Inventory + Receipts) - (Closing Inventory + Deliveries). Area personnel and Transportation Engineering personnel perform the estimate with startup Control Center data or location data (as appropriate). The details of Method 4 are:

| Detail | Description |
|---------------|--|
| Determination | System repack volume |
| Purpose | A confirmation of volume lost estimate for follow-up reporting |
| Estimate | $VR = LB_{post} - LB_{prior} - LR_{vol}$ VR = volume released LB _{post} = system imbalance following system startup and stabilization LB _{prior} = system imbalance prior to release occurrence LR _{vol} = line repair volume removed |

The accuracy of this method depends upon:

- The amount of line drainage that occurs following the release
- How well the system was purged of air during restart
- System complexity
- Temperature changes, and
- Product batches in the system.

Method 5

Method 5 is a calculation based on the beginning batch size versus the delivered batch size. Area personnel, measurement and engineering personnel in Transportation Engineering perform the estimate with Control Center and/or field data defining batch loss/gain. The details of Method 5 are:

| Detail | Description |
|---------------|--|
| Determination | Batch volume loss |
| Purpose | <ul style="list-style-type: none"> • Confirmation of release volume estimate for Methods 1 or 2, or • Calculated volume released when instrumentation data is insufficient |
| Estimate | $VR = VV + (SV \times SR) + PV$ <p>VR = volume released VV = volatilized volume (calculated by E&T Environmental) SV = soil volume (field mapped to identify surface area covered and depth of penetration) SR = saturation ratio (field determined with Environmental Support - Transportation Engineering) PV = pooled volume (field determined)</p> |

Note: Only use this method if batch operations are occurring and the released material has been batch-identified. The spreading of batch interfaces during system downtime may be significant. This occurrence reduces the accuracy of this method.

Method 6

Method 6 is an executable program that may be used to calculate spill volumes on water. The program determines the volume of a spill based on the surface area of the oil on the water and color of the sheen. The program may be executed by clicking on the MMS Pipeline Leak Estimator program.

Method 7

Method 7 is a calculation for determining the amount of oil contained in contaminated soil. This calculation is based on the volume of the soil contaminated and pore space of the soil.

| Detail | Description |
|---------------|--|
| Determination | A calculated volume estimate based on volume of soil contaminated and pore space of soil |
| Purpose | Confirmation of volume lost estimate for Method 1 |
| Estimate | <ol style="list-style-type: none"> 1. Measure the volume of the soil contaminated. <i>width x length x depth = cubic feet</i> 2. Determine average pore space between the soil grains--15% to 26% (pure sand). 3. Determine the cubic feet of oil contained in the soil by multiplying the result of step 2 by result of step 1. 4. Determine the gallons of oil contained in the soil by multiplying the result of step 3 by 7.48 (gallons/cubic feet). 5. Determine the barrels of oil contained in the soil by dividing the result of step 3 by 42 (gallons/barrel). |
| Example | <p>You have a release site are of 30 feet by 25 feet by six inches. Determine the amount of oil in barrels contained in the soil. Assume the pore space to be 20%.</p> <ol style="list-style-type: none"> 1. Volume of soil contaminated=$30 \times 25 \times .5 = 375$ cubic feet 2. Average pore space=.20 3. Oil contained in the soil(in cubic feet)=$375 \times .20 = 75$ cubic feet 4. Oil contained in the soil (in gallons)=$75 \times 7.48 = 555$ gallons 5. Oil contained in the soil (barrels)=$555 / 42 = 13.2$ barrels |

Gas Detection & Confirmation by On Site Personnel

In the event of gas being detected in a building on or near SPLC facilities, SPLC personnel should take action as appropriate to protect employees and public safety.

Contact the gas utility companies and/or other gas pipeline operations in the immediate area. Begin leak detection procedures and mitigation procedures (e.g., shutting off the gas and ignition sources, etc.) only if it is safe to engage in such activities.

Guidelines

When gas is detected in or near a building, consider these guidelines.

- See "[Initial Responder Guidelines](#)" heading above.

People Related

- Consider evacuating the area if there are nearby residential or commercial dwellings.

Release Related

- Determine the location and source of the gas release.
- If a vapor cloud has developed, assess the extent and coverage of the vapor cloud and determine the hazardous areas.
- Refer to guidelines under the "Responding to Vapor Clouds" heading below.

Gasoline Containing MTBE on Land

Additional precautions are required during response and cleanup of gasoline containing MTBE because of its greater potential impact, than most other traditional components, upon the environment. Significant MTBE release characteristics are:

- It moves about 20 times faster in the underground than benzene
- It is about 24 times more soluble in water than benzene
- It degrades very slowly in the environment, and
- Groundwater remediation projects are 1.5 to 5 times more expensive.

Guidelines

If a release of gasoline occurs on land, follow these guidelines.

- See "Initial Responder Guidelines" heading above.
- Cease pumping and close valves to prevent any further release of gasoline.
- Determine the release source and prevent further flow from the pipeline.
- Remember that flammable vapor concentrations can exist near spilled gasoline. Use explosive meters and safety precautions to prevent fire, explosions, and asphyxiation or health risks to the response personnel.
- Eliminate possible sources of ignition. Do not start vehicles in the vicinity of volatile materials that have been released.
- To avoid vapor ignition, divert or stop traffic if the release impacts a roadway.
- Prevent gasoline from entering into drainage or sewer systems, water courses, irrigation channels, or culverts. Block drains, dam ditches, and boom water courses and irrigation channels.
- Make appropriate notifications to regulatory agencies, internal SPLC management, and Environmental Support.

Response Strategies

The following strategies are recommended for response to a gasoline release containing MTBE in order of normal occurrence.

- Minimize area of surface soil impacted by free product (e.g., damming). Contact with surface runoff or standing water should be prevented, whenever possible.
- Recover pooled hydrocarbon as soon as possible. Free hydrocarbons may be floated with water to aid recovery if increase vapors and agitation can be avoided. The water will act as barrier to reduce further infiltration of pure hydrocarbon into the soil. This water will later have to be removed and probably treated. If free hydrocarbon IS NOT present, do not add water to the impacted area.
- Recover all free water in contact with the release area.
- Remove heavily impacted soil (saturated with hydrocarbons, very strong hydrocarbon smell) as soon as possible after product/water removal. Place in a bin/rolloff or a waste pile lined on the bottom and covered on the top with plastic sheeting to prevent contact with rainwater and contamination of other areas. Drums may be used for very small spill cleanups.

If removal of heavily-impacted soil is delayed or contaminated soil is left in place pending final disposition, the follow action should be taken if the possibility of rain exists to minimize contact with rainfall.

- Cover area with plastic sheeting, overlap seams, weigh down with sandbags.
- Use shallow ditches to divert rainwater around contaminated site.
- Promptly remove any rain water that does accumulate on the site.

The following steps should be taken working together with environmental support to minimize long term risk from the site:

- Sample contaminated soil still in place
- Characterize and dispose of removed soil
- Estimate proper cleanup target
- Remove and dispose of more soil, if necessary
- Install groundwater monitoring wells or monitor existing wells if necessary, and
- Provide follow-up communication with regulatory agencies if necessary.

MTBE Characteristics

The following lists general facts associated with MTBE:

| Item | Property |
|---------------------------|-------------------------|
| Appearance | clear, colorless liquid |
| Concentration in gasoline | up to 15% |
| Flash point | -15 to -20 °F |
| TLV-TWA | 40 ppm (proposed) |
| Odor threshold | 20-50 ppm (in water) |
| Boiling point | 130 °F |
| Solubility in water | 4.3% |
| RQ - CERCLA | 1,000 pounds |
| Liquid specific gravity | 0.74 |
| Vapor density | 3 times air |

Vapor Cloud

Individual Who Discovers the Emergency

If an incident occurs when the pipeline is transporting gas or highly volatile liquids (HVLs) or refined products, there is a strong possibility of vapor cloud formation.

Material Specific Gravity

When an incident occurs, the specific gravity of the vapor material is relevant. Vapors that are heavier than air seek low spots, such as ditches and depressions in the ground. Therefore, the higher specific gravity of a material released, the more likely its vapor cloud would hug the ground.

The following table lists the specific gravities of possible release materials using the specific gravity for air as a base.

| Material | Specific Gravity |
|-------------|------------------|
| Acetone | 0.791 |
| Air | 1.00 |
| Benzene | 0.8835 |
| Butadiene | 0.63 |
| Butane | 2.04 |
| Ethane | 1.04 |
| Ethylene | 0.98 |
| Gasoline | 3.00 |
| Hydrogen | 0.07 |
| Natural Gas | 0.55 |
| Propane | 1.56 |
| Propylene | 1.45 |

Weather

Wind and general weather conditions can affect vapor clouds. Such conditions can cause the boundary area to move and enlarge. If an incident occurs, determine the most likely direction of vapor cloud movement based on the wind direction.

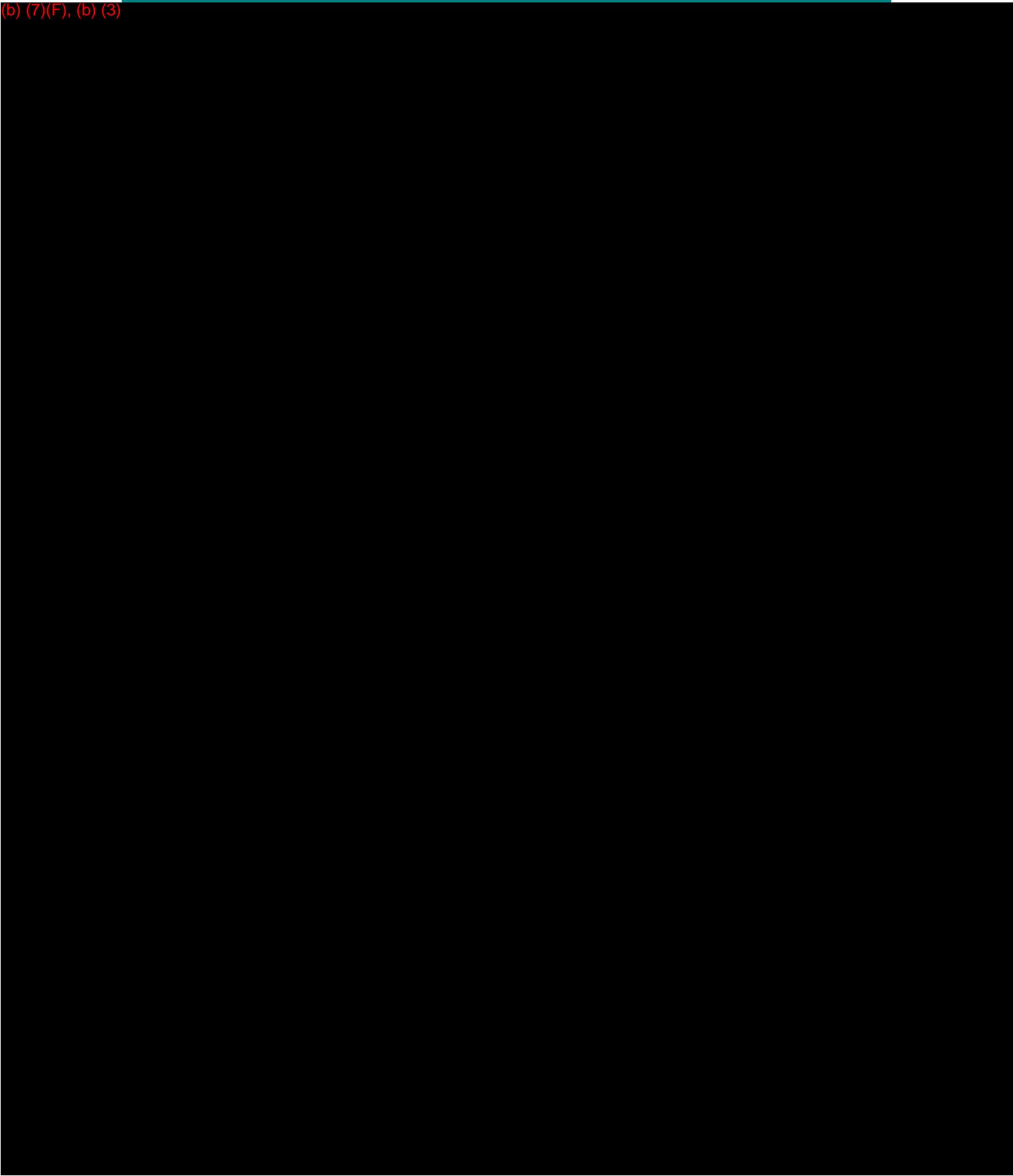
Response Actions

This table describes the procedure to follow if an incident causes a vapor cloud formation.

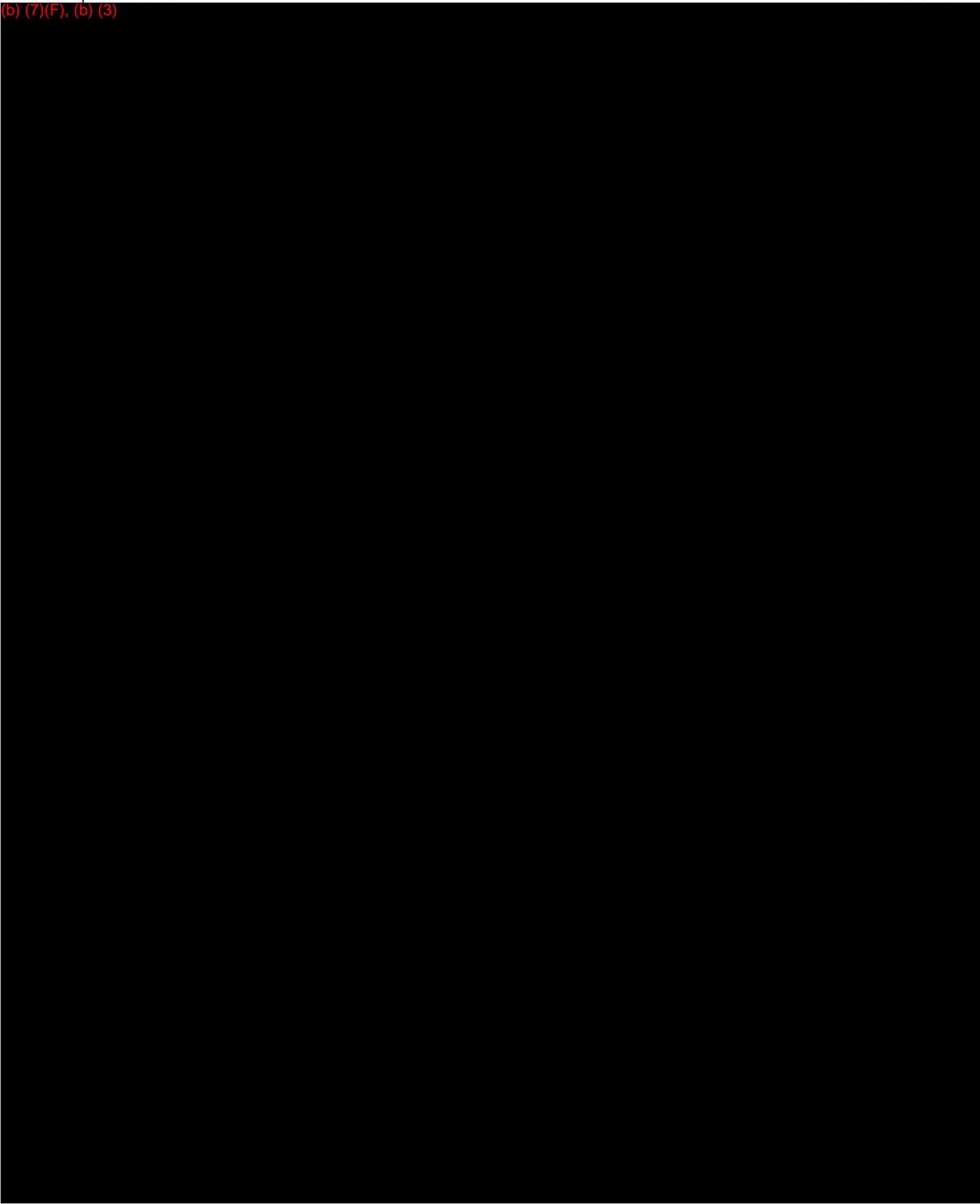
| Step | Action | | | | | | |
|---------|--|----------------|---------|--------|--|---------|---|
| 1 | <p>The Initial Responder:</p> <ul style="list-style-type: none"> ● Discovers the vapor cloud ● Determines the material causing the vapor cloud, and ● Notifies the Controller and maintenance crew. <p>See "Initial Responder Guidelines" listed previously in this section.</p> | | | | | | |
| 2 | <p>The Controller:</p> <ul style="list-style-type: none"> ● Isolates the pipeline by closing the remotely-operated valves | | | | | | |
| 3 | The maintenance crew isolates the pipeline by closing the manually operated valves. | | | | | | |
| 4 | The Initial Responder determines: | | | | | | |
| | <table border="1"> <thead> <tr> <th>IF there is...</th> <th>THEN...</th> </tr> </thead> <tbody> <tr> <td>A fire</td> <td>Remain at a safe distance on site, until relieved.</td> </tr> <tr> <td>No fire</td> <td>Keep ignition sources away and work with fire department to disperse the vapor cloud.</td> </tr> </tbody> </table> | IF there is... | THEN... | A fire | Remain at a safe distance on site, until relieved. | No fire | Keep ignition sources away and work with fire department to disperse the vapor cloud. |
| | IF there is... | THEN... | | | | | |
| A fire | Remain at a safe distance on site, until relieved. | | | | | | |
| No fire | Keep ignition sources away and work with fire department to disperse the vapor cloud. | | | | | | |
| No fire | Keep ignition sources away and work with fire department to disperse the vapor cloud. | | | | | | |
| 5 | <p>The Initial Responder:</p> <ul style="list-style-type: none"> ● Determines the boundary area of the vapor cloud and the vapor concentration using explosimeter or Draeger tube ● Barricades or identifies the boundary area ● Identifies the affected area that exists 1,500 feet outside of boundary area and the areas downwind of the vapor cloud ● Determines the people and facilities within the affected area, and ● Notifies the police to evacuate the affected area (including areas downwind of the vapor cloud, outside of the affected area). | | | | | | |
| 6 | Police evacuate the boundary area. | | | | | | |
| 7 | Fire department disperses the vapor cloud with a sustained flow of water spray. | | | | | | |
| 8 | <p>The Initial Responder stays on site until:</p> <ul style="list-style-type: none"> ● Relief arrives ● Vapor cloud is completely dispersed, or ● Fire is burned out and the vapor cloud no longer exists. | | | | | | |

Security Incidents

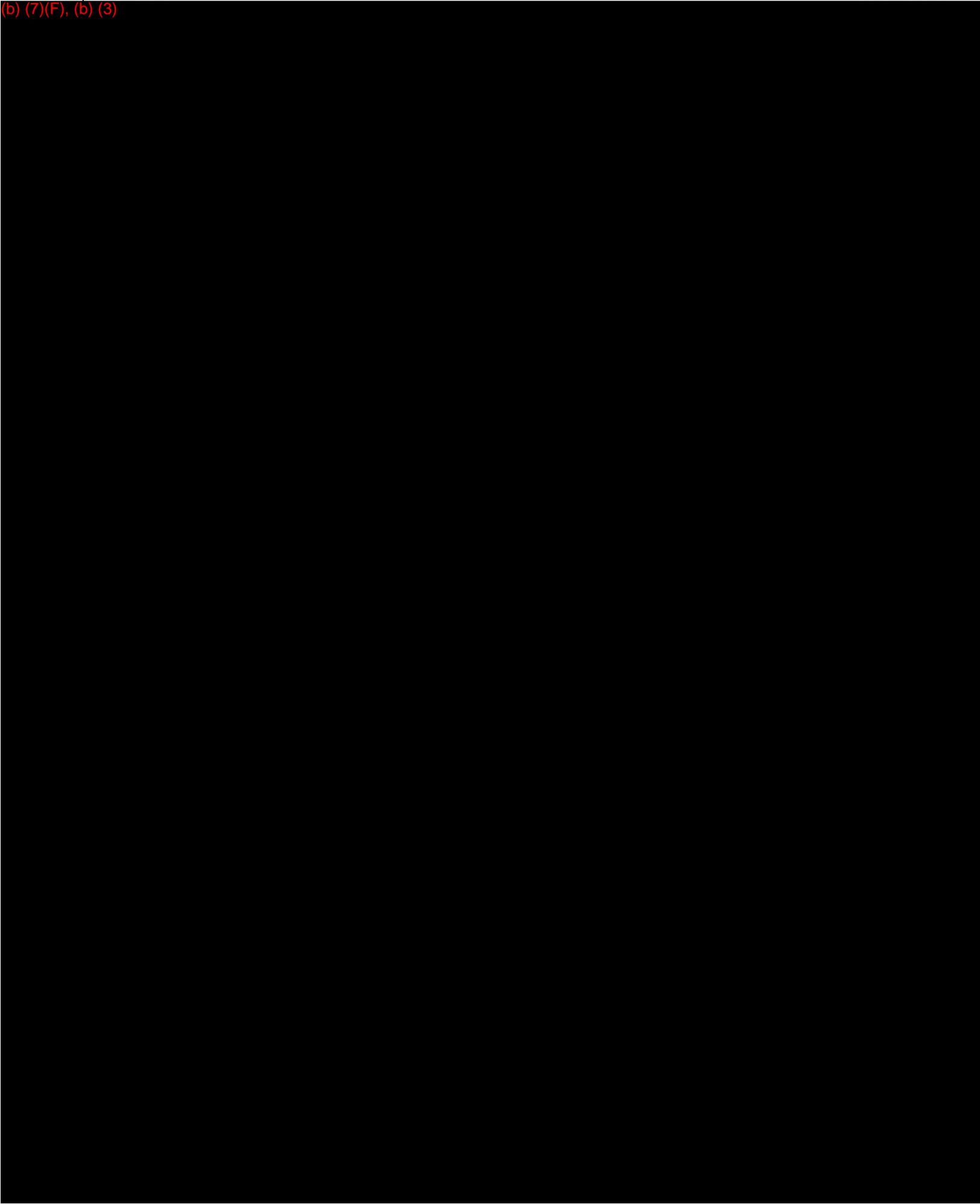
(b) (7)(F), (b) (3)



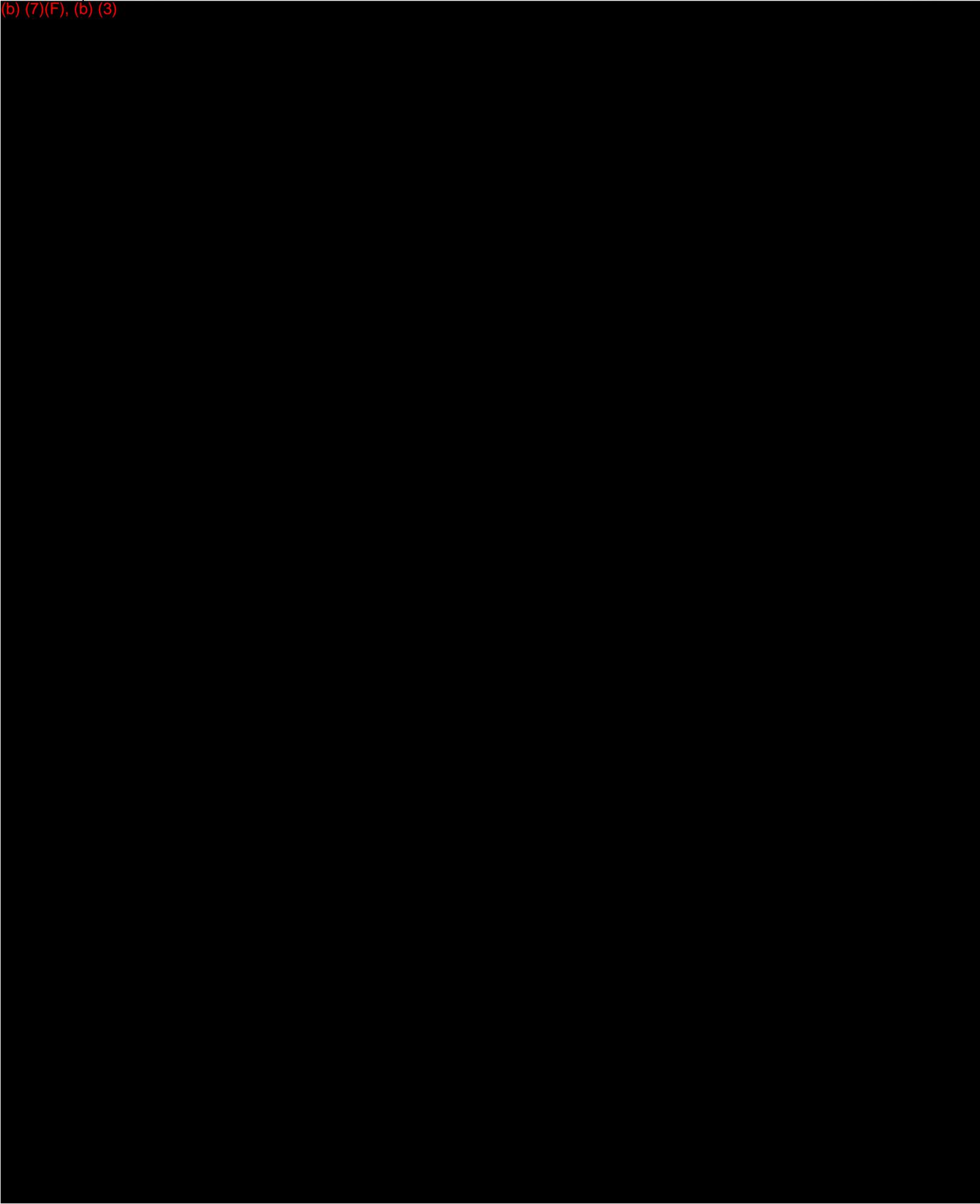
(b) (7)(F), (b) (3)



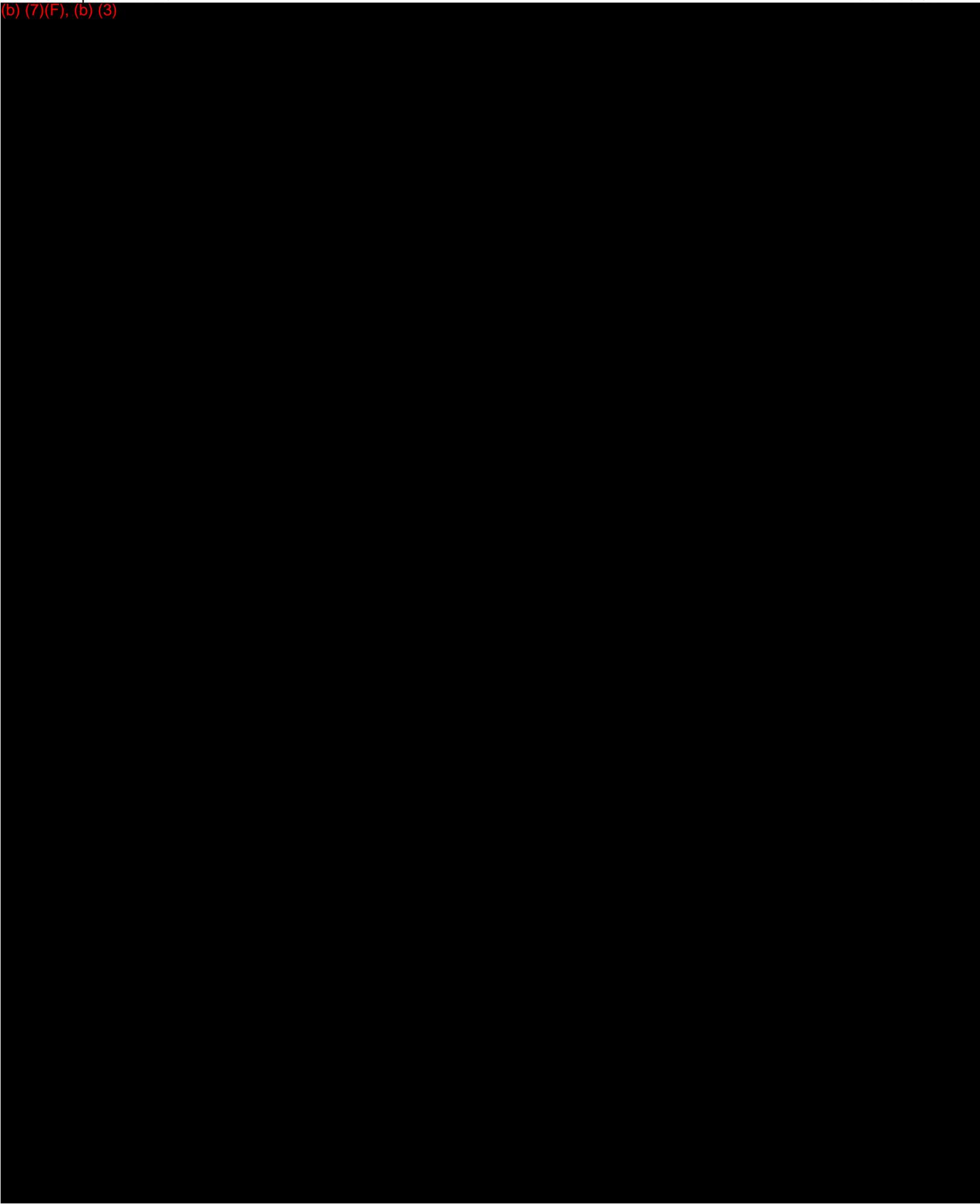
(b) (7)(F), (b) (3)



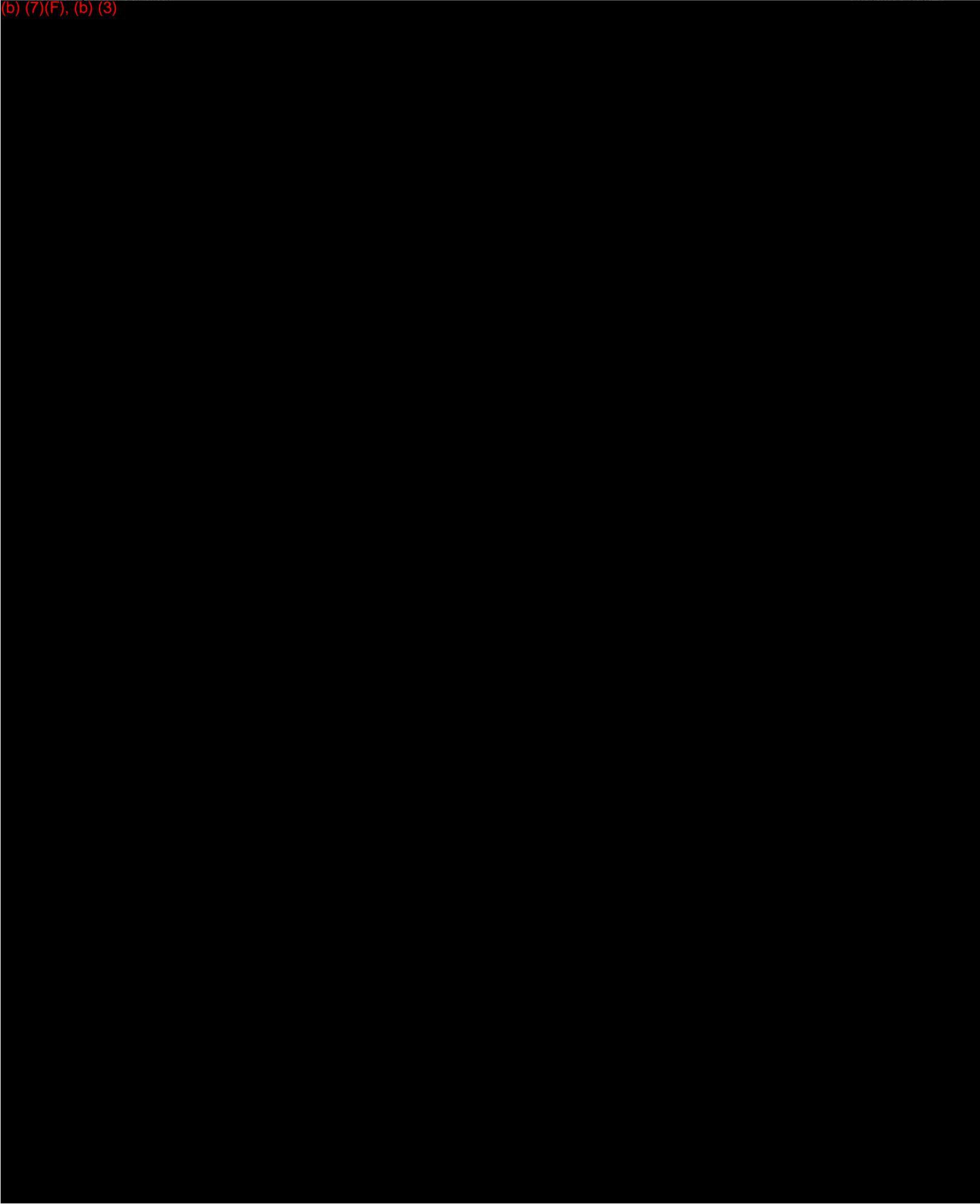
(b) (7)(F), (b) (3)



(b) (7)(F), (b) (3)



(b) (7)(F), (b) (3)



Hurricane

Hurricane Response

When a hurricane threatens:

- monitor news reports to plot movement of the hurricane
- determine which pipeline facilities will be affected by the hurricane, and
- contact appropriate Company personnel.

Note: Company management will decide whether the pipeline facility will be attended and/or operated during the hurricane. Refer to the GOM Hurricane Response Plan for further guidance.

For pipeline facilities which will be affected by the hurricane:

- secure equipment that will be susceptible to damage from high winds
- board or tape windows
- arrange for first aid, drinking water, emergency lighting and food if management decides to have the facility attended during the hurricane, and
- maintain adequate inventory in tanks to prevent tanks from floating.

When a hurricane hits:

- monitor the progress of the hurricane, and
- monitor SCADA system for indications of leaks.

After a hurricane hits, correct any damage to the facility and restart operations after obtaining proper approval.

Natural Disaster Incidents

Tornado or Severe Storms

A tornado may be monitored and detected by:

- listening to news reports--know the difference between tornado watch and tornado warning
- sighting of a funnel formation on the ground or in the clouds, or
- hearing a roar that sounds like a jet or a locomotive.

If a tornado is a direct threat to a pipeline facility:

- notify appropriate Company personnel
- shut down the pipeline facility
- inform others and take appropriate shelter, and
- after the tornado passes, correct any damage to the facility and restart operations after obtaining proper approval.

Note: Circumstances may require changing the order in which these guidelines are performed.

Flooding

Flooding Response

Special Considerations

Below are the special considerations to take into account, depending on the magnitude of the flooding, amount of damage, and prevalent conditions.

- Be alert to areas of flooding and have personnel available for emergency response actions such as shutdown, isolation, and containment.
- Consider extending regulator vents and relief stacks above the level of anticipated flooding as appropriate.
- Evaluate the accessibility of pipeline facilities, such as valve setting needed to isolate water crossings or other sections of pipeline that might be jeopardized.
- Perform frequent patrols to evaluate right-of-way conditions at water crossings during flooding and after waters subside. Determine if flooding has exposed and/or undermined pipelines as a result of forming new channels or erosion of riverbeds.
- Coordinate with other pipeline companies in the flood area and provide personnel to emergency response centers to act as a liaison for pipeline issues. Provide maps and information on pipeline location and condition to emergency responders.

Determine if normally aboveground facilities (valves, regulator and relief sets, etc.) that have become submerged could be struck by craft operating in flooded areas and supply maps to emergency response centers and mark with buoys, as appropriate.

- Perform surveys to determine the depth of cover over pipelines and notify landowners of reduced cover. Agricultural agencies may be helpful in reminding farmers of the potential hazard of reduced cover over pipelines.
- Assure that line markers are still in place and remind contractors, highway departments, and others involved in excavation and clearing activities associated with flood clean-up of the presence of pipelines and the operating hazards that could occur due to reduced pipeline cover.

Ground, Marine and Air Traffic

Traffic Control Needs

The first responder or IC will evaluate the release site to determine whether or not ground and marine traffic will hamper the spill response. The FOSC may evaluate air traffic. In the event that control is required before local state, or federal agencies arrive, the first responder or IC will follow the guidelines presented in the table below.

| Traffic Control Needed | Response Requirements |
|------------------------|---|
| Ground | <p>Call 911 and describe the location and nature of the release.</p> <p>Request highway patrol, sheriff, police, or fire department assistance.</p> <p>If manpower permits:</p> <ul style="list-style-type: none"> ● cordon off the area with hazard cones and yellow hazard tape ● consider temporary use of vehicles to barricade streets if vehicular traffic is in danger, and ● keep pedestrians away from the site. |
| Marine | <p>In the event that such a spill reaches marine waters:</p> <ul style="list-style-type: none"> ● notify the Coast Guard immediately ● request the Captain of the Port to provide assistance for controlling marine vessels, and ● to the extent possible, warn vessels and boats that traversing the release area may be dangerous and may jeopardize response operations. <p>Leave patrolling and control activities to the direction of Coast Guard or the Captain of the Port.</p> |
| Air | <p>Contact the Federal Aviation Administration (FAA) if it appears that air traffic control will be required. (Upon approval, the FAA will immediately issue a Notice to Airmen ("NOTAM")).</p> <p>Be prepared to describe the geographical location, or if known, the latitude and longitude of the release.</p> |

3.2 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 that 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/operations.
- 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.
- **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).**

3.3 OIL CONTAINMENT, RECOVERY AND DISPOSAL/WASTE MANAGEMENT

After initial response has been taken to stop further spillage and notifications made to the required agencies, the Company will begin spill containment, recovery, and disposal operations for any released material.

The Incident Commander will assess the size and hazards of the spill. The type of product, the location of the spill, and the predicted movement of the spill will be considered.

Based on this assessment, additional clean up personnel and equipment will be dispatched to the site and deployed to control and contain the spill. Boom may be deployed in waterways to contain the spill and to protect socio-economic and environmentally sensitive areas. Booms may also be used in waterways to deflect or guide the spill to locations where it can more effectively be cleaned up using skimmers, vacuum trucks, or sorbent material. Clean up equipment and material will be used in the manner most effective for rapid and complete clean-up of all spilled product.

Response and cleanup will continue until all recoverable product is removed, the environment is returned to its pre-spill state, and the unified command of the Company's Incident Commander and the On-Scene Coordinators determine that further response and cleanup is no longer necessary.

FIGURE 3.2

PRODUCT SPECIFIC RESPONSE CONSIDERATIONS

| FLAMMABLE LIQUIDS (Non-Polar/Water-Immiscible) | |
|---|--|
| The following information provides the initial responder(s) with data that may be useful in making quick decisions and executing prompt response actions. The information is intended for guideline purposes only. | |
| HEALTH | |
| GUIDE NO. 128 | <ul style="list-style-type: none"> ● Inhalation or contact with material may irritate or burn skin and eyes. ● Fire may produce irritating, corrosive and/or toxic gases. ● Vapors may cause dizziness or suffocation. ● Runoff from fire control or dilution water may cause pollution. |
| FIRST AID | |
| <ul style="list-style-type: none"> ● Move victim to fresh air. ● Call 911 or emergency medical service. ● Give artificial respiration if victim is not breathing. ● Administer oxygen if breathing is difficult. ● Remove and isolate contaminated clothing and shoes. ● In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes. ● Wash skin with soap and water. ● In case of burns, immediately cool affected skin for as long as possible with cold water. Do not remove clothing if adhering to skin. ● Keep victim warm and quiet. ● Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed. ● Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. | |
| PUBLIC SAFETY | |
| <ul style="list-style-type: none"> ● Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions. ● Keep unauthorized personnel away. ● Stay upwind. ● Keep out of low areas. ● Ventilate closed spaces before entering. | |
| EVACUATION | <p>Large Spill</p> <ul style="list-style-type: none"> ● Consider initial downwind evacuation for at least 300 meters (1,000 feet). <p>Fire</p> <ul style="list-style-type: none"> ● If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions. |
| Information provided by the Emergency Response Guidebook 2008. | |

| FLAMMABLE LIQUIDS (Polar/Water-Miscible) | |
|--|--|
| The following information provides the initial responder(s) with data that may be useful in making quick decisions and executing prompt response actions. The information is intended for guideline purposes only. | |
| HEALTH | |
| GUIDE NO. 127 | <ul style="list-style-type: none"> ● Inhalation or contact with material may irritate or burn skin and eyes. ● Fire may produce irritating, corrosive and/or toxic gases. ● Vapors may cause dizziness or suffocation. ● Runoff from fire control or dilution water may cause pollution. |
| FIRST AID | |
| <ul style="list-style-type: none"> ● Move victim to fresh air. ● Call 911 or emergency medical service. ● Give artificial respiration if victim is not breathing. ● Administer oxygen if breathing is difficult. ● Remove and isolate contaminated clothing and shoes. ● In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes. ● Wash skin with soap and water. ● In case of burns, immediately cool affected skin for as long as possible with cold water. Do not remove clothing if adhering to skin. ● Keep victim warm and quiet. ● Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves | |
| PUBLIC SAFETY | |
| <ul style="list-style-type: none"> ● CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover. ● As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. ● Keep unauthorized personnel away. ● Stay upwind. ● Keep out of low areas. ● Ventilate closed spaces before entering. | |
| EVACUATION | <p>Large Spill</p> <ul style="list-style-type: none"> ● Consider initial downwind evacuation for at least 300 meters (1,000 feet). <p>Fire</p> <ul style="list-style-type: none"> ● If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions. |
| Information provided by the Emergency Response Guidebook 2008. | |

| FLAMMABLE LIQUIDS - TOXIC | |
|--|--|
| The following information provides the initial responder(s) with data that may be useful in making quick decisions and executing prompt response actions. The information is intended for guideline purposes only. | |
| HEALTH | |
| GUIDE NO. 131 | <ul style="list-style-type: none"> ● TOXIC; may be fatal if inhaled, ingested or absorbed through skin. ● Inhalation or contact with some of these materials will irritate or burn skin and eyes. ● Fire will produce irritating, corrosive and/or toxic gases. ● Vapors may cause dizziness or suffocation. ● Runoff from fire control or dilution water may cause pollution. |
| FIRST AID | |
| <ul style="list-style-type: none"> ● Move victim to fresh air. ● Call 911 or emergency medical service. ● Give artificial respiration if victim is not breathing. ● Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. ● Administer oxygen if breathing is difficult. ● Remove and isolate contaminated clothing and shoes. ● In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes. ● Wash skin with soap and water. ● In case of burns, immediately cool affected skin for as long as possible with cold water. Do not remove clothing if adhering to skin. ● Keep victim warm and quiet. ● Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed. ● Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. | |
| PUBLIC SAFETY | |
| <ul style="list-style-type: none"> ● CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover. ● As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. ● Keep unauthorized personnel away. ● Stay upwind. ● Keep out of low areas. ● Ventilate closed spaces before entering | |
| EVACUATION | <p>Large Spill</p> <ul style="list-style-type: none"> ● See the Emergency Response Guidebook Table 1 for evacuation distances. <p>Fire</p> <ul style="list-style-type: none"> ● If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions. |
| Information provided by the Emergency Response Guidebook 2008. | |

3.4 STORAGE/DISPOSAL

Introduction

The following describes the procedures used to store, handle, and dispose of materials generated during a release incident and the associated cleanup.

Note: Contact your local environmental representative for guidance on storing, handling, and disposing wastes generated from spills.

Materials Generated by a Release

SPLC has identified four distinct categories of materials generated by a release and the associated cleanup:

- Recovered oil
- Oil-contaminated natural debris (leaves, twigs, etc.)
- Oil-contaminated cleanup material (sorbent pads, oily rags, etc.), and
- Oil-impacted soil.

Storage Procedures

Recovered Oil

Possible storage methods include:

- Vacuum trucks
- Frac tanks
- Drums
- Storage tanks at SPLC facilities
- Barges
- Lined pits, or
- Other appropriate means.

When determining the type of storage container to use, consider the:

- Amount and type of oil to recover
- Availability of storage containers
- Time needed to obtain and set up the storage vessels, and
- Location of release.

Note: The Control Center may provide information on the type of material in the pipeline at the time of the release. Also, product/crude assays and Material Safety Data Sheets may be helpful in providing information about product/crude types in the pipeline.

Contaminated Natural Debris

When determining the type of storage container to use, check the amount and size of the contaminated natural debris. The table below describes the options.

| If there is a... | Then consider using... |
|------------------------------------|--|
| Small to moderate amount of debris | UN drums, dumpsters, or roll-off boxes. |
| Large amount of debris | Surface piles. Plastic linings, tarps, or other protection may be required under the piles to prevent further spread of contamination. |

Contaminated Cleanup Material

When determining the type of storage container to use, check the amount of contaminated cleanup materials produced at the site. To store this material, use:

- UN approved drums
- Dumpsters, or
- Other appropriate containers.

Note: You can place small volumes of contaminated materials in six mil plastic bags or plastic buckets for easy handling.

Impacted Soil

If possible, leave the impacted soil in place so external storage is not needed. If soil removal is needed to facilitate cleanup, help repair the pipeline, or limit further environmental impact, then surface piles are acceptable for storage. Plastic liners under these piles may be necessary.

To limit storm water runoff, consider precautions such as:

- Covering piles with tarps or plastic, or
- Building a berm around the piles.

Note: If there is only a small amount of impacted soil, then consider storing it in a similar way as contaminated natural debris.

Handling Procedures

Recovered Oil

Possible methods to handle and transport recovered oil to a suitable pipeline injection point or refinery include:

- Vacuum trucks
- Transporters, or
- Other appropriate modes.

The actual equipment and method used depend on the:

- Amount and type of oil recovered
- Location
- Distance to be transported, and

- Equipment that is readily available in the area.

When a release occurs in water, take special care in handling and recovering the oil in order to limit the amount of water recovered with the oil. If you recover large amounts of water with the oil, consider using some sort of oil/water separator to reduce the amount of water to be handled and transported.

Handling Contaminated Natural Debris

To ensure proper treatment and handling of contaminated natural debris, classify it as hazardous or non hazardous. The options for classifications are:

- Use knowledge about similar debris from prior release sites, or
- If no prior knowledge, collect samples and have an SPLC approved laboratory perform the laboratory analysis.

Note: Contact a Company environmental representative for assistance with classification.

Make every effort to contain the oil and lessen the debris impacted. When determining the way to handle, consider the:

- Size
- Type
- Amount, and
- Classification.

The handling methods include:

- Hand collection
- Hand tools (rakes, shovels, etc.)
- Backhoes, and
- Bulldozers.

To handle and transport contaminated natural debris, follow these guidelines.

- Wear the required personal protective equipment (PPE) to handle any debris
- Follow all applicable RCRA, DOT, and hazardous communication regulations
- Check all containers for defects, proper placement, alignment, and closure.

Handling Contaminated Cleanup Material

To ensure proper treatment and handling of contaminated cleanup material, classify it as hazardous or non-hazardous. The options for classification are:

- Use knowledge about similar material from prior release sites if possible, or
- If no prior knowledge, collect samples and have an SPLC approved laboratory perform the laboratory analysis.

To reduce the amount of contaminated cleanup material to handle and transport, use sorbent and other materials appropriately during the response. Use and collect these cleanup materials by hand.

To handle and transport contaminated cleanup material, follow these guidelines:

- Wear the required PPE to handle any contaminated material.
- Follow all applicable RCRA, DOT, and hazardous communication regulations.
- Check all containers for defects, proper placement, alignment, and closure.

Impacted Soil

When possible, treat impacted soil in place. (See the pages entitled "Disposal" for further information on treating soils.) This procedure reduces the need for handling and transportation. When soils are handled, use normal excavating equipment, such as:

- Shovels
- Backhoes, and
- Bulldozers.

The particular method for a particular site is based on the:

- Amount and type of the soil
- Location of the release
- Availability of equipment, and
- Time constraints.

If you must transport the soil off site, follow all applicable Resource Conservation and Recovery Act (RCRA), Department of Transportation (DOT), and hazard communication regulations.

Disposal Procedures

Recovered Oil

When possible, do not dispose of recovered oil. Instead, recycle it by injecting it back into the pipeline system or into one of the recovery systems at a refinery.

Contaminated Natural Debris

To reduce the amount of natural debris needing disposal, make every effort to clean the natural debris (so it can stay in place) including:

- Low and high pressure flushing
- Manual removal of oil, and
- Other appropriate cleaning techniques.

Possible treatment/disposal options for contaminated natural debris include:

- Burning on or off site
- Remediation on or off site, or
- Landfilling.

Follow these guidelines to dispose of contaminated natural debris.

- Get input from a Company environmental representative and regulatory agency on the best approach for the given situation.
- Choose the disposal/treatment method.

- Have a Company environmental representative handle all the necessary permits and other details.

If you must dispose of the contaminated natural debris:

- Conduct all the necessary testing required by applicable regulations and the particular disposal sites. Have an SPLC approved laboratory carry out all tests, and
- Use a SPLC approved disposal site to discard all debris.

Contaminated Cleanup Material

To reduce the amount of contaminated cleanup material needing disposal, recycle and reuse response materials (booms, boots, etc.) whenever possible.

However, you must properly dispose of some materials used in the clean up (such as sorbent pads, disposable gloves, etc.). Follow these guidelines to dispose of contaminated cleanup material:

- Get a laboratory analysis to help determine what type of facility is appropriate for a given material (hazardous or nonhazardous)
- Make sure that an SPLC approved laboratory runs all the tests, and
- Dispose of all waste in an SPLC approved facility.

Have the Company environmental representative:

- Assist in collecting test samples
- Obtain necessary permits
- Select disposal facilities, and
- Carry out the disposal.

Impacted Soil

In most cases, you should try to remediate impacted soil instead of disposing of it. The following table describes the factors to consider when treating/disposing of impacted soil.

| Factor | Description |
|-------------------------------|---|
| Decision-making criteria | <ul style="list-style-type: none"> • sampling results • soil characteristics • location |
| Strategy | <p>Possible remediation techniques include:</p> <ul style="list-style-type: none"> • natural biodegradation • soil vapor extraction • landfarming, and • other methods. |
| Monitoring protocols | EPA method SW846 is followed. |
| Obtaining regulatory approval | The local environmental representative contacts the regulatory agencies to get the necessary permits. |

| Factor | Description |
|---------------------|--|
| Obtaining equipment | The local environmental representative contacts environmental consultants to conduct sampling and provide remediation equipment. |

If you cannot remediate the contaminated soils and must dispose of them, conduct the tests required by the disposal facility and consider the following:

- Have an SPLC approved laboratory run all tests, and
- Dispose of the waste in an SPLC approved facility.

3.5 SAMPLING AND WASTE ANALYSIS PROCEDURE

The Company's sampling and waste analysis practices are governed by the regulations for the applicable state and the United States Environmental Protection Agency (EPA). These regulations outline methods and procedures for determining the chemical and physical characteristics of wastes generated by the terminal, including waste associated with spills, so that they may be properly stored, treated, or disposed of.

3.6 SAFETY AWARENESS

General Response Safety

All Company and contractor personnel are expected to comply with the Site Safety and Health Plan for each spill incident. This document has been written as a supplement to the Carson Safety and Health Plan or to whatever specific Health and Safety Plan that may be written by a contractor working at the Carson Terminal to fulfill the Company's language contained in specific contract documents between the contractor and the Company.

- Any concern regarding health or safety issues should be immediately addressed.
- The First Responder must consider the spill site as dangerous and the local atmosphere explosive until air monitoring procedures prove that the area is safe.
- The First Responder must exit the area against or across the wind if possible and must also evacuate others who are working in the area.
- All injuries, no matter how minor, must be reported to the Terminal Manager in a timely manner.
- Prior to entering a spill area, a qualified person must perform an initial safety and health evaluation of the site.

Air Monitoring

- A Safety Monitor shall be designated who is trained in the operation of air monitoring equipment. The Incident Commander must ensure that Safety Monitors are trained and that their equipment is maintained and ready for use.
- The air monitoring equipment shall be activated and checked at the location in which it is stored.

- Air monitoring measurements which are to be made prior to entry into the spill area include:
 - Lower Explosive Limit (LEL)
 - Oxygen content
 - Benzene level
- LEL readings above 10% require immediate evacuation of the area and elimination of ignition sources.
- Oxygen readings below 19.5% require the use of air supplied respiratory protection.
- After assuring that there are no hazards relating to explosion or oxygen depletion, sampling for benzene shall dictate the appropriate respiratory devices to be used by persons entering the area as follows:
 - Benzene***
 - 0.50 PPM or less, none required
 - 0.50 to 1.0 PPM, half face air purifying
 - to 50.0 PPM, full face air purifying
 - 50.0 PPM or greater, pressure demand SCBA
 - The Incident Commander is responsible for industrial hygiene monitoring in the post discovery period.

Decontamination

Through training programs, terminal personnel know and understand the importance of the removal of hazardous substances from their person if they are contaminated. Within the terminal, eyewash stations and, in some cases, safety showers are located strategically to quickly remove gross contamination of harmful agents, including gasoline. Personnel must immediately shower and remove any clothing which is wet or otherwise contaminated. Showers in the change room are to be used for thorough cleansing. Persons should inspect themselves thoroughly before donning a fresh change of clothing. Employees who become saturated with gasoline should supply a urine sample (for the benzene standard's phenol test) at the end of their shift.

Contaminated clothing should be allowed to dry, protected from an ignition source, then laundered before wearing again. Contaminated personal protective equipment must be washed and sanitized before re-using. The washing of contaminated equipment is performed in a "contained area" to assure that the disposal of the wash water can be handled properly.

Establishing "Exclusion - Hot", "Decontamination - Decon", and "Support - Safe" zones are required to prevent the removal of contaminants from the containment area as well as unauthorized entry into contaminated areas.

- Regardless of the decontamination facilities available, all efforts to minimize personnel exposure should be taken.
- Decontamination facilities should be positioned prior to employee/ contractor entrance to areas where the potential for exposure to contamination exists. The appropriate Material Safety Data Sheets (MSDS) are available to aid health professionals treating the injured parties. MSDS are separately maintained at the Facility.

- Decontamination facilities should be designed to prevent further contamination of the environment and should have a temporary storage area for items that will be reused in the contaminated area.
- Particular attention should be paid to personal hygiene prior to eating, drinking, or smoking.
- The appropriate decontamination procedure will depend on the contaminant and its physical properties. The decontamination stations and process should be confined to the Contamination Reduction Zone. Steps for personnel decontamination are outlined in the Eight-Step Decontamination Plan in Appendix H.
- Additional information regarding decontamination requirements can be found in the Terminal Manual.

Personal Protective Equipment (PPE)

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

| Personal Protective Equipment (PPE) | |
|--|---|
| <p>LEVEL A</p> <ul style="list-style-type: none"> ● Self Contained Breathing Apparatus (SCBA) (worn inside suit) ● Encapsulated Chemical Protective Suit ● Chemical Protective Gloves ● Chemical Protective Boots ● Hard Hat ● Safety Toe Footwear ● Safety Glasses | To be selected when the greatest level of skin, respiratory, and eye protection is required. |
| <p>LEVEL B</p> <ul style="list-style-type: none"> ● SCBA (worn outside suit) ● Chemical Protective Suit w/Hood ● Chemical Protective Boots ● Chemical Protective Gloves ● Hard Hat ● Safety Toe Footwear ● Safety Glasses | To be selected when the highest level of respiratory protection is necessary but a lesser level of skin protection is needed. |
| <p>LEVEL C</p> <ul style="list-style-type: none"> ● Air Purifying Respirator (APR) ● APR a½ Face / Full Face ● Hard Hat ● Glasses (worn with a½ face APR) ● Chemical Protective Boots ● Chemical Protective Gloves ● Chemical Protective Suit/Tyvek ● Safety Toe Footwear ● Safety Glasses | To be selected when the concentration and type of airborne substances is known and the criteria for using air purifying respirators are met. |
| <p>MODIFIED LEVEL C</p> <ul style="list-style-type: none"> ● Same as level C except no APR requirements. | To be selected when the concentration and type of airborne substances is known and the criteria for using air purifying respirators are met. |
| <p>LEVEL D</p> <ul style="list-style-type: none"> ● Hard Hat ● Safety Glasses ● Work Uniform / Clothes ● Leather Gloves ● Safety Boots ● Nomex (if required by the Company) | The atmosphere contains no known hazard and work functions preclude the potential for unexpected inhalation of or contact with hazardous levels of any chemicals. |

3.7 EMERGENCY MEDICAL TREATMENT AND FIRST AID

General Medical and First Aid Procedures

If personnel are injured, immediate steps will be taken to address the injuries, and medical treatment will be requested as soon as possible. Any emergency medical treatment administered prior to the arrival of medical personnel will be limited to addressing the immediate needs of the individual as necessary.



4.0 RESPONSE TEAMS

4.1 [Introduction](#)

4.2 [Qualified Individual](#)

4.3 [Response Teams](#)

4.4 [Incident Command System](#)

4.5 [Unified Command](#)

Figure 4.1 [Command Staff](#)

Figure 4.2 [Operations Section](#)

Figure 4.3 [Planning Section](#)

Figure 4.4 [Logistics Section](#)

Figure 4.5 [Finance Section](#)

4.1 INTRODUCTION

This section describes organizational features and duties of the Qualified Individual and the Gulf of Mexico Region - West Response Zone Incident Command System (ICS).

The Gulf of Mexico Region - West Response Zone ICS is based upon the National Incident Management System and is consistent with the ICS procedures utilized by many agencies and the oil industry worldwide.

The Local Response Team will provide first response to an incident at a facility. Emergency Management (EM)-managed Teams will respond, to the degree necessary, to incidents exceeding local capability and when requested. If additional assistance is needed, the Local Incident Commander will activate the EM-managed Teams, which may include:

- An AWAY Team
- A National Response Team (NRT)
- The Houston Command Center (HCC)
- A Corporate Emergency Response Team (CERT)
- The SOP US/Motiva Crisis Management Team (CMT)

An explanation of ICS and the roles and responsibilities for primary members of the Local Response Team is provided in this Section.

The U.S. Occupational Safety and Health Administration (OSHA) requires that organizations which respond to emergencies involving hazardous materials adopt a nationally recognized Incident Command System [29 CFR 1910.120(q)(3)(i)]. The Incident Management System (IMS) is based upon *The National Incident Management System (NIMS)*, as developed by the Department of Homeland Security. Personnel assigned specific positions on response teams are thoroughly familiar with their roles and responsibilities, and participate in specified training programs and exercises simulating oil spill events.

The NIMS ICS is used to manage emergency response activities. Because ICS is a management tool that is readily adaptable to incidents of varying magnitude, it will typically be used for all emergency incidents. Staffing levels will be adjusted to meet specific response team needs based on incident size, severity, and type of emergency.

The USCG Incident Management Handbook (IMH) contains an in-depth description of all ICS positions, ICS development, response objectives and strategies, command responsibilities, ICS specific glossary/acronyms, resource typing, the Incident Action Plan (IAP) process, and meetings.

4.2 QUALIFIED INDIVIDUAL

The Qualified Individual (QI) is responsible for the full implementation of the Facility Response Plan and is trained for these responsibilities. The Designated Alternate provides relief to the QI as needed to ensure that at least one QI is available to respond on a 24 hour basis. The QI/AQI is responsible for implementing response plans, directing response operations, and resolving internal conflicts that arise during response operations either directly or through the use of qualified designees.

It is the responsibility of the Qualified Individual (QI) or his/her designee to coordinate with the Federal On-Scene Coordinator (FOSC) and State On-Scene Coordinator (SOSC) throughout the response.

Vital duties of the Qualified Individual (QI) include:

- Initiate internal notifications and hazard communication systems to notify all Facility personnel.
- Notify all response personnel, as needed.
- Identify the character, exact source, amount, and extent of the release, as well as the other items needed for notification.
- Notify and provide necessary information to the appropriate Federal, State, and local authorities with designated response roles, including the National Response Center (NRC), State Emergency Response Commission (SERC), and local agencies.
- Assess the interaction of the spilled substance with water and/or other substances stored at the Facility and notify response personnel at the scene of that assessment.
- Assess the possible hazards to human health and the environment due to the release. This assessment must consider both the direct and indirect effects of the release (i.e., the effects of any toxic, irritating, or asphyxiating gases that may be generated or the effects of any hazardous surface water runoffs from water or chemical agents used to control fire and heat-induced explosion).
- Assess and implement prompt removal actions to contain and remove the substance released.
- 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 cleanup activities.
- Direct cleanup activities until properly relieved of this responsibility.
- Arrangements will be made to ensure that the Qualified Individual (QI) or the Alternate Qualified Individual (AQI) is available on a 24-hour basis and is able to arrive at the Facility in a reasonable time.
- The AQI shall replace the QI in the event of his/her absence and have the same responsibilities and authority.

4.3 RESPONSE TEAMS

LOCAL RESPONSE TEAM - TIER I

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

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.

Refer to the job descriptions detailed in this Section for the primary response team positions.

The LRT should try to fill the positions and request additional support from Emergency Management to fill/back up all of the remaining positions, as the incident dictates. Telephone reference is provided in Figure 2.1. Job descriptions of the primary response team positions are detailed in this Section.

EM-MANAGED RESPONSE TEAMS - TIER II & III

Shell and Motiva management resources available for incident response include:

- A National Response Team
- AWAY Team
- Houston Command Center (HCC)
- Corporate Emergency Response Team (CERT)
- SOP US/Motiva Crisis Management Teams

National Response Center

Shell and Motiva maintain one National Response Team that covers the entire US for incidents that require a Tier II or Tier III response.

A National Response Team, once fully staffed, is designed to cover all aspects of a comprehensive and prolonged incident response. During a prolonged response, additional personnel from within the Company may be cascaded in, and more than one level within the Team may be involved to sustain 24-hour operations.

National Response Team Organization

The National Response Team is organized according to Incident Command System principles. Led by Unified Command, the team includes the following principal components:

- Command Staff
- Operations
- Planning

- Logistics
- Finance

Membership

The National Team is staffed by specially trained personnel from various Shell and Motiva business units and by consultants.

AWAY Team

The AWAY Team is a component of the National Response Team, and is composed of designated, Houston-based personnel from various Shell and Motiva departments. Upon activation, the AWAY Team will preliminarily:

- Assess the magnitude of the incident and its potential impact;
- Estimate the level of effort necessary for minimizing its impact; and
- Depart to the scene of an incident from the Shell Corporate Hanger at Houston Bush Intercontinental Airport as soon as possible, typically within two hours after being activated.

Once on scene, the AWAY Team will use the Incident Command System to:

- Manage the incident response; or
- Support the Local Team by integrating with the local response organization, providing liaison to government agencies and the news media, supporting or taking over any duties mutually agreed to, and helping keep the HCC and the SOP US/Motiva CMT informed.

Houston Command Center

When activated, the Houston Command Center (HCC) will be staffed to provide 24-hour facility support, including managing field activities from the HCC until the AWAY Team and/or National Team arrives on scene.

For vessel incidents, the HCC will be the initial command post and Spill Management Team until an AWAY Team and/or National Team arrives and a new Incident Command Post is established. Once this is complete, the HCC will support the incident until no longer needed.

Corporate Emergency Response Team

The Corporate Emergency Response Team (CERT) is a cross functional team of emergency responders from the operating business units. CERT members possess skills in one or more of the following areas:

- Incident Command
- Safety Officer
- Medical Unit Leader

- Operations Skill Pool
 - Fire fighting leadership
 - Hazardous materials response
 - Rescue
- Planning Section Chief

CERT members may be activated to respond to any non-oil spill emergency. In the event ICS support positions are required that are external to the CERT, personnel from the National Response Team will fill those positions.

Shell Oil Products US/Motiva Crisis Management Teams

The SOP US/Motiva Crisis Management Teams manage crisis-related issues at the SOP US/Motiva Executive Leadership level. The Teams provide guidance on issues that have the potential to significantly impact the Company's reputation or operations, or pose a significant legal, regulatory, or financial liability.

The appropriate CEO, in accordance with the SOP US/Motiva Crisis Management Plan, will activate the SOP US/Motiva Crisis Management Team.

4.4 INCIDENT COMMAND SYSTEM

The Incident Command System (ICS) 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, federal and public sector emergency response personnel
- Provide a solid cornerstone for emergency planning efforts

A description of each ICS position, the primary responsibilities, and pre-emergency planning activities are provided in Figures 4.1 - 4.5.

A brief overview of the entire ICS Structure is presented below.

ICS Overview
[Click to view](#)

Emergency Management

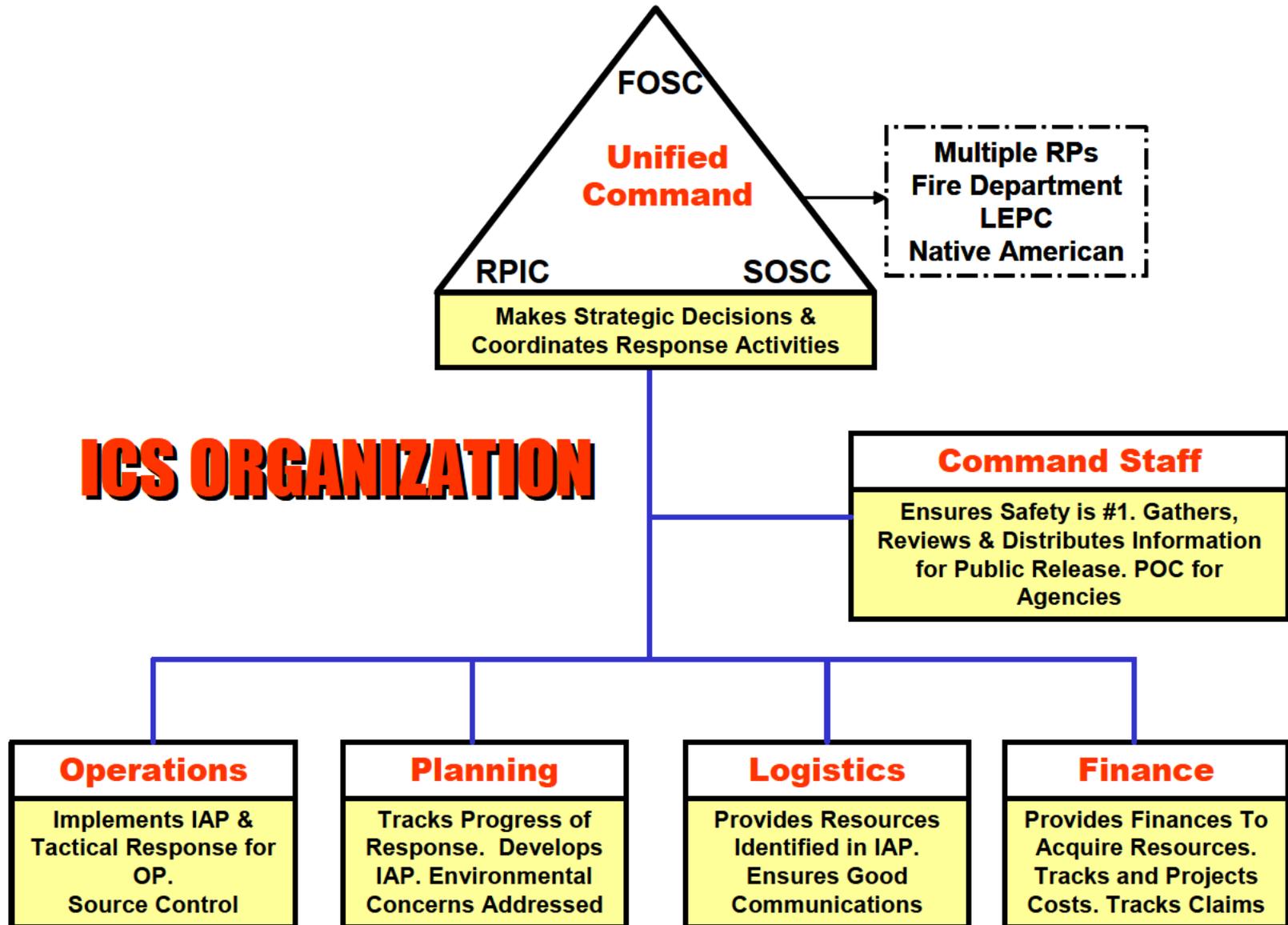
Martin Padilla - Manager

**NATIONAL RESPONSE
TEAM**

**SHELL AMERICAS
RESPONSE TEAM**

**Billy Powell
Ed Hawthorne
Steve Majid
Todd Barr
Rick Ferguson**



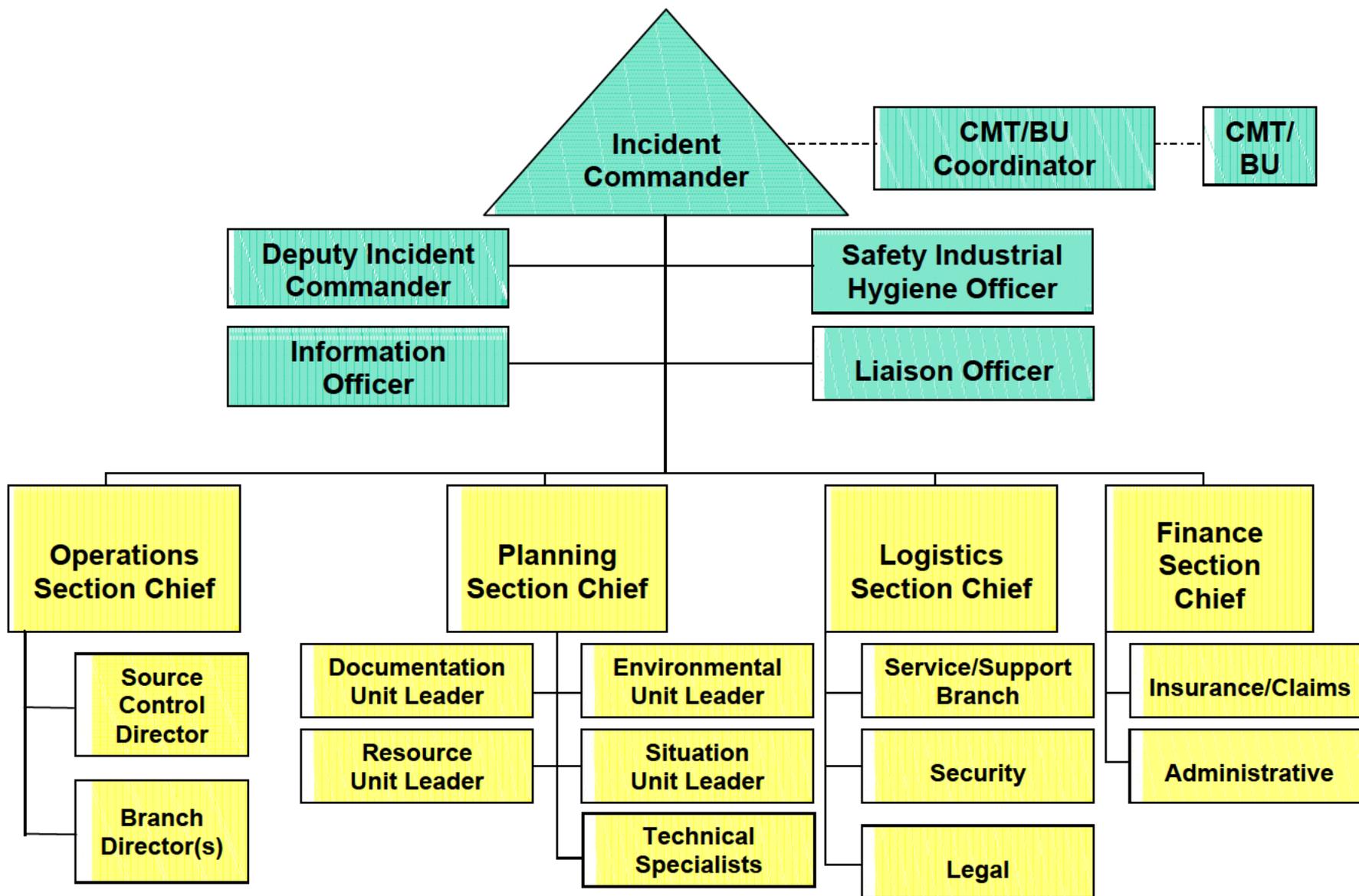


ICS ORGANIZATION



* Can be assigned to Command Staff

HCC ORGANIZATION (ICS)



4.5 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

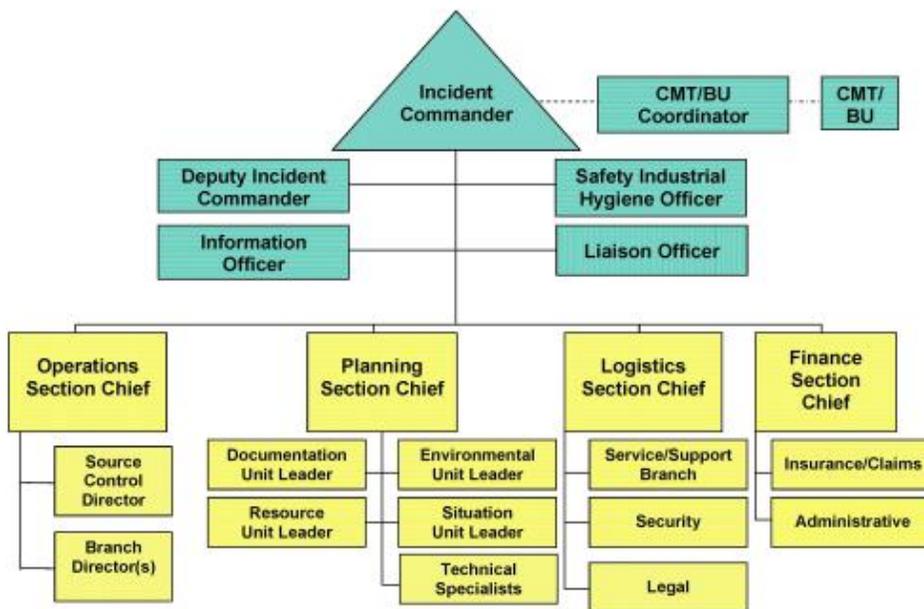
The participants of Unified Command for a specific incident will be determined taking into account the specifics of the incident and existing response plans and/or decisions reached during the initial meeting of the UC. The UC may change as an incident progress in order to account for changes in the 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 which 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-hour-7-day-a-week commitment to the incident
- Have the authority to commit agency or company resources to the incident
- Have the authority to spend agency or company funds
- Agree on an incident response organization
- Agree on the appropriate Command and General Staff assignments
- Commit to speak with “one voice” through the Public Information Officer or Joint Information Center
- Agree on logistical support procedures
- Agree on cost-sharing procedures

FIGURE 4.1
COMMAND STAFF



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.

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.

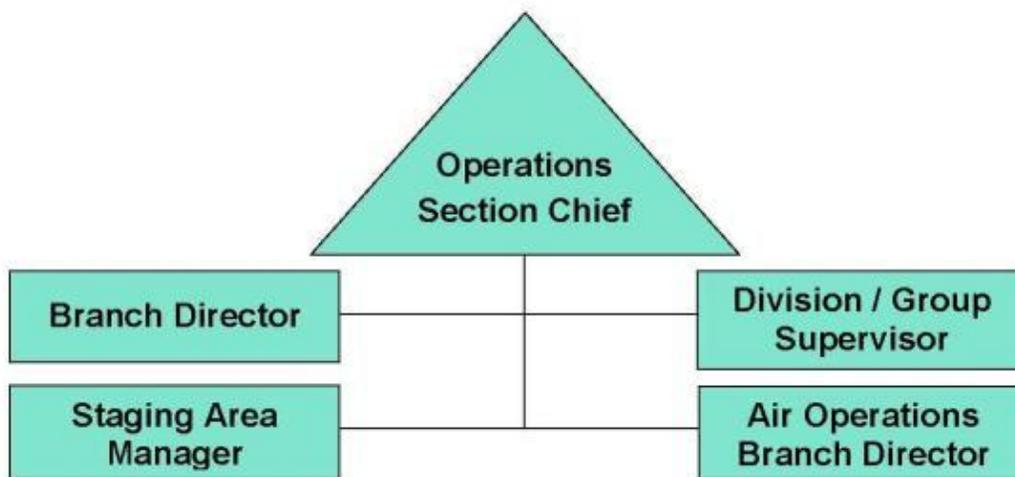
Safety Industrial Hygiene Officer

- 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.

Legal Officer

- Participate in planning meetings, if requested.
- Advise on legal issues relating to in-situ burning, use of dispersants, and other alternative response technologies.
- Advise on legal issues relating to differences between Natural Resource Damage Assessment Restoration (NRADR) and response activities.
- Advise on legal issues relating to investigations.
- Advise on legal issues relating to finance and claims.
- Advise on legal issues relating to response.

FIGURE 4.2
OPERATIONS SECTION



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 medical 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. Coordinate activities with adjacent Division/Group.
- 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

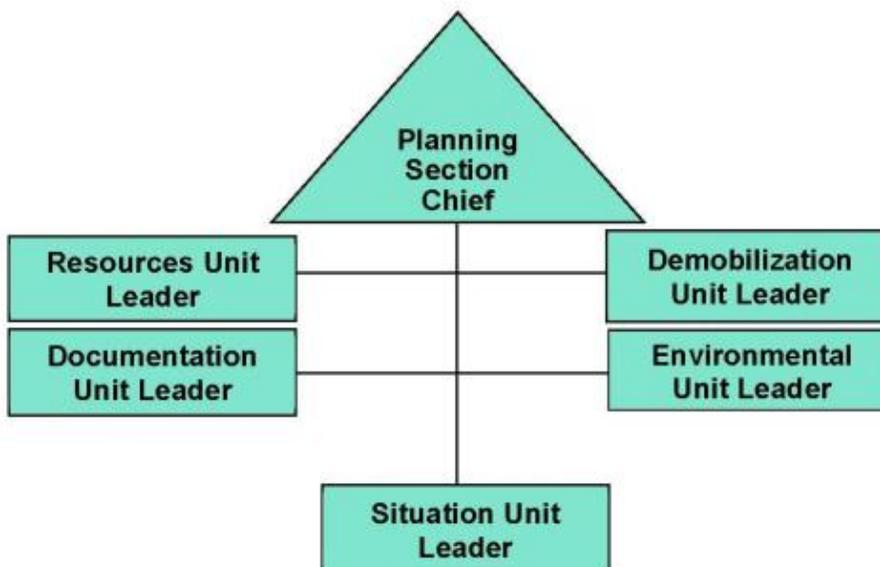
- Establish Staging Area layout.
- Determine any support needs for equipment, feeding, sanitation and security.
- Establish check-in function as appropriate.
- Post areas for identification and traffic control.
- Request maintenance service for equipment at Staging Area as appropriate.
- Respond to request 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.

FIGURE 4.3
PLANNING SECTION



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.

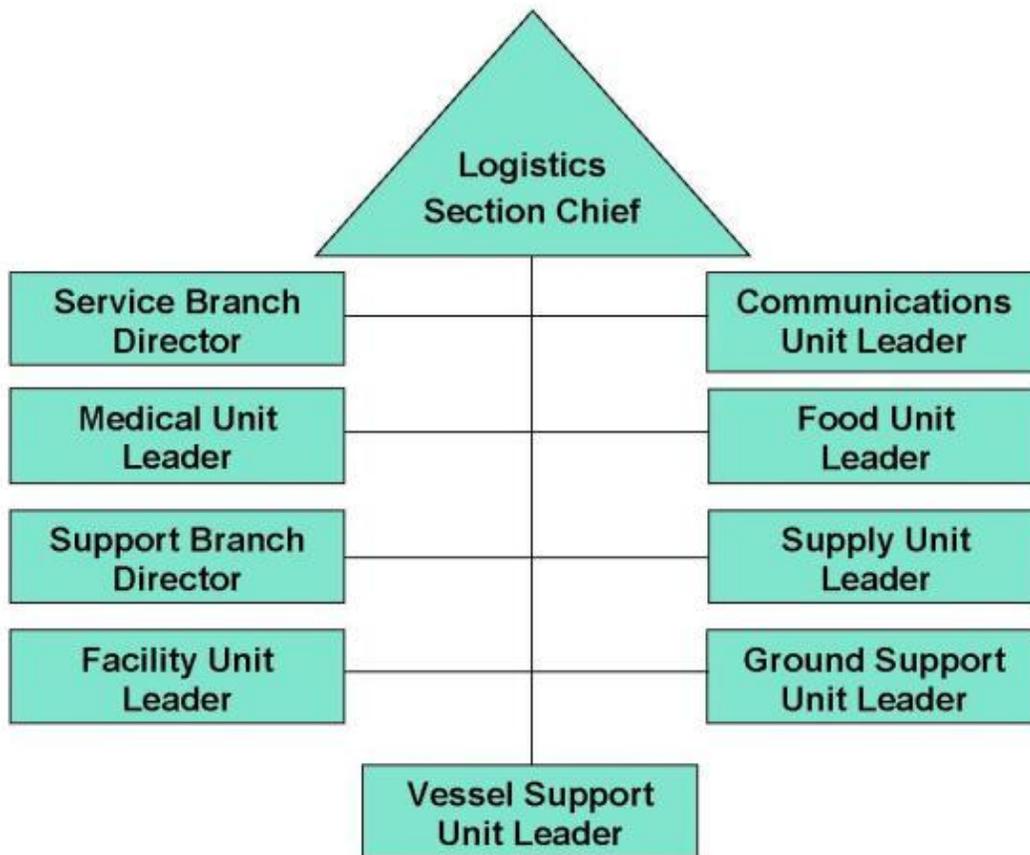
Demobilization Unit Leader

- 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.

FIGURE 4.4
LOGISTICS SECTION



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.

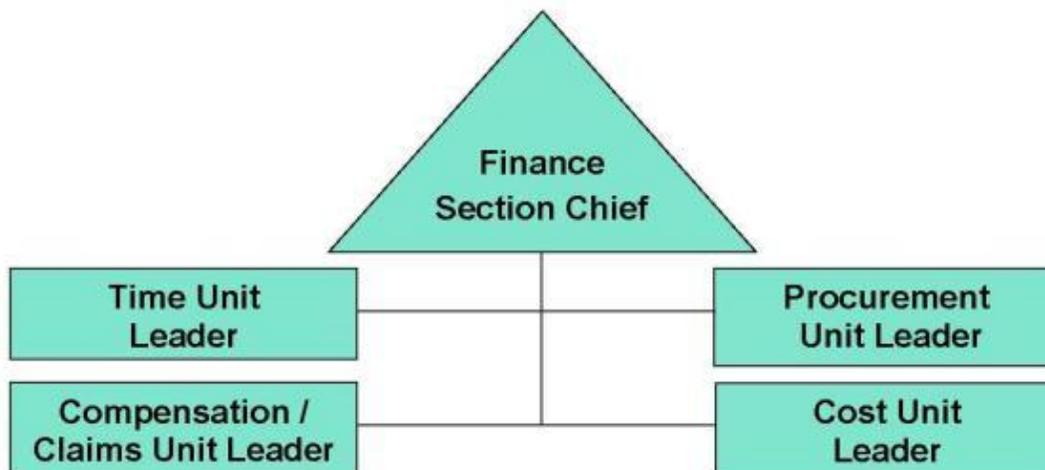
Ground Support Unit Leader

- 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.

FIGURE 4.5
FINANCE SECTION



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.

Development Examples

The examples below demonstrate how the ICS development process might work in various situations.

Example 1

A Pipeliner comes across a small (1/2 gallon) outdoor spill from a solvent drum. The Pipeliner assumes the role of Incident Commander (IC) and decides that the situation can be handled without additional assistance. The Pipeliner also assumes the roles of the functions that report directly to the IC (Safety Officer, Source Chief, Operations Chief, Planning Chief, Information Officer, Liaison Officer, Logistics Chief, and Finance Chief). The Pipeliner takes action to resolve the problem and then notifies the Supervisor.

Example 2

The Controller at the Control Center determines there is cause to shutdown a pipeline due to a suspected problem and potential release. The local Maintenance Foreman is called out to investigate. He discovers that the pipeline has a leak, assumes the role of Incident Commander, radios for assistance, and starts the process of notifications. As more individuals arrive, the IC assigns individuals to the positions of Safety Officer and Operations Chief.

At this point, the Maintenance Foreman is still acting as IC and the unassigned ICS positions (Information Officer, Liaison Officer, Source Chief, Logistics Chief, Planning Chief, and Finance Chief) are his responsibility.

The Regional Operations Manager arrives on-scene, and confers with the Maintenance Foreman. They determine that the incident will require substantially more resources even though the group is beginning to resolve the problem. The Regional Operations Manager assumes the role of IC and the Maintenance Foreman is assigned the job of Planning Chief.

As more individuals arrive on-scene, the IC assigns the roles of Logistics Chief, Finance Chief, and Information Officer. The IC also provides individuals for the Operations Chief's group. The Regional Operations Manager remains IC and Liaison Officer. Due to the nature of the incident, the IC assembles a relief team of individuals to staff the ICS for a second shift so the first team can rest and return the next day. These two teams of responders work for three days to resolve the problem and clean up the affected area.

Zone LRT

SPLC requires that each Regional Operations Manager:

- maintain a list of the individuals assigned to fill the LRT, and
- appoints one person as the LRT Coordinator as appropriate.

LRT Coordinator

The LRT Coordinator is responsible for:

- Coordinating LRT drills and meetings
- Managing the regional emergency response equipment, inventory, and contractor list
- Identifying individuals for LRT positions
- Coordinating the LRT list with Emergency Management Team
- Updating LRT positions when staff changes occur

Activation Process

In a classified incident, the LRT activation process is as follows:

| Stage | Responsible Party | Process | |
|-----------------|---|--|--|
| 1 | Control Center | When notified of or confirms an incident, contacts Region management and local maintenance crews who respond to emergency. | |
| 2 | Region Management | Activates LRT, and notifies senior Head Office management who activates the Response Leadership Team. | |
| 3 | LRT | Arrives on scene and communicates updated emergency assessment to Region Management. | |
| 4 | Region Management | Classifies incident: | |
| | | WHEN incident is... | THEN the... |
| | | Class I | LRT manages incident and updates Response Leadership Team. |
| Class II or III | <ul style="list-style-type: none"> • Regional Operations Manager activates Emergency Management Teams. • LRT begins managing incident, updates Response Leadership Team, and integrates Emergency Management Teams as they arrive on scene. | | |

LRT Activation

Depending on the incident, the LRT may be activated. The following shows the activation decision.

Please refer to Appendix H for LRT Activation Chart.

Structure of the Response Leadership Team

The Response Leadership Team organizational structure follows. The members are activated as needed by the Team Leader.

Please refer to Appendix H for Structure of the Response Leadership Team Chart.

Activation of the Response Leadership Team

Depending on the class of the incident, the CLT may be activated. The chart which shows the steps involved with activating the CLT during an incident is referenced in Appendix H.



5.0 RESPONSE PLANNING

- 5.1 [Incident Action Plan](#)
- 5.2 [Planning P](#)
- 5.3 [Site Safety Plan](#)

5.1 INCIDENT ACTION PLAN

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

For larger or more complex incidents a more complete IAP will be necessary. These IAPs are generally created through the completion and compilation of several standard ICS forms. These forms are located in the Electronic Document Library and examples are located in Appendix H.

| ICS FORM NUMBER | FORM TITLE | PREPARED BY* |
|-----------------|------------------------------------|--|
| 201 | Incident Briefing | Initial Response IC |
| None | ICS IAP Cover | Situation Unit Leader |
| 202 | Incident Objectives | Planning Section Chief |
| 203 | Organization Assignment List | Resources Unit Leader |
| 204 | Assignment List | Operations Section Chief & Resources Unit Leader |
| 205 | Incident Radio Communications Plan | Communications Unit Leader |
| 206 | Medical Plan | Medical Unit Leader |
| SSP | Site Safety Plan | Safety Officer |

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

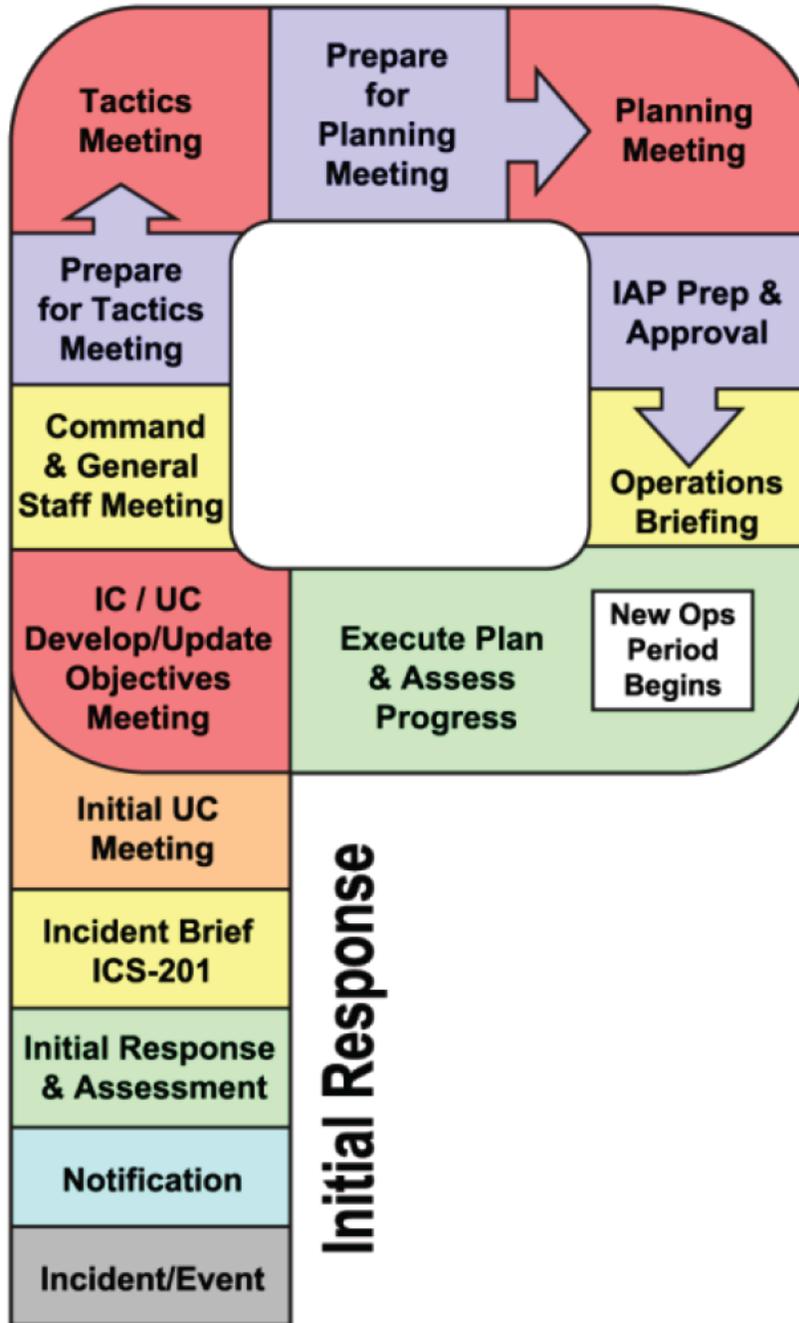
Depending on the nature and severity of the emergency, additional documents may be included in the IAP. These may include:

- Sensitivity Maps (Provided in Section 6.0)
- Waste Management & Disposal Plans (Provided in Appendix F)
- Plans for use of Alternative Technologies (Dispersant/In-situ Burn/Bioremediation)
- Security Plans
- Decontamination Plans
- Traffic Plans

5.2 PLANNING P

UNITED STATES COAST GUARD

The Operational Planning "P"



5.3 SITE SAFETY PLAN

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

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



6.0 SPILL IMPACT CONSIDERATIONS

- 6.1 [Critical Areas to Protect](#)
- 6.2 [Environmental/Socio-Economic Sensitivities](#)
- 6.3 [Fisheries and Wildlife Protection](#)
- 6.4 [Staging Areas](#)
- 6.5 [Containment and Recovery of Spilled Product](#)
- 6.6 [Vulnerability Analysis](#)
- 6.7 [Alternative Response Strategies](#)

Figure 6.1 [On-Water Response Flowchart](#)

Figure 6.2 [Environmental Sensitivity Maps](#)

-

Figure 6.3 [Endangered/Threatened Species Listing](#)

6.1 CRITICAL AREAS TO PROTECT

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

| HIGH SENSITIVITY |
|---|
| <ul style="list-style-type: none"> ● Areas which are high in productivity, abundant in many species, extremely sensitive, difficult to rehabilitate, or inhabited by threatened/endangered species. ● Areas which consist of forested areas, brush/grassy areas, wooded lake areas, freshwater marshes, wildlife sanctuaries/refuges, and vegetated river/stream banks. |
| MODERATE SENSITIVITY |
| <ul style="list-style-type: none"> ● Areas of moderate productivity, somewhat resistant to the effects of oiling. ● Areas which consist of degraded marsh habitat, clay/silt banks with vegetated margins, and gravel/cobble beaches. |
| LOW SENSITIVITY |
| <ul style="list-style-type: none"> ● Areas of low productivity, man-made structures, and/or high energy. ● Areas which consist of gravel, sand, or clay material, barren/rocky riverbanks and lake edges, man-made structures, and concrete/compacted earthen drainage ditches. |

6.2 ENVIRONMENTAL/SOCIO-ECONOMIC SENSITIVITIES

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

The Company will explore, where appropriate, equivalent environmental protection systems, methods, devices, or technologies that maintain or may be less damaging to the character of heritage resources or archeological sites. If a release from the pipeline impacts a heritage resource, the Company will respond as outlined in Section 3.0, report to the appropriate authority prescribed by law, cleanup and restore the area as required by regulation, and conduct such sampling, analyses, or associated monitoring during and after restoration.

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

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

The most complete and up to date environmental sensitivity charts are located in the Coastal Area Contingency Plans for Texas and Louisiana. The websites below are links to the most recent environmental sensitivity charts provided by the various response agencies and will be used in developing protection strategies and procedures:

gisweb.glo.texas.gov/atlas/atlas for Louisiana

gisweb.glo.texas.gov/atlas/atlas for Texas

If the hyperlinks above do not work go to this link in your browser to access the environmental sensitivity charts: <http://gisweb.glo.texas.gov/atlas/masterpage.pdf>

6.3 FISHERIES AND WILDLIFE PROTECTION

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

Protecting fish habitat (e.g. spawning and rearing grounds) is important to both consumers and commercial fisheries. Beyond typical response strategies, other options could include moving floating facilities, temporarily sinking facilities using cages designed for this purpose, temporary suspension of water intakes, or closing sluice gates to isolate the facilities from contamination.

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.

Wildlife Rescue

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

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

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

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 on their own. It is important to communicate that it may be illegal to handle wildlife without express authority from appropriate agencies. Provisions should be made to support an appropriate rehabilitator; however, **no support should be given to any unauthorized volunteer rescue efforts.**
- The regulatory agencies and response personnel should be provided the name and location of a qualified rehabilitator in the event contaminated wildlife is captured.
- Resources and contacts that can assist with wildlife rescue and rehabilitation are provided in Section 2.0. This list includes:
 - Outside rehabilitation organizations
 - Local regulatory agencies
 - Other resources

6.4 STAGING AREAS

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

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

6.5 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT

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

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

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, 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.

Prior to the use of dispersant agents, ensure that permission has been granted by government authorities and local landowner. 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.

• 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.

Spill in Nearshore Urban Areas

Oil spills in urban areas can greatly impact recreational use, human health, wildlife habitat(s), and potential beach or park closures. Manmade structures along waterways require unique protection strategies. Manmade structures could include vertical shore protection structures such as seawalls, piers, and bulkheads, as well as riprap revetments and groins, breakwaters, and jetties. Vertical structures can be constructed of concrete, wood, and corrugated metal. They usually extend below the water surface, although seawalls can have beaches or riprap in front of them. These structures are very common along developed shores, particularly in harbors, marinas, and residential areas.

The range in degree of exposure to waves and currents varies widely, from very low in dead-end canals, to very high on offshore breakwaters. Boat wakes can generate wave energy in otherwise sheltered areas.

Maintaining shipping or other kinds of vessel traffic through navigation channels or waterways during a spill response is a difficult consideration because there is usually economic and political pressure to re-establish normal operations as soon as possible. For these reasons, recovery efforts must be coordinated through the Unified Command to ensure the cooperation of all parties involved.

- **Confinement Methods**

In harbor areas, oil can often be contained by a vessel of opportunity or a dedicated Oil Spill Response Vessel (OSRV) using containment booms and skimmers. Optimum conditions for recovery operations would be with currents of 3 knots or less. The facility could also deploy boom from shore to contain and concentrate product in the vicinity of the release point until the product can be removed.

Spill on Small to Medium Size Streams (Fast-Flowing Creeks)

• Confinement Methods

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

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

With this type dam, a separate barrier (floating or stationary boom) must be placed across the pool created by the dam. The separate barrier arrests the surface layer of product. At the same time, the water is flowing under the barrier and over the top of the dam. The barrier should be placed at an angle of 45 % across the pool to decrease the effective water velocity beneath it. Also, it helps to concentrate the product at the bank and not all along the barrier. A second barrier should be placed approximately 10 to 15 feet downstream of the first one as a secondary back-up.

The stationary boom type barrier should be made of wood planks or other suitable material. The stationary boom should be soundly constructed and sealed against the bank. The ends of the planks can be buried in the banks of the stream and timber stakes driven into the stream bed for support as needed. The necessary length of the boom will be approximately 1-1/2 times the width of the waterway.

The plank boom should extend six to eight inches deep into the water and about two inches or higher above the water level. If the increase in velocity under the stationary boom is causing release of trapped product, it should be moved upward slightly. At no time should barrier be immersed more than 20% of the depth of the pool at the barrier location; that is, if the pool created by damming is three feet deep, do not exceed an immersion depth of seven inches with the barrier at the position the barrier is installed.

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

A floating boom can be used in place of the stationary type if the created pool's size (bank to bank) and depth will permit. Since changing the depth and/or length of a standard floating boom in a small stream is difficult, the use of the stationary type permits adjustments to be made in depth to provide for a better separation of product and water. The advantages of using a floating boom are the speed of deployment and the fact that there is no need for additional support as with the stationary boom.

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

- **Removal Methods**

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

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

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

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

Spill on Lake or Pond (Calm or Slow-Moving Water)

• Confinement Methods

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

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

If the spill does not concentrate itself on or near a shore (no wind effect), then a sweeping action using boats and floating booms will be necessary.

The essential requirement for this operation is that it be done very slowly. The booms should be moved at not more than 40 feet per minute. Once the slick is moved to a more convenient location (near shore), the normal operations of removal should begin.

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

• Removal Methods

If the confined slick is thick enough, regular suction equipment may be used first; however, in most instances, a floating skimmer should be used.

If the floating skimmer starts picking up excess water (slick becomes thin), 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, ensure 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.

Spill on Large Streams and Rivers

• Confinement Methods

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

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

If the current of the entire river is 1/2 knot (0.8 ft/sec) or less, then a boom can be positioned straight across the river or large stream, but angled slightly in relation of the banks. By placing the boom at an angle to the banks, product on the surface is diverted along the boom to the side of the river.

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

Where the current velocity of the chosen site exceeds 1/2 knot, the boom should be positioned in two smooth curves from a point of maximum velocity (usually the center of the river) to both banks. However, this double-boom required product to be removed from both sides of the river. To determine the appropriate angle of boom placement and support (mooring) needed to hold the booms in position, the current velocity should be measured by timing a floating object which is 80% submerged over a distance of 100 feet. A time of 60 seconds over this distance indicates a water current of approximately 1 knot.

For currents from 1 to 2.5 knots (1.7 to 4.2 ft./sec.), the more the boom will have to be angled acute to the bank. The length of the boom will have to be such to reach the center of the river. For currents between 1/2 and 1 knot (0.8 and 1.7 ft./sec.), the angle of employment can be enlarged.

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

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

- **Removal Methods**

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

The absorbents would then be used upstream of the secondary boom to absorb the underflow from the primary boom. An absorbent boom can also be placed between the primary and secondary booms to help the other absorbents control the underflow from the primary boom.

It is best to hand skim the saturated absorbents and place on plastic sheets. However, if the absorbent used can be pumped after product absorption and speed of removal is a necessity, the floating skimmer can be used to remove the product-soaked absorbent.

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

Spill on Stream which Flows into Lake or Pond

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

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

- **Confinement Methods**

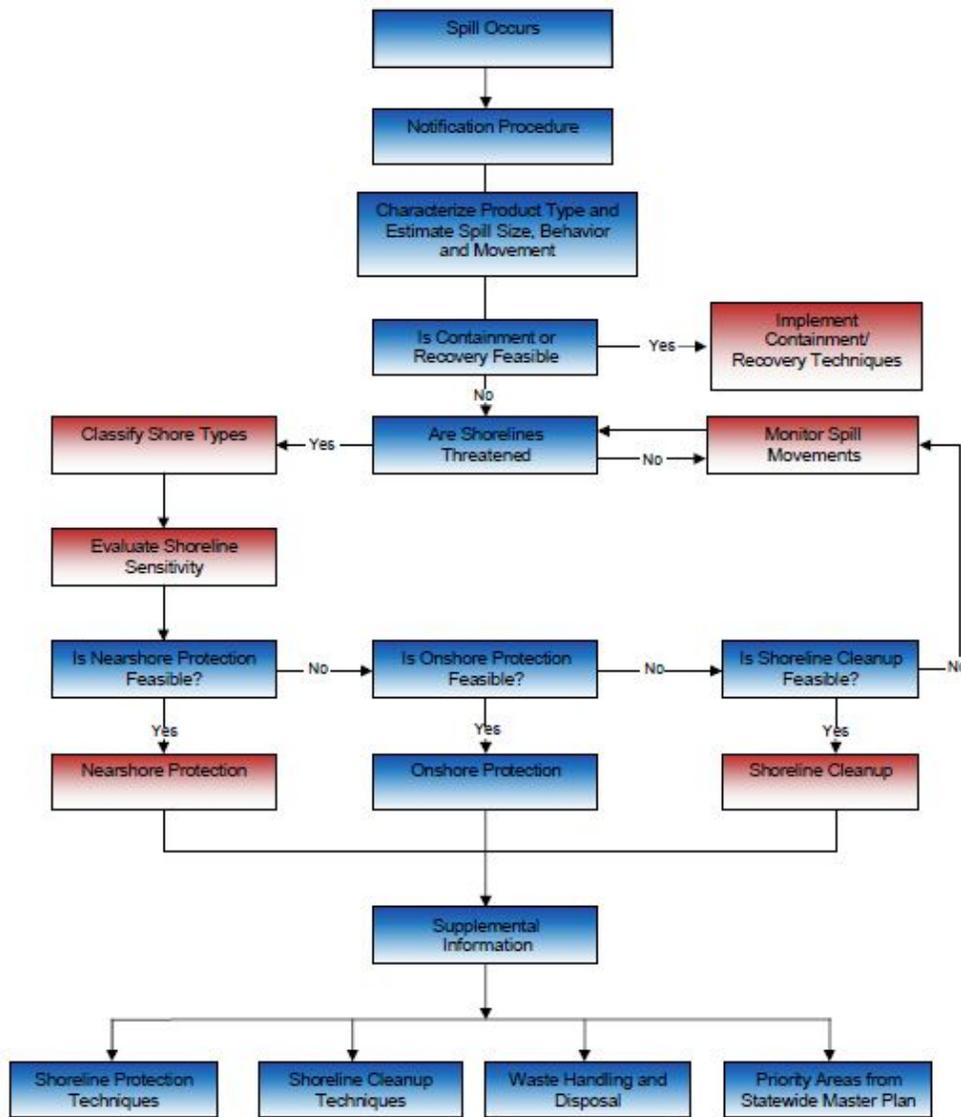
Product on a stream flowing into a lake should be boomed as close to the entrance as possible. The boom should be positioned on the lake at an angle to the residential stream current so as to direct the surface water to a slower moving area. The area where the product is being deflected should be enclosed by booms to contain it. An additional boom for sweeping the product to the bank will be required. This area of containment should not have a current velocity of more than 1/2 knot (0.8 ft./sec.), preferably less.

- **Removal Methods**

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

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

**FIGURE 6.1
ON-WATER RESPONSE FLOWCHART**



6.6 VULNERABILITY ANALYSIS

The thorough examination of published Area Contingency Plans (ACPs) was conducted to identify sensitive areas in all the response zones.

The Environmental Sensitivity Maps located in Figure 6.2 identify sensitive areas along the Pipeline. The appropriate Area Contingency Plan maps are also included to provide more detailed information on sensitivities and possible potential response options.

6.7 ALTERNATIVE RESPONSE STRATEGIES

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

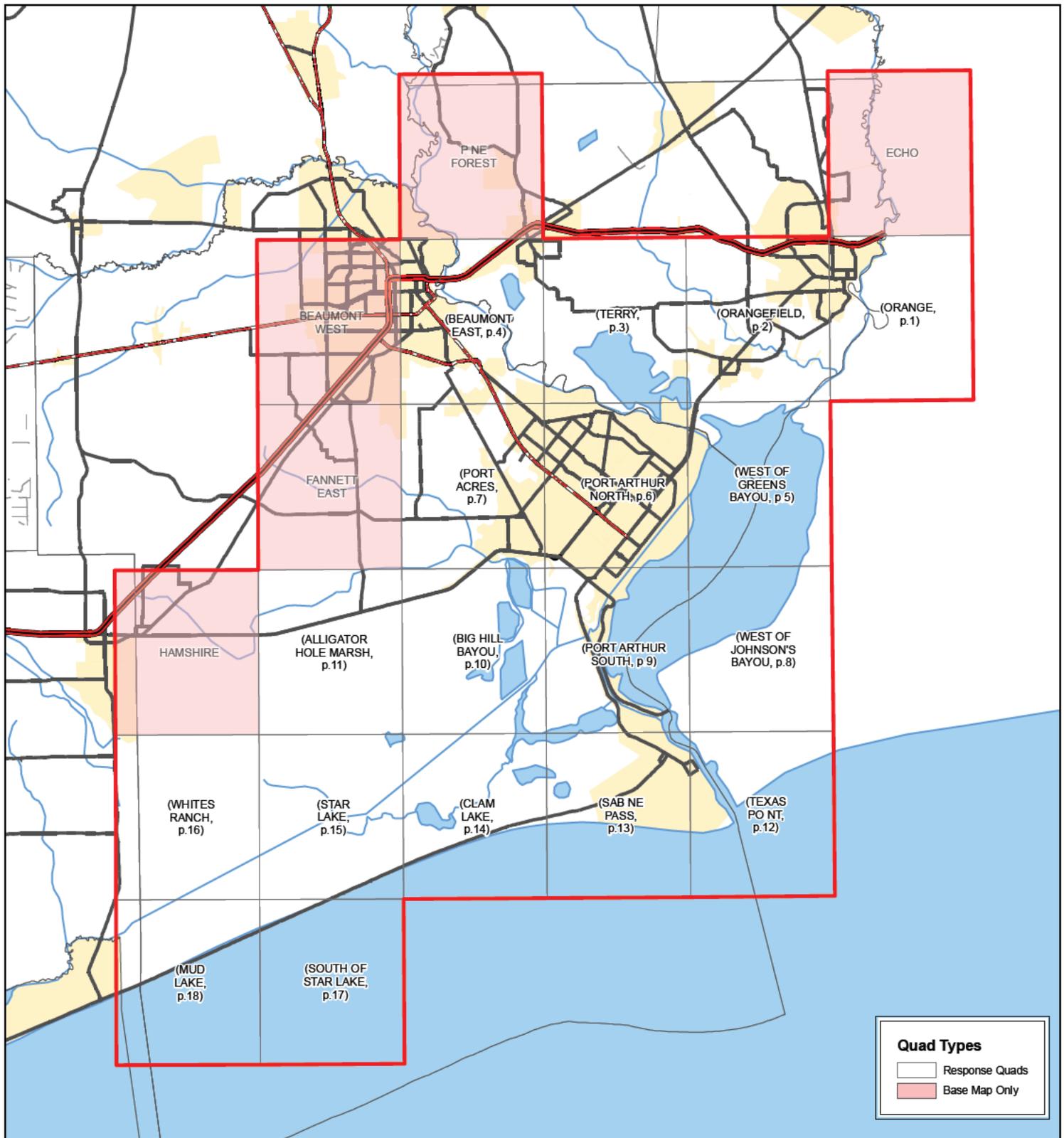
FIGURE 6.2
ENVIRONMENTAL SENSITIVITY MAPS

[Sabine Lake Area Index
Map](#)

[Galveston Bay System
Index Map](#)

[Freeport - East Matagorda
Bay Index Map](#)

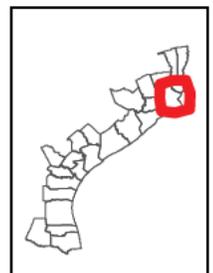
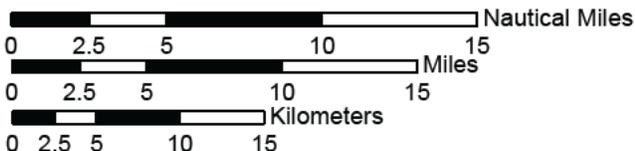
Sabine Lake Area Index Map



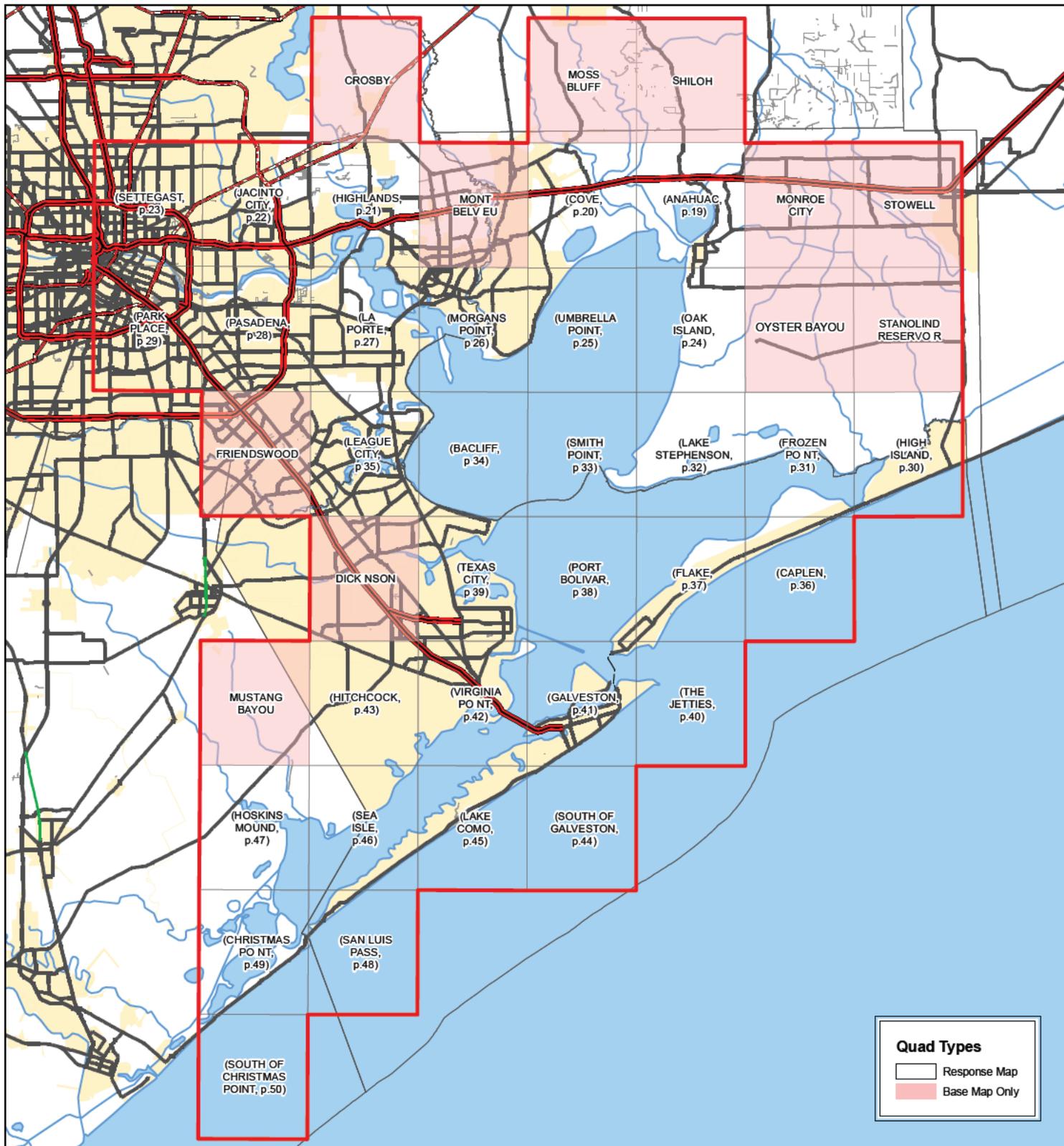
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**OIL SPILL
PREVENTION
AND RESPONSE
PROGRAM**



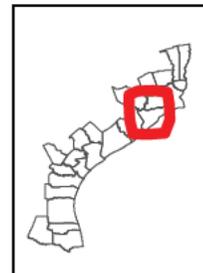
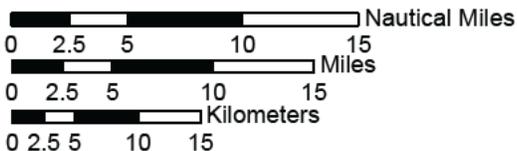
Galveston Bay System Index Map



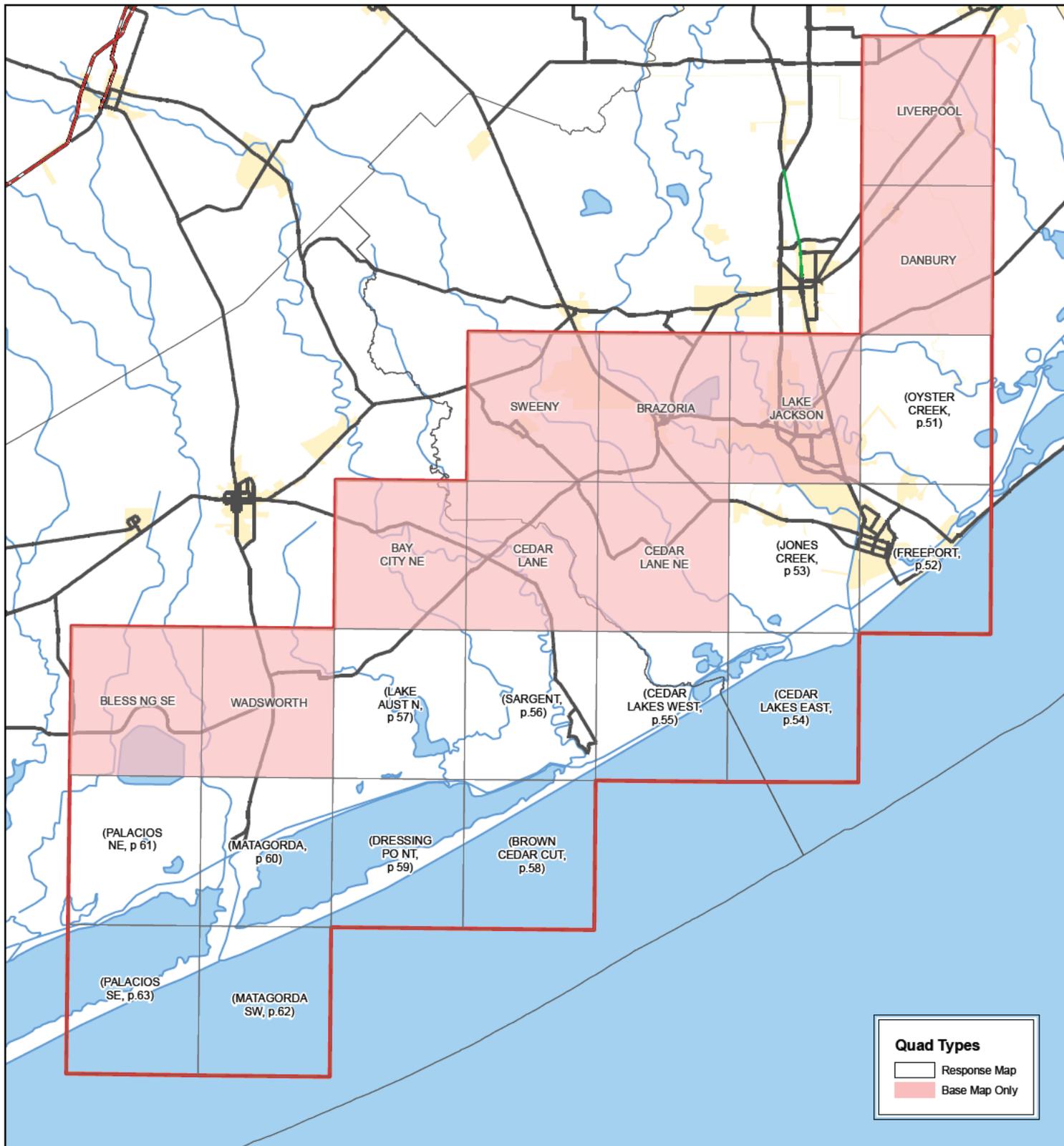
1:600,000



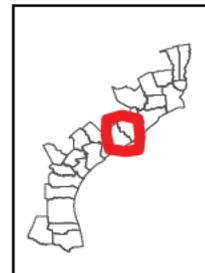
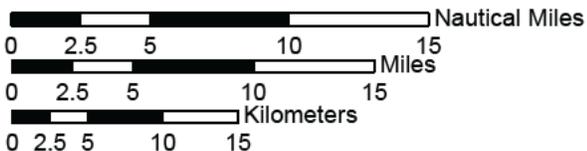
**OIL SPILL
PREVENTION
AND RESPONSE
PROGRAM**



Freeport - East Matagorda Bay Index Map



1:500,000



FEDERAL ENDANGERED/THREATENED SPECIES LISTING

(The following list of species is taken from the U.S. Fish and Wildlife Service Website http://ecos.fws.gov/tess_public/StateListing.)

FIGURE 6.3

| ANIMALS (Texas) | | |
|-----------------|-----------------------------------|--|
| Status | Species Name | Scientific Name |
| E | Amphipod, Peck's cave | <i>Stygobromus (=Stygonectes) pecki</i> |
| E | Bat, Mexican long-nosed | <i>Leptonycteris nivalis</i> |
| T | Bear, Louisiana black | <i>Ursus americanus luteolus</i> |
| E | Beetle, American burying | <i>Nicrophorus americanus</i> |
| E | Beetle, Coffin Cave mold | <i>Batrisodes texanus</i> |
| E | Beetle, Comal Springs dryopid | <i>Stygoparnus comalensis</i> |
| E | Beetle, Comal Springs riffle | <i>Heterelmis comalensis</i> |
| E | Beetle, Helotes mold | <i>Batrisodes venyivi</i> |
| E | Beetle, Kretschmarr Cave mold | <i>Texamaurops reddelli</i> |
| E | Beetle, Tooth Cave ground | <i>Rhadine persephone</i> |
| E | Crane, whooping except where EXPN | <i>Grus americana</i> |
| E | Curlew, Eskimo | <i>Numenius borealis</i> |
| E | Darter, fountain | <i>Etheostoma fonticola</i> |
| E | Falcon, northern aplomado | <i>Falco femoralis septentrionalis</i> |
| E | Flycatcher, southwestern willow | <i>Empidonax traillii extimus</i> |
| E | Gambusia, Big Bend | <i>Gambusia gaigei</i> |
| E | Gambusia, Clear Creek | <i>Gambusia heterochir</i> |
| E | Gambusia, Pecos | <i>Gambusia nobilis</i> |
| E | Gambusia, San Marcos | <i>Gambusia georgei</i> |
| E | Ground beetle, [unnamed] | <i>Rhadine exilis</i> |
| E | Ground beetle, [unnamed] | <i>Rhadine infernalis</i> |
| E | Harvestman, Bee Creek Cave | <i>Texella reddelli</i> |
| E | Harvestman, Bone Cave | <i>Texella reyesi</i> |
| E | Harvestman, Cokendolpher Cave | <i>Texella cokendolpheri</i> |
| E | Jaguar | <i>Panthera onca</i> |
| E | Jaguarundi, Gulf Coast | <i>Herpailurus (=Felis) yagouaroundi cacomitli</i> |

| ANIMALS (Cont'd) | | |
|------------------|---|-------------------------------------|
| Status | Species Name | Scientific Name |
| E | Manatee, West Indian | <i>Trichechus manatus</i> |
| E | Margay Mexico southward | <i>Leopardus (=Felis) wiedii</i> |
| E | Meshweaver, Braken Bat Cave | <i>Cicurina venii</i> |
| E | Meshweaver, Government Canyon Bat Cave | <i>Cicurina vespera</i> |
| E | Meshweaver, Madla's Cave | <i>Cicurina madla</i> |
| E | Meshweaver, Robber Baron Cave | <i>Cicurina baronia</i> |
| T | Minnow, Devils River | <i>Dionda diaboli</i> |
| E | Minnow, Rio Grande silvery | <i>Hybognathus amarus</i> |
| E | Ocelot | <i>Leopardus (=Felis) pardalis</i> |
| T | Owl, Mexican spotted | <i>Strix occidentalis lucida</i> |
| E | Pelican, brown except U.S. Atlantic coast, FL, AL | <i>Pelecanus occidentalis</i> |
| T | Plover, piping except Great Lakes watershed | <i>Charadrius melodus</i> |
| E | Prairie-chicken, Attwater's greater | <i>Tympanuchus cupido attwateri</i> |
| E | Pseudoscorpion, Tooth Cave | <i>Tartarocreagris texana</i> |
| E | Pupfish, Comanche Springs | <i>Cyprinodon elegans</i> |
| E | Pupfish, Leon Springs | <i>Cyprinodon bovinus</i> |
| E | Salamander, Barton Springs | <i>Eurycea sosorum</i> |
| T | Salamander, San Marcos | <i>Eurycea nana</i> |
| E | Salamander, Texas blind | <i>Typhlomolge rathbuni</i> |
| E | Sawfish, smalltooth | <i>Pristis pectinata</i> |
| T | Sea turtle, green except where endangered | <i>Chelonia mydas</i> |
| E | Sea turtle, hawksbill | <i>Eretmochelys imbricata</i> |
| E | Sea turtle, Kemp's ridley | <i>Lepidochelys kempii</i> |
| E | Sea turtle, leatherback | <i>Dermochelys coriacea</i> |
| T | Sea turtle, loggerhead | <i>Caretta caretta</i> |
| T | Shiner, Arkansas River Arkansas R. Basin | <i>Notropis girardi</i> |

| ANIMALS (Cont'd) | | |
|------------------|---|--------------------------------|
| Status | Species Name | Scientific Name |
| E | Snail, Pecos <i>assimineae</i> | <i>Assimineae pecos</i> |
| T | Snake, Concho water | <i>Nerodia paucimaculata</i> |
| E | Spider, Government Canyon Bat Cave | <i>Neoleptoneta microps</i> |
| E | Spider, Tooth Cave | <i>Leptoneta myopica</i> |
| E | Tern, least interior pop. | <i>Sterna antillarum</i> |
| E | Toad, Houston | <i>Bufo houstonensis</i> |
| E | Vireo, black-capped | <i>Vireo atricapilla</i> |
| E | Warbler (=wood), golden-cheeked | <i>Dendroica chrysoparia</i> |
| E | Whale, finback | <i>Balaenoptera physalus</i> |
| E | Whale, humpback | <i>Megaptera novaeangliae</i> |
| E | Wolf, gray Lower 48 States, except where delisted and where EXPN. Mexico. | <i>Canis lupus</i> |
| E | Wolf, red except where EXPN | <i>Canis rufus</i> |
| E | Woodpecker, ivory-billed | <i>Campephilus principalis</i> |
| E | Woodpecker, red-cockaded | <i>Picoides borealis</i> |

FIGURE 6.3 (Cont'd)

| PLANTS (Texas) | | |
|----------------|----------------------------------|--|
| Status | Species Name | Scientific Name |
| E | Ambrosia, south Texas | <i>Ambrosia cheiranthifolia</i> |
| E | Ayenia, Texas | <i>Ayenia limitaris</i> |
| E | Bladderpod, white | <i>Lesquerella pallida</i> |
| E | Bladderpod, Zapata | <i>Lesquerella thamnophila</i> |
| E | Cactus, black lace | <i>Echinocereus reichenbachii</i> var. <i>albertii</i> |
| T | Cactus, Chisos Mountain hedgehog | <i>Echinocereus chisoensis</i> var. <i>chisoensis</i> |
| T | Cactus, Lloyd's Mariposa | <i>Echinomastus mariposensis</i> |
| E | Cactus, Nellie cory | <i>Coryphantha minima</i> |
| E | Cactus, Sneed pincushion | <i>Coryphantha sneedii</i> var. <i>sneedii</i> |
| E | Cactus, star | <i>Astrophytum asterias</i> |
| E | Cactus, Tobusch fishhook | <i>Ancistrocactus tobuschii</i> |
| E | Cat's-eye, Terlingua Creek | <i>Cryptantha crassipes</i> |
| T | Cory cactus, bunched | <i>Coryphantha ramillosa</i> |
| E | Dawn-flower, Texas prairie | <i>Hymenoxys texana</i> |
| E | Dogweed, ashy | <i>Thymophylla tephroleuca</i> |
| E | Frankenia, Johnston's | <i>Frankenia johnstonii</i> |
| E | Ladies'-tresses, Navasota | <i>Spiranthes parksii</i> |
| E | Manioc, Walker's | <i>Manihot walkerae</i> |
| T | Oak, Hinckley | <i>Quercus hinckleyi</i> |
| E | Phlox, Texas trailing | <i>Phlox nivalis</i> ssp. <i>texensis</i> |
| E | Pitaya, Davis' green | <i>Echinocereus viridiflorus</i> var. <i>davisii</i> |
| E | Pondweed, Little Aguja (=Creek) | <i>Potamogeton clystocarpus</i> |
| E | Poppy-mallow, Texas | <i>Callirhoe scabriuscula</i> |
| E | Rush-pea, slender | <i>Hoffmannseggia tenella</i> |
| E | Sand-verbena, large-fruited | <i>Abronia macrocarpa</i> |
| E | Snowbells, Texas | <i>Styrax texanus</i> |

| PLANTS (Cont'd) | | |
|-----------------|--------------------------------------|-----------------------------|
| Status | Species Name | Scientific Name |
| T | Sunflower, Pecos (=puzzle, =paradox) | <i>Helianthus paradoxus</i> |
| E | Wild-rice, Texas | <i>Zizania texana</i> |

E = Endangered

T = Threatened

Federally Endangered Species: Any species which is in danger of extinction throughout all or a significant portion of its range.

Federally Threatened Species: Any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.



APPENDIX A

RESPONSE EQUIPMENT / RESOURCES

- A.1 [Company Owned Response Equipment](#)
 - A.2 [Other Company Resources](#)
 - A.3 [Contract Resources](#)
 - A.4 [Cooperative/Mutual Aid Resources](#)
 - A.5 [Volunteers](#)
 - A.6 [Communications](#)
-
- Figure A.1 [Company Owned Spill Response Equipment](#)
 - Figure A.2 [Response Resources](#)
 - Figure A.3 [USCG OSRO Classifications](#)
 - Figure A.4 [OSRO Agreements/Contracts](#)

A.1 COMPANY OWNED RESPONSE EQUIPMENT

Facility does not maintain response equipment on site.

A.2 OTHER COMPANY RESOURCES

A.3 CONTRACT RESOURCES

In the event of a discharge which is beyond the initial response capabilities of the Local Response Team, contract manpower and equipment resources can be obtained through Oil Spill Removal Organization(s) (OSRO). These OSROs can provide manpower and containment/clean-up equipment for the response operation.

The resources will be secured from a Company approved contractor. Management will typically handle notification/implementation of these resources. Figure A.2 provides a quick reference to the Oil Spill Removal Organizations and details their response capability and estimated response times. **Telephone reference is provided in Figure 2.3.** (*Note: The Company will ensure that each OSRO has a comprehensive maintenance program and applicable training / drills programs in place at contract renewal.*)

A.4 COOPERATIVE/MUTUAL AID RESOURCES

The Facility is not currently associated with a Cooperative/ Mutual Aid system. All response resources would be either Company owned or contracted.

A.5 VOLUNTEERS

Volunteers will not be utilized by the Company for responding to spills originating from the Facility. All volunteers will be referred to the State or Federal On-Scene Coordinator (EPA).

A.6 COMMUNICATIONS

SPLC recognizes the media's legitimate interest in emergency situations and benefits from cooperation with them. This cooperation promotes rapid and accurate reporting of the facts, and dispels rumors and exaggerated accounts which can frequently occur.

When to Notify

Communications should be contacted when there is:

- A fatality or serious injury
- The potential for significant environmental damage
- A potential need to evacuate
- Substantial property damage
- News media involvement or the possibility to attract media attention
- Inconvenience to the public
- Is a charges of SPLC negligence, and/or
- A need for Communications support, as determined by the Incident Commander.

Responsibility

The Communications contact:

- Provides advice and counsel to the Incident Commander
- Assists in determining the need for on-scene Communications support
- Uses information obtained from the Incident Commander to write a holding statement (if necessary), and
- Coordinates press conferences (if necessary).

Central Communications System

Prearranged communication channels are of the utmost importance in dealing with Company emergencies. The notification procedures and telephone contacts documented in Section 2.0 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 Departments, Public Officials and local agencies is provided in the Annexes.
- A list of emergency telephone numbers for contract response resources (Figure 2.6).

Communications Equipment

Field communications during a spill response will be handled via radios, telephones, cellular phones, fax machines, and computers and will be maintained by Company personnel. In the event of a Worst Case Discharge, field communications will be enhanced with contract resources as the situation demands.

Communications Type

Voice communications may be conducted over the public telephone system or Company provided two-way radio equipment.

Radios- Handheld and vehicle mounted radio sets are the most effective means of communication for the field response operation. The units are battery operated, multi-channelled, and have a typical range that will cover the area of the response operation.

Additional radio sets and battery packs/charges will be necessary in the event of a prolonged response operation.

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.

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

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

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

FIGURE A.1
COMPANY OWNED SPILL RESPONSE EQUIPMENT

| Company Owned Response Equipment | | |
|---|-----------------|--------------------|
| NAME | LOCATION | DESCRIPTION |
| | NONE | |
| | | |

FIGURE A.2
RESPONSE RESOURCES

| USCG CLASSIFIED OIL SPILL REMOVAL ORGANIZATION (OSRO) | | | | | | | |
|---|---------------|------------------|-------------------------------|----|----|----|------------------|
| OSRO Name | Response Time | Environment Type | Facility Classification Level | | | | High Volume Port |
| | | | MM | W1 | W2 | W3 | |
| Environmental Safety & Health Consulting Services | | River/Canal | Y | Y | Y | Y | Yes |
| | | Inland | Y | Y | Y | Y | |
| Garner Environmental Services | | River/Canal | Y | Y | Y | Y | Yes |
| | | Inland | Y | Y | Y | Y | |
| | | Nearshore | | | Y | Y | |
| | | Offshore | | | Y | Y | |
| | | Open Ocean | | | Y | Y | |
| Marine Spill Response Corporation (MSRC) | | River/Canal | Y | Y | Y | Y | Yes |
| | | Inland | Y | Y | Y | Y | |
| | | Nearshore | Y | | Y | Y | |
| | | Offshore | Y | | Y | Y | |
| | | Open Ocean | Y | Y | Y | Y | |
| Oil Mop, Inc. | | River/Canal | Y | Y | Y | Y | Yes |
| | | Inland | Y | Y | Y | Y | |
| Eagle - SWS | | River/Canal | | | Y | Y | Yes |
| United States Environmental Services | | River/Canal | | | Y | Y | Yes |
| | | Inland | | | Y | | |

Note: Classification ratings taken from the USCG's internet site www.uscg.mil/hq/nsfweb/nsfcc/ops/ResponseSupport/RRAB/osroclassifiedguidelines.asp

FIGURE A.3

USCG OSRO CLASSIFICATIONS

The USCG has classified OSROs according to their response capabilities, within each Captain of the Port (COTP) zone, for vessels and for facilities in four types of environments. Response capabilities are rated MM, W1, W2, or W3 as described below.

| MINIMUM EQUIPMENT REQUIREMENTS FOR OSRO CLASSIFICATIONS | | | | |
|---|------------------------------|-------------|---------------------------------|-------------------------------|
| Classification | Resource Quantity Guidelines | | Maximum Facility Response Times | Maximum Vessel Response Times |
| Rivers/Canals | | | | |
| MM | Protective Boom: | 4,000*ft | High Volume Ports: 6 hours | High Volume Ports: 12 hours |
| | EDRC: | 1,200 bbls | Other Ports: 12 hours | Other Ports: 24 hours |
| | TSC: | 2,400 bbls | | |
| W1 | Protective Boom: | 25,000*ft | High Volume Ports: 12 hours | High Volume Ports: 12 hours |
| | EDRC: | 1,875 bbls | Other Ports: 24 hours | Other Ports: 24 hours |
| | TSC: | 3,750 bbls | | |
| W2 | Protective Boom: | 25,000*ft | High Volume Ports: 30 hours | High Volume Ports: 36 hours |
| | EDRC: | 3,750 bbls | Other Ports: 36 hours | Other Ports: 48 hours |
| | TSC: | 7,500 bbls | | |
| W3 | Protective Boom: | 25,000*ft | High Volume Ports: 54 hours | High Volume Ports: 60 hours |
| | EDRC: | 7,500 bbls | Other Ports: 60 hours | Other Ports: 72 hours |
| | TSC: | 15,000 bbls | | |
| Great Lakes | | | | |
| MM | Protective Boom: | 6,000*ft | All Ports: 6 hours | All Ports: 12 hours |
| | EDRC: | 1,250 bbls | | |
| | TSC: | 2,500 bbls | | |
| W1 | Protective Boom: | 30,000*ft | High Volume Ports: 12 hours | High Volume Ports: 12 hours |
| | EDRC: | 6,250 bbls | Other Ports: 24 hours | Other Ports: 24 hours |
| | TSC: | 12,500 bbls | | |
| W2 | Protective Boom: | 30,000*ft | All Ports: 36 hours | All Ports: 42 hours |
| | EDRC: | 12,500 bbls | | |
| | TSC: | 25,000 bbls | | |
| W3 | Protective Boom: | 30,000*ft | All Ports: 60 hours | All Ports: 66 hours |
| | EDRC: | 25,000 bbls | | |
| | TSC: | 50,000 bbls | | |

| MINIMUM EQUIPMENT REQUIREMENTS FOR OSRO CLASSIFICATIONS | | | |
|--|--|---|---|
| Classification | Resource Quantity Guidelines | Maximum Facility Response Times | Maximum Vessel Response Times |
| Inland | | | |
| MM | Protective Boom: 6,000*ft EDRC: 1,200 bbls TSC: 2,400 bbls | High Volume Ports: 6 hours Other Ports: 12 hours | High Volume Ports: 12 hours Other Ports: 24 hours |
| W1 | Protective Boom: 30,000*ft EDRC: 12,500 bbls TSC: 25,500 bbls | High Volume Ports: 12 hours Other Ports: 24 hours | High Volume Ports: 12 hours Other Ports: 24 hours |
| W2 | Protective Boom: 25,000*ft EDRC: 12,500 bbls TSC: 25,500 bbls | High Volume Ports: 30 hours Other Ports: 36 hours | High Volume Ports: 36 hours Other Ports: 48 hours |
| W3 | Protective Boom: 25,000*ft EDRC: 50,500 bbls TSC: 100,500 bbls | High Volume Ports: 54 hours Other Ports: 60 hours | High Volume Ports: 60 hours Other Ports: 72 hours |
| Great Lakes | | | |
| MM | Protective Boom: 8,000*ft EDRC: 1,200 bbls TSC: 2,400 bbls | High Volume Ports: 6 hours Other Ports: 12 hours | High Volume Ports: 12 hours Other Ports: 24 hours |
| W1 | Protective Boom: 30,000*ft EDRC: 12,500 bbls TSC: 25,500 bbls | High Volume Ports: 12 hours Other Ports: 24 hours | High Volume Ports: 12 hours Other Ports: 24 hours |
| W2 | Protective Boom: 30,000*ft EDRC: 25,500 bbls TSC: 50,500 bbls | High Volume Ports: 30 hours Other Ports: 36 hours | High Volume Ports: 36 hours Other Ports: 48 hours |
| W3 | Protective Boom: 30,000*ft EDRC: 50,000 bbls TSC: 100,000 bbls | High Volume Ports: 54 hours Other Ports: 60 hours (for open ocean, plus travel time from shore) | High Volume Ports: 60 hours Other Ports: 72 hours (for open ocean, plus travel time from shore) |

| MINIMUM EQUIPMENT REQUIREMENTS FOR OSRO CLASSIFICATIONS | | | | |
|---|------------------------------|--------------|---------------------------------|-------------------------------|
| Classification | Resource Quantity Guidelines | | Maximum Facility Response Times | Maximum Vessel Response Times |
| Offshore | | | | |
| MM | Protective Boom: | 6,000*ft | High Volume Ports: | High Volume Ports: 12 hours |
| | EDRC: | 1,200 bbls | Other Ports: | Other Ports: 24 hours |
| | TSC: | 2,400 bbls | | |
| W1 | Protective Boom: | 15,000*ft | High Volume Ports: | High Volume Ports: 24 hours |
| | EDRC: | 12,500 bbls | Other Ports: | Other Ports: 48 hours |
| | TSC: | 25,500 bbls | | |
| W2 | Protective Boom: | 15,000*ft | High Volume Ports: | High Volume Ports: 36 hours |
| | EDRC: | 25,000 bbls | Other Ports: | Other Ports: 48 hours |
| | TSC: | 50,000 bbls | | |
| W3 | Protective Boom: | 15,000*ft | High Volume Ports: | High Volume Ports: 60 hours |
| | EDRC: | 50,000 bbls | Other Ports: | Other Ports: 72 hours |
| | TSC: | 100,000 bbls | | |
| Open Ocean | | | | |
| MM | Protective Boom: | 0*ft | High Volume Ports: | High Volume Ports: 12 hours |
| | EDRC: | 1,200 bbls | Other Ports: | Other Ports: 24 hours |
| | TSC: | 2,400 bbls | | |
| W1 | Protective Boom: | 0*ft | High Volume Ports: | High Volume Ports: 12 hours |
| | EDRC: | 12,500 bbls | Other Ports: | Other Ports: 24 hours |
| | TSC: | 25,500 bbls | | |
| W2 | Protective Boom: | 0*ft | High Volume Ports: | High Volume Ports: 36 hours |
| | EDRC: | 25,000 bbls | Other Ports: | Other Ports: 48 hours |
| | TSC: | 50,000 bbls | | |
| W3 | Protective Boom: | 0*ft | High Volume Ports: | High Volume Ports: 60 hours |
| | EDRC: | 50,000 bbls | Other Ports: | Other Ports: 72 hours |
| | TSC: | 100,000 bbls | | |

1. Rivers/canals include bodies of water, including the Intracoastal Waterway and other bodies artificially created for navigation, confined within an inland area and having a project depth of 12 feet (3.66 meters).
2. EDRC stands for "effective daily recovery capacity," or the calculated recovery capacity of oil recovery devices determined by using a formula that takes into account limiting factors such as daylight, weather, sea state, and emulsified oil in the recovered material.
3. TSC stands for "temporary storage capacity," meaning sufficient storage capacity equal to twice the EDRC of an OSRO. Temporary storage may include inflatable bladders, rubber barges, certified barge capacity, or other temporary storage that can be utilized on scene at a spill response and which is designed and intended for the storage of flammable or combustible liquids. It does not include vessels or barges of opportunity for which no pre-arrangements have been made. Fixed shore-based storage capacity, ensured available by contract or other means, will be acceptable.

* In addition, 1,000 feet of containment boom plus 300 feet per skimming system.

FIGURE A.4**OSRO AGREEMENTS/CONTRACTS**

Environmental Safety & Health Consulting Services

[Click to view the file - ESH 10 9 2012 18 7 53.pdf](#)

Garner Environmental Services

[Click to view the file - Garner 10 9 2012 18 8 17.pdf](#)

Marine Spill Response Corporation

[Click to view the file - MSRC - Contract 10 9 2012 18 8 45.pdf](#)

Oil Mop LLC

[Click to view the file - Oil Mop - Contract 10 9 2012 18 9 9.pdf](#)

Eagle - SWS

[Click to view the file - SWS Environmental 10 9 2012 18 9 42.pdf](#)

United States Environmental Services

[Click to view the file - USES 10 9 2012 18 10 19.pdf](#)

RESIDUAL/WASTE ENVIRONMENTAL SERVICES AGREEMENT

Agreement No: RESA-0005-LDC

Effective Date: January 27, 2000

This Residual/Waste Environmental Services Agreement ("Agreement"), made and entered into as of the 27th day of January, 2000, by and between EQUILON ENTERPRISES LLC (Equilon) its members, subsidiaries, affiliates and joint venture partners to the extent of their interest or MOTIVA ENTERPRISES LLC (Motiva) its members, subsidiaries, affiliates and joint venture partners to the extent of their interest, a Delaware limited liability company, ("Company"), and Environmental Safety & Health Consulting Services, Inc., a Louisiana corporation, ("Contractor").

WHEREAS, Company wishes to have access to Contractor's services and resources on an as-needed basis in order to obtain environmental, geological and engineering services as may be requested by Company within Contractor's geographical area of operations; and

WHEREAS, Contractor is in the business of providing such services and is willing and able to make its equipment, material, personnel, and services available to Company upon Company's request.

NOW, THEREFORE, in consideration of the mutual covenants and promises contained herein and for other valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

1. DEFINITIONS AND GENERAL PROVISIONS

(a) Definitions

"Company" means as set forth in the first paragraph and any of its Members, Subsidiaries, Affiliates and Joint Venture Partners to the extent of their interest for whose benefit Company will be requesting the Work from Contractor.

"Contractor Representative" means a party duly authorized by Contractor to act on its behalf, with whom the Company may consult at all reasonable times concerning the administration of this Agreement, and whose instructions, requests, and decisions issued or made as provided for in this Agreement shall be binding on Contractor. The Contractor Representative shall identify to the Company the person or persons who, as site coordinator, supervisor, or foreman, shall be responsible for receiving and coordinating the Work directions given by Company and for carrying out Contractor's obligations under this Agreement.

1) "Contractor's Personnel" means personnel supplied by Contractor for the performance of the Work and shall include both Contractor's regular employees and any such temporary or subcontract personnel employed or contracted by Contractor in order for Contractor to provide the requested Work to Company.

"Designated Contractor" means a Contractor designated by Company to perform Work normally subcontracted by Contractor. Company will contract directly with Designated Contractor.

"Oil" means petroleum (including crude oil and/or any of its fractions or related distillate products).

"Order" means as set forth in Section 2.

31. SURVIVAL

The warranty, liability, indemnity, audit, ownership of tangible work product, patent, and confidentiality (including publicity releases) provisions of this Agreement shall survive its termination or final settlement. The provisions of this Agreement relating to termination and settlement of disputes and claims (including choice of law) shall survive its termination, but not its final settlement.

32. INVALIDITY

If any clause, phrase or provision of this Agreement is determined to be contrary to law, then that clause, phrase or provision shall be disregarded but the remainder of the Agreement shall remain in effect.

Executed in one or more counterparts, each of which shall be deemed an original.

Equiva Services LLC for and on behalf
Of Equilon Enterprises LLC and Motiva
Enterprises LLC

Company

By:

L. D Casey

L. D CASEY

Print Name

Title

CONTRACT SPECIALIST

Date

02/01/00

ENVIRONMENTAL SAFETY & HEALTH CONSULTING SERVICES, INC

Contractor

By:

PATRICK J. BERGERON JR., REM

Patrick J. Bergeron Jr.

Print Name

Title

MANAGER, CONSULTING DIVISION

Date

01/27/00

EMERGENCY SPILL RESPONSE AGREEMENT

Agreement No: **ERA-0017-GCL**

Effective Date: **May 12, 2000**

This Emergency Spill Agreement ("Agreement"), made and entered into as of the 12th day of May, 2000, by and between EQUILON ENTERPRISES LLC (Equilon) its members, subsidiaries, affiliates and joint venture partners to the extent of their interest or MOTIVA ENTERPRISES LLC (Motiva) its members, subsidiaries, affiliates and joint venture partners to the extent of their interest, a Delaware limited liability company, ("BUYER"), and Gamer Environmental Services, Inc., a Texas corporation, ("VENDOR").

WHEREAS, BUYER wishes to have access to VENDOR's services and resources on an as-needed basis in order to obtain environmental, geological engineering services as may be requested by BUYER within VENDOR's geographical area of operations; and

WHEREAS, VENDOR is in the business of providing such services and is willing and able to make its equipment, material, personnel, and services available to BUYER upon BUYER's request.

NOW, THEREFORE, in consideration of the mutual covenants and promises contained herein and for other valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

1. DEFINITIONS AND GENERAL PROVISIONS

(a) Definitions

"BUYER" means as set forth in the first paragraph and any of its Members, Subsidiaries, Affiliates and Joint Venture Partners to the extent of their interest for whose benefit BUYER will be requesting the Work from VENDOR.

"VENDOR Representative" means a party duly authorized by VENDOR to act on its behalf, with whom the BUYER may consult at all reasonable times concerning the administration of this Agreement, and whose instructions, requests, and decisions issued or made as provided for in this Agreement shall be binding on VENDOR. The VENDOR Representative shall identify to the BUYER the person or persons who, as site coordinator, supervisor, or foreman, shall be responsible for receiving and coordinating the Work directions given by BUYER and for carrying out VENDOR's obligations under this Agreement.

"VENDOR's Personnel" means personnel supplied by VENDOR for the performance of the Work and shall include both VENDOR's regular employees and any such temporary or subcontract personnel employed or contracted by VENDOR in order for VENDOR to provide the requested Work to BUYER.

"Designated VENDOR" means a VENDOR designated by BUYER to perform Work normally subcontracted by VENDOR. BUYER will contract directly with Designated VENDOR.

"Oil" means petroleum (including crude oil and/or any of its fractions or related distillate products).

"Order" means a written or verbal request for work to be performed.

"Work Site" means the location(s) at which the Work is performed, whether or not such location(s) is on BUYER's property.

"Work" means as set forth in Section 2.

29. ASSIGNMENT

Neither this Agreement nor any money earned by VENDOR under this Agreement is assignable without BUYER's written consent.

30. SETOFF

BUYER is authorized to deduct any sums owed it by VENDOR (whether or not the debt arises out of this Agreement) from the payments due VENDOR under this Agreement. BUYER may also withhold payment from VENDOR in an amount sufficient to protect BUYER from any claims of third parties or any liens which arise as a result of VENDOR's or its subcontractor's performance of the Work.

31. SURVIVAL

The warranty, liability, indemnity, audit, ownership of tangible work product, patent, and confidentiality (including publicity releases) provisions of this Agreement shall survive its termination or final settlement. The provisions of this Agreement relating to termination and settlement of disputes and claims (including choice of law) shall survive its termination, but not its final settlement.

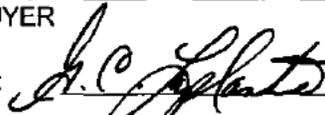
32. INVALIDITY

If any clause, phrase or provision of this Agreement is determined to be contrary to law, then that clause, phrase or provision shall be disregarded but the remainder of the Agreement shall remain in effect.

Executed in one or more counterparts, each of which shall be deemed an original.

Equiva Services LLC for and on behalf
Of Equilon Enterprises LLC and Motiva
Enterprises LLC

BUYER

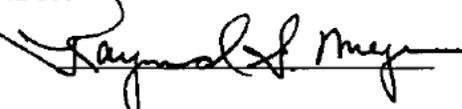
By: 

G. C. Laplante
Print Name

Title Industry Mgr., SH&E

Date 5/12/00

GARVER ENVIRONMENTAL SERVICE, INC
VENDOR

By: 

RAYMOND G. MEYER
Print Name
EXECUTIVE VICE PRESIDENT

Title _____

Date 4/24/00



August 24, 2001

Garner Environmental Services, Inc.
1717 W. 13th Street
Deer Park, TX. 77536

Attn: Raymond G. Weyer.

Subject: Agreement Number **ERA-0017-GCL dated May 12, 1999**

In reference to the subject Agreement mentioned above, please be **advised** that the following changes apply to the subject Agreement and are effective immediately:

Alteration 1 dated August 24, 2001, is being issued to add the Company Contractor Safety, Health & Environmental Standard (as attached) and revise invoicing requirements for the subject Agreement as noted as follows:

Contractor Safety, Health & Environmental Standard (see attached)

Invoices submitted for payment must include the sales tax as a separate item on the invoice, however, if the services provided are not taxable the invoices must reflect the following statement "All sales taxes have been paid to the proper tax authorities." Invoices which do not reflect this information will not be processed for payment.

Consolidated Invoices are no longer acceptable. Invoices must be specific to the Services billed and must include all the necessary back-up documentation.

Except as modified hereinabove, all other terms and conditions of this Agreement shall remain in full force and effect.

Equiva Services LLC for and on behalf
Of Equilon Enterprises LLC and Motiva
Enterprises LLC

By: _____

G. Y. OWUSU
Print Name

Title: Commodity Manager

Date August 24, 2001

Garner Environmental Services, Inc.

By: _____

Otis Chambers
Print Name

Title: Executive Vice President

Date: August 29, 2001

**MARINE SPILL RESPONSE CORPORATION
SERVICE AGREEMENT**

EXECUTION INSTRUMENT

The MSRC SERVICE AGREEMENT attached hereto (together with this execution instrument, the "Agreement"), a standard form of agreement amended and restated as of September 27, 1996, is hereby entered into by and between

MOTIVA ENTERPRISES LLC (AS ASSIGNEE OF STAR ENTERPRISE)
[Name of COMPANY]

a Delaware Limited Liability Company
[Type of entity and place of organization]

with its principal offices located at 1100 Louisiana Street, Houston TX 77002

(the "COMPANY"), and MARINE SPILL RESPONSE CORPORATION, a nonprofit corporation organized under the laws of Tennessee ("MSRC"), and shall be identified as

SERVICE AGREEMENT No. 6MPA049 [This is to be provided by MSRC.]

IN WITNESS WHEREOF, the parties hereto each have caused this Agreement to be duly executed and effective as of July 1, 1998.

MOTIVA ENTERPRISES LLC [COMPANY]

By: Ricks P. Frazier [signature]

Ricks P. Frazier [print name]

Title: General Counsel

Address: 1100 Louisiana Street

Houston, TX 77002

Telephone: 713-277-8150 Fax: 713-277-9920

MARINE SPILL RESPONSE CORPORATION:

By: Judith A. Roos
Judith A. Roos
Marketing & Customer Service Manager
455 Spring Park Place, Suite 200
Herndon, VA 20170
703/326-5617; Fax: 703/326-5660

**MARINE SPILL RESPONSE CORPORATION
SERVICE AGREEMENT**

EXECUTION INSTRUMENT

The **MSRC SERVICE AGREEMENT** attached hereto (together with this execution instrument, the "Agreement"), a standard form of agreement amended and restated as of September 27, 1996, is hereby entered into by and between

EQUILON ENTERPRISES LLC

[Name of COMPANY]

a Delaware Limited Liability Company

[Type of entity and place of organization]

with its principal offices located at 1100 Louisiana, Houston, TX 77002

(the "COMPANY"), and **MARINE SPILL RESPONSE CORPORATION**, a nonprofit corporation organized under the laws of Tennessee ("MSRC"), and shall be identified as

SERVICE AGREEMENT No. WMPA Eto (This is to be provided by MSRC.)

IN WITNESS WHEREOF, the parties hereto each have caused this Agreement to be duly executed and effective as of Jan. 1, 1998:9

EQUILON ENTERPRISES LLC

[COMPANY]

By: D. E. Kinnan [signature]

D. E. Kinnan [print name]

Title: General Counsel

Address: 1100 Louisiana Street

Houston, TX 77002

Telephone: 713-277-7150 Fax: 713-277-9836

MARINE SPILL RESPONSE CORPORATION:

By: Judith A. Roos

Judith A. Roos
Marketing & Customer Service Manager
455 Spring Park Place, Suite 200
Herndon, Virginia 20170

703/326-5617; Fax: 703/326-5660

EMERGENCY RESPONSE AGREEMENT

Agreement No: **ERA-0013-GCL**

Effective Date: **March 30, 2000**

This Emergency Response Agreement ("Agreement"), made and entered into as of the 30th day of March, 2000, by and between EQUILON ENTERPRISES LLC (Equilon) its members, subsidiaries, affiliates and joint venture partners to the extent of their interest or MOTIVA ENTERPRISES LLC (Motiva) its members, subsidiaries, affiliates and joint venture partners to the extent of their interest, a Delaware limited liability company, ("Company"), and Oil Mop LLC, a Louisiana corporation, ("Contractor").

WHEREAS, Company wishes to have access to Contractor's services and resources on an as-needed basis in order to obtain environmental, geological engineering services as may be requested by Company within Contractor's geographical area of operations; and

WHEREAS, Contractor is in the business of providing such services and is willing and able to make its equipment, material, personnel, and services available to Company upon Company's request.

NOW, THEREFORE, in consideration of the mutual covenants and promises contained herein and for other valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

1. DEFINITIONS AND GENERAL PROVISIONS

(a) Definitions

"Company" means as set forth in the first paragraph and any of its Members, Subsidiaries, Affiliates and Joint Venture Partners to the extent of their interest for whose benefit Company will be requesting the Work from Contractor.

"Contractor Representative" means a party duly authorized by Contractor to act on its behalf, with whom the Company may consult at all reasonable times concerning the administration of this Agreement, and whose instructions, requests, and decisions issued or made as provided for in this Agreement shall be binding on Contractor. The Contractor Representative shall identify to the Company the person or persons who, as site coordinator, supervisor, or foreman, shall be responsible for receiving and coordinating the Work directions given by Company and for carrying out Contractor's obligations under this Agreement.

"Contractor's Personnel" means personnel supplied by Contractor for the performance of the Work and shall include both Contractor's regular employees and any such temporary or subcontract personnel employed or contracted by Contractor in order for Contractor to provide the requested Work to Company.

"Designated Contractor" means a Contractor designated by Company to perform Work normally subcontracted by Contractor. Company will contract directly with Designated Contractor.

"Oil" means petroleum (including crude oil and/or any of its fractions or related distillate products).

"Order" means as set forth in Section 2.

"Work Site" means the location(s) at which the Work is performed, whether or not such location(s) is on Company property.

"Work" means as set forth in Section 2.

Executed in one or more counterparts, each of which shall be deemed an original.

Equiva Services LLC for and on behalf
Of Equilon Enterprises LLC and Motiva
Enterprises LLC

Oil Mop , LLC
145 Keating Drive
Belle Chasse, LA 70037

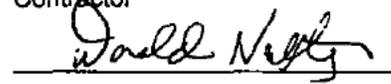
Company

Contractor

By:



By:



G. C. Laplante
Print Name

DONALD NALTY
Print Name

Title

Industry Mgr., SH&E

Title

CEO

Date

3/30/00

Date

3-24-00

VENDOR: SWS Environmental First Response
[Blanket / Purchase] Agreement: ERA-0048-GYO
Issue Date: July 19, 2004

[Shell Oil Company] April 1, 2004

To Be Used For: EMERGENCY RESPONSE ONLY

Commodity Codes

| | | |
|-------------------|---|---|
| VENDOR: | Supplier Name: SWS Environmental First Response TAX ID: 65-0183433 | Invoicing Information: |
| Address: | 1619 Moylan Road Panama City Beach, FL 32407 | Please mail invoice with Freight bill (when Prepaid/Add to Invoice) and bills of lading. For questions regarding payment of invoices, please call: As indicated on BUYER's Release Document |
| Attn: | Jamie Michael | |
| Telephone: | 813-241-0282 | |
| Fax: | 803-241-6765 | |
| Internet: | www.swsefr.com | |

Ship To: As Per BUYER's Release.

Bill To: As Per BUYER's Release

| | | | | |
|-------------|---------|---------|--------|---|
| Non-Taxable | Taxable | Own Use | Resale | Accounting Code, BUYER's Release Document or AFE: As Per BUYER's Release |
|-------------|---------|---------|--------|---|

1. Payment Terms of Net 30 will be based on the date invoice is received.
 All invoices and packing slips must reference the applicable BUYER Release Document or Account Code and be forwarded to the "Bill To" address. Failure to do so may delay or prevent payment.

Delivery term: As per BUYER's Release

Shipping Directions: As Per BUYER's Release

Freight Charges: Prepaid & Allowed Prepaid/Add to Invoice Collect

Notice: This form contains a Liability-Indemnity clause. Please read carefully.

Scope & Duration

This **[Blanket / Purchase]** Agreement ("Agreement") between **Shell Oil Company** ("BUYER") and SWS Environmental First Response ("VENDOR"), having its principal office in Panama City Beach, Florida sets forth the terms and conditions pursuant to which VENDOR is to furnish [*] all Goods and/or Services (individually and/or collectively, "Work"), including necessary tools, equipment, materials, supplies (other than those materials or supplies furnished by BUYER), transportation, testing, clean up, permits, and labor and supervision (including costs of worker's compensation and/or employer's liability insurance and all payroll taxes on such labor) necessary to provide the Goods and Services. This Agreement is effective as of April 1, 2004 (the "Effective Date") and shall remain in effect until terminated in accordance with the provision contained herein. In the event of any conflict between the terms and conditions set forth in a BUYER Release Document hereunder and this Agreement, the terms and conditions of this Agreement prevail except to the extent the terms or conditions of the BUYER Release Document specifically state they supersede or amend the terms or conditions of this Agreement.

SWS Environmental First Response, Agreement number ERA-0048-JYO

construed as if not containing the particular invalid or unenforceable provision or provisions, and the rights and obligations of each party shall be construed and enforced accordingly.

42. Entire Agreement.

This Agreement, its attachments and the BUYER Release Documents entered into hereunder set forth the entire agreement between BUYER and VENDOR with respect to the supply of the Goods and Services by VENDOR to BUYER from the Effective Date and supersede and replace any other agreement or understanding in respect of such subject matter whether in writing or otherwise, entered into or existing prior to the Effective Date. Neither this Agreement nor any BUYER Release Document hereunder shall be altered, amended or modified except in writing duly signed by both parties.

43. Acceptance.

By signing below, each party signifies that it has carefully examined and agrees to be bound by all terms and conditions which are contained in this Agreement (including all front pages, the Standard Terms and Conditions contained in Articles 1 through 17 and the Additional Terms and Conditions contained in Articles 18 through 43).

Authorized BUYER Representative

| | |
|----------------------------------|---------------------------------|
| Signature: <i>Mark A. Garcia</i> | Date: <i>8/25/04</i> |
| Name: <i>MARK A. GARCIA</i> | Title: <i>COMMODITY MANAGER</i> |
| Telephone: <i>713 241-8426</i> | Fax: <i>713 241-8410</i> |

Authorized VENDOR Representative

| | |
|---------------------------------|---------------------------------|
| Signature: <i>Samir Michale</i> | Date: <i>7/29/04</i> |
| Name: <i>Samir Michale</i> | Title: <i>Contracts Manager</i> |
| Telephone: <i>813 241-0282</i> | Fax: <i>813 241-6765</i> |

EMERGENCY SPILL RESPONSE AGREEMENT

Agreement No: **ERA-0002-GCL**

Effective Date: **January 11, 2000**

This Emergency Response Agreement ("Agreement"), made and entered into as of the 11th day of January, 2000, by and between EQUILON ENTERPRISES LLC (Equilon) its members, subsidiaries, affiliates and joint venture partners to the extent of their interest or MOTIVA ENTERPRISES LLC (Motiva) its members, subsidiaries, affiliates and joint venture partners to the extent of their interest, a Delaware limited liability company, ("Company"), and United States Environmental Services, LLC., a Louisiana corporation, ("Contractor").

WHEREAS, Company wishes to have access to Contractor's services and resources on an as-needed basis in order to obtain environmental, geological engineering services as may be requested by Company within Contractor's geographical area of operations; and

WHEREAS, Contractor is in the business of providing such services and is willing and able to make its equipment, material, personnel, and services available to Company upon Company's request.

NOW, THEREFORE, in consideration of the mutual covenants and promises contained herein and for other valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

1. DEFINITIONS AND GENERAL PROVISIONS

(a) Definitions

"Company" means as set forth in the first paragraph and any of its Members, Subsidiaries, Affiliates and Joint Venture Partners to the extent of their interest for whose benefit Company will be requesting the Work from Contractor.

"Contractor Representative" means a party duly authorized by Contractor to act on its behalf, with whom the Company may consult at all reasonable times concerning the administration of this Agreement, and whose instructions, requests, and decisions issued or made as provided for in this Agreement shall be binding on Contractor. The Contractor Representative shall identify to the Company the person or persons who, as site coordinator, supervisor, or foreman, shall be responsible for receiving and coordinating the Work directions given by Company and for carrying out Contractor's obligations under this Agreement.

"Contractor's Personnel" means personnel supplied by Contractor for the performance of the Work and shall include both Contractor's regular employees and any such temporary or subcontract personnel employed or contracted by Contractor in order for Contractor to provide the requested Work to Company.

"Designated Contractor" means a Contractor designated by Company to perform Work normally subcontracted by Contractor. Company will contract directly with Designated Contractor.

"Oil" means petroleum (including crude oil and/or any of its fractions or related distillate products).

"Order" means as set forth in Section 2.

"Work Site" means the location(s) at which the Work is performed, whether or not such location(s) is on Company property.

"Work" means as set forth in Section 2.

31. SURVIVAL

The warranty, liability, indemnity, audit, ownership of tangible work product, patent, and confidentiality (including publicity releases) provisions of this Agreement shall survive its termination or final settlement. The provisions of this Agreement relating to termination and settlement of disputes and claims (including choice of law) shall survive its termination, but not its final settlement.

32. INVALIDITY

If any clause, phrase or provision of this Agreement is determined to be contrary to law, then that clause, phrase or provision shall be disregarded but the remainder of the Agreement shall remain in effect.

Executed in one or more counterparts, each of which shall be deemed an original.

Equiva Services LLC for and on behalf
Of Equilon Enterprises LLC and Motiva
Enterprises LLC
Company

By:



G. C. Laplante
Print Name

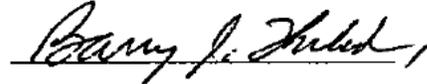
Title Industry Mgr., SH&E

Date

12/3/99

United States Environmental
Services, L.L.C.
Contractor

By:



Barry J. Thibodeaux
Print Name

Title President

Date

12/20/99



APPENDIX B

WORST CASE DISCHARGE ANALYSIS AND SCENARIOS

Introduction

Gulf of Mexico - West Response Zone

Worst Case Discharge Planning Volume Calculations

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.

United States Department of Transportation/Pipeline and Hazardous Materials Safety Administration 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 (bph), 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

This worst case discharge location was chosen because the release:

- occurs in an environmentally sensitive area
- (b) (3), (b) (7)(F)
- occurs during adverse (rainy and windy) weather conditions.

Mitigation Tactics for Worst Case Discharge & Other Areas

A tactical plan has been developed for the following locations and is included in the subsequent tabs.

- East Houston/Port Arthur - Trinity River

The tactical plans set forth the response strategy including site descriptions and characteristics, resources and personnel needed, tactical objectives, and assignment lists.

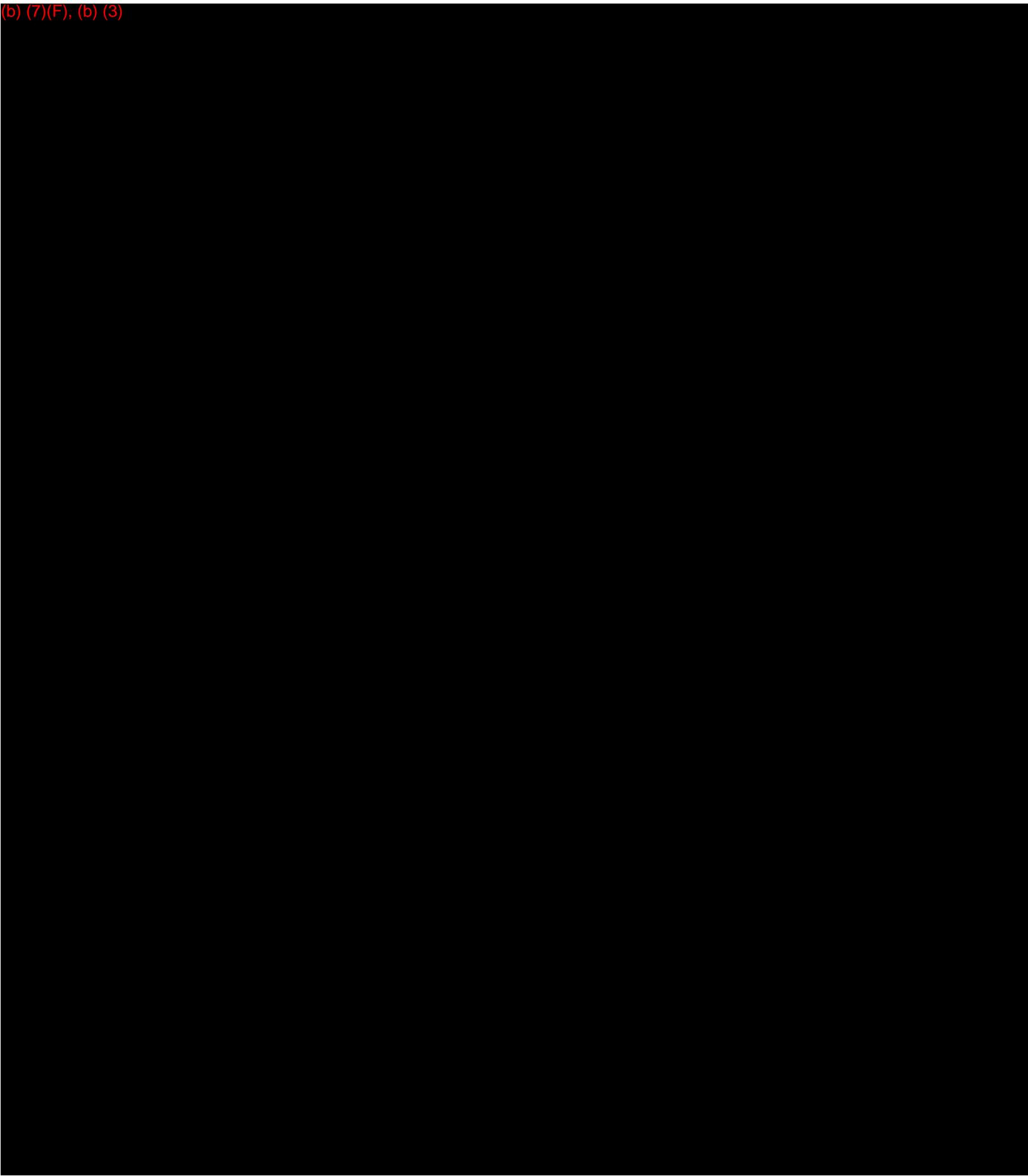
Worst Case Discharge (Pipeline)

Volume

(b) (7)(F), (b) (3)

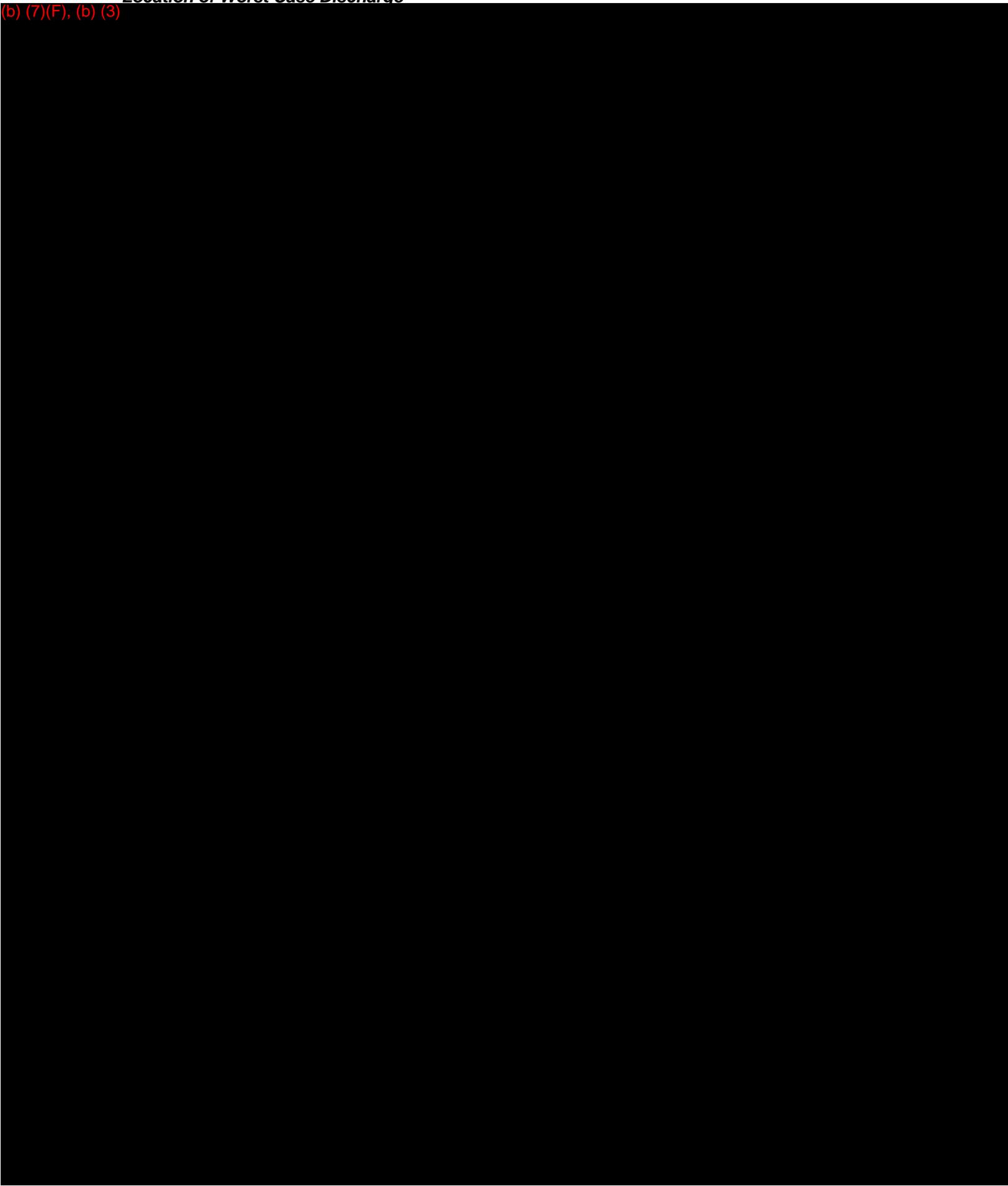
Location of Worst Case Discharge

(b) (7)(F), (b) (3)



Location of Worst Case Discharge

(b) (7)(F), (b) (3)



RESPONSE CAPABILITY SCENARIOS

Gulf of Mexico - West Response Zone

PHMSA Worst Case Discharge = (b) (7)(F), (b) (b) (7)(F), (b) (3)



Response Requirement

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

- Resources capable of arriving at the staging area within the applicable response tier requirements for non-high volume areas (Tier 1 = 12 hours; Tier 2 = 36 hours; Tier 3 = 60 hours).
- Resources capable of arriving at the staging area within the applicable response tier requirements for high volume areas (Tier 1 = 6 hours; Tier 2 = 30 hours; Tier 3 = 54 hours).
- Resources capable of oil recovery in inclement weather conditions (i.e. heavy rain, snow, ice).

Notes

- Contracted and Company owned equipment and manpower resources are detailed in Figure 2.6 and Appendix A.
- Telephone references are provided in Figures 2.2 and 2.6.

| Breakout Tank Worst Case Discharge = (b) (7)(F), (b) (3) |
|--|
| (b) (7)(F), (b) (3) |

RESPONSE PLANNING VOLUME CALCULATIONS

| Location Data | | | |
|--|--|---------------------|---------------------|
| | | | (b) (7)(F), (b) (3) |
| Location Type | | | |
| Port Type | | | |
| WCD Product Type | | | |
| Product Group | | | |
| Pipeline and Hazardous Materials Safety Administration WCD Volume (bbls) | | | |
| Discharge Volumes/Calculations | | | |
| | | | (b) (7)(F), (b) (3) |
| Worst Case Discharge - Based on Pipeline and Hazardous Materials Safety Administration criteria (bbls) | | | |
| Selected Calculation Factors (Based on USCG Tables) | | | |
| Removal Capacity Planning Volume - Percent Natural Dissipation | | | 30 % |
| Removal Capacity Planning Volume - Percent Recovered Floating Oil | | | 50% |
| Removal Capacity Planning Volume - Percent Oil Onshore | | | 50% |
| Emulsification Factor | | | 2 |
| Tier 1 - On Water Oil Recovery Resource Mobilization Factor | | | 15% |
| Tier 2 - On Water Oil Recovery Resource Mobilization Factor | | | 25% |
| Tier 3 - On Water Oil Recovery Resource Mobilization Factor | | | 40% |
| Response Planning Volume Calculation | | | |
| | | | (b) (7)(F), (b) (3) |
| On-Water Recovery Volume (bbls) | | | |
| Shoreline Recovery Volume (bbls) | | | |
| Shoreline Cleanup Volume (bbls) | | | |
| | | | |
| | | Tier 1 | Tier 2 |
| On-Water Recovery Cpcty (bbls/day) | | (b) (7)(F), (b) (3) | |
| Shallow Water Resp Cpblty (bbls/day) | | | |
| Storage Capacity (bbls/day) | | | |
| On-Water Response Caps (bbls/day) | | | |
| Additional Response Req'd (bbls/day) | | | |
| Response Time (hrs) | | | |



APPENDIX C

HAZARD EVALUATION / PREVENTION

- C.1 [Release Detection](#)
- C.2 [Leak Detection Systems](#)
- C.3 [Discharge Prevention Systems](#)

HAZARD EVALUATION / PREVENTION

Leak detection and discharge prevention is accomplished through safe operating procedures and maintenance procedures outlined in the Company Operations and Maintenance (O&M) Manual. The Company Operations and Maintenance Manual is designed to meet the requirements found in Title 49, US Code of Federal Regulations, Part 195, Transportation of Hazardous Liquids by Pipeline.

C.1 RELEASE DETECTION

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

C.2 LEAK DETECTION SYSTEMS

(b) (3), (b) (7)(F)

- (b) (3), (b) (7)(F)

Drug and Alcohol Testing

All personnel (including supervisors and contractors) associated with the operation and maintenance of the pipeline facilities covered by this Plan are subject to drug and alcohol testing as dictated by the United States Department of Transportation (DOT) under 49 CFR Part 199. These regulations provide for mandatory pre-employment, random, and post accident drug and alcohol testing.

Security of Facilities

All pipelines subject to DOT jurisdiction must comply with the security requirements listed in 49 CFR Part 195.

C.3 DISCHARGE PREVENTION SYSTEMS

PREVENTION PROGRAMS

SPLC's philosophy is prevention of emergencies to ensure:

- A safe work environment for employees, and
- Protection of the general population and environment.

In order to support SPLC's prevention philosophy, the following programs are provided:

| Program | Description |
|------------------------|--|
| Safety | Promotes safe work practices and procedures. |
| Preventive Maintenance | Provides preventive maintenance procedures and inspections for: <ul style="list-style-type: none"> • Cathodic protection • Computer systems • Communications systems • Electrical equipment and controls • Mechanical equipment and controls • Paint • Pipeline coatings and inhibitors, and • Tanks and pressure vessels. |
| Field Inspections | Inspection programs that enable SPLC to assess: <ul style="list-style-type: none"> • Status of and need for corrective actions in the preventive maintenance programs • Input from field staff, and • Effectiveness of operation and maintenance procedures. |

| Program | Description |
|---|---|
| Pipeline Rights of Way (ROW) Inspection | As specified by Department of Transportation (DOT) Code of Federal Regulations (CFR), Part 192 and/or 195, pipeline inspections are documented and maintained. |
| One-Call System | <p>In states where SPLC has facilities, SPLC actively participates in One-Call systems by:</p> <ul style="list-style-type: none"> ● Paying dues ● Using and promoting the system, and ● Requiring contractors to use the system. |



APPENDIX D

EVACUATION PLAN

D.1 Evacuation

D.1 EVACUATION

This evacuation plan shall be implemented in the event of an incident which requires the evacuation of one or more areas of the Facility.

The primary responsibility of the Incident Commander is to account for all employees and visitors in the emergency area.

Evacuation Planning

The primary evacuation routes were developed with the following factors taken into consideration:

- location of stored materials;
- hazard imposed by spilled material;
- spill flow direction;
- prevailing wind direction and speed;
- water currents, tides, or wave conditions (if applicable);
- arrival route of emergency response personnel and response equipment;
- evacuation routes;
- alternative routes of evacuation;
- transportation of injured personnel to nearest emergency medical facility;
- location of alarm/notification systems;
- the need for a centralized check-in area for evacuation validation (roll call);
- selection of a mitigation command center; and
- location of shelter at the facility as an alternative to evacuation.

All employees and contractors have been trained to evaluate the safety of the primary route prior to using it for evacuation.

The Evacuation Diagram shows the primary evacuation routes throughout the Facility.

Evacuation Response

Procedures and Schedules

Introduction

There are several training programs provided to SPLC employees who are expected to respond to incidents.

Requirements

SPLC employees must take incident responder training once and take refresher courses or demonstrate competence every year.

Who Needs This Training

All employees who are identified as potential incident responders must satisfy these training requirements.

Tracking

SPLC tracks all compliance training taken by employees (courses offered internally and externally, drills and actual responses) using Shell's training records management system. Upon notification of completion, the designated area/location employee documents this training in an online system (which is accessible via company intranet). It is line management's responsibility to ensure compliance of initial and refresher training. Individual employee records are maintained through employment and retained for an additional five (5) years after employment.

Evaluation

SPLC will conduct personnel performance reviews and evaluate the effectiveness of the training program. Any changes to the training program that are required to ensure that it is effective will be made as necessary. The evaluation will be conducted once every calendar year, not to exceed 15 months. The supervisor will maintain thorough knowledge of the response procedures for which they are responsible.

Evacuation Diagram



APPENDIX E

TRAINING AND DRILLS

E.1 Response Team Training

Oil Spill Response Plan Review

Hazardous Waste Operations and Emergency Response (29 CFR 1910.120)

Incident Command System

Training Records Maintenance

Contractor Training

Training Qualifications

Drug and Alcohol Testing

E.2 Response Team Exercises

Quarterly QI Notification Exercise

Annual Equipment Deployment Exercise

Annual Response Team Tabletop Exercise

Government-Initiated Unannounced Exercise

Area Exercises

Exercise Documentation

E.3 Incident Response Review

Introduction

Review of FRP Implementation and Adequacy

Review of Operational Response

Area Only Review

Area and Control Center Review

E.1 RESPONSE TEAM TRAINING

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

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

INCIDENT COMMAND SYSTEM--Response team members will receive ICS training, and may also receive supplemental training in other, related general topics.

VOLUNTEERS-Shell Pipeline 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.

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

That all personnel know:

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

That all reporting personnel know:

- The Pipelines and Response Zone details for the affected area (Response Zones Annexes).
- The telephone number of the Federal, State and local agencies and other required notifications (Section 2.0).
- The notification process. (Section 2.0).

That all response personnel know:

- The characteristics and hazards of the oil discharged (Section 3.0 and Appendix H - MSDS).
- The conditions that is 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).

Oil Spill Response Plan Review

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

HAZARDOUS WASTE OPERATIONS AND EMERGENCY RESPONSE (29 CFR 1910.120)

Federal and State regulations require that Response Team Members maintain up-to-date Hazardous Waste Operations and Emergency Response training necessary to function in their assigned positions. At a minimum, team members will receive "First Responder Awareness Level" training. All personnel responding to an incident must satisfy the applicable Hazardous Waste Operations and Emergency Response training requirements of 29 CFR 1910.120.

| OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION HAZARDOUS WASTE OPERATIONS AND EMERGENCY RESPONSE TRAINING REQUIREMENTS | | |
|--|---|------------------|
| Responder Classification | Required Training Hours | Refresher |
| 29CFR 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 |
| 29CFR 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 |
| * Previous work experience and/or training certified as equivalent by employer. | | |

Incident Command System

Response Team Members will receive Incident Command System training and may also receive supplemental training in other related general topics.

Training Records Maintenance

Emergency response training records are maintained at the Company's office. Training records for response personnel will be maintained for as long as personnel have duties in this Emergency Response Plan.

Contractor Training

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

Training Qualifications

As no formalized method of certifying training instructors has been provided by the Occupational Safety and Health Administration, 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 training program to ensure their suitability for the program.

Drug and Alcohol Testing

All personnel (including supervisors and contractors) associated with the operation and maintenance of the pipeline facilities covered by this Plan are subject to drug and alcohol testing as dictated by the United States Department of Transportation (DOT) under 49 CFR Part 199. These regulations provide for mandatory pre-employment, random, and post accident drug and alcohol testing.

E.2 RESPONSE TEAM EXERCISES

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 drills to maintain compliance, and each plan-holder must participate in at least one exercise annually. The following table lists the triennial exercise cycle for facilities (see National Preparedness for Response Exercise Program Guidelines for full details).

| TRIENNIAL CYCLE | | |
|--|------------------|---|
| Total Number | Frequency | Exercise Type/Description |
| 12 | Quarterly | Qualified Individual Notification Exercise |
| 3 | Annually | Equipment Deployment Exercise (<i>Facility-owned equipment</i>) |
| 3 | Annual | Response Team Tabletop Exercise |
| 3 | Annual | Equipment Deployment Exercise (<i>facilities with Oil Spill Removal Organization-owned equipment</i>) |
| 3 | 3 per Cycle | Unannounced Exercise (<i>not a separate exercise</i>) Actual response can be considered as an unannounced exercise. Credit can also be given for unannounced equipment deployment and Response Team tabletop exercises. |
| NOTES: 1) All Emergency Response Plan components must be exercised at least once in the Cycle. 2) Triennial cycle is completed for each response zone. | | |

Quarterly QI Notification Exercise

- **Scope:** Exercise communication between Pipeline personnel and the Qualified Individual(s) and/or designated alternate(s). At least once each year, one of the notification exercises should be conducted during non-business hours.

- **Objective:** Contact must be made with a Qualified Individual or designated alternate, as identified in the 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.

Annual Equipment Deployment Exercise (for operator and/or Oil Spill Removal Organization equipment)

- **Scope:** Demonstrate ability to deploy spill response equipment identified in the Oil Spill Response Plan.
 - May consist entirely of operator or OSRO 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 once a year and semi-annually for each terminal with response equipment. If the same personnel and equipment respond to multiple zones, they need only exercise once per year. If different personnel and equipment respond to various Response Zones, each must participate in an annual equipment deployment exercise.
- **Objective:** Demonstrate personnel's ability to deploy and operate response equipment. Ensure that the response equipment is in proper working order.
- **General:** The Facility may take credit for actual equipment deployment to a spill, or for training sessions, as long as the activities are properly documented.

Annual Response Team Tabletop Exercise

- **Scope:** Exercise the response team's organization, communication, and decision-making in managing a spill response. Each team identified within the Plan must conduct an annual Response Team Tabletop Exercise.
- **Objective:** Exercise the response team in a review of the following:
 - Knowledge of the Plan.
 - Proper notifications.
 - Communications system.
 - Ability to access an OSRO.
 - Coordination of internal spill response personnel.
 - Review of the transition from an initial team to a regional team.
 - Ability to effectively coordinate response activity with the National Response System (NRS) Infrastructure.
 - Ability to access information in the Area Contingency Plan.
- **General:** A minimum of one Response Team Tabletop Exercise in a triennial cycle will involve a Worst Case Discharge scenario.

Government-Initiated Unannounced Exercise

- **Scope:** Demonstrate ability to respond to a Worst Case Discharge spill event.
- **Objectives:** Designated Oil Spill Response Team Members should demonstrate adequate knowledge of their Emergency Response Plan and the ability to organize, communicate, coordinate, and respond in accordance with that Plan.
- **General:** Maximum of 20 unannounced Pipeline and Hazardous Materials Safety Administration 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.

Area Exercises

- **Objective:** The purpose of the area exercise is to exercise the entire response community in a particular area. An area is defined as that geographic area for which a separate and distinct Area Contingency Plan has been prepared, as described in Oil Pollution Act 90. The response community includes the Federal, State, and local government and industry. The area exercises are designed to exercise the government and industry interface for spill response.
- **General:** The goal is to ensure that all areas of the country are exercised triennially. All of the area exercises will be developed by an exercise design team. The exercise design team is comprised of representatives from the Federal, State, and local government and industry. A lead plan holder would lead each area exercise. The lead plan holder is the organization (government or industry) that holds the primary plan that is exercised in the area exercise. The lead plan holder would have the final word on designing the scope and scenario of the exercise.

Exercise Documentation

- All exercises should be documented and maintained at the Company office; 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.
- Exercise documentation should be kept on file for the required length of time depending on the regulating agency (three (3) years for the U.S. Coast Guard and five (5) years for the Pipeline and Hazardous Materials Safety Administration and the U.S. Environmental Protection Agency).

E.3 INCIDENT RESPONSE REVIEW

Introduction

The following explains the guidelines to follow for conducting a review of the incident response. Shell Supply and Distribution (S&D) must conduct a review of responses to certain incidents in accordance with:

- 49 CFR 194.121(b) after containment and initial cleanup of a "oil spill" to evaluate the implementation of the FRP and its adequacy, and
- 49 CFR 195.402(e)(9) to evaluate the effectiveness of emergency operational procedures.

The Shell Supply & Distribution North America Incident Reporting and Investigation procedure shall also be referred to for additional response review requirements.

Review of FRP Implementation and Adequacy (49 CFR Part 194)

Certain "oil spills" result in Shell Supply and Distribution (S&D) implementing its Facility Response Plan (FRP) and activating its location response team. In these cases, a review of the plans' implementation and the plan's adequacy must be conducted. This review should begin as soon as possible while the facts of the incident are fresh in the responders' minds. Ideally, this would be initiated during the proactive phase of the incident or immediately following conclusion of the response. The following table outlines the responsibilities and the procedures for conducting a review of a response to contain and mitigate an "oil spill:"

| Step | Action |
|------|--|
| 1 | Identify the review leader. Unless specifically directed otherwise by management, the review leader will be the Incident Commander for the facility or Location Response Team, as appropriate. |
| 2 | The review leader will determine the depth of the review based upon the magnitude of the response and improvements encountered. |
| 3 | The Incident Commander may assign members of the response team as necessary to assist with the review. |
| 4 | Discuss all improvements regarding the response or the plan's adequacy with Shell S&D's HSSE Manager (crude or products) before issuing the formal review. |

| Step | Action |
|------|---|
| 5 | All reviews must be documented on form SP-30, "Incident Response Review." |
| 6 | Consider the following guidelines in review preparation: <ul style="list-style-type: none"> • State only the facts • Do not express opinions • Do not assign blame, and • Do not evaluate individual performance. |
| 7 | Route in accordance with instructions on SP-30. |
| 8 | Shell S&D's HSSE Manager (crude or products) will serve as the focal point for addressing any noted improvements. |

Review of Operational Response - 49 CFR Part 195

All operational responses to emergency conditions for hazardous liquid pipelines are required to be reviewed to determine the adequacy of the procedures in mitigating the different types of emergencies. Depending upon how the affected facility is operated, this review can either be solely the Area's responsibility or a joint Area and Control Center responsibility.

Area Only Review - 49 CFR Part 195

The following table outlines the responsibilities and procedures for conducting a review of the operational procedures to mitigate an emergency involving only the Area.

| Step | Action |
|------|---|
| 1 | Identification of the review leader. Unless specifically directed otherwise by management, the supervisor/foreman responsible for the affected system(s) will conduct the review. |
| 2 | The review leader will determine the depth of the review based upon the magnitude of the response and improvements encountered. |

| Step | Action |
|------|--|
| 3 | <p>As applicable, the review must cover the adequacy of the procedures which address the following:</p> <ul style="list-style-type: none"> ● Receiving emergency notifications and evaluating the appropriate response ● Prompt and effective response to notifications for the various types of emergencies ● Personnel, equipment, instruments, tools, and materials as needed at the scene of an emergency ● Emergency shutdown or pressure reduction to minimize the volume of hazardous liquid that is released from any section of a pipeline system in the event of a failure ● Control of the released product on site to minimize the hazards ● Protection of the public by assisting with evacuation and traffic control ● Notification of fire, police, and other appropriate public officials and response coordination as appropriate for hazardous liquids, carbon dioxide, or highly volatile liquids (HVL), and ● Use of appropriate instruments to assess the extent and coverage of vapor cloud and hazardous areas resulting from HVL releases. |
| 4 | <p>The review must contain as a minimum the following:</p> <ul style="list-style-type: none"> ● A "check mark" indicating that the review was performed ● A signature of the person who performed the review, and ● A date indicating when the review was performed. |
| 5 | <p>A copy of all reviews shall be sent to:</p> <ul style="list-style-type: none"> ● General Manager ● Operations Manager and ● Shell S&D HSSE Manager (crude or products). |
| 6 | <p>The review leader will serve as the focal point for addressing any noted improvements.</p> |

Area and Control Center Review - 49 CFR Part 195

The following table outlines the responsibilities and procedures for conducting a review of the operational procedures to mitigate an emergency involving both the Area and the Control Center.

| Step | Action |
|-------------|---|
| 1 | Identification of the review leader. Unless specifically directed otherwise by management, the supervisor/foreman responsible for the affected system(s) will conduct the review. |
| 2 | The review leader will determine the depth of the review based upon the magnitude of the response and improvements encountered. |
| 3 | <p>As applicable, the Area will review the adequacy of the procedures which address the following:</p> <ul style="list-style-type: none"> ● Receiving emergency notifications and evaluating the appropriate response ● Prompt and effective response to notifications for the various types of emergencies ● Personnel, equipment, instruments, tools, and materials as needed at the scene of an emergency ● Emergency shutdown or pressure reduction to minimize the volume of hazardous liquid that is released from any section of a pipeline system in the event of a failure ● Control of the released product on site to minimize the hazards ● Protection of the public by assisting with evacuation and traffic control ● Notification of fire, police, and other appropriate public officials and response coordination as appropriate for hazardous liquids, carbon dioxide, or highly volatile liquids (HVL), and ● Use of appropriate instruments to assess the extent and coverage of vapor cloud and hazardous areas resulting from HVL releases. |
| 4 | <p>The review must contain as a minimum the following:</p> <ul style="list-style-type: none"> ● A "check mark" indicating that the review was performed ● A signature of the person who performed the review, and ● A date indicating when the review was performed. |
| 5 | Forwarded the review to the appropriate Operations Supervisor. |

| Step | Action |
|------|---|
| 6 | <p>As applicable, the Operations Supervisor will review the adequacy of the procedures which address the following:</p> <ul style="list-style-type: none"> ● Receiving emergency notifications and evaluating the appropriate response ● Prompt and effective response to notifications for the various types of emergencies ● Personnel, equipment, instruments, tools, and materials as needed at the scene of an emergency ● Emergency shutdown or pressure reduction to minimize the volume of hazardous liquid that is released from any section of a pipeline system in the event of a failure, and ● Notification of fire, police, and other appropriate public officials and response coordination as appropriate for hazardous liquids, carbon dioxide, or highly volatile liquids (HVL). |
| 7 | <p>The review must contain as a minimum the following:</p> <ul style="list-style-type: none"> ● A "check mark" indicating that the review was performed ● A signature of the person who performed the review, and ● A date indicating when the review was performed. |
| 8 | <p>A copy of all reviews shall be sent to:</p> <ul style="list-style-type: none"> ● Originating foreman/supervisor ● General Manger ● Operations Manager ● Shell S&D HSSE Manager (crude or products) ● Manager Control Center, and ● Community Safety. |
| 9 | <p>The originating foreman/supervisor shall be responsible for following-up on any Area noted improvements.</p> |
| 10 | <p>The Operations Supervisor shall be responsible for following-up on any Control Center noted improvements.</p> |



APPENDIX F

DISPOSAL PLAN

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WASTE MANAGEMENT

OVERVIEW

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

WASTE CLASSIFICATION

Oily - Liquid Wastes

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

Non-Oily - Liquid Wastes

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

Oily - Solid/Semi-Solid Wastes

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

Non-Oily - Solid/Semi-Solid Wastes

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

WASTE HANDLING

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

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 of at an appropriate disposal site. Depending on the location of response operations, any or all of the following transfer operations may occur:

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

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

- **Pumps:** Rotary pumps, such as centrifugal pumps, may be used when transferring large volumes of oil, but they may not be appropriate for pumping mixtures of oil and water. The extreme shearing action of centrifugal pumps tends to emulsify oil and water, thereby increasing the viscosity of the mixture and causing low, inefficient transfer rates. The resultant emulsion would also be more difficult to separate into oil and water fractions. Lobe or "positive displacement" pumps work well on heavy, viscous oils, and do not emulsify the oil/water mixture. Double-acting piston and double acting diaphragm pumps are reciprocating pumps that may also be used to pump oily wastes.

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 1 provides a comparative evaluation of 15 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 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.

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

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

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

WASTE STORAGE (Cont'd)

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

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

- Geology.
- Ground water.
- Soil.
- 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 underfelt thick enough to prevent piercing. A reinforced access area for vehicles at the edge of the site should be provided. In addition, the oily debris should be covered by secured visqueen or tarps and an adequate stormwater runoff collection system for the size and location of the site would be utilized. Additionally, the sites should be at least 3 meters above mean sea level.

Oily debris can be hauled to an 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 of 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 of at a solid waste landfill. Treatment is the next best alternative, but incineration and burning for energy recovery have more options within the state. There are some limitations and considerations in incinerating for disposal. Environmental quality of incineration varies with the type and age of the 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. Landfilling is the last option. Final disposal at a solid or dangerous waste landfill is the least environmentally sound method of dealing with a waste problem such as oily debris.

During an oil spill incident, the Company 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. The Company maintains a list of approved disposal sites that satisfy local, state, and federal regulations and company requirements. This identification of suitable waste treatment and disposal sites would be prepared by the HSSE Department of the Company Response Team in the form of an Incident Disposal Plan which must be authorized by the U.S. Coast Guard and/or the EPA. 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 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.

The Company's **HSSE Department** is responsible for ensuring that all waste materials be disposed of 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 of 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 of only at Company-approved disposal facilities. The Company's **HSSE Department** is responsible for ensuring that all waste materials are disposed of at a Company internally approved disposal site. Disposal at a non-approved facility would require approval by the Company **HSSE Department** prior to sending any waste to such a facility.

TABLE 1

COMPARATIVE EVALUATION OF OIL SPILL TRANSFER SYSTEMS

| CHARACTERISTICS OF TRANSFER SYSTEMS | CENTRIFUGAL PUMP | LOBE PUMP | GEAR PUMP | INTERMESHING 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 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 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: <ul style="list-style-type: none"> ● 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 |
| 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

NATIONAL RESPONSE FRAMEWORK

G.1 National Response Framework

Figure G.1 Response Organization

Figure G.2 Federal Representation on National Response Team

Figure G.3 U.S. Environmental Protection Agency (EPA) Regional Offices

Figure G.4 U.S. Coast Guard (USCG) Districts

G.1 NATIONAL RESPONSE FRAMEWORK

National Response Framework

The National Response Framework (NRF) presents the guiding principles that enable all response partners to prepare for and provide a unified national response to disasters and emergencies - from the smallest incident to the largest catastrophe. The Framework defines the key principles, roles and structures that organize the way we respond as a Nation. It describes how communities, tribes States, the Federal Government, and private-sector and nongovernmental partners apply these principles for a coordinated, effective national response. The National Response Framework is always in effect, and elements can be implemented at any level at any time.

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 Framework 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 Framework 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, non-governmental 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 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)*

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 modified (September 1994) to implement changes made to the Clean Water Act by the Oil Pollution Act of 1990.

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 G.1).

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 G.2. Normally, the NRT is chaired by the EPA representative (Figure G.3) while the USCG representative (Figure G.4) 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.
4. Since the NCP is a regulation subject to notice and comment requirements, modifications will require future rulemaking not available at this time.

**FIGURE G.1
RESPONSE ORGANIZATION**

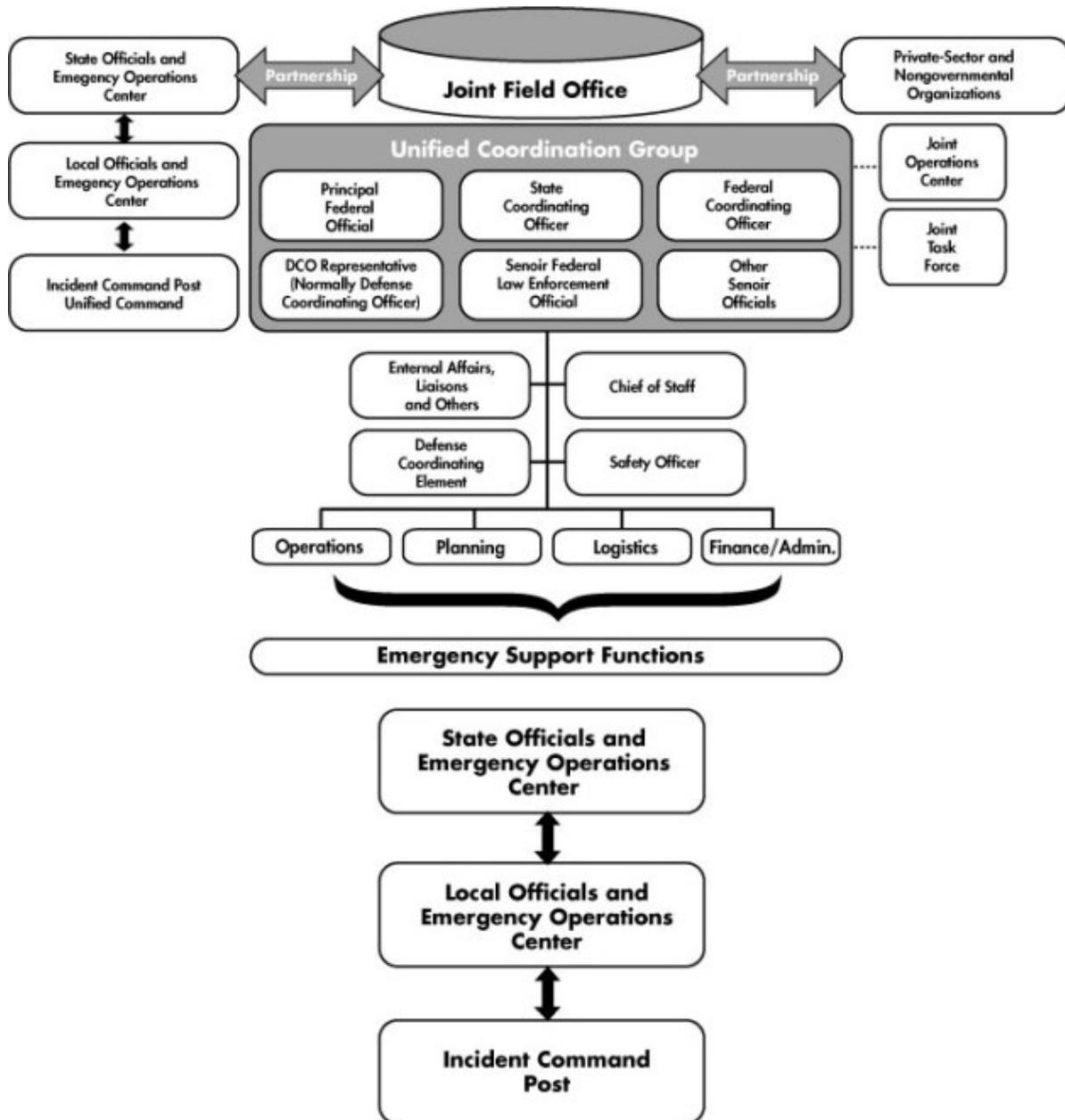


FIGURE G.2
FEDERAL REPRESENTATION ON NATIONAL RESPONSE TEAM

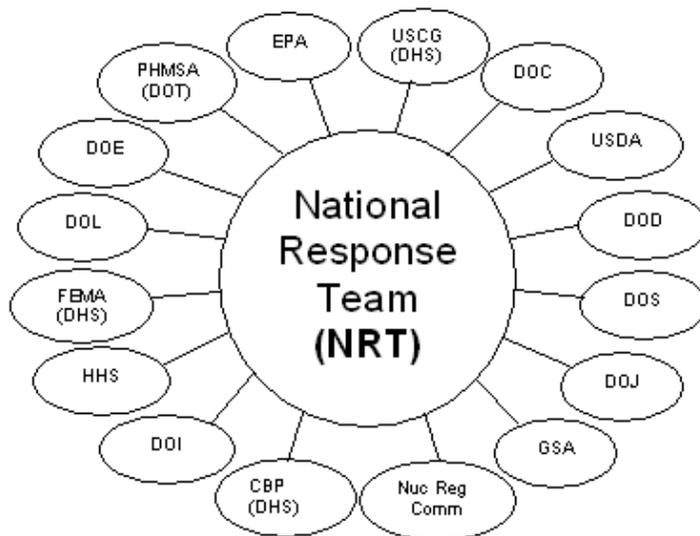


FIGURE G.3

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

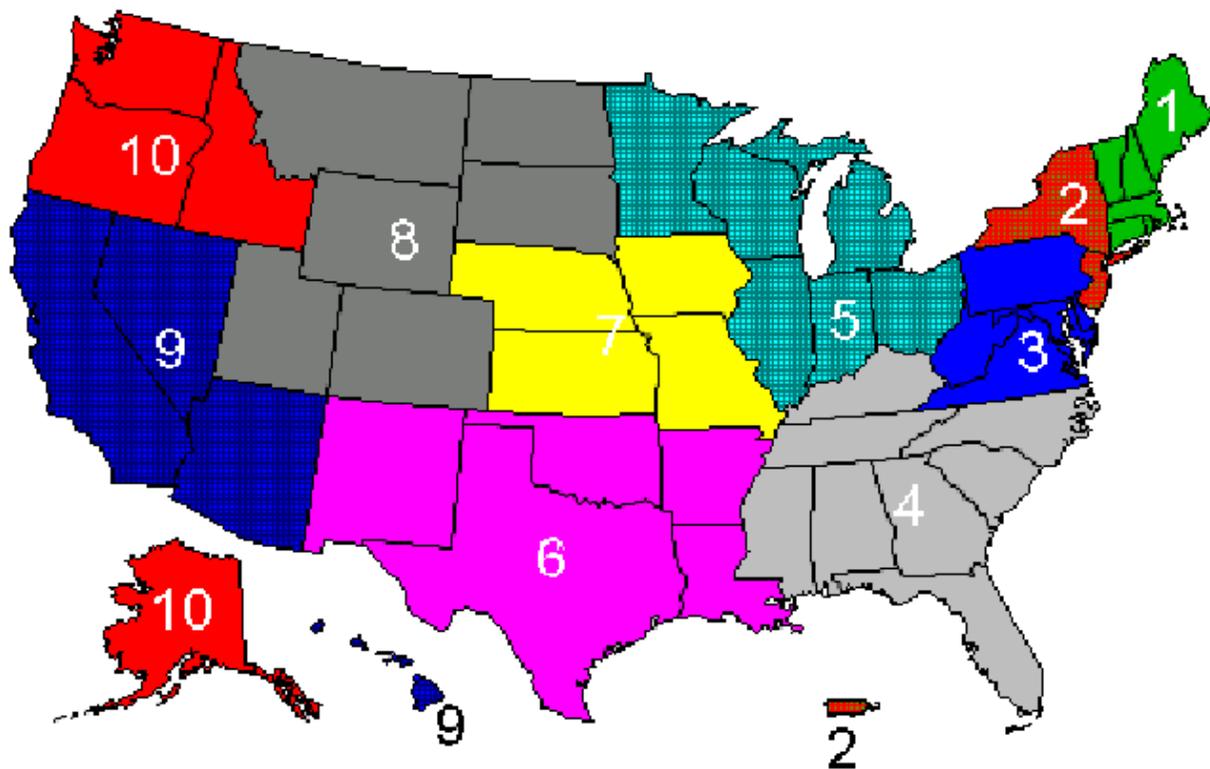
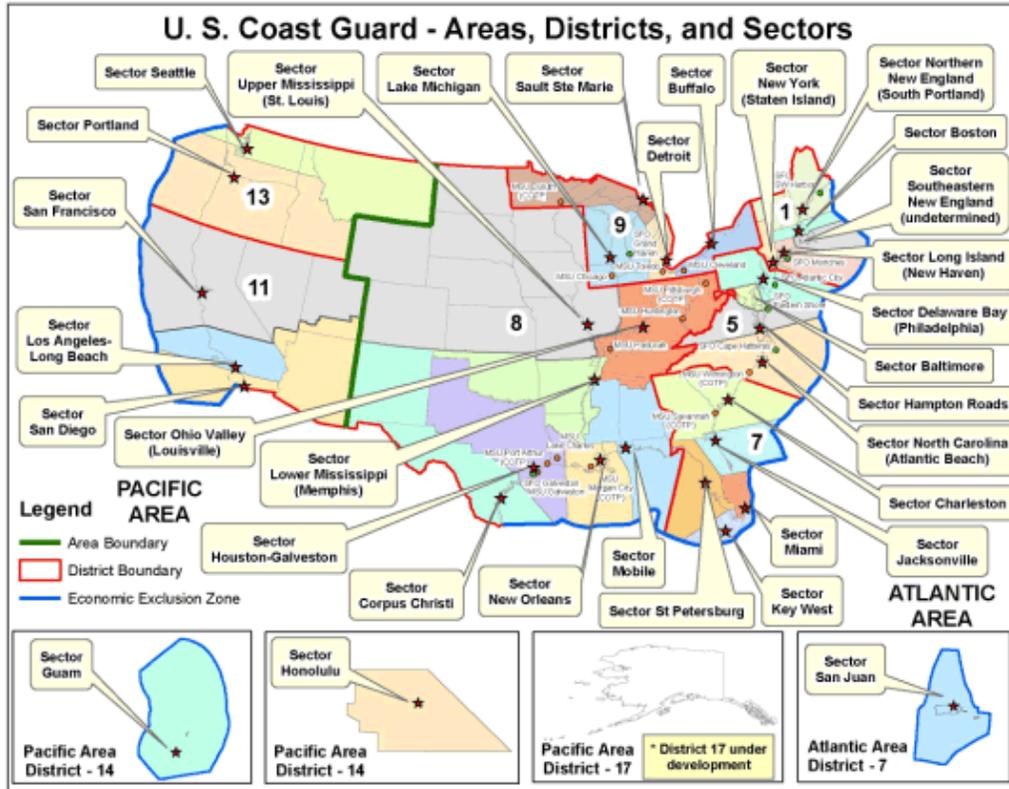


FIGURE G.4
U.S. COAST GUARD (USCG) DISTRICTS





APPENDIX H

MISCELLANEOUS FORMS

DOT/PHMSA Plan Approval

[Click to view](#)

TGLO Discharge Prevention and Response Certificate No.TX10112

[Click to view](#)

Certificate of QI and AQI Authority

[Click to view](#)

Certificate of Response Preparedness

[Click to view](#)

Activation of Response Leadership Team

[Click to view](#)

Containment Methods

[Click to view](#)

Eight-Step Decontamination Plan For Personnel

[Click to view](#)

Emergency Equipment Inspection

[Click to view](#)

Equipment Deployment Exercise Form

[Click to view](#)

First Notification of Incident

[Click to view](#)

ICS Forms and Site Safety Plan

[Click to view](#)

LRT Activation Chart

[Click to view](#)

Notification Exercise Form

[Click to view](#)

Recommended Guideline for Inspection and Testing

[Click to view](#)

Security Incident Response Checklist - Bomb Threat (via Phone)

[Click to view](#)

Spill Management Team Tabletop Exercise Form

[Click to view](#)

SPLC Site Safety Plan

[Click to view](#)

Structure of the Response Leadership Team

[Click to view](#)

TGLO Oiled Wildlife Response Information Guide

[Click to view](#)

TRRC Form H-8

[Click to view](#)

Torres, Coral L SPLC-DSD/257

From: Hodgins, Carrie L SPLC-DSD/622
Sent: Tuesday, May 12, 2009 1:38 PM
To: Torres, Coral L SPLC-DSD/257
Subject: FW: Shell Pipeline Company Gulf Of Mexico Louisiana North and West Regions Facility Response Plans

Coral,

Please print, scan, and file as Plan Approval Letters for the 3 GOM Pipeline Plans. Please put in server and Live Link.

Thanks,
Carrie

-----Original Message-----

From: melanie.barber@dot.gov [mailto:melanie.barber@dot.gov]
Sent: Tuesday, May 05, 2009 3:38 PM
To: Hodgins, Carrie L SPLC-DSD/622
Subject: Shell Pipeline Company Gulf Of Mexico Louisiana North and West Regions Facility Response Plans

The United States Department of Transportation Office of Pipeline Safety has received Shell Pipeline Company Gulf Of Mexico Louisiana North and West Regions Facility Response Plans, Sequence Numbers 146, 147, and 148. I have reviewed and approved Shell Pipeline Company Gulf Of Mexico Louisiana North and West Regions Facility Response Plans, Sequence Numbers 146, 147, and 148.

Sincerely,

Melanie M. C. Barber, Esquire
Environmental Planning Officer
United States Department of Transportation
Office of Pipeline Safety
Room E22-210
1200 New Jersey Avenue, S.E.
Washington, D.C. 20590
Office: 202-366-4560
Cell: (b) (6)

5/20/2009



Certificate Number: 10112
Expiration: July 01, 2018

Texas General Land Office
Oil Spill Prevention and Response
Discharge Prevention and Response Certificate

Shell Pipeline Co LP-Port Arthur

Port Arthur, TX

Facility Name

Location

Shell Pipeline Co, LP

Shell Pipeline Co, LP

Owner

Operator

This certificate carries with it the need to maintain a high level of prevention awareness at your facility and the need to respond in a 'planned' manner to unauthorized discharges.

Jerry Patterson
 Commissioner
 Texas General Land Office

Greg Pollock
 Deputy Commissioner, Oil Spill Prevention & Response
 Texas General Land Office

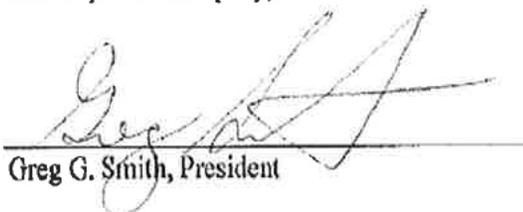
CERTIFICATE OF QUALIFIED INDIVIDUAL AND ALTERNATE QUALIFIED INDIVIDUAL

Shell Pipeline Company, LP hereby certifies to the Coast Guard, Department of Transportation and Environmental Protection Agency that the individuals identified as Qualified Individual and Alternate Qualified Individual in this plan have full authority in accordance with 33 CFR 154.1026 and this plan to:

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

Shell Pipeline Company, LP

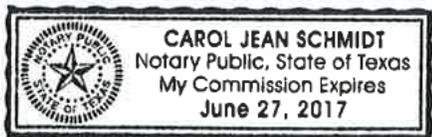
1/10/14
Date


Greg G. Smith, President

STATE OF TEXAS

COUNTY OF HARRIS

This Certification of Qualified Individual and Alternate Qualified Individual was acknowledged before me on Jan. 10, 2014 by Greg G. Smith, President, Shell Pipeline Company, LP, a Delaware Limited Liability Company, on behalf of said company.



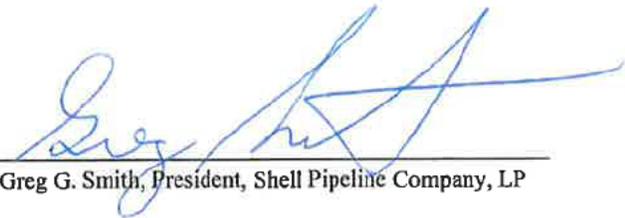
Carol Jean Schmidt
My commission expires 6/27/2017

CERTIFICATE OF RESPONSE PREPAREDNESS

Shell Pipeline Company, LP hereby certifies to the Pipeline Hazardous Materials Safety Administration (PHMSA) that it has identified, and ensured by contract, or other means approved by PHMSA, the availability of private personnel and equipment to respond, to the maximum extent practical, to a worst case discharge or a substantial threat of such discharge.

Shell Oil Products, U.S.

1/13/14
Date


Greg G. Smith, President, Shell Pipeline Company, LP

STATE OF TEXAS

COUNTY OF HARRIS

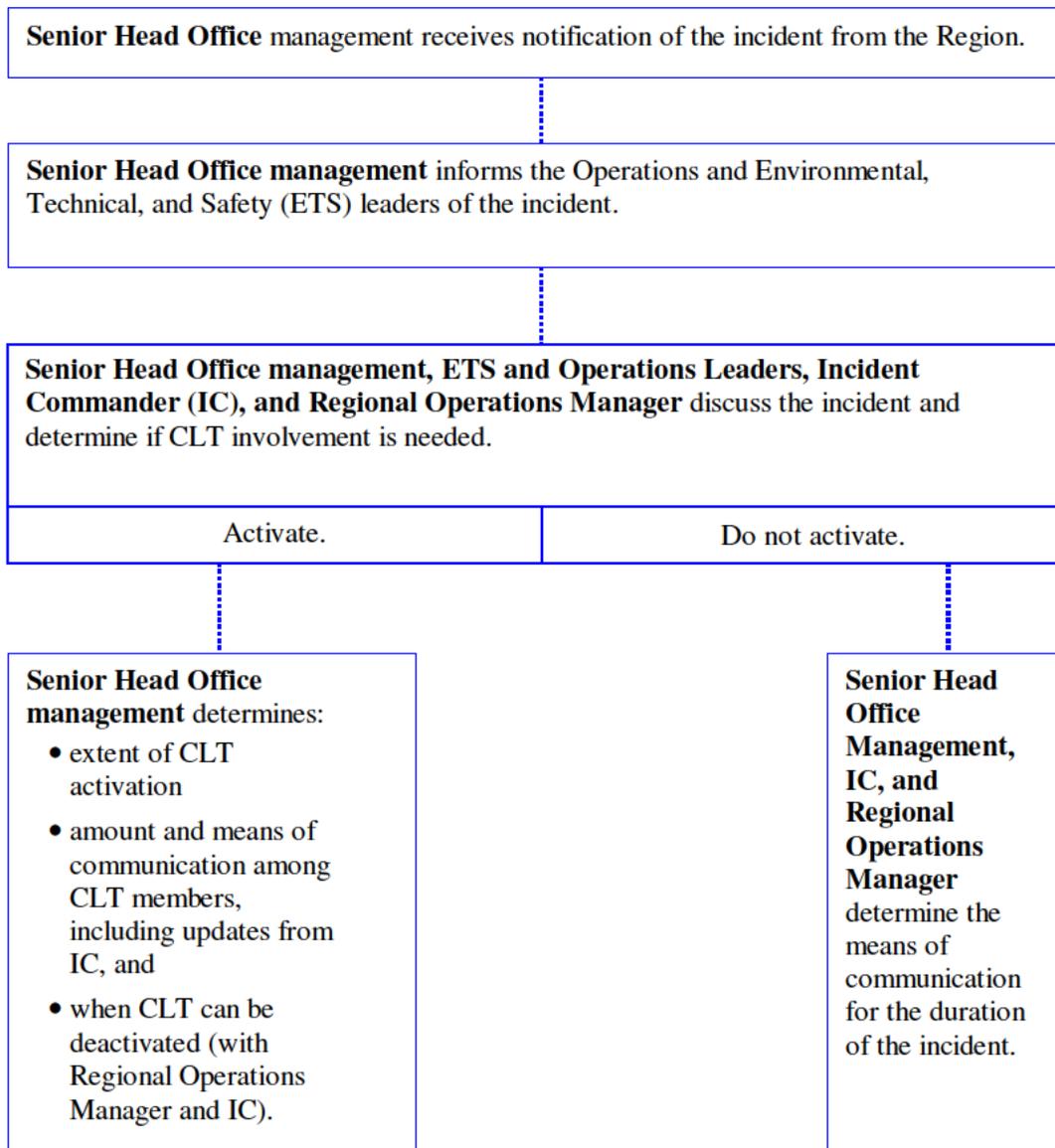
This Certification of Qualified Individual and Alternate Qualified Individual was acknowledged before me on Jan. 13, 2014 by Greg G. Smith, President, Shell Pipeline Company, LP, a Delaware Limited Liability Company, on behalf of said company.



Carol Jean Schmidt
My commission expires 6/27/2017

Activation of Response Leadership Team

Depending on the class of the incident, the CLT may be activated. The following chart shows the steps involved with activating the CLT during an incident.



Containment Methods

CCR §817.02(d)(6)(A-B), (e)(4)(A)(1-2)

Introduction

This section describes and illustrates typical containment techniques for:

- Street Containment
- Culvert Blocking and Damming
- Storm Drain Blocking
- Earth Containment Berm
- Blocking Dam
- Flowing Water Dams
- Sorbent Barriers
- Low to Moderate Current Containment Booming
- High Current Cascading Boom/Berms
- Quiet Water Containment
- Open Water Containment
- Exclusion Booming
- Diversion Booming, and
- Beach Berming.



Government approval may be needed before using any of the following techniques.



Containment and recovery activities should be conducted in safe conditions. Deployment of containment and recovery equipment should be attempted only when conditions do not exceed the capabilities of the people, equipment or vehicles used to deploy the equipment.

Refer to SPLC's Safety Manual for information on:

- atmospheric monitoring
- hot work permits
- confined space
- excavation techniques, and
- personal protection equipment.

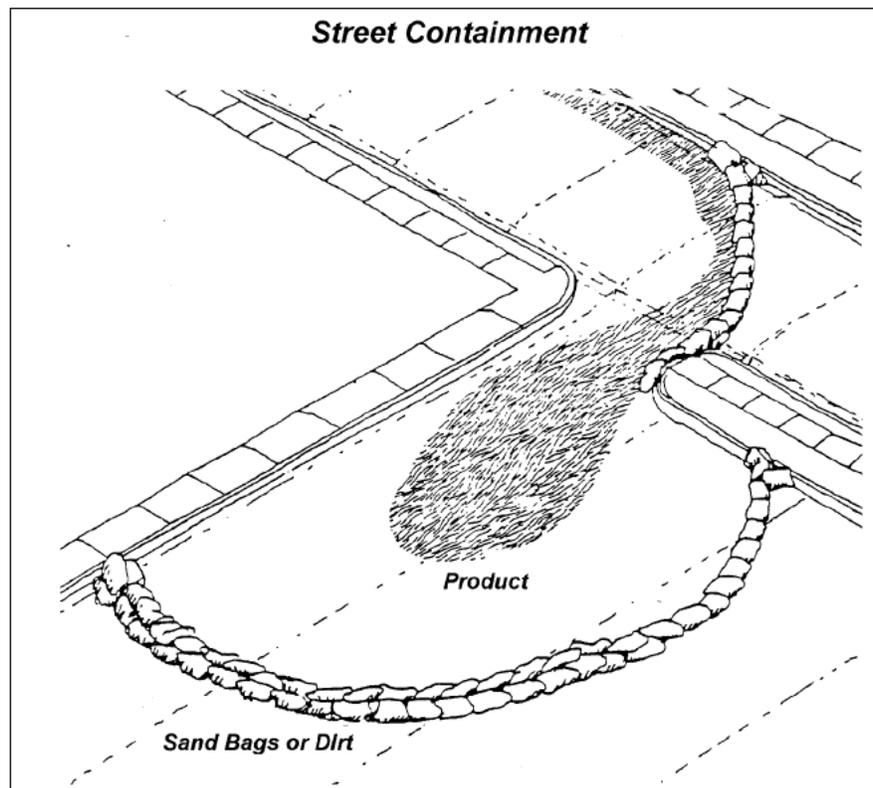
CALL BEFORE YOU DIG!!

Street Containment

General Instructions

Construct barriers with sandbags, soil, or gravel. If coarse materials are used, the spill side should be made impermeable with plastic sheeting or similar material. Barrier height should equal curb height. If there is no curb, build a “horseshoe” barrier.

If a greater storage area is needed, a diversion barrier can be constructed at an angle across the street to direct oil into a parking lot or open field where a larger containment barrier has been built. Recover oil by pumping or vacuuming. See the *Street Containment* drawing below.



Maintenance

Periodically check the barrier for leaks, structural integrity, and adequate height.

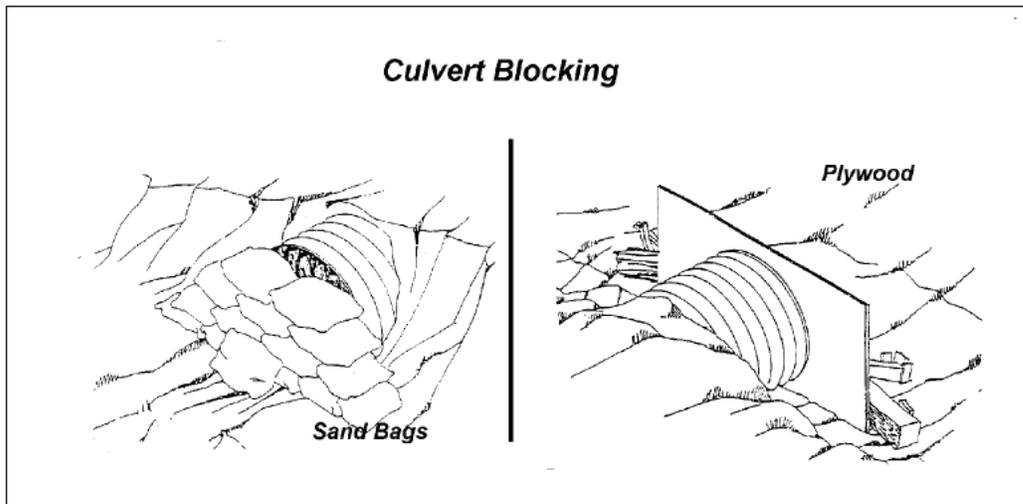
Variations

None.

Culvert Blocking and Damming

General Instructions

Block the culvert by piling dirt, sand or similar material over the upstream end of the culvert creating a containment dam. Sandbags or plywood sheets are also effective. See the *Culvert Blocking* drawings below. Inflatable plugs may be used if available at the site. Recover oil by skimming, vacuuming, or pumping.

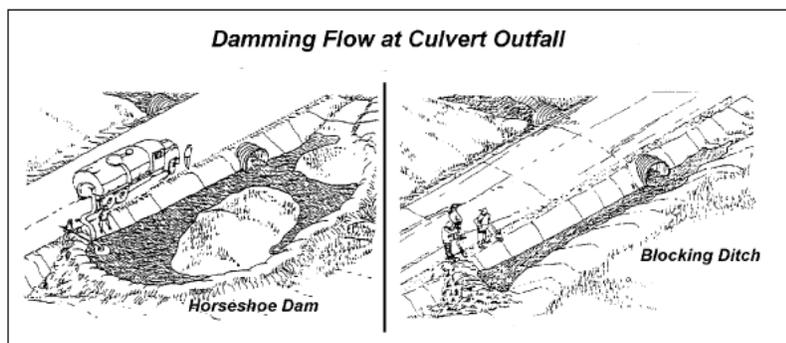


Maintenance

Periodically check the culvert for leaks, structural integrity, and excessive oil buildup.

Variations

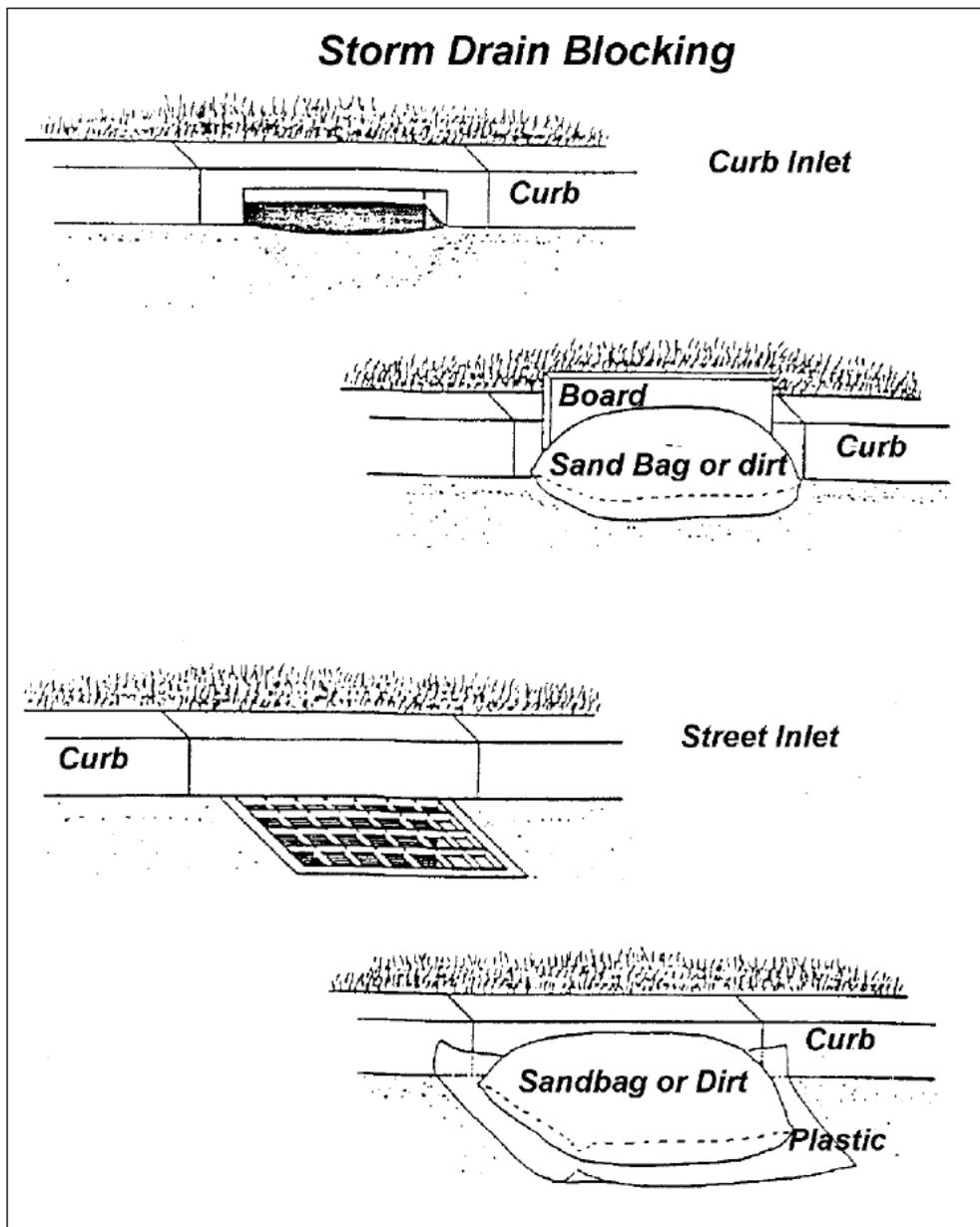
If there is little or no storage area on the spill side of the culvert, it may be advantageous to permit the oil to pass through the culvert and to dam and contain the release at the culvert outfall. See the drawing of *Damming Flow at Culvert Outfall* below.



Storm Drain Blocking

General Instructions

For curb inlets, position a board over the curb inlet and hold it in place with a sandbag. Street inlets can be blocked similarly with a board or plastic sheeting. Both inlet-blocking techniques are illustrated in the drawing of *Storm Drain Blocking* below. Recover oil by skimming, vacuuming, or pumping.



Maintenance

Periodically check for leaks.

Variations

Other materials may be used to block inlets.

Earth Containment Berm

General Instructions

Construct berms by forming materials into ridges in a “horseshoe” shape. Width of containment opening should exceed that of the leading edge of the oncoming released oil. Berm height and the size of the containment area depend on the quantity of the release. Recover oil by skimming, pumping, or vacuuming.

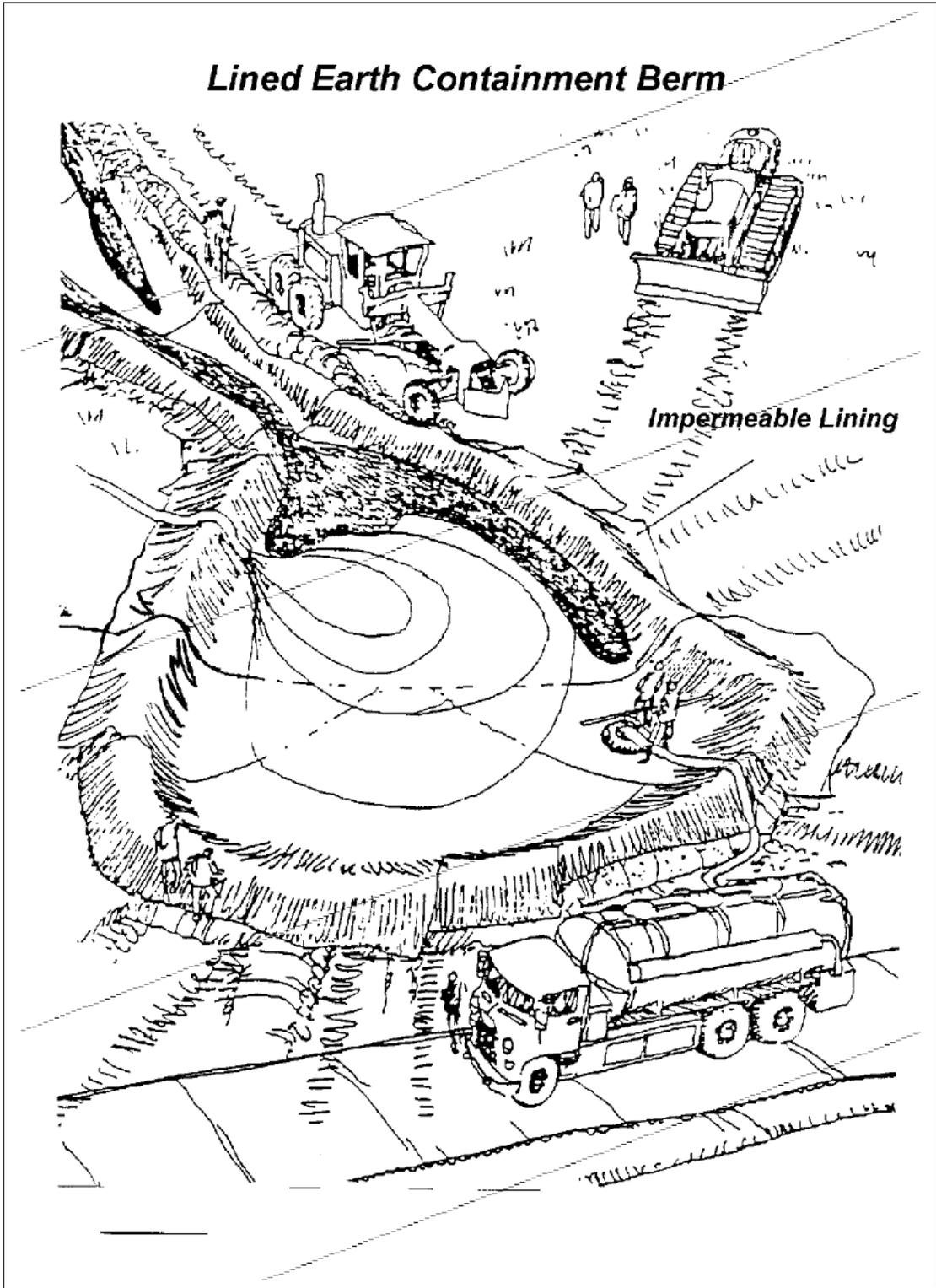
Maintenance

Periodically check berms for leaks and adequate height.

Variations

In areas with a high groundwater table or high soil permeability, the containment area may be lined with plastic sheeting to inhibit soil penetration. The drawing below shows a *Lined Earth Containment Berm*.

Lined Earth Containment Berm



Blocking Dam

General Instructions

Construct the dam using earthen materials, sandbags, plywood sheets or any material that blocks the flow of oil. If necessary, excavate earthen materials from the upstream side to increase storage capacity. Plastic sheeting should be placed over the dam to prevent penetration and erosion. Recover oil from behind the dam by pumping or using vacuum trucks.



Dam locations should have high banks on the upstream side with the dam tightly secured into the banks.

Maintenance

Periodically check the dam for leaks, structural integrity and excessive oil buildup.

Variations

None.

Flowing Water Dams

General Instructions

Construct dam with earthen materials, sandbags, plywood sheets, or any other material that blocks the flow of oil. If necessary, excavate material from the upstream side to increase dam storage capacity. To prevent penetration and erosion make the upstream side impermeable with plastic sheeting. Recover oil by skimming.

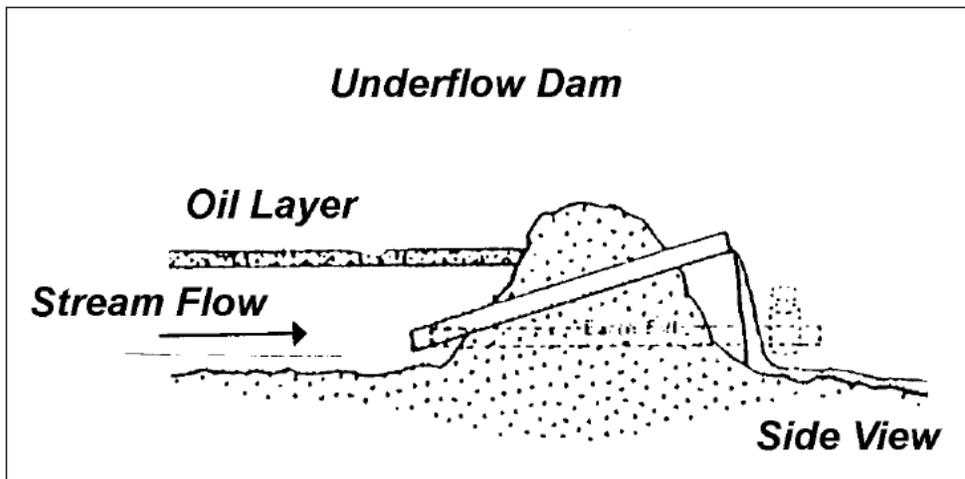


Dam locations should have high banks on the upstream side with the dam tightly secured into the banks.

Underflow Dams

Underflow dams use inclined pipes that have a flow capacity greater than the stream flow rate.

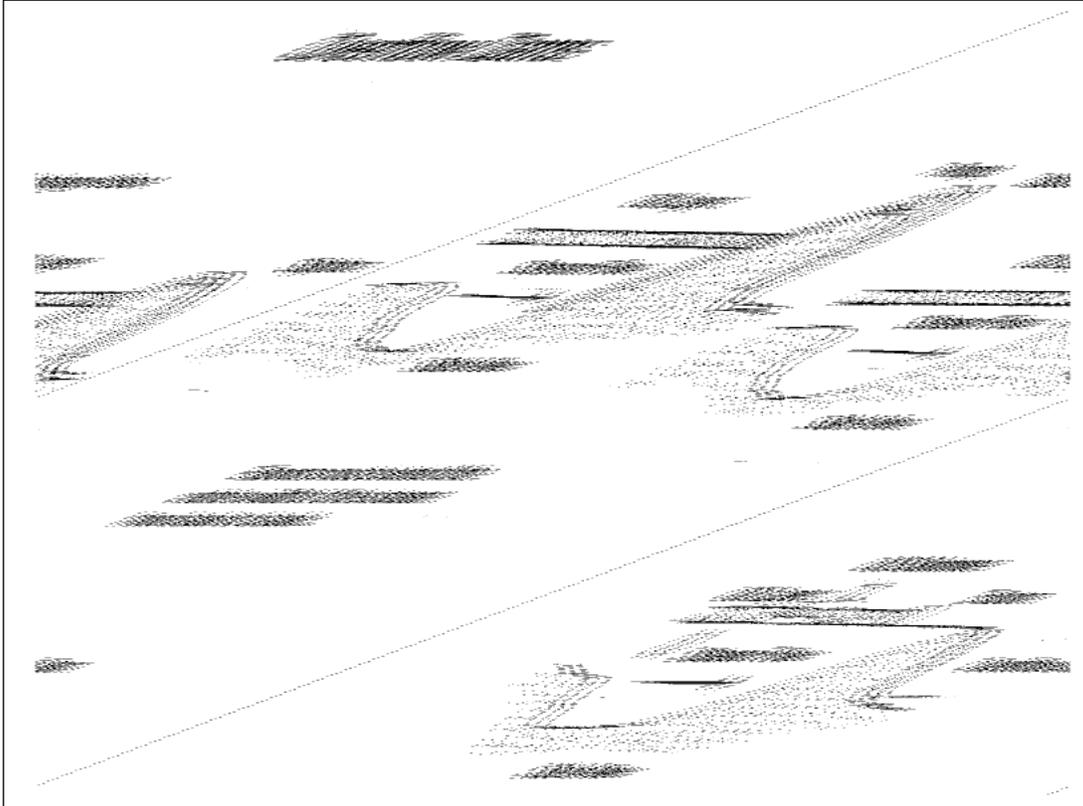
Construct the dam as described above and place pipes on an incline as shown in the picture of an *Underflow Dam* below. The height of the raised end determines the water level behind the dam. Adjust the height and number of pipes until a constant water/oil level is achieved behind the dam.



Overflow Dams

For overflow dams, water flows over the top of the dam, and booms positioned behind the dam contain the floating oil.

Construct the dam as described above, and anchor the boom several feet behind the dam. Pumps or siphons can also be used to pass water over the dam. To be effective, the pumping rate should be greater than the stream flow rate. See the drawings of *Overflow Dams* below.



Maintenance

Periodically check dam for leaks and integrity. Replace eroded material.

Variations

None.

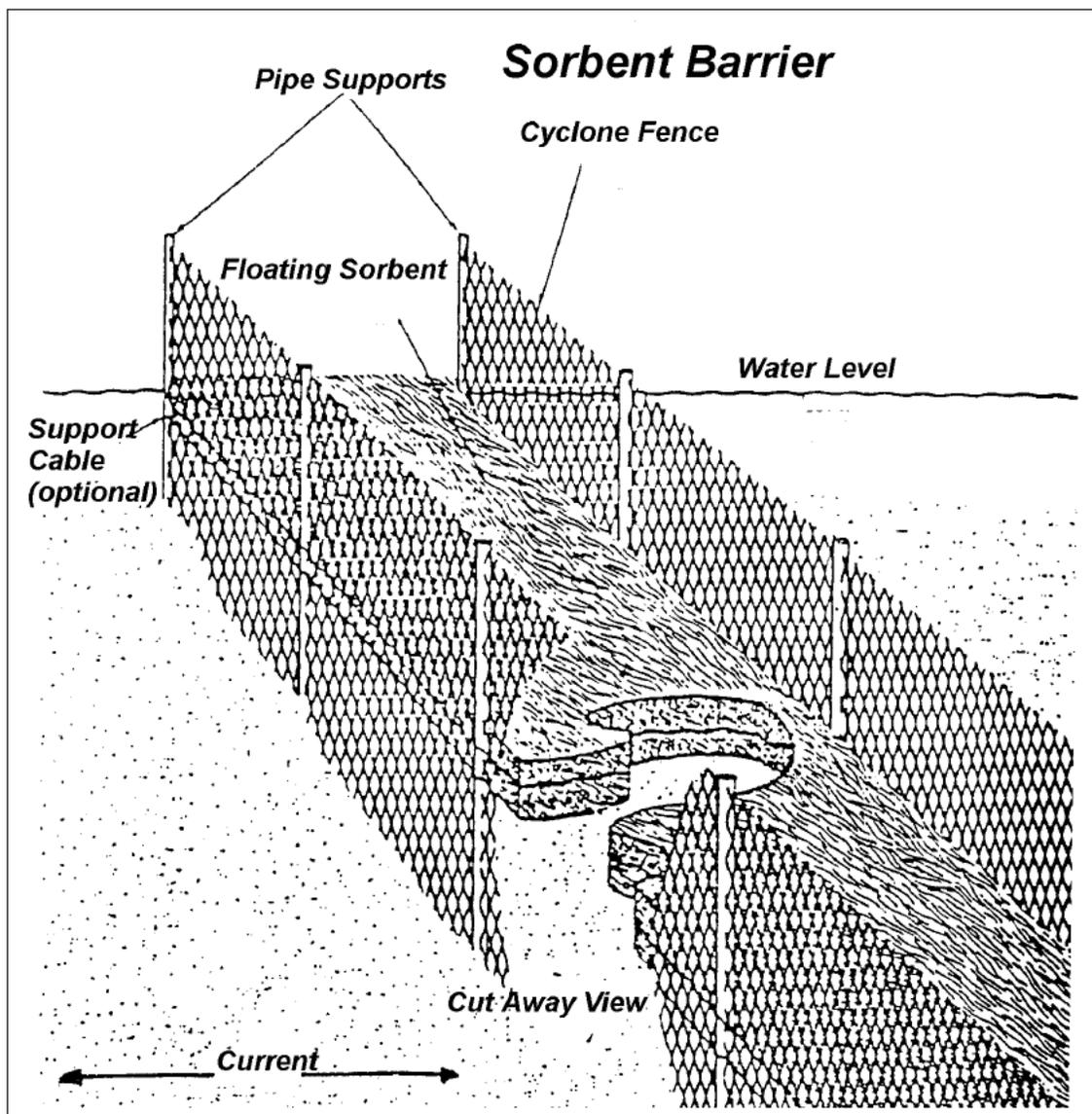
Sorbent Barriers

General Instructions

Construct single-sided barriers by driving a line of posts into the stream bottom with wire mesh screen fastened to the upstream side. Place snare (sorbent) squares or strips in front of the screens.

In tidal channels with reversing currents, construct a double-sided barrier. Erect two parallel lines of posts across the channel and attach screen along each line of posts. Place sorbents between the screens to trap floating oil and contaminated debris. See the drawing of a *Sorbent Barrier* below.

Screen height for both types of barriers must be sufficient to prevent the scattering of loose sorbent from above or beneath the barrier as flow levels change. The screen mesh must be compatible with the type and size of filler sorbent and able to withstand currents.



Maintenance

Turn sorbents regularly for maximum absorbency and replace them when they are completely saturated. Check barriers periodically for leaks or damage.

Variations

If significant quantities of oil are encountered, construct multiple barriers. Recover oil pooling behind the barrier by skimming, pumping, or using sorbents.

Low to Moderate Current Containment Booming

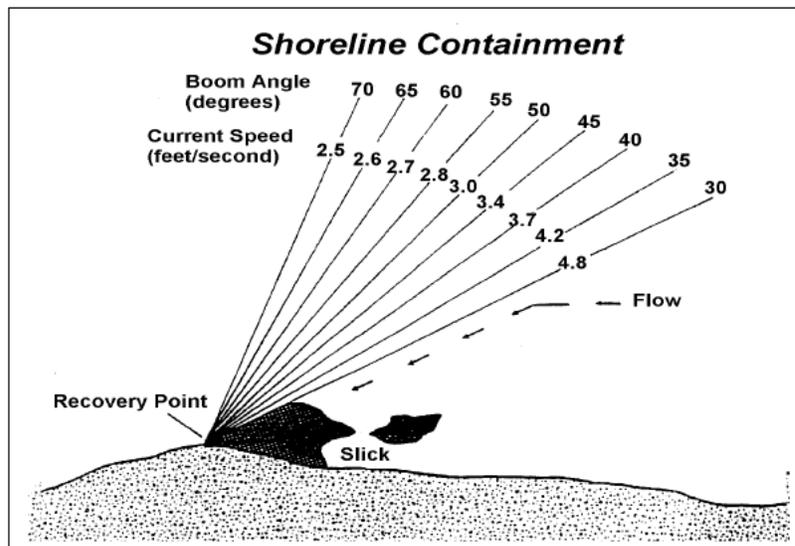
General Instructions

Anchor one boom end to the shoreline. Use a boat or winch to pull the free end across the river and anchor it slightly upstream. The optimum deployment angle depends on current velocity, boom length, and boom stability.

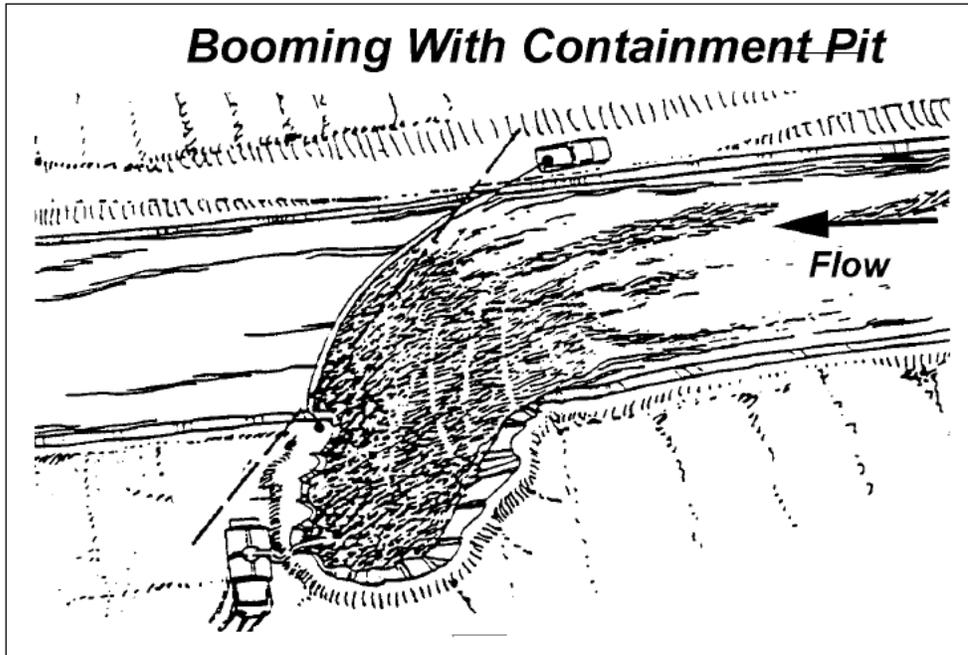
In general, boom length should be four times the width of the waterway. As current velocity and boom length increase, the deployment angle relative to the shoreline decreases. To improve boom stability, anchor it in several places. The *Shoreline Containment* drawing below shows nine boom deployment angles as a function of current speeds.



Boat motors could ignite fumes or vapors.



Remove oil from the downstream end of the boom by skimming, pumping or using vacuum trucks. A shallow containment pit dug into the shoreline can expedite the containment and recovery process as shown in the drawing of *Booming With Containment Pit* below.



Maintenance

Periodically check the boom for leaks and adjust its placement angle, if necessary. Also check boom for twisted, damaged or submerged sections. Check anchors for security.

Variations

For wide rivers, deploy two or more booms from each bank with one positioned slightly downstream from the other. Anchor the free ends so that they overlap slightly past the mid-stream point.

If not enough boom is available to deploy from both banks, deploy a single boom from the side of the river with the heaviest concentration of oil.

High Current Cascading Boom/Berms

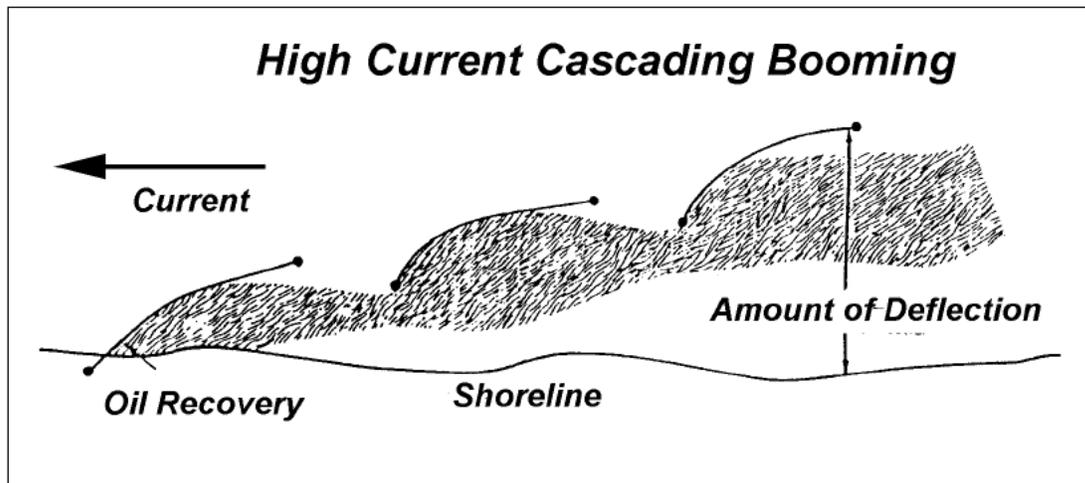
General Instructions

Tow the lead boom to the opposite shore or to some point mid-stream and anchor it at an angle to the current. Deploy a second boom angled toward the shoreline and anchor the free end 25 to 30 feet downstream from the first so that it overlaps the trailing end of the lead boom. Deploy successive booms in the same manner until the shoreline is reached.



Boat motors could ignite fumes or vapors.

Diverted oil may be recovered by skimming, pumping, or using vacuum trucks. A shallow containment pit can be dug into the river bank or shoreline to assist oil recovery. The optimum boom deployment angle decreases as current velocity and boom length increase unless several anchor points are set along the length of the boom. See the drawing of *High Current Cascading Booming* below.



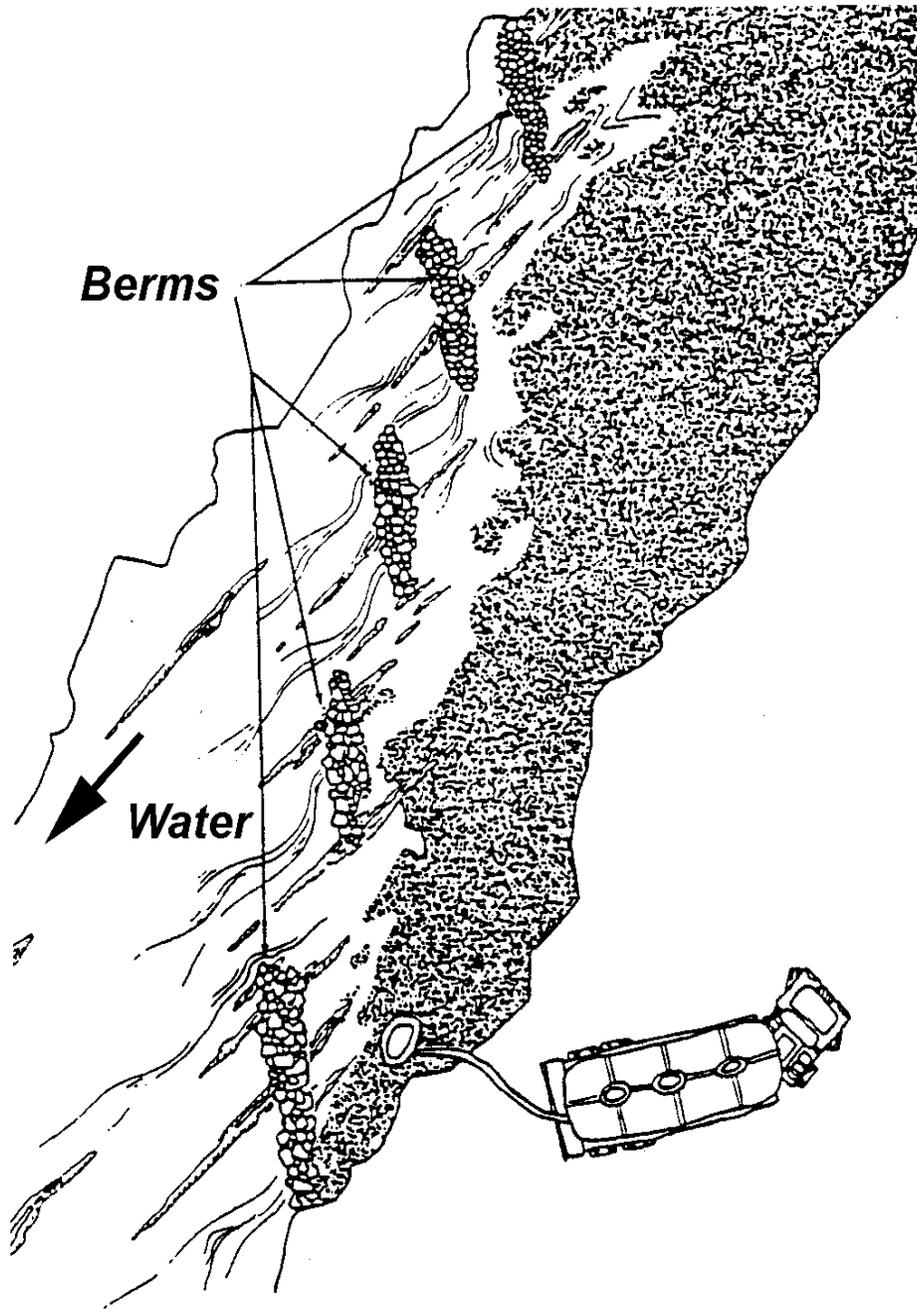
Maintenance

Periodically check the booms for leaks and adjust the deployment angle, if necessary. Also, check the booms for damaged, twisted, or submerged sections. Check anchors for security.

Variations

If booms are unavailable or if the water is too shallow, berms may be built using streambed or near-site materials arranged in a cascading configuration as shown in the drawing of *High Current Cascading Berming* below.

High Current Cascading Berming



Quiet Water Containment

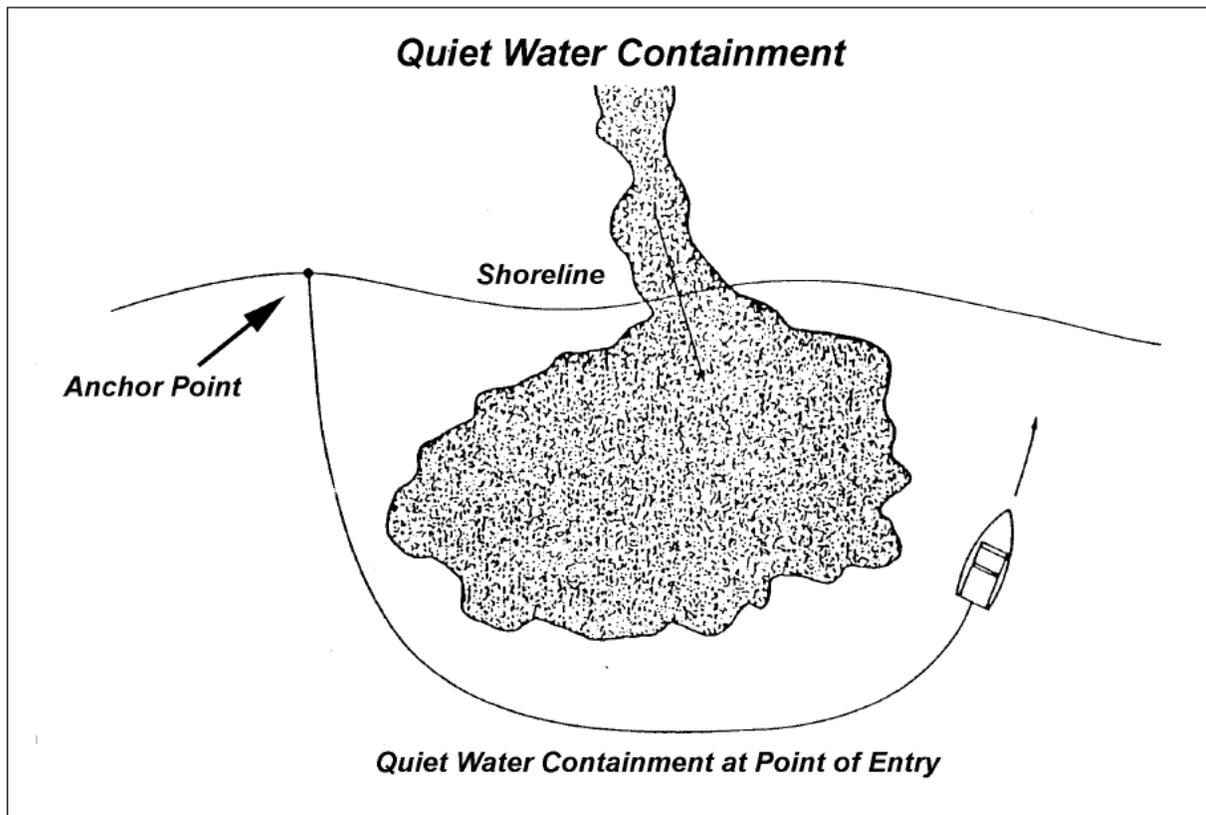
General Instructions

Contain any released oil flowing into a body of water at the point where the spill enters the water. Anchor one end of the boom to the shoreline. Using a boat, pull the other end out around the leading edge of the slick and back to the shore on the other side of the slick, as illustrated in the drawing of *Quiet Water Containment* below. Recover oil by skimming.

Small slicks, sheen, or patches of oil can be contained by completely encircling them with the boom. Anchor one boom end near the edge of the slick. Pull the other end around the perimeter of the floating oil and attach it to the anchored end.



Boat motors could ignite fumes or vapors.



Maintenance

Periodically check booms for leaks or broken, twisted, or submerged sections.

Variations

If a spill in water is too large for containment, oil may eventually migrate to the water outlet. Booms can be placed across the outlet to contain and concentrate the oil for vacuum recovery.

Open Water Containment

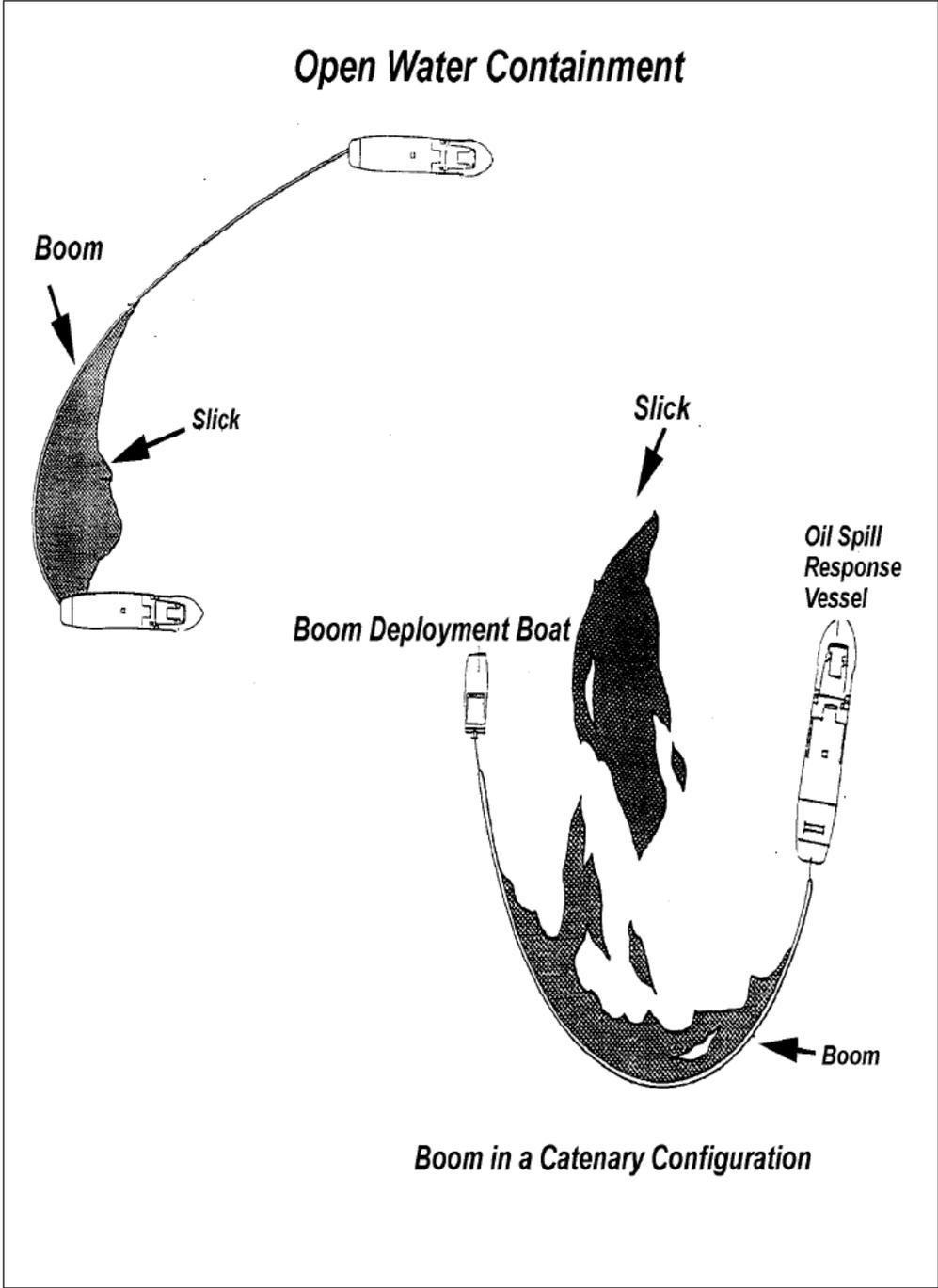
General Instructions

Position the deployment boat along one side of the slick's leading edge. Deploy the boom using an assist boat. Tow the free end around the slick's leading edge and hold it in place with the assist boat as shown in the drawing of *Open Water Containment* below.

Wind and currents will concentrate the oil in the boom where a boat can be positioned to begin skimming operations. Under strong wind and sea conditions it may be advantageous to deploy upwind and chase the slick downwind in order to reduce the relative forces between the boom and the seas.



Boat motors could ignite fumes or vapors.



Maintenance

Continually reposition the skimmer to the area of heaviest oil concentration. Check the boom periodically for leaks and broken, twisted, or submerged sections. The boom may require repositioning or redeployment if the current or wind direction changes appreciably.

Variations

Two boats or two sea anchors can be used to deploy the boom in a catenary configuration as shown in the drawing below. Tow the boom ends up either side of a slick until all the oil is contained within the boom.

Exclusion Booming

General Instructions

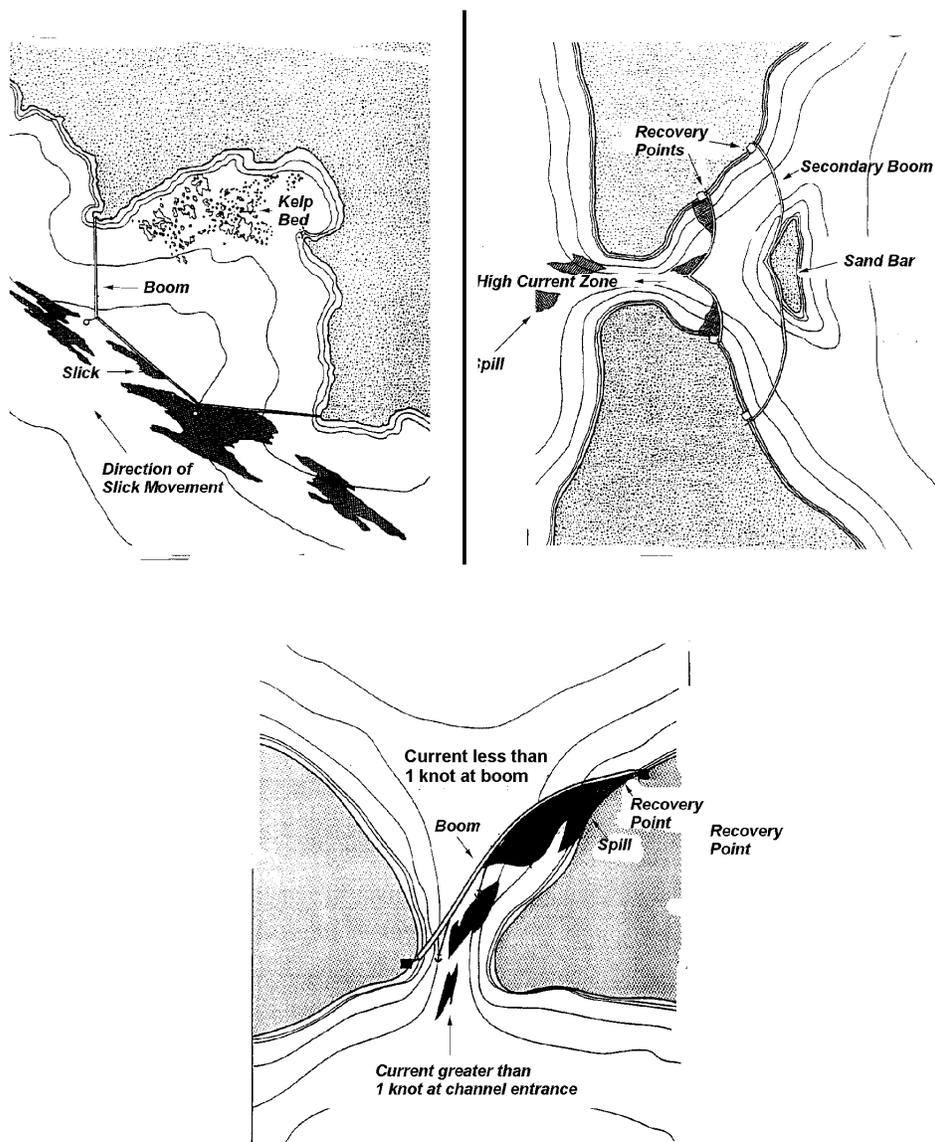
Place booms across the area to be protected and anchor both ends to the shore. For inlets or harbor entrances, booms should be placed inside the opening where current velocities and wave action are lowest. To allow vessel passage through harbor waters, one boom end may be attached to a small boat.

Booms may also be deployed in a cascading configuration as described earlier which provides vessel passage and excludes oil. To maintain boom integrity, anchors should be placed at 100-foot intervals if substantial boom lengths are required. Three techniques are shown in the drawing of *Exclusion Booming* below. Recover contained oil by skimming or pumping.



Boat motors could ignite fumes or vapors.

Exclusion Booming



Maintenance

Periodically check boom for integrity, leaks, or twisted, broken, or submerged sections. In tidal waters or areas with fluctuating water levels, reposition the boom and/or its anchor points as water levels change.

Variations

Double or triple booming may be employed in areas with high currents. Position a primary boom in the area of strongest currents and deploy secondary or tertiary booms several hundred yards behind the first as a backup measure

Diversion Booming

General Instructions

Anchor one end of the boom to the shoreline. Use a vessel to position the free end of the boom at an angle to the current. If oil is being diverted to the shore, angle the free end of the boom toward the oncoming flow as shown in the drawings titled *Diversion Booming* below.

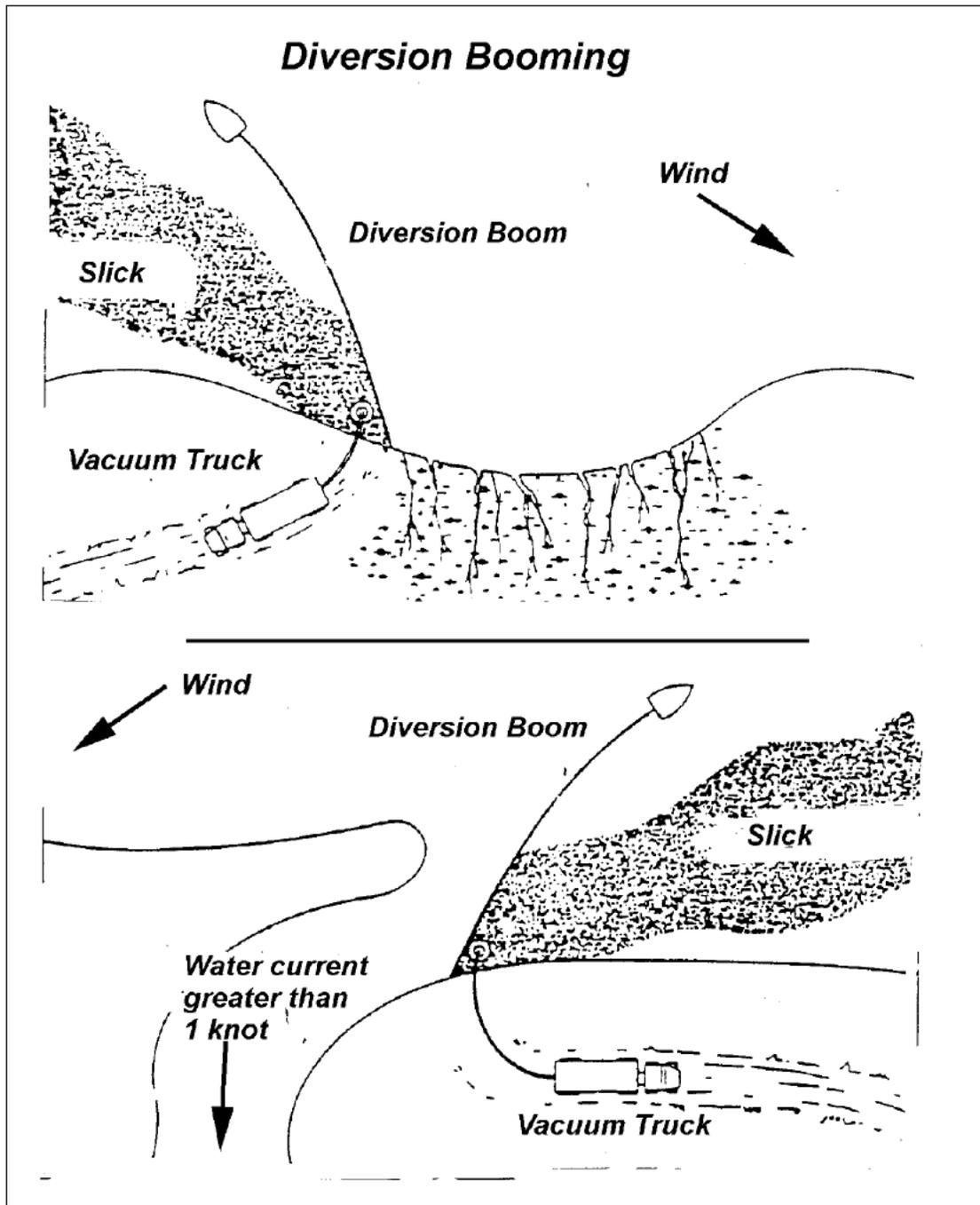
Oil diverted toward the shore can be recovered by skimming or pumping. If oil is being diverted away from the shore, angle the free end away from the approaching slick. If the spill is large or continuing, the free end of the boom should also be anchored in place.

The optimum angle of boom deployment depends on the type and length of boom used, the current velocity, and the shape and position of the approaching slick. Generally the free end of the boom must be angled toward the shoreline as current velocity increases.

To avoid boom failure in strong currents, the deployment angle must be smaller than in weak currents. The same relation is true with regard to boom length. The optimum deployment angle decreases as boom length increases unless the boom is anchored at several places along its length.



Boat motors could ignite fumes or vapors.



Maintenance

Periodically check the boom for leaks and broken, twisted, or submerged sections. The deployment angle may require adjustment in the event of significant wind or current changes, oil entrainment beneath the boom or excessive buildup behind the boom. The shoreline anchor point may require occasional repositioning due to tidal fluctuations.

Variations

Two booms can be deployed to divert an approaching slick from a shoreline and into a floating skimmer. Secure one end of each boom to opposite sides of the skimmer and tow one free end along or parallel to the threatened shore. By towing the other free end toward open water, the booms form a vee to trap the encroaching oil while the skimmer recovers the contained slick before it reaches the shore.

Beach Berming

General Instructions

With a grader build a berm midway between the high and low tide lines parallel to the surf line. Several passes are usually required to produce an adequate berm height. A bulldozer is usually required to assist the grader when it gets stuck. Bulldozers can also be used to build sand berms. If heavy equipment is unavailable, shovels may be used to construct berms. Recover oil by skimming, pumping, or using sorbents.

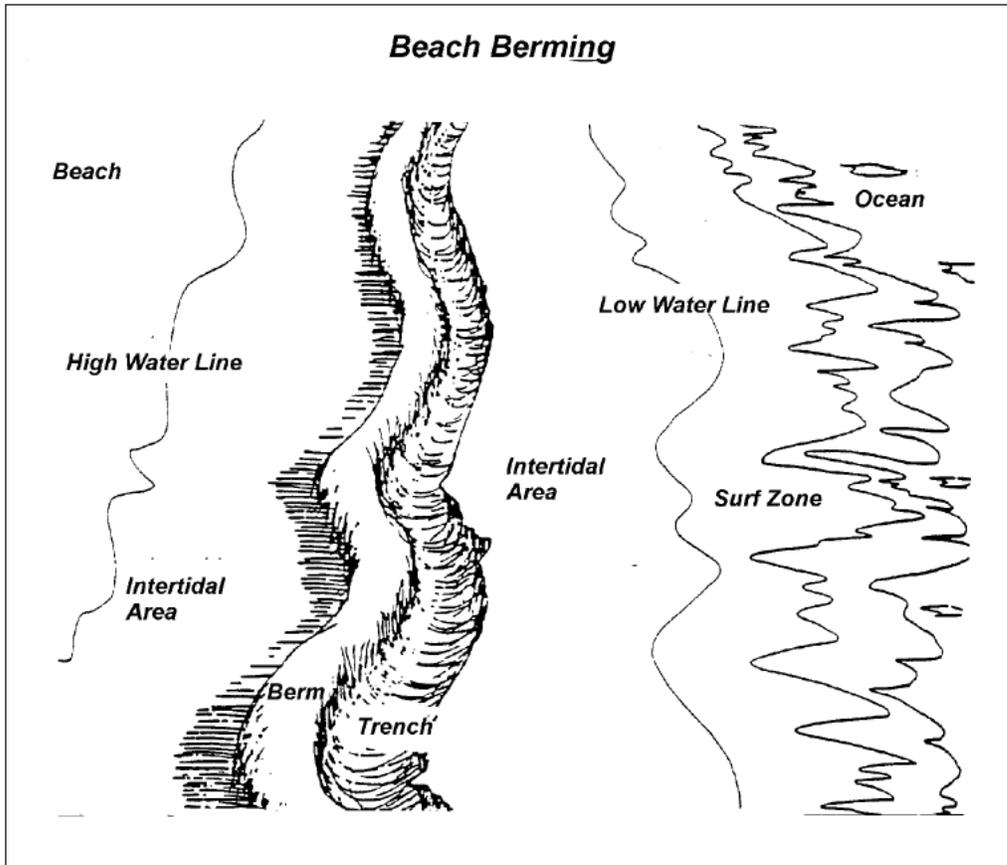
Maintenance

Continually check berm for adequate height. Maintain or increase berm height as necessary.

Variations

A trench may be dug on the seaward side of the berm to assist in collecting incoming oil for subsequent removal as illustrated in the drawing of *Beach Berming* below. This could, however, allow deeper contaminant penetration into the sediments.

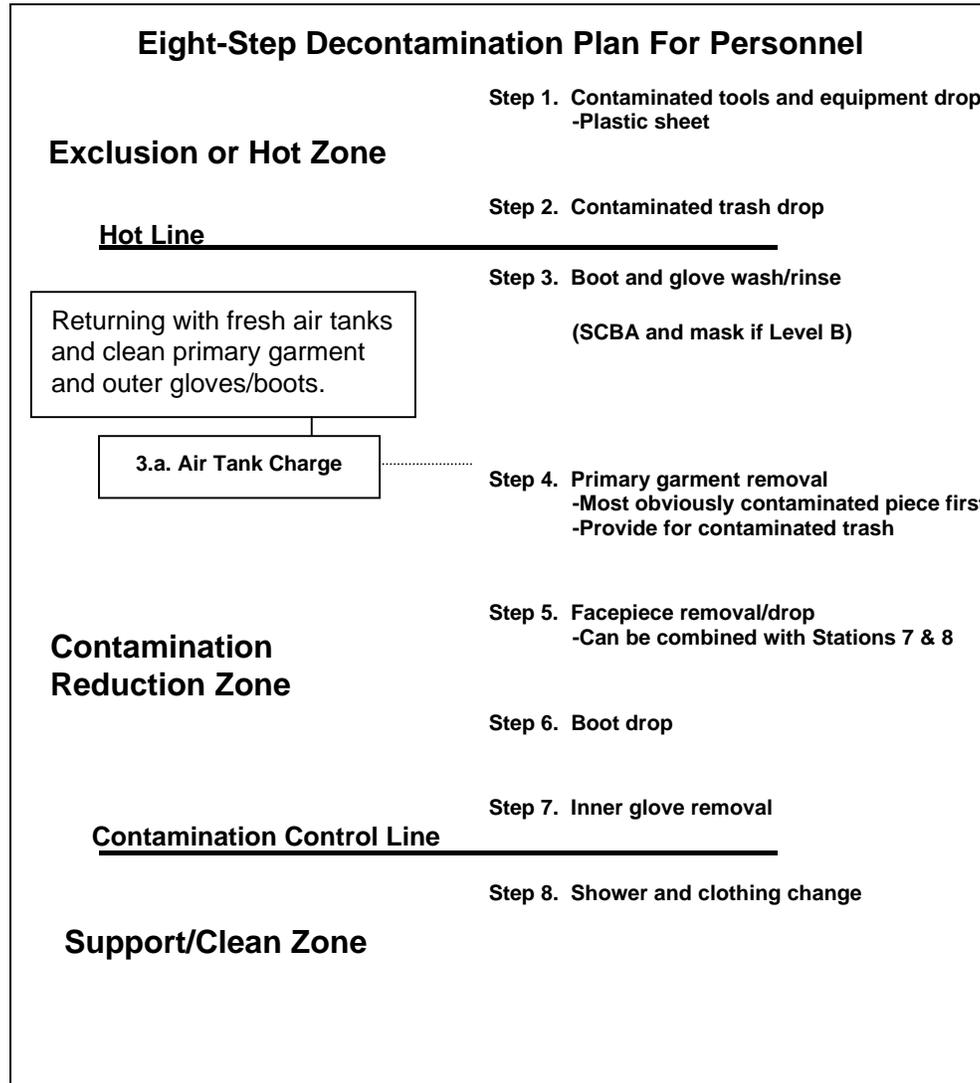
A trench may also be dug on the beach side of the berm. This trench will aid in containing run off when flushing contaminated areas on the beach side of the berm.



Decontamination

CCR §817.02(f)(8)

The appropriate decontamination procedure will depend on the contaminant and its physical properties. The decontamination stations and process should be confined to the Contamination Reduction Zone. Steps for personnel decontamination are outlined below.



Emergency Equipment Inspection

The Facility is not equipped with spill response equipment. The Facility maintains only a minimal supply of clean-up materials and equipment. These materials are used during routine maintenance and housekeeping procedures at the Facility. All spill response will be done by qualified contractors that maintain their own equipment. The Facility has contracts in place with OSROs and other clean-up contractors for response to a discharge.

Equipment Deployment Exercise

1. Date performed: _____
2. Exercise or actual response? Exercise Actual response
 If an exercise? Announced Unannounced
3. Deployment location(s): _____
 Name of MTR facility or response zone drilled: _____
4. Time started: _____ AM PM Time completed: _____ AM PM
5. Equipment deployed was:
 Facility-owned OSRO-owned Both
 If OSRO-owned, name of OSRO: _____

6. List type and amount of all equipment deployed:

| Equipment | Type | Amount |
|------------------------|------|--------|
| Boom | | |
| Skimmers | | |
| Oil mops | | |
| Boats | | |
| Wash pumps | | |
| Generators | | |
| Winches | | |
| Communication trailers | | |
| | | |
| | | |

7. Number of support personnel employed (also complete Attachment A): _____

8. Describe goals of the equipment deployment and list any Area Contingency Plan strategies tested. Sketch the equipment deployment and booming strategies used-- see Attachment B.

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

Not applicable Yes No

Was the facility-owned equipment deployed in its intended operating environment?

Yes No

Explain:

10. 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?

Not applicable Yes No

Was the OSRO-owned equipment deployed in its intended operating environment?

Yes No

Explain:

11. Describe emergency response equipment maintenance program.

Name of plan which describes program:

Section:

Page(s):

Date of last equipment inspection:

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

Yes No If no, why not? _____

13. Was all deployed equipment operational?

Yes No If no, why not? _____

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

Organization Design:

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

Operational Response:

Discharge control Assessment of discharge Containment of discharge

Recovery of spilled material Protection of sensitive areas

Disposal of recovered material and contaminated debris

Response Support:

Communications Transportation Personnel support

Equipment maintenance & support Procurement Documentation

15. Describe the security component(s) exercised, if applicable:

16. Describe the training program for facility or response zone personnel.

Name of plan which describes program: _____

Section: _____ Page(s): _____

17. Describe lesson(s) learned.

The person(s) responsible for follow up of corrective measures are:

Certifying signature

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

| Attachment A - List of Support Personnel Employed | | | |
|--|-------------|------------------------|----------------|
| | Name | Mockingbird No. | Company |
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| 9 | | | |
| 10 | | | |
| 11 | | | |
| 12 | | | |
| 13 | | | |
| 14 | | | |
| 15 | | | |
| 16 | | | |
| 17 | | | |
| 18 | | | |
| 19 | | | |
| 20 | | | |
| 21 | | | |
| 22 | | | |
| 23 | | | |

| Attachment A - List of Support Personnel Employed | | | |
|--|-------------|------------------------|----------------|
| | Name | Mockingbird No. | Company |
| 24 | | | |
| 25 | | | |
| 26 | | | |
| 27 | | | |
| 28 | | | |
| 29 | | | |
| 30 | | | |
| 31 | | | |
| 32 | | | |
| 33 | | | |
| 34 | | | |
| 35 | | | |
| 36 | | | |
| 37 | | | |
| 38 | | | |
| 39 | | | |
| 40 | | | |
| 41 | | | |
| 42 | | | |
| 43 | | | |
| 44 | | | |
| 45 | | | |

Attachment B - Sketch of Equipment Deployment and Booming Strategies





FIRST NOTIFICATION OF INCIDENT

TYPE OF INCIDENT:

- | | | |
|---|--|---|
| <input type="checkbox"/> INJURY/ILLNESS | <input type="checkbox"/> PROPERTY DAMAGE | <input type="checkbox"/> NON-COMPLIANCE / NOTICE OF VIOLATION |
| <input type="checkbox"/> VEHICLE | <input type="checkbox"/> DAMAGE PREVENTION/ROW | <input type="checkbox"/> NEAR MISS (SEVERITY LEVEL 2 OR 3) |
| <input type="checkbox"/> RELEASE | <input type="checkbox"/> PRODUCT/CRUDE QUALITY | |

SEVERITY RATING:

- Level 0
 Level 1
 Level 2
 Level 3
 Level 4
 Level 5

If Severity Level of 4 or 5, make immediate notification to General Manager US and HSSE Manager.

REGION / DEPARTMENT:

- GOM
 WESTERN
 OS&E
 OTHER: _____

GROUP / LOCATION / PROJECT: _____

REPORTED BY: _____ OFFICE PHONE: _____
(Distribution US Employee) CELL PHONE: _____

INCIDENT DATE: _____ INCIDENT TIME: _____

PERSON INVOLVED: _____

- EMPLOYEE
 CONTRACTOR
 CONTRACTOR COMPANY: _____
 SHORT SERVICE CONTRACTOR EMPLOYEE (SSCE)

BRIEF DESCRIPTION OF INCIDENT: (Include relevant events as deemed appropriate)

THIRD PARTY INJURY OR PROPERTY DAMAGE

MEDIA COVERAGE

| <input type="checkbox"/> AGENCY REPORTABLE: <small>(NRC, MMS, DOT, EPA, OSHA, State Agency, Local Agency, etc.)</small> | AGENCY | REPORT # | DATE / TIME | CONTACT |
|--|--------|----------|-------------|---------|
| | _____ | _____ | _____ | _____ |
| | _____ | _____ | _____ | _____ |
| | _____ | _____ | _____ | _____ |

INJURY / INCIDENT: (non-binding, preliminary information only, check only ONE box)

- Alleged
 First Aid
 OSHA Recordable
 Days Away
 Fatality
 Other (Explain) _____

Note MMS, DOT and other agency(s) reporting requirements as applicable.

DESCRIBE MEDICAL TREATMENT (BE BRIEF): Note if hospitalized overnight

WORKER ACCOMPANIED TO THE DOCTOR? Yes No



FIRST NOTIFICATION OF INCIDENT

RELEASE INFORMATION:

System: _____ Facility: _____ Product: _____

Estimated Volume Released: _____ Barrels Gallons Other (e.g. LBS.) _____

Contacted Water DOT Reportable DOT Drug/Alcohol Test Required

Contacted Land Alcohol within 2 hours – not to exceed 8 hours

OQ Task Involved Drugs within 32 hours (SP 30-2)

MMS REPORTABLE INFORMATION:

OCS Facility If "yes", check type of event

Fatality

Injury requiring evacuation for treatment or precautionary measures

Fire or explosion associated with flame or where evidence of flame, regardless of size and whether or not the flame was seen

Collisions resulting in property or equipment damage > \$25,000

Structural damage such that operations on the facility must cease until repairs are made

Incident involving crane operations or personnel/material handling operations – includes ALL near misses

Damage or disability of safety systems or equipment (including firefighting systems) (ESD, Gas Detection, Fire Detection, Fire Fighting, Lifesaving, etc.)

Gas release resulting in a 15-minute time-weighted average atmospheric concentration of H₂S of 20 ppm or more

Spill or release of oil or liquid pollutants >1 bbl

Pipeline Name / Segment Number: _____

Lease Number, OCS Area, Block: _____

NON-COMPLIANCE / NOTICE OF VIOLATION INFORMATION:

Air Non-Compliance Effluent Non-Compliance Citation/NOV Complaint Incident

Other: _____

VEHICLE INFORMATION:

Automobile Pick Up Transport Other: _____

CLV/COV Rental Personal Vehicle

DOT Registered Vehicle:

Did it resulted in:

Fatality If "Yes" to any, Drug/Alcohol testing is required.

Driver citation as a result of the accident with: Alcohol within 2 hours – not to exceed 8 hours

Medical Treatment (of any person) away from the scene Drugs within 32 hours (SP 30-2)

1 or more vehicles towed from scene due to disabling damage

PRODUCT QUALITY INFORMATION:

Product Specifications Legal Specifications Contaminant(s) Performance

Incompatibility Other: _____

DAMAGE PREVENTION/ROW EXCAVATION INCIDENTS:

Unauthorized Third Party Excavations

Unintended Third Party Contact with Pipelines

First and Second Party (Company or Contractor) unintended contact with pipelines

NRC Incident No. # _____

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

3. Approved by Incident Commander(s):

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

INCIDENT ACTION PLAN

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

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

Other Attachments

- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____

| | |
|------------------------------|------------------------|
| 4. Prepared by: _____ | Date/Time _____ |
|------------------------------|------------------------|

NRC Incident No. # _____

| 1. Incident Name | 2. Operational Period (Date/Time) From: _____ To: _____ | EXECUTIVE SUMMARY |
|-------------------|--|----------------------|
| 3. Operations: | | |
| 4. Environmental | | |
| 5. Planning | | |
| 6. Other | | |
| 7. Prepared by: | | Date/Time |
| EXECUTIVE SUMMARY | | June 2000 |

NRC Incident No. # _____

| INITIAL INCIDENT INFORMATION | INCIDENT NAME | | Information as of: | |
|---|---------------|---|---|--|
| | | | Date | Time |
| NAME OF PERSON REPORTING THE INCIDENT | | | | |
| Call-Back Number(s) of person reporting the incident: | | | | |
| VESSEL/FACILITY INFORMATION AND POINTS OF CONTACT | | | | |
| Vessel / Facility Name: | | | Number of people onboard/on site: | |
| Location: | | | | |
| Type of Vessel / Facility: | | | | |
| Contact / Agent: | | | Phone: | |
| Owner: | | | Phone: | |
| Operator / Charterer: | | | Phone: | |
| VESSEL SPECIFIC INFORMATION | | | | |
| Last Port of Call: | | Destination: | | Flag: |
| Particulars: Length: | Ft. | Tonnage (Gross/Net/DWT): | Draft Fwd: | Aft: Year Built: |
| Type of Hull: <input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Double-Bottom <input type="checkbox"/> Double-Sided | | | | |
| Hull Material: | | | | |
| Type of Propulsion: <input type="checkbox"/> Diesel <input type="checkbox"/> Steam <input type="checkbox"/> Gas Turbine <input type="checkbox"/> Nuclear <input type="checkbox"/> Other | | | | |
| Petroleum Products or Crude Oil <input type="checkbox"/> Yes <input type="checkbox"/> No | | | | |
| Type of Cargo: | | | Total Number of Tanks on Vessel: | |
| Total Quantity: | | Barrels x 42 = | Gallons | Total Capacity: Barrels |
| Type of Fuel: | | | Quantity on Board: Barrels | |
| INCIDENT INFORMATION | | | | |
| Location: | | | Lat/Long: | |
| Type of Casualty: <input type="checkbox"/> Grounding <input type="checkbox"/> Collision <input type="checkbox"/> Allision <input type="checkbox"/> Explosion <input type="checkbox"/> Fire <input type="checkbox"/> Other | | | | |
| | | | | |
| Number of Tanks Impacted: | | | Total Capacity of Affected Tanks: | |
| Material(s) Spilled: | | | Viscosity: | |
| Estimated Quantity Spilled: | | (<input type="checkbox"/> Gallons/ <input type="checkbox"/> Barrels) | Classification: <input type="checkbox"/> Minor <input type="checkbox"/> Medium <input type="checkbox"/> Major | |
| Source Secured?: <input type="checkbox"/> Yes <input type="checkbox"/> No | | If Not, Estimated Spill Rate: | | <input type="checkbox"/> Barrels <input type="checkbox"/> Gallons / Hour |
| Notes: | | | | |
| INCIDENT STATUS | | | | |
| Injuries/Casualties: | | | | <input type="checkbox"/> SAR Underway |
| | | | | |
| Vessel Status: <input type="checkbox"/> Sunk <input type="checkbox"/> Aground <input type="checkbox"/> Dead in Water | | | Set and Drift: | |
| <input type="checkbox"/> Anchored <input type="checkbox"/> Berthed <input type="checkbox"/> Under Tow | | | Estimated Time to Dock / Anchor: | |
| <input type="checkbox"/> Enroute to Anchorage / Berth Under Own Power | | | Estimated Time of Arrival: | |
| <input type="checkbox"/> Holed: <input type="checkbox"/> Above Waterline <input type="checkbox"/> Below Waterline <input type="checkbox"/> At Waterline | | | Approximate Size of Hole: | |
| <input type="checkbox"/> Fire: <input type="checkbox"/> Extinguished <input type="checkbox"/> Burning | | | <input type="checkbox"/> Assistance Enroute <input type="checkbox"/> Assistance On-Scene | |
| <input type="checkbox"/> Flooding: <input type="checkbox"/> Dewatering <input type="checkbox"/> Lightering | | | <input type="checkbox"/> Assistance Enroute <input type="checkbox"/> Assistance On-Scene | |
| <input type="checkbox"/> List: <input type="checkbox"/> Port <input type="checkbox"/> Starboard Degrees: | | | <input type="checkbox"/> Trim: <input type="checkbox"/> Bow <input type="checkbox"/> Stern Degrees: | |
| | | | | |
| ENVIRONMENTAL INFORMATION | | | | |
| Wind Speed: | Knots | Wind Direction: | Air Temperature: F° | Water Temperature: F° |
| Wave Height: | Feet | Wave Direction: | Conditions: | Tide: <input type="checkbox"/> Slack <input type="checkbox"/> Flood <input type="checkbox"/> Ebb |
| Current: | Knots | Current Direction: | | High Tide at: Hours |
| Swell Height: | Feet | Swell Direction: | | Low Tide at: Hours |
| | | | | |
| Prepared By: | | Date / Time Prepared | | June 2000 INITIAL INCIDENT INFORMATION |

| | | |
|---|--|---------------------------------|
| 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: _____ _____ _____ _____ _____ _____ _____ _____ _____ | | |

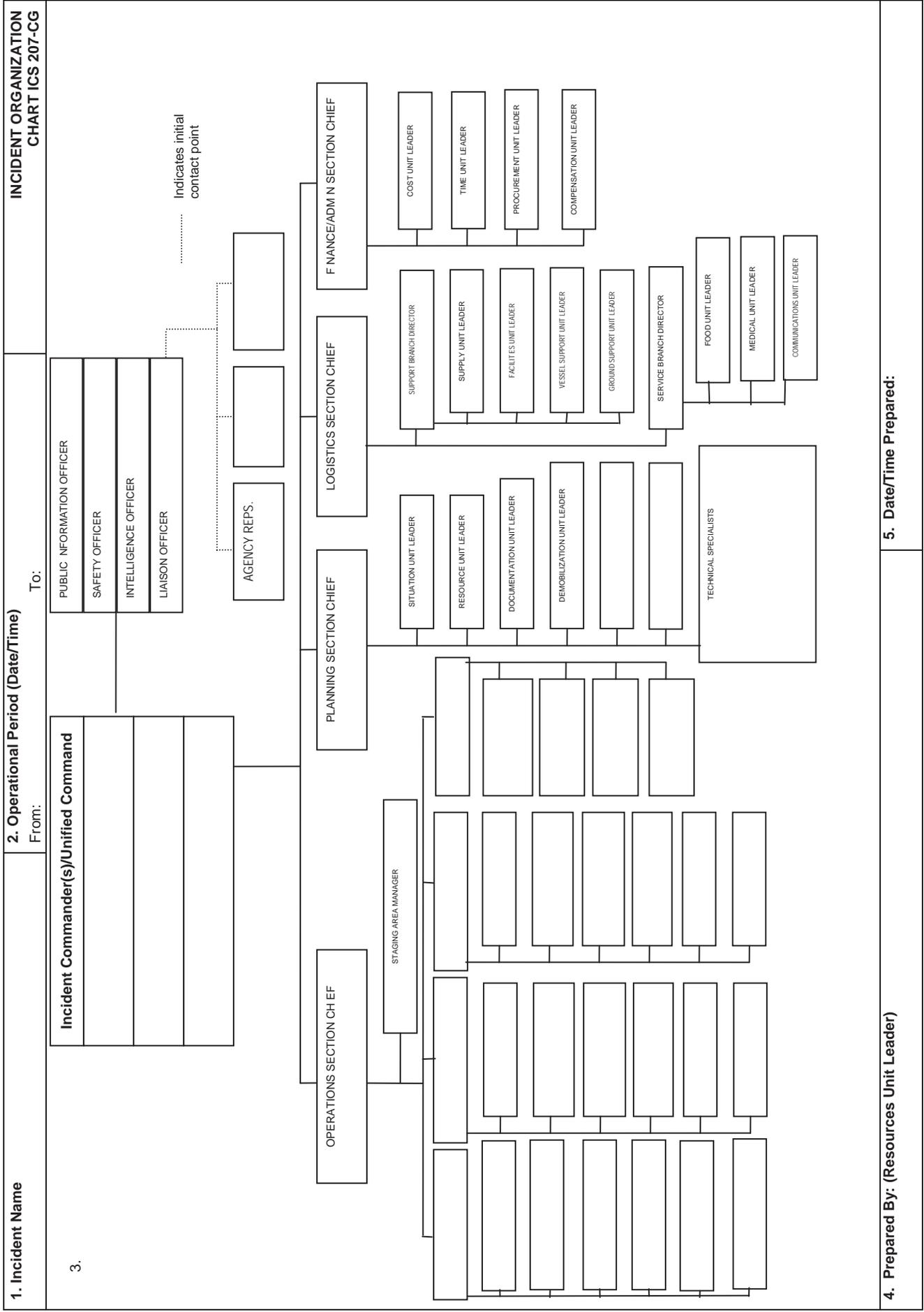
| | | |
|-------------------------|--|---------------------------------|
| 1. Incident Name | 2. Prepared by: (name) Date: _____ Time: _____ | INCIDENT BRIEFING ICS 201-CG |
|-------------------------|--|---------------------------------|

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| 5. Initial Response Objectives, Current Actions, Planned Actions | |
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| 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 <table border="1" style="width:100%; border-collapse: collapse;"> <tr><td style="width:30%; height: 20px;"></td><td style="width:35%;"></td><td style="width:35%;"></td></tr> <tr><td style="height: 20px;"></td><td></td><td></td></tr> <tr><td style="height: 20px;"></td><td></td><td></td></tr> <tr><td style="height: 20px;"></td><td></td><td></td></tr> <tr><td style="height: 20px;"></td><td></td><td></td></tr> </table> Safety Officer: _____ Information Officer: _____ Liaison Officer: _____ | | | | | | | | | | | | | | | | 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 _____ | |
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| 4. Agency Representatives <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:15%;">Agency</th> <th style="width:85%;">Name</th> </tr> </thead> <tbody> <tr><td style="height: 20px;"></td><td></td></tr> </tbody> </table> | Agency | Name | | | | | | | | | | | | | | | |
| Agency | Name | | | | | | | | | | | | | | | | |
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| 5. PLANNING/INTEL SECTION Chief _____ Deputy _____ Resources Unit _____ Situation Unit _____ Environmental Unit _____ Documentation Unit _____ Demobilization Unit _____ Technical Specialists _____ _____ _____ | | | | | | | | | | | | | | | | | |
| 6. LOGISTICS SECTION Chief _____ Deputy _____ a. Support Branch Director _____ Supply Unit _____ Facilities Unit _____ Vessel Support Unit _____ Ground Support Unit _____ b. Service Branch Director _____ Communications Unit _____ Medical Unit _____ Food Unit _____ | 8. FINANCE/ADMINISTRATION SECTION Chief _____ Deputy _____ Time Unit _____ Procurement Unit _____ Compensation/Claims Unit _____ Cost Unit _____ | | | | | | | | | | | | | | | | |
| 9. Prepared By: (Resources Unit) | Date/Time | | | | | | | | | | | | | | | | |

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|--|------------------------------------|---|-------------------|---------------------------------------|--------------------------|
| 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 | |
| | | | | | <input type="checkbox"/> |
| | | | | | <input type="checkbox"/> |
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| 7. Work Assignments | | | | | |
| | | | | | |
| 8. Special Instructions | | | | | |
| | | | | | |
| 9. Communications (radio and/or phone contact numbers needed for this assignment) | | | | | |
| <u>Name/Function</u> | <u>Radio: Freq./System/Channel</u> | <u>Phone</u> | <u>Cell/Pager</u> | _____ | |
| _____ | _____ | _____ | _____ | _____ | |
| _____ | _____ | _____ | _____ | _____ | |
| _____ | _____ | _____ | _____ | _____ | |
| Emergency Communications | | | | | |
| Medical | _____ | Evacuation | _____ | Other | _____ |
| 10. Prepared by: | | 11. Reviewed by (PSC): | | 12. Reviewed by (OSC): | |
| | Date/Time | | Date/Time | | Date/Time |

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



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|--|-----------------|--|--------------------------------------|---|------------------|
| 1. Incident Name | | 2. Operational Period (Date / Time) From: To: Time of Report | | INCIDENT STATUS SUMMARY ICS 209-CG | |
| 3. Type of Incident | | | | | |
| <input type="checkbox"/> | Oil Spill | <input type="checkbox"/> | HAZMAT | <input type="checkbox"/> | AMIO |
| <input type="checkbox"/> | SAR/Major SART | <input type="checkbox"/> | SI/Terrorism | <input type="checkbox"/> | Natural Disaster |
| <input type="checkbox"/> | Marine Disaster | <input type="checkbox"/> | Civil Disturbance | <input type="checkbox"/> | Military Outload |
| <input type="checkbox"/> | Planned Event | <input type="checkbox"/> | Maritime HLS/Prevention | <input type="checkbox"/> | |
| 4. Situation Summary as of Time of Report: | | | | | |
| 5. Future Outlook/Goals/Needs/Issues: | | | | | |
| 6. Safety Status/Personnel Casualty Summary | | | | | |
| | | Since Last Report | Adjustments To Previous Op Period | Total | |
| Responder Injury | | | | | |
| Responder Death | | | | | |
| Public Missing (Active Search) | | | | | |
| Public Missing (Presumed Lost) | | | | | |
| Public Uninjured | | | | | |
| Public Injured | | | | | |
| Public Dead | | | | | |
| Total Public Involved | | | | | |
| 7. Property Damage Summary | | | | | |
| Vessel | | | | \$ | |
| Cargo | | | | \$ | |
| Facility | | | | \$ | |
| Other | | | | \$ | |
| 8. Attachments with clarifying information | | | | | |
| <input type="checkbox"/> | Oil/HAZMAT | <input type="checkbox"/> | SAR/LE | <input type="checkbox"/> | |
| <input type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | |
| <input type="checkbox"/> | Marine Disaster | <input type="checkbox"/> | Civil Disturbance | <input type="checkbox"/> | Military Outload |

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

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

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

NRC Incident No. # _____

| | | |
|--|--|-----------------------------|
| 1. Incident Name | 2. Operational Period (Date / Time) From: _____ To: _____ | STATUS CHANGE ICS 210-OS |
| 3. Personnel / Resource Name or I.D. | | |
| 4. New Status <input type="checkbox"/> Available / Staged <input type="checkbox"/> Assigned _____ <input type="checkbox"/> Out of Service | | |
| 5. FROM Location or Status | 6. TO Location or Status | |
| | | |
| 7. Time of Location / Status Change | | |
| 8. Comments | | |
| 9. Prepared by: | | Date / Time |
| 10. Processed by: (Resource Unit) | | Date / Time |
| STATUS CHANGE | June 2000 | ICS 210-OS |

NRC Incident No. # _____

| | | |
|---|-----------------------------|--------------------------------------|
| 1. Incident Name | 2. Date and Time of Message | GENERAL MESSAGE ICS 213-CG |
| 3. TO: ICS Position | | |
| 4. FROM: ICS Position | | |
| 5. Subject: | | |
| 6. Message | | |
| 7 Reply | | |
| 8. Signature/Position (person replying) | | Date/Time of reply |
| GENERAL MESSAGE | | ICS 213-CG (04/04) |

| OPERATIONAL PLANNING WORKSHEET | | 6 . | | 2. DATE & TIME PREPARED | | 3. OPERATIONAL PERIOD (DATE & TIME) | |
|------------------------------------|--|-----------------------------|------|-------------------------|---------------------------------|-------------------------------------|----------------------------|
| | | K R I S I N D U S R C E F S | | 7. OVERHEAD | 8. SPECIAL EQUIPMENT & SUPPLIES | 9. REPORTING LOCATION | 10. REQUESTED ARRIVAL TIME |
| 1. INCIDENT NAME | | 5. WORK ASSIGNMENTS | | | | | |
| 4. DIVISION/ GROUP/ OTHER LOCATION | | REQ | HAVE | | | | |
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|---|---|--|
| 1. Incident Name | 2. Operational Period (Date / Time) From: _____ To: _____ | DEMOB. CHECK-OUT ICS 221-CG |
| 3. Unit / Personnel Released | | 4. Release Date / Time |
| <p>5. Unit / Personnel</p> <p>You and your resources have been released, subject to signoff from the following: (Demob. Unit Leader "X" appropriate box(es))</p> <p>Logistics Section</p> <p><input type="checkbox"/> Supply Unit _____</p> <p><input type="checkbox"/> Communications Unit _____</p> <p><input type="checkbox"/> Facilities Unit _____</p> <p><input type="checkbox"/> Ground Unit _____</p> <p>Planning Section</p> <p><input type="checkbox"/> Documentation Unit _____</p> <p>Finance / Admin. Section</p> <p><input type="checkbox"/> Time Unit _____</p> <p>Other</p> <p><input type="checkbox"/> _____</p> <p><input type="checkbox"/> _____</p> <p><input type="checkbox"/> _____</p> | | |
| <p>6. Remarks</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> | | |
| 7. Prepared by: _____ | | Date / Time _____ |
| DEMOB. CHECK-OUT | | ICS 221-CG (Rev.07/04) |

| 1. Incident Name | | 2. Operational Period (Date/Time) From: _____ To: _____ | | DAILY MEETING SCHEDULE ICS 230-CG | |
|--|------------------------------------|--|--|--|--|
| 3. Meeting Schedule (Commonly-held meetings are included) | | | | | |
| Date/ Time | Meeting Name | Purpose | Attendees | Location | |
| | Unified Command Objectives Meeting | Review/ identify objectives for the next operational period. | Unified Command members | | |
| | | | | | |
| | Command & General Staff Meeting | IC/UC gives direction to Command & General staff including incident objectives and priorities | IC/UC, Command & General Staff | | |
| | | | | | |
| | Tactics Meeting | Develop/Review primary and alternate Strategies to meet Incident Objectives for the next Operational Period. | PSC, OSC, LSC, RESL & SITL | | |
| | | | | | |
| | | | | | |
| | Planning Meeting | Review status and finalize strategies and assignments to meet Incident Objectives for the next Operational Period. | Determined by the IC/UC | | |
| | | | | | |
| | | | | | |
| | Operations Briefing | Present IAP and assignments to the Supervisors / Leaders for the next Operational Period. | IC/UC, Command & General Staff, Branch Directors, Div/Gru Sups., Task Force/Strike Team Leaders and Unit Leaders | | |
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| | | | | | |
| 4. Prepared by: (Situation Unit Leader) | | | Date/Time | | |
| | | | | | |
| DAILY MEETING SCHEDULE | | | | ICS 230-CG (Rev.07/04) | |

NRC Incident No. # _____

| | | |
|---|----------------------|--------------------------------------|
| 1. Incident Name | 2. Meeting Date/Time | MEETING SUMMARY ICS 231-OS |
| 3. Meeting Name | | |
| 4. Meeting Location | | |
| 5. Facilitator | | |
| 6. Attendees | | |
| 7. Notes (with summary of decisions and action items) | | |
| 8. Prepared by: | | Date/Time |
| MEETING SUMMARY | June 2000 | ICS 231-OS |

| | | | | |
|---|----------|---|-------------------------------|---|
| 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 | |
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| 4. Archaeo-cultural and Socio-economic Issues | | | | |
| Site # | Priority | Site Name and/or Physical Location | Site Issues | |
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| 5. Prepared by: (Environmental Unit Leader) | | | Date/Time | |
| | | | | |
| RESOURCES AT RISK SUMMARY | | | ICS 232-CG (Rev.07/04) | |

Date: _____

NRC Incident No. # _____

SITE SAFETY PLAN

I. General - Spill / Release

Land Air Water HAZMAT Other: _____

Facility: _____

Location: _____

Objectives: _____

Operational Period: **Date** _____ **Time:** _____ **to** _____

II. Hazards to be Evaluated

| | | | | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|---------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-----------------------------|
| Y | N | <input type="checkbox"/> | <input type="checkbox"/> | Oxygen Deficient/Enriched | Y | N | <input type="checkbox"/> | <input type="checkbox"/> | Chemical/MSDS # _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Flammable Atmosphere | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Physical Site Hazard _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Toxic Atmosphere: _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Traffic _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Boat Operations | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Other* (see comments) _____ |

III. Weather

Skies: _____ Tide: _____ Water Temperature: _____

Temperature: _____ Current: _____ Kts. Current Direction: _____

Wind Velocity: _____ Wind Direction: _____

IV. Control Measures

Isolation & Lockout (Identify items to be locked out): _____

Decon: _____

Ventilation: Natural Mechanical: _____ Continuous: No Yes

Flagman/Watchman: _____

V. Testing & Monitoring (Check required items)

Tests are to be performed in the order listed.

| | | | |
|--------------------------|--------------------------|---|-------------------|
| Y | N | Continuous | Frequency |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> Y <input type="checkbox"/> N | _____ every _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> Y <input type="checkbox"/> N | _____ every _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> Y <input type="checkbox"/> N | _____ every _____ |
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| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> Y <input type="checkbox"/> N | _____ every _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> Y <input type="checkbox"/> N | _____ every _____ |

ACCEPTABLE ENTRY CONDITIONS

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

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

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

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

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

Any other special PPE: _____

VII. Emergency Information and Rescue Services

Emergency Contact Person: _____ Contact by: _____

Fire Department: _____ Contact by: _____

Ambulance: _____ Contact by: _____

Hospital: _____ Contact by: _____

Rescue Services: _____ Contact by: _____

(if not provided by above)

VIII. Required Safety & Rescue Equipment (on site)

Lights Fall Protection First Aid Kit Drinking Water Fire Extinguisher Tripod Other: _____

Ladder Retrieval Lines Defibrillator Communication Method _____

Date: _____

NRC Incident No. # _____

IX. Comments or Special Work Procedures

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

Radio Channel: _____ Radio Frequency: _____ Telephone No. _____

Call 911 if life threatening

XI. 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 | | | | | | | | | | | | | | |
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| | By | | | | | | | | | | | | | | |
| | Time | | | | | | | | | | | | | | |
| | Level | | | | | | | | | | | | | | |
| | By | | | | | | | | | | | | | | |

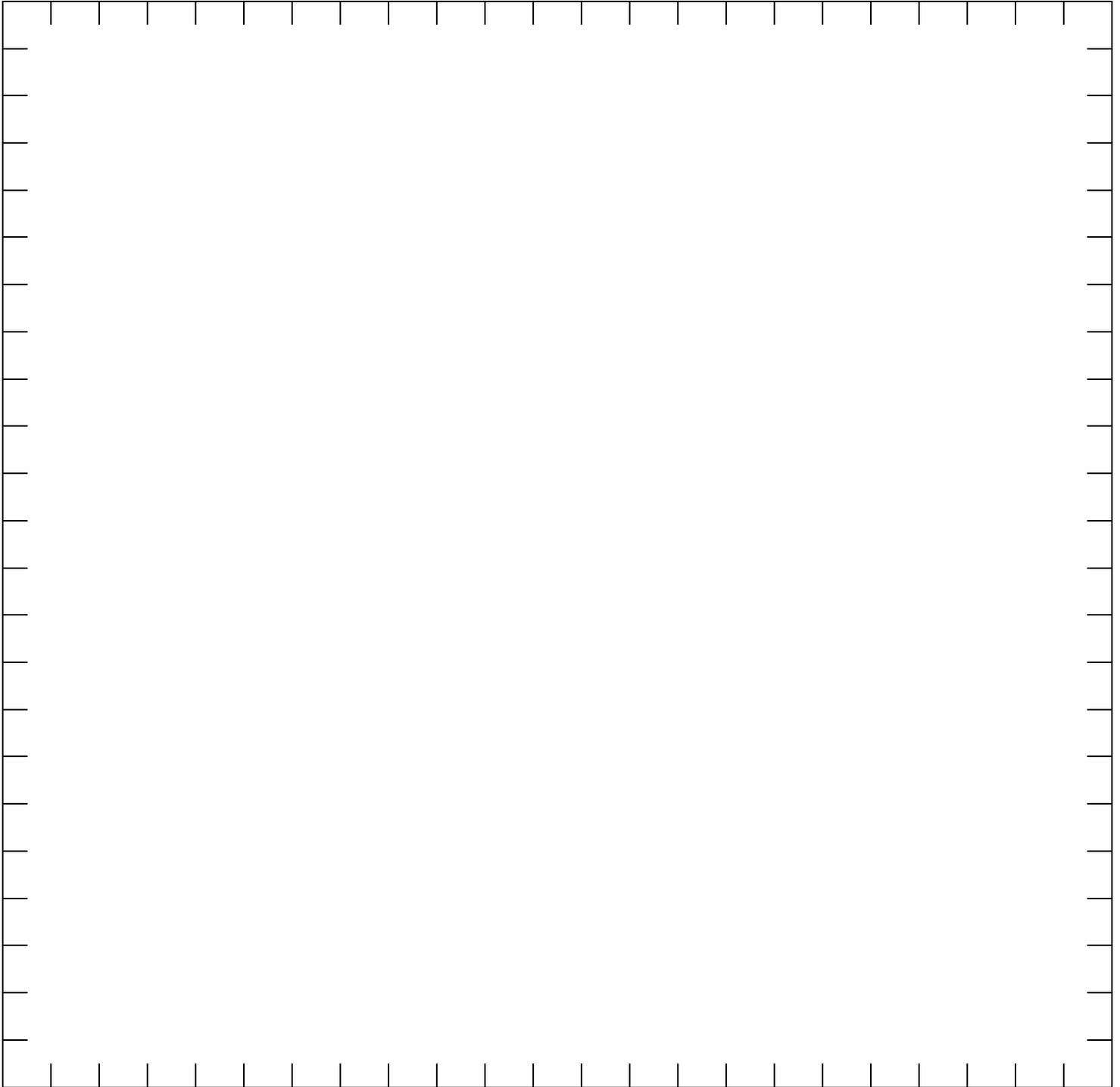
Equipment: Type: _____ Mnfr: _____ Calibration / Expiration: _____
 Type: _____ Mnfr: _____ Calibration / Expiration: _____

Date: _____

NRC Incident No. # _____

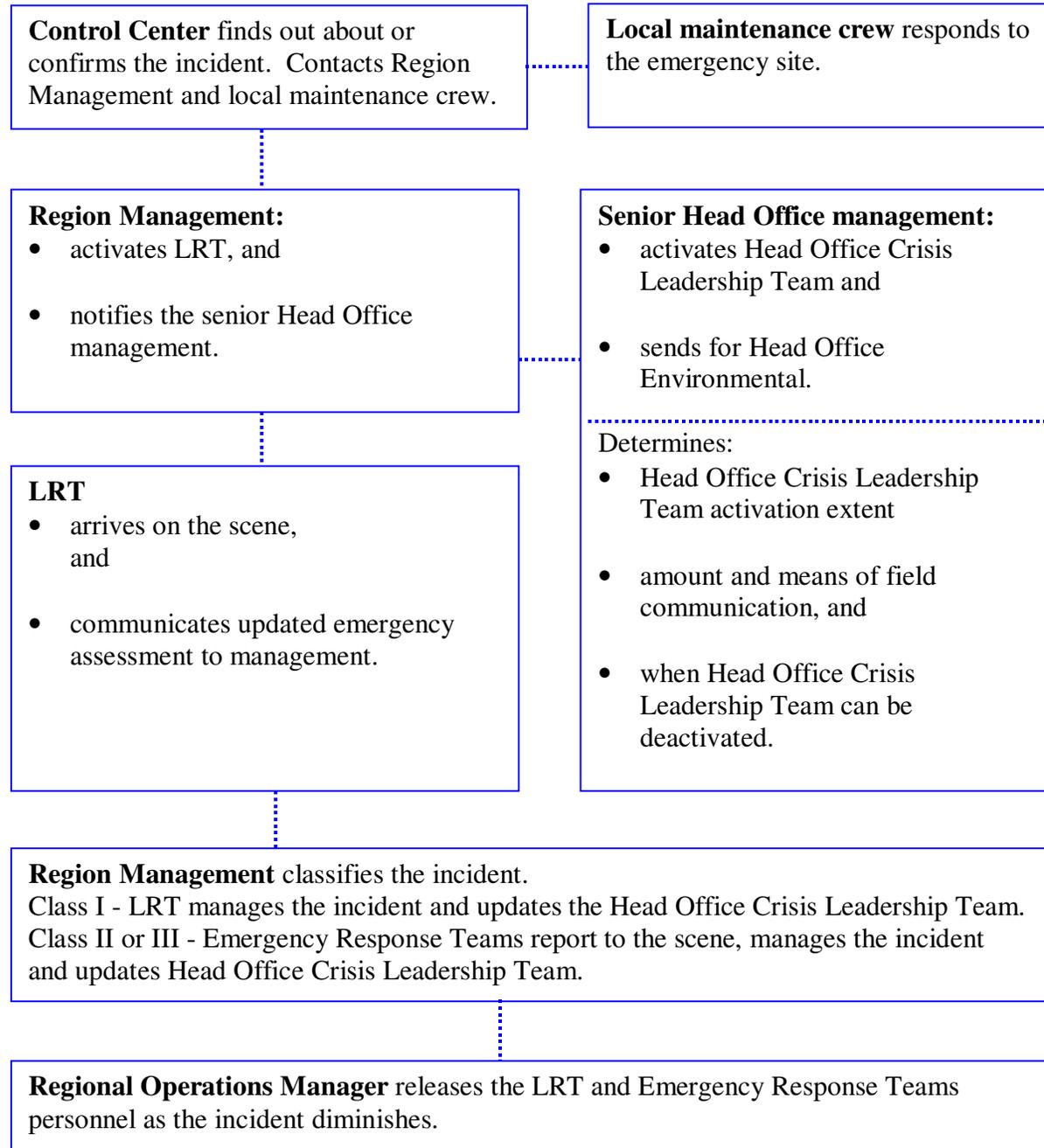
XII. Work Area Diagram

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



LRT Activation

Depending on the incident, the LRT may be activated. The following shows the activation decision.



Notification Exercise Form

1. Date performed: _____
2. Exercise or actual response? Exercise Actual response
3. Type of facility initiating exercise: Vessel Facility Pipeline Offshore
4. Exercise included:
- Facility LRT (Name): _____
- Equiva Crisis Management
- Head Office Crisis Leadership Team
- OSRO (Name): _____
- Other: _____
5. Was the qualified individual included in this exercise? Yes No
6. Time initiated: _____ AM PM
- Did the exercise require the qualified individual to respond? Yes No
- Time of qualified individual response: _____ AM PM
7. Method used to contact: Phone Pager Radio Other _____
8. Description of notification procedure:
- _____
- _____
- _____

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

Notifications Staff mobilization Other (list) _____

Certifying signature



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

Recommended Guidelines For Inspection & Testing

Frequency of Inspection

The frequency for inspecting and maintaining emergency response equipment is listed below.

| Equipment to be Inspected | Frequency of Inspection |
|---|--|
| Spill trailer <ul style="list-style-type: none"> • manuals • supplies | Annually or after deployment of equipment during drill or actual emergency |
| Generators | Annually |
| Outboard motors | Annually |
| Pumps | Annually |
| Chain saws, blowers, and other small two-cycle engines | Annually |
| Communications equipment | Annually (quarterly for batteries) |
| Boom trailer (if applicable) | Annually or after deployment of equipment during drill or actual emergency |

Guidelines For Inspection and Maintenance

Guidelines for inspection and maintenance of emergency response equipment are as follows:

| Equipment to be Tested | Procedure |
|-------------------------------|--|
| Generators | <p>Run a minimum of 10 minutes under a load.</p> <div style="display: inline-block; vertical-align: middle;">  </div> <p>Run more often if deemed necessary by the area.</p> <p>Do the following steps prior to long-term storage.</p> <ul style="list-style-type: none"> • Put the fuel stabilizer in the fuel tank. • Run the engine long enough to get the fuel stabilizer into the carburetor and then cut the fuel off at the tank. Run the engine dry. • Top off the fuel tank to prevent any condensation. • Clean and store dry small fuel tanks. • Remove the spark plug and spray inside the cylinder with a mist of WD-40 or other parts protector. Replace the spark plug. • Drain the fuel lines if possible. |

| Equipment to be Tested | Procedure |
|-------------------------------|--|
| Outboard motors | <p>Run a minimum of 10 minutes. Either place the lower unit in a drum of water or use an adapter to connect the water hose to the lower unit. Do the following steps prior to long-term storage.</p> <ul style="list-style-type: none"><li>• Put the fuel stabilizer in the fuel tank.<li>• Run the engine long enough to get the fuel stabilizer into the carburetor and then cut off the fuel at the tank. Run the engine dry.<li>• Top off the fuel tank to prevent any condensation.<li>• Clean and store dry small fuel tanks.<li>• Drain the lower unit and replace with a fresh lower-unit oil.<li>• Remove the spark plugs and spray inside the cylinder with a mist of WD-40 or other parts protector. Replace the spark plug.<li>• Drain the fuel lines if possible. Consider having a spare fuel line available. |

| Equipment to be Tested | Procedure |
|--|--|
| Pumps | <p>Run for at least 10 minutes. Do the following steps prior to long-term storage.</p> <ul style="list-style-type: none"> • Flush the pump with fresh water. • Drain the pump of all water and spray a heavy mist of WD-40 or other parts protector into the suction of the pump. • Put the fuel stabilizer into the fuel tank. • Run the engine long enough to get the fuel stabilizer into the carburetor. • Turn the fuel off at the tank and run the carburetor dry.  <p>If the carburetor has a drain plug, open the drain to remove any fuel left.</p> |
| Chain saws, blowers, and other small two-cycle engines | <p>Do not test provided that you follow these long-term storage procedures.</p> <ul style="list-style-type: none"> • Run the engine dry of fuel. • Air-dry the fuel tank. • Remove the spark plug and spray inside the cylinder with a mist of WD-40 or other parts protector. Replace the spark plug. • Spray or wipe with a light coating of oil on bar and chain of chain saw. |

| Equipment to be Tested | Procedure | |
|--|--|---|
| Communications equipment | Do the following according to type of equipment. | |
| | Equipment | Procedure |
| | Two-way radio | Check the power and frequency with a service monitor. |
| | Satellite | Assemble the transportable INMSRSAT terminal. Set up and make a call. |
| | NICAD battery | Cycle all batteries including spares using the battery cycle system. Store in the proper case. |
| Battery inverter and DC power supplies | Check under load. | |

Spill Management Team Tabletop Exercise

1. Date performed: _____

2. Exercise or actual response? Exercise Actual response

3. Location of tabletop: _____

4. Name of MTR facility or response zone drilled: _____

5. Time started: _____ AM PM Time completed: _____ AM PM

6. Response plan scenario used:

Worst case discharge Average most probable discharge Maximum most probable discharge

Size of (simulated spill) _____ bbls

7. Describe how the following objectives were exercised:

a) Spill management team's knowledge of oil-spill response plan:

b) Proper notifications:

c) Communications system:

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

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

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

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

Organization Design:

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

Operational Response:

- Discharge control Assessment of discharge Containment of discharge
 Recovery of spilled material Protection of sensitive areas
 Disposal of recovered material and contaminated debris

Response Support:

- Communications Transportation Personnel support
 Equipment maintenance & support Procurement Documentation

9. Describe the security component(s) exercised:

Attach list of personnel (see Attachment A), description of lesson(s) learned and person(s) responsible for follow up of corrective measures.

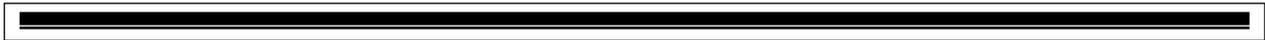
Certifying signature

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

| Attachment A - List of Support Personnel Employed | | | |
|--|-------------|------------------------|----------------|
| | Name | Mockingbird No. | Company |
| 1 | | | |
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| 22 | | | |
| 23 | | | |

| Attachment A - List of Support Personnel Employed | | | |
|--|-------------|------------------------|----------------|
| | Name | Mockingbird No. | Company |
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| 44 | | | |
| 45 | | | |

SITE SAFETY PLAN



NAME OF INCIDENT

REPORT NUMBER

DATE PREPARED

FEDERAL REPRESENTATIVE

NAME

DATE

TIME

STATE REPRESENTATIVE

NAME

DATE

TIME

SHELL REPRESENTATIVE

NAME

DATE

TIME

SPLC EMERGENCY RESPONSE—RELEASE SITE SAFETY PLAN

SITE ENTRY PLAN

PRODUCT RELEASED:

| | |
|---------------------|--------------------------|
| MSDS ON SITE | |
| YES | <input type="checkbox"/> |
| NO | <input type="checkbox"/> |
| # | <input type="text"/> |

| | | | | | |
|--------------|--------------------------|----------|--------------------------|-------------|--------------------------|
| SWEET CRUDE | <input type="checkbox"/> | JET FUEL | <input type="checkbox"/> | NATURAL GAS | <input type="checkbox"/> |
| SOUR | <input type="checkbox"/> | DIESEL | <input type="checkbox"/> | GASOLINE | <input type="checkbox"/> |
| OTHER: _____ | | | | | |

PERSONAL PROTECTIVE EQUIPMENT REQUIRED:

| | | | | | |
|----------|--------------------------|--------------|--------------------------|---------|--------------------------|
| HARD HAT | <input type="checkbox"/> | SAFETY SHOES | <input type="checkbox"/> | GLASSES | <input type="checkbox"/> |
| GLOVES | <input type="checkbox"/> | RUBBER | <input type="checkbox"/> | GOGGLE | <input type="checkbox"/> |

RESPIRATORY:

| | | |
|----------------|--------------------------|--------------------------|
| | YES | NO |
| SELF CONTAINED | <input type="checkbox"/> | <input type="checkbox"/> |
| PARTICLE MASK | <input type="checkbox"/> | <input type="checkbox"/> |
| REMARKS: | _____ | |

CLOTHING:

| | | |
|--------------------|--------------------------|--------------------------|
| | YES | NO |
| CHEMICAL RESISTANT | <input type="checkbox"/> | <input type="checkbox"/> |
| FIRE RETARDANT | <input type="checkbox"/> | <input type="checkbox"/> |

ATMOSPHERIC CONDITIONS:

| | | | |
|------------------------|--------------------------|--------|--------------------------|
| RAIN | <input type="checkbox"/> | CLOUDY | <input type="checkbox"/> |
| WIND DIRECTION _____ | SHOWERS | CLEAR | <input type="checkbox"/> |
| WIND VELOCITY _____ | DRY | DUSTY | <input type="checkbox"/> |
| 24 HOUR FORECAST _____ | | | |

| | | | | | |
|------------|-----------------------------|-----------------------------|----------------------|------------------------------|-----------------------------|
| TIME | AM <input type="checkbox"/> | PM <input type="checkbox"/> | FIRE DANGER PRESENT | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| DATE _____ | | | FIRE CONTROL ON SITE | <input type="checkbox"/> | <input type="checkbox"/> |
| REMARKS: | _____ | | | | |

SITE MONITORING:**INITIAL MONITORING PERFORMED**

| | |
|--------------------------|--------------------------|
| YES | NO |
| <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> |

ADDITIONAL MONITORING REQUIRED

CONTINUOUS
HOURLY
EVERY TWO HOURS
EVERY FOUR HOURS
EVERY EIGHT HOURS

| | |
|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> |

REMARKS _____

MONITOR READINGS

| | | |
|---------|----------------------|-------|
| BENZENE | <input type="text"/> | PPM |
| H2S | <input type="text"/> | PPM |
| OXYGEN | <input type="text"/> | % |
| LEL | <input type="text"/> | % |
| _____ | <input type="text"/> | _____ |

MONITOR TYPE: _____

SERIAL # _____

CALIBRATION DATE: _____

**MONITORING REQUIREMENTS
TO BE REEVALUATED UPON
ANY CHANGE IN CONDITIONS.**

PLAN PREPARED BY: _____

Date _____

Time _____

SPLC EMERGENCY RESPONSE—RELEASE SITE SAFETY PLAN SAFE WORK AND HEALTH PLAN

FACILITY / SYSTEM

CITY: _____

STREET ADDRESS: _____

NEAREST CROSS STREET: _____

AIR MILE MARKER: _____

Y-MAP: _____

STATION: _____

PRODUCT RELEASED: _____

ESTIMATED INITIAL VOLUME: _____

REMARKS: _____
_____**MANAGEMENT:**

YES

NO

INCIDENT COMMAND SYSTEM IMPLEMENTED

SEE ORGANIZATION CHART

COMMUNICATIONS ESTABLISHED

FOR COMMAND STRUCTURE

SATELLITE

RADIO

PHONE

AND LEADER IDENTIFICATION.

STAGING AREA IDENTIFIED

LOCATION: _____

REMARKS: _____
_____**ENGINEERING CONTROLS:**CONTROL CENTER
NOTIFIED

YES

NO

UPSTREAM

VALVE # _____

OPEN

CLOSED

SITE AREA
SECURED

DOWNSTREAM

VALVE # _____

OPEN

CLOSED

FACILITY SHUT DOWN

OTHER: _____

REMARKS: _____
_____**PLAN PREPARED BY:** _____**Date** _____**Time** _____

SPLC EMERGENCY RESPONSE—RELEASE SITE SAFETY PLAN SAFE WORK AND HEALTH PLAN

WATER AFFECTED:

PRODUCT IN WATER CREEK RIVER OCEAN

YES NO BAY CANAL TIDELANDS

OTHER: _____

REMARKS: _____

DESCRIPTION OF SITE AND TOPOGRAPHY:

MOUNTAINS BRUSH GRASS FARMING DRY

FOOTHILLS FOREST CROPS LEVEL WET

OTHER: _____

REMARKS: _____

LAND USE:

PUBLIC CITY RESIDENTIAL INDUSTRIAL

PRIVATE COUNTY RECREATION FARMING

FEDERAL STATE OTHER: _____

REMARKS: _____

PROPERTY DAMAGE:

OWNER NOTIFIED YES NO

CROP TYPE _____

CROPS AFFECTED YES NO

AREA DAMAGED _____

LIVESTOCK YES NO

NUMBER : _____

TYPE: _____

STRUCTURES YES NO

COMMERCIAL

PRIVATE

REMARKS: _____

PLAN PREPARED BY: _____

Date _____

Time _____

SPLC EMERGENCY RESPONSE—RELEASE SITE SAFETY PLAN SITE WORK PLAN

INCIDENT COMMANDER: _____ OPERATIONS CHIEF: _____

SAFETY OFFICER: _____ PLANNING CHIEF: _____

SAFETY MEETING: ALL PERSONNEL ENTERING THE RESPONSE AREA WILL BE REQUIRED TO PRODUCE HAZWOPER CERTIFICATION PAPERS UPON REQUEST.

THE SAFETY OFFICER WILL CONDUCT A SAFETY MEETING WITH THE WORK CREWS PRIOR TO THEIR ENTERING THE JOB SITE TO DISCUSS ALL KNOWN HAZARDS THAT MAY BE ENCOUNTERED AT THE SITE LOCATION.

FIRE DANGER - CONFINED SPACE - RESPIRATORY - MOVING EQUIPMENT

EVACUATION PLAN NEEDED YES NO

THE SAFETY OFFICER WILL PREPARE AN EVACUATION PLAN IF NEEDED.

IF PRODUCT CONTAINS BENZENE INSURE ADEQUATE PERSONAL PROTECTION IN PLACE.

OTHER: _____

PRODUCT CONTAINMENT:

| | YES | NO | | TIMES | |
|-------------------------|--------------------------|--------------------------|----------------------|-------|----|
| | | | | AM | PM |
| VACUUM TRUCKS REQUIRED | <input type="checkbox"/> | <input type="checkbox"/> | TRUCKS ORDERED _____ | | |
| PORTABLE PUMPS REQUIRED | <input type="checkbox"/> | <input type="checkbox"/> | PUMPS ORDERED _____ | | |
| PORTABLE TANKS REQUIRED | <input type="checkbox"/> | <input type="checkbox"/> | TANKS ORDERED _____ | | |
| REMARKS: _____ | | | | | |

ESTIMATED TIME FOR CONTAINMENT, PICKUP AND REMOVAL _____

EXCAVATION:

| | YES | NO | EQUIPMENT ORDERED | | |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------------------|----------------------------|
| SHORING REQUIRED | <input type="checkbox"/> | <input type="checkbox"/> | BACK HOE <input type="checkbox"/> | TRACKLAYER <input type="checkbox"/> | |
| SLOPING OR BENCHING | <input type="checkbox"/> | <input type="checkbox"/> | EXCAVATOR <input type="checkbox"/> | GRADER <input type="checkbox"/> | |
| EXCAVATION PERMIT ON SITE | <input type="checkbox"/> | <input type="checkbox"/> | 960 LOADER <input type="checkbox"/> | DRAGLINE <input type="checkbox"/> | |
| USA ALERT NOTICE SENT | <input type="checkbox"/> | <input type="checkbox"/> | DUMP TRUCK <input type="checkbox"/> | BOTTOM DUMP <input type="checkbox"/> | |
| OVER 5' (CAOSHA NOTIFIED) (OSHA TRENCHING AND SHORING) | <input type="checkbox"/> | <input type="checkbox"/> | OTHER: _____ | | |
| COMPETENT PERSON ON SITE | <input type="checkbox"/> | <input type="checkbox"/> | NAME: _____ | | |
| SOIL CLASSIFIED | <input type="checkbox"/> | <input type="checkbox"/> | CLASSIFICATION: | A <input type="checkbox"/> | B <input type="checkbox"/> |
| REMARKS: _____ | | | | C <input type="checkbox"/> | |

ESTIMATED TIME TO EXCAVATE SITE FOR REPAIR _____

PLAN PREPARED BY: _____ **Date** _____ **Time** _____

SPLC EMERGENCY RESPONSE—RELEASE SITE SAFETY PLAN

SITE WORK PLAN

REPAIR:

| | YES | NO | EQUIPMENT / MATERIALS |
|---|--------------------------|--------------------------|---|
| PIPE REPLACEMENT NEEDED API 1104 | <input type="checkbox"/> | <input type="checkbox"/> | PORTABLE WELDER <input type="checkbox"/> |
| FULL SLEEVE REPAIR NEEDED API 1107 | <input type="checkbox"/> | <input type="checkbox"/> | HYDRO CRANE <input type="checkbox"/> |
| RECTIFIER TURNED OFF | <input type="checkbox"/> | <input type="checkbox"/> | PORTABLE LIGHTS <input type="checkbox"/> |
| HOT WORK PERMIT ISSUED PL | <input type="checkbox"/> | <input type="checkbox"/> | FIRE EXTINGUISHERS <input type="checkbox"/> |
| LOCK OUT/TAG OUT DONE SAFETY PROCEDURES MANUAL | <input type="checkbox"/> | <input type="checkbox"/> | RADIOGRAPHIC INSPECTION <input type="checkbox"/> |
| WELD PROCEDURE ON SITE | <input type="checkbox"/> | <input type="checkbox"/> | DRY ICE <input type="checkbox"/> NITROGEN <input type="checkbox"/> |
| WELDERS TEST PAPERS ON SITE | <input type="checkbox"/> | <input type="checkbox"/> | NAME: _____ |
| TESTED PIPE VERIFICATION | <input type="checkbox"/> | <input type="checkbox"/> | TEST # _____ |
| FIRE WATCH ESTABLISHED | <input type="checkbox"/> | <input type="checkbox"/> | NAME: _____ |
| REMARKS: _____ | | | |
| ESTIMATED TIME TO COMPLETE REPAIR _____ | | | |

SANITATION:

| | YES | NO | NOTE |
|---|--------------------------|--------------------------|-----------------|
| EMPLOYEE DECONTAMINATION FACILITIES IN PLACE | <input type="checkbox"/> | <input type="checkbox"/> | POTABLE WATER |
| EQUIPMENT DECONTAMINATION AREA ESTABLISHED | <input type="checkbox"/> | <input type="checkbox"/> | MAY BE OBTAINED |
| DECONTAMINATION WASTE FLUID CONTAINERS ON SITE | <input type="checkbox"/> | <input type="checkbox"/> | THROUGH VACUUM |
| POTABLE WATER AVAILABLE | <input type="checkbox"/> | <input type="checkbox"/> | TRUCK SERVICE. |
| PORTABLE TOILETS & WASHING FACILITIES ON SITE | <input type="checkbox"/> | <input type="checkbox"/> | |
| REMARKS: _____ | | | |
| ESTIMATED TIME TO SET SANITATION FACILITIES _____ | | | |

WASTE CONTAINMENT:

| | YES | NO | TYPE OF CONTAINMENT NEEDED |
|--|--------------------------|--------------------------|---|
| CONTAMINATED SOIL | <input type="checkbox"/> | <input type="checkbox"/> | CONTAIN ON AND COVER WITH VISQUEEN IF AUTHORIZED-USE HAZWASTE BINS USE D.O.T. 17 H DRUMS IF OVER 4 CUBIC YARDS AND MATERIALS ARE NON FLAMMABLE USE BINS. NOTE: Do not remove waste from site unless authorized by Environmental Rep. |
| CONTAMINATED DEBRIS | <input type="checkbox"/> | <input type="checkbox"/> | |
| CONTAMINATED RAGS | <input type="checkbox"/> | <input type="checkbox"/> | |
| CONTAMINATED PADS | <input type="checkbox"/> | <input type="checkbox"/> | |
| CONTAMINATED BOOM | <input type="checkbox"/> | <input type="checkbox"/> | |
| REMARKS: _____ | | | |
| ESTIMATED TIME TO CONTAIN CONTAMINATED MATERIALS _____ | | | |

PLAN PREPARED BY:

Date

Time

SPLC EMERGENCY RESPONSE—RELEASE SITE SAFETY PLAN SITE WORK PLAN

N



SITE SKETCH:

REMARKS:

TOTAL ESTIMATED TIME FOR RESPONSE REPAIR COMPLETION

NOTE: IF TOTAL RESPONSE REPAIR TIME EXCEEDS

HOURS.

ESTABLISH EMPLOYEE SHIFTS OF

HOURS EACH.

PLAN PREPARED BY:

Date

Time

SPLC EMERGENCY RESPONSE—RELEASE SITE SAFETY PLAN SITE WORK PLAN

SITE EMERGENCY INFORMATION:

911

CAN 911 BE USED TO REQUEST EMERGENCY MEDICAL, FIRE, OR POLICE HELP? YES NO

LOCAL AMBULANCE SERVICE

NAME: _____ TOWN: _____

PHONE NO: _____

LOCAL HOSPITAL

NAME: _____ TOWN: _____

PHONE NO: _____

IS A MAP SHOWING THE ROUTE OR DIRECTIONS TO THE HOSPITAL POSTED? YES NO

SITE MAP OR SKETCH

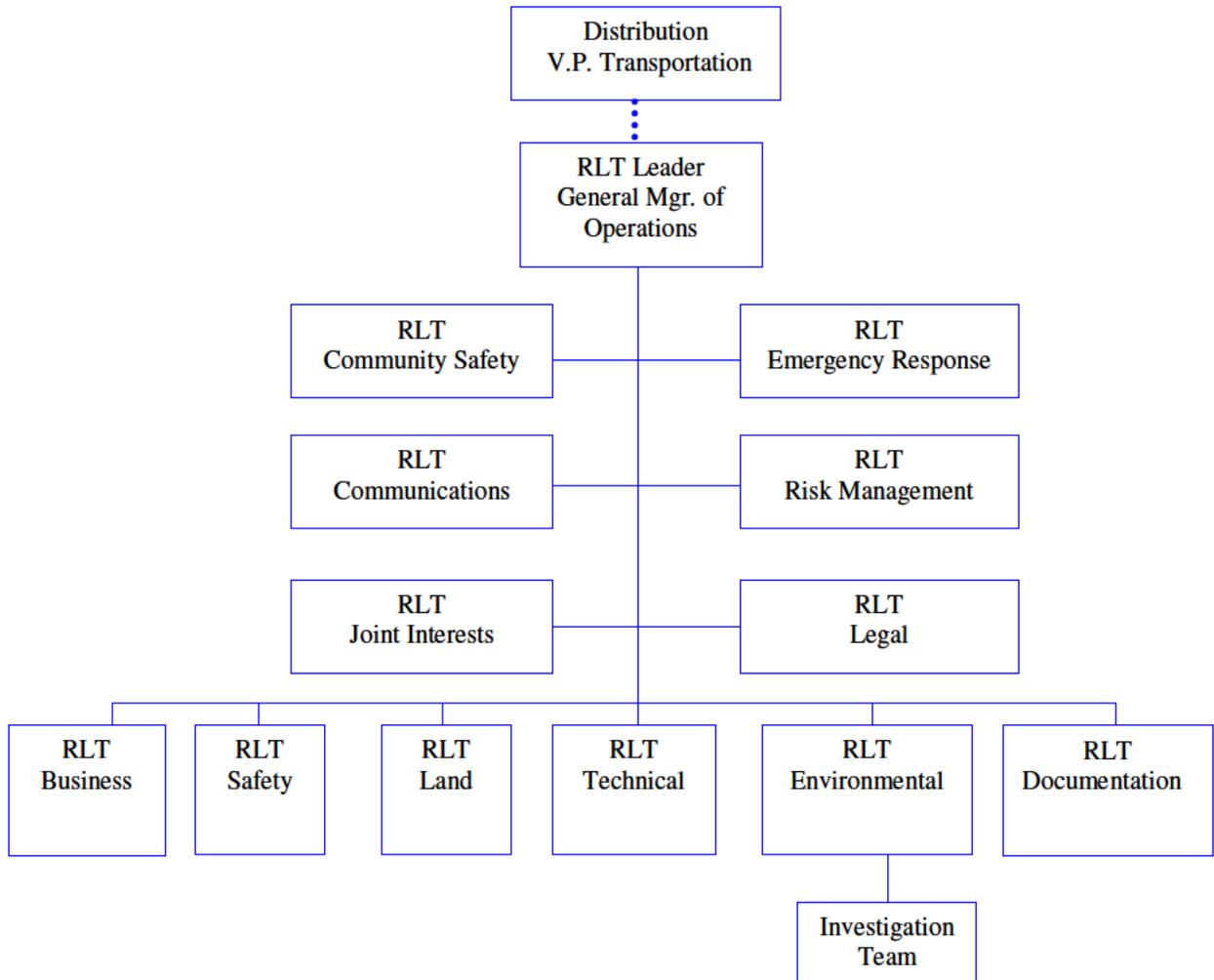
IS A MAP OR SKETCH OF THE WORK AREA AND FACILITIES POSTED? YES NO

REMARKS: _____

PLAN PREPARED BY: _____ **Date** _____ **Time** _____

Structure of the Response Leadership Team

The Response Leadership Team organizational structure follows. The members are activated as needed by the Team Leader.





Texas General Land Office Oil Spill Prevention and Response

Oiled Wildlife Response Information Guide

General Response

- Federal regulations prohibit handling of migratory birds.
- Untrained personnel should not attempt to rescue oiled wildlife because of the potential of serious, sometimes fatal zoonotic diseases (transmission of disease from animal to human.)
- Oiled animals can inflict serious injury to untrained personnel.
- Only personnel from state fish & game agencies and U.S. Fish & Wildlife Service, or properly trained and permitted rehabilitators designated by these agencies are allowed to capture oiled wildlife.
- Make appropriate notifications and await instruction from licensed personnel on how to deal with affected wildlife.
- Only personnel licensed by the State of Texas are allowed to handle oil wildlife.

Resources

TX General Land Office 24 Hour Oil Spill Notification
800-832-8224

Wildlife Rehab & Education

Sharon Schmalz, Certified Oiled Wildlife and Response Team Member
Federal License # PRT673173 • State License # SPH090-090

Margaret Pickell, Certified Oiled Wildlife & Response Team Member

Upper Coast: Cell (b) (6) • 713-861-9453 • Pagers 713-279-1417 • 281-418-8100 • (b) (6) (home)

Lower Coast: 281-992-8080 • Pager 281-418-8100

Wildlife Response Services LLC

Rhonda Murgatroyd, Certified Oiled Wildlife & response Team Member
Federal License #SPRH039465, TX License # REH-0401-713, LA License #R-07-13
713-705-5897 • Pager 281-266-0054

UPPER COAST

Region 1 (Beaumont/Port Arthur)
Region 2 (LaPorte / Houston)

Texas Parks and Wildlife
281-842-8100 (24 hrs)

Texas Parks and Wildlife – Spills and Kills-Winston Denton
281-534-0138 • 281-842-8100 • 281-534-0130 (office)

U.S. Fish & Wildlife (pager for Ron Brinkley)
281-286-8282 • Pager 281-505-4754 • Cell (b) (6)

LOWER COAST

Region 3 (Corpus Christi • Region 4 (Brownsville)
Region 5 (Pt. Lavaca)

Texas Parks and Wildlife
956-350-4490

Texas Parks and Wildlife - Spills and Kills
361-825-3246

U.S. Fish & Wildlife (pager for Claire Lee)
512-994-9005

Animal Rehabilitation Keep (ARK) – Port Aransas, TX
361-749-6793

**RAILROAD COMMISSION OF TEXAS
OIL AND GAS DIVISION**

CRUDE OIL, GAS WELL LIQUIDS, OR ASSOCIATED PRODUCTS LOSS REPORT

| | | | |
|---|--|--|--|
| 1. Field Name (as per current proration schedule, including reservoir, if applicable) | | 2. RRC District | |
| 3. Company | | 4. County | |
| | | Check appropriate block(s): <input type="checkbox"/> Producer <input type="checkbox"/> Transporter <input type="checkbox"/> Other _____ | |
| 5. Lease Name(s) and RCC Lease Number(s) (if applicable) | | | |
| 6. Location where Liquid Hydrocarbon (crude oil, gas well liquids, or associated products) Loss occurred (Section, Block, & Survey) | | | |
| 7. Description of Facility from which Liquid Hydrocarbon Loss Occurred | | | |
| 8. Name of Landowner where Liquid Hydrocarbon Loss Occurred | | 9. Type of Liquid Hydrocarbon Loss <input type="checkbox"/> Crude Oil <input type="checkbox"/> Gas Well Liquid <input type="checkbox"/> Other _____ | |
| 10. Date Liquid Hydrocarbon Loss Occurred | | 11. Date Liquid Hydrocarbon Loss Reported to RRC District Office by Telephone or Telegraph | |
| 12. Total Barrels of Liquid Hydrocarbon Lost in Leak or Spill | | 13. Total Barrels of Liquid Hydrocarbon Recovered | 14. Barrels of Liquid Hydrocarbon Unrecovered (Net Loss) |
| 15. Did Liquid Hydrocarbon Loss Affect Inland or Coastal Water? (If yes, explain.) | | | |
| 16. Cause of Liquid Hydrocarbon Loss (Explain.) (If additional space is required, attach page(s).) | | | |
| 17. Remedial Measures Taken and How Successful (Explain.) | | | |
| 18. Remarks | | | |
| <p>I declare under penalties prescribed in Article 6036c, R. C. S., that I am authorized to make this report, that this report was prepared by me or under my supervision and direction, and that data and facts stated therein are true, correct, and complete, to the best of my knowledge.</p> | | | |
| _____ Date | | _____ Signature | |
| _____ Company | | _____ Name of Person (type or Print) | |
| _____ Street Address or P.O. Box | | _____ Title of Person | |
| _____ City, State | | _____ Telephone | |
| _____ Zip Code | | _____ Area Code | _____ Number |

(COMPANY MUST COMPLY WITH THE INSTRUCTIONS ON THE REVERSE SIDE HEREOF.) (OVER)

Clear Form

-INSTRUCTIONS-

1. File the original and one copy of this form in the Railroad Commission District Office.
2. Immediate notification shall be given first by telephone or telegraph to the Commission District Office of a fire, leak, spill, or break in facilities causing a loss of more than five (5) barrels of crude oil, gas well liquids, or associated products and then followed by the filing of this form when appropriate measures have been taken.
3. This form complies with Statewide Rules 20 and 71 which require notification to the Commission of all fires, leaks, spills, or breaks of facilities which cause a loss of more than five (5) barrels of crude oil, gas well liquids, or associated products.
4. This form is for the emergency written notification of all fires, leaks, spills, or breaks in facilities causing a loss of more than five (5) barrels and is not a substitute for the monthly loss report required of common carrier pipelines by Statewide Rule 71.
5. The use of liquid hydrocarbon in this form refers to crude oil, gas well liquids, or associated products.



GLOSSARY OF TERMS AND ACRONYMS

[Glossary of Terms](#)

[Acronyms](#)

GLOSSARY OF TERMS

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

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

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

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

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

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

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

Contingency Plan: 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.

Diversions 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 other areas 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.

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: 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 in section 502(7) of the FWPCA. The term includes:

All navigable waters of the United States, as defined in judicial decisions prior to the passage of the 1972 Amendments of the Federal Water Pollution Control Act, (FWPCA) (Pub. L. 92-500) also known as the Clean Water Act (CWA), and tributaries of such waters;

Interstate waters;

Intrastate lakes, rivers, and streams which are utilized by interstate travelers for recreational or other purposes;

Intrastate lakes, rivers, and streams from which fish or shellfish are taken and sold in interstate commerce.

Nearshore Area: For OPA 90, the area extending seaward 12 miles from the boundary lines defined in 46 CFR Part 7, except in the Gulf of Mexico. In the Gulf of Mexico, it means the area extending seaward 12 miles from the line of demarcation defined in §80.740 - 80.850 of title 33 of the CFR.

Non-persistent or Group I Oil: A petroleum-based oil that, at the time of shipment, consists of hydrocarbon fractions:

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

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

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

Oil or Oils: Oil means oil of any kind or in any form, including, but not limited to: fats, oils, or greases of animal, fish, or marine mammal origin; vegetable oils, including oils from seeds, nuts, fruits, or kernels; and, other oils and greases, including petroleum, fuel oil, sludge, synthetic oils, mineral oils, oil refuse, or oil mixed with wastes other than dredged spoil.

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

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

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

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

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

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.
- Confined space entry procedures.

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

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

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

Sorbents: Materials ranging from natural products to synthetic polymeric foams placed in confined areas to soak up small quantities of oil. Sorbents are very effective in protecting walkways, boat decks, working areas, and previously uncontaminated or cleaned areas.

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 United States: See **Navigable Waters** in this Glossary.

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.

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.

ACRONYMS

| | |
|----------------------------|--|
| AMIO | - Alien Migration Interdiction Operation |
| AQI | - Alternate Qualified Individual |
| AM | - Ante Meridiem |
| ACP | - Area Contingency Plan |
| ACP | - Area Contingency Plans |
| Avg. | - Average |
| bbl/hr | - Barrel per Hour |
| Br | - Branch |
| BLM | - Bureau of Land Management |
| COTP | - Captain of the Port |
| Ctr. | - Center |
| CAS Number | - Chemical Abstracts Service |
| CST | - Civil Support Team |
| CG | - Coast Guard |
| CFR | - Code of Federal Regulations |
| Cont'd | - Continued |
| CMT | - Crisis Management Team |
| DOA | - Dead on Arrival |
| Dept. | - Department |
| DOD | - Department of Defense |
| DENR | - Department of Environment and Natural Resources |
| DHS | - Department of Homeland Security |
| DOI | - Department of Interior |
| DNR | - Department of Natural Resources |
| DOT | - Department of Transportation |
| D.C. | - District of Columbia |
| Div. | - Division |
| DOCL | - Documentation Unit Leader |
| EMS | - Emergency Management System |
| EM | - Emergency Manager |
| EOC | - Emergency Operations Center |
| ESA | - Endangered Species Act |
| EET | - Environmental Emergency Team |
| EDRC | - Estimated Daily Recovery Capability |
| EPA | - Environmental Protection Agency |
| ETA | - Estimated Time of Arrival |
| etc. | - Et Cetera |
| exempli gratia e.g. | - For Example |
| FAA | - Federal Aviation Administration |
| FBI | - Federal Bureau of Investigation |
| FOSC | - Federal On-Scene Coordinator |
| Ft./Sec. | - Feet/Second |
| FIR | - Field Investigation Report |
| FR | - Fire Retardant |
| FWD | - Forward |
| Freq. | - Frequency |
| GRP | - Group |
| Gru Sups. | - Group Supervisors |
| HAZMAT | - Hazardous Material |
| HAZWOPER | - Hazardous Waste Operations and Emergency Response Standard |
| HVAC | - Heating, Ventilating, and Air Conditioning |
| HEPA OVV | - High Efficiency Particle Air Device |
| HF ERW | - High Frequency Electric-Resistance Weld |
| HLS | - Homeland Security |
| Hrs. | - Hours |
| ID NO. | - Identification Number |

| | |
|-------------------|--|
| IL | - Illinois |
| IDNR | - Illinois Department of Natural Resources |
| IAW | - In Accordance With |
| IAP | - Incident Action Plan |
| ICS | - Incident Command System |
| ICS | - Incident Command System |
| IC | - Incident Commander |
| IMH | - Incident Management Handbook |
| IMS | - Incident Management System |
| Info. | - Information |
| KS | - Kansas |
| KM | - Kilometer |
| KP | - Kilometer Point |
| LE | - Law Enforcement |
| LO | - Liaison Officer |
| LPG | - Liquefied Petroleum Gas |
| LEPC | - Local Emergency Planning Committee |
| LRT | - Local Response Team |
| LSC | - Logistics Section Chief |
| LF ERW | - Low Frequency Electric-Resistance Weld |
| LEL | - Lower Explosive Limit |
| MO | - Missouri |
| MSDS | - Material Safety Data Sheets |
| MEDEVAC'D | - Medical Evacuation |
| NCP | - National Contingency Plan |
| NE | - Nebraska |
| NEECP (CA) | - National Environmental Emergencies Contingency Plan |
| NFPA | - National Fire Protection Association |
| NIMS | - National Incident Management System |
| ND | - North Dakota |
| NOAA | - National Oceanographic Atmospheric Administration |
| NCP (U.S.) | - National Oil and Hazardous Substances Contingency Plan |
| NRC | - National Response Center |
| NRDAR | - Natural Resource Damage Assessment and Restoration |
| N | - No |
| NW | - North West |
| N/A | - Not Available |
| OSHA | - Occupational Safety & Health Administration |
| OSRO | - Oil Spill Removal Organization |
| OSRP | - Oil Spill Response Plan |
| OSRV | - Oil Spill Response Vessel |
| OSC | - On-Scene Coordinate |
| OSC | - Operation Section Chief |
| OP | - Operational Period |
| Op. | - Operations |
| OPS | - Operations |
| O&M | - Operations and Maintenance |
| OCC | - Operations Coordination Center |
| OV | - Organic Vapor |
| PPM | - Parts Per Million |
| PFD | - Personal Floatation Device |
| PPE | - Personal Protective Equipment |
| PHMSA | - Pipeline and Hazardous Materials Safety Administration |
| PSC | - Planning Section Chief |
| PSC | - Planning Section Chief |
| POC | - Point of Contact |
| PVC | - Polyvinyl Chloride |
| P.M. | - Post Meridiem |

| | |
|---------------------|---|
| PREP | - Preparedness for Response Exercise Program |
| Prot. | - Protection |
| PWSD | - Public Water Supply District |
| QI | - Qualified Individual |
| RPT | - Regional Preparedness Team |
| Req. | - Required |
| RCRA | - Resource Conservation and Recovery Act |
| RESL | - Resource Leader |
| RP | - Responsible Party |
| RPIC | - Responsible Party Incident Commander |
| Rev. | - Revision |
| R/W | - Right-of-Way |
| RWD | - Rural Water District |
| SAR | - Search and Rescue |
| SART | - Search and Rescue Transporter |
| SD | - South Dakota |
| SI | - Security Incident |
| SO | - Security Officer |
| SCBA | - Self Contained Breathing Apparatus |
| SSPs | - Site Safety Plans |
| SITL | - Situation Unit Leader |
| Spec. | - Special |
| SPCC | - Spill Prevention, Control, and Countermeasure |
| SORS | - Spilled oil Recovery System |
| Sq. Ft. | - Square Foot |
| STAM | - Staging Area Manager |
| SERC | - State Emergency Response Center |
| SERC | - State Emergency Response Commission |
| SOSC | - State On-Scene Coordinator |
| SOR | - Statutory Orders and Regulations |
| SCADA | - Supervisory Control and Data Acquisition |
| TOC | - Table of Contents |
| TSD | - Temporary Storage and Disposal |
| TSC | - Temporary Storage Capacity |
| id est, I.E. | - That is |
| TBA | - To be Assigned |
| TSB | - Transportation Safety Board |
| TWIC | - Transportation Worker Identification Credential |
| UC | - Unified Command |
| UN Number | - United Nations |
| US | - United States |
| USCG | - United States Coast Guard |
| USN | - US Navy Supervisor Salvage |
| Vsl. | - Vessel |
| VOSS | - Vessel of Opportunity Skimmer System |
| VOC | - Volatile Organic Compound |
| Vol. | - Volume |
| W | - West |
| WCD | - Worst Case Discharge |
| Y | - Yes |



REGULATORY CROSS REFERENCE

[DOT/PHMSA 49 CFR Part 194 Cross Reference](#)

[DOT/PHMSA 49 CFR Part 192](#)

| DOT/PHMSA 49 CFR PART 194 | | |
|--------------------------------------|--|-----------------------------------|
| § 194.105 | BRIEF DESCRIPTION | LOCATION IN PLAN |
| (a) | ... determine the worst case discharge ... provide methodology, including calculations, used to arrive at the volume. | App B |
| (b) | The worst case discharge is the largest volume, in barrels, of the following: | ---- |
| (b)(1) | ... maximum release time in hours, plus the maximum shutdown response time in hours, multiplied by the maximum flow rate expressed in barrels per hour, plus the largest line drainage volume after shutdown of the line section(s) ...; or | App B |
| (b)(2) | The largest foreseeable discharge for the line section(s) within a response zone, expressed in barrels, based on the maximum historic discharge, if one exists, adjusted for any subsequent corrective or preventative action taken; or | App B |
| (b)(3) | If the response zone contains one or more breakout tanks, the capacity of the single largest tank or battery of tanks within a single secondary containment system, adjusted for the capacity or size of the secondary containment system, expressed in barrels. | App B |
| (b)(4) | Operators may claim prevention credits for breakout tank secondary containment and other specific spill prevention measures as follows:... | App B |
| § 194.107 | BRIEF DESCRIPTION | LOCATION IN PLAN |
| (a) | Each response plan must plan for resources for responding, to the maximum extent practicable, to a worst case discharge, and to a substantial threat of such a discharge. | App A |
| (b) | An operator must certify in the plan ... reviewed NCP and each applicable ACP... | FWD-2 |
| (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... | § 4.0, App G |
| (b)(1)(ii) | Establish provisions to ensure the protection of safety at the response site; and | § 3.6, 4.0 (Command), § 5.0 |
| (b)(1)(iii) | Identify the procedures to obtain any required Federal and State permissions for using alternative response strategies such as in-situ burning and dispersants... | § 6.7 |
| (b)(2) | As a minimum, to be consistent with the applicable ACP the plan must: | ---- |
| (b)(2)(i) | Address the removal of a worst case discharge and the mitigation or prevention of a substantial threat of a worst case discharge; | § 3.0, App B |
| (b)(2)(ii) | Identify environmentally and economically sensitive areas; | § 6.0 |
| (b)(2)(iii) | Describe the responsibilities of the operator and of Federal, State and local agencies in removing a discharge and in mitigating or preventing a substantial threat of a discharge; and | §4.0, 6.0 |
| (b)(2)(iv) | Establish the procedures for obtaining an expedited decision on use of dispersants or other chemicals. | § 6.7 |
| (c) | Each response plan must include: | ---- |
| (c)(1) | A core plan consisting of ... | ---- |
| (c)(1)(i) | An information summary as required in § 194.113, | Fig 1.1 |
| (c)(1)(ii) | Immediate notification procedures, | § 2.0 |
| (c)(1)(iii) | Spill detection and mitigation procedures, | § 3.0 |
| (c)(1)(iv) | The name, address, and telephone number of the oil spill response organization, if appropriate, | Fig 2.3, App A |
| (c)(1)(v) | Response activities and response resources, | § 3.0, App A |

| DOT/PHMSA 49 CFR PART 194 | | |
|--------------------------------------|--|---------------------------------|
| § 194.107 | BRIEF DESCRIPTION | LOCATION IN PLAN |
| (c)(1)(vi) | Names and telephone numbers of Federal, State, and local agencies which the operator expects to have pollution control responsibilities or support, | Fig 2.6 |
| (c)(1)(viii) | Equipment testing, | App E.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 PHMSA will determine if the program is equivalent to PREP. | App E.2 |
| (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. | Response Zone Annex |
| (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. | § 4.0 |
| § 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 |
| (b) | Each operator shall provide a copy of its response plan to each qualified individual | 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, Response Zone Annex |
| (b) | The information summary for the response zone appendix, required in § 194.107, must include: | ---- |
| (b)(1) | The information summary for the core plan. | Fig 1.1 |
| (b)(2) | The names or titles and 24-hour telephone numbers of the qualified individual(s) and at least one alternate qualified individual(s); | Fig 1.1, Fig 2.2 |
| (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, Response Zone Annex |
| (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. | Foreword |
| (b)(6) | The type of oil and volume of the worst case discharge. | App B |

| DOT/PHMSA 49 CFR PART 194 | | |
|--------------------------------------|--|-------------------------------------|
| § 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. | App A |
| (b) | An operator shall identify in the response plan the response resources which are available to respond within the time specified, after discovery of a worst case discharge, or to mitigate the substantial threat of such a discharge. | App A |
| § 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 | § 3.0 |
| (a)(1)(ii) | The name and address of, and the procedure for contacting, the operator on a 24-hour basis | § 2.0, § 4.0 |
| (a)(1)(iii) | The name of, and procedures for contacting, the qualified individual on a 24-hour basis | § 2.0, 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 | Fig 2.6 |
| (a)(2)(iii) | The notification process | § 2.0, Fig 2.5 |
| (a)(3) | Personnel engaged in response activities know -- | ----- |
| (a)(3)(i) | The characteristics and hazards of the oil discharged | Fig 3.2 |
| (a)(3)(ii) | The conditions that are likely to worsen emergencies, including the consequences of facility malfunctions or failures, and the appropriate corrective actions. | § 3.0 |
| (a)(3)(iii) | The steps necessary to control any accidental discharge of oil and to minimize the potential for fire, explosion, toxicity, or environmental damage | § 3.0 |
| (a)(3)(iv) | The proper firefighting procedures and use of equipment, fire suits, and breathing apparatus | § 3.0 |
| (b) | Each operator shall maintain a training record for each individual that has been trained as required by this section. These records must be maintained in the following manner as long as the individual is assigned duties under the response plan | App E.1 |
| (b)(1) | Records for operator personnel must be maintained at the operator's headquarters | App E.1 |
| (b)(2) | Records for personnel engaged in response, other than operator personnel, shall be maintained as determined by the operator. | App E.1 |
| (b)(3) | Nothing in this section relieves an operator from the responsibility to ensure that all response personnel are trained to meet the OSHA standards for emergency response operations in 29 CFR 1910.120 ... | App E.1 |
| § 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... | ----- |

| DOT/PHMSA 49 CFR PART 194 | | |
|--------------------------------------|--|-------------------------|
| § 194.121 | BRIEF DESCRIPTION | LOCATION IN PLAN |
| (a) | Each operator shall update its response plan to address new or different operating conditions or information. In addition, each operator shall review its response plan in full at least every 5 years from the date of the last submission or the last approval as follows: | § 1.4 |
| (a)(1) | For substantial harm plans, an operator shall resubmit every 5 years from the last approval date. | § 1.4 |
| (a)(2) | For significant and substantial harm plans, an operator shall resubmit every 5 years from the last approval date. | § 1.4 |
| (b) | If a new or different operating condition or information would substantially affect the implementation of a response plan, the operator must immediately modify its response plan to address such a change... | § 1.4 |
| (b)(1) | An extension of the existing pipeline or construction of a new pipeline in a response zone not covered by the previously approved plan; | § 1.4 |
| (b)(2) | Relocation or replacement of the pipeline in a way that substantially affects the information included in the response plan, such as a change to the worst case discharge volume; | § 1.4 |
| (b)(3) | The type of oil transported, if the type affects the required response resources, such as a change from crude oil to gasoline; | § 1.4 |
| (b)(4) | The name of the spill removal organization; | § 1.4 |
| (b)(5) | Emergency response procedures; | § 1.4 |
| (b)(6) | The qualified individual; | § 1.4 |
| (b)(7) | A change in the NCP or an ACP that has significant impact on the equipment appropriate for response activities; and | § 1.4 |
| (b)(8) | Any other information relating to circumstances that may affect full implementation of the plan. | § 1.4 |
| (c) | If PHMSA determines that a change to a response plan does not meet the requirements of this part, PHMSA will notify the operator of any alleged deficiencies, and provide operator...opportunity to correct deficiencies. | ---- |
| (d) | An operator who disagrees with a determination that proposed revisions to a plan are deficient may petition PHMSA for reconsideration, within 30 days from the date of receipt of PHMSA's notice... | ---- |

| DOT/PHMSA 49 CFR Part 192 | | |
|--------------------------------------|--|-------------------------|
| § 192.615 | Emergency plans. | Location in Plan |
| (a) | Each operator shall establish written procedures to minimize the hazard resulting from a gas pipeline emergency. At a minimum, the procedures must provide for the following: | Plan |
| (a)(1) | Receiving, identifying, and classifying notices of events which require immediate response by the operator. | |
| (a)(2) | Establishing and maintaining adequate means of communication with appropriate fire, police, and other public officials. | Section 2.0 |
| (a)(3) | Prompt and effective response to a notice of each type of emergency, including the following: | Section 3.0 |
| (a)(3)(i) | Gas detected inside or near a building. | Figure 3.1 |
| (a)(3)(ii) | Fire located near or directly involving a pipeline facility. | |
| (a)(3)(iii) | Explosion occurring near or directly involving a pipeline facility. | |
| (a)(3)(iv) | Natural disaster. | |
| (a)(4) | The availability of personnel, equipment, tools, and materials, as needed at the scene of an emergency. | Section 2.0 |
| (a)(5) | Actions directed toward protecting people first and then property. | 3.1 |
| (a)(6) | Emergency shutdown and pressure reduction in any section of the operator's pipeline system necessary to minimize hazards to life or property. | |
| (a)(7) | Making safe any actual or potential hazard to life or property. | |
| (a)(8) | Notifying appropriate fire, police, and other public officials of gas pipeline emergencies and coordinating with them both planned responses and actual responses during an emergency. | Figure 2.6 |
| (a)(9) | Safely restoring any service outage. | |
| (a)(10) | Beginning action under § 192.617, if applicable, as soon after the end of the emergency as possible. | |
| (a)(11) | Actions required to be taken by a controller during an emergency in accordance with § 192.631. | |
| (b) | Each operator shall: | |
| (b)(1) | Furnish its supervisors who are responsible for emergency action a copy of that portion of the latest edition of the emergency procedures established under paragraph (a) of this section as necessary for compliance with those procedures. | ERAP |
| (b)(2) | Train the appropriate operating personnel to assure that they are knowledgeable of the emergency procedures and verify that the training is effective. | Appendix E |
| (b)(3) | Review employee activities to determine whether the procedures were effectively followed in each emergency. | Appendix E |

| DOT/PHMSA 49 CFR Part 192 | | |
|----------------------------------|--|--|
| (c) | Each operator shall establish and maintain liaison with appropriate fire, police, and other public officials to: | |
| (c)(1) | Learn the responsibility and resources of each government organization that may respond to a gas pipeline emergency; | |
| (c)(2) | Acquaint the officials with the operator's ability in responding to a gas pipeline emergency; | |
| (c)(3) | Identify the types of gas pipeline emergencies of which the operator notifies the officials; and | |
| (c)(4) | Plan how the operator and officials can engage in mutual assistance to minimize hazards to life or property. | |



RESPONSE ZONE INFORMATION

Gulf of Mexico - West Response Zone

RESPONSE ZONE CONTACT INFORMATION

Owner Name: Shell Pipeline Company LP (SPLC)

Addresses: Physical Address
777 Walker Street
Two Shell Plaza
Houston, Texas 77002

24 Hour Emergency Contact Phone Numbers: (800) 922-3459 (24 Hours)

Telephone/Fax: Telephone references, including 24 hour numbers, for the Facility, Owner, and Qualified Individual/Alternate Qualified Individual are provided in Figure 2.2.

States Traversed: Texas/ Brazoria, Chambers, Galveston, Hardin, Harris
Jefferson, Liberty, Orange, Polk

INFORMATION SUMMARY

Determination of Significant and Substantial Harm (United States Department of Transportation/Pipeline and Hazardous Materials Safety Administration):

This Response Zone has been determined to meet the significant and substantial harm classification because at least one (1) line section within the response zone is greater than 6 5/8" in nominal outside diameter, 10 miles or longer and has met at least one of the criteria listed in 49 CFR 194.1032(c)(1).

Worst Case Discharge (Refer to Appendix B for calculations):

Potential Oil Group: 3

United States Department of Transportation/Pipeline and Hazardous Materials Safety Administration Planning Volume: (b) (7)(F), (b)

| INTERNAL NOTIFICATIONS - INCIDENT MANAGEMENT TEAM | | | | |
|---|-------------------|----------------|---------|-------|
| POSITION/TITLE | NAME | OFFICE | HOME | OTHER |
| General Manager Operations GOM-QI/IC | Greg Smith | (504) 728-4474 | (b) (6) | |
| Manager Control Center (AQI) | Jill Derise | (713) 241-9859 | | |
| EOR Facility Manager | Gerald Yandell | (713) 906-6387 | | |
| LA Onshore Facility Manager | Dennis Cazenave | (985) 873-3454 | | |
| US Operations Support Manager | Larry Lamaison | (504) 728-3246 | | |
| Sr. US Operations SupportCoordinator | Alan Hunsberger | (225) 746-2410 | | |
| Manager HSSE Americas | Carrie Hodgins | (713) 241-2838 | | |
| Safety Officer | Greg Kaul | (713) 423-3345 | | |
| Safety Officer | Michael Marciante | (504) 728-8536 | | |
| Operations Supervisor - (Colex East / West) | Ronnie Brian | (713) 423-3362 | | |
| Operations Supervisor (East Houston) | James Espinoza | (713) 423-3360 | | |
| Operations Supervisor - Port Arthur | Phillip Swenson | (409) 984-7003 | | |
| Asset Supervisor (Mont Belvieu) | Rebecca Weber | (281) 385-0660 | | |
| Operations Assistant (Colex) | Larry Belcher | (281) 620-5115 | | |
| Operations Assistant - (Port Arthur) | Mike Biddle | (409) 984-7008 | | |

| INTERNAL NOTIFICATIONS - INCIDENT MANAGEMENT TEAM (Cont'd) | | | | |
|--|-------------------------------|----------------|---------|-------|
| POSITION/TITLE | NAME | OFFICE | HOME | OTHER |
| Maintenance Supervisor | Gerald Carabajal (Colex West) | (713) 423-3384 | (b) (6) | |
| Area Maintenance Supervisor | David Janwich (Port Arthur) | (409) 984-7009 | | |
| Craft Support (PAPS) | Hansel Lemoine | (337) 373-3204 | | |

| QUALIFIED INDIVIDUAL | | | | |
|---|------------|----------------|---------|------|
| POSITION/TITLE | NAME | OFFICE | HOME | CELL |
| General Manager Operations GOM-QI/IC | Greg Smith | (504) 728-4474 | (b) (6) | |

| ALTERNATE QUALIFIED INDIVIDUAL | | | | |
|---------------------------------|-------------|----------------|---------|------|
| POSITION/TITLE | NAME | OFFICE | HOME | CELL |
| Manager Control Center (AQI) | Jill Derise | (713) 241-9859 | (b) (6) | |

| LOCAL EMERGENCY SERVICES | | |
|-------------------------------------|---------------------|--|
| COMPANY | LOCATION | TELEPHONE |
| Brazoria County Sheriff | Texas | (979) 864-2392 |
| Brazoria County LEPC | | (979) 864-1801 |
| American Red Cross Brazoria County | | (979) 849-6439 |
| Angleton Police Department | | (979) 849-2383 |
| Chambers County Sheriff | | (409) 267-8318 |
| Chambers County LEPC | | (409) 267-2445 |
| Mont Belvieu Police Department | Mont Belvieu, Texas | 911 / (281) 576-2417 |
| Baytown American Red Cross | | (281) 424-1300 |
| Houston American Red Cross | | (713) 526-8300 |
| San Jacinto Methodist Hospital | Baytown, Texas | (281) 420-8600 / (281) 420-6100 Patient Access Svc |
| Trinity River Authority | Huntsville, Texas | (936) 295-5485 |
| Galveston Sheriff's Department | Texas | (409) 766-2300 |
| Galveston County LEPC | | (281) 996-3335 |
| Galveston County American Red Cross | | (409) 945-7200 |
| Alta Loma/Arcadia Police | | (409) 925-2000 |

| LOCAL EMERGENCY SERVICES (Cont'd) | | |
|---|-----------------|--|
| COMPANY | LOCATION | TELEPHONE |
| Dickinson Fire Department | | (281) 534-3031 |
| La Marque Fire Department | | (409) 938-9260 |
| City of Texas City Police Dept. | | 911 / (409) 948-2525 |
| City of Texas City Fire Dept. | | (409) 643-5700 |
| Harris County Sheriff's Department | Houston, Texas | (713) 221-6000 |
| Harris County LEPC | Houston, Texas | (713) 881-3300 (H.C. Emergency Mmgmt) |
| Harris County OEM | | (713) 881-3100 (Emer) / (713) 881-3100 |
| Harris County American Red Cross | | (713) 526-8300 |
| Harris County Fire Marshall | Houston, Texas | (281) 436-8000 |
| Harris County Environmental of Public Health | | (713) 920-2831 |
| Aldine Fire Department | | (281) 847-3300 (Dispatch) |
| Bay Area LEPC (Taylor Lake Village City Hall) | | (281) 326-2843 |
| Baytown Police Department | | (281) 422-8371 |
| Baytown Fire/Rescue | | (281) 422-2311 |
| Baytown LEPC | | (281) 420-6556 (EOC) |

| LOCAL EMERGENCY SERVICES (Cont'd) | | |
|--|--------------------|--|
| COMPANY | LOCATION | TELEPHONE |
| Brookshire Fire (Police) | | (281) 375-5000 |
| Channelview Fire Department | | (281) 452-5782 |
| Deer Park LEPC | Deer Park, Texas | (281) 479-1511 24 HRS/ (281) 478-7247 |
| Deer Park Fire Department | Deer Park, Texas | (281) 478-7281 |
| Shell Deer Park Refining Emergency Response Team | Deer Park, Texas | (713) 246-7301 (Main Gate) (713) 246-7402 |
| Galena Park Fire Dept. | Galena Park, Texas | 911 / (713) 674-5311 |
| Galena Park Police Dept. | Galena Park, Texas | 911 / (713) 675-3471 |
| Galena Park LEPC | Galena Park, Texas | (713) 675-3471 |
| Highlands Fire Depart. | Highlands, Texas | (281) 847-3362 / 911 |
| Houston Police Department | Houston, Texas | (713) 884-3131 |
| Houston Fire Department | Houston, Texas | (713) 884-3144 |
| Houston LEPC | Houston, Texas | (713) 884-4500 (emergency) |
| U.S. Fish and Wildlife Service | Houston, Texas | (800) 344-9453 |
| Wildlife Rehab & Education (Sharon Schmalz) | Houston, Texas | (281) 332-8319 |
| ABM Security Services | Houston, Texas | (713) 926-4453 |

| LOCAL EMERGENCY SERVICES (Cont'd) | | |
|---|--------------------|---|
| COMPANY | LOCATION | TELEPHONE |
| Huffman Fire Department | Huffman, Texas | (281) 324-2111 |
| Katy Fire Department | Katy, Texas | (281) 391-3500 |
| Katy LEPC | Katy, Texas | (281) 391-3500 |
| Fort Bend County Local Emergency Planning Committee | Katy, Texas | (281) 391-4848 |
| LaPorte Police/Fire | LaPorte, Texas | (281) 471-2141 / (281) 471-3607 (fire non emer) |
| LaPorte Police Department | LaPorte, Texas | (281) 471-2141 |
| LaPorte LEPC | LaPorte, Texas | (281) 471-3810 (emer) / (281) 471-2141 |
| League City Police | League City, Texas | 911 / (281) 332-2566 |
| League City Fire Department | League City, Texas | (281) 332-2566 |
| Mt. Belvieu Police/Fire | Baytown, Texas | (281) 576-2417 |
| North Channel (Galena Park Area) LEPC | Galena Park, Texas | (713) 675-3471 |
| Pasadena Police Department | Pasadena, Texas | 911 / (713) 477-1221 |
| Pasadena Volunteer Fire Department | Pasadena, Texas | (713) 477-1221 / (713) 475-5554 (non-emer) |
| Pasadena LEPC | Pasadena, Texas | (713) 477-1511 |
| Bayshore Medical Center - Pasadena | Pasadena, Texas | (713) 359-2000 |

| LOCAL EMERGENCY SERVICES (Cont'd) | | |
|--|----------------------|--------------------------------|
| COMPANY | LOCATION | TELEPHONE |
| South Houston Police | South Houston, Texas | (713) 944-1910 (non-emergency) |
| South Houston Fire Department | South Houston, Texas | (713) 944-1910 |
| South Houston LEPC | South Houston, Texas | (713) 944-1910 |
| Webster Police | Webster, Texas | (281) 332-2426 |
| Webster Fire | Webster, Texas | (281) 332-2426 |
| Webster Medical Screening Clinic | Pasadena, Texas | (713) 944-9830 |
| Jefferson Co. Sheriff | Texas | (409) 835-8418 |
| Jefferson Co. Sheriff (Beaumont Office) | Pasadena, Texas | (409) 835-8411 |
| Jefferson Co Sheriff (Mid-County - Jail) | Beaumont, Texas | (409) 726-2500 |
| Jefferson Co. LEPC | Beaumont, Texas | (409) 835-8757 |
| Jefferson Co Ambulance | Texas | (409) 729-9300 |
| Jefferson Co. State Police | Beaumont, Texas | (409) 924-5400 |
| Jefferson Co. American Red Cross | Beaumont, Texas | (409) 832-1644 |
| Port Arthur Fire Department | Port Arthur, Texas | (409) 983-8700 |
| Port Arthur Emergency Management Coordinator | Port Arthur, Texas | (409) 983-8600 |

| LOCAL EMERGENCY SERVICES (Cont'd) | | |
|--|--------------------|------------------|
| COMPANY | LOCATION | TELEPHONE |
| Port Arthur Police Department | Port Arthur, Texas | (409) 983-8600 |
| Valero Refinery Port Arthur Fire (Main) | Port Arthur, Texas | (409) 985-1201 |
| Port Arthur City-Police Department | Port Arthur, Texas | (409) 983-8600 |
| Christus St. Mary Hospital | Port Arthur, Texas | (409) 985-7431 |
| Groves Fire Department | Groves, Texas | (409) 962-4469 |
| Groves Police Department | Port Arthur, Texas | (409) 983-8600 |
| Renaissance Hospital | Groves, Texas | (409) 962-5733 |
| Port Neches Fire Department | Port Neches, Texas | (409) 722-5885 |
| Port Neches Police Department | Port Neches, Texas | (409) 722-1424 |
| Medical Center of Southeast Texas | Port Arthur, Texas | (409) 724-7389 |
| Nederland Fire Department | Nederland, Texas | (409) 723-1531 |
| Nederland Police Department | Nederland, Texas | (409) 722-4965 |
| Beaumont Fire Department | Beaumont, Texas | (409) 880-3901 |
| Beaumont Police Department | Beaumont, Texas | (409) 832-1234 |
| St. Elizabeth Hospital | Beaumont, Texas | (409) 892-7171 |

| LOCAL EMERGENCY SERVICES (Cont'd) | | |
|--|----------------------------|------------------|
| COMPANY | LOCATION | TELEPHONE |
| Baptist Hospital | Beaumont, Texas | (409) 212-5000 |
| Labelle Fire Department | LaBelle, Texas | (409) 794-1441 |
| LaBelle County Sheriff Department | Labelle, Texas | (409) 835-8411 |
| LaBelle Fire Department | LaBelle, Tennessee | (409) 794-1441 |
| Liberty County Sheriff | Liberty, Texas | (936) 336-4500 |
| Liberty County LEPC | Liberty, Texas | (936) 334-3219 |
| Liberty County American Red Cross | Houston, Texas | (713) 526-8300 |
| North Liberty Volunteer Fire Department | Romayor, Texas | (319) 626-5717 |
| Romayor Fire Department | Texas | 911 |
| Tarkington Prairie Fire Department | Texas | 911 |
| Tarkington Volunteer Fire Department | Cleveland, Texas | (281) 592-7800 |
| Federal Bureau of Investigation (FBI) | Houston / Galveston, Texas | (409) 832-8571 |
| Bridge City/Orange County Sheriff's Department | Orange, Texas | (409) 883-2612 |
| Orange County LEPC | Orange, Texas | (409) 882-6209 |
| TX Dept. of Public Safety - Beaumont District | Beaumont, Texas | (409) 924-5400 |

| LOCAL EMERGENCY SERVICES (Cont'd) | | |
|--|--------------------|------------------|
| COMPANY | LOCATION | TELEPHONE |
| Orange County Red Cross | Orange, Texas | (409) 883-2322 |
| Bridge City Fire Department | Bridge City, Texas | (409) 735-2419 |
| Bridge City Police | Bridge City, Texas | (409) 735-5028 |
| Vidor Fire Department | Vidor, Texas | (409) 769-6241 |
| Vidor Police Department | Vidor, Texas | (409) 769-4561 |
| Polk County Sheriff | Livingston, Texas | (936) 327-6810 |
| Polk County Local Emergency Planning Committee | Livingston, Texas | (936) 327-6826 |
| Polk County American Red Cross | Livingston, Texas | (936) 327-6867 |
| Corrigan Police and Fire Department | Corrigan, Texas | (936) 398-2551 |
| Goodrich Fire Department | Goodrich, Texas | (936) 365-2121 |
| ABM Security Services | Dallas, Texas | (214) 267-5600 |
| Texas Railroad Commission / Oil and Gas Division | Austin, Texas | (512) 463-6788 |
| Livingston County American Red Cross | Livingston, Texas | (936) 327-6867 |
| Livingston County Local Emergency Planning Comm | Livingston, Texas | (936) 327-6826 |

| Pipeline Specifications | | | |
|---|--|-------|-------------------|
| LOCATION | TYPE OF OIL | STATE | COUNTY |
| 3" Deer Park Rohm Haas #2 | Acetone | TX | Harris |
| 3" Deer Park Rohm Haas #1 | Acetone | TX | Harris |
| 4" Deer Park Rohm Haas #3 | Acetone | TX | Harris |
| DPMC - BASF | BASF Raffinate | TX | Harris |
| 4" Deer Park ITC | Benzene | TX | Harris |
| 8" Crown-Witter | Deer Park Dry Gas | TX | Harris |
| 8" Manchester - Deer Park | Deer Park Dry Gas | TX | Harris |
| LCR Lateral | Deer Park Dry Gas | TX | Harris |
| 12" Deer Park Olefins | Deer Park Olefins Feed | TX | Harris |
| 24" Deer Park Olefins | Deer Park Olefins Feed | TX | Harris |
| 12" Dry Gas | Texas Bay Area Pipeline Dry Gas | TX | Galveston, Harris |
| 6" Marathon Dry Gas Lateral | Texas City Dry Gas | TX | Harris |
| 6" Isopropene | ITC to Deer Park Connection Isopropene | TX | Harris |
| 24" Deer Park Olefins Lateral | Deer Park Olefins Feed | TX | Harris |
| 4" Witter St - Deer Park (Manchester Propylene) | Idle (Nitrogen) | TX | Harris |
| 4" Witter St - Crown (Manchester Propylene) | Idle (Nitrogen) | TX | Harris |
| 4" Manchester - Deer Park | Propylene | TX | Harris |
| 12" Spare Kilgore Crossing | Ship Channel Olefins Feed Lines | TX | Harris |
| 12" Main Kilgore Crossing (Ship Channel) | Idle | TX | Harris |
| 10" Sheldon - Deer Park (Ship Channel) | Idle | TX | Harris |
| 8" Deer Park Refinery - ITC | Butadiene | TX | Harris |
| 8" Fairmont Take Off-Nova/Fina | Ethylene | TX | Harris |
| 8" Fairmont Take Off-Nova/Fina | Ethylene | TX | Harris |
| 8/10 Jct - Fairmont | Ethylene | TX | Harris |
| 8" Sunoco Lateral | Idle (Nitrogen) | TX | Harris |
| Mont Belvieu - 8/10 Junction | Ethylene | TX | Harris / Chambers |
| Tidal Td - 8/10 Jct | Ethylene | TX | Harris |
| 8/10 Jct. - Solvay | Ethylene | TX | Harris |
| 6" Arco Delivery - Miller Cut Off Road | Idle (Nitrogen) | TX | Harris |
| 10" Ethylene to/from DPMC | Ethylene | TX | Chambers |

| Pipeline Specifications (Cont'd) | | | |
|--|-------------------------|-------|---|
| LOCATION | TYPE OF OIL | STATE | COUNTY |
| 10" Ethylene from Exxon Dryer | Ethylene | TX | Chambers |
| 10" Ethylene to/from Chevron Mont Belvieu | Ethylene | TX | Chambers |
| 8" Arco-Mont Belvieu (Equistar to Mt. Belvieu) | Ethylene | TX | Chambers |
| 8" Basell Lateral | Ethylene | TX | Harris |
| 4" Lateral to Solvary | Ethylene | TX | Harris |
| 6" Texas City Sterling Delivery | Idle (Nitrogen) | TX | Galveston |
| 6" Fairmont - BASF Underwood | Propylene | TX | Harris |
| Union Carbide 4, 6 & 8" Lateral | Propylene | TX | Galveston |
| 6" Deer Park Mont Belvieu | Propylene | TX | Harris & Chambers |
| 6" Fairmont - Arco Bayport | Propylene | TX | Harris |
| 4" Phillips-Shell Propylene | Idle (Nitrogen) | TX | Harris |
| 6" Rohm & Haas Lateral | Propylene | TX | Harris |
| 6" Arco Delivery- Miller Cut Off Road | Idle (Nitrogen) | TX | Harris |
| 6" Crossover to Chocolate Bayou from Rohm & Haas Lateral | Propylene | TX | Harris |
| 8" Propylene to/from DPMC | Propylene | TX | Chambers |
| 10" Propylene to Exxon Green Lake | Propylene | TX | Chambers |
| 8" Propylene from Exxon Dryer | Idle (Nitrogen) | TX | Chambers |
| 8" Propylene to Exxon Cavern/Dryer | Idle (Nitrogen) | TX | Chambers |
| 6" Amoco Lateral | Idle (Nitrogen) | TX | Galveston |
| 6" Arcadia Jct - Texas City | Propylene | TX | Galveston |
| 4" Deer Park - Aristech Propylene | Idle (Nitrogen) | TX | Harris |
| Louisiana / Texas State Line to Mont Belvieu | Ethylene | TX | Orange, Jefferson, Chambers & Liberty |
| Beaumont Lateral | Idled w/ Nitrogen | TX | Jefferson |
| 6" Webster Crude Butadiene | Crude Butadiene | TX | Harris |
| Battleground Crude Isoprene | Crude Isoprene | TX | Harris |
| HFOTCO - Deer Park | Crude | TX | Harris |
| Sabine River - East Houston | Crude | TX | Orange, Jefferson, Chambers, Liberty & Harris |
| Y Jct - Motiva Port Arthur | Empty / Nitrogen Purged | TX | Jefferson |
| Lateral to Unocal/Sun | Crude | TX | Jefferson |
| Idle 10" to Oil Tanking | Idle (Nitrogen) | TX | Jefferson |

| Pipeline Specifications (Cont'd) | | | |
|---|-------------------------|-------|-------------------|
| LOCATION | TYPE OF OIL | STATE | COUNTY |
| Port Neches - Port Arthur | Crude | TX | Jefferson |
| Port Neches - Port Arthur 12" Idle North | Empty / Nitrogen Purged | TX | Jefferson |
| Port Neches - Port Arthur 12" Idle South | Empty / Nitrogen Purged | TX | Jefferson |
| Port Neches - Fina 12" | Crude | TX | Jefferson |
| Sunshine Lateral | Idle Nitrogen Purged | TX | Polk |
| 8" Webster Junction - Texas City | Nitrogen | TX | Galveston, Harris |
| Colex West to Spider Web No. 9 (12") | Multiple Products | TX | Harris |
| Colex West to Deer Park Rail Car 10 (16") | Multiple Products | TX | Harris |
| Colex West to Colonial No. 11 (36") | Multiple Products | TX | Harris |
| Colex West to Colonial No. 12 (36") | Multiple Products | TX | Harris |
| Colex West to Explorer No. 13 (30") | Multiple Products | TX | Harris |
| Colex West to Explorer No. 14 (30") | Multiple Products | TX | Harris |
| Colonial to Colex West No. 15 (16") | Multiple Products | TX | Harris |
| Colonial to Colex West No. 16 (16") | Multiple Products | TX | Harris |
| Colex West to Spider Web No. 19 (16") | Multiple Products | TX | Harris |
| Colex West to Deer Park Rail Car No. 18 (12") | Multiple Products | TX | Harris |
| Colex East to Colex West No. 17 (16") | Multiple Products | TX | Harris |
| Colex West to Grand Central No. 20 (12") | Multiple Products | TX | Harris |
| PAR - PAPS 12" Gasoline No. 1 | Gasoline | TX | Jefferson |
| PAR - PAPS 12" Gasoline No. 1 | Empty | TX | Jefferson |
| Shell - Ex 30" Gasoline | Gasoline | TX | Jefferson |
| PAR - PAPS 12" Fuels No. 2 | Distillate | TX | Jefferson |
| Shell - EX 30" Fuels | Distillate | TX | Jefferson |
| PAPS - El Vista 12" Gasoline (Premcor) | Gasoline | TX | Jefferson |
| El Vista - PAPS 36" Gasoline (Premcor) | Gasoline | TX | Jefferson |
| Premcor 8" | Mothballed | TX | Jefferson |
| 10" Marketing Jct - Pasadena Plant | Multiple Products | TX | Harris |
| 10" Sinco Station - Market Jct | Multiple Products | TX | Harris |
| 14" Sinco - Colex | Multiple Products | TX | Harris |
| 10" Sinco Station - Lyondell | Multiple Products | TX | Harris |

| Pipeline Specifications (Cont'd) | | | |
|---|-------------------|-------|-------------------------------|
| LOCATION | TYPE OF OIL | STATE | COUNTY |
| 12" Lyondell - East Houston | Multiple Products | TX | Harris |
| 8" Sinco Station - Market Junction | Idle | TX | Harris |
| 12" Blackwell Jct. to Galena Park Station (SINCO 8" & 10") | Multiple Products | TX | Harris |
| Sinco 10" to Colex Terminal 10" | Multiple Products | TX | Harris |
| 12" Crossing of Houston Ship Channel | Idle | TX | Harris |
| Colex Terminal to Sinco 10" | Multiple Products | TX | Harris |
| 8" Hess to Rancho | Idle | TX | Harris |
| Sinco 8 to Colex Terminal 12" | Multiple Products | TX | Harris |
| Unocal - Pine Street 12" | Idle w/ Nitrogen | TX | Jefferson |
| Explorer - Pine Street 10" | Idle w/ Nitrogen | TX | Jefferson |
| Pine Street - PAPS 10" | Multiple Products | TX | Jefferson |
| Phillips Rd. North to Phillips Road South -Colex Terminal | Multiple Products | TX | Harris |
| Colex West to HL&P No. 21 (16") | Multiple Products | TX | Harris |
| #16 Lateral to Explorer | Multiple Products | TX | Harris |
| #15 Lateral to Explorer (Colex Terminal) | Multiple Products | TX | Harris |
| Chocolate Bayou Tk off / Faimont / Arc Jct. / Dow Solutia | Propylene | TX | Brazoria, Galveston, & Harris |
| Fairmont Station 6" Suction | Propylene | TX | Harris |
| Fairmont Station 6" Discharge | Propylene | TX | Harris |
| Premcor El Vista - Explorer 30" Gasoline (Port Arthur Products) | Refine Products | TX | Jefferson |
| PAPS - Explorer 30" Oil (Port Arthur Products) | Refined Products | TX | Jefferson |
| Magellan Mainline to Grand Central Junction No. 22 (16") | Refined Products | TX | Harris |
| 8" Sinco Market Jct to Lyondell (Sinco-Colex Products) | Idle | TX | Harris |
| Unocal-Pine Street 12" (Smith Bluff) | Idle | TX | Jefferson |
| Explorer to Fina Connection - Smith Bluff | Idle | TX | Jefferson |
| 10" Sinco Market Jct - Lyondell (Sinco-Colex Products) | Idle | TX | Harris |

| Company Owned Response Equipment | | |
|----------------------------------|----------|-------------|
| NAME | LOCATION | DESCRIPTION |
| | NONE | |
| | | |

| Breakout Tanks | | | |
|---------------------|-------------|-----------------|-------------|
| FACILITY NAME | TANK NUMBER | CAPACITY (Bbls) | TYPE OF OIL |
| (b) (7)(F), (b) (3) | | | |