EMERGENCY RESPONSE ACTION PLAN

Mormon Island Marine Terminal

Prepared for:

Equilon Enterprises LLC, dba Shell Oil Products US
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 I Fax: (281) 320-9700
www.obriensrm.com

Version: 2.38.144

EMERGENCY RESPONSE ACTION PLAN

TABLE OF CONTENTS

FACILITY INFORMATION

GENERAL INFORMATION

Facility Name:	Mormon Island Marine Terminal	
	Physical Address Berth 167, 168 & 169 Wilmington, California 90744	***Mailing Address*** Berth 167, 168 & 169 Wilmington, California 90744
24 hr Telephone #:	(310) 834-2638	
Fax #:	(310) 816-2388	

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

Company:	***Owner: Physical Address*** Equilon Enterprises LLC, dba Shell Oil Products US 777 Walker Street Two Shell Plaza Houston, Texas 77002	***Operator: Physical Address*** Shell Oil Products US Berth 168 & 169 Wilmington, California 90744

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 carryout response activities.

Qualified Individual:

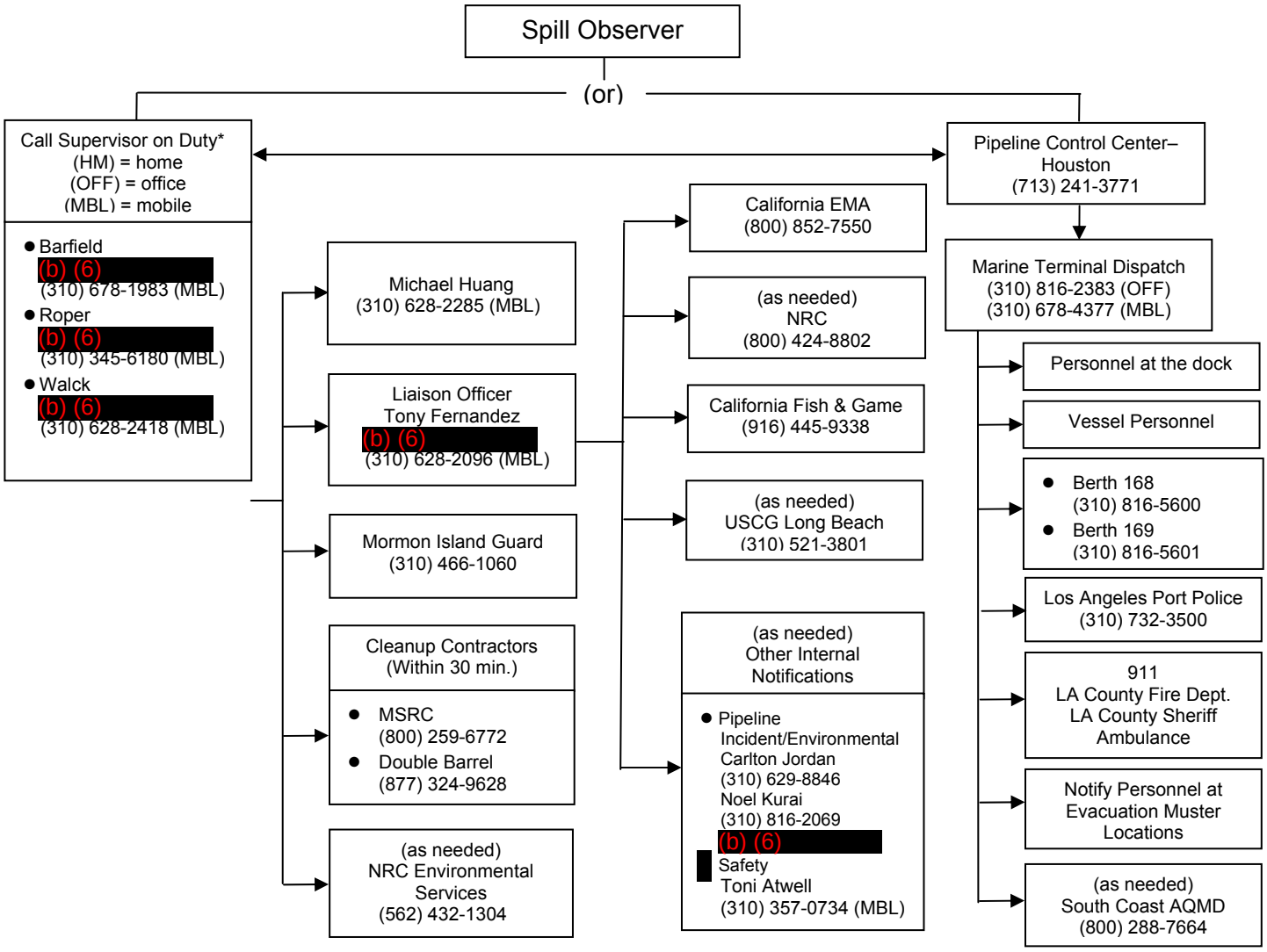
Michael Huang	Facilities Manager South (IC)	Call Cell Phone (Home) (310) 628-2285 (Cellular)

Alt. Qualified Individual:

Rick Roper	MI / Chemical Terminals Manager	(b) (6) (310) 345-6180 (Cellular)
Lisa Barfield	Carson/So. Cal P/L Terminal Manager	(b) (6)) (310) 678-1983 (Cellular)

Internal Notification Sequence - Mormon Island
Click to view

FIGURE 2.4
MORMON ISLAND TERMINAL
INTERNAL AND EXTERNAL NOTIFICATION SEQUENCE



EMERGENCY MANAGEMENT HOTLINE
(877) 242-7400

EMA	California Emergency Management Agency (This Agency notifies Fish & Game)
NRC	National Response Center (This agency notifies USCG as necessary. In addition, CERCLA related spills are to be reported to this agency.)

* For internal reporting procedures, refer to HSSE Incident Reporting and Investigation Procedure (including First Notification Form).

INTERNAL NOTIFICATION REFERENCES

INTERNAL NOTIFICATIONS - INCIDENT MANAGEMENT TEAM				
NAME/ POSITION/TITLE	RESPONSE TIME	OFFICE	(b) (6)	OTHER
Michael Huang Facilities Manager South (IC)	60 MIN MAX	(310) 816-2080		(310) 628-2285 CELL
Rick Roper MI / Chemical Terminals Manager	60 MIN	(310) 816-2307		(310) 345-6180 CELL
Lisa Barfield Carson/So. Cal P/L Terminal Manager	60 Min	(310) 816-2230		(310) 678-1983 CELL
Rich Walck Craft Supervisor Carson	60 MIN	(310) 816-2067		(310) 628-2418 CELL
Toni Atwell Safety Officer	60 MIN	(310) 816-2211		(310) 357-0734 CELL
Tony Fernandez WR Emergency Response/Security Rep.	24 Hr.	(310) 816-2318		(310) 628-2096 CELL
Tracy Swan Finance Section Chief	60 MIN	(310) 816-2034		(310) 629-8822 CELL
Noel Kurai Environmental Site Support	60 MIN MAX	(310) 816-2069		(310) 629-8426 CELL
Martin Padilla Shell Oil Products Emergency Mngmt	24 HRS	(713) 241-3283		(713) 824-0986 CELL
Bruce Johnson Shell Oil Products Emergency Management	24 HRS	(713) 241-1338		(713) 249-4744 CELL
Rick Ferguson Shell Oil Products Emergency Management	24 HRS	(713) 241-6066		(281) 853-4361 CELL
Steve Majid Shell Oil Products Emergency Management	24 HRS	(713) 241-6144		(443) 324-1841 CELL
Todd Barr Shell Oil Products Emergency Management	24 HRS	(713) 241-6878		(832) 693-5717 CELL

INTERNAL NOTIFICATIONS - INCIDENT MANAGEMENT TEAM (Cont'd)				
NAME/ POSITION/TITLE	RESPONSE TIME	OFFICE	(b) (6)	OTHER
Tim Hill Sr. Security Advisor, S&D NA	24 HRS	(713) 241-3199		(713) 732-9714 CELL
Alan Caldwell Communications Specialist	24 HRS	(310) 816-2056		(310) 408-6785 CELL
Steve Lesher Communications		(925) 313-3462		(925) 200-7986 CELL
Martha (Marti) Powers Communications Officer	24 HRS MAX	(713) 241-1584		(713) 591-7652 CELL
Shell Oil Products Emergency Management Hotline	24 HRS	(877) 242-7400		(877) 242-7400 CELL
Motiva/SOPUS/STUSCO Shipping Emergency 24 HR Contact No.		(713) 241-2532		
Shell Corporate Medical 24 Hours		(800) 524-7747		
Shell Corporate Security 24 Hours		(713) 241-4773		

INTERNAL NOTIFICATIONS - OTHER CONTACTS				
NAME/ POSITION/TITLE	RESPONSE TIME	OFFICE	(b) (6)	OTHER
Anne Anderson GM S&D -US (QI/IC)	24 HRS MAX	(713) 230-3199		(225) 954-9495 CELL
Carrie Hodgins S&D HSSE/SD Manager North America	24 HRS MAX	(713) 241-2838		(713) 516-3842 CELL
Jill Derise Manager Control Center (AQI)	24 HRS	(713) 241-9859		(713) 806-7889 CELL
Larry Lamaison US Operations Support Manager	24 HRS	(504) 728-3246		(985) 859-8066 CELL
Karen McCray US Maintenance Manager		(713) 423-3371		(979) 308-9116 CELL
Michele Joy GM Pipeline Growth	24 HRS	(713) 241-7979		(713) 213-4875 CELL
Peyton Ross Manager Asset Integrity	24 HRS	(713) 241-3935		(713) 826-2954 CELL
Jason Dollar Manager Technical Offshore	24 HRS	(713) 241-3485		(504) 430-4373 CELL
Mike Coyne Manager Operations Support and Engineering		(713) 241-1146		(713) 851-0880 CELL
A. Michael Macrander Global Discipline Lead - Ecol.& Emerg. Resp.	24 HRS	(907) 646-7123		(907) 317-9314 CELL
Michael Elmore Sr. Staff Land Agent	24 HRS	(310) 816-2208		(310) 628-2094 CELL
Pam Alley Land Process Manager	24 HRS	(713) 241-2066		(281) 974-9537 CELL
Julia Chan Procurement Manager	24 HRS	(310) 816-2061		(562) 243-9483 CELL
Brian Faulkner Legal Counsel - Environmental	24 HRS	(713) 241-2383		(281) 685-7356 CELL

INTERNAL NOTIFICATIONS - OTHER CONTACTS (Cont'd)				
NAME/ POSITION/TITLE	RESPONSE TIME	OFFICE	(b) (6)	OTHER
Jamie Nelson Senior Legal Counsel - Pipeline	24 HRS	(713) 241-3179		(281) 250-0502 CELL
Robert Ream Regional Security Manager				(832) 314-0139 CELL

OIL SPILL REMOVAL ORGANIZATIONS

USCG CLASSIFIED OIL SPILL REMOVAL ORGANIZATIONS (OSRO)			
COMPANY	RESPONSE TIME	LOCATION	TELEPHONE
Double Barrel	60 MIN	Riverside, California	(877) 324-9628
Marine Spill Response Corporation (MSRC)	60 MIN	Various Locations, California	(800) 259-6772

NOTIFICATION DATA SHEET

NOTIFICATION DATA SHEET

Date: _____ ***Time:*** _____

INCIDENT DESCRIPTION

Reporter's Full Name:		***Position:***	
Day Phone:		***Evening Phone:***	
Company:	Shell Oil Products US	***Organization Type:***	
Facility Address:	Berth 167, 168 & 169	***Owner's Address:***	777 Walker Street
			Two Shell Plaza
	Wilmington, California 90744		Houston, Texas 77002

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

Spill Location ***(if not at Facility):*** _____

Responsible Party's Name: _____ ***Phone Number:*** _____

Responsible Party's Address: _____

Source and/or cause of discharge: _____

Nearest City: Wilmington

County: Los Angeles ***State:*** California ***Zip Code:*** 90744

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:

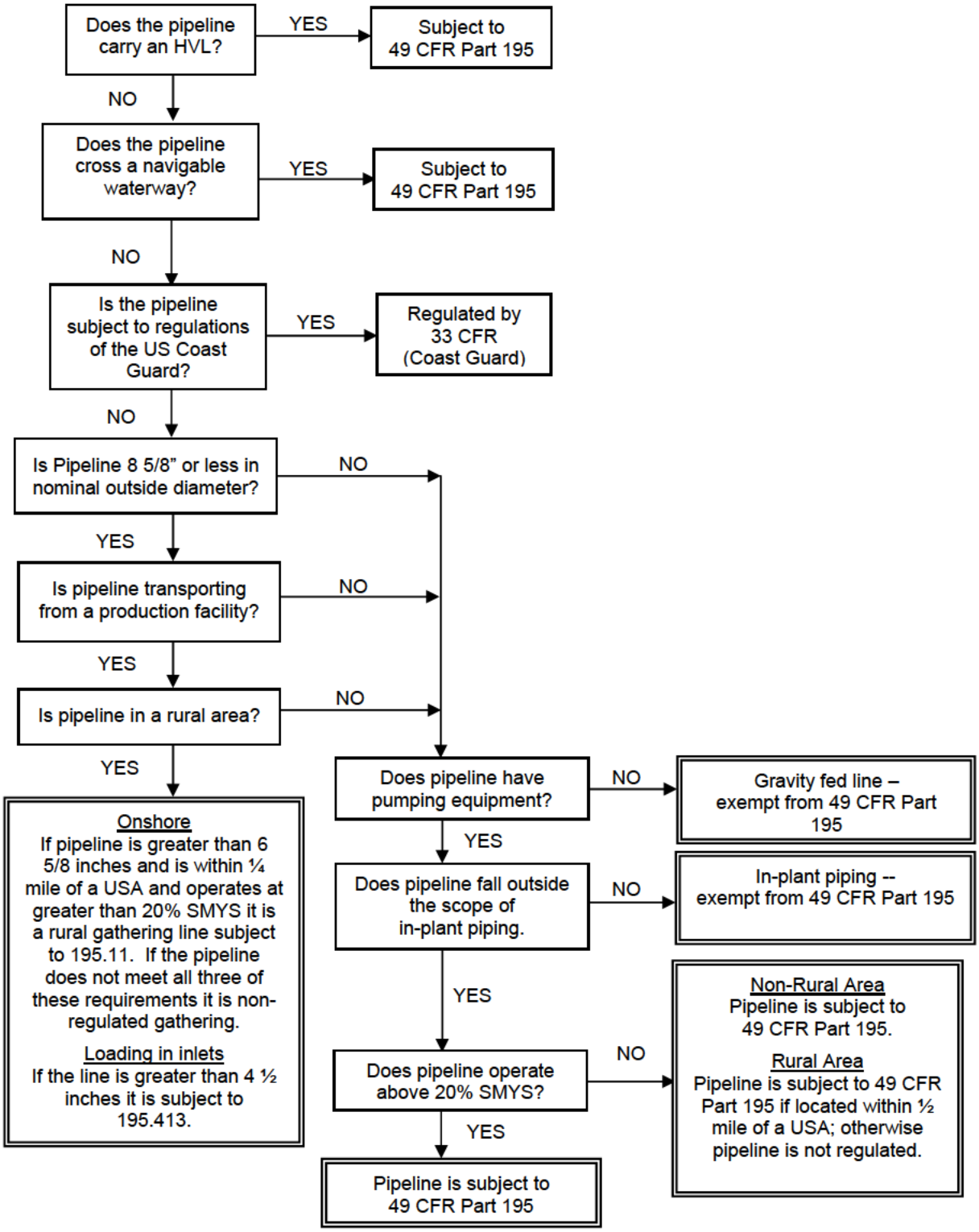
NOTE: DO NOT DELAY NOTIFICATION PENDING COLLECTION OF ALL INFORMATION.

EXTERNAL NOTIFICATION FLOWCHART

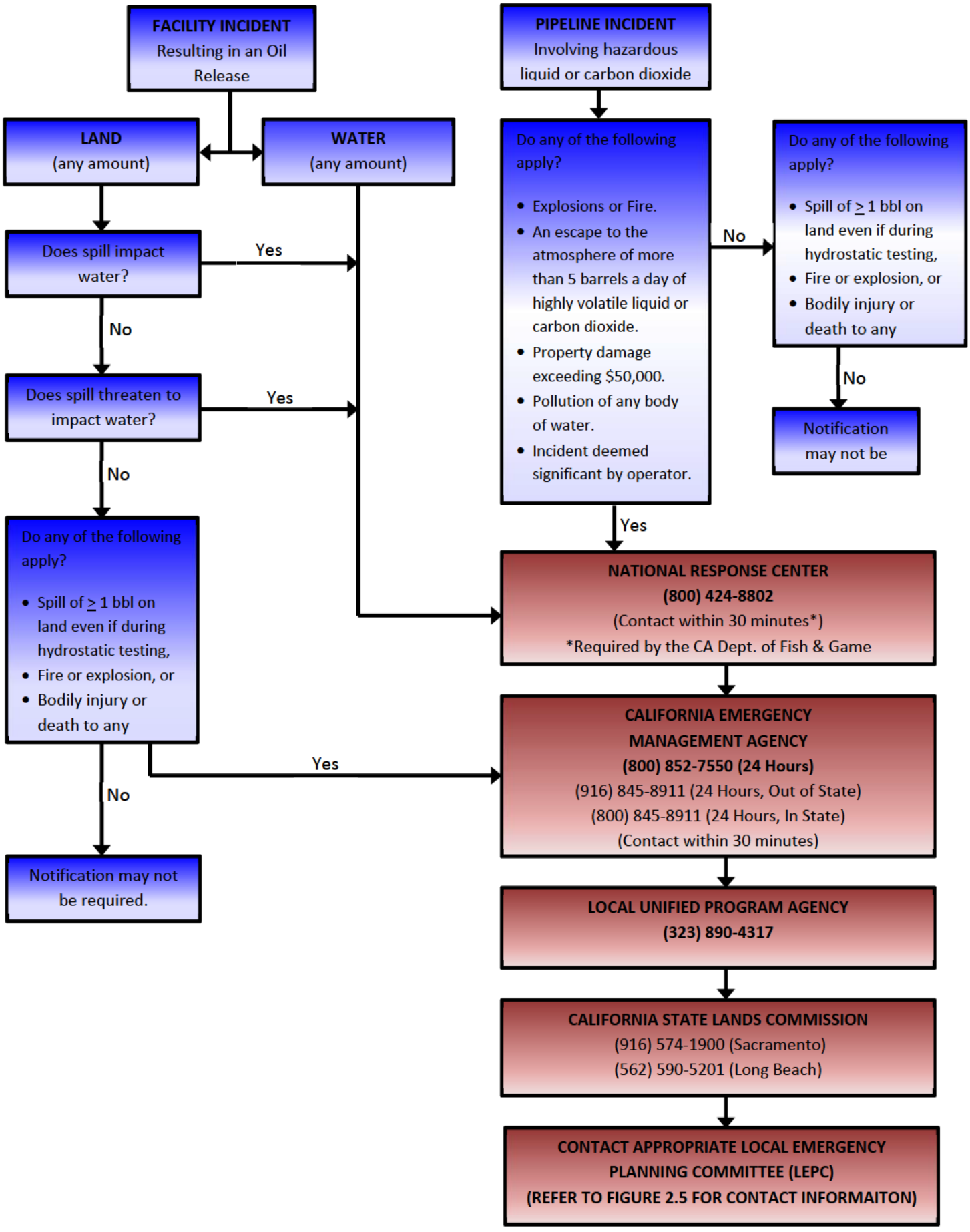
External Notification Flowchart for Determining if Hazardous Liquid
Click to view

External Notification Sequence - Mormon Island
Click to view

EXTERNAL NOTIFICATION FLOWCHART
Flow Chart for Determining if a Hazardous Liquid Pipeline Is Subject to DOT Regulation (49 CFR Part 195)



EXTERNAL NOTIFICATION FLOWCHART



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)
California Emergency Management Agency (CAL EMA)	Mather, California	(800) 852-7550 (24 Hr.) (916) 845-8911 (Night Phone)
California State Lands Commission	Sacramento, California	(562) 590-5201 (24 Hr.) (916) 574-1900 (Day Phone)
Cal-CUPA - Los Angeles City Fire Dept.	Los Angeles, California	(213) 978-3685 / (213) 978-3680 (Day Phone)

OTHER POTENTIAL REQUIRED NOTIFICATIONS		
AGENCY	**LOCATION**	**TELEPHONE**
Local Emergency Planning Committees (LEPC)	Commerce (Los Angeles County), California	(323) 980-2260 (Day Phone)
California State Fire Marshal	Sacramento, California	(916) 445-8200 (Day Phone)
Lakewood Marshal **Bob Gorham**		(562) 497-9100 (Day Phone) (818) 419-0784 (Cellular)
CA State Fire Marshal Bakersfield **Chuck MacDonald**	Bakersfield, California	(661) 587-1601 (Day Phone) (661) 809-7904 (Cellular)
California State Fire Marshal Northern CA **Linda Zigler**	Hidden Valley, California	(650) 400-6533 (Day Phone) (650) 400-6533 (Cellular)
CA State Fire Marshal Long Beach **Tom Williams**	Lakewood, California	(562) 425-1902 (Day Phone) (818) 378-3729 (Cellular)
Long Beach Fire Marshal **Dan Lee**	Long Beach, California	(562) 982-9115 (Day Phone) (818) 618-1339 (Cellular)
Lakewood Fire Marshal **Emmett Cooper**	Lakewood, California	(562) 497-9103 (Day Phone) (818) 389-9201 (Cellular)
U.S. Coast Guard Sector Los Angeles/Long Beach	San Pedro, California	(310) 521-3600 (Day Phone)
U.S. EPA Region IX	San Francisco, California	(800) 300-2193 (24 Hr.) (415) 947-4400 (Day Phone)
Agency for Toxic Substances & Disease Registry	Atlanta, Georgia	(404) 498-0120 (24 Hr.) (888) 422-8737 (Message Center) (Day Phone) (415) 947-4316 (San Francisco) (Night Phone)
BCDC Oil Spill Program	San Francisco, California	(415) 352-3600 / (415) 352-3644 (Day Phone)
California Department of Public Health (CDPH)	Sacramento, California	(916) 449-5661 (Day Phone)
California Division of OSHA (Torrance)	Torrance, California	(310) 516-3734 (Day Phone)

OTHER POTENTIAL REQUIRED NOTIFICATIONS		
AGENCY	**LOCATION**	**TELEPHONE**
California Department of Toxic Substance Control	Cypress, California	(714) 484-5300 (Day Phone)
California Occupational Safety and Health Administ	Los Angeles, California	(562) 516-3734 (24 Hr.)
CCC Oil Spill Program	San Francisco, California	(415) 904-5247 / (415) 904-5205 (Day Phone)
Chemical Waste Management, Inc.	Kettleman City, California	(559) 386-6151 (Day Phone)
Chemical Transportation Emergency Center-CHEMTREC		(800) 876-4766 (24 Hr.)
Clean Harbors - Buttonwillow	Buttonwillow, California	(661) 762-6200 (Day Phone)
Crosby and Overton	Long Beach, California	(562) 432-4554 (Day Phone)
DeMenno-Kerdon	Compton, California	(310) 537-7100 (24 Hr.)
Hazardous Materials Administering Agencies	Wilmington, California	(800) 688-8000 (In-State only) (24 Hr.)
IT Corporation - Vine Hill Facility	Martinez, California	(415) 372-9100 (Day Phone)
Los Angeles Port Police	San Pedro, California	(310) 732-3500 (24 Hr.)
Poison Control Center	San Francisco, California	(800) 876-4766 (Day Phone)
U.S. Fish and Wildlife Service	Washington, District Of Columbia	(800) 344-9453 (24 Hr.)

FIRE, POLICE, HOSPITALS		
DIAL 911 for all Police, Fire, and Ambulance Emergencies		
AGENCY	**LOCATION**	**TELEPHONE**
Los Angeles City Fire Department Station #38 / #49	Los Angeles, California	(310) 548-7538 (St. 38)/ (310) 548-7549 (St. #49)
Federal Bureau of Investigation (FBI)	Los Angeles, California	(310) 477-6565
Los Angeles Police	Los Angeles, California	(877) 275-5273 (Non-emergency)
California State Highway Patrol (Monterey Park)	Monterey Park, California	911 / (323) 980-4600
Ambulance Service / Fire Department	Carson, California	(213) 485-6180
Community Hospital of Long Beach	Long Beach, California	(562) 498-1000
Harbor-UCLA Medical Center	Torrance, California	(310) 222-2345
Torrance Memorial Medical Center	Torrance, California	(310) 325-9110

MEDIA NOTIFICATIONS		
AGENCY	**LOCATION**	**TELEPHONE**
KABC-TV Channel 7	Glendale, California	(818) 863-7777
KNBC-TV Channel 4	Burbank, California	(818) 840-4444
Los Angeles Times	Los Angeles, California	(213) 237-5000
National Weather Service (recorded forecasts)	Los Angeles, California	(805) 988-6610 Ext. 1
Press Telegram	Long Beach, California	(562) 432-5959

OTHER PUBLIC/INDUSTRY CONTACTS		
COMPANY	**LOCATION**	**TELEPHONE**
Catalina Express	Berth 95,	(310) 519-1212
Conoco Phillips	Berth 148-151,	(310) 834-4691
Kinder Morgan	Berths 118-120,	(310) 831-6566
Los Angeles County Flood Control District	Los Angeles, California	(626) 458-5100
Los Angeles County Sanitation District	Whittier, California	(323) 245-9865
California Department of Fish & Game	Sacramento, California	(916) 653-7667
National Oceanic and Atmospheric Administration -	Seattle, Washington	(206) 526-4327
Pacific Cruise Ship Terminal	Berth 90-93,	(310) 514-4049
Ranch LPG	Berth 120,	(310) 833-5275
Rio Tinto	Berths 164, 165,	(310) 522-5300
Surface Wtr, Fish, Wldlf&Habit.-Dpt. of Fish&Game	Sacramento, California	(916) 358-1300
Surface&Groundwater-State Water Res Cntrl Brd	Sacramento, California	(916) 341-5671
US Water Taxi	Berth 60,	(310) 519-8230
Valero Marine	Berths 163-164,	(310) 834-7254

OTHER PUBLIC/INDUSTRY CONTACTS (Cont'd)		
COMPANY	LOCATION	TELEPHONE
Vopak LA	Berths 187-191,	(310) 549-0961

ADDITIONAL RESPONSE RESOURCES		
Planning and Incident Support		
COMPANY	**LOCATION**	**TELEPHONE**
NRC Environmental Services	Long Beach, California	(800) 337-7455 / (562) 432-1304
Ecology Control, Inc. (ECI)	Torrence, California	(310) 354-9999
Environmental or Illegal Drug Labs - Dept. of TSC	Sacramento, California	(916) 255-6504 / (800) 260-3972
International Bird Rescue and Research	Cordelia, California	(707) 207-0380
Marine Water - Office of Spill Prevention and Resp	Sacramento, California	(916) 445-9338
Oil Fields - Division of Oil, Gas, and Geothermal	Sacramento, California	(916) 445-9686
Oiled Wildlife Care Network	Davis, California	(707) 207-0380 / (530) 752-4167
Oiled Wildlife Care Network		(916) 445-0045 (press 5)
Surface Water - National Pollution Funds Center	Arlington, Virginia	(202) 493-6700

NOTIFICATION REQUIREMENTS

NATIONAL RESPONSE CENTER

Discharges of Oil to Navigable Waters

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.)

NOTE: 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, or
- 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.

NOTE: 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.

NOTE: 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.

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, or HVL, 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

NOTE: To determine if a hazardous liquid pipeline is subject to DOT regulation (Refer to Figure 2.4)

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

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.

NOTE: 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.

CALIFORNIA EMERGENCY MANAGEMENT AGENCY (EMA)

TYPE: Notification is required if any of the following occurred:

- Any amount into or threatening state waters - inland, marine, or groundwater.
- Any amount into a storm drain.
- Any amount onto city and county streets.
- Any amount onto state highways and freeways.
- Any amount onto land (except for certain San Joaquin Valley oil fields)
- 5 barrels or more uncontained in certain San Joaquin Valley oil fields.
- 10 barrels or more contained in certain San Joaquin Valley oil fields.
- Crude oil release of more than five barrels from a pipeline or flow line in a rural area -if no threat to state waters.
- Fire or explosion; or
- Bodily injury or death to any person

VERBAL: Immediately

WRITTEN: As may be requested by the agency

HAZARDOUS MATERIALS ADMINISTERING AGENCIES

TYPE: Any spill requiring notification to Federal or State agencies must be reported.

VERBAL: Immediately

WRITTEN: As may be requested by the agency

LOS ANGELES PORT POLICE

TYPE: Any incident at the port.

VERBAL: Immediately

WRITTEN: As may be requested by the agency

CALIFORNIA STATE FIRE MARSHAL

TYPE: Any unintentional rupture of 5 barrels or more, explosion or fire involving a pipeline. (CAL EMA is official call.)

VERBAL: Immediately

WRITTEN: As may be requested by the agency

REGIONAL WATER QUALITY CONTROL BOARD

TYPE: Any spill affecting groundwater or leaks from tankage. NOTE: CAL EMA handles all reportable spills for the Regional Board.

VERBAL: Immediately

WRITTEN: As may be requested by the agency

BUREAU OF LAND MANAGEMENT (BLM)

TYPE: Any spill on BLM property.

VERBAL: Immediately

WRITTEN: As may be requested by the agency

CALIFORNIA STATE LANDS COMMISSION

TYPE: Any spill on state lands

VERBAL: Immediately

WRITTEN: As may be requested by the agency

AIR POLLUTION CONTROL DISTRICTS

TYPE: Any air pollution breakdown.

VERBAL: Immediately

WRITTEN: As may be requested by the agency

LOCAL EMERGENCY PLANNING COMMITTEES (LEPC)

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

VERBAL: Immediately

WRITTEN: As may be requested by the agency

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

U.S. COAST GUARD - SECTORS

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.

U.S. ENVIRONMENTAL PROTECTION AGENCY REGION 9

TYPE: Immediately for 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: Per SPCC requirements, a written report must be submitted within 60 days for a spill in excess of 1,000 gallons (approximately 24 Bbls) in a single event or two spill events within a twelve month period into or upon navigable waters of the United States or adjoining shorelines. The written report should contain all of the elements listed in 40 CFR 112.4(a). As per RCRA regulations, a written report on the incident must be submitted to the Regional Administrator within 15 days from the date of the incident. The report must include:

1. Name, address, and telephone number of the owner or operator;
2. Name, address, and telephone number of the Facility;
3. Date, time, and type of incident (e.g., fire, explosion);
4. Name and quantity of material(s) involved;
5. The extent of injuries, if any;
6. An assessment of actual or potential hazards to human health or the environment, where this is applicable; and
7. Estimated quantity and disposition of recovered material that resulted from the incident.

U.S. FISH AND WILDLIFE SERVICE

TYPE: Wildlife Protection / Rehabilitation.
VERBAL: Immediately
WRITTEN: As the agency may request depending on circumstances

Initial Response Actions

Initial Response Action

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.

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

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

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

INITIAL RESPONSE ACTIONS - SUMMARY

- Personnel and Public Safety is first priority
- Eliminate sources of ignition
- Isolate the source of the discharge, minimize further flow
- Make internal notifications
- Make external notifications
- Activate the Local Response Team as necessary
- Activate response contractors and other external resources as necessary
- Monitor and control the containment and clean-up effort

As additional guidelines for responding to oil spills, the following flowcharts are included in Appendix H:

- General Oil Spill Response
- Shoreline Protection Decision Tree
- Shoreline Response Decision Tree

In addition to the potential emergency events outlined in this section, the Company has identified several "abnormal operations" that could be expected in the pipeline facilities. The pipeline 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 Shell Pipeline Company Operations Manual for Controllers.

FIRST RESPONDER AWARENESS LEVEL *CCR §817.02(f)(4)(D-E)*

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.

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 and

NOTE: 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, O_2, and if necessitated by release type H_2S, 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.

FIRST COMPANY PERSON NOTIFIED/ON SCENE

- Follow the appropriate ***"Specific Incident Response Checklist"*** and ***"Product Specific Response Considerations".***

- Notify **Terminal Management** of the incident.

- Utilize local emergency services as necessary (police, fire, medical).
- Notify the **Pipeline Control Center**, as appropriate.

TERMINAL MANAGEMENT

- **Evaluate the Severity**, Potential Impact, Safety Concerns, and Response Requirements based on the initial data provided by the first person on scene.
- Assume the role of **Incident Commander**.
- **Confirm safety** aspects at site, including need for personal protective equipment, sources of ignition, and potential need for evacuation.
- Activate the **Local Response Team and primary response contractors**, as the situation demands.
- Coordinate/perform **activation of additional spill response contractors**, as the situation demands (telephone reference is provided in Section 2.0).
- Notify the **Marine Group** for all vessel incidents.
- Notify **Regional Manager**. Provide incident briefing and coordinate activation of Emergency Management (EM), as the situation demands. (Refer to Section 2.0).
- Coordinate/perform **regulatory agency notification**, as the situation demands, (notification procedures and telephone references are provided in Section 2.0).
- Proceed to spill site and **coordinate response and clean-up operations**.
- Direct containment, dispersion, and/or clean-up operations in accordance with the Product Specific Response Considerations.

LOCAL RESPONSE TEAM

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

AREA PERSONNEL RESPONSIBILITIES

The area personnel's general response plan consists of the following four (4) stages which may overlap or occur concurrently:

- Making an initial response,
- Defining the problem,

- Controlling the situation, and
- Cleaning up and repairing the damage.

After notification of an incident, area personnel should:

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

- Assemble response equipment and personnel. Dispatch resources to the release site.
- 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).
- 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.
- Activate contract employees and equipment as needed.
- Determine if assistance is needed from an oil spill cooperative (if available) or LRT. Activate them if needed.

- Collect the released material into containment sites as quickly as possible.
- Locate additional containment sites, if needed.
- Evaluate resources to confirm sufficient personnel and equipment.
- Clean up to minimize damage to public health and the environment.
- Repair the damage to the system.

INITIAL RESPONSE

- Take appropriate personal protective measures.
- Call for medical assistance if an injury has occurred.
- Check wind direction before investigating incidents where vapor cloud is a possibility.
- Utilize LEL meter when you conduct an initial investigation to determine what has been released and the source.
- Do not investigate on your own, take a buddy.
- If you discover explosive / flammable vapors during your initial investigation or if vapors are a possibility, make sure you inform the 911 operator that police and other emergency responders should NOT use flares to control traffic.
- When you evacuate the Terminal because of toxic or explosive vapors, make sure that you take the FRP, response checklists, cell phones, radios, etc. with you to the muster point. Develop a "kit" / "go bag" / evacuation bag to take with you when you evacuate the Facility. (The evacuation bag should contain items that you would need to run a response for the first several hours from a location other than the Terminal building.)
- At the evacuation muster point, take a head count to determine if anyone is missing.
- If possible, block access to the hot zone and/or entire Terminal (use vehicles, caution tape, traffic cones, etc.).
- Restrict access to the spill site and adjacent area as the situation demands. Take any other steps necessary to minimize any threat to health and safety.
- Verify the type of product and quantity released (Material Safety Data Sheets are retained separately at the Facility).
- Advise personnel in the area of any potential threat and/or initiate evacuation procedures.
- Use testing and sampling equipment to determine potential safety hazards, as the situation demands.
- Identify/Isolate the source and minimize the loss of product, from a safe distance.
- Take necessary fire response actions. 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.

- Eliminate possible sources of ignition in the near vicinity of the spill.
- Notify Terminal Management of the incident.

Product or Hazardous Material Release

Line Break or Leak

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

Storage Tank Leak

- Shut down all tank battery product movement operations and isolate the tank.
- Initiate Confined Space Entry procedures, as applicable.
- Ensure that the containment area drainage valve(s) is "closed".
- If near tank bottom, consider filling tank with water and maintain water bottom to suspend the discharge.
- Utilize Combustible Gas Indicator, O_2 meter, proper colormetric indicator and other air sampling measurements to assure that areas are safe to enter for continued response operations.
- Block drainage of spilled material from traveling offsite.
- Stop all traffic in hazardous area (inside and outside of property boundaries), as the situation demands.
- Request local authorities to establish traffic control in the area, as necessary.
- Remove product from containment area (at a sump or in a low area) with an explosion proof pump, oil skimmer, and/or vacuum truck w/ skimmer attachments.
- If applicable, process remaining product through the separator system.
- Empty tank as soon as possible.
- Make all necessary repairs. Return the line/tank to service when repairs are complete and tested.
- Clean up product spill to eliminate any possible environmental problems. Be alert for underground cables.
- Inform local operators such as utilities, telephone company, railway.
- If necessary, call one (1) of the approved waste removal companies to remove the remaining sludge and residue from the containment area. Contact the Company Hazardous Waste Coordinator, if necessary, to remove waste from the Facility for disposal.
- If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in Section 6.0 of the FRP and ACP. Determine which of these may be threatened by the spill and direct the response to these locations. Initiate protection and recovery actions.
- Determine the direction and expected duration of spill movement. Refer to the environmental sensitivity maps in Section 6.0 of the FRP.
- Complete follow-up and written reporting, as the situation demands.

Marine Operation Spills/Leaks

- Shut down all engines/motors.
- Close all line and ship manifold discharge valves.
- If hose rupture, drain line into barge, drums, buckets, and blank line to stop spill into water.
- If other than hose rupture, determine source of leak and stop.
- Prevent discharge from entering the water if at all possible with:
    - Pump from sump or deck drainage system into drums, tanks, containment area, or other storage facility.
    - Dike/Dam the flow into a containment or collection area away from the water if feasible.
    - Place containment boom or sorbent material around area (provided that a safe operating environment exists).
- If the product enters the water and provided that a safe operating environment exists, try to contain by:
    - Deploy spill response equipment (facility and/or contract) to prevent/mitigate spill impact (spreading of spill).
    - Attempt to divert/contain the spill in:
        - Quiet or low current area the water.
        - Away from strong winds or areas that could be affected by change in wind direction.
        - Away from areas of hazard to public, property improvements, marinas, water intakes, etc.

Oil Containment, Recovery & Disposal

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.

Fire / Explosion Incidents

Company Personnel

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

- Shut down Facility operations and mitigate fuel sources, as the situation demands.
- Utilize applicable Facility firefighting capability after conducting safety assessment of the area. If fire is in the incipient stage, trained personnel may utilize the facility fire extinguishers if safe to do so. Facility personnel are trained to only to the incipient stage.
- Notify local fire department(s), as the situation demands.
- Consider evacuating the area, as the situation demands, if there are nearby residential or commercial dwellings.
- Assist the emergency rescue personnel with injured and/or trapped individuals.
- Determine when the fire started.

Individual Discovering the Fire - All Employees

- Notify the Terminal Manager or the supervisor on duty.
- Return to the scene of the fire and, if practical (not beyond incipient stage), trained personnel may utilize the facility fire extinguisher if safe to do so. Facility personnel are trained only to the incipient stage.
- Prevent secondary problems due to flame impingement, or spills and runoff. Spray other nearby tanks and structures with cool water to avoid ignition.
- In the event the fire is too large for an individual to fight alone, the individual sounding the alarm or making the phone call should stand by at a safe distance to direct the fire department to the scene of the fire and keep personnel and vehicles from entering the danger area.
- Alert all terminal areas of the exact location and extent of the fire.
- Shut off pumps.
- If product is being received, notify the appropriate dock personnel of the fire and request that the transfer be shut down. The tank which is receiving product from the dock must not be closed until assurance is received that the transfer is down, unless that tank is involved in the fire.
- After confirmation has been received that the transfer has been shut down, close the pipeline header valves.
- Close valves for the tanks in the tank farm.

Individual Discovering Fire-Absence of Supervision

- In the event of fire in the absence of a member of supervision or the Terminal Operator, any Company employee on duty is designated as the individual in charge.
- The individual discovering the fire will adhere to the instructions issued for the normal operation.
- Ensure that the fire department has been notified.
- Alert all terminal areas of the exact location and extent of the fire.
- Ensure supervision is notified by telephone.
- Shut down any transfers and proceed to close tank valves.
- Prior to the arrival of a member of supervision, the individual will remain in charge and will direct the fire department to the scene of the fire.

Individual Who Discovers Tank Related Fire

TANK RELATED FIRE

- 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.

Individual Who Discovers Explosion Near Pipeline

EXPLOSION NEAR OR AT A PIPELINE FACILITY

Damage Assessment/Control By On Site 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 Response Actions" 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.).

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

Vapor Cloud

Individual Who Discovers the Emergency

NOTE: 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
Gasoline	0.68 to 0.74
Jet Fuel	0.82 to 1.08
ULS Diesel	0.62 to 0.88
Ethanol	0.79

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.

Vapor Cloud Originating from a Facility Incident

- The person who discovers the vapor cloud will sound the alarm and notify the supervisor on duty and vacate the area.
- Remember: the only proper action in the presence of a vapor cloud is to get away from it. Do not shut off electrical equipment.
- All personnel will report to the evacuation muster point for roll call and further instructions.
- After all personnel have been accounted for, the Terminal Manager, the Terminal Supervisor or a Terminal Operator will initiate the following actions as deemed necessary:

    1. Shut down pipeline.
    2. Evacuation of adjacent property.
    3. Only the fire department will be permitted to enter the terminal.

- Contact the appropriate agencies and potentially affected neighbors (refer to Section 2.0).

Vapor Cloud Originating from a Pipeline Incident

- The Initial Responder:
  - discovers the vapor cloud
  - determines the material causing the vapor cloud, and
  - notifies the Controller and maintenance crew.
  - See "Initial Response Action" listed previously in this section.
- The Controller:
  - isolates the pipeline by closing the remotely-operated valves, and
  - notifies the National Response Center.
- The maintenance crew isolates the pipeline by closing the manually operated valves.
- The Initial Responder determines:
  - **If there is** a fire then remain at a safe distance on site, until relieved.
  - **If there is not** a fire then keep ignition sources away and work with fire department to disperse the vapor cloud.
- The Initial Responder:
  - 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).
- Police evacuate the boundary area.
- Fire department disperses the vapor cloud with a sustained flow of water spray.
- The Initial Responder stays on site until:
  - relief arrives
  - vapor cloud is completely dispersed, or fire is burned out and the vapor cloud no longer exists.

Gas Detected in Building

Gas Detection & Confirmation by On Site Personnel

NOTE: 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.

Gas Detection and Confirmation by On Site Personnel

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 Response Actions" heading above.

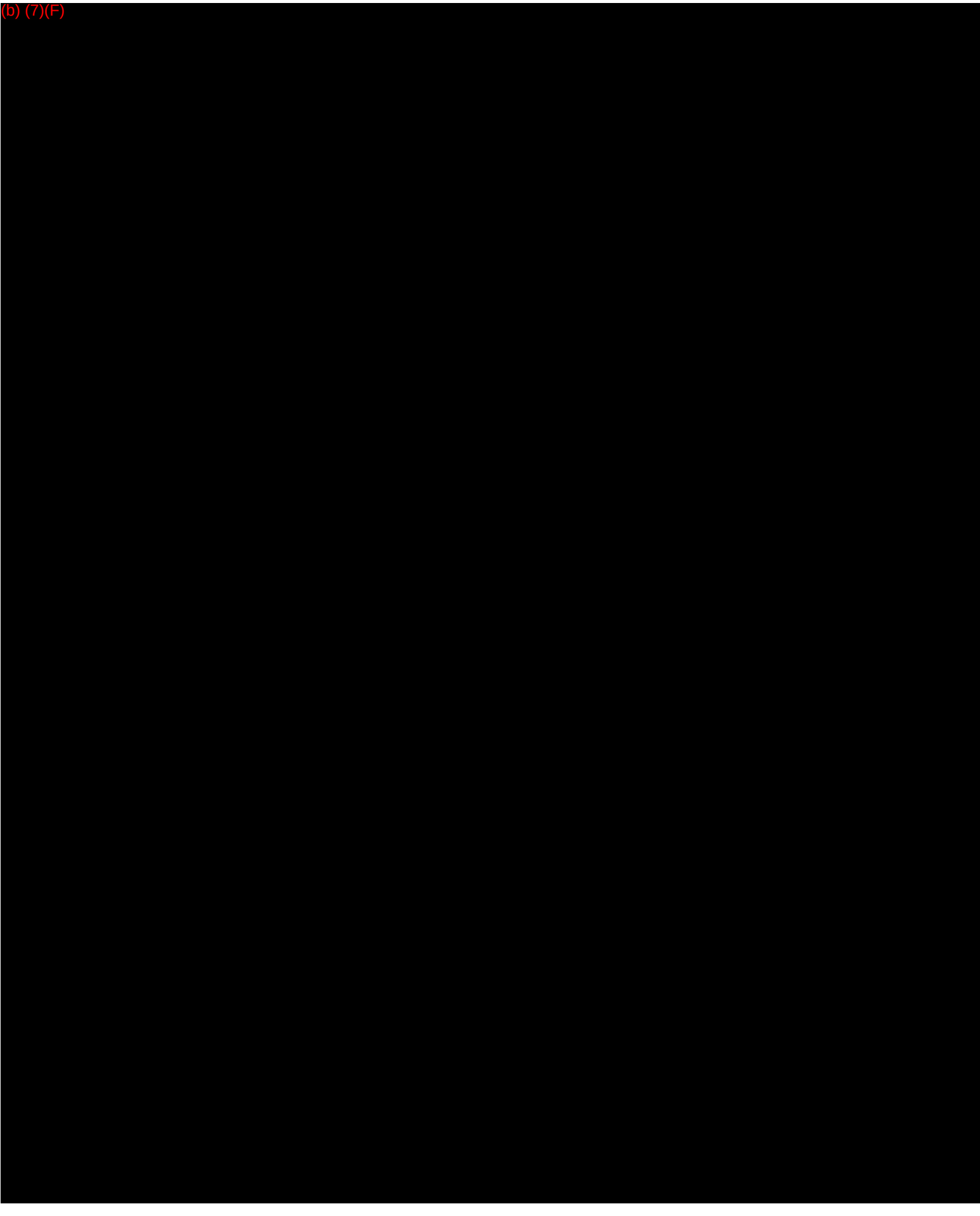
People Related

- 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 "Vapor Clouds" heading above.

(b) (7)(F)

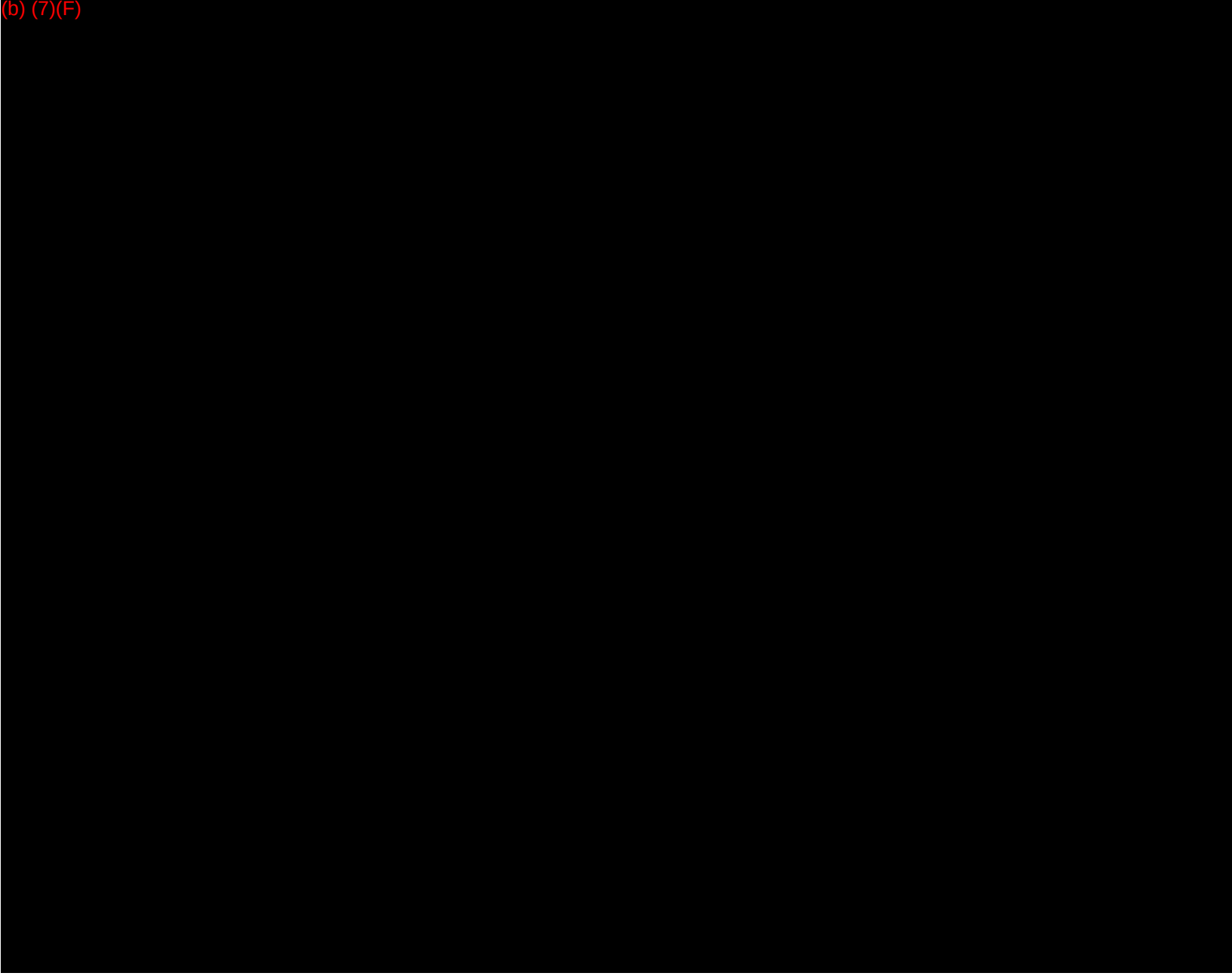


(b) (7)(F)

(b) (7)(F)

(b) (7)(F)

(b) (7)(F)



Natural Disaster Incidents

Tornado or Severe Storms

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

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.

Tornado and Severe Storms

- **Be Aware of Changing Weather Conditions**

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

- **If Severe Weather Conditions Threaten**

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

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.

- **Immediately After the Storm**

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

Earthquake Procedures

General Guidelines

In the event of an earthquake and you are located within the Terminal, you should take the following actions as precautionary measures:

- Immediately press the Emergency Shutdown Button.
- Stop and shut down all vessel discharge.
- If you are outside, remain in an open area. Stay away from anything that could potentially fall and injure you.
- If you are inside, move away from all windows.
- If absolutely necessary, shut off the main power switch.
- Close off the loading rack to foot or vehicle traffic using cones.
- Notify the Terminal Manager/Superintendent as soon as possible.
- When the earthquake has subsided, notify the Scheduling Center with an initial report of damage, injury, etc. If more than one person is available, one person should assess damage while the other person stays by the telephone.
- If any leaks are noticed, isolate the leak by closing the appropriate valves. Do so only with precautions established in this Plan.

Terminal Operator Guidelines

When the inspection of the Facility is completed, and you are satisfied that there are no leaks, proceed with the following steps:

- Call the Scheduling Center with an updated report.
- Turn main power back on (if needed).
- Reset the loading rack, if applicable.

- Activate one product pump at a time. Inspect the product filter area for any leaks.
- If no leaks appear, turn the pump off and go to the next product. Use this same procedure for each product until all product lines have been tested.
- It is important that all product lines be tested and inspected prior to placing them back into service.
- When conditions require, the 3 day supply of food and water are available in the earthquake kit. All employees must be familiar with the contents of the earthquake kit.

Delivery Guidelines

- Anytime an earthquake occurs in the delivery area, all personnel should use good judgment. Drivers should be instructed to proceed on their delivery schedule as long as earthquake damage does not impede their ability to drive safely to and from the Terminal.
- In the case of small earthquakes, delivery activities may be conducted provided there is no noticeable damage at the service stations. Drivers should be observant of damage to truck access areas and possible damage to fill and tank areas. If damage is observed, call the Scheduling Center for instructions.
- For large earthquakes where damage is possible, known or heard, in the city you are making a delivery, you must call the Scheduling Center for instructions. The Scheduling Center will obtain instructions/guidance from engineering and advise the driver accordingly.
- In a major earthquake, where known extensive damage is reported in the metropolitan area, all drivers should return to the Terminal if at all possible. Once there, they should await instructions from Terminal Management. No deliveries are to be started and those in progress are to be immediately stopped until you are given clearance from Terminal Management or the Scheduling Center.

Special Considerations

- When system integrity or other problems are suspected, then consider surveillance using helicopters or fixed-wing aircraft supplemented with "on the ground" inspections when needed.
- When an earthquake occurs and multiple releases are possible, then consider more than the usual amount of emergency response personnel and equipment.
- When bridges or highways are destroyed or impassible, then use alternative transportation routes or modes to close block valves. Response time may be longer than normal. Consider using helicopters as an alternative to driving.
- When the earthquake causes damage to SPLC employees' homes in the region and they are occupied with their own personal situations, then get assistance from SPLC locations outside the affected area. Include both personnel and equipment. Use contractors and other service providers needed.
- When regular communication is not functional (down or congested), then establish emergency communication in the region.

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.

Controlling 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 below.

Ground

Call 911 and describe the location and nature of the release. Request highway patrol, sheriff, police, or fire department assistance. Request Los Angeles Port Police assistance.

If manpower permits:

- 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

In the event that such a spill reaches marine waters:

- 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.

Leave patrolling and control activities to the direction of Coast Guard or the Captain of the Port.

Air

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")).

Be prepared to describe the geographical location, or if known, the latitude and longitude of the release.

Third Party Vessel Owners/Operators

It is the responsibility of third party vessel owners/operators to have spill contingency plans developed and in place. In the event of a spill involving a third party vessel at the Facility, it is the responsibility of the vessel owner/operator to immediately respond and mitigate the spill and to coordinate response efforts with the Local Response Team.

If a spill occurs when the vessel (carrying Company cargo) is underway and within the area of the Facility, the Local Response Team will initiate first Company response to assist the vessel in containment and clean up.

Road Transportation Emergency

Employee Actions

Purpose

The purpose of this document is to provide a template of an emergency response plan covering the transportation of products (includes the loading, transport and unloading) that meets the requirements of the Road Transport Standard.

INTRODUCTION

This plan outlines the steps to be taken in handling various accidents involving road transport contractors. The intent of the plan is to eliminate or contain the incident and thereby prevent injuries to people or damage to property and the environment.

Every employee likely to be involved in the implementation and control must be fully conversant with the procedures detailed in this plan.

GENERAL PROCEDURES (Accidents)

Note: Safety to people must come first. Employees must never take any actions that would put themselves or others in harm's way.

RESPONDING TO CARRIER ROAD TRANSPORT INCIDENTS

In the event of a significant incident involving a carrier transporting Shell products **under our operational control**, it is required that a Shell employee, ideally a supervisor or manager, be on site. The company representative must initiate a timely investigation and gather information as directed by the Director of Trucking or the Manager of Delivery Support.

Significant incidents include but are not limited to:

1. An incident of impact resulting in significant media coverage and public concern that could result in damage to the Company brand or reputation.
2. Product spill/leak/release that results in soil, surface water or potential/actual groundwater contamination.
3. Any work-related contractor or third party fatality occurring on or off company property.
4. Road closures due to an incident.

The company representative must complete the ***First Notification of Incident*** form and the ***Product Spill Data Log*** if necessary.

DEFINITIONS

Major Spill - A spill that may require outside assistance to remove, and/or that impacts a storm drain or body of water.

A major spill may also be a Reportable Spill (see definition in Glossary of Terms). In this case, the Contract Carrier must notify the National Response Center (1-800-424-8802) and possibly state and/or local regulatory agencies. Refer to the Core Plan at the beginning of this manual for all Agency/Emergency contact numbers.

Minor Spill - A spill that is small enough to be easily cleaned up by the driver and which does not impact a storm drain or body of water. Some states require certain minor spills to be reported. Contract Carrier is responsible for appropriate notifications.

Under Operational Control - Delivering products on behalf of Shell.

Marine Incidents

Oil Spill

In the event of a spill during any cargo handling operation, the following spill response guidelines should be observed.

Initial Response

- Terminate transfer operations and eliminate the source of the spill (shut down pumps, close block valves, etc.).
- Notify Vessel PIC and Master.
- Drain line/hose into barge, containment system, or other storage media and blank line to stop discharge.

External Notifications

- Make the following EXTERNAL NOTIFICATIONS, or request that they be made immediately:

    1. National Response Center (NRC)
    2. USCG - Marine Safety Office.
    3. State Emergency Response Commission (SERC).
    4. Local Emergency Planning Committee (LEPC).
    5. Fire Department (as necessary).
    6. Police or Sheriff's Department (as necessary).
    7. Police or Sheriff's Department (as necessary).
    8. Other outside resources (as necessary).

Internal Notifications

- Make the following INTERNAL NOTIFICATIONS immediately:

    1. Terminal Management.
    2. Regional Manager.
    3. Marine Emergency Hotline (Marine Group).

Note: In the event of the absence or inability to contact one of the above referenced parties, the calling party should assume the responsibility to continue notifications up the management chain.

Fire and/or Explosion

In the event of a fire or explosion during any cargo handling operation, the following firefighting guidelines should be observed:

Initial Response

- Terminate transfer operations and eliminate the source of the fire (shut down pumps, close block valves, etc.).
- Notify Vessel PIC and Master.

- IF SAFE, make every effort to mitigate the damage and prevent the fire from spreading by fighting the fire with a dry chemical fire extinguisher.
- Fire Alarm Procedures
- FIRE ALARM PROCEDURES - When an alarm is sounded:
- All waterfront transfers should be stopped immediately.
- All personnel should proceed with extreme caution and attempt to determine the location of the fire.
- In the event of a small fire, personnel in the area may attempt to extinguish or control the fire.
- In the event of a large fire or explosion, all personnel should proceed to the pre-arranged muster area and await further instructions.

External Notifications

- Make the following EXTERNAL NOTIFICATIONS, or request that they be made immediately:

1. Fire Department (as necessary).
2. Police or Sheriff's Department (as necessary).
3. Other outside resources (as necessary).

Internal Notifications

- Make the following INTERNAL NOTIFICATIONS immediately:

1. Terminal Management.
2. Regional Manager.
3. Marine Emergency Hotline (Marine Group).

Note: In the event of the absence or inability to contact one of the above referenced parties, the calling party should assume the responsibility to continue notifications up the management chain.

Personnel Injury

In the event of a personnel injury during transfer operations, the following response actions should be followed:

Initial Response

- Terminate transfer operations.
- If prudent, move injured party to a safe/stable location.
- Notify Vessel PIC and Master.

External Notifications

- Make the following EXTERNAL NOTIFICATIONS, or request that they be made immediately:

1. Emergency Medical Services (as necessary).

2. Fire Department (as necessary).
3. Police or Sheriff's Department (as necessary).
4. Other outside resources (as necessary).

Internal Notifications

- Make the following INTERNAL NOTIFICATIONS immediately:

1. Terminal Manager.
2. Terminal Superintendent.
3. Regional Manager

NOTE: In the event of the absence or inability to contact one of the above referenced parties, the calling party should assume the responsibility to continue notifications up the management chain.

Vessel Breakaway

In the event of a vessel breakaway, the following response actions should be observed:

Initial Response

- Terminate transfer operations and close all transfer valves.
- Deploy tug (in the event it is on standby away from the tow) to retrieve the barge(s) and resecure mooring to the dock.

Associated Procedures

- In the event of oil spill, fire/explosion, or personnel injury initiate the appropriate procedures detailed in this section.

Severe Weather Conditions

In the event of severe weather (severe thunderstorms, high winds, etc.), the following safeguards should be observed:

Initial Response

- Terminate transfer operations and close all transfer valves.
- Notify Vessel Master.
- If vessel remains at dock, ensure adequate mooring.
- Secure the area, pump out sump systems, and evacuate as necessary.
- Standby for further instructions and for conditions to improve.

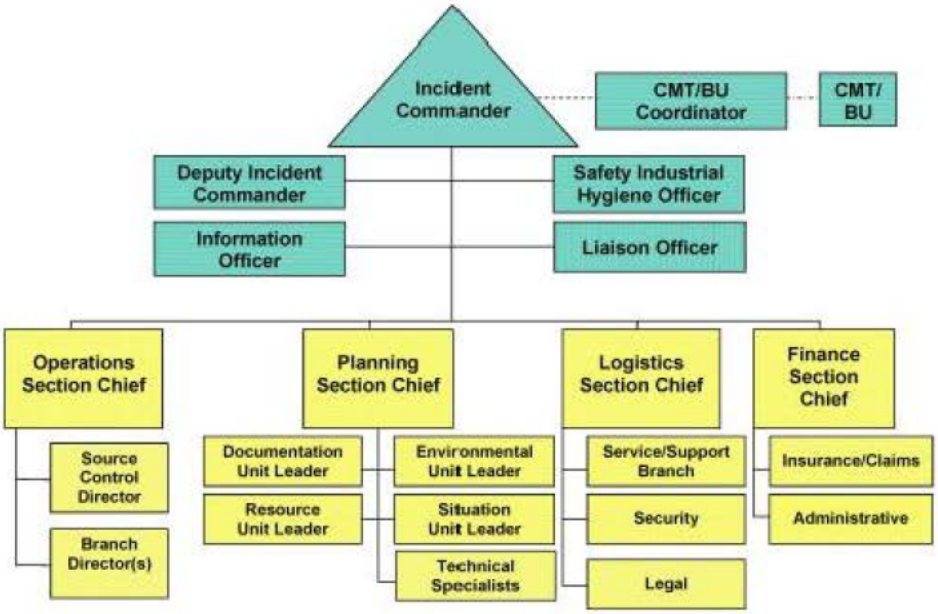
Associated Procedures

- In the event of oil spill, fire/explosion, or personnel injury initiate the procedures detailed herein.

(b) (7)(F)

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.

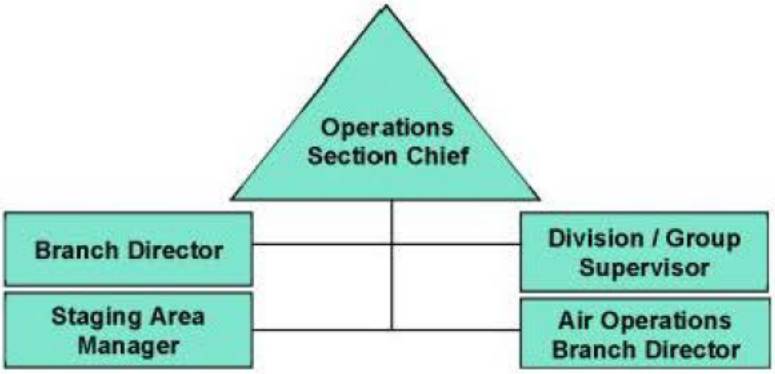
SAFETY OFFICER

- 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 medial reports originating within the Branch.

DIVISION/GROUP SUPERVISOR

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

STAGING AREA MANAGER

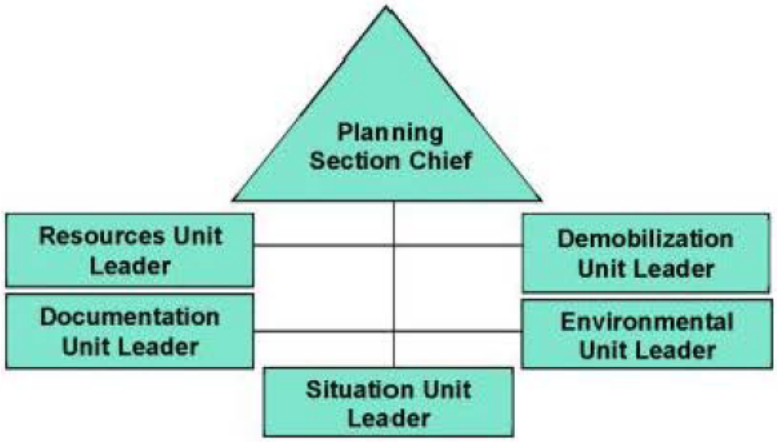
- Establish Staging Area layout.
- Determine any support needs for equipment, feeding, sanitation and security.
- Establish check-in function as appropriate.
- Post areas for identification and traffic control.
- Request maintenance service for equipment at Staging Area as appropriate.
- Respond to request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

- Obtain and issue receipts for radio equipment and other supplies distributed and received at Staging Area.
- Determine required resource levels from the OPS.
- Advise the OPS when reserve levels reach minimums.
- Maintain and provide status to Resource Unit of all resources in Staging Area.
- Demobilize Staging Area in accordance with the Incident Demobilization Plan.

AIR OPERATIONS BRANCH DIRECTOR

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

PLANNING 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.

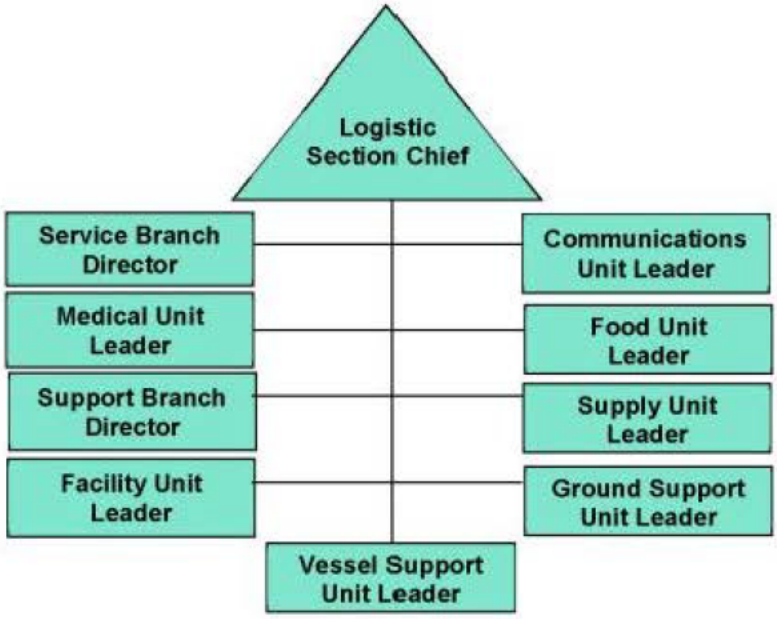
DEMOBILIZATION UNIT LEADER

- 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

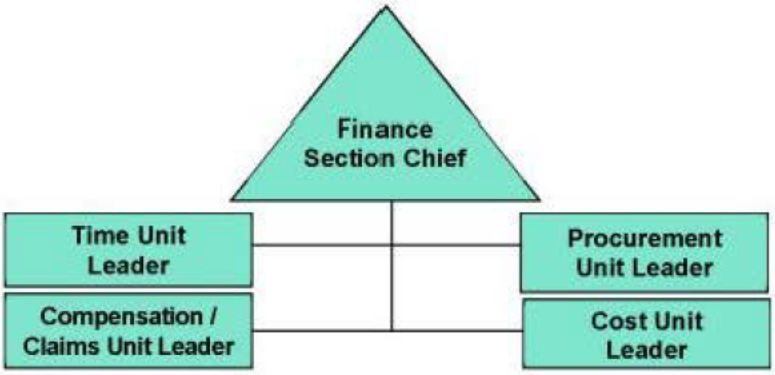
GROUND SUPPORT UNIT LEADER

- 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.

RESOURCES

EMERGENCY RESPONSE EQUIPMENT	
Date of Last Update:	**Last Inspection or Response Equipment Test Date:**
Inspected By:	**Last Deployment Drill Date:**
Inspection Frequency:	**Deployment Frequency:**
Fire/Rescue Equipment:	

Fire Fighting and Rescue Equipment			
Type/Year	**Operational Status**	**Quantity**	**Location**
30# dry chemical extinguisher	Ready	27	See Detailed list in Appendix H
8" line connected directly to the City ofr Los Angeles water main at 80-90 psi	Ready	1	See Appendix H for location and condition
Fire water monitors	Ready	32	See Appendix H for location and condition
Fire Water hydrants	Ready	5	See Appendix H for location and conditions
Stationary reels containing 100' of 1 1/2" hose	Ready	6	See Appendix H for location and conditions
Emergency shower and eye bath	Ready	3	See Appendix H for location and conditions
Emergency/fire alarm (can be activated at three locations)	Ready	1	See Appendix H for location and conditions
Fire boat connections (1 each end of dock)	Ready	2	See Appendix H for location and conditions
Pumper truck connection header (located at main enterence)	Ready	2	See Appendix H for location and conditions
Fire pump, diesel driven 2,500 GPM	Ready	2	See Appendix H for location and conditions
4,500 gallon tank of AFFF-ATC fire fighting foam	Ready	1	See Appendix H for location and conditions
Semi fixed foam induction system in tank farm	Ready	1	See Appendix H for location and conditions
Fire water pump, electric driven 2,500 GPM	Ready	1	See Appendix H for location and conditions

FACILITY RESPONSE EQUIPMENT	
Date of Last Update:	**Last Inspection or Response Equipment Test Date:**
Inspected By:	**Last Deployment Drill Date:**
Inspection Frequency:	**Deployment Frequency:**
Hazardous Material/Oil Spill Equipment:	

SKIMMERS/PUMPS						
Type/Model/ Year	**Operational Status**	**Quantity**	**Capacity bbl/day**	**Daily Effective Recovery Rate**	**Storage Location(s)**	**Date Fuel Last Changed**
		None				

FACILITY RESPONSE EQUIPMENT (Cont'd)	
Date of Last Update:	**Last Inspection or Response Equipment Test Date:**
Inspected By:	**Last Deployment Drill Date:**
Inspection Frequency:	**Deployment Frequency:**
Hazardous Material/Oil Spill Equipment:	

BOOM				
Type/Model/ Year	**Operational Status**	**Size (Length)**	**Containment Area**	**Storage Location(s)**
Petro-Barrier (*Note: Boom is placed in the water for the aid of OSROs. Shell does not deploy boom.)	Ready	1,610 ft		Berth 167 South to Berth 169
Sorbent Boom (*Note: Boom is placed in the water for the aid of OSROs. Shell does not deploy boom.)	Ready	8' x 10'		Can Shack

FACILITY RESPONSE EQUIPMENT (Cont'd)	
Date of Last Update:	**Last Inspection or Response Equipment Test Date:**
Inspected By:	**Last Deployment Drill Date:**
Inspection Frequency:	**Deployment Frequency:**
Hazardous Material/Oil Spill Equipment:	

CHEMICAL DISPERSANTS						
Type	**Operational Status**	**Quantity/ Amount**	**Date Purchased**	**Treatment Capacity**	**Storage Location(s)**	**Date Changed**
		None				

FACILITY RESPONSE EQUIPMENT (Cont'd)	
Date of Last Update:	**Last Inspection or Response Equipment Test Date:**
Inspected By:	**Last Deployment Drill Date:**
Inspection Frequency:	**Deployment Frequency:**
Hazardous Material/Oil Spill Equipment:	

DISPERSANT DISPENSING EQUIPMENT				
Type/Year	**Operational Status**	**Capacity**	**Storage Location(s)**	**Response Time**
	None			

FACILITY RESPONSE EQUIPMENT (Cont'd)	
Date of Last Update:	**Last Inspection or Response Equipment Test Date:**
Inspected By:	**Last Deployment Drill Date:**
Inspection Frequency:	**Deployment Frequency:**
Hazardous Material/Oil Spill Equipment:	

SORBENTS				
Brand Name/Type	**Operational Status**	**Size**	**Treatment Capacity**	**Storage Location**
Pads	Ready	100 pad/box	Sorbent Pads	Can Shack

FACILITY RESPONSE EQUIPMENT (Cont'd)	
Date of Last Update:	**Last Inspection or Response Equipment Test Date:**
Inspected By:	**Last Deployment Drill Date:**
Inspection Frequency:	**Deployment Frequency:**
Hazardous Material/Oil Spill Equipment:	

HAND TOOLS			
Type/Year	**Operational Status**	**Quantity**	**Storage Location**
	None		

FACILITY RESPONSE EQUIPMENT (Cont'd)	
Date of Last Update:	**Last Inspection or Response Equipment Test Date:**
Inspected By:	**Last Deployment Drill Date:**
Inspection Frequency:	**Deployment Frequency:**
Hazardous Material/Oil Spill Equipment:	

COMMUNICATION EQUIPMENT			
Type/Year	**Operational Status**	**Quantity**	**Storage Location(s)/Number**
Intercoms/ PA Systems - RCRA	Ready		Between main gate and main office
Portable Radios - RCRA	Ready		Carried by Operations personnel
Telephone - RCRA	Ready		Office - Refer to section 2
Cellular Phones - RCRA	Ready		Plant Personnel - Refer to Section 2

FACILITY RESPONSE EQUIPMENT (Cont'd)	
Date of Last Update:	**Last Inspection or Response Equipment Test Date:**
Inspected By:	**Last Deployment Drill Date:**
Inspection Frequency:	**Deployment Frequency:**
Hazardous Material/Oil Spill Equipment:	

PERSONAL PROTECTIVE EQUIPMENT			
Type/Year	**Operational Status**	**Quantity**	**Storage Location**
	None		

FACILITY RESPONSE EQUIPMENT (Cont'd)	
Date of Last Update:	**Last Inspection or Response Equipment Test Date:**
Inspected By:	**Last Deployment Drill Date:**
Inspection Frequency:	**Deployment Frequency:**
Hazardous Material/Oil Spill Equipment:	

OTHER EQUIPMENT			
Type/Year	**Operational Status**	**Quantity**	**Storage Location**
Exhaust hoods - RCRA	Ready		Lab
Berms/Dikes - RCRA	Ready		Refer to SPCC Section 4

CONTRACTED RESPONSE RESOURCES

USCG CLASSIFIED OIL SPILL REMOVAL ORGANIZATION (OSRO)							
OSRO Name	Response Time	Environment Type	Facility Classification Level				High Volume
			MM	W1	W2	W3	
Double Barrel	60 minutes (maximum)	River/Canal	Y				No
		Inland	Y				
Marine Spill Response Corporation (MSRC)	60 minutes (maximum)	River/Canal	Y	Y	Y	Y	No
		Inland	Y	Y	Y	Y	
		Offshore			Y	Y	

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

EVACUATION PLAN

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

In case of an emergency within the Facility

In case of an emergency within the Facility that would necessitate evacuation, some or all of the following steps are taken, depending on type of emergency and circumstances:

- Sound an alarm or give verbal alarm.
- Call 911.
- Shut down loading, unloading, pipeline, and marine operations.
- Evacuate trucks from facility (provided that a safe operating environment exists).
- Divert incoming trucks/vessels to a safe distance away from the Facility.
- Evacuate all personnel to safe areas.

Community evacuation plans are in place and local authorities coordinate all community evacuations.

Evacuation Diagram

Evacuation Diagram
Click to view

(b) (7)(F)

Area Map

Area Map
Click to view

AREA MAP

RESPONSE MANAGEMENT ASSOCIATES

0 1 2 3 4

5/8 inch = 1 miles

Facility Diagram

Facility Diagram
Click to view

(b) (7)(F)

FACILITY RESPONSE PLAN

Mormon Island Marine Terminal

Prepared for:

Equilon Enterprises LLC, dba Shell Oil Products US
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 I Fax: (281) 320-9700
www.obriensrm.com

GENERAL INFORMATION	
Owner/Operator of Facility:	Equilon Enterprises LLC, dba Shell Oil Products US
Owner/Operator's Address:	777 Walker Street Two Shell Plaza Houston, Texas 77002
Owner/Operator's Telephone Numbers:	(713) 241-2838
Facility Name:	Mormon Island Marine Terminal
Facility's Physical Address:	Berth 167, 168 & 169 Wilmington, California 90744
Facility's Phone Number:	(310) 834-2638
(b) (7)(F) [redacted]	
Dun & Bradstreet Number:	004294737
North American Industry Classification System (NAICS):	424710
Number of Aboveground Oil Storage Tanks:	12 (Aboveground Storage Tanks) 0 (Buried Storage Tanks) 8 (Other Sources)
(b) (7)(F) [redacted]	
Facility Distance to Navigable Water:	☒ 0 - 1/4 mile ☐ 1/2 - 1 mile ☐ 1/4 - 1/2 mile ☐ >1 mile

Click to view - Mormon Island PHMSA

U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

400 Seventh Street, S.W.
Washington, D.C. 20590

September 20, 2005

Plan Approval

Certified Mail – 7004 2510 0007 5236 8664 Return Receipt Requested

Mr. Gerald Harper
Shell Oil Products US
777 Walker Street, 2 Shell Plaza Room 1505C
P.O Box 2099
Houston, TX 77252-2099

Re: OPS Sequence Number 1612 (Mormon Island Marine Terminal)

Dear Mr. Harper,

The Office of Pipeline Safety (OPS), Pipeline and Hazardous Materials Safety Administration (PHMSA) reviewed the July and August 2005 revisions for the Facility Response Plan (FRP). RMA submitted the plan revisions to address the finding in our review (OPS letter dated 20 April 2005). The revised plan satisfactorily addressed our finding. Enclosed is the result of the review. PHMSA appreciates your effort to address them.

Please note that although we have determined that your plan now has all of the required response planning elements specified in 49 CFR 194, *Response Plans for Onshore Transportation-Related Oil Pipelines*, we have not analyzed your plan's content to determine if it fully complies with the requirements of the regulation. We may do so in the future as part of our ongoing quality control activities.

You submitted this plan to us on 25 August 2003. As required by the regulation, we will review the entire plan every five years from the last plan submission date. At that time, you can either submit a revised plan or a letter informing us that the plan on file with us is current for the required review. The next submission date will be 25 August 2008.

As shown above, OPS is now part of a new U.S. Department of Transportation administration, PHMSA. The Research and Special Programs Administration (RSPA) no longer exists in the department. [redacted]

Ext. # 9791 File # 2511, 2531 Act. # 9600

Please refer to the "OPS Plan Sequence Number" listed above in all plan-related correspondence, including e-mails. E-mail is the preferred method for submitting inquiries, questions and comments to me at le.herrick@dot.gov. You can also telephone me at (202) 366-5523 or fax me at (202) 366-4566. Thank you for your cooperation.

Sincerely,

L. E. Herrick
Response Plans Officer

Enclosure

cc: EPA Region IX
USCG MSO LA/LB
CA OSPR

Click to view - California Natural Resources Agency

California Natural Resources Agency
DEPARTMENT OF FISH AND GAME
Office of Spill Prevention and Response
1700 K. Street, Ste 250
Sacramento, California 95811
Telephone: (916) 445-9338
www.dfg.ca.gov

ARNOLD SCHWARZENEGGER, Governor
John McCamman, Director

November 8, 2010

Mr. Billy Powell
Shell Oil Products
910 Louisiana Street, OSP 623
Houston, TX 77062

Dear Mr. Powell:

This letter is in response to your recent correspondence requesting drill credit for the exercise conducted on March 23, 2010, for the following listed oil spill contingency plan(s):

Shell (EQUILON)	**Control # F5-19-0188**
Shell Oil Products US	**Control # F2-07-0114**
Shell Pipeline Company LP	**Control # P4-15-0008**
Shell International Trading & Shipping Co. Ltd.	**Control # 08-01-1659**

After careful review of the records, documents, and evaluation submitted to our office, your request for credit is approved.

Regulations require that you maintain all exercise related records for a minimum of three years. If changes to your contingency plan resulted from this exercise, please ensure that a copy of those changes is forwarded to our office.

The California Code of Regulations regarding drills and exercises are available at http://www.dfg.ca.gov/Ospr/regulation/index.html. Printed regulations can be obtained by contacting Barclay's Publishing House at (800) 888-3600.

If you have any questions, contact Ms. Barbara Foster, Drills and Exercises Program, at telephone number (916) 327-9406, or by e-mail at bfoster@ospr.dfg.ca.gov.

Sincerely,

Stephen L. Edinger

Stephen L. Edinger
Administrator

Enclosure

cc: Ms. Barbara Foster
Drills Unit
Sacramento, California

FACILITY DRILL AND EXERCISE REVIEW AND CREDIT FORM

Plan Name:	Plan Control Number:
Shell (EQUILON)	Control # F5-19-0188
Shell Oil Products US	Control # F2-07-0114
Shell Pipeline Company LP	Control # P4-15-0008
Shell International Trading & Shipping Co. Ltd.	Control # 08-01-1659

Drill Reviewer: Barbara Foster

Status: Approved

Date of Drill: March 23, 2010

Location of Drill: Portland, Maine

Contact for Drill: Billy Powell

Telephone Number: (713) 241-7356

Facsimile Number:

OSPR Representative: N/A

Type of Drill: Table Top

Objectives Credited:

2	3.1	3.1.1	3.1.2	3.1.3	3.1.4
3.2	3.2.1	3.2.2	3.2.3	3.2.4	3.2.5
3.2.6	3.2.7	4	4.1	4.3	4.4
5	6	7	7.1	7.2	8
8.1	8.2	8.3	8.4	9	10
10.1	10.2	11	11.1	11.2	11.3
12	12.1	12.2	12.3	12.4	12.5
13	13.1	13.2	14	14.1	14.2
14.3	15				

Click to view Executability Statement

FACILITY EXECUTABILITY STATEMENT

The below statement, required by California Code of Regulations Title 14, Division 1, subdivision 4, Chapter 3, subchapter 3, §817.02(a)(1)(D), has been signed by an executive within the plan holder's management. The undersigned has training, knowledge, and experience in the area of oil spill prevention and response, has the authority to fully implement the oil spill contingency plan written within this Facility Response Plan, and will review this Plan for accuracy, feasibility, and executability.

"I certify, to the best of my knowledge and belief, under penalty of perjury under the laws of the State of California, that the information contained in this contingency plan is true and correct and that the plan is both feasible and executable."

Rick Roper
Terminal Manager

2-7-2013
Date

CERTIFICATION OF THE APPLICABILITY OF THE EPA SUBSTANTIAL HARM CRITERIA

FACILITY NAME: Mormon Island Marine Terminal

FACILITY ADDRESS: Berth 167, 168 & 169

Wilmington, California 90744

1. Does the facility transfer oil over water to or from vessels ***and*** does the facility have a total oil storage capacity greater than or equal to 42,000 gallons? Yes ✓ No

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons ***and*** does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area? Yes No ✓

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons ***and*** is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III to 40 CFR Part 112 or a comparable formula1) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Plans: Fish and Wildlife and Sensitive Environments" (59 FR 14713, March 29, 1994) and the applicable Area Contingency Plan. Yes ✓ No

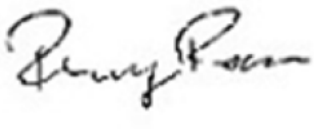
4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons ***and*** is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III to 40 CFR Part 112 or a comparable formula1) such that a discharge from the facility would shut down a public drinking water intake2? Yes No ✓

5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons ***and*** has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years? Yes No ✓

1. If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.
2. For the purposes of 40 CFR part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).

I certify:

- Under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.
- To the United States Coast Guard that the Company has ensured, by contract or other approved means as described in section 154.1028(a), the availability of the necessary private personnel and equipment to respond, to the maximum extent practicable to a worst case discharge or substantial threat of such a discharge from the Facility and that the plan meets the requirements of Subpart F to Part 154.



Terminal Manager

Signature | Title

Rick Roper | 02/07/2013

Name (please type or print) | Date

NOTE: 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. O'Brien's Response Management Inc. (O'Brien'sRM) provided consulting and plan development services in the preparation of this plan utilizing data provided by the owner/operator and/or the Facility. 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: Mormon Island Marine Terminal

FACILITY ADDRESS: Berth 167, 168 & 169

Wilmington, California 90744

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

   Yes_____ No__✓__

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

   Yes_____ No__✓__

3. Has any line section experienced two or more reportable releases, as defined in Sec. 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 Sec. 195.406 that corresponds to a stress level greater than 50 percent of the specified minimum yield strength of the pipe? or

   Yes_____ No__✓__

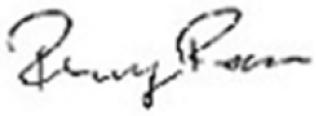
5. Is any line located within a 5-mile (8 km) radius of potentially affected public drinking water intakes and could reasonably be expected to reach public drinking water intakes? or

   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_____

Equilon Enterprises LLC, dba Shell Oil Products US hereby certifies to the Pipeline and Hazardous Materials Safety Administration of the Department of Transportation that we have identified and ensured, by contract or by other means, the availability of personnel and equipment to respond, to the maximum extent practicable, to a worst case discharge.



Terminal Manager

Signature | Title

Rick Roper | 02/07/2013

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)**
May, 2012	All	Issued Entire New Manual Including Annual Review
August, 2012	ERAP, Forward, Sections 2 and 4	ERAP-1, ERAP-8, ERAP-16, ERAP-38, ERAP-40, ERAP-47, ERAP-62, ERAP-65, ERAP-71, ERAP-72, FWD-6, FWD-7, FWD-8, 2-7, 2-8, 2-9, 2-12, 2-17, 4-10, 4-14, 4-17 and 4-23 (ePlanPro Version 2.27.76)
June, 2013	ERAP, Foreword, Section 2, Section 4, Section 6, Appendix H	Annual Review including management documents, ecological maps, bomb threat checklist and personnel changes on pages ERAP-1, ERAP-6 through ERAP-9, ERAP-15, ERAP-16, ERAP-44, ERAP-63, ERAP-65, ERAP-66, ERAP-72, ERAP-73, FWD-6, FWD-7, FWD-8. FWD-9, FWD-10, FWD-11, 2-7, 2-8, 2-9, 2-10, 2-16, 2-17, 4-10, 4-14, 4-17, 4-23, 6-12 through 6-35, H-2 through H-19 (ePlanPro Version 2.38.144)

DISTRIBUTION LIST	
COPY NUMBER	**PLAN HOLDER**
1	U.S. Environmental Protection Agency - Region IX Mr. Steve Calanog (SFD-9-2) 75 Hawthorne Street San Francisco, California 94105
2	Shell Oil Products US Marine Terminal Control Room 300 Falcon St., Berth 168 Wilmington, California 90744
3	Shell Oil Products US Facilities Manager South Carson Terminal 20945 S. Wilmington Avenue Carson, California 90810-1039
4	Shell Oil Products US Security / Emergency Response Rep Carson Terminal 20945 S. Wilmington Avenue Carson, California 90810-1039
5	California State Lands Commission Marine Facilities Division 200 Oceangate, 9th Floor Long Beach, California 90802
6	Shell Oil Products US - Chemical Facility Mormon Island / Chemical Manager Carson Distribution Facility 20945 S. Wilmington Avenue Carson, California 90810-1039
7	U.S. Coast Guard (COTP) Facilities Branch Sector Los Angeles/Long Beach 1001 South Seaside Ave., #20 San Pedro, California 90731-7350
8	Shell Oil Products US - Mormon Island Mormon Island / Chemical Manager 300 Falcon St., Berth 168 Wilmington, California 90744
9	Shell Oil Products US Carson/So Cal PL Mgr Carson Terminal 20945 S. Wilmington Avenue Carson, California 90810-1039
10	California Department of Fish and Game Oil Spill Prevention Specialist 4665 Lampson Avenue, Suite C Los Alamitos, California 90720

DISTRIBUTION LIST (Cont'd)	
COPY NUMBER	**PLAN HOLDER**
(2) CDs Only	U.S. Department of Transportation Melanie Barber Pipeline and Hazardous Material Safety Administration 1200 New Jersey Avenue SE-E-22-321 Washington, District Of Columbia 20590
(CD only)	Los Angeles City Fire Department Hazardous Material Section 200 N. Main Street, Room 970 Los Angeles, California 90012
(CD only)	Community Hospital of Long Beach Administrator 1720 Terminal Avenue Long Beach, California 90804-3026
(ERAP Only) 1 copy	Shell Oil Products US Dock - Mormon Island Marine Terminal Berth 168 Wilmington, California 90744
(ERAP Only) 1 copy	Shell Oil Products US Dock - Mormon Island Marine Terminal Berth 169 Wilmington, California 90744
(ERAP Only) 1 copy	Shell Oil Products US Michael Huang 20945 S. Wilmington Ave. Carson, California 90810
(ERAP Only) 1 copy	Shell Oil Products US Tony Fernandez Carson Terminal 20945 S. Wilmington Avenue Carson, California 90810-1039
(ERAP Only) 1 copy	Shell Oil Products US Rick Roper 20945 S. Wilmington Ave. Carson, California 90810-1039
(ERAP Only) 1 copy	Shell Oil Products US Lisa Barfield 20945 S. Wilmington Ave. Carson, California 90810-1039
(ERAP Only) 1 copy	Shell Oil Products US Rich Walck 20945 S. Wilmington Ave. Carson, California 90810-1039

DISTRIBUTION LIST (Cont'd)	
COPY NUMBER	**PLAN HOLDER**
(ERAP Only) 1 copy	Shell Oil Products US Toni Atwell 20945 S. Wilmington Ave. Carson, California 90810
(ERAP Only) 1 Copy	Shell Oil Products US Noel Kurai 20945 S. Wilmington Ave. Carson, California 90810
(ERAP Only) 1 copy	Shell Oil Products US Carlton Jordan 20945 S. Wilmington Ave. Carson, California 90810

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

The purpose of this Facility Response Plan ("Plan") is to assist the Mormon Island Marine Terminal (“Facility") personnel prepare for and respond quickly and safely to an incident at the Facility. The Plan provides techniques and guidelines for achieving an efficient, coordinated and effective response to an incident which may occur at the Facility.

The specific objectives of the Plan are to:

- Establish response team(s) as described in Section 4.0, assign individuals to fill the positions on the team(s) and define the roles and responsibilities of team members.
- Define notification, activation, and mobilization procedures to be followed when an incident occurs.
- Define organizational lines of responsibility to be adhered to during a response operation.
- Ensure compliance with certain federal, state, and local regulatory requirements. A summary of the applicable regulations addressed by this plan is provided in Section 1.5.
- Ensure consistency with the National Contingency Plan and Area Contingency Plan(s) for the area of operation.

1.2 FORMAT AND SCOPE OF PLAN

This Plan has been developed under the general guidance published in the Federal Register by the EPA entitled “The National Response Team’s Integrated Contingency Plan” (61 FR 28642). The NRT guidance was developed in conjunction with the Environmental Protection Agency, Department of Transportation (U.S. Coast Guard, Research and Special Programs Administration, replaced by PHMSA), Department of the Interior (Minerals Management Service, replaced by BSEE), and the Department of Labor (Occupational Safety and Health Administration). This guidance also provides for state and local contingency planning requirements to be incorporated into the Plan.

This Plan contains prioritized procedures for Facility personnel to mitigate or prevent any discharge resulting from the operations of the Facility. A description of the operations conducted at the Facility is provided in Figure 1.1 with additional information provided in the "Hazard Evaluation" located in Appendix C.

1.3 PLAN DISTRIBUTION PROCEDURES

Distribution will be handled in the following manner:

- This plan is designed to be electronically based. Access to the Plan will be through an interactive computer interface, which will provide efficient and straightforward guidance for the response team.
- In the event that the electronic plan is inaccessible, bound copies of the plan are available to the response team for their use during an emergency incident.
- Distribution of copies of the Plan is controlled by the number on the front cover. A Distribution List is provided in the Foreword to facilitate control.
- Company personnel who may be called upon to provide assistance during emergency response activities will have access to the Plan for their use and training.
- Certain individuals will be assigned to maintain bound copies of the Plan. It is the responsibility of any person holding a copy of the Plan to ensure that the copy is transferred to their replacement in the event of reassignment or change in responsibility.
- Copies of the Plan will also be distributed to various regulatory agencies. The list of agencies and control numbers is provided in the Distribution List.

1.4 PLAN REVIEW AND UPDATE PROCEDURES

Annual Review/Update

The Facility will coordinate the following Plan review and update procedures.

- Annually review the relevant portions of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) and applicable Area Contingency Plan(s) and, if necessary, revise the FRP to ensure consistency.
- At least once each year, review and make appropriate revisions as required by operational or organizational changes.
- At least once each year, review and make appropriate revisions as required by changes in the names and telephone numbers detailed in Section 2.0.
- Opportunities may occur during response team tabletop exercises or actual emergency responses which may initiate Plan review/update.

Agency Review/Revision Requirements

AGENCY TIMING REQUIREMENTS		
AGENCY	**TIMING FOR PLAN REVIEWS**	**TIMING FOR SUBMISSIONS OF SIGNIFICANT PLAN REVISIONS**
EPA	Periodically but not to exceed five (5) years.	60 days
USCG	Within one (1) month of the anniversary of COTP approval letter.	30 days
DOT/PHMSA	Periodically but not to exceed five (5) years.	30 days
OSPR	Periodically but not to exceed five (5) years.	30 days

EPA Requires any significant changes (see below) that materially may affect the response to a Worst Case Discharge to be submitted within 60 days of the change to the EPA's Regional Office [40 CFR 112.20(d)(1)]. If the Facility is a significant and substantial harm facility, EPA will review the Plan periodically (not to exceed five years). The Facility will submit non-material changes to EPA as the revisions occur.

USCG Requires any significant changes (see below) to be submitted within 30 days to the COTP Sector [33 CFR 154.1065(b)]. The Plan annual review must occur within one (1) month of the anniversary date of the USCG approval letter. The revisions become effective not later than 30 days from their submission to the COTP unless the COTP indicates otherwise in writing. If no revisions are required, the facility owner or operator shall indicate the completion of the annual review on the Revision Record. The Facility must resubmit an updated plan every 5 years from the date of Plan approval. All re-submitted response plans must be accompanied by a cover letter containing a detailed listing of all revisions.

DOT/PHMSA The Facility shall revise and resubmit changes to the Pipeline Response Plans Officer within 30 days for new or different operating conditions or information which will substantially affect the implementation of the response plan [49 CFR 194.121]. For a substantial harm facility, the Facility will review the Plan at least every five years of the most recent date of submission and resubmit changed portions of the Plan. For a significant and substantial harm facility, the review will be conducted within 5 years of the date of approval. If the Plan is still current, the Agency will accept a letter which serves as the resubmitted plan for PHMSA to review for completeness.

OSPR The Facility is required to submit changes within 24 hours of the change to the OSPR Administrator.

RCRA Revision Requirements

Whenever a change that may materially affect the Facility's RCRA Hazardous Waste Contingency Plan occurs, the Facility will be responsible for providing the appropriate revisions to the Plan. Such changes include but are not limited to:

- The applicable federal and/or state regulations are revised;
- The Plan fails in an emergency;
- A change in the Facility's configuration occurs that materially increases the potential for fires, explosion, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency;
- Changes occur to the list of emergency coordinates included in the Plan; and/or
- Changes occur to the list of emergency equipment.

Should no changes as mentioned above occur on an annual basis, the Facility will nevertheless undertake a review of the Plan to ensure that changes have not been made and that the Plan is still effective when responding to an emergency.

The Facility will provide revisions of the Plan to the appropriate local agencies and medical organizations whenever the Plan is updated.

The Facility shall revise and resubmit revised portions of the Plan for each change that may materially affect the response to a Worst Case Discharge, including:

CONDITIONS REQUIRING CHANGES	EPA	USCG	DOT/ PHMSA	OSPR
Material change in the Facility's spill prevention and emergency response procedures.	✓	✓	✓	✓
Change in the Facility's configuration that materially alters the information included in the Plan.	✓	✓	✓	✓
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).	✓	✓	✓	✓
Material change in capabilities of the Oil Spill Removal Organization(s) (OSROs) that provide equipment and personnel.	✓	✓	✓	✓
Any other changes that materially affect the implementation of the Plan.	✓	✓	✓	✓
A change in the listings of economically important or environmentally sensitive areas identified in the applicable ACP in effect six (6) months prior to the plan review.		✓	✓	✓
Relocation or replacement of portions of the Facility (including the Pipeline) which in any way substantially affect the information included in the Plan, such as a change to the Worst Case Discharge Volume.			✓	✓
Emergency response procedures.			✓	✓
An extension of the existing pipeline or construction of a new pipeline in a response zone not covered by the previously approved plan.			✓	
The qualified individual.			✓	
A change in the NCP or an ACP that has significant impact on the equipment appropriate for response activities.			✓	

1.5 REGULATORY COMPLIANCE

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

- Federal Oil Pollution Act of 1990: U.S. EPA Final Rule for Non-Transportation Related On-shore Facilities as published in 40 CFR Part 112.20.
- U.S. EPA Resources Conservation and Recovery Act (RCRA) Regulation as published in 40 CFR Part 265.50-265.56.
- Federal Oil Pollution Act of 1990: U.S. Coast Guard Final Rule for Marine Transportation Related Facilities as published in 33 CFR Part 154.
- Federal Oil Pollution Act of 1990: U.S. DOT Final Rule for Transportation Related On-shore Facilities as published in 49 CFR 194.
- California Final Code of Regulations Title 14, Division 1, Subdivision 4 - Office of Oil Spill Prevention and Response, Chapter 3 - Oil Spill Prevention and Response Planning, Subchapter 3 Oil Spill Contingency Plans, Sections 815-817.
- OSHA's HAZWOPER Regulation as published in 29 CFR 1910.120.
- OSHA's Emergency Action Plan Regulation as published in 29 CFR 1910.38(a), as applicable.

This Plan is consistent with the most recent version of the applicable Area Contingency Plans (ACPs). The applicable ACPs for the Facility are:

- USCG / OSPR, Los Angeles / Long Beach South.

This Plan is consistent with the most recent version of the National Contingency Plan (NCP). The NCP for the Facility is:

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

FIGURE 1.1
FACILITY INFORMATION

GENERAL INFORMATION		
Facility Name:	Mormon Island Marine Terminal	
	Physical Address Berth 167, 168 & 169 Wilmington, California 90744	***Mailing Address*** Berth 167, 168 & 169 Wilmington, California 90744
24 hr Telephone #:	(310) 834-2638	
Fax #:	(310) 816-2388	
EPA FRP #:	09A0167	
USCG Tracking:	LOSMS019	
OSPR Tracking:	F5-19-0188 (COFR# 20848-01-003)	
NAICS:	424710	
(b) (7)(F)	[redacted]	
Dun & Bradstreet Number:	004294737	
Company:	***Owner: Physical Address*** Equilon Enterprises LLC, dba Shell Oil Products US 777 Walker Street Two Shell Plaza Houston, Texas 77002	***Operator: Physical Address*** Shell Oil Products US Berth 168 & 169 Wilmington, California 90744

PLAN CONTACTS	
Plan Correspondent:	Carrie Hodgins S&D HSSE/SD Manager North America Shell PO Box 2648 Houston, Texas 77252-2648 (713) 241-2838 (Office) (b) (6) [redacted] (713) 516-3842 (Cell) (713) 241-2997 (Fax)
Agent for Service of Process:	Michael Huang Facilities Manager South (IC) Shell 20945 S. Wilmington Ave. Carson, California 90810 (310) 816-2080 (Office) (b) (6) [redacted] (310) 628-2285 (Cell) (713) 423-0165 (Fax)

FACILITY LOCATION

County:	Los Angeles			
Area Map:	**See Figure 1.2**			
Facility Diagram:	**See Figure 1.3**			
Wellhead Protection Area:	No Impact			
Facility Distance to Navigable Water:	☒	0 - 1/4 mile	☐	1/2 - 1 mile
	☐	1/4 - 1/2 mile	☐	>1 mile

Landside Directions: The Mormon Island Marine Terminal is located at the southern end of the City of Los Angeles, in the Wilmington District and within the Port of Los Angeles boundaries. The site covers a total ground and dock area of approximately 10.3 acres, and is leased from the Los Angeles Harbor Department as Site 4 Marine Oil Terminal, Mormon Island District.

Waterside Directions: The Facility occupies the southwestern end of a peninsula along the east side of Slip 1 of the Los Angeles Harbor, at Berths 167, 168, and 169.

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:		
Michael Huang	Facilities Manager South (IC)	Call Cell Phone (Home) (310) 628-2285 (Cellular)
Alt. Qualified Individual:		
Rick Roper	MI / Chemical Terminals Manager	(b) (6) (310) 345-6180 (Cellular)
Lisa Barfield	Carson/So. Cal P/L Terminal Manager	(b) (6) (310) 678-1983 (Cellular)

PHYSICAL DESCRIPTION - GENERAL

Description of Operation:

The Facility temporarily stores petroleum products before they are transferred to other facilities. The petroleum products handled by the Facility include: gasoline, jet fuel, diesel, ethanol. The Facility has a total working storage capacity of (b) (7)(F) with an average storage volume of (b) (7)(F). Daily throughput is approximately 50,000 barrels. All product is received by vessels or pipelines.

Hours of Operation:	24 hours/day, 365 days per year.
Approximate daily throughput:	56,000 Bbls/Day
Date of Initial Storage:	1926

Products Handled:

- Jet Fuel
- Diesel Fuel
- Ethanol
- Gasoline

Note: A Product Specific Response Consideration sheet is provided at the end of Section 3.0. The Facility also maintains MSDS reference information on the products stored.

PHYSICAL DESCRIPTION - GENERAL (Cont'd)	
Seasonal Hydrographic and Climate Conditions:	Air temperatures range from 30° to 95°F. Water temperature ranges from 52° to 54°F. Winds are generally southwest at 15 to 25 mph in afternoons from April to September. Winds are typically calm in other months except during storms. The area generally receives 18 to 20 inches of rainfall per year during October to May.
Physical Geographic Features	See Figures 1.2, 1.3 and Environmental Sensitivity Maps in Section 6.

PHYSICAL DESCRIPTION - MARINE OPERATIONS

General Operation:

The Facility has a total active storage capacity of (b) (7)(F) with an average storage volume of 20,000 barrels of products. Daily throughput is approximately 50,000 barrels. An additional 45,000 barrels of tankage is out of service. All gasoline diesel, jet fuel and ethanol are received via ship or barge from both Shell and third parties (such as Tesoro, Chevron, and/or TOSCO) and through pipelines extending from the refineries/terminals to the Facility. Shell Carson is also able to ship via pipeline to the Facility. Operation: Dock - regular operation throughout the year. The Facility's Dock operates as required (any time). General: This dock facility (Port of Los Angeles owned berths) is capable of mooring two (2) vessels and transferring from both vessels at the same time.

Dock Details:

The dock is constructed of wood on pilings and is 1,256 ft in length. Gasoline is transferred at 10,000 Bbls/hr; diesel at 9,500 Bbls/hr; jet at 10,000 Bbls/hr and ethanol at 3,000 Bbls/hr. The Facility is equipped with four (4) 95' of 8" hose. Typical operation would utilize a 95' hose. The maximum line fill volume (LFV) is approximately 7 Bbls. The Operating system operates at 125 psig maximum allowable working pressure and is tested to 225 psig. Vessels and/or barges (ships & third party barges) are received at the dock. The under Keel clearance while alongside the dock is 1 ft. The max DWT is 85,000 tons and the max displacement is 110,000 tons. The Total Line Fill Capacity for the two pipelines from the Dock to the first block valve within secondary containment (Line 502/503 and Line 512/513) is 63 Bbls for each line. The length and diameter for each line are 269 ft and 16 inches. The mooring facilities consist of one (1) wood dock with steel mono piles used for berthing dolphins. Each dolphin contains Quick Release Hooks for spring lines. Under no circumstances is a vessel undergoing transfer allowed to be left unattended. A strict watch of each unmanned barge in tow shall be maintained from the towing vessel.

Maximum loading rate to a vessel: N/A
Maximum unloading rate from a vessel: 10,000 Bbls/hr

The following table describes the type and maximum size of vessels which can call on each dock.

Dock Name/Number	Vessel Type/Quantity	Vessel Size	Draft
Dock 1/Berth 167 & 168	Barge /1	Up to 850'	37.917 feet
Dock 1/Berth 169	Barge /1	Up to 850'	37.083 feet

PHYSICAL DESCRIPTION - DOT/PHMSA OPERATIONS

General Pipeline Operations:

DOT regulated pipelines associated with this Terminal are addressed in the Western Region including Carson Terminal Facility Response Plan.

Response Zone Description:

The Response Zone is located within the Facility's property boundaries and is limited to the Facility's tank farm.

PHYSICAL DESCRIPTION - DOT/PHMSA OPERATIONS (Cont'd)					
Name of Pipeline	Type of Oil	Starting Mile Post	Ending Mile Post	Counties	Response Zone
Tank M-26	Gasoline	0	0	Los Angeles	The Tank Farm is considered the Response Zone.

DATES AND TYPES OF SUBSTANTIAL EXPANSIONS

1947 The pier was rebuilt.

1970 The South Tank Farm was constructed.

1998 Change of owner to Equilon Enterprises LLC.

2010/2011 New Dock Piping installed.

OTHER FACILITY DATA

- Additional facility data (including storage information) is provided in Appendix H and discharge prevention, detection and inspection information is provided in Appendix I.

FIGURE 1.2
AREA MAP(s)

Area Map
Click to view


AREA MAP
N
TORRANCE
Carson
Lomita
Harbor City
Wilmington
Avalon Village
California Heights
Signal
Walteria
Rolling Hills Estates
Rolling Hills
Miraleste
San Pedro
Mormon Island
Terminal Island
Long Beach Middle Harbor
Outer Harbor
Queen Mary
LONG BE
San Pedro
US NAVAL RESERVATION
US GOVT RES
FORT MAC ARTHUR
UPPER RES
LOWER RES
Palos Verdes Shoreline Park
White Point Regional Park
Whites Point
Point Fermin Park
Lighthouse
Point Fermin
Cabrillo Beach Park
Mormon Island Marine Terminal
RESPONSE MANAGEMENT ASSOCIATES
0 1 2 3 4
5/8 inch = 1 miles

FIGURE 1.3
FACILITY DIAGRAM(s)

Facility Diagram
Click to view

(b) (7)(F)

2.0 NOTIFICATION PROCEDURES

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.

First Company Person Notified/On-Scene

- Immediately notify the **Terminal Person-in-Charge** and vessels, as the situation demands.
- Immediately notify Terminal Management.

Terminal Management (either directly or through Emergency Notification System)

- Activate the **Local Response Team**, as the situation demands.
- Activate **local emergency response resources *(Oil Spill Removal Organizations (OSRO)***, fire, police, medical, etc.).
- To report incidents internally, take the following actions:

  If the situation warrants potential use of resources from Emergency Management, call their 24 hr. hotline immediately at (877) 242-7400 to report incidents. When notification is made to or assistance is requested from Emergency Management (EM), notification information should be documented on the EM Notification Log (located in Appendix H).

  Collect the information requested on the Notification Data Sheet (Figure 2.3) prior to calling Emergency Management.

- Contact the Regional Manager - If the incident is believed to be a "Significant Incident", i.e. for a release over 500 barrels OR expected financial impact of greater then $1MM, the General Manager, Operations, and Manager, Environmental should be notified immediately so that the required notifications to executive management can be made.
- Notify the **Environmental Representative**.
- **Coordinate** activation of additional response (including activation / mobilization of Emergency Management (EM)) and clean-up resources with the Environmental Representative, as the situation demands.

Environmental Representative

- Notify all **regulatory/governmental agencies** and other external organizations as detailed in Section 2.2 and Figures 2.4, 2.5.
- Make additional upper management and head office notifications as the situation demands.
- In the event of a **vessel incident**, coordinate notification to the Marine Group with the **Regional Manager**.
- Complete First Notification of Incident Form within 24 hours. Refer to the Shell distribution HSSE Incident Reporting and Investigation Procedure for the First Notification Form (SP-30-3) and additional guidance.

Communications

Shell 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 charge of Shell 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.

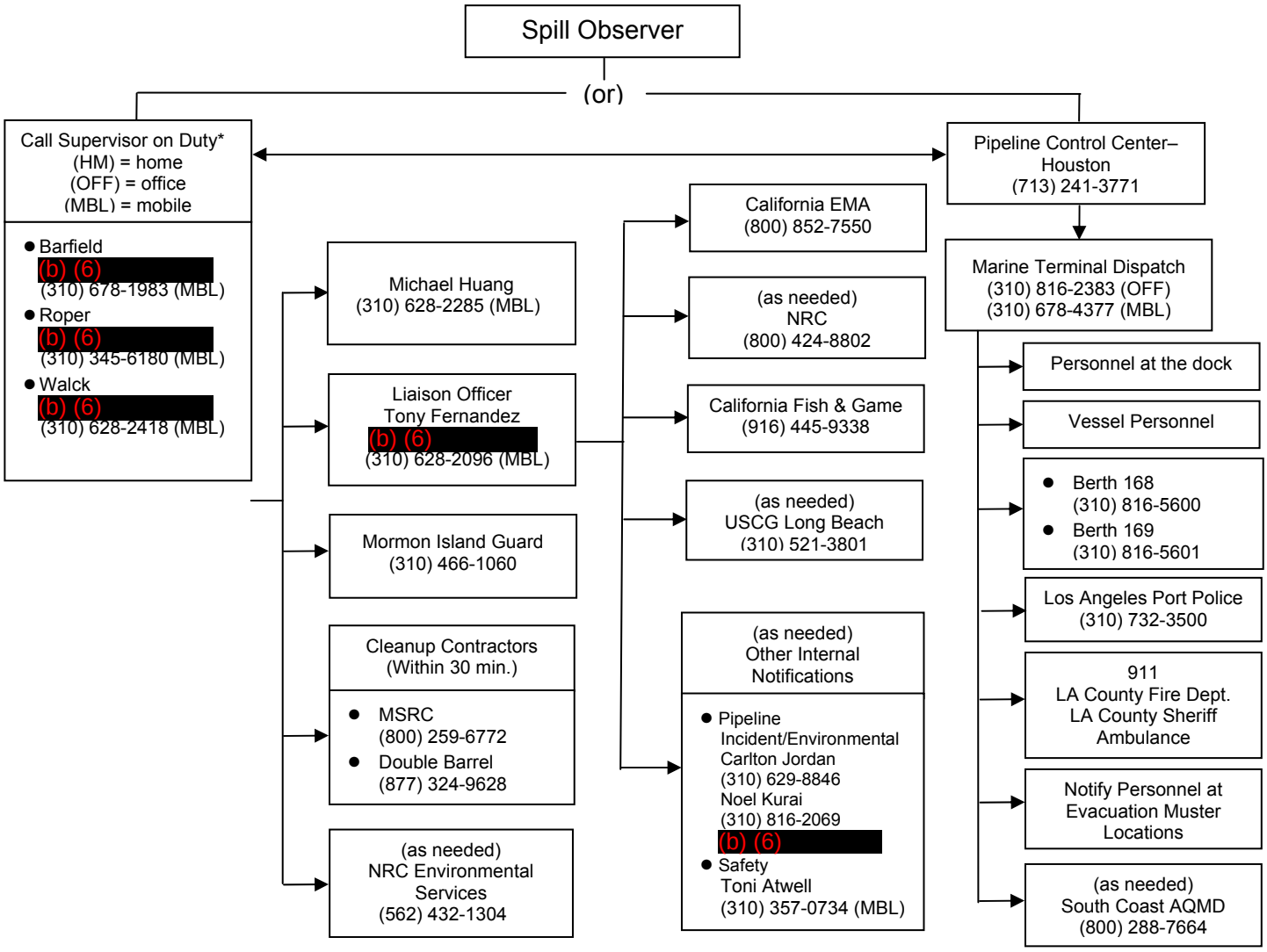
Insurance Carrier

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.

INTERNAL NOTIFICATION FLOWCHART

Internal Notification Sequence - Mormon Island
Click to view

FIGURE 2.4
MORMON ISLAND TERMINAL
INTERNAL AND EXTERNAL NOTIFICATION SEQUENCE



EMERGENCY MANAGEMENT HOTLINE
(877) 242-7400

EMA	California Emergency Management Agency (This Agency notifies Fish & Game)
NRC	National Response Center (This agency notifies USCG as necessary. In addition, CERCLA related spills are to be reported to this agency.)

* For internal reporting procedures, refer to HSSE Incident Reporting and Investigation Procedure (including First Notification Form).

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 2.1

INTERNAL NOTIFICATION REFERENCES

INTERNAL NOTIFICATIONS - INCIDENT MANAGEMENT TEAM				
NAME/ POSITION/TITLE	RESPONSE TIME	OFFICE	(b) (6)	OTHER
Michael Huang Facilities Manager South (IC)	60 MIN MAX	(310) 816-2080		(310) 628-2285 CELL
Rick Roper MI / Chemical Terminals Manager	60 MIN	(310) 816-2307		(310) 345-6180 CELL
Lisa Barfield Carson/So. Cal P/L Terminal Manager	60 Min	(310) 816-2230		(310) 678-1983 CELL
Rich Walck Craft Supervisor Carson	60 MIN	(310) 816-2067		(310) 628-2418 CELL
Toni Atwell Safety Officer	60 MIN	(310) 816-2211		(310) 357-0734 CELL
Tony Fernandez WR Emergency Response/Security Rep.	24 Hr.	(310) 816-2318		(310) 628-2096 CELL
Tracy Swan Finance Section Chief	60 MIN	(310) 816-2034		(310) 629-8822 CELL
Noel Kurai Environmental Site Support	60 MIN MAX	(310) 816-2069		(310) 629-8426 CELL
Martin Padilla Shell Oil Products Emergency Mngmt	24 HRS	(713) 241-3283		(713) 824-0986 CELL
Bruce Johnson Shell Oil Products Emergency Management	24 HRS	(713) 241-1338		(713) 249-4744 CELL
Rick Ferguson Shell Oil Products Emergency Management	24 HRS	(713) 241-6066		(281) 853-4361 CELL
Steve Majid Shell Oil Products Emergency Management	24 HRS	(713) 241-6144		(443) 324-1841 CELL
Todd Barr Shell Oil Products Emergency Management	24 HRS	(713) 241-6878		(832) 693-5717 CELL

INTERNAL NOTIFICATIONS - INCIDENT MANAGEMENT TEAM (Cont'd)				
NAME/ POSITION/TITLE	RESPONSE TIME	OFFICE	(b) (6)	OTHER
Tim Hill Sr. Security Advisor, S&D NA	24 HRS	(713) 241-3199		(713) 732-9714 CELL
Alan Caldwell Communications Specialist	24 HRS	(310) 816-2056		(310) 408-6785 CELL
Steve Lesher Communications		(925) 313-3462		(925) 200-7986 CELL
Martha (Marti) Powers Communications Officer	24 HRS MAX	(713) 241-1584		(713) 591-7652 CELL
Shell Oil Products Emergency Management Hotline	24 HRS	(877) 242-7400		(877) 242-7400 CELL
Motiva/SOPUS/STUSCO Shipping Emergency 24 HR Contact No.		(713) 241-2532		
Shell Corporate Medical 24 Hours		(800) 524-7747		
Shell Corporate Security 24 Hours		(713) 241-4773		

INTERNAL NOTIFICATIONS - OTHER CONTACTS				
NAME/ POSITION/TITLE	RESPONSE TIME	OFFICE	(b) (6)	OTHER
Anne Anderson GM S&D -US (QI/IC)	24 HRS MAX	(713) 230-3199		(225) 954-9495 CELL
Carrie Hodgins S&D HSSE/SD Manager North America	24 HRS MAX	(713) 241-2838		(713) 516-3842 CELL
Jill Derise Manager Control Center (AQI)	24 HRS	(713) 241-9859		(713) 806-7889 CELL
Larry Lamaison US Operations Support Manager	24 HRS	(504) 728-3246		(985) 859-8066 CELL
Karen McCray US Maintenance Manager		(713) 423-3371		(979) 308-9116 CELL
Michele Joy GM Pipeline Growth	24 HRS	(713) 241-7979		(713) 213-4875 CELL
Peyton Ross Manager Asset Integrity	24 HRS	(713) 241-3935		(713) 826-2954 CELL
Jason Dollar Manager Technical Offshore	24 HRS	(713) 241-3485		(504) 430-4373 CELL
Mike Coyne Manager Operations Support and Engineering		(713) 241-1146		(713) 851-0880 CELL
A. Michael Macrander Global Discipline Lead - Ecol.& Emerg. Resp.	24 HRS	(907) 646-7123		(907) 317-9314 CELL
Michael Elmore Sr. Staff Land Agent	24 HRS	(310) 816-2208		(310) 628-2094 CELL
Pam Alley Land Process Manager	24 HRS	(713) 241-2066		(281) 974-9537 CELL
Julia Chan Procurement Manager	24 HRS	(310) 816-2061		(562) 243-9483 CELL
Brian Faulkner Legal Counsel - Environmental	24 HRS	(713) 241-2383		(281) 685-7356 CELL

INTERNAL NOTIFICATIONS - OTHER CO[redacted]d)				
NAME/ POSITION/TITLE	RESPONSE TIME	OFFICE		OTHER
Jamie Nelson Senior Legal Counsel - Pipeline	24 HRS	(713) 241-3179		281) 250-0502 CELL
Robert Ream Regional Security Manager				832) 314-0139 CELL

(b) (6)

FIGURE 2.2

OIL SPILL REMOVAL ORGANIZATIONS

USCG CLASSIFIED OIL SPILL REMOVAL ORGANIZATIONS (OSRO)			
COMPANY	**RESPONSE TIME**	**LOCATION**	**TELEPHONE**
Double Barrel	60 MIN	Riverside, California	(877) 324-9628
Marine Spill Response Corporation (MSRC)	60 MIN	Various Locations, California	(800) 259-6772

FIGURE 2.3
NOTIFICATION DATA SHEET

NOTIFICATION DATA SHEET

Date: _____ ***Time:*** _____

INCIDENT DESCRIPTION

Reporter's Full Name:		***Position:***	
Day Phone:		***Evening Phone:***	
Company:	Shell Oil Products US	***Organization Type:***	
Facility Address:	Berth 167, 168 & 169	***Owner's Address:***	777 Walker Street
			Two Shell Plaza
	Wilmington, California 90744		Houston, Texas 77002

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

Spill Location ***(if not at Facility):*** _____

Responsible Party's Name: _____ ***Phone Number:*** _____

Responsible Party's Address: _____

Source and/or cause of discharge: _____

Nearest City: Wilmington

County: Los Angeles ***State:*** California ***Zip Code:*** 90744

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.

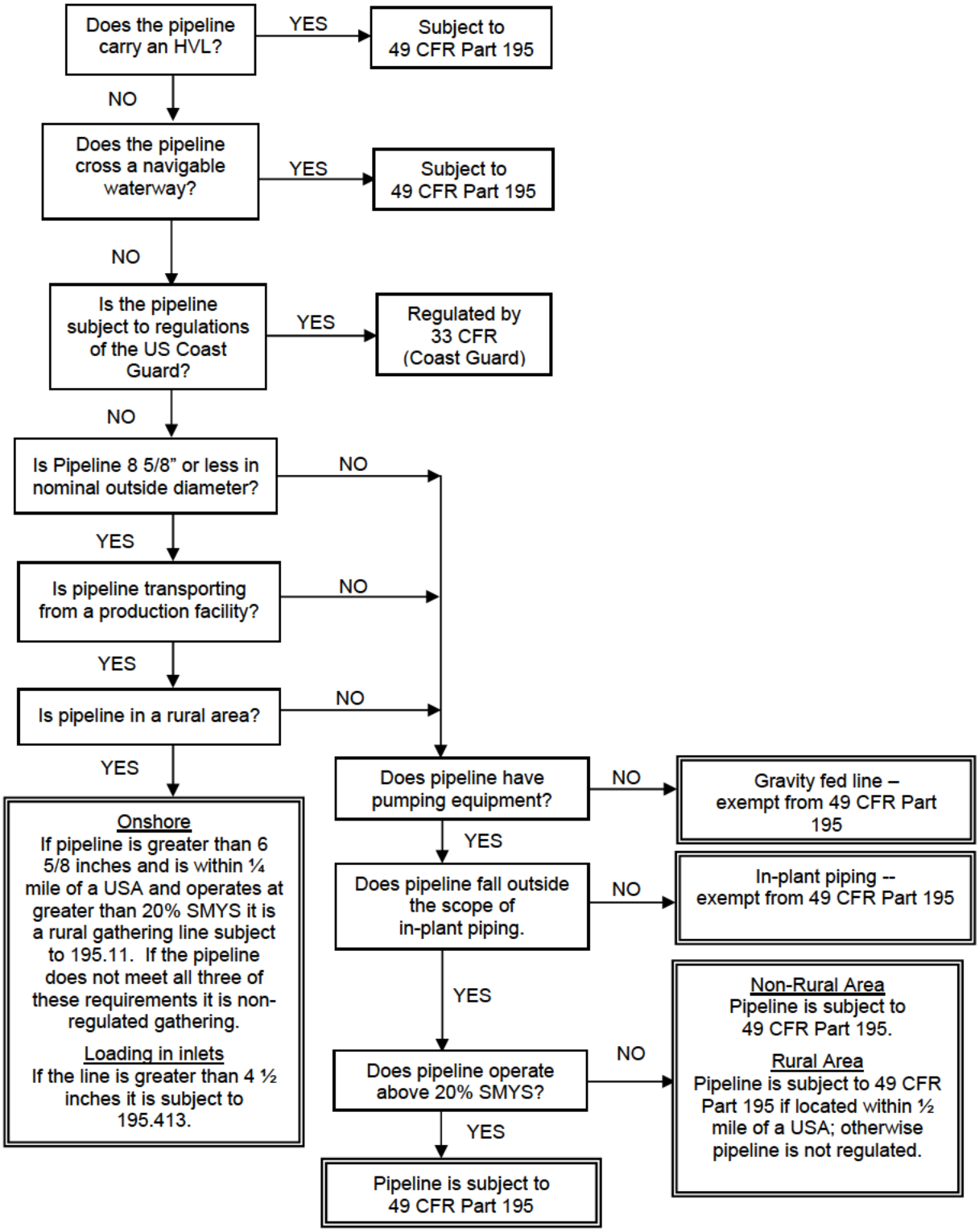
FIGURE 2.4

EXTERNAL NOTIFICATION FLOWCHART

External Notification Flowchart for Determining if Hazardous Liquid
Click to view

External Notification Sequence - Mormon Island
Click to view

EXTERNAL NOTIFICATION FLOWCHART
Flow Chart for Determining if a Hazardous Liquid Pipeline Is Subject to DOT Regulation (49 CFR Part 195)



EXTERNAL NOTIFICATION FLOWCHART

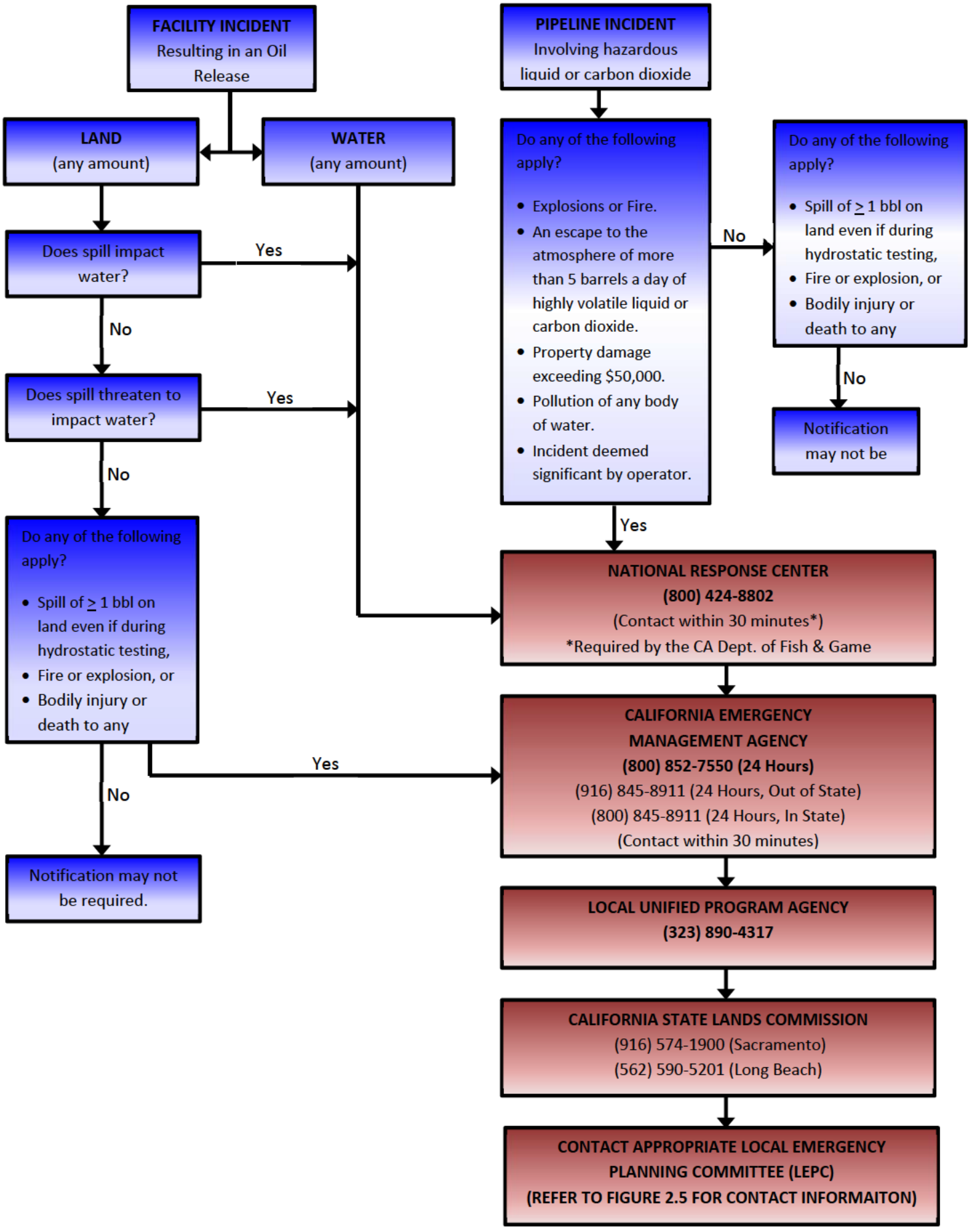


FIGURE 2.5

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)
California Emergency Management Agency (CAL EMA)	Mather, California	(800) 852-7550 (24 Hr.) (916) 845-8911 (Night Phone)
California State Lands Commission	Sacramento, California	(562) 590-5201 (24 Hr.) (916) 574-1900 (Day Phone)
Cal-CUPA - Los Angeles City Fire Dept.	Los Angeles, California	(213) 978-3685 / (213) 978-3680 (Day Phone)

OTHER POTENTIAL REQUIRED NOTIFICATIONS		
AGENCY	**LOCATION**	**TELEPHONE**
Local Emergency Planning Committees (LEPC)	Commerce (Los Angeles County), California	(323) 980-2260 (Day Phone)
California State Fire Marshal	Sacramento, California	(916) 445-8200 (Day Phone)
Lakewood Marshal **Bob Gorham**		(562) 497-9100 (Day Phone) (818) 419-0784 (Cellular)
CA State Fire Marshal Bakersfield **Chuck MacDonald**	Bakersfield, California	(661) 587-1601 (Day Phone) (661) 809-7904 (Cellular)
California State Fire Marshal Northern CA **Linda Zigler**	Hidden Valley, California	(650) 400-6533 (Day Phone) (650) 400-6533 (Cellular)
CA State Fire Marshal Long Beach **Tom Williams**	Lakewood, California	(562) 425-1902 (Day Phone) (818) 378-3729 (Cellular)
Long Beach Fire Marshal **Dan Lee**	Long Beach, California	(562) 982-9115 (Day Phone) (818) 618-1339 (Cellular)
Lakewood Fire Marshal **Emmett Cooper**	Lakewood, California	(562) 497-9103 (Day Phone) (818) 389-9201 (Cellular)
U.S. Coast Guard Sector Los Angeles/Long Beach	San Pedro, California	(310) 521-3600 (Day Phone)
U.S. EPA Region IX	San Francisco, California	(800) 300-2193 (24 Hr.) (415) 947-4400 (Day Phone)
Agency for Toxic Substances & Disease Registry	Atlanta, Georgia	(404) 498-0120 (24 Hr.) (888) 422-8737 (Message Center) (Day Phone) (415) 947-4316 (San Francisco) (Night Phone)
BCDC Oil Spill Program	San Francisco, California	(415) 352-3600 / (415) 352-3644 (Day Phone)
California Department of Public Health (CDPH)	Sacramento, California	(916) 449-5661 (Day Phone)
California Division of OSHA (Torrance)	Torrance, California	(310) 516-3734 (Day Phone)

OTHER POTENTIAL REQUIRED NOTIFICATIONS		
AGENCY	**LOCATION**	**TELEPHONE**
California Department of Toxic Substance Control	Cypress, California	(714) 484-5300 (Day Phone)
California Occupational Safety and Health Administ	Los Angeles, California	(562) 516-3734 (24 Hr.)
CCC Oil Spill Program	San Francisco, California	(415) 904-5247 / (415) 904-5205 (Day Phone)
Chemical Waste Management, Inc.	Kettleman City, California	(559) 386-6151 (Day Phone)
Chemical Transportation Emergency Center-CHEMTREC		(800) 876-4766 (24 Hr.)
Clean Harbors - Buttonwillow	Buttonwillow, California	(661) 762-6200 (Day Phone)
Crosby and Overton	Long Beach, California	(562) 432-4554 (Day Phone)
DeMenno-Kerdon	Compton, California	(310) 537-7100 (24 Hr.)
Hazardous Materials Administering Agencies	Wilmington, California	(800) 688-8000 (In-State only) (24 Hr.)
IT Corporation - Vine Hill Facility	Martinez, California	(415) 372-9100 (Day Phone)
Los Angeles Port Police	San Pedro, California	(310) 732-3500 (24 Hr.)
Poison Control Center	San Francisco, California	(800) 876-4766 (Day Phone)
U.S. Fish and Wildlife Service	Washington, District Of Columbia	(800) 344-9453 (24 Hr.)

FIRE, POLICE, HOSPITALS		
DIAL 911 for all Police, Fire, and Ambulance Emergencies		
AGENCY	**LOCATION**	**TELEPHONE**
Los Angeles City Fire Department Station #38 / #49	Los Angeles, California	(310) 548-7538 (St. 38)/ (310) 548-7549 (St. #49)
Federal Bureau of Investigation (FBI)	Los Angeles, California	(310) 477-6565
Los Angeles Police	Los Angeles, California	(877) 275-5273 (Non-emergency)
California State Highway Patrol (Monterey Park)	Monterey Park, California	911 / (323) 980-4600
Ambulance Service / Fire Department	Carson, California	(213) 485-6180
Community Hospital of Long Beach	Long Beach, California	(562) 498-1000
Harbor-UCLA Medical Center	Torrance, California	(310) 222-2345
Torrance Memorial Medical Center	Torrance, California	(310) 325-9110

MEDIA NOTIFICATIONS		
AGENCY	**LOCATION**	**TELEPHONE**
KABC-TV Channel 7	Glendale, California	(818) 863-7777
KNBC-TV Channel 4	Burbank, California	(818) 840-4444
Los Angeles Times	Los Angeles, California	(213) 237-5000
National Weather Service (recorded forecasts)	Los Angeles, California	(805) 988-6610 Ext. 1
Press Telegram	Long Beach, California	(562) 432-5959

OTHER PUBLIC/INDUSTRY CONTACTS		
COMPANY	**LOCATION**	**TELEPHONE**
Catalina Express	Berth 95,	(310) 519-1212
Conoco Phillips	Berth 148-151,	(310) 834-4691
Kinder Morgan	Berths 118-120,	(310) 831-6566
Los Angeles County Flood Control District	Los Angeles, California	(626) 458-5100
Los Angeles County Sanitation District	Whittier, California	(323) 245-9865
California Department of Fish & Game	Sacramento, California	(916) 653-7667
National Oceanic and Atmospheric Administration -	Seattle, Washington	(206) 526-4327
Pacific Cruise Ship Terminal	Berth 90-93,	(310) 514-4049
Ranch LPG	Berth 120,	(310) 833-5275
Rio Tinto	Berths 164, 165,	(310) 522-5300
Surface Wtr, Fish, Wldlf&Habit.-Dpt. of Fish&Game	Sacramento, California	(916) 358-1300
Surface&Groundwater-State Water Res Cntrl Brd	Sacramento, California	(916) 341-5671
US Water Taxi	Berth 60,	(310) 519-8230
Valero Marine	Berths 163-164,	(310) 834-7254

OTHER PUBLIC/INDUSTRY CONTACTS (Cont'd)		
COMPANY	LOCATION	TELEPHONE
Vopak LA	Berths 187-191,	(310) 549-0961

ADDITIONAL RESPONSE RESOURCES		
Planning and Incident Support		
COMPANY	**LOCATION**	**TELEPHONE**
NRC Environmental Services	Long Beach, California	(800) 337-7455 / (562) 432-1304
Ecology Control, Inc. (ECI)	Torrence, California	(310) 354-9999
Environmental or Illegal Drug Labs - Dept. of TSC	Sacramento, California	(916) 255-6504 / (800) 260-3972
International Bird Rescue and Research	Cordelia, California	(707) 207-0380
Marine Water - Office of Spill Prevention and Resp	Sacramento, California	(916) 445-9338
Oil Fields - Division of Oil, Gas, and Geothermal	Sacramento, California	(916) 445-9686
Oiled Wildlife Care Network	Davis, California	(707) 207-0380 / (530) 752-4167
Oiled Wildlife Care Network		(916) 445-0045 (press 5)
Surface Water - National Pollution Funds Center	Arlington, Virginia	(202) 493-6700

2.3 NOTIFICATION REQUIREMENTS

NATIONAL RESPONSE CENTER

Discharges of Oil to Navigable Waters

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.)

NOTE: 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, or
- 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.

NOTE: 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.

NOTE: 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.

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, or HVL, 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

NOTE: To determine if a hazardous liquid pipeline is subject to DOT regulation (Refer to Figure 2.4)

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

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.

NOTE: 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.

CALIFORNIA EMERGENCY MANAGEMENT AGENCY (EMA)

TYPE: Notification is required if any of the following occurred:

- Any amount into or threatening state waters - inland, marine, or groundwater.
- Any amount into a storm drain.
- Any amount onto city and county streets.
- Any amount onto state highways and freeways.
- Any amount onto land (except for certain San Joaquin Valley oil fields)
- 5 barrels or more uncontained in certain San Joaquin Valley oil fields.
- 10 barrels or more contained in certain San Joaquin Valley oil fields.
- Crude oil release of more than five barrels from a pipeline or flow line in a rural area -if no threat to state waters.
- Fire or explosion; or
- Bodily injury or death to any person

VERBAL: Immediately

WRITTEN: As may be requested by the agency

HAZARDOUS MATERIALS ADMINISTERING AGENCIES

TYPE: Any spill requiring notification to Federal or State agencies must be reported.

VERBAL: Immediately

WRITTEN: As may be requested by the agency

LOS ANGELES PORT POLICE

TYPE: Any incident at the port.

VERBAL: Immediately

WRITTEN: As may be requested by the agency

CALIFORNIA STATE FIRE MARSHAL

TYPE: Any unintentional rupture of 5 barrels or more, explosion or fire involving a pipeline. (CAL EMA is official call.)

VERBAL: Immediately

WRITTEN: As may be requested by the agency

REGIONAL WATER QUALITY CONTROL BOARD

TYPE: Any spill affecting groundwater or leaks from tankage. NOTE: CAL EMA handles all reportable spills for the Regional Board.

VERBAL: Immediately

WRITTEN: As may be requested by the agency

BUREAU OF LAND MANAGEMENT (BLM)

TYPE: Any spill on BLM property.

VERBAL: Immediately

WRITTEN: As may be requested by the agency

CALIFORNIA STATE LANDS COMMISSION

TYPE: Any spill on state lands

VERBAL: Immediately

WRITTEN: As may be requested by the agency

AIR POLLUTION CONTROL DISTRICTS

TYPE: Any air pollution breakdown.

VERBAL: Immediately

WRITTEN: As may be requested by the agency

LOCAL EMERGENCY PLANNING COMMITTEES (LEPC)

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

VERBAL: Immediately

WRITTEN: As may be requested by the agency

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

U.S. COAST GUARD - SECTORS

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.

U.S. ENVIRONMENTAL PROTECTION AGENCY REGION 9

TYPE: Immediately for 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: Per SPCC requirements, a written report must be submitted within 60 days for a spill in excess of 1,000 gallons (approximately 24 Bbls) in a single event or two spill events within a twelve month period into or upon navigable waters of the United States or adjoining shorelines. The written report should contain all of the elements listed in 40 CFR 112.4(a). As per RCRA regulations, a written report on the incident must be submitted to the Regional Administrator within 15 days from the date of the incident. The report must include:

1. Name, address, and telephone number of the owner or operator;
2. Name, address, and telephone number of the Facility;
3. Date, time, and type of incident (e.g., fire, explosion);
4. Name and quantity of material(s) involved;
5. The extent of injuries, if any;
6. An assessment of actual or potential hazards to human health or the environment, where this is applicable; and
7. Estimated quantity and disposition of recovered material that resulted from the incident.

U.S. FISH AND WILDLIFE SERVICE

TYPE: Wildlife Protection / Rehabilitation.
VERBAL: Immediately
WRITTEN: As the agency may request depending on circumstances

3.0 RESPONSE ACTIONS

3.1 INITIAL RESPONSE ACTIONS

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

It is important to properly classify the emergency level to ensure a proper response. The emergency level of the incident will affect the notifications and the initial response to the incident.

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

INITIAL RESPONSE ACTIONS - SUMMARY

1. Assume responsibility and control of the situation.
2. Assess the incident - Personnel and Public Safety is first priority.
3. Provide immediate aid to the injured.
4. Eliminate any sources of ignition.
5. Isolate the source of a discharge, eliminate, or minimize further flow.
6. Conduct immediate notification to activate the alarm system and mobilize the Spill Management Team or Local Response Team, Fire Department, Oil Spill Response Team, or Hazmat Team as necessary.
7. Control the area - Evacuate as needed and prevent personnel from entering the area until trained responders have arrived.

Section 3.3 discusses initial response actions for specific incidents.

The first Company employee on scene will function as the Person-in-Charge until relieved by an authorized supervisor who will assume the role of on-scene Incident Commander. Transfer of command will take place as more senior management respond to the incident.

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**.

3.2 DOCUMENTATION OF INITIAL RESPONSE ACTIONS

The Incident Commander, starting with the initial responder, must document the events and communications occurring around an incident. Initially, events and communications may be written in a personal notepad and transcribed to a more formal format at a later time. Once the Incident Management Team is activated, all records are to be kept using the appropriate ICS forms. When recording information during an event, it is important to capture only the pertinent facts as related to response activities.

The criteria for incident documentation varies according to the type of incident. Any incident requiring documentation under applicable Federal and/or State regulations will be documented and maintained as follows:

- ☐ Agency notification logs will be filed and be maintained.
- ☐ Any follow-up letters required by regulation will be maintained.
- ☐ A root cause investigation will be performed for the facility in which the incident occurred. The investigation report as well as records of follow-up actions and activities generated by the investigation will be maintained.
- ☐ When a formal response critique occurs, the incident response critique and records of follow-up activities will be maintained.
- ☐ If drill or exercise credit under the National Preparedness for Response Exercise Program (PREP) is to be taken for an actual response, the appropriate PREP documentation will be maintained.
- ☐ All records of Lessons Learned during actual incidents will also be maintained.

Examples of what to record:

- Record only facts.
- 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 orders or recommendations (especially if Company personnel do not agree with their suggestions, instructions, or actions).**

Examples of what **NOT** to put into the records.

- × Speculations.
- × Criticisms of efforts and/or methods of other people/operations.
- × Skipping lines or making erasures unless an error is made. If an error is made, then line through it, add the correct entry above or below it, and initial the change.

If response to an actual event is to be used for PREP credit, the following information will be included in the documentation:

- ☐ The type of response
- ☐ Date and time of the response
- ☐ A description of the incident and the response
- ☐ The Plan components addressed in the response (see Appendix E - Training and Drills)
- ☐ The PREP requirements fulfilled by the response
- ☐ Lessons learned

3.3 INCIDENT SPECIFIC RESPONSE ACTIONS

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 describes 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

Initial Response Action

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.

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

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

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

INITIAL RESPONSE ACTIONS - SUMMARY

- Personnel and Public Safety is first priority
- Eliminate sources of ignition
- Isolate the source of the discharge, minimize further flow
- Make internal notifications
- Make external notifications
- Activate the Local Response Team as necessary
- Activate response contractors and other external resources as necessary
- Monitor and control the containment and clean-up effort

As additional guidelines for responding to oil spills, the following flowcharts are included in Appendix H:

- General Oil Spill Response
- Shoreline Protection Decision Tree
- Shoreline Response Decision Tree

In addition to the potential emergency events outlined in this section, the Company has identified several "abnormal operations" that could be expected in the pipeline facilities. The pipeline 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 Shell Pipeline Company Operations Manual for Controllers.

FIRST RESPONDER AWARENESS LEVEL *CCR §817.02(f)(4)(D-E)*

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.

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 and

NOTE: 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, O_2, and if necessitated by release type H_2S, 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.

FIRST COMPANY PERSON NOTIFIED/ON SCENE

- Follow the appropriate ***"Specific Incident Response Checklist"*** and ***"Product Specific Response Considerations".***

- Notify **Terminal Management** of the incident.

- Utilize local emergency services as necessary (police, fire, medical).
- Notify the **Pipeline Control Center**, as appropriate.

TERMINAL MANAGEMENT

- **Evaluate the Severity**, Potential Impact, Safety Concerns, and Response Requirements based on the initial data provided by the first person on scene.
- Assume the role of **Incident Commander**.
- **Confirm safety** aspects at site, including need for personal protective equipment, sources of ignition, and potential need for evacuation.
- Activate the **Local Response Team and primary response contractors**, as the situation demands.
- Coordinate/perform **activation of additional spill response contractors**, as the situation demands (telephone reference is provided in Section 2.0).
- Notify the **Marine Group** for all vessel incidents.
- Notify **Regional Manager**. Provide incident briefing and coordinate activation of Emergency Management (EM), as the situation demands. (Refer to Section 2.0).
- Coordinate/perform **regulatory agency notification**, as the situation demands, (notification procedures and telephone references are provided in Section 2.0).
- Proceed to spill site and **coordinate response and clean-up operations**.
- Direct containment, dispersion, and/or clean-up operations in accordance with the Product Specific Response Considerations.

LOCAL RESPONSE TEAM

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

AREA PERSONNEL RESPONSIBILITIES

The area personnel's general response plan consists of the following four (4) stages which may overlap or occur concurrently:

- Making an initial response,
- Defining the problem,

- Controlling the situation, and
- Cleaning up and repairing the damage.

After notification of an incident, area personnel should:

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

- Assemble response equipment and personnel. Dispatch resources to the release site.
- 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).
- 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.
- Activate contract employees and equipment as needed.
- Determine if assistance is needed from an oil spill cooperative (if available) or LRT. Activate them if needed.

- Collect the released material into containment sites as quickly as possible.
- Locate additional containment sites, if needed.
- Evaluate resources to confirm sufficient personnel and equipment.
- Clean up to minimize damage to public health and the environment.
- Repair the damage to the system.

INITIAL RESPONSE

- Take appropriate personal protective measures.
- Call for medical assistance if an injury has occurred.
- Check wind direction before investigating incidents where vapor cloud is a possibility.
- Utilize LEL meter when you conduct an initial investigation to determine what has been released and the source.
- Do not investigate on your own, take a buddy.
- If you discover explosive / flammable vapors during your initial investigation or if vapors are a possibility, make sure you inform the 911 operator that police and other emergency responders should NOT use flares to control traffic.
- When you evacuate the Terminal because of toxic or explosive vapors, make sure that you take the FRP, response checklists, cell phones, radios, etc. with you to the muster point. Develop a "kit" / "go bag" / evacuation bag to take with you when you evacuate the Facility. (The evacuation bag should contain items that you would need to run a response for the first several hours from a location other than the Terminal building.)
- At the evacuation muster point, take a head count to determine if anyone is missing.
- If possible, block access to the hot zone and/or entire Terminal (use vehicles, caution tape, traffic cones, etc.).
- Restrict access to the spill site and adjacent area as the situation demands. Take any other steps necessary to minimize any threat to health and safety.
- Verify the type of product and quantity released (Material Safety Data Sheets are retained separately at the Facility).
- Advise personnel in the area of any potential threat and/or initiate evacuation procedures.
- Use testing and sampling equipment to determine potential safety hazards, as the situation demands.
- Identify/Isolate the source and minimize the loss of product, from a safe distance.
- Take necessary fire response actions. 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.

- Eliminate possible sources of ignition in the near vicinity of the spill.
- Notify Terminal Management of the incident.

Product or Hazardous Material Release

Line Break or Leak

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

Storage Tank Leak

- Shut down all tank battery product movement operations and isolate the tank.
- Initiate Confined Space Entry procedures, as applicable.
- Ensure that the containment area drainage valve(s) is "closed".
- If near tank bottom, consider filling tank with water and maintain water bottom to suspend the discharge.
- Utilize Combustible Gas Indicator, O_2 meter, proper colormetric indicator and other air sampling measurements to assure that areas are safe to enter for continued response operations.
- Block drainage of spilled material from traveling offsite.
- Stop all traffic in hazardous area (inside and outside of property boundaries), as the situation demands.
- Request local authorities to establish traffic control in the area, as necessary.
- Remove product from containment area (at a sump or in a low area) with an explosion proof pump, oil skimmer, and/or vacuum truck w/ skimmer attachments.
- If applicable, process remaining product through the separator system.
- Empty tank as soon as possible.
- Make all necessary repairs. Return the line/tank to service when repairs are complete and tested.
- Clean up product spill to eliminate any possible environmental problems. Be alert for underground cables.
- Inform local operators such as utilities, telephone company, railway.
- If necessary, call one (1) of the approved waste removal companies to remove the remaining sludge and residue from the containment area. Contact the Company Hazardous Waste Coordinator, if necessary, to remove waste from the Facility for disposal.
- If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in Section 6.0 of the FRP and ACP. Determine which of these may be threatened by the spill and direct the response to these locations. Initiate protection and recovery actions.
- Determine the direction and expected duration of spill movement. Refer to the environmental sensitivity maps in Section 6.0 of the FRP.
- Complete follow-up and written reporting, as the situation demands.

Marine Operation Spills/Leaks

- Shut down all engines/motors.
- Close all line and ship manifold discharge valves.
- If hose rupture, drain line into barge, drums, buckets, and blank line to stop spill into water.
- If other than hose rupture, determine source of leak and stop.
- Prevent discharge from entering the water if at all possible with:
    - Pump from sump or deck drainage system into drums, tanks, containment area, or other storage facility.
    - Dike/Dam the flow into a containment or collection area away from the water if feasible.
    - Place containment boom or sorbent material around area (provided that a safe operating environment exists).
- If the product enters the water and provided that a safe operating environment exists, try to contain by:
    - Deploy spill response equipment (facility and/or contract) to prevent/mitigate spill impact (spreading of spill).
    - Attempt to divert/contain the spill in:
        - Quiet or low current area the water.
        - Away from strong winds or areas that could be affected by change in wind direction.
        - Away from areas of hazard to public, property improvements, marinas, water intakes, etc.

Oil Containment, Recovery & Disposal

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.

Fire / Explosion Incidents

Company Personnel

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

- Shut down Facility operations and mitigate fuel sources, as the situation demands.
- Utilize applicable Facility firefighting capability after conducting safety assessment of the area. If fire is in the incipient stage, trained personnel may utilize the facility fire extinguishers if safe to do so. Facility personnel are trained to only to the incipient stage.
- Notify local fire department(s), as the situation demands.
- Consider evacuating the area, as the situation demands, if there are nearby residential or commercial dwellings.
- Assist the emergency rescue personnel with injured and/or trapped individuals.
- Determine when the fire started.

Individual Discovering the Fire - All Employees

- Notify the Terminal Manager or the supervisor on duty.
- Return to the scene of the fire and, if practical (not beyond incipient stage), trained personnel may utilize the facility fire extinguisher if safe to do so. Facility personnel are trained only to the incipient stage.
- Prevent secondary problems due to flame impingement, or spills and runoff. Spray other nearby tanks and structures with cool water to avoid ignition.
- In the event the fire is too large for an individual to fight alone, the individual sounding the alarm or making the phone call should stand by at a safe distance to direct the fire department to the scene of the fire and keep personnel and vehicles from entering the danger area.
- Alert all terminal areas of the exact location and extent of the fire.
- Shut off pumps.
- If product is being received, notify the appropriate dock personnel of the fire and request that the transfer be shut down. The tank which is receiving product from the dock must not be closed until assurance is received that the transfer is down, unless that tank is involved in the fire.
- After confirmation has been received that the transfer has been shut down, close the pipeline header valves.
- Close valves for the tanks in the tank farm.

Individual Discovering Fire-Absence of Supervision

- In the event of fire in the absence of a member of supervision or the Terminal Operator, any Company employee on duty is designated as the individual in charge.
- The individual discovering the fire will adhere to the instructions issued for the normal operation.
- Ensure that the fire department has been notified.
- Alert all terminal areas of the exact location and extent of the fire.
- Ensure supervision is notified by telephone.
- Shut down any transfers and proceed to close tank valves.
- Prior to the arrival of a member of supervision, the individual will remain in charge and will direct the fire department to the scene of the fire.

Individual Who Discovers Tank Related Fire

TANK RELATED FIRE

- 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.

Individual Who Discovers Explosion Near Pipeline

EXPLOSION NEAR OR AT A PIPELINE FACILITY

Damage Assessment/Control By On Site 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 Response Actions" 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.).

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

Vapor Cloud

Individual Who Discovers the Emergency

NOTE: 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
Gasoline	0.68 to 0.74
Jet Fuel	0.82 to 1.08
ULS Diesel	0.62 to 0.88
Ethanol	0.79

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.

Vapor Cloud Originating from a Facility Incident

- The person who discovers the vapor cloud will sound the alarm and notify the supervisor on duty and vacate the area.
- Remember: the only proper action in the presence of a vapor cloud is to get away from it. Do not shut off electrical equipment.
- All personnel will report to the evacuation muster point for roll call and further instructions.
- After all personnel have been accounted for, the Terminal Manager, the Terminal Supervisor or a Terminal Operator will initiate the following actions as deemed necessary:

    1. Shut down pipeline.
    2. Evacuation of adjacent property.
    3. Only the fire department will be permitted to enter the terminal.

- Contact the appropriate agencies and potentially affected neighbors (refer to Section 2.0).

Vapor Cloud Originating from a Pipeline Incident

- The Initial Responder:
  - discovers the vapor cloud
  - determines the material causing the vapor cloud, and
  - notifies the Controller and maintenance crew.
  - See "Initial Response Action" listed previously in this section.
- The Controller:
  - (b) (7)(F)
  - notifies the National Response Center.
- The maintenance crew isolates the pipeline by closing the manually operated valves.
- The Initial Responder determines:
  - **If there is** a fire then remain at a safe distance on site, until relieved.
  - **If there is not** a fire then keep ignition sources away and work with fire department to disperse the vapor cloud.
- The Initial Responder:
  - 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).
- Police evacuate the boundary area.
- Fire department disperses the vapor cloud with a sustained flow of water spray.
- The Initial Responder stays on site until:
  - relief arrives
  - vapor cloud is completely dispersed, or fire is burned out and the vapor cloud no longer exists.

Gas Detected in Building

Gas Detection & Confirmation by On Site Personnel

NOTE: 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.

Gas Detection and Confirmation by On Site Personnel

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 Response Actions" heading above.

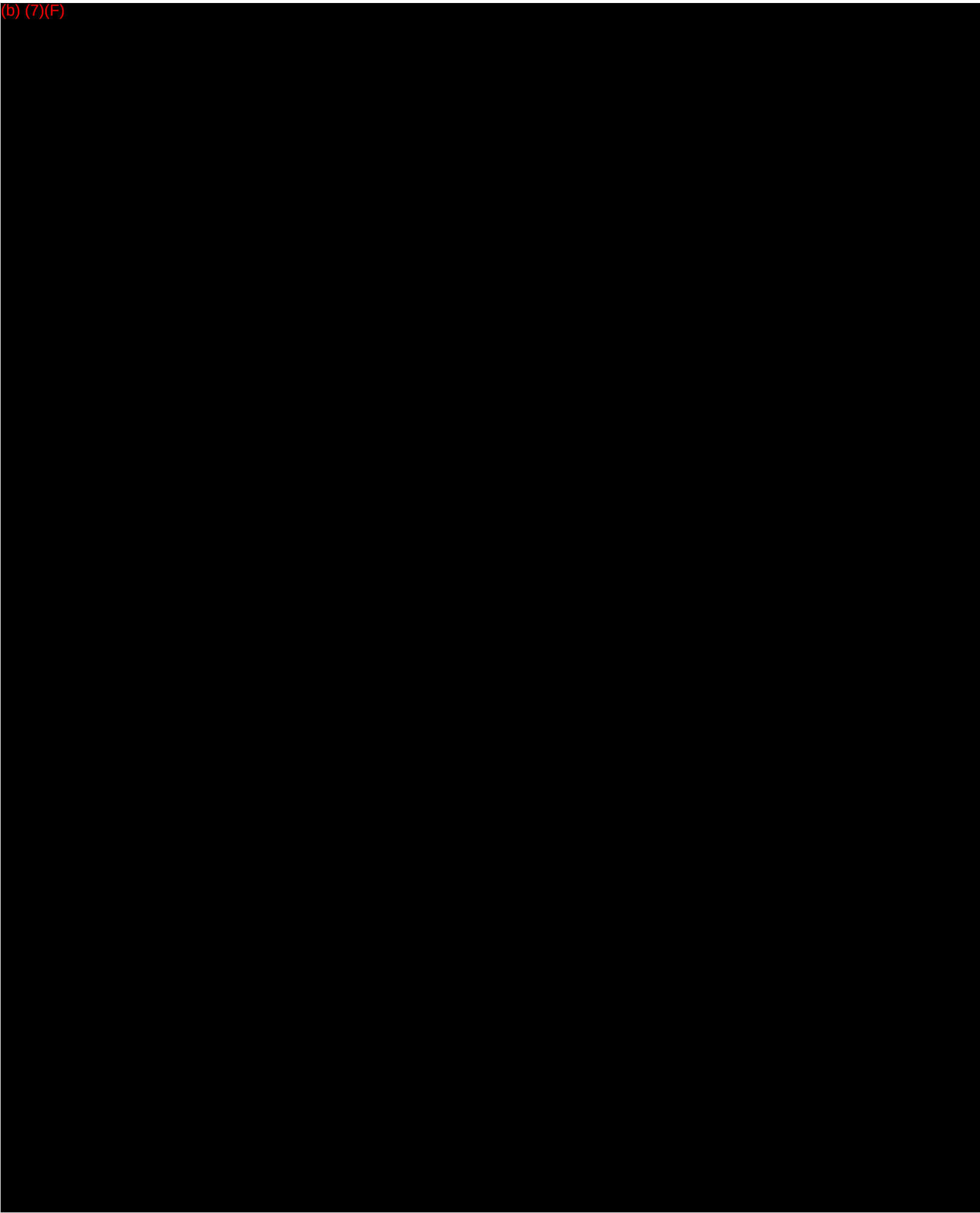
People Related

- 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 "Vapor Clouds" heading above.

(b) (7)(F)



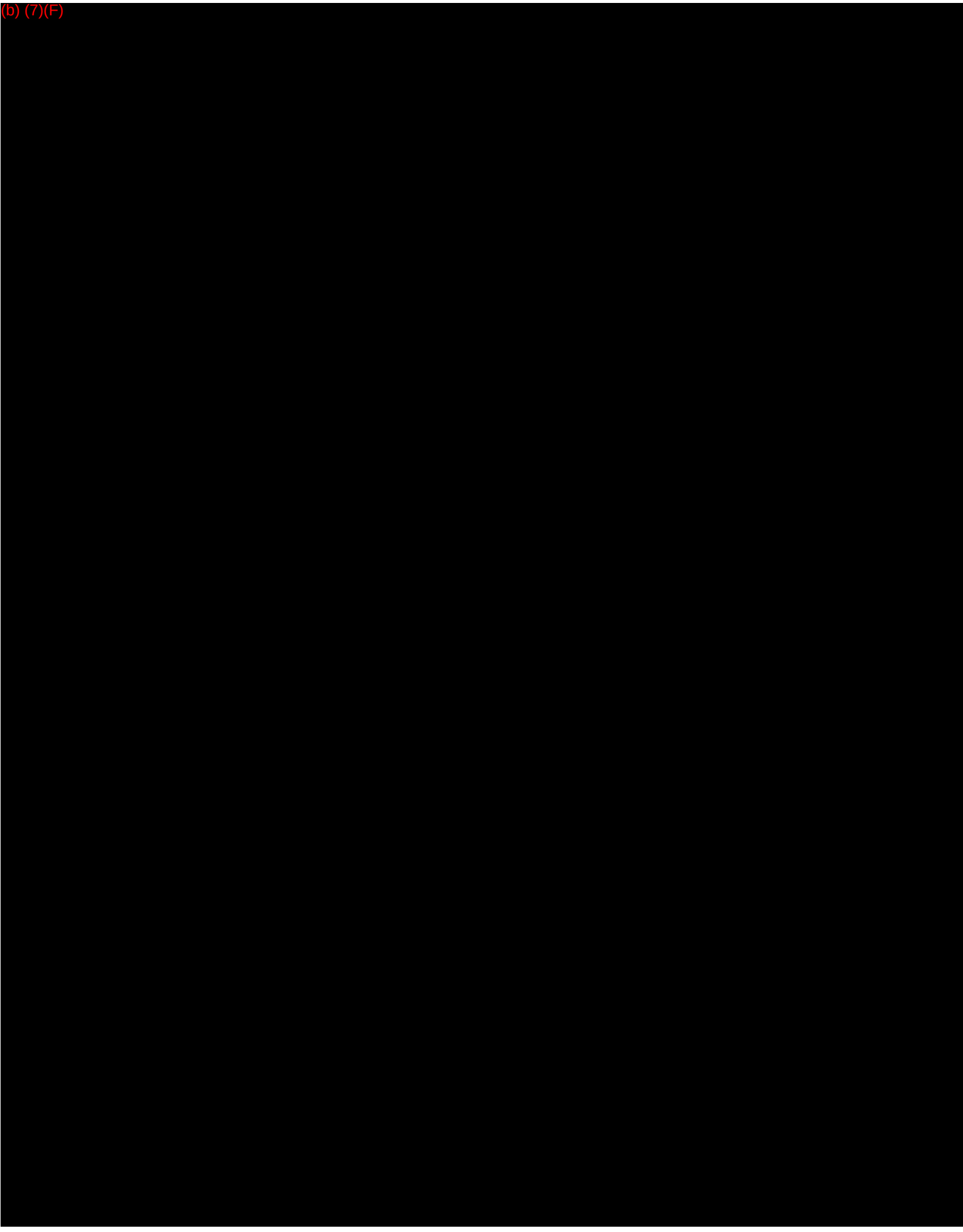
(b) (7)(F)

(b) (7)(F)

(b) (7)(F)

[redacted]

(b) (7)(F)



Natural Disaster Incidents

Tornado or Severe Storms

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

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.

Tornado and Severe Storms

- **Be Aware of Changing Weather Conditions**

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

- **If Severe Weather Conditions Threaten**

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

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.

- **Immediately After the Storm**

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

Earthquake Procedures

General Guidelines

In the event of an earthquake and you are located within the Terminal, you should take the following actions as precautionary measures:

- Immediately press the Emergency Shutdown Button.
- Stop and shut down all vessel discharge.
- If you are outside, remain in an open area. Stay away from anything that could potentially fall and injure you.
- If you are inside, move away from all windows.
- If absolutely necessary, shut off the main power switch.
- Close off the loading rack to foot or vehicle traffic using cones.
- Notify the Terminal Manager/Superintendent as soon as possible.
- When the earthquake has subsided, notify the Scheduling Center with an initial report of damage, injury, etc. If more than one person is available, one person should assess damage while the other person stays by the telephone.
- If any leaks are noticed, isolate the leak by closing the appropriate valves. Do so only with precautions established in this Plan.

Terminal Operator Guidelines

When the inspection of the Facility is completed, and you are satisfied that there are no leaks, proceed with the following steps:

- Call the Scheduling Center with an updated report.
- Turn main power back on (if needed).
- Reset the loading rack, if applicable.

- Activate one product pump at a time. Inspect the product filter area for any leaks.
- If no leaks appear, turn the pump off and go to the next product. Use this same procedure for each product until all product lines have been tested.
- It is important that all product lines be tested and inspected prior to placing them back into service.
- When conditions require, the 3 day supply of food and water are available in the earthquake kit. All employees must be familiar with the contents of the earthquake kit.

Delivery Guidelines

- Anytime an earthquake occurs in the delivery area, all personnel should use good judgment. Drivers should be instructed to proceed on their delivery schedule as long as earthquake damage does not impede their ability to drive safely to and from the Terminal.
- In the case of small earthquakes, delivery activities may be conducted provided there is no noticeable damage at the service stations. Drivers should be observant of damage to truck access areas and possible damage to fill and tank areas. If damage is observed, call the Scheduling Center for instructions.
- For large earthquakes where damage is possible, known or heard, in the city you are making a delivery, you must call the Scheduling Center for instructions. The Scheduling Center will obtain instructions/guidance from engineering and advise the driver accordingly.
- In a major earthquake, where known extensive damage is reported in the metropolitan area, all drivers should return to the Terminal if at all possible. Once there, they should await instructions from Terminal Management. No deliveries are to be started and those in progress are to be immediately stopped until you are given clearance from Terminal Management or the Scheduling Center.

Special Considerations

- When system integrity or other problems are suspected, then consider surveillance using helicopters or fixed-wing aircraft supplemented with "on the ground" inspections when needed.
- When an earthquake occurs and multiple releases are possible, then consider more than the usual amount of emergency response personnel and equipment.
- When bridges or highways are destroyed or impassible, then use alternative transportation routes or modes to close block valves. Response time may be longer than normal. Consider using helicopters as an alternative to driving.
- When the earthquake causes damage to SPLC employees' homes in the region and they are occupied with their own personal situations, then get assistance from SPLC locations outside the affected area. Include both personnel and equipment. Use contractors and other service providers needed.
- When regular communication is not functional (down or congested), then establish emergency communication in the region.

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.

Controlling 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 below.

Ground

Call 911 and describe the location and nature of the release. Request highway patrol, sheriff, police, or fire department assistance. Request Los Angeles Port Police assistance.

If manpower permits:

- 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

In the event that such a spill reaches marine waters:

- 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.

Leave patrolling and control activities to the direction of Coast Guard or the Captain of the Port.

Air

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")).

Be prepared to describe the geographical location, or if known, the latitude and longitude of the release.

Third Party Vessel Owners/Operators

It is the responsibility of third party vessel owners/operators to have spill contingency plans developed and in place. In the event of a spill involving a third party vessel at the Facility, it is the responsibility of the vessel owner/operator to immediately respond and mitigate the spill and to coordinate response efforts with the Local Response Team.

If a spill occurs when the vessel (carrying Company cargo) is underway and within the area of the Facility, the Local Response Team will initiate first Company response to assist the vessel in containment and clean up.

Road Transportation Emergency

Employee Actions

Purpose

The purpose of this document is to provide a template of an emergency response plan covering the transportation of products (includes the loading, transport and unloading) that meets the requirements of the Road Transport Standard.

INTRODUCTION

This plan outlines the steps to be taken in handling various accidents involving road transport contractors. The intent of the plan is to eliminate or contain the incident and thereby prevent injuries to people or damage to property and the environment.

Every employee likely to be involved in the implementation and control must be fully conversant with the procedures detailed in this plan.

GENERAL PROCEDURES (Accidents)

Note: Safety to people must come first. Employees must never take any actions that would put themselves or others in harm's way.

RESPONDING TO CARRIER ROAD TRANSPORT INCIDENTS

In the event of a significant incident involving a carrier transporting Shell products **under our operational control**, it is required that a Shell employee, ideally a supervisor or manager, be on site. The company representative must initiate a timely investigation and gather information as directed by the Director of Trucking or the Manager of Delivery Support.

Significant incidents include but are not limited to:

1. An incident of impact resulting in significant media coverage and public concern that could result in damage to the Company brand or reputation.

2. Product spill/leak/release that results in soil, surface water or potential/actual groundwater contamination.

3. Any work-related contractor or third party fatality occurring on or off company property.

4. Road closures due to an incident.

The company representative must complete the ***First Notification of Incident*** form and the ***Product Spill Data Log*** if necessary.

DEFINITIONS

Major Spill - A spill that may require outside assistance to remove, and/or that impacts a storm drain or body of water.

A major spill may also be a Reportable Spill (see definition in Glossary of Terms). In this case, the Contract Carrier must notify the National Response Center (1-800-424-8802) and possibly state and/or local regulatory agencies. Refer to the Core Plan at the beginning of this manual for all Agency/Emergency contact numbers.

Minor Spill - A spill that is small enough to be easily cleaned up by the driver and which does not impact a storm drain or body of water. Some states require certain minor spills to be reported. Contract Carrier is responsible for appropriate notifications.

Under Operational Control - Delivering products on behalf of Shell.

Marine Incidents

Oil Spill

In the event of a spill during any cargo handling operation, the following spill response guidelines should be observed.

Initial Response

- Terminate transfer operations and eliminate the source of the spill (shut down pumps, close block valves, etc.).
- Notify Vessel PIC and Master.
- Drain line/hose into barge, containment system, or other storage media and blank line to stop discharge.

External Notifications

- Make the following EXTERNAL NOTIFICATIONS, or request that they be made immediately:

    1. National Response Center (NRC)
    2. USCG - Marine Safety Office.
    3. State Emergency Response Commission (SERC).
    4. Local Emergency Planning Committee (LEPC).
    5. Fire Department (as necessary).
    6. Police or Sheriff's Department (as necessary).
    7. Police or Sheriff's Department (as necessary).
    8. Other outside resources (as necessary).

Internal Notifications

- Make the following INTERNAL NOTIFICATIONS immediately:

    1. Terminal Management.
    2. Regional Manager.
    3. Marine Emergency Hotline (Marine Group).

Note: In the event of the absence or inability to contact one of the above referenced parties, the calling party should assume the responsibility to continue notifications up the management chain.

Fire and/or Explosion

In the event of a fire or explosion during any cargo handling operation, the following firefighting guidelines should be observed:

Initial Response

- Terminate transfer operations and eliminate the source of the fire (shut down pumps, close block valves, etc.).
- Notify Vessel PIC and Master.

- IF SAFE, make every effort to mitigate the damage and prevent the fire from spreading by fighting the fire with a dry chemical fire extinguisher.
- Fire Alarm Procedures
- FIRE ALARM PROCEDURES - When an alarm is sounded:
- All waterfront transfers should be stopped immediately.
- All personnel should proceed with extreme caution and attempt to determine the location of the fire.
- In the event of a small fire, personnel in the area may attempt to extinguish or control the fire.
- In the event of a large fire or explosion, all personnel should proceed to the pre-arranged muster area and await further instructions.

External Notifications

- Make the following EXTERNAL NOTIFICATIONS, or request that they be made immediately:

1. Fire Department (as necessary).
2. Police or Sheriff's Department (as necessary).
3. Other outside resources (as necessary).

Internal Notifications

- Make the following INTERNAL NOTIFICATIONS immediately:

1. Terminal Management.
2. Regional Manager.
3. Marine Emergency Hotline (Marine Group).

Note: In the event of the absence or inability to contact one of the above referenced parties, the calling party should assume the responsibility to continue notifications up the management chain.

Personnel Injury

In the event of a personnel injury during transfer operations, the following response actions should be followed:

Initial Response

- Terminate transfer operations.
- If prudent, move injured party to a safe/stable location.
- Notify Vessel PIC and Master.

External Notifications

- Make the following EXTERNAL NOTIFICATIONS, or request that they be made immediately:

1. Emergency Medical Services (as necessary).

2. Fire Department (as necessary).
3. Police or Sheriff's Department (as necessary).
4. Other outside resources (as necessary).

Internal Notifications

- Make the following INTERNAL NOTIFICATIONS immediately:

1. Terminal Manager.
2. Terminal Superintendent.
3. Regional Manager

NOTE: In the event of the absence or inability to contact one of the above referenced parties, the calling party should assume the responsibility to continue notifications up the management chain.

Vessel Breakaway

In the event of a vessel breakaway, the following response actions should be observed:

Initial Response

- Terminate transfer operations and close all transfer valves.
- Deploy tug (in the event it is on standby away from the tow) to retrieve the barge(s) and resecure mooring to the dock.

Associated Procedures

- In the event of oil spill, fire/explosion, or personnel injury initiate the appropriate procedures detailed in this section.

Severe Weather Conditions

In the event of severe weather (severe thunderstorms, high winds, etc.), the following safeguards should be observed:

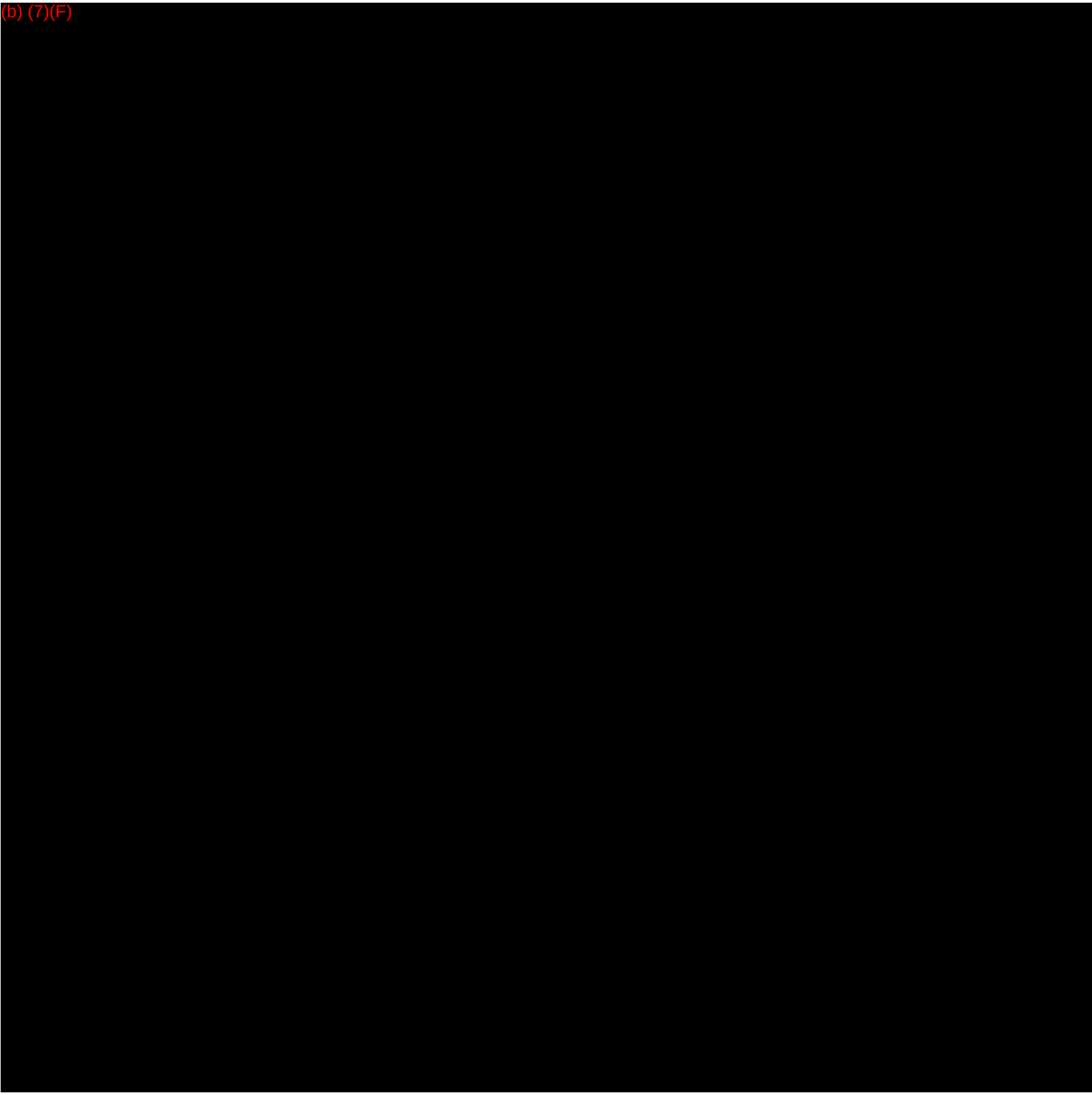
Initial Response

- Terminate transfer operations and close all transfer valves.
- Notify Vessel Master.
- If vessel remains at dock, ensure adequate mooring.
- Secure the area, pump out sump systems, and evacuate as necessary.
- Standby for further instructions and for conditions to improve.

Associated Procedures

- In the event of oil spill, fire/explosion, or personnel injury initiate the procedures detailed herein.

(b) (7)(F)



3.4 SAFETY

Air Monitoring

During an incident in which oil or hazardous material has been spilled or potentially could affect the response, prior to engaging in **any** spill response activity, air monitoring should be conducted in the affected area.

It is imperative that all air monitoring equipment is operated and their data interpreted by trained personnel thoroughly familiar with the equipment.

- The air monitoring equipment should be calibrated before and after every use using the equipment manufacturer's recommended procedures and standards.
- Air monitoring measurements which are to be made prior to entry into the spill area include:
    - Lower Explosive Limit (LEL)
    - Oxygen content
- 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.
- Where unknown and multiple contaminants may be present, instrument readings should be interpreted conservatively.

The Incident Commander is responsible for industrial hygiene monitoring in the post discovery period and may refer to the Safety Officer.

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
  - 1.0 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.
- Additional information regarding decontamination requirements can be found in the Terminal Manual.

Personal Protective Equipment (PPE)

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

PERSONAL PROTECTIVE EQUIPMENT(PPE)	
LEVEL A Self Contained Breathing Apparatus (SCBA) (worn inside suit) Encapsulated Chemical Protective Suit Chemical Protective Gloves Chemical Protective Boots Hard Hat	LEVEL B SCBA (worn outside suit) Chemical Protective Suit w/Hood Chemical Protective Boots Chemical Protective Gloves Hard Hat
LEVEL C Air Purifying Respirator (APR) APR ½ Face / Full Face Hard Hat Glasses (worn with ½ face APR) Chemical Protective Boots Chemical Protective Gloves Chemical Protective Suit/Tyvek	LEVEL D Hard Hat Safety Glasses Work Uniform / Clothes Leather Gloves Safety Boots
MODIFIED LEVEL C Same as Level C except no APR requirements	

3.5 PRODUCT SPECIFIC RESPONSE CONSIDERATIONS

The following emergency response guides may be used by first responders during the initial phases of a hazardous material incident.

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	• 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

- 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

- 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	**Large Spill** • Consider initial downwind evacuation for at least 300 meters (1,000 feet). **Fire** • 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	• 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

- 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

- **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	**Large Spill** • Consider initial downwind evacuation for at least 300 meters (1,000 feet). **Fire** • 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.

4.0 RESPONSE TEAMS

4.1 INTRODUCTION

This section describes organizational features and duties of the Qualified Individual and the Mormon Island Marine Terminal Incident Command System (ICS).

The Mormon Island Marine Terminal 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.

This section describes organizational features and duties of the Local Response Team (LRT) and the Tier II and III Response Team. The Tier II and III Teams are managed by Emergency Management (EM).

The key to an effective emergency response is a rapid, coordinated, tiered response by the affected unit/facility, AWAY Team, and/or National Response Team, consistent with the magnitude of an incident.

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)

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.

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 Appendix B.

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 Team

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 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:

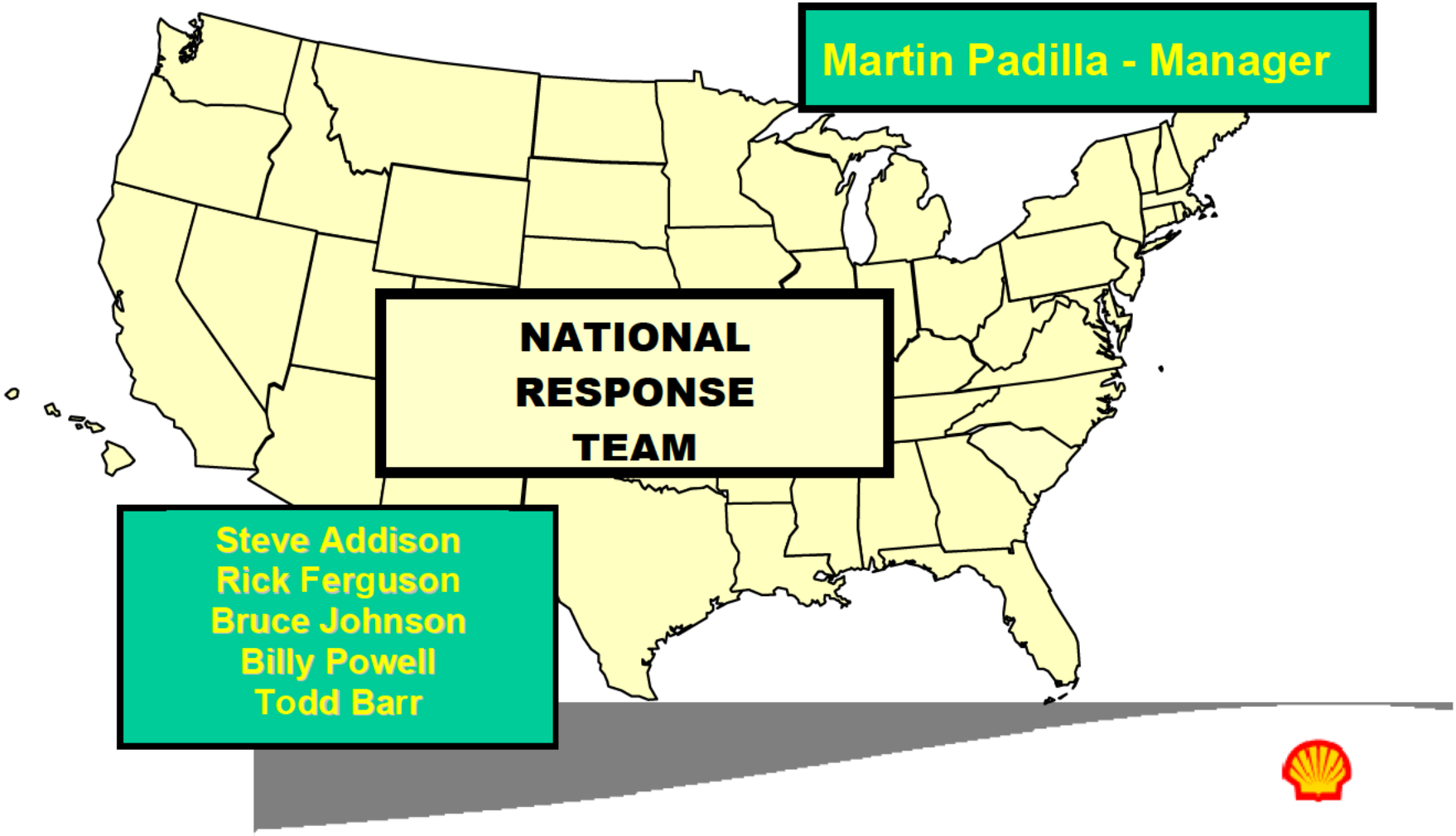
- Provide for increased safety
- Shorten emergency mitigation time by providing more effective and organized mitigation
- Cause increased confidence and support from local, state, federal and public sector emergency response personnel
- Provide a solid cornerstone for emergency planning efforts

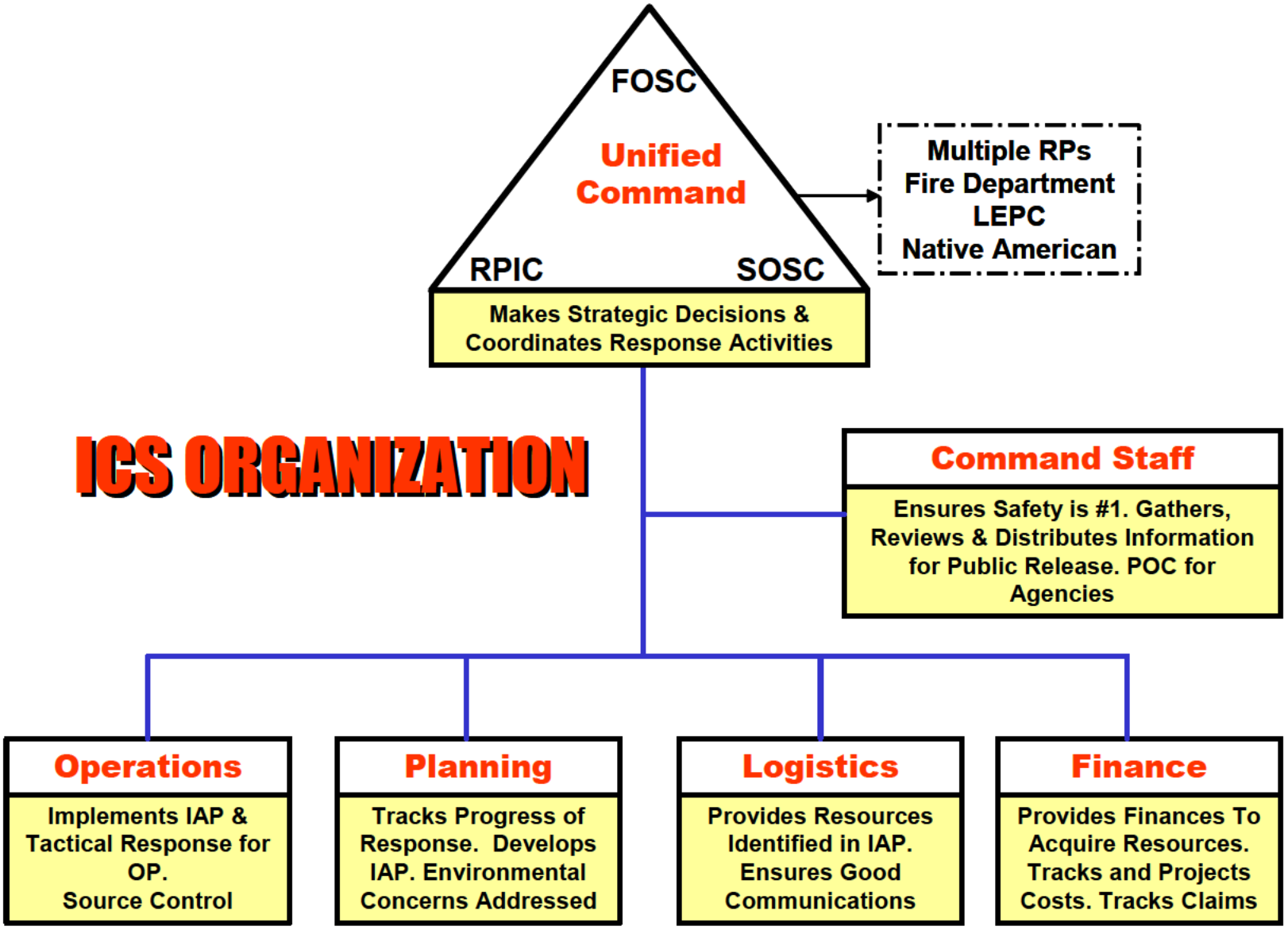
A description of each ICS position, the primary responsibilities, and pre-emergency planning activities are provided in Figures 4.1 - 4.5.

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

Click to view the file - ICS

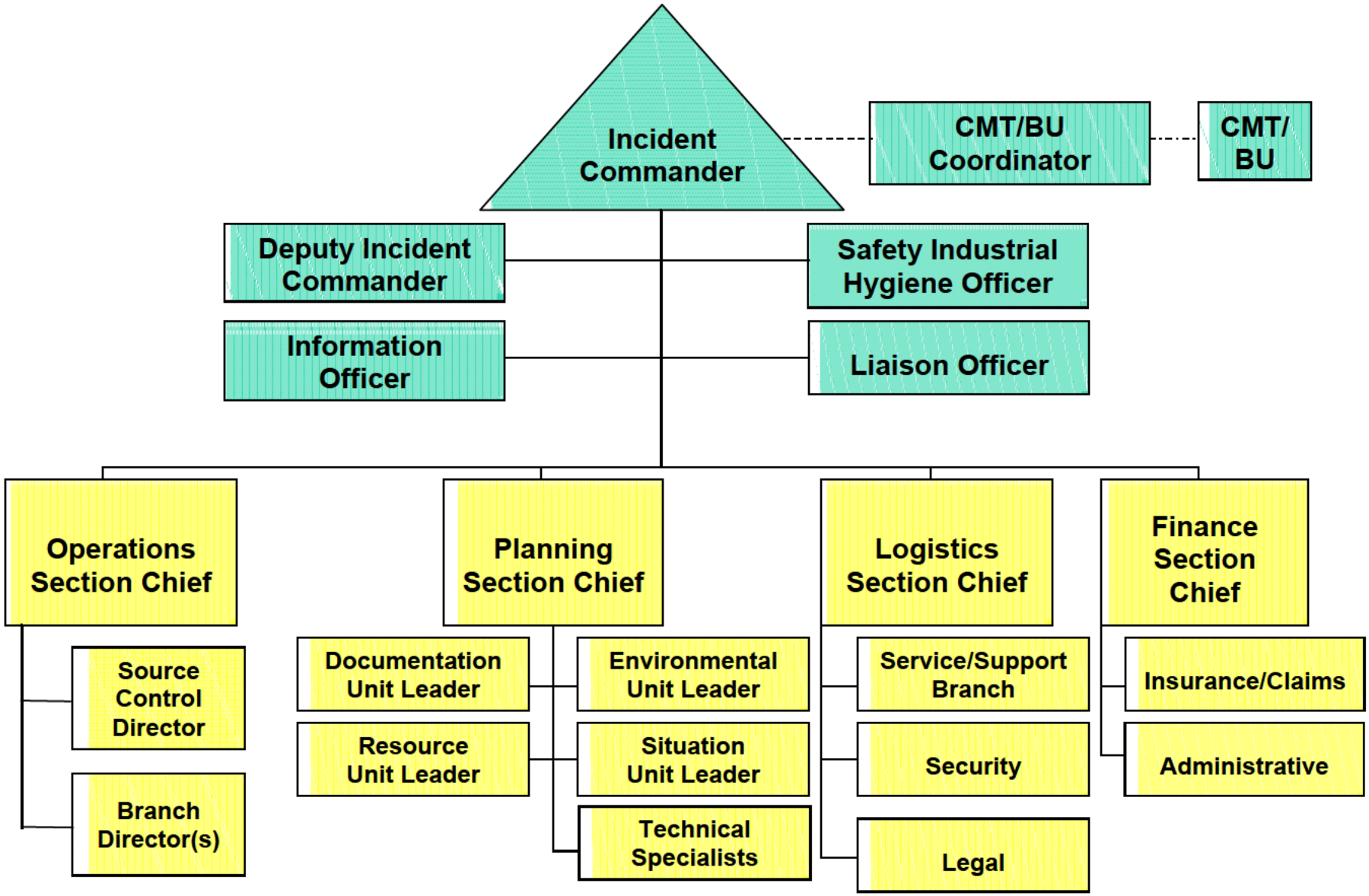
Emergency Management




FOSC
Unified Command
RPIC
SOSC
Makes Strategic Decisions & Coordinates Response Activities
Multiple RPs
Fire Department
LEPC
Native American
ICS ORGANIZATION
Command Staff
Ensures Safety is #1. Gathers, Reviews & Distributes Information for Public Release. POC for Agencies
Operations
Implements IAP & Tactical Response for OP.
Source Control
Planning
Tracks Progress of Response. Develops IAP. Environmental Concerns Addressed
Logistics
Provides Resources Identified in IAP. Ensures Good Communications
Finance
Provides Finances To Acquire Resources. Tracks and Projects Costs. Tracks Claims

ICS ORGANIZATION

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.

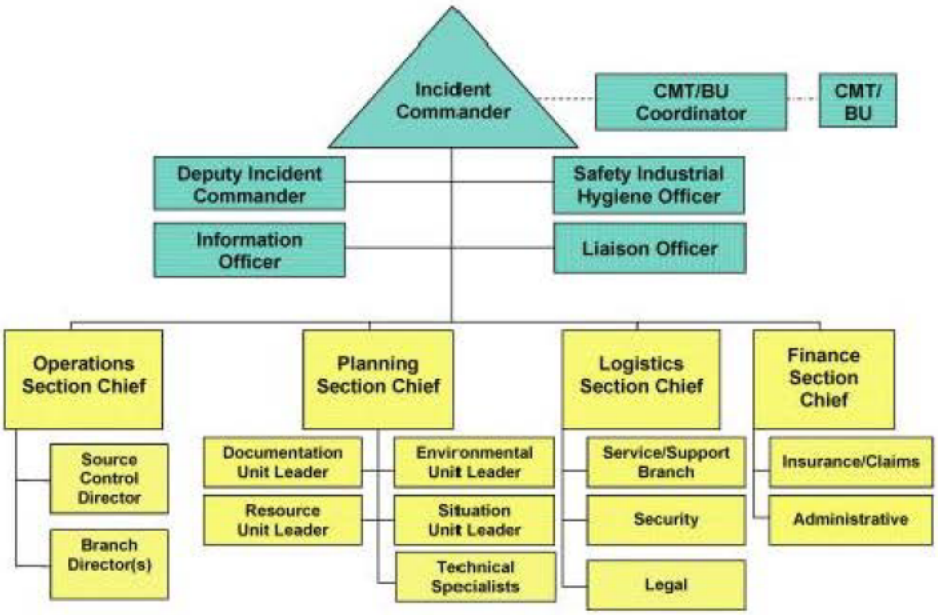
The UC is responsible for overall management of an incident. The UC directs incident activities and approves and releases resources. The UC structure is a vehicle for coordination, cooperation and communication which is essential to an effective response.

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 OFFICER

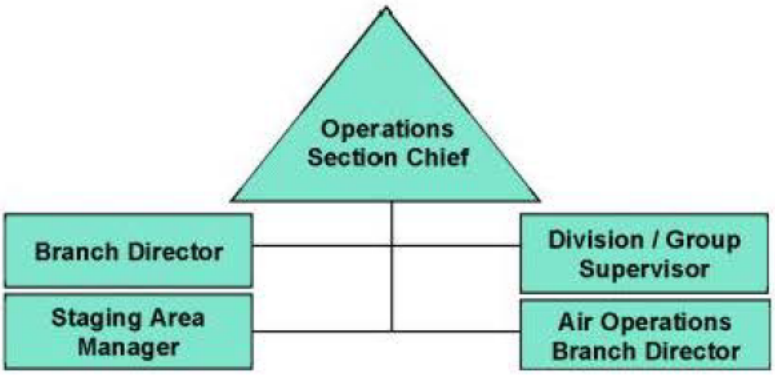
- Participate in planning meetings.
- Identify hazardous situations associated with the incident.
- Review the IAP for safety implications.
- Exercise emergency authority to stop and prevent unsafe acts.
- Investigate accidents that have occurred within the incident area.
- Review and approve the medical 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 medial reports originating within the Branch.

DIVISION/GROUP SUPERVISOR

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

STAGING AREA MANAGER

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

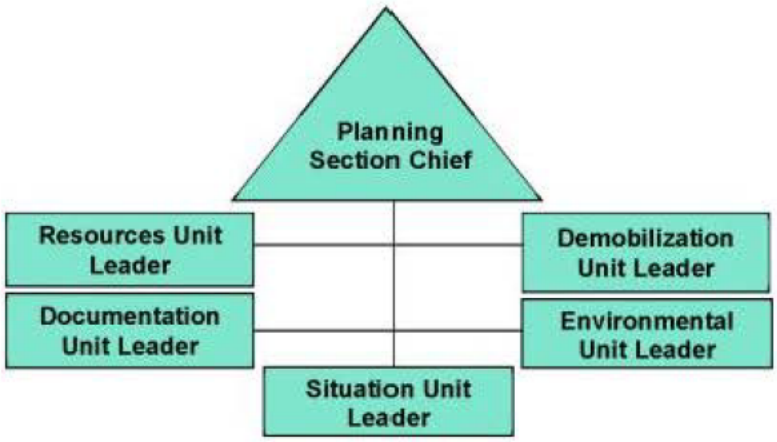
- Obtain and issue receipts for radio equipment and other supplies distributed and received at Staging Area.
- Determine required resource levels from the OPS.
- Advise the OPS when reserve levels reach minimums.
- Maintain and provide status to Resource Unit of all resources in Staging Area.
- Demobilize Staging Area in accordance with the Incident Demobilization Plan.

AIR OPERATIONS BRANCH DIRECTOR

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

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

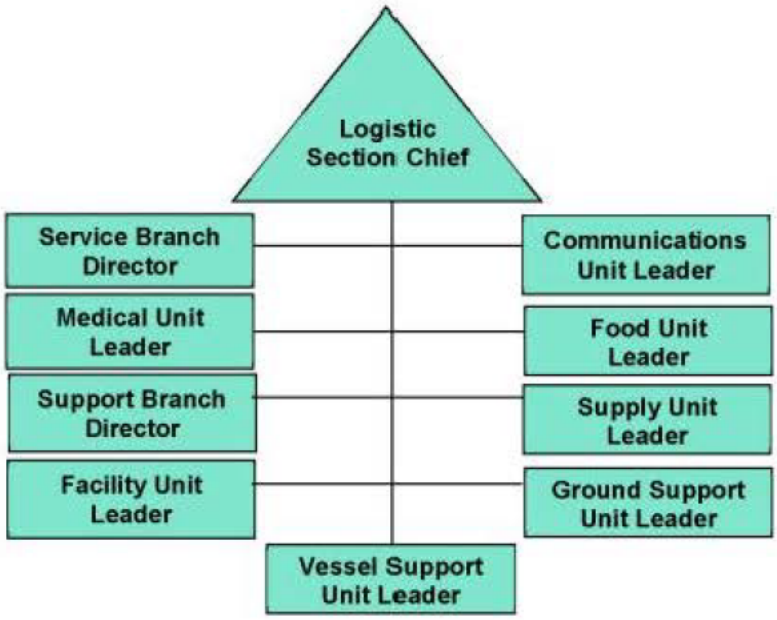
- Participate in planning meetings as required.
- Review incident resource records to determine the likely size and extent of demobilization effort.
- Based on the above analysis, add additional personnel, workspace, and supplies as needed.
- Coordinate demobilization with Agency Representatives.
- Monitor 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

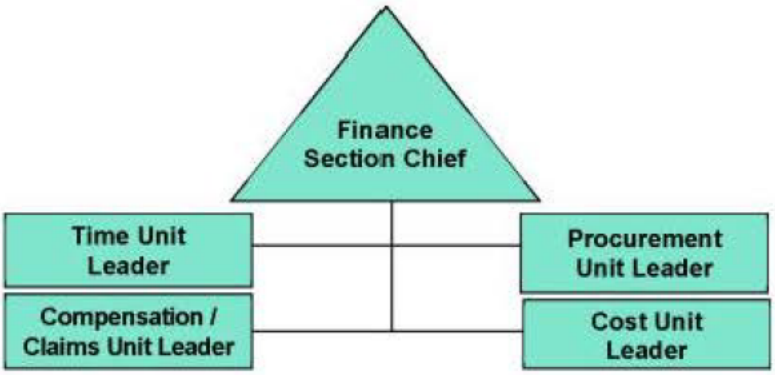
- Participate in Support Branch/Logistics Section planning activities.
- Develop and implement the Traffic Plan.
- Support out-of-service resources.
- Notify the Resources Unit of all status changes on support and transportation vehicles.
- Arrange for and activate fueling, maintenance, and repair of 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.

5.0 RESPONSE PLANNING

5.1 INCIDENT ACTION PLAN

Emergency response activities are planned and coordinated through the use of an Incident Action Plan (IAP) which is developed for each Operational Period of a response by the Incident Management Team. For small responses, an ICS 201 (Incident Briefing Form provided in 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.

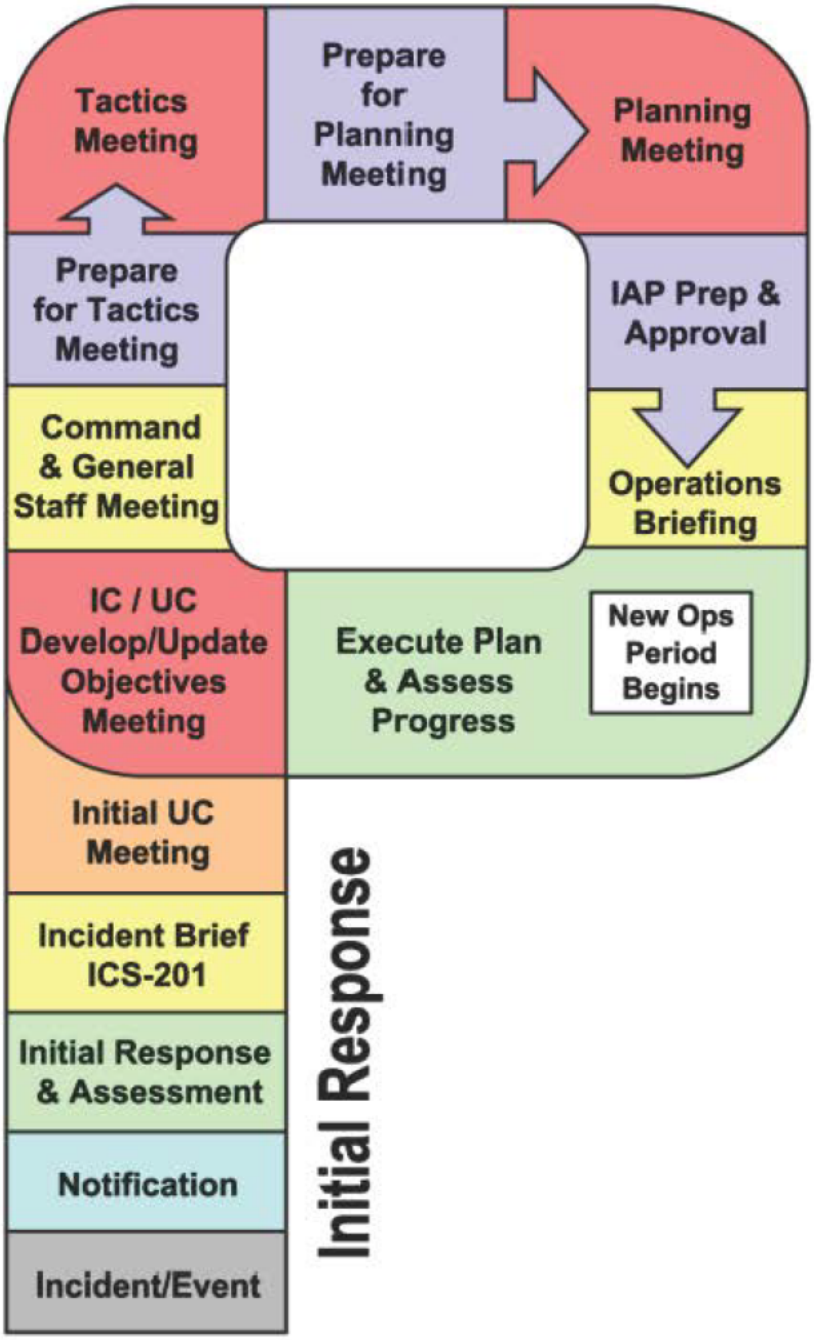
Depending on the nature and severity of the emergency, additional documents may be included in the IAP. These may include:

- 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

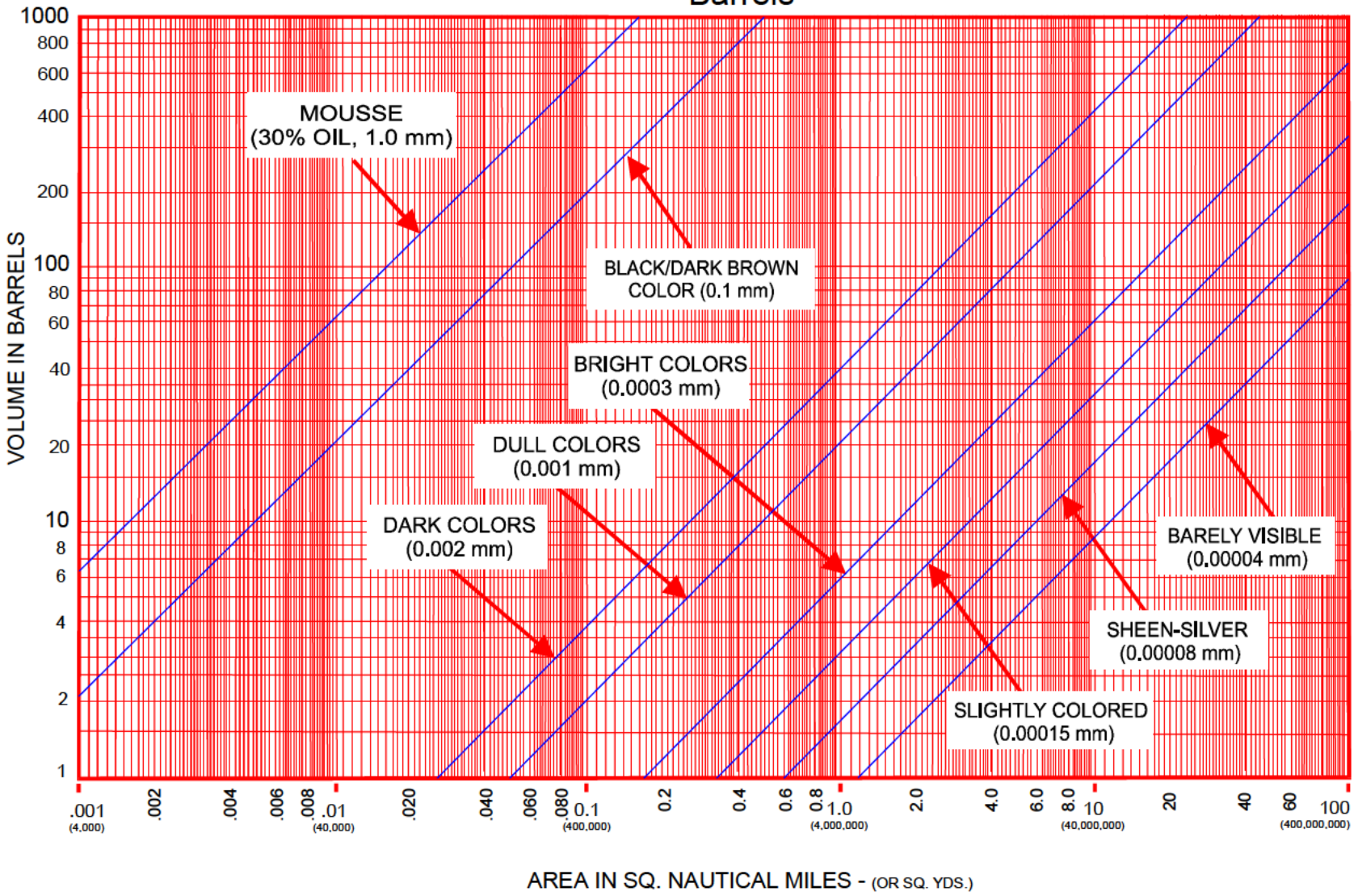
6.1 VOLUME ESTIMATION AND PLANNING DISTANCE

Spill Volume Estimates

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

Click to view Volume Estimator

Oil Slick Volume Estimator Barrels



Planning Distance Calculation

"Oil Transport on Tidal-Influence Areas"

- The worst case discharge consists of gasoline, a non-persistent oil.
- The planning distance is five (5) miles during flood and ebb tides.

Note: The planning distance was determined in accordance with 40 CFR, Appendix C Attachment C-111.

Trajectory Analysis

Oil spilled on water will react primarily to the effects of wind and current. The oil will tend to spread to a thin layer under the influence of gravity (primary) and chemical (secondary) forces. The following describes the behavior of oil on water:

- Oil will move in the direction and at the rate of the current under negligible wind conditions.
- Oil will move in the direction and at approximately 3.4 % of the velocity of the wind under negligible current conditions.
- The combined effects of wind and current on the oil should be carefully analyzed. A method of vector analysis can be performed to determine the net direction of movement (wind forces can work in addition to, against, or in many other combinations with the current).
- The primary method of surveillance for the Facility will be visual. Visual surveillance is not effective however in rain, fog, darkness, or heavy cloud cover. It is difficult to observe a slick on the water from a boat, dock or land due to the angle of observation. Aerial surveillance is the preferred method of visual surveillance because of the elevated view and the ability to cover a large area in a short period.

The CCW Regional Resource Manual contains detailed information on spill trajectory analysis and various means of surveillance for spills originating in the Los Angeles Harbor.

6.2 ENVIRONMENTAL SENSITIVITIES AND VULNERABILITY ANALYSIS

Critical Areas to Protect

The critical areas to protect are classified as having high, moderate, or low sensitivity to oil. The Federal, State, and local authorities will further clarify these categories at the time of the response. The categories are defined as follows:

HIGH SENSITIVITY

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

MODERATE SENSITIVITY

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

LOW SENSITIVITY

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

Environmental/Socio-Economic Sensitivities

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

All environmental and socio-economic sensitive areas 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
- ☐ Maps showing environmentally sensitive areas
- ☐ Other industry and private experts

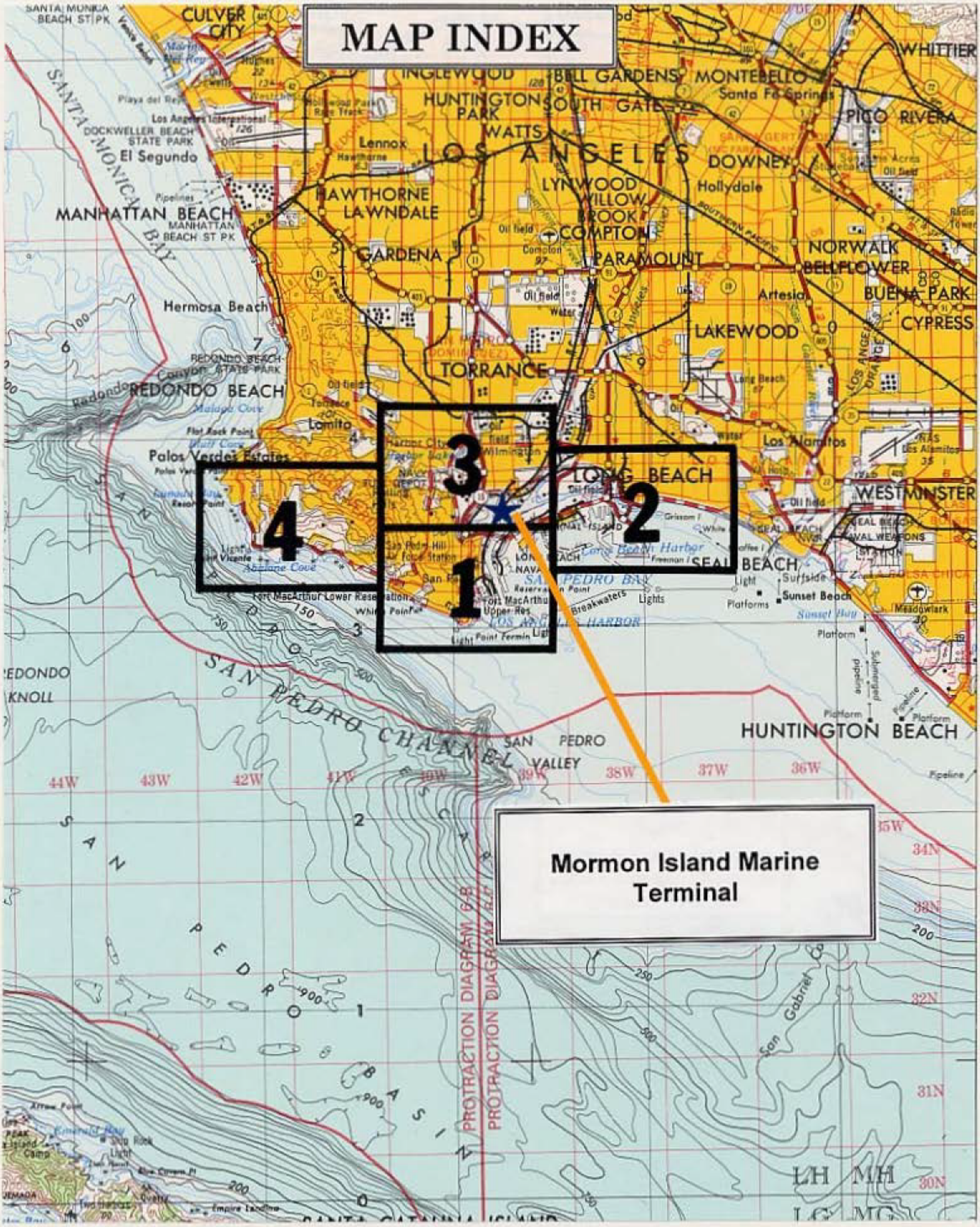
Environmental Sensitivity Maps

The following Environmental Sensitivity Maps have been prepared utilizing U.S. Geological Survey 7.5 Minute Quadrangle Maps as the base. The maps include a key to the reference symbols located on each map.

Remember these maps are to be utilized as guidelines only. During a real response effort Federal, State, and Local agencies should be contacted to provide further assistance in the proper identification and protection of the various environmental and socio-economic sensitive areas.

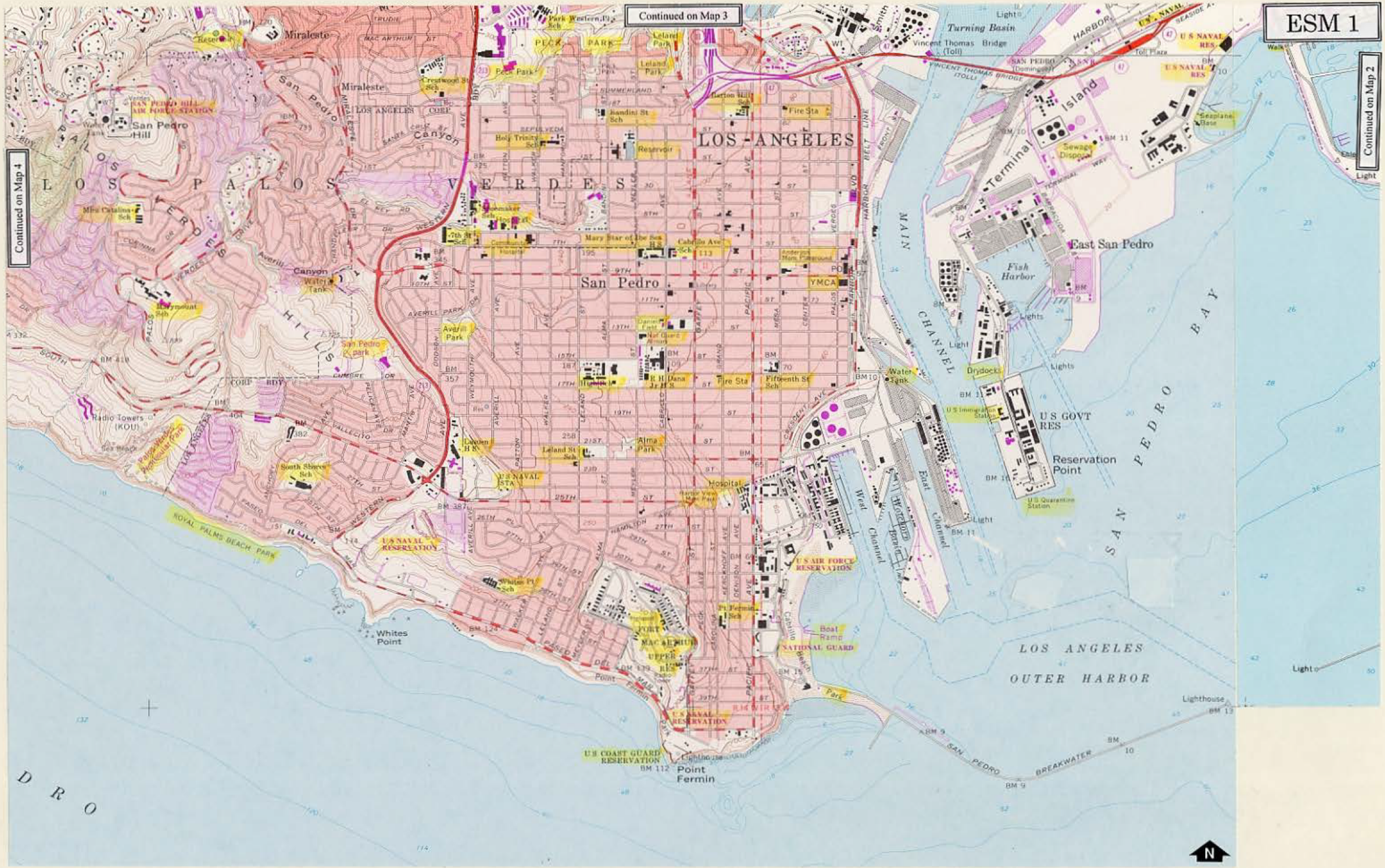
Refer to the ACP for additional detailed information on environmental sensitivities in the Los Angeles Harbor.

Click to view ESM Index


MAP INDEX
3
4
2
1
Mormon Island Marine Terminal
PROTRACTION DIAGRAM 6-B
PROTRACTION DIAGRAM 6-A
SAN PEDRO CHANNEL
SAN PEDRO BASIN
SAN PEDRO ESCARP
SAN PEDRO BAY
LOS ANGELES HARBOR
LOS ANGELES
LONG BEACH
HUNTINGTON BEACH
SEAL BEACH
TORRANCE
REDONDO BEACH
MANHATTAN BEACH
HERMOSA BEACH
PALOS VERDES ESTATES
EL SEGUNDO
CULVER CITY
INGLEWOOD
HAWTHORNE
LAWNDALE
GARDENA
COMPTON
LYNWOOD
WILLOWBROOK
WATTS
HUNTINGTON PARK
BELL GARDENS
SOUTH GATE
DOWNEY
PARAMOUNT
NORWALK
BELLFLOWER
BUENA PARK
CYPRESS
LAKEWOOD
ARTESIA
LOS ALAMITOS
WESTMINSTER
PICO RIVERA
MONTEBELLO
WHITTIER
LOMITA
SAN PEDRO
PEDRO VALLEY
REDONDO KNOLL
SUNSET BEACH
SURFSIDE
LH
MH
LG
MG

Click to view ESM 1

ESM 1


Continued on Map 3
Continued on Map 4
Continued on Map 2
Miraleste
San Pedro Hill
LOS PALOS VERDES
LOS ANGELES
San Pedro
Canyon
Averill Park
Peck Park
Leland Park
Reservoir
Fire Sta
Mary Star of the Sea H S
Cabrillo Ave Sch
YMCA
Fifteenth St Sch
R H Dana Jr H S
Alma Park
Hospital
Turning Basin
Vincent Thomas Bridge (Toll)
Terminal Island
U S NAVAL RES
Seaplane Base
Sewage Disposal
East San Pedro
Fish Harbor
MAIN CHANNEL
Drydocks
U S GOVT RES
Reservation Point
U S Quarantine Station
U S Immigration Station
West Channel
East Channel
U S AIR FORCE RESERVATION
NATIONAL GUARD
Boat Ramp
Radio Towers (KOU)
Palos Verdes Peninsula Park
South Shores Sch
U S NAVAL STA
U S NAVAL RESERVATION
ROYAL PALMS BEACH PARK
Whites Point
Point Fermin
U S COAST GUARD RESERVATION
LOS ANGELES OUTER HARBOR
SAN PEDRO BREAKWATER
Lighthouse
Light
N

Click to view ESM 2

ESM 2

Continued on Map 3

Continued on Map 1

LONG BEACH

OIL FIELD

ISLAND

RESERVATION

Inner Harbor

Channel

Channel Two

Channel Three

East Basin

West Basin

MIDDLE HARBOR

LONG BEACH

Basin Six

Southeast Basin

LONG BEACH CHANNEL

OUTER HARBOR

SAN PEDRO BAY

NAVY MOLE

Drake Park

Shoemaker Bridge

Edison Sch

Boyd High Sch

St Anthony High Sch

Franklin Jr HS

Hubbard Sch

Rose Park

Jefferson Jr HS

St Matthews Sch

St Bartholomews Sch

Fremont Sch

Hosp

Fire Sta.

PO

City Hall

Lincoln Park

Carroll Park

Horace Mann Sch

Harriman Hospital

Santa Cruz Park

Palm Beach Park

Victory Park

Municipal Auditorium

Navy Landing

Lights

Oil Sumps

Wells (Salt)

Dry Dock

Lock

Light

Radio Tower

Island Grissom

Island White

Island Freeman

Island Chaffee

Belmont Pier

Belmont Shor

Queen Mary

BLUFF PARK

OCEAN BLVD

BROADWAY

GRANT BDY

FLORIDA

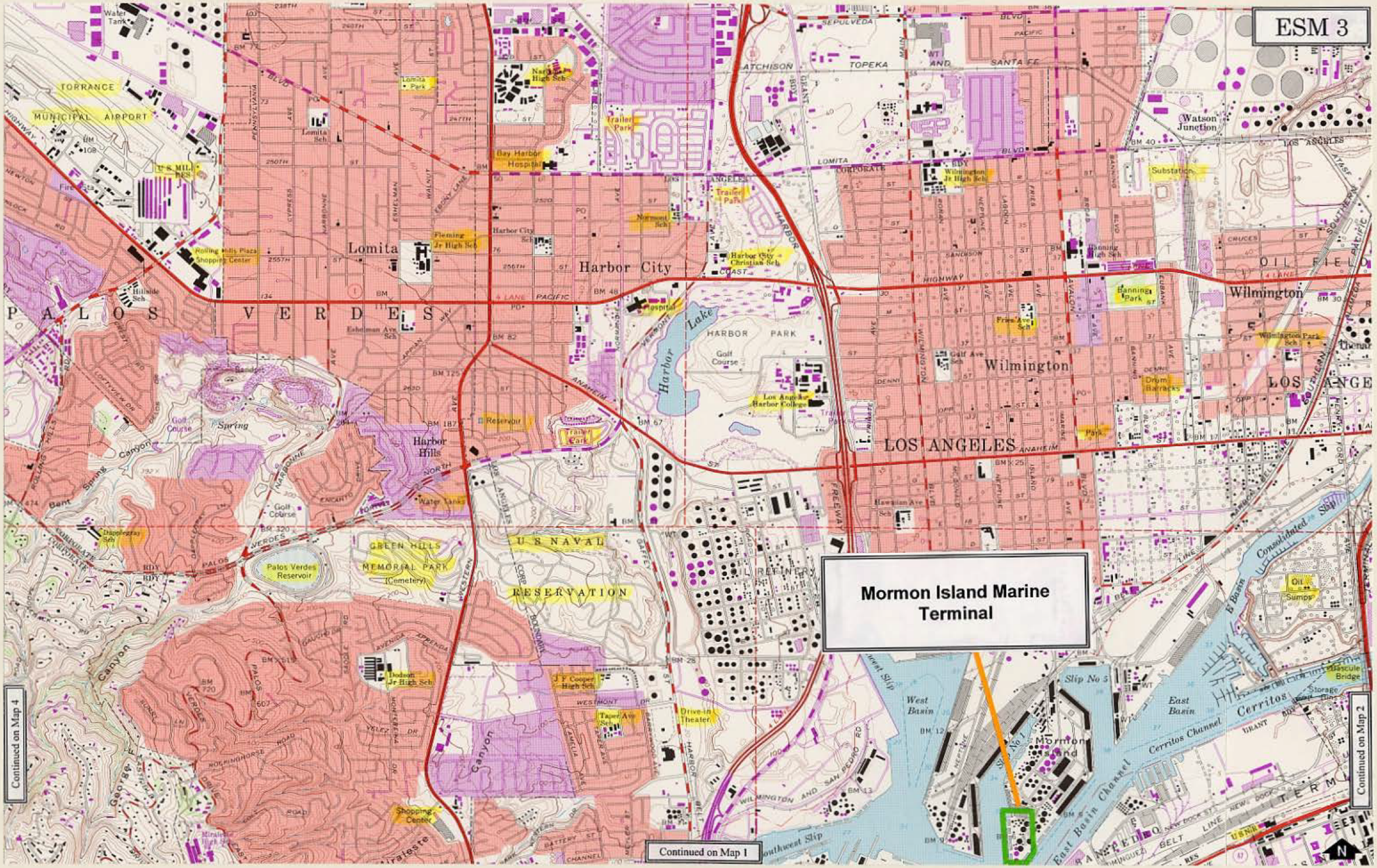
COLORADO

VISTA

N

Click to view ESM 3

ESM 3


Mormon Island Marine Terminal
Continued on Map 4
Continued on Map 1
Continued on Map 2
TORRANCE
MUNICIPAL AIRPORT
Lomita
Harbor City
PALOS VERDES
LOS ANGELES
Wilmington
HARBOR PARK
Harbor Lake
Harbor Hills
GREEN HILLS MEMORIAL PARK (Cemetery)
U S NAVAL RESERVATION
Palos Verdes Reservoir
Watson Junction
OIL FIELD
Mormon Island
Slip No 3
Slip No 1
West Basin
East Basin
Cerritos Channel
Consolidated Slip
Southwest Slip
Drum Barracks
Los Angeles Harbor College
Harbor City Christian Sch
Banning High Sch
Wilmington Jr High Sch
Fleming Jr High Sch
Hodson Jr High Sch
J F Cooper High Sch
Tajauta Ave Sch
Drive-In Theater
Shopping Center
Golf Course
Water Tank
Reservoir
Trailer Park
Hospital
Substation
Oil Sumps
Storage Bins
Bascule Bridge
Lomita Park
Lomita Sch
Bay Harbor Hospital
Harbor City Sch
Normont Sch
Rolling Hills Plaza Shopping Center
Hillside Sch
Eshelman Ave Sch
Dapplegray Sch
Golf Ave Sch
Fries Ave Sch
Wilmington Park Sch
Hawaiian Ave Sch
Banning Park
Park
Spring
Canyon
SEPULVEDA
TOPEKA
SANTA FE
PACIFIC
HARBOR
FREEWAY
HIGHWAY
ANAHEIM
WESTERN
NORMANDIE
VERMONT
PENNSYLVANIA
CRENSHAW
NARBONNE
WALNUT
EBONY LANE
CYPRESS
ESPLANADE
PALOS VERDES
CRENSHAW BLVD
PACIFIC COAST
LOMITA BLVD
WESTMONT DR
NORTHPARK DR
NORTHRIDGE RD
NORTHWOOD DR
GOLDEN CYPRESS
GAUDIN DR
AVENIDA APPENDIA
MONTEMALAGA DR
YELEZ DR
NORTHWOOD RD
NORTHRIDGE DR
NORTHPARK DR
NOLAN HORSE DRIVE
LOOKOUT DR
LOOKOUT RD
LOOKOUTVIEW DR
ROLLING HILLS RD
CRENSHAW BLVD
PALOS VERDES BLVD
PALOS VERDES DR EAST
PALOS VERDES DR WEST
GEORGE T. BALES
WILMINGTON AND SAN PEDRO RD
HARBOR BELT
SOUTHERN PACIFIC
SANTA FE
ATCHISON
TOPEKA
LOMITA CORPORATE
ANGELES
BM 48
BM 82
BM 125
BM 187
BM 67
BM 120
BM 515
BM 720
BM 607
BM 28
BM 12
BM 13
BM 25
BM 40
BM 30
BM 108
BM 73
BM 76
BM 111
BM 134
BM 192
BM 200
BM 274
BM 263
BM 255
BM 247
BM 238
BM 250
BM 257
BM 260
BM 262
BM 264
BM 266
BM 268
BM 270
BM 272
BM 274
BM 276
BM 278
BM 280
BM 282
BM 284
BM 286
BM 288
BM 290
BM 292
BM 294
BM 296
BM 298
BM 300
BM 302
BM 304
BM 306
BM 308
BM 310
BM 312
BM 314
BM 316
BM 318
BM 320
BM 322
BM 324
BM 326
BM 328
BM 330
BM 332
BM 334
BM 336
BM 338
BM 340
BM 342
BM 344
BM 346
BM 348
BM 350
BM 352
BM 354
BM 356
BM 358
BM 360
BM 362
BM 364
BM 366
BM 368
BM 370
BM 372
BM 374
BM 376
BM 378
BM 380
BM 382
BM 384
BM 386
BM 388
BM 390
BM 392
BM 394
BM 396
BM 398
BM 400
BM 402
BM 404
BM 406
BM 408
BM 410
BM 412
BM 414
BM 416
BM 418
BM 420
BM 422
BM 424
BM 426
BM 428
BM 430
BM 432
BM 434
BM 436
BM 438
BM 440
BM 442
BM 444
BM 446
BM 448
BM 450
BM 452
BM 454
BM 456
BM 458
BM 460
BM 462
BM 464
BM 466
BM 468
BM 470
BM 472
BM 474
BM 476
BM 478
BM 480
BM 482
BM 484
BM 486
BM 488
BM 490
BM 492
BM 494
BM 496
BM 498
BM 500
BM 502
BM 504
BM 506
BM 508
BM 510
BM 512
BM 514
BM 516
BM 518
BM 520
BM 522
BM 524
BM 526
BM 528
BM 530
BM 532
BM 534
BM 536
BM 538
BM 540
BM 542
BM 544
BM 546
BM 548
BM 550
BM 552
BM 554
BM 556
BM 558
BM 560
BM 562
BM 564
BM 566
BM 568
BM 570
BM 572
BM 574
BM 576
BM 578
BM 580
BM 582
BM 584
BM 586
BM 588
BM 590
BM 592
BM 594
BM 596
BM 598
BM 600
BM 602
BM 604
BM 606
BM 608
BM 610
BM 612
BM 614
BM 616
BM 618
BM 620
BM 622
BM 624
BM 626
BM 628
BM 630
BM 632
BM 634
BM 636
BM 638
BM 640
BM 642
BM 644
BM 646
BM 648
BM 650
BM 652
BM 654
BM 656
BM 658
BM 660
BM 662
BM 664
BM 666
BM 668
BM 670
BM 672
BM 674
BM 676
BM 678
BM 680
BM 682
BM 684
BM 686
BM 688
BM 690
BM 692
BM 694
BM 696
BM 698
BM 700
BM 702
BM 704
BM 706
BM 708
BM 710
BM 712
BM 714
BM 716
BM 718
BM 720
BM 722
BM 724
BM 726
BM 728
BM 730
BM 732
BM 734
BM 736
BM 738
BM 740
BM 742
BM 744
BM 746
BM 748
BM 750
BM 752
BM 754
BM 756
BM 758
BM 760
BM 762
BM 764
BM 766
BM 768
BM 770
BM 772
BM 774
BM 776
BM 778
BM 780
BM 782
BM 784
BM 786
BM 788
BM 790
BM 792
BM 794
BM 796
BM 798
BM 800
BM 802
BM 804
BM 806
BM 808
BM 810
BM 812
BM 814
BM 816
BM 818
BM 820
BM 822
BM 824
BM 826
BM 828
BM 830
BM 832
BM 834
BM 836
BM 838
BM 840
BM 842
BM 844
BM 846
BM 848
BM 850
BM 852
BM 854
BM 856
BM 858
BM 860
BM 862
BM 864
BM 866
BM 868
BM 870
BM 872
BM 874
BM 876
BM 878
BM 880
BM 882
BM 884
BM 886
BM 888
BM 890
BM 892
BM 894
BM 896
BM 898
BM 900
BM 902
BM 904
BM 906
BM 908
BM 910
BM 912
BM 914
BM 916
BM 918
BM 920
BM 922
BM 924
BM 926
BM 928
BM 930
BM 932
BM 934
BM 936
BM 938
BM 940
BM 942
BM 944
BM 946
BM 948
BM 950
BM 952
BM 954
BM 956
BM 958
BM 960
BM 962
BM 964
BM 966
BM 968
BM 970
BM 972
BM 974
BM 976
BM 978
BM 980
BM 982
BM 984
BM 986
BM 988
BM 990
BM 992
BM 994
BM 996
BM 998
BM 1000

Click to view ESM 4

ESM 4


Palos Verdes Point
Lunada Bay
Resort Point
Point Vicente
Rolling Hills Estates
Portuguese Bend
Abalone Cove
Long Point
MARINELAND
Palos Verdes High Sch
Lunada Bay Sch
Margate Sch
Pedregal Sch
Rancho Sch
Rolling Hills High Sch
Rolling Hills Country Day Sch
Shopping Center
Radio Facility
Marymount College
Wayfarers Chapel
Portuguese Bend Riding Club
Water Tank
Pt Vicente Sch
Los Verdes Park
Del Cerro Park
St John Fisher Sch
Ball Parks
PT VICENTE COUNTY PARK
US COAST GUARD RESERVATION
Lighthouse
Parking
Inspiration Point
Portuguese Point
Rolling Hills
PALOS VERDES ESTATES
ROLLING HILLS ESTATES
PALOS VERDES HILLS
PALOS VERDES PENINSULA
LOS VERDES GOLF COURSE
CORPORATE BOUNDARY
Agua Amarga Canyon
Agua Magna Canyon
Sepulveda Canyon
Portuguese Canyon
Altamira Canyon
Klondike Canyon
Malaga Canyon
HAWTHORNE BLVD
CRENSHAW BLVD
ROLLING HILLS ROAD
CRAFTER CREST ROAD
PALOS VERDES DRIVE SOUTH
PALOS VERDES DRIVE WEST
ROLLING HILLS DRIVE
ROLLING HILLS ROAD
Continued on Map 3
Continued on Map 1
N

Click to view Mormon Island Ecological Inventory Map Index

Mormon Island Marine Terminal
Ecological Inventory Map Index

HABITAT USE

Shown in RED for species with special status, BLUE for aquatic organisms, and BROWN for terrestrial organisms.

a	Breeding Area	e	Designated Critical Habitat	w	Spring
b	Nursery Area	f	Migratory Area	x	Summer
c	Adult Concentration Area	g	Commercial Harvesting Area	y	Fall
d	Unusual Distribution or Specimen	h	Sport Fishing/Hunting Area	z	Winter

AQUATIC ORGANISMS

PLANTS (1-49)

2	Giant Kelp	
6	Eelgrasses	
7	Surfgrasses	
10	Feather Boa Kelp	

INVERTEBRATES (50-99)

50	Shrimp	c
54	Clams	f
55	Abalone	f
66	Rock Scallop	
74	Pismo Clam	f
75	Red Abalone	cf
76	Black Abalone	cf
77	Pink Abalone	cf
78	Green Abalone	cf
81	Ghost Shrimp	
84	Spiny Lobster	cf
85	Squid	c
87	Sea Urchin	c

FISH (100-299)

101	Flatfish	f
102	Rockfish	cf
120	California Halibut	f
121	Speckled Sanddab	f
129	Sharks	cf
133	Califronia Grunion	af

FISH (100-299) Con't.

134	White Seabass	f
137	Kelp Bass	f
139	Barred Sand Bass	f
141	Chub Mackerel	f
142	Jack Mackerel	cf
143	Tunas	cf
146	Pacific Bonito	cf
148	Yellowtail	cf
157	Sculpins	cf
158	Cabezon	f
162	Ocean Whitefish	cf
163	Northern Anchovy	
168	Pacific Barracuda	f
169	California Sheephead	f
170	Croakers	f
173	Garibaldi	d

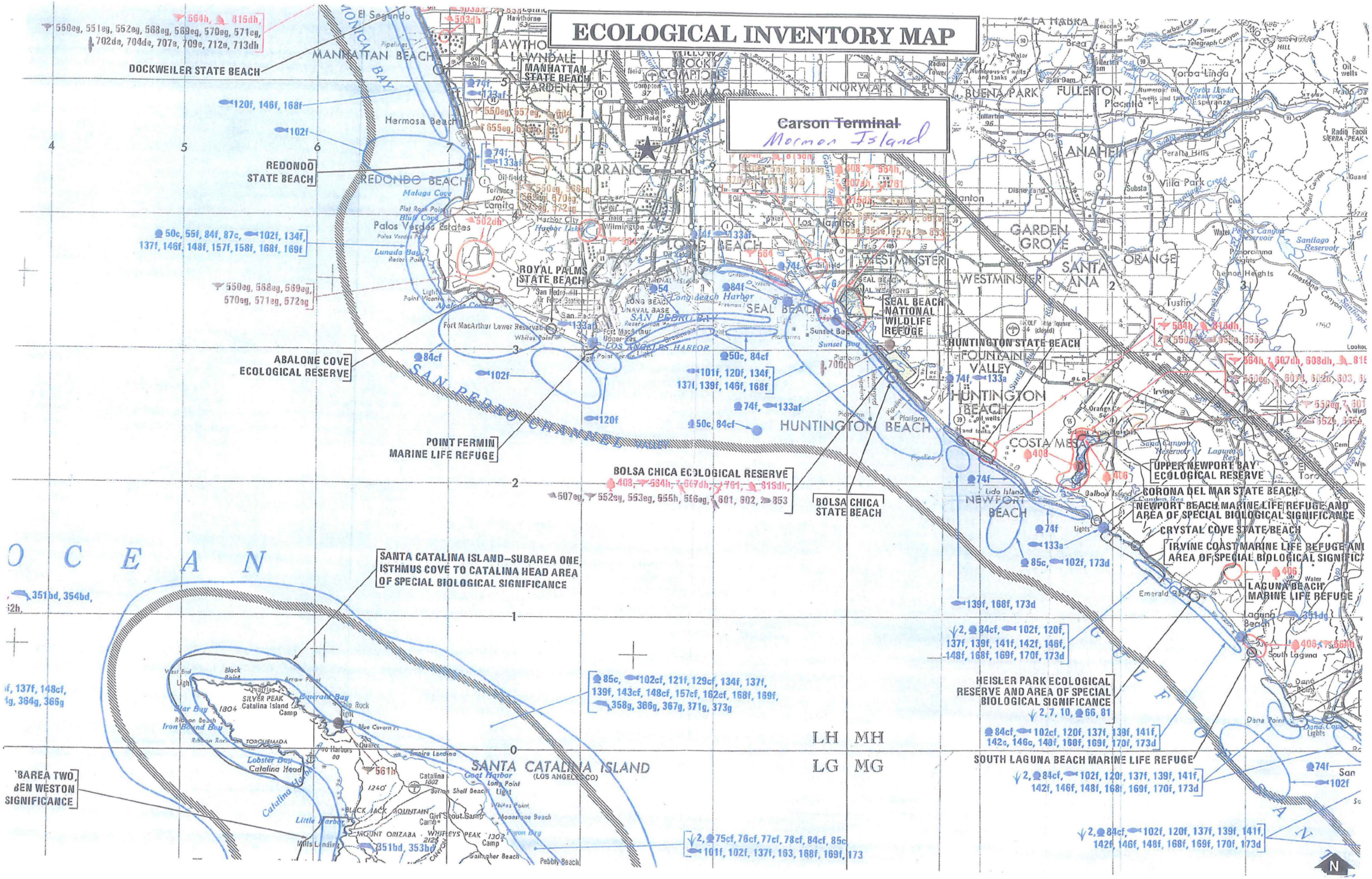
MAMMALS (350-399)

351	California Sea Lion	bdg
358	Minke Whale	g
366	Pacific Whitesided Dolphin	g
367	Common Dolphin	g
371	Pilot Whale	g
373	Northern right Whale Dolphin	g

Mormon Island Marine Terminal (Continued)

TERRESTRIAL ORGANISMS					
PLANTS(400-490)			**WATERFOWL (650-699) Con't.**		
406	Stonecrop Family		655	Dabbling Ducks	e
408	Figwort Family		656	Diving Ducks	eg
			657	Sea Ducks	e
INVEREBRATES (500-549)			**RAPTORS (700-749)**		
502	Palos Verdes Blue Butterfly	dh	700	Raptors	dh
503	El Segundo Blue Butterfly	dh	702	Hawks	de
507	Monarch Butterfly	eg	704	Falcons	de
SHOREBIRDS (550-599)			707	White-tailed Kite	e
550	Shorebirds	eg	709	Osprey	e
551	Jaegers	eg	712	Golden Eagle	e
552	Gulls	eg	713	Burrowing Owl	dh
553	Terns	eg	**SEABIRDS (750-799)**		
555	Snowy Plover	h	761	California Brown Pelican	
556	Sandpipers	eg	**SONGBIRDS (800-849)**		
557	American Avocet	eg	815	Belding Savannah Sparrow	dh
564	California Least Tern	h	**REPTILES AND AMPHIBIANS (800-849)**		
568	Willet	eg	853	Coast Horned Lizard	d
569	Marbled Godwit	eg	NOTE**	**(F) Protected by Federal Legislation **(S) Protected by State Legislation	
570	Turnstones	eg			
571	Plovers	de			
572	Yellowlegs	eg			
WADING BIRDS (600-649)					
601	Wading Birds	d			
602	Herons	d			
603	Bitterns				
604	Rails				
607	Light-footed Clapper Rail	dh			
608	California Black Rail	dh			
651	Loons	ef			
652	Grebes	e			

Click to view Mormon Island Ecological Inventory Map


ECOLOGICAL INVENTORY MAP
~~Carson Terminal~~
Mormon Island
564h, 815dh,
550eg, 551eg, 552eg, 568eg, 569eg, 570eg, 571eg,
702de, 704de, 707e, 709e, 712e, 713dh
DOCKWEILER STATE BEACH
120f, 146f, 168f
102f
REDONDO STATE BEACH
50c, 55f, 84f, 87c, 102f, 134f,
137f, 146f, 148f, 157f, 158f, 168f, 169f
550eg, 568eg, 569eg,
570eg, 571eg, 572eg
ABALONE COVE ECOLOGICAL RESERVE
84cf
102f
120f
POINT FERMIN MARINE LIFE REFUGE
ROYAL PALMS STATE BEACH
74f
133af
550eg, 557eg, 604
655eg
502dh
503dh
564
50c, 84cf
101f, 120f, 134f,
137f, 139f, 146f, 168f
74f, 133af
50c, 84cf
700dh
408, 564h, 607dh, 761
BOLSA CHICA ECOLOGICAL RESERVE
408, 564h, 607dh, 761, 815dh,
507eg, 552eg, 553eg, 555h, 556eg, 601, 602, 853
BOLSA CHICA STATE BEACH
SEAL BEACH NATIONAL WILDLIFE REFUGE
HUNTINGTON STATE BEACH
74f, 133a
564h, 815dh,
550eg
564h, 607dh, 608dh, 815
550eg, 601, 602, 603
550eg, 601
552eg
408
406
UPPER NEWPORT BAY ECOLOGICAL RESERVE
CORONA DEL MAR STATE BEACH
NEWPORT BEACH MARINE LIFE REFUGE AND AREA OF SPECIAL BIOLOGICAL SIGNIFICANCE
CRYSTAL COVE STATE BEACH
IRVINE COAST MARINE LIFE REFUGE AND AREA OF SPECIAL BIOLOGICAL SIGNIFICA
74f
133a
85c, 102f, 173d
139f, 168f, 173d
406
LAGUNA BEACH MARINE LIFE REFUGE
351dd
406, 564h
2, 84cf, 102f, 120f,
137f, 139f, 141f, 142f, 146f,
148f, 168f, 169f, 170f, 173d
HEISLER PARK ECOLOGICAL RESERVE AND AREA OF SPECIAL BIOLOGICAL SIGNIFICANCE
2, 7, 10, 66, 81
84cf, 102cf, 120f, 137f, 139f, 141f,
142c, 146c, 148f, 168f, 169f, 170f, 173d
SOUTH LAGUNA BEACH MARINE LIFE REFUGE
2, 84cf, 102f, 120f, 137f, 139f, 141f,
142f, 146f, 148f, 168f, 169f, 170f, 173d
74f
102f
2, 84cf, 102f, 120f, 137f, 139f, 141f,
142f, 146f, 148f, 168f, 169f, 170f, 173d
OCEAN
351bd, 354bd,
SANTA CATALINA ISLAND—SUBAREA ONE, ISTHMUS COVE TO CATALINA HEAD AREA OF SPECIAL BIOLOGICAL SIGNIFICANCE
85c, 102cf, 121f, 129cf, 134f, 137f,
139f, 143cf, 148cf, 157cf, 162cf, 168f, 169f,
358g, 366g, 367g, 371g, 373g
137f, 148cf,
364g, 366g
SUBAREA TWO, BEN WESTON SIGNIFICANCE
561h
351bd, 353bd
2, 75cf, 76cf, 77cf, 78cf, 84cf, 85c
101f, 102f, 137f, 163, 168f, 169f, 173
SANTA CATALINA ISLAND
SAN PEDRO CHANNEL
SANTA MONICA BAY
LH MH
LG MG
N

Vulnerability Analysis

The vulnerability analysis addresses the potential effects (i.e., to human health, property, or the environment) of an oil spill originating from the Facility.

This section provides general guidance to the responder for "Spill Impact Considerations", addressing response options for many of the specific sensitivities detailed below. Refer also the ACP and the CCW Regional Resource Manual for additional details.

The area potentially affected by a spill originating from the Facility has a number of characteristics which require consideration in the event of a discharge.

Los Angeles Harbor is situated at the west end of San Pedro Bay, the body of water which lies between Seal Beach on the east and Point Fermin on the west. San Pedro Bay is protected by three breakwaters built to enclose Los Angeles Harbor. The breakwaters make Los Angeles Harbor a safe harbor in any weather.

Currents in the Los Angeles Harbor are governed by wind and tidal action, and by river runoff. The tidally influenced channel experiences two high tides and two low tides on a diurnal cycle. Tidal currents are weak inside the harbor. Flood tide enters the harbor in an easterly direction and proceeds up either side of Terminal Island. Measurements of tidal currents in Los Angeles Harbor show a high level of incursion and little circulation in some of the basins of the inner harbor. The tidal currents follow the axis of the channels and rarely exceed one (1) knot. However, currents in the harbor increase during periods of higher rainfall due to runoff from storm water channels. Tidal currents in the outer harbor exceed one (1) knot during strong wind conditions.

Water depths in the Los Angeles Main Channel from the breakwater past the turning basin are maintained at more than 45 feet.

Wind speeds in the area of Mormon Island average 5 to 10 knots. Winter storms are responsible for strong winds over San Pedro Bay, particularly from the southwest through the northwest. Winds of 17 knots or greater can occur about 1 to 2 percent of the time from November through May. Santa Ana winds also can occur during fall and winter. This is an offshore desert wind which, though infrequent, may be violent. These winds usually are gusty, and can reach speeds of 52 knots.

Additional information is detailed on the environmental sensitivity maps in this section.

Water Intakes

In the event of a discharge, there are no water intakes within close proximity to the Facility,

(b) (7)(F)

(b) (7)(F)

[redacted]

Medical Facilities

Miscellaneous medical facilities (primarily hospitals) are located within the Wilmington area. There are no medical facilities in the immediate vicinity of the Facility.

Any evacuation efforts for medical facilities would be coordinated with the local emergency assistance agencies (police department, fire department, etc.). Additional detail on the medical facilities within the area of the Facility are included on the maps in Figure 6.1.

Residential Areas

Residential population is limited in the immediate area of the Facility. Residential areas begin within a mile of the Facility and continue outward in all directions. The coverage area of these residential areas is not continuous, rather it is broken up by commercial areas.

Any evacuation efforts for these areas will be coordinated with the local emergency assistance agencies (police department, fire department, etc.). Additional detail on the residential areas within the area of the Facility are included on the environmental sensitivity maps in this section.

Businesses

The immediate area surrounding the Facility is for the most part industrialized. The listing of industries in the area is extensive and not included here for update purposes.

The major businesses along the main channel downstream of the Facility use the docks for commercial passenger cruise lines and the Ports O'Call Shipping Village.

Any evacuation efforts for these areas will be coordinated with the local emergency assistance agencies (police department, fire department, etc.) or the industrial facility itself. Additional detail on the general layout of businesses within the area of the Facility are included on the environmental sensitivity maps in this section.

Fish and Wildlife, Wetlands, and other Sensitive Environment

The immediate area surrounding the Facility is industrialized and supports only minor amounts of wildlife. The overall impact on fish and wildlife, wetlands, and other sensitive environments will happen upon impact of the East Basin Channel and San Pedro Bay area.

The coastal area along San Pedro Bay is home for a variety of migratory species during parts of the year. The common coastal inhabitants include shorebirds, wading birds, fish, reptiles, invertebrates, and various plants. The coastal shorelines have been divided into ten categories according to potential sensitivity to oil. The U.S. Coast Guard - Area Contingency Plan for Los Angeles, CA details these categories.

Flora and fauna are always present and are sensitive to the effects of a pollution incident. All environmental areas deserve protection from pollution, but they must be prioritized during a response so as to protect the most sensitive and susceptible areas to pollution.

Currently there are no specifically identified wetlands in the area of the Facility. Wetland habitats, however, are common throughout portions of the coastal area. The size and diversity of the wetland environments vary with season and year.

The Seal Beach National Wildlife Refuge is located adjacent to Sunset Bay and is identified in more detail on the environmental sensitivity maps in this section. This refuge lies to the east of the Facility along the coastline towards Huntington Beach.

During a response situation the USFWS and applicable state agencies should be contacted for information regarding wetlands and other sensitive environments. Upon contact the agencies will be able to:

- Identify and establish priorities for fish and wildlife, wetlands, and other sensitive environments requiring protection from any direct or indirect effects from a discharge.
- Identify potential environmental effects on fish and wildlife, wetlands, and other sensitive environments resulting from removal actions or countermeasures.

Lakes and Streams

The lakes, streams, and rivers that may be potentially impacted by a discharge originating at the Facility are identified on the environmental sensitivity maps in this section.

Endangered Flora and Fauna

The endangered flora and fauna that may be potentially impacted by a discharge originating at the Facility are detailed in Figure 6.2.

Recreational Areas

The recreational areas that may be potentially impacted by a discharge originating at the Facility are more fully identified on the environmental sensitivity maps in this section.

(b) (7)(F)

Utilities

Currently there are no utility companies within close proximity to the Facility.

Other Areas of Economic Importance

San Pedro Bay is bordered by various dock facilities, other commercial facilities, and recreational/public use areas. These areas are identified on the environmental sensitivity maps in this section.

Any evacuation efforts necessary for these areas will be coordinated with the local emergency assistance agencies (police department, fire department, etc.), State Police, U.S. Coast Guard, and other agencies as the situation demands. Telephone references are provided in Figure 2.5.

6.3 WILDLIFE PROTECTION AND REHABILITATION

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

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

California state regulations require that personnel necessary to implement rescue and rehabilitation procedures shall be assured by contract or other approved means. In keeping with these regulations the Company has declared its intention to utilize the Oiled Wildlife Care Network (OWCN) as its designated responder.

These facilities and associated personnel provide rehabilitation for sea birds, sea otters, other mammals, and sea turtles in the event of an oil spill in waters and will be maintained in a constant state of preparedness. The facilities and organizations that currently comprise the OWCN are listed in the CCW Regional Resource Manual.

The CCW Regional Resource Manual contains extensive details regarding the treatment of wildlife potentially impacted by an oil spill. Following is a summary of that information.

Endangered/Threatened Species

The U.S. Fish and Wildlife Service (USFWS) and related state agencies classify the status of various wildlife species in the potentially effected states. A summary of critical birds, reptiles, mammals, and plant species status as related to the Facility's operating areas (area of highest oil spill potential) are presented in Figure 6.1 and Figure 6.2.

The following is a complete listing of endangered/threatened species with known or possible occurrence in the area of the Facility.

Shorebirds:
California Least Tern
Bald Eagle
American Peregrine Falcon

Wading Birds:
Light-footed Clapper Rail

Songbirds and other birds:
Belding Savannah Sparrow

Seabirds:
California Brown Pelican

Wildlife Rescue

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

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

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

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

OSPR Area Contingency Plans

California Department of Fish and Game

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 6.1

ANIMALS (California)		
Status	**Species Name**	**Scientific Name**
E	Abalone, White North America (Along West Coast from Point Conception, CA, U.S.A., to Punta Abreojos, Baja California, Mexico)	*Haliotis sorenseni*
E	Albatross, short-tailed	*Phoebastria (=Diomedea) albatrus*
T	Bear, grizzly lower 48 States, except where listed as an experimental population or delisted	*Ursus arctos horribilis*
T	Beetle, delta green ground	*Elaphrus viridis*
E	Beetle, Mount Hermon June	*Polyphylla barbata*
T	Beetle, valley elderberry longhorn	*Desmocerus californicus dimorphus*
T	Butterfly, bay checkerspot	*Euphydryas editha bayensis*
E	Butterfly, Behren's silverspot	*Speyeria zerene behrensii*
E	Butterfly, callippe silverspot	*Speyeria callippe callippe*
E	Butterfly, El Segundo blue	*Euphilotes battoides allyni*
E	Butterfly, Lange's metalmark	*Apodemia mormo langei*
E	Butterfly, lotis blue	*Lycaeides argyrognomon lotis*
E	Butterfly, mission blue	*Icaricia icarioides missionensis*
E	Butterfly, Myrtle's silverspot	*Speyeria zerene myrtleae*
T	Butterfly, Oregon silverspot	*Speyeria zerene hippolyta*
E	Butterfly, Palos Verdes blue	*Glaucopsyche lygdamus palosverdesensis*
E	Butterfly, Quino checkerspot	*Euphydryas editha quino (=E. e. wrighti)*
E	Butterfly, San Bruno elfin	*Callophrys mossii bayensis*
E	Butterfly, Smith's blue	*Euphilotes enoptes smithi*
E	Chub, bonytail entire	*Gila elegans*
E	Chub, Mohave tui	*Gila bicolor mohavensis*
E	Chub, Owens tui	*Gila bicolor snyderi*
E	Condor, California U.S.A. only	*Gymnogyps californianus*
E	Crayfish, Shasta	*Pacifastacus fortis*
E	Curlew, Eskimo	*Numenius borealis*
E	Fairy shrimp, Conservancy	*Branchinecta conservatio*

ANIMALS (Cont'd)		
Status	**Species Name**	**Scientific Name**
E	Fairy shrimp, longhorn	*Branchinecta longiantenna*
E	Fairy shrimp, Riverside	*Streptocephalus woottoni*
E	Fairy shrimp, San Diego	*Branchinecta sandiegonensis*
T	Fairy shrimp, vernal pool	*Branchinecta lynchi*
E	Fly, Delhi Sands flower-loving	*Rhaphiomidas terminatus abdominalis*
E	Flycatcher, southwestern willow	*Empidonax traillii extimus*
E	Fox, San Joaquin kit	*Vulpes macrotis mutica*
E	Fox, San Miguel Island	*Urocyon littoralis littoralis*
E	Fox, Santa Catalina Island	*Urocyon littoralis catalinae*
E	Fox, Santa Cruz Island	*Urocyon littoralis santacruzae*
E	Fox, Santa Rosa Island	*Urocyon littoralis santarosae*
T	Frog, California red-legged subspecies range clarified	*Rana aurora draytonii*
E	Frog, mountain yellow-legged southern California DPS	*Rana muscosa*
T	Gnatcatcher, coastal California	*Polioptila californica californica*
E	Goby, tidewater Entire	*Eucyclogobius newberryi*
E	Grasshopper, Zayante band-winged	*Trimerotropis infantilis*
E	Jaguar	*Panthera onca*
E	Kangaroo rat, Fresno	*Dipodomys nitratoides exilis*
E	Kangaroo rat, giant	*Dipodomys ingens*
E	Kangaroo rat, Morro Bay	*Dipodomys heermanni morroensis*
E	Kangaroo rat, San Bernardino Merriam's	*Dipodomys merriami parvus*
E	Kangaroo rat, Stephens'	*Dipodomys stephensi (incl. D. cascus)*
E	Kangaroo rat, Tipton	*Dipodomys nitratoides nitratoides*
E	Lizard, blunt-nosed leopard	*Gambelia silus*
T	Lizard, Coachella Valley fringe-toed	*Uma inornata*
T	Lizard, Island night	*Xantusia riversiana*

ANIMALS (Cont'd)		
Status	**Species Name**	**Scientific Name**
T	Moth, Kern primrose sphinx	*Euproserpinus euterpe*
E	Mountain beaver, Point Arena	*Aplodontia rufa nigra*
E	Mouse, Pacific pocket	*Perognathus longimembris pacificus*
E	Mouse, salt marsh harvest	*Reithrodontomys raviventris*
T	Murrelet, marbled CA, OR, WA	*Brachyramphus marmoratus*
T	Otter, southern sea except where EXPN	*Enhydra lutris nereis*
T	Owl, northern spotted	*Strix occidentalis caurina*
E	Pelican, brown except U.S. Atlantic coast, FL, AL	*Pelecanus occidentalis*
E	Pikeminnow (=squawfish), Colorado except Salt and Verde R. drainages, AZ	*Ptychocheilus lucius*
T	Plover, western snowy Pacific coastal pop.	*Charadrius alexandrinus nivosus*
E	Pupfish, desert	*Cyprinodon macularius*
E	Pupfish, Owens	*Cyprinodon radiosus*
E	Rabbit, riparian brush	*Sylvilagus bachmani riparius*
E	Rail, California clapper	*Rallus longirostris obsoletus*
E	Rail, light-footed clapper U.S.A. only	*Rallus longirostris levipes*
E	Rail, Yuma clapper U.S.A. only	*Rallus longirostris yumanensis*
E	Salamander, California tiger U.S.A. (CA - Santa Barbara County)	*Ambystoma californiense*
E	Salamander, California tiger U.S.A. (CA - Sonoma County)	*Ambystoma californiense*
T	Salamander, California tiger U.S.A. (Central CA DPS)	*Ambystoma californiense*
E	Salamander, desert slender	*Batrachoseps aridus*
E	Salamander, Santa Cruz long-toed	*Ambystoma macrodactylum croceum*
T	Salmon, chinook CA Central Valley spring-run	*Oncorhynchus (=Salmo) tshawytscha*
T	Salmon, chinook CA coastal	*Oncorhynchus (=Salmo) tshawytscha*
E	Salmon, chinook winter Sacramento R.	*Oncorhynchus (=Salmo) tshawytscha*
T	Salmon, coho OR, CA pop.	*Oncorhynchus (=Salmo) kisutch*
E	Salmon, coho central CA coast	*Oncorhynchus (=Salmo) kisutch*

ANIMALS (Cont'd)		
Status	**Species Name**	**Scientific Name**
T	Sea turtle, green except where endangered	*Chelonia mydas*
E	Sea turtle, leatherback	*Dermochelys coriacea*
T	Sea turtle, loggerhead	*Caretta caretta*
T	Sea turtle, olive ridley except where endangered	*Lepidochelys olivacea*
T	Sea-lion, Steller eastern pop.	*Eumetopias jubatus*
E	Sea-lion, Steller western pop.	*Eumetopias jubatus*
T	Seal, Guadalupe fur	*Arctocephalus townsendi*
E	Sheep, Peninsular bighorn Peninsular CA pop.	*Ovis canadensis nelsoni*
E	Sheep, Sierra Nevada bighorn Sierra Nevada	*Ovis canadensis sierrae*
E	Shrew, Buena Vista Lake ornate	*Sorex ornatus relictus*
E	Shrike, San Clemente loggerhead	*Lanius ludovicianus mearnsi*
E	Shrimp, California freshwater	*Syncaris pacifica*
E	Skipper, Carson wandering	*Pseudocopaeodes eunus obscurus*
E	Skipper, Laguna Mountains	*Pyrgus ruralis lagunae*
T	Smelt, delta	*Hypomesus transpacificus*
E	Snail, Morro shoulderband (=Banded dune)	*Helminthoglypta walkeriana*
T	Snake, giant garter	*Thamnophis gigas*
E	Snake, San Francisco garter	*Thamnophis sirtalis tetrataenia*
T	Sparrow, San Clemente sage	*Amphispiza belli clementeae*
T	Steelhead Central Valley CA	*Oncorhynchus (=Salmo) mykiss*
T	Steelhead central CA coast	*Oncorhynchus (=Salmo) mykiss*
T	Steelhead northern CA	*Oncorhynchus (=Salmo) mykiss*
T	Steelhead south central CA coast	*Oncorhynchus (=Salmo) mykiss*
E	Steelhead southern CA coast	*Oncorhynchus (=Salmo) mykiss*
E	Stickleback, unarmored threespine	*Gasterosteus aculeatus williamsoni*
T	Sturgeon, North American green U.S.A. (CA) Southern Distinct Population Segment	*Acipenser medirostris*

ANIMALS (Cont'd)		
Status	**Species Name**	**Scientific Name**
E	Sucker, Lost River	*Deltistes luxatus*
E	Sucker, Modoc	*Catostomus microps*
E	Sucker, razorback entire	*Xyrauchen texanus*
T	Sucker, Santa Ana 3 CA river basins	*Catostomus santaanae*
E	Sucker, shortnose	*Chasmistes brevirostris*
E	Tadpole shrimp, vernal pool	*Lepidurus packardi*
E	Tern, California least	*Sterna antillarum browni*
E	Tiger beetle, Ohlone	*Cicindela ohlone*
E	Toad, arroyo (=arroyo southwestern)	*Bufo californicus (=microscaphus)*
T	Tortoise, desert U.S.A., except in Sonoran Desert	*Gopherus agassizii*
T	Towhee, Inyo California	*Pipilo crissalis eremophilus*
T	Trout, bull U.S.A., conterminous, lower 48 states	*Salvelinus confluentus*
T	Trout, Lahontan cutthroat	*Oncorhynchus clarki henshawi*
T	Trout, Little Kern golden	*Oncorhynchus aguabonita whitei*
T	Trout, Paiute cutthroat	*Oncorhynchus clarki seleniris*
E	Vireo, least Bell's	*Vireo bellii pusillus*
E	Vole, Amargosa	*Microtus californicus scirpensis*
E	Whale, blue	*Balaenoptera musculus*
E	Whale, finback	*Balaenoptera physalus*
E	Whale, humpback	*Megaptera novaeangliae*
E	Whale, killer Southern Resident DPS	*Orcinus orca*
E	Whale, Sei	*Balaenoptera borealis*
E	Whale, sperm	*Physeter catodon (=macrocephalus)*
E	Wolf, gray In lower 48 States, except where delisted and where EXPN Mexico.	*Canis lupus*
E	Woodrat, riparian (=San Joaquin Valley)	*Neotoma fuscipes riparia*

FIGURE 6.2

PLANTS (California)		
Status	**Species Name**	**Scientific Name**
E	Allocarya, Calistoga	*Plagiobothrys strictus*
E	Alopecurus, Sonoma	*Alopecurus aequalis var. sonomensis*
E	Ambrosia, San Diego	*Ambrosia pumila*
T	Amole, purple	*Chlorogalum purpureum*
T	Baccharis, Encinitas	*Baccharis vanessae*
E	Barberry, island	*Berberis pinnata ssp. insularis*
E	Barberry, Nevin's	*Berberis nevinii*
E	Bedstraw, El Dorado	*Galium californicum ssp. sierrae*
E	Bedstraw, island	*Galium buxifolium*
E	Bird's beak, palmate-bracted	*Cordylanthus palmatus*
E	Bird's-beak, Pennell's	*Cordylanthus tenuis ssp. capillaris*
E	Bird's-beak, salt marsh	*Cordylanthus maritimus ssp. maritimus*
E	Bird's-beak, soft	*Cordylanthus mollis ssp. mollis*
E	Bladderpod, San Bernardino Mountains	*Lesquerella kingii ssp. bernardina*
T	Bluecurls, Hidden Lake	*Trichostema austromontanum ssp. compactum*
E	Bluegrass, Napa	*Poa napensis*
E	Bluegrass, San Bernardino	*Poa atropurpurea*
T	Brodiaea, Chinese Camp	*Brodiaea pallida*
T	Brodiaea, thread-leaved	*Brodiaea filifolia*
E	Broom, San Clemente Island	*Lotus dendroideus ssp. traskiae*
E	Buckwheat, cushenbury	*Eriogonum ovalifolium var. vineum*
E	Buckwheat, Ione (incl. Irish Hill)	*Eriogonum apricum (incl. var. prostratum)*
E	Bush-mallow, San Clemente Island	*Malacothamnus clementinus*
E	Bush-mallow, Santa Cruz Island	*Malacothamnus fasciculatus var. nesioticus*
T	Butterweed, Layne's	*Senecio layneae*
E	Button-celery, San Diego	*Eryngium aristulatum var. parishii*

PLANTS (Cont'd)		
Status	**Species Name**	**Scientific Name**
E	Cactus, Bakersfield	*Opuntia treleasei*
E	Ceanothus, coyote	*Ceanothus ferrisae*
E	Ceanothus, Pine Hill	*Ceanothus roderickii*
T	Ceanothus, Vail Lake	*Ceanothus ophiochilus*
T	Centaury, spring-loving	*Centaurium namophilum*
E	Checker-mallow, Keck's	*Sidalcea keckii*
E	Checker-mallow, Kenwood Marsh	*Sidalcea oregana ssp. valida*
E	Checker-mallow, pedate	*Sidalcea pedata*
E	Clarkia, Pismo	*Clarkia speciosa ssp. immaculata*
E	Clarkia, Presidio	*Clarkia franciscana*
T	Clarkia, Springville	*Clarkia springvillensis*
E	Clarkia, Vine Hill	*Clarkia imbricata*
E	Clover, Monterey	*Trifolium trichocalyx*
E	Clover, showy Indian	*Trifolium amoenum*
T	Crownbeard, big-leaved	*Verbesina dissita*
E	Crownscale, San Jacinto Valley	*Atriplex coronata var. notatior*
T	Cypress, Gowen	*Cupressus goveniana ssp. goveniana*
E	Cypress, Santa Cruz	*Cupressus abramsiana*
T	Daisy, Parish's	*Erigeron parishii*
T	Dudleya, Conejo	*Dudleya abramsii ssp. parva*
T	Dudleya, marcescent	*Dudleya cymosa ssp. marcescens*
E	Dudleya, Santa Clara Valley	*Dudleya setchellii*
T	Dudleya, Santa Cruz Island	*Dudleya nesiotica*
T	Dudleya, Verity's	*Dudleya verityi*
T	Dudleyea, Santa Monica Mountains	*Dudleya cymosa ssp. ovatifolia*
T	Dwarf-flax, Marin	*Hesperolinon congestum*

PLANTS (Cont'd)		
Status	**Species Name**	**Scientific Name**
E	Evening-primrose, Antioch Dunes	*Oenothera deltoides ssp. howellii*
E	Evening-primrose, Eureka Valley	*Oenothera avita ssp. eurekensis*
T	Evening-primrose, San Benito	*Camissonia benitensis*
E	Fiddleneck, large-flowered	*Amsinckia grandiflora*
E	Flannelbush, Mexican	*Fremontodendron mexicanum*
E	Flannelbush, Pine Hill	*Fremontodendron californicum ssp. decumbens*
E	Fringepod, Santa Cruz Island	*Thysanocarpus conchuliferus*
E	Gilia, Hoffmann's slender-flowered	*Gilia tenuiflora ssp. hoffmannii*
E	Gilia, Monterey	*Gilia tenuiflora ssp. arenaria*
E	Goldfields, Burke's	*Lasthenia burkei*
E	Goldfields, Contra Costa	*Lasthenia conjugens*
T	Grass, Colusa	*Neostapfia colusana*
E	Grass, Eureka Dune	*Swallenia alexandrae*
E	Grass, Solano	*Tuctoria mucronata*
T	Gumplant, Ash Meadows	*Grindelia fraxino-pratensis*
T	Howellia, water	*Howellia aquatilis*
E	Indian paintbrush, San Clemente Island	*Castilleja grisea*
E	Jewelflower, California	*Caulanthus californicus*
E	Jewelflower, Metcalf Canyon	*Streptanthus albidus ssp. albidus*
E	Jewelflower, Tiburon	*Streptanthus niger*
E	Larkspur, Baker's	*Delphinium bakeri*
E	Larkspur, San Clemente Island	*Delphinium variegatum ssp. kinkiense*
E	Larkspur, yellow	*Delphinium luteum*
E	Layia, beach	*Layia carnosa*
E	Lessingia, San Francisco	*Lessingia germanorum (=L.g. var. germanorum)*
E	Lily, Pitkin Marsh	*Lilium pardalinum ssp. pitkinense*

PLANTS (Cont'd)		
Status	**Species Name**	**Scientific Name**
E	Lily, Western	*Lilium occidentale*
T	Liveforever, Laguna Beach	*Dudleya stolonifera*
E	Liveforever, Santa Barbara Island	*Dudleya traskiae*
E	Lupine, clover	*Lupinus tidestromii*
E	Lupine, Nipomo Mesa	*Lupinus nipomensis*
E	Malacothrix, island	*Malacothrix squalida*
E	Malacothrix, Santa Cruz Island	*Malacothrix indecora*
E	Mallow, Kern	*Eremalche kernensis*
E	Manzanita, Del Mar	*Arctostaphylos glandulosa ssp. crassifolia*
T	Manzanita, Ione	*Arctostaphylos myrtifolia*
T	Manzanita, Morro	*Arctostaphylos morroensis*
T	Manzanita, pallid	*Arctostaphylos pallida*
E	Manzanita, Presidio	*Arctostaphylos hookeri var. ravenii*
E	Manzanita, Santa Rosa Island	*Arctostaphylos confertiflora*
T	Mariposa lily, Tiburon	*Calochortus tiburonensis*
E	Meadowfoam, Butte County	*Limnanthes floccosa ssp. californica*
E	Meadowfoam, Sebastopol	*Limnanthes vinculans*
E	Mesa-mint, Otay	*Pogogyne nudiuscula*
E	Mesa-mint, San Diego	*Pogogyne abramsii*
E	Milk-vetch, Braunton's	*Astragalus brauntonii*
E	Milk-vetch, Clara Hunt's	*Astragalus clarianus*
E	Milk-vetch, Coachella Valley	*Astragalus lentiginosus var. coachellae*
E	Milk-vetch, coastal dunes	*Astragalus tener var. titi*
E	Milk-vetch, Cushenbury	*Astragalus albens*
T	Milk-vetch, Fish Slough	*Astragalus lentiginosus var. piscinensis*
E	Milk-vetch, Lane Mountain	*Astragalus jaegerianus*

PLANTS (Cont'd)		
Status	**Species Name**	**Scientific Name**
T	Milk-vetch, Peirson's	*Astragalus magdalenae var. peirsonii*
E	Milk-vetch, triple-ribbed	*Astragalus tricarinatus*
E	Milk-vetch, Ventura Marsh	*Astragalus pycnostachyus var. lanosissimus*
E	Monardella, willowy	*Monardella linoides ssp. viminea*
E	Morning-glory, Stebbins'	*Calystegia stebbinsii*
E	Mountain balm, Indian Knob	*Eriodictyon altissimum*
E	Mountain-mahogany, Catalina Island	*Cercocarpus traskiae*
E	Mustard, slender-petaled	*Thelypodium stenopetalum*
E	Navarretia, few-flowered	*Navarretia leucocephala ssp. pauciflora (=N. pauciflora)*
E	Navarretia, many-flowered	*Navarretia leucocephala ssp. plieantha*
T	Navarretia, spreading	*Navarretia fossalis*
E	Niterwort, Amargosa	*Nitrophila mohavensis*
E	Onion, Munz's	*Allium munzii*
E	Orcutt grass, California	*Orcuttia californica*
E	Orcutt grass, hairy	*Orcuttia pilosa*
E	Orcutt grass, Sacramento	*Orcuttia viscida*
T	Orcutt grass, San Joaquin	*Orcuttia inaequalis*
T	Orcutt grass, slender	*Orcuttia tenuis*
T	Owl's-clover, fleshy	*Castilleja campestris ssp. succulenta*
E	Oxytheca, cushenbury	*Oxytheca parishii var. goodmaniana*
T	Paintbrush, ash-grey	*Castilleja cinerea*
E	Paintbrush, soft-leaved	*Castilleja mollis*
E	Paintbrush, Tiburon	*Castilleja affinis ssp. neglecta*
T	Penny-cress, Kneeland Prairie	*Thlaspi californicum*
E	Pentachaeta, Lyon's	*Pentachaeta lyonii*
E	Pentachaeta, white-rayed	*Pentachaeta bellidiflora*

PLANTS (Cont'd)		
Status	**Species Name**	**Scientific Name**
E	Phacelia, island	*Phacelia insularis ssp. insularis*
E	Phlox, Yreka	*Phlox hirsuta*
E	Piperia, Yadon's	*Piperia yadonii*
E	Polygonum, Scotts Valley	*Polygonum hickmanii*
E	Potentilla, Hickman's	*Potentilla hickmanii*
T	Pussypaws, Mariposa	*Calyptridium pulchellum*
E	Rock-cress, Hoffmann's	*Arabis hoffmannii*
E	Rock-cress, McDonald's	*Arabis macdonaldiana*
E	Rockcress, Santa Cruz Island	*Sibara filifolia*
T	Rush-rose, island	*Helianthemum greenei*
T	Sandwort, Bear Valley	*Arenaria ursina*
E	Sandwort, Marsh	*Arenaria paludicola*
E	Seablite, California	*Suaeda californica*
E	Sedge, white	*Carex albida*
E	Spineflower, Ben Lomond	*Chorizanthe pungens var. hartwegiana*
E	Spineflower, Howell's	*Chorizanthe howellii*
T	Spineflower, Monterey	*Chorizanthe pungens var. pungens*
E	Spineflower, Orcutt's	*Chorizanthe orcuttiana*
E	Spineflower, Robust (incl. Scotts Valley)	*Chorizanthe robusta (incl. vars. robusta and hartwegii)*
E	Spineflower, slender-horned	*Dodecahema leptoceras*
E	Spineflower, Sonoma	*Chorizanthe valida*
T	Spurge, Hoover's	*Chamaesyce hooveri*
E	Stonecrop, Lake County	*Parvisedum leiocarpum*
E	Sunburst, Hartweg's golden	*Pseudobahia bahiifolia*
T	Sunburst, San Joaquin adobe	*Pseudobahia peirsonii*
E	Sunflower, San Mateo woolly	*Eriophyllum latilobum*

PLANTS (Cont'd)		
Status	**Species Name**	**Scientific Name**
E	Sunshine, Sonoma	*Blennosperma bakeri*
E	Taraxacum, California	*Taraxacum californicum*
E	Tarplant, Gaviota	*Deinandra increscens ssp. villosa*
T	Tarplant, Otay	*Deinandra (=Hemizonia) conjugens*
T	Tarplant, Santa Cruz	*Holocarpha macradenia*
E	Thistle, Chorro Creek bog	*Cirsium fontinale var. obispoense*
E	Thistle, fountain	*Cirsium fontinale var. fontinale*
E	Thistle, La Graciosa	*Cirsium loncholepis*
E	Thistle, Loch Lomond coyote	*Eryngium constancei*
E	Thistle, Suisun	*Cirsium hydrophilum var. hydrophilum*
T	Thornmint, San Diego	*Acanthomintha ilicifolia*
E	Thornmint, San Mateo	*Acanthomintha obovata ssp. duttonii*
E	Tuctoria, Greene's	*Tuctoria greenei*
T	Vervain, Red Hills	*Verbena californica*
E	Wallflower, Ben Lomond	*Erysimum teretifolium*
E	Wallflower, Contra Costa	*Erysimum capitatum var. angustatum*
E	Wallflower, Menzies'	*Erysimum menziesii*
E	Watercress, Gambel's	*Rorippa gambellii*
T	Wild-buckwheat, southern mountain	*Eriogonum kennedyi var. austromontanum*
E	Woodland-star, San Clemente Island	*Lithophragma maximum*
E	Woolly-star, Santa Ana River	*Eriastrum densifolium ssp. sanctorum*
E	Wooly-threads, San Joaquin	*Monolopia (=Lembertia) congdonii*
E	Yerba santa, Lompoc	*Eriodictyon capitatum*

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.

6.4 STAGING AND RESPONSE STRATEGIES

Staging Areas/Command Post

Refer to the ACP for detailed information on potential staging areas. When establishing personnel and equipment staging areas for a response to a Facility 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.

Response Strategies

A comprehensive response strategy is important to insure an effective response effort. Although no single strategy is applicable to all spill situations, the response to a spill at the Facility would generally entail consideration of the following:

- Location Response Strategy - involves the utilization of on-site equipment and resources to contain and clean up minor spills, or to initiate response operations for larger spills. For a small spill such as a sheen of oil in the water, sorbent boom placed in the water with the Jon boat would be considered. A larger spill would require placement of containment boom. In the event of a major spill beyond the capabilities of on-site equipment, the focus of local response operations would be geared toward controlling the source of the spill.

- Nearshore Response Strategy - involves containment and recovery techniques and resources that can be used to prevent oil from reaching sensitive shorelines, such as by means of diversion or exclusion booming.

- Shoreline Response Strategy - involves the use of techniques to most effectively remove oil from affected shorelines, taking into consideration factors such as the degree of oiling, shoreline type, accessibility to the area, and environmental sensitivity.

- Open Water Response Strategy - involves the effective use of available on-water recovery equipment to contain and recover the oil.

- Non-Mechanical Response Strategies - involves the consideration of alternative techniques such as in-situ burning, dispersants and bioremediation. Each of these non-mechanical remediation efforts requires extensive assessment and agency involvement and will normally only be considered if they can be proven to be substantially more effective than mechanical recovery efforts.

The ACP and the CCW Regional Resource Manual provide extensive detail on the application of the above strategies.

Depending on the location, certain response and clean-up activities may need permit approval from either the California Coastal Commission or San Francisco Bay Conservation and Development Commission (BCDC) (within their respective jurisdictions). Examples of such activities are dikes and coffer dams, temporary structures, grading and excavation, site restoration, storage of contaminated waste, among others. The Executive Director may issue an emergency permit for initial clean-up activities with a verbal approval. The issuance of an emergency permit is not intended to impede clean-up activities. The responsible party at a spill will then submit an application for a follow-up permit. Requests for emergency permits should be directed to the Joint CCC/BCDC Oil Spill Program staff. Refer to Figure

(b) (7)(F)

(b) (7)(F)

INDUSTRY STANDARDS FOR SHORELINE & HABITAT RESPONSE ZONE CLEANUP

Alternative Technologies

There will be no alternative technologies, such as dispersants and in-situ, burning used during a spill.

APPENDIX A

RESPONSE EQUIPMENT / RESOURCES

A.1 EMERGENCY RESPONSE EQUIPMENT

The Facility is equipped with emergency response equipment which is listed in Figure A.1 and A.2. This equipment should be sufficient to handle minor emergencies at the facility. For larger emergencies, contracted resources may need to be used.

The facility owned response equipment is inspected as per the regulations using the appropriate company response equipment inspection checklist. Inspection records are maintained on file for a minimum of five (5) years.

Note: Equipment that is listed in Figure A.1 and A.2 as operational status ready may be temporarily unavailable due to maintenance needs or under current operation. Equipment that will be out of service for longer than three months will be noted as such on the equipment list.

The Qualified Individual has the authority to activate other Company resources or that of private contractors and other experts and consultants as the situation demands.

A.2 COMMUNICATIONS

Effective and efficient communications systems are essential for emergency response at every level. The communications system will be utilized to gather information and current status reports as well as to provide coordination and direction to widely separated work groups involved in search, containment/diversion, repair, traffic control, public control or evacuation, and restoration. *(Note:* All communication equipment used during a response within an area that may potentially contain a flammable atmosphere will be intrinsically safe. During regular operations, any device that is not intrinsically safe will not be allowed in transfer areas, safety zones, or any other area containing flammable atmospheres.)

During a spill incident, the communication between the Company and the responsible government agencies in the Federal Regional Response Team (RRT) will occur between the Incident Commander and the Federal On-Scene Coordinator.

Communications Equipment

Telephones

Cellular phones - The majority of supervisors and key operations personnel have cellular phones. Land line phones - The manned facilities, and many of unmanned facilities, have land line phones. Mobile satellite phones are located throughout the regions.

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-channeled, 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. The official language of the Marine Terminal is English. Therefore, all vessels must have personnel on duty at all times who can communicate in English with the dock personnel. Quick and reliable means of communications between the vessel and terminal is an essential requirement to ensure that cargo unloading operations can be accomplished safely and efficiently and to provide for immediate corrective action to be taken in case of emergency. The facility uses a 900 MHz trunked radio system during transfer operations. This 900 MHz system utilizes a trunking controller and five base station transmitters located on Dominguez Hills, providing an effective operating range of 20-30 miles from the transmitter site. Radios are assigned to the vessel person-in-charge of the cargo transfer operation and must be ready for use at all times for communicating with the shore person-in-charge. At each watch change, and at intervals not to exceed one hour during transfer, vessel and shore persons-in-charge are to make a radio check to verify a functional communication system. A fresh battery would be supplied by shore personnel to vessel when required. Radios are used to ensure emergency shutdown by the product handler at the request of the ship's officer. Two bull horns are provided for an additional means of communication in the event of radio failure. The marine terminal office (i.e., Control Center) is located adjacent to the dock. The office is the focal point for all operations and has extensive communication systems to permit voice communication from office to refinery and office to dock. These systems are as follows: The Company telephone system with four lines for communication to the Carson Terminal Control Center. Two of these lines are for use on the dock. Two Pacific Bell Telephone Company lines are at the terminal office for general business use and for backup in the event the Company systems should fail. Three Pacific Bell Telephone Company pay telephones are located at the end of ramp #3 for the convenience of vessel personnel. One VHF Marine radio telephone station. Two portable VHF marine radio telephones. Communications over Marine VHF Channel 16 (156.800 MHz) is limited to calling and replying before changing to a mutual working channel. If an emergency exists and there is no other mutual channel, Channel 16 is used. Lines of communication between the Incident Commander, Local Response Team, and Emergency Management (EM) members are demonstrated in the organization charts shown in Section 4.0. Communication of the overall spill response operation between the Facility and the responsible government agencies in the Federal Regional Response Team (RRT) will occur between the Incident Commander and the Federal On-Scene Coordinator. Appendix G provides additional detail on the Federal Response Organization.

Channel	Group	No. Units	Frequency (MHz)	
			Transmit	Receive
VHF		Varies		

Pagers

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

Fax Machines

FAX machines allow for a rapid transfer of 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 report.

Sirens

Sirens may be used to warn Facility personnel of emergency conditions onsite.

Field communications during a minor spill response will be handled via the existing Facility communications network. This network will utilize existing radios, telephones, beepers, FAX machines, cell phones, and computers and will be maintained by Facility personnel. In the event of a larger spill, field communications will be enhanced with other Company and contract resources as the situation demands. CCW and the OSROs maintain communications equipment designed to allow communication among each other and with the USCG. Radio equipment at the Facility and on Facility response vessels is capable of transmitting on the National Oil Spill frequency (154.585 MHz) and on the Los Angeles Harbor Fire Department mutual aid frequency (154.280 MHz).

A.3 VOLUNTEERS

Volunteers will not be utilized by the Company for the response operations. All volunteers will be referred to the State or Federal On-Scene Coordinator.

A.4 EXPERTS AND CONSULTANTS

The Company maintains a relationship with various environmental and technical consultants that can provide support in the event of an emergency incident. These consultants can provide expertise and support in the areas of emergency response management, environmental services, site assessment, permitting, waste treatment, recycling, dewatering, hazardous waste disposal, and remediation.

A.5 COOPERATIVE/MUTUAL AID RESOURCES

Description

In the event of a fire, Southern California Industrial Mutual aid Organization (SCIMO) can be called upon in addition to local firefighting agencies.

Requesting Mutual Aid Assistance

Mutual Aid is activated by the Facility or Local Fire Department.

Response to an Assistance Request

SCIMO's primary purpose is the joining together of firefighting, rescue, hazardous material manpower, resources and facilities among Southern California Private industries and governmental response organizations for mutual assistance in the case of emergency situations, either natural or man-made.

A.6 CONTRACT RESOURCES

The Facility has agreements in place with the OSRO(s) that would be activated if necessary. These resources are contracted to ensure that sufficient personnel and equipment is available to protect environmentally and economically sensitive areas during a worst case discharge as described in Appendix B. Figure A.3 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 2.2.** Figure A.4 is a description of the USCG classifications according to the OSRO response capabilities. Figure A.5 includes the current OSRO contracts. These resources along with Company personnel, as necessary, will provide trained personnel and equipment to conduct a spill response for at least seven days. *(Note:* The Company receives annual PREP letters to ensure that each OSRO has a comprehensive maintenance program and applicable training/drills programs in place.)

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 on land, water, or adjacent shorelines. The resources will be secured from a Company approved contractor. Notification/implementation of these resources will typically be handled by the Qualified Individual. Figure A.3 provides a quick reference to the Oil Spill Removal Organizations and details their response capability and estimated response times. Additional OSRO data, including equipment inventories and/or USCG certification data, is provided in Figure A.4. Telephone reference is provided in Figure 2.5. (Note: Emergency Management (EM) has a program in place to insure that each OSRO has a comprehensive maintenance program and applicable training / drills programs in place. The Facility is provided updated documentation on an annual basis and records are maintained for a five (5) year period.)

FIGURE A.1

EMERGENCY RESPONSE EQUIPMENT	
Date of Last Update:	**Last Inspection or Response Equipment Test Date:**
Inspected By:	**Last Deployment Drill Date:**
Inspection Frequency:	**Deployment Frequency:**
Fire/Rescue Equipment:	

Fire Fighting and Rescue Equipment			
Type/Year	**Operational Status**	**Quantity**	**Location**
30# dry chemical extinguisher	Ready	27	See Detailed list in Appendix H
8" line connected directly to the City ofr Los Angeles water main at 80-90 psi	Ready	1	See Appendix H for location and condition
Fire water monitors	Ready	32	See Appendix H for location and condition
Fire Water hydrants	Ready	5	See Appendix H for location and conditions
Stationary reels containing 100' of 1 1/2" hose	Ready	6	See Appendix H for location and conditions
Emergency shower and eye bath	Ready	3	See Appendix H for location and conditions
Emergency/fire alarm (can be activated at three locations)	Ready	1	See Appendix H for location and conditions
Fire boat connections (1 each end of dock)	Ready	2	See Appendix H for location and conditions
Pumper truck connection header (located at main enterence)	Ready	2	See Appendix H for location and conditions
Fire pump, diesel driven 2,500 GPM	Ready	2	See Appendix H for location and conditions
4,500 gallon tank of AFFF-ATC fire fighting foam	Ready	1	See Appendix H for location and conditions
Semi fixed foam induction system in tank farm	Ready	1	See Appendix H for location and conditions
Fire water pump, electric driven 2,500 GPM	Ready	1	See Appendix H for location and conditions

FIGURE A.2

FACILITY RESPONSE EQUIPMENT	
Date of Last Update:	**Last Inspection or Response Equipment Test Date:**
Inspected By:	**Last Deployment Drill Date:**
Inspection Frequency:	**Deployment Frequency:**
Hazardous Material/Oil Spill Equipment:	

SKIMMERS/PUMPS						
Type/Model/ Year	**Operational Status**	**Quantity**	**Capacity bbl/day**	**Daily Effective Recovery Rate**	**Storage Location(s)**	**Date Fuel Last Changed**
		None				

FACILITY RESPONSE EQUIPMENT (Cont'd)	
Date of Last Update:	**Last Inspection or Response Equipment Test Date:**
Inspected By:	**Last Deployment Drill Date:**
Inspection Frequency:	**Deployment Frequency:**
Hazardous Material/Oil Spill Equipment:	

BOOM				
Type/Model/ Year	**Operational Status**	**Size (Length)**	**Containment Area**	**Storage Location(s)**
Petro-Barrier (*Note: Boom is placed in the water for the aid of OSROs. Shell does not deploy boom.)	Ready	1,610 ft		Berth 167 South to Berth 169
Sorbent Boom (*Note: Boom is placed in the water for the aid of OSROs. Shell does not deploy boom.)	Ready	8' x 10'		Can Shack

FACILITY RESPONSE EQUIPMENT (Cont'd)	
Date of Last Update:	**Last Inspection or Response Equipment Test Date:**
Inspected By:	**Last Deployment Drill Date:**
Inspection Frequency:	**Deployment Frequency:**
Hazardous Material/Oil Spill Equipment:	

CHEMICAL DISPERSANTS						
Type	**Operational Status**	**Quantity/ Amount**	**Date Purchased**	**Treatment Capacity**	**Storage Location(s)**	**Date Changed**
		None				

FACILITY RESPONSE EQUIPMENT (Cont'd)	
Date of Last Update:	**Last Inspection or Response Equipment Test Date:**
Inspected By:	**Last Deployment Drill Date:**
Inspection Frequency:	**Deployment Frequency:**
Hazardous Material/Oil Spill Equipment:	

DISPERSANT DISPENSING EQUIPMENT				
Type/Year	**Operational Status**	**Capacity**	**Storage Location(s)**	**Response Time**
	None			

FACILITY RESPONSE EQUIPMENT (Cont'd)	
Date of Last Update:	**Last Inspection or Response Equipment Test Date:**
Inspected By:	**Last Deployment Drill Date:**
Inspection Frequency:	**Deployment Frequency:**
Hazardous Material/Oil Spill Equipment:	

SORBENTS				
Brand Name/Type	**Operational Status**	**Size**	**Treatment Capacity**	**Storage Location**
Pads	Ready	100 pad/box	Sorbent Pads	Can Shack

FACILITY RESPONSE EQUIPMENT (Cont'd)	
Date of Last Update:	**Last Inspection or Response Equipment Test Date:**
Inspected By:	**Last Deployment Drill Date:**
Inspection Frequency:	**Deployment Frequency:**
Hazardous Material/Oil Spill Equipment:	

HAND TOOLS			
Type/Year	**Operational Status**	**Quantity**	**Storage Location**
	None		

FACILITY RESPONSE EQUIPMENT (Cont'd)	
Date of Last Update:	**Last Inspection or Response Equipment Test Date:**
Inspected By:	**Last Deployment Drill Date:**
Inspection Frequency:	**Deployment Frequency:**
Hazardous Material/Oil Spill Equipment:	

COMMUNICATION EQUIPMENT			
Type/Year	**Operational Status**	**Quantity**	**Storage Location(s)/Number**
Intercoms/ PA Systems - RCRA	Ready		Between main gate and main office
Portable Radios - RCRA	Ready		Carried by Operations personnel
Telephone - RCRA	Ready		Office - Refer to section 2
Cellular Phones - RCRA	Ready		Plant Personnel - Refer to Section 2

FACILITY RESPONSE EQUIPMENT (Cont'd)	
Date of Last Update:	**Last Inspection or Response Equipment Test Date:**
Inspected By:	**Last Deployment Drill Date:**
Inspection Frequency:	**Deployment Frequency:**
Hazardous Material/Oil Spill Equipment:	

PERSONAL PROTECTIVE EQUIPMENT			
Type/Year	**Operational Status**	**Quantity**	**Storage Location**
	None		

FACILITY RESPONSE EQUIPMENT (Cont'd)	
Date of Last Update:	**Last Inspection or Response Equipment Test Date:**
Inspected By:	**Last Deployment Drill Date:**
Inspection Frequency:	**Deployment Frequency:**
Hazardous Material/Oil Spill Equipment:	

OTHER EQUIPMENT			
Type/Year	**Operational Status**	**Quantity**	**Storage Location**
Exhaust hoods - RCRA	Ready		Lab
Berms/Dikes - RCRA	Ready		Refer to SPCC Section 4

FIGURE A.3
CONTRACTED RESPONSE RESOURCES

USCG CLASSIFIED OIL SPILL REMOVAL ORGANIZATION (OSRO)							
OSRO Name	Response Time	Environment Type	Facility Classification Level				High Volume
			MM	W1	W2	W3	
Double Barrel	60 minutes (maximum)	River/Canal	Y				No
		Inland	Y				
Marine Spill Response Corporation (MSRC)	60 minutes (maximum)	River/Canal	Y	Y	Y	Y	No
		Inland	Y	Y	Y	Y	
		Offshore			Y	Y	

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

FIGURE A.4
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: EDRC: TSC:	4,000*ft 1,200 bbls 2,400 bbls	High Volume Ports: Other Ports:	6 hours 12 hours	High Volume Ports: Other Ports:	12 hours 24 hours
W 1	Protective Boom: EDRC: TSC:	25,000*ft 1,875 bbls 3,750 bbls	High Volume Ports: Other Ports:	6 hours 12 hours	High Volume Ports: Other Ports:	12 hours 24 hours
W 2	Protective Boom: EDRC: TSC:	25,000*ft 3,750 bbls 7,500 bbls	High Volume Ports: Other Ports:	30 hours 36 hours	High Volume Ports: Other Ports:	36 hours 48 hours
W 3	Protective Boom: EDRC: TSC:	25,000*ft 7,500 bbls 15,000 bbls	High Volume Ports: Other Ports:	54 hours 60 hours	High Volume Ports: Other Ports:	60 hours 72 hours
Great Lakes						
MM	Protective Boom: EDRC: TSC:	6,000*ft 1,200 bbls 2,400 bbls	All Ports:	6 hours	All Ports:	12 hours
W 1	Protective Boom: EDRC: TSC:	30,000*ft 6,250 bbls 12,500 bbls	High Volume Ports: Other Ports:	12 hours 24 hours	High Volume Ports: Other Ports:	12 hours 24 hours
W 2	Protective Boom: EDRC: TSC:	30,000*ft 12,500 bbls 25,000 bbls	All Ports:	36 hours	All Ports:	42 hours
W 3	Protective Boom: EDRC: TSC:	30,000*ft 25,000 bbls 50,000 bbls	All Ports:	60 hours	All Ports:	66 hours

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**
	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
W 1	Protective Boom: 30,000* ft EDRC: 12,500 bbls TSC: 25,000 bbls	High Volume Ports: 6 hours Other Ports: 12 hours	High Volume Ports: 12 hours Other Ports: 24 hours
W 2	Protective Boom: 30,000* ft EDRC: 25,000 bbls TSC: 50,000 bbls	High Volume Ports: 30 hours Other Ports: 36 hours	High Volume Ports: 36 hours Other Ports: 48 hours
W 3	Protective Boom: 30,000* ft EDRC: 50,000 bbls TSC: 100,000 bbls	High Volume Ports: 54 hours Other Ports: 60 hours	High Volume Ports: 60 hours Other Ports: 72 hours
	Nearshore		
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 Locations: 24 hours (for open ocean, plus travel time from shore)
W 1	Protective Boom: 30,000* ft EDRC: 12,500 bbls TSC: 25,000 bbls	High Volume Ports: 6 hours Other Ports: 12 hours	High Volume Ports: 12 hours Other Locations: 24 hours
W 2	Protective Boom: 30,000* ft EDRC: 25,000 bbls TSC: 50,000 bbls	High Volume Ports: 30 hours Other Locations: 36 hours	High Volume Ports: 36 hours Other Locations: 48 hours
W 3	Protective Boom: 30,000* ft EDRC: 50,000 bbls TSC: 100,000 bbls	High Volume Ports: 54 hours Other Locations: 60 hours (for open ocean, plus travel time from shore)	High Volume Ports: 60 hours Other Locations: 72 hours (for open ocean, plus travel time from shore)

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**	
Offshore						
MM	Protective Boom: EDRC: TSC:	8,000* ft 1,200 bbls 2,400 bbls	High Volume Ports: Other Ports:	6 hours 12 hours	High Volume Ports: Other Ports:	12 hours 24 hours
W 1	Protective Boom: EDRC: TSC:	15,000* ft 12,500 bbls 25,000 bbls	High Volume Ports: Other Ports:	6 hours 12 hours	High Volume Ports: Other Ports:	12 hours 24 hours
W 2	Protective Boom: EDRC: TSC:	15,000* ft 25,000 bbls 50,000 bbls	High Volume Ports: Other Ports:	30 hours 36 hours	High Volume Ports: Other Ports:	36 hours 48 hours
W 3	Protective Boom: EDRC: TSC:	15,000* ft 50,000 bbls 100,000 bbls	High Volume Ports: Other Ports:	54 hours 60 hours	High Volume Ports: Other Ports:	60 hours 72 hours
Open Ocean						
MM	Protective Boom: EDRC: TSC:	0 ft 1,200 bbls 2,400 bbls	High Volume Ports: Other Ports:	6 hours 12 hours	High Volume Ports: Other Locations:	12 hours 24 hours
W 1	Protective Boom: EDRC: TSC:	0 ft 12,500 bbls 25,000 bbls	High Volume Ports: Other Ports:	6 hours 12 hours	High Volume Ports: Other Locations:	12 hours 24 hours
W 2	Protective Boom: EDRC: TSC:	0 ft 25,000 bbls 50,000 bbls	High Volume Ports: Other Locations:	30 hours 36 hours	High Volume Ports: Other Locations:	36 hours 48 hours
W 3	Protective Boom: EDRC: TSC:	0 ft 50,000 bbls 100,000 bbls	High Volume Ports: Other Locations:	54 hours 60 hours	High Volume Ports: Other Locations:	60 hours 72 hours

FIGURE A.5
OSRO CONTRACTS

Double Barrel Environmental Services, Inc.
Click to view

Marine Spill Response Corporation
Click to view

PURCHASE CONTRACT

ID# 1101180

SECTION I

This **Purchase Contract** is made on May 5, 2011 (the "Effective Date")

between

Equilon Enterprises LLC dba Shell Oil Products US, a company formed under the laws of **Texas** and having its main office at **910 Louisiana Street, Houston, TX**, hereinafter "**Company**".

and

Double Barrel Environmental Services, Inc., a company formed under the laws of **California** and having its registered office at **121 Main Street, Riverside, CA**, hereinafter "**Contractor**".

WHEREAS:

A. Company wishes that certain Scope be supplied out all as described in this Purchase Contract;

B. Company has selected Contractor to supply the Scope;

C. Contractor has agreed to perform the Scope on the terms and conditions of this Purchase Contract.

NOW THEREFORE THE PARTIES HERETO AGREE AS FOLLOWS:

1) In this Purchase Contract, all capitalized words and expressions shall have the same meanings as are assigned to them in Section II – General Terms.

2) The following Sections shall be read as one document and form the Purchase Contract and, in the event of conflict or inconsistency between the Sections, shall be given precedence in the order listed, with the exception that Category and Special General Terms shall take precedence over other General Terms to the extent required to resolve any conflict or inconsistency.

Section I - Purchase Contract

Section II – General Terms (Any reference to General Terms includes both General Terms and Category and Special General Terms, if any, set out in Appendix 1 to the General Terms, unless the context dictates otherwise.)

Section III – Scope Description

Section IV – Administration Instructions

Section V – HSSE

Section VI – Technical Information

Section VII – Performance Tests

Section VIII – Free Issue Materials

3) In accordance with this Purchase Contract:

   a) the Contractor shall perform and complete the Scope; and
   b) the Company shall pay the Purchase Contract Price.

4) The duration of this Purchase Contract shall be from the Effective Date hereof until **May 1, 2014** unless terminated earlier in accordance with the provisions herein.

5) Contractor undertakes to provide the Scope described in this Purchase Contract and as may be more particularly specified in any Purchase Order issued hereunder.

6) The parties will send any communications or notices required under the Purchase Contract to the following focal points:

Contractor Focal Point:
Erik Ricardo
President & General Manager

121 Main Street
Riverside, CA 92501

(951) 683-6994
ErikR@dbhzmat.com

Company Focal Point:
Isaac Elking
Senior Buyer

910 Louisiana Street
Room 1842A
Houston, TX 77002

(713) 241-1004
I.Elking@shell.com

A party may change its focal point on written notice to the other party.

7) This Purchase Contract may be signed in any number of counterparts all of which together will constitute a single instrument.

8) Shell Companies shall be permitted to issue Purchase Orders under this Purchase Contract to order Scope from Contractor Companies, according to the provisions of Article 23 of the General Terms. Each Purchase Order shall reference the Purchase Contract and specify at least the Scope, Contract Price, the quantity ordered, the Delivery Date, and Delivery Point. Contractor Companies shall supply and provide Scope to Shell Companies ordered under a Purchase Order. This Purchase Contract does not guarantee a minimum quantity that Shell Companies must purchase from Contractor Companies. Shell Companies may, without limitation or condition, purchase goods and services (including those that are that are similar to or competitive with the Scope) from any third party supplier. It is agreed that the Company named herein shall have no obligation or liability under this Purchase Contract for any Purchase Order issued by any other Shell Company or its failure to perform. If a Shell Company other than the Company named herein fails to perform its obligations, Contractor Company may terminate that Shell Company's right to place additional Purchase Orders, but such termination shall not affect the named Company herein, or any other Shell Company. Contractor named herein will ensure any Affiliates of Contractor who supply Scope to Shell Companies under the Purchase Contract comply with the terms and conditions herein. Contractor named herein will guarantee as principal the financial performance of any Affiliates of Contractor who supply Scope to Shell Companies under the Purchase Contract, including in the event of bankruptcy or insolvency.

9) Notwithstanding the confidentiality provisions in Section II, the parties agree that Shell JVs may, subject to Applicable Laws, be provided with pricing and other Purchase Contract information in order that they may make commercially reasonable and prudent decisions pertaining to purchases under the Purchase Contract, provided that Shell JVs may not be entitled to receive detailed commercial information pertaining to the make-up or components of pricing, except as agreed by Company named herein and Contractor named herein.

IN WITNESS WHEREOF: the authorized signatories of the parties have executed this Purchase Contract as follows:

For and on behalf of Equilon Enterprises LLC dba Shell Oil Products US

Signed: Greg Shay

Name: Greg Shay

Position: Western Region Procurement Mgr.

For and on behalf of Double Barrel Environmental Services, Inc.

Signed:

Name: ERIK J. RICARDO

Position: President & C.M.

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. 6MPA 860 [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

APPENDIX B

WORST CASE DISCHARGE ANALYSIS AND SCENARIO

B.1 INTRODUCTION

The Mormon Island Marine Terminal is classified as a "Complex Facility".

"**Complex Facility**" means a facility possessing a combination of transportation-related and non-transportation-related components that is subject to the jurisdiction of more than one Federal agency under section 311(j) of the Clean Water Act (CWA).

Complex Facilities must perform discharge calculations for each jurisdictional agency and plan for the largest Worst Case Discharge Volume pursuant to the respective regulations. The discharge volume calculations are described as follows:

EPA Discharge Volume Calculation

- **Worst Case Discharge (WCD)**
  100% of the largest single tank

- **Medium Discharge (MD)**
  Discharge greater than 2,100 gallons (50 Bbls) and less than or equal to 36,000 gallons (857 Bbls) or 10% of the capacity of the largest tank, whichever is less and not to exceed the WCD

- **Small Discharge (SD)**
  Discharge of less than or equal to 2,100 gallons (50 Bbls), not to exceed the WCD

DOT - PHMSA Discharge Volume Calculation

- **Worst Case Discharge(WCD)**
  The largest volume (Bbls) of the following:

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

  -- OR --

  - *Largest foreseeable discharge for the line section is based on the maximum historic discharge, if one exists, adjusted for any subsequent corrective action or preventative 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.*

USCG Discharge Volume Calculation

- **Worst Case Discharge(WCD)**
  Discharge from all piping carrying oil between the marine transfer manifold and the non-transportation-related portion of the Facility. The discharge from each pipe is calculated as follows:

  *{[Maximum Discovery Time (hrs) + Maximum Shutdown Time (hrs.)] * Maximum Flow Rate (Bbls/Hr)} +Total Line Fill (Bbls) = WCD (Bbls)*

- **Maximum Most Probable Discharge (MMPD)**
  1,200 Bbls or 10% of the WCD, whichever is less

- **Average Most Probable Discharge (AMPD)**
  50 Bbls or 1% of the WCD, whichever is less

OSPR Discharge Volume Calculation

- **Reasonable Worst Case Spill (RWCS)**
  The portion of the total linefill capacity which could be lost during a spill, taking into account the availability and location of the emergency shut-off controls; plus the amount of additional spillage that could reasonably be expected to enter California marine waters during emergency shut-off, transfer or pumping operations if a hose or pipeline ruptures or becomes disconnected, or if some other incident occurs which could cause or increase the size of an oil spill.

  Total Linefill Capacity + Additional Spillage (during Shut Down) = RWCS

The following planning volume calculations must be performed to determine the required response resources for a Worst Case Discharge:

Planning Volume for On-Shore Recovery (OSR)

OSR = WCD * % Oil on Shore * Emulsification Factor

Planning Volume for On-Water Recovery (OWR)

OWR = WCD * % Recovered Floating Oil * Emulsification Factor

Recovery Capacity (RC)

RC = OWR * On-Water Recovery Resource Mobilization Factors

The recovery capacity determined by these equations is compared to the appropriate response capability caps from the EPA tables. The actual contracted response amount is the lesser of the two values. If the calculated capacity exceeds the capability caps, sufficient response resources should be available for twice the amount of the caps or up to the total planning volume, whichever is less.

B.2 RESPONSE PLANNING VOLUME CALCULATIONS

Assumptions and factors are provided in 40 CFR 112 and Appendix C to 33 CFR Part 154 for Worst Case Discharge resources and removal capacity planning determination. This information is summarized in the table entitled "EPA/USCG Tables for Worst Case Discharge Response Resources Determination and Removal Capacity Planning".

Response planning volume calculations were developed using the largest Worst Case Discharge for each of the oil groups. These calculations are summarized herein. The results, as shown in the summary below, provide the WCD planning volume and are used in the subsequent response resource calculation.

Discharge Scenario	Potential Oil Group	Discharge Volumes (bbls)				
		EPA	DOT/PHMSA	OSPR	USCG	Complex Maximum
Small / Average Most Probable	1 Gasoline	50	N/A	N/A	50	50
Medium / Maximum Most Probable	1 Gasoline	857	N/A	N/A	(b) (7)	857

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

TABLE B-1

EPA/USCG TABLES
FOR WORST CASE DISCHARGE RESPONSE RESOURCES DETERMINATION AND REMOVAL CAPACITY PLANNING

Spill Location	Rivers & Canals			Nearshore/Inland/Great Lakes		
Sustainability of on-water oil recovery	3 Days			4 Days		
Oil Group	% Natural Dissipation	% Recovered Floating Oil	% Oil On Shore	% Natural Dissipation	% Recovered Floating Oil	% Oil On Shore
1. Non-persistent oils	80	10	10	80	20	10
2. Light Crudes	40	15	45	50	50	30
3. Medium crudes and fuels	20	15	65	30	50	50
4. Heavy crudes and fuels	5	20	75	10	50	70

EMULSION FACTORS

NON-PERSISTENT OIL	
Group 1	1.0
PERSISTENT OIL	
Group 2	1.8
Group 3	2.0
Group 4	1.4
Group 5	1.0

RESPONSE CAPABILITY CAPS (bbls/day)
(Maximum Required Recovery levels)

AREA	TIER 1	TIER 2	TIER 3
Rivers and Canals	1,875	3,750	7,500
Great Lakes	6,350	12,300	25,000
Inland/Nearshore	12,500	25,000	50,000

ON-WATER OIL RECOVERY RESOURCE MOBILIZATION FACTORS

AREA	TIER 1	TIER 2	TIER 3
River	.30	.40	.60
Inland/Nearshore Great Lakes	.15	.25	.40

NOTE: These mobilization factors are for total resources mobilized, not incremental response resources.

RESPONSE TIME (hours)

AREA	TIER 1	TIER 2	TIER 3
Higher volume port area	6	30	54
All Other	12	36	60

Mormon Island Marine Terminal

Response Planning Volume Calculations for USCG:

Location Data			
Location Type			River/ Canal
Port Type			High Volume Port
WCD Product Type			Gasoline/Diesel
Product Group			2
USCG WCD Volume (bbls)			(b)
Discharge Volumes/Calculations			
Average Most Probable or Small Discharge (bbls)			50
Maximum Most Probable or Medium Discharge (bbls)			(b)
Worst Case Discharge - Based on USCG criteria (bbls)			(b)(7)
Selected Calculation Factors (Based on EPA Tables)			
Removal Capacity Planning Volume - Percent Natural Dissipation			40%
Removal Capacity Planning Volume - Percent Recovered Floating Oil			15%
Removal Capacity Planning Volume - Percent Oil Onshore			45%
Emulsification Factor			1.8
Tier 1 - On Water Oil Recovery Resource Mobilization Factor			30%
Tier 2 - On Water Oil Recovery Resource Mobilization Factor			40%
Tier 3 - On Water Oil Recovery Resource Mobilization Factor			60%
Response Planning Volume Calculation			
On-Water Recovery Volume (bbls)			(b) (7)(F)
Shoreline Recovery Volume (bbls)			
Shoreline Cleanup Volume (bbls)			
	Tier 1	Tier 2	Tier 3
On-Water Recovery Cpcty (bbls/day)	513	684	1,026
Shallow Water Resp Cpblty (bbls/day)	103	137	205
Storage Capacity (bbls/day)	1,026	1,368	2,052
On-Water Response Caps (bbls/day)	1,875	3,750	7,500
Additional Response Req'd (bbls/day)	0	0	0
Response Time (hrs)	6	30	54

Mormon Island Marine Terminal

Response Planning Volume Calculations for DOT:

Location Data			
Location Type			River/ Canal
Port Type			High Volume Area
WCD Product Type			Gasoline/Diesel
Product Group			1
PHMSA WCD Volume (bbls)			(b) (7)
Discharge Volumes/Calculations			
Worst Case Discharge - Based on PHMSA criteria (bbls)			(b) (7)
Selected Calculation Factors (Based on EPA Tables)			
Removal Capacity Planning Volume - Percent Natural Dissipation			80%
Removal Capacity Planning Volume - Percent Recovered Floating Oil			10%
Removal Capacity Planning Volume - Percent Oil Onshore			10%
Emulsification Factor			1
Tier 1 - On Water Oil Recovery Resource Mobilization Factor			30%
Tier 2 - On Water Oil Recovery Resource Mobilization Factor			40%
Tier 3 - On Water Oil Recovery Resource Mobilization Factor			60%
Response Planning Volume Calculation			
			(b) (7)(F)
On-Water Recovery Volume (bbls)			
Shoreline Recovery Volume (bbls)			
Shoreline Cleanup Volume (bbls)			
	Tier 1	Tier 2	Tier 3
On-Water Recovery Cpcty (bbls/day)	2,998	3,997	5,996
Shallow Water Resp Cpblty (bbls/day)	600	799	1,199
Storage Capacity (bbls/day)	5,996	7,995	11,992
On-Water Response Caps (bbls/day)	1,875	3,750	7,500
Additional Response Req'd (bbls/day)	1,123	247	0
Response Time (hrs)	6	30	54

Mormon Island Marine Terminal

Response Planning Volume Calculations for EPA:

Location Data			
Location Type			River/ Canal
Port Type			High Volume Port
WCD Product Type			Gasoline
Product Group			1
Capacity of the Largest Single Tank (bbls)			(b) (7)
Discharge Volumes/Calculations			
Average Most Probable or Small Discharge (bbls)			50
Maximum Most Probable or Medium Discharge (bbls)			857
Worst Case Discharge - Based on EPA criteria (bbls)			(b) (7)
EPA WCD Calculation: 100% * Capacity of the Largest Single Tank			
Selected Calculation Factors (Based on EPA Tables)			
Removal Capacity Planning Volume - Percent Natural Dissipation			80%
Removal Capacity Planning Volume - Percent Recovered Floating Oil			10%
Removal Capacity Planning Volume - Percent Oil Onshore			10%
Emulsification Factor			1
Tier 1 - On Water Oil Recovery Resource Mobilization Factor			30%
Tier 2 - On Water Oil Recovery Resource Mobilization Factor			40%
Tier 3 - On Water Oil Recovery Resource Mobilization Factor			60%
Response Planning Volume Calculation			
			(b) (7)(F)
On-Water Recovery Volume (bbls)			
Shoreline Recovery Volume (bbls)			
Shoreline Cleanup Volume (bbls)			
	Tier 1	Tier 2	Tier 3
On-Water Recovery Cpcty (bbls/day)	2,998	3,997	5,996
Shallow Water Resp Cpblty (bbls/day)	600	799	1,199
Storage Capacity (bbls/day)	5,996	7,995	11,992
On-Water Response Caps (bbls/day)	1,875	3,750	7,500
Additional Response Req'd (bbls/day)	1,123	247	0
Response Time (hrs)	6	30	54

B.3 RESPONSE CAPABILITY SCENARIOS

The occurrence of a Small, Medium, or Worst Case Discharge could be the result of any number of scenarios at the Facility including:

- Failure of manifold, mechanical loading arm, other transfer equipment, or hoses, as appropriate.
- Tank overfill and/or failure.
- Piping line, valve, or flange leak and/or rupture.
- Tank truck and/or tank car loading overfill and/or failure.
- Explosion or fire.
- Equipment failure (e.g. pumping system failure, relief valve failure, or other general equipment relevant to operational activities associated with internal or external facility transfers).

Events and conditions that pose a substantial threat of a Worst Case Discharge might include:

- Tank and associated piping fire.
- Catastrophic tank shell failure.
- Natural disaster induced tank shell or major piping failure.

A sudden release of tank contents due to the above potential threats could result in a breach of the tank basin secondary containment.

Actions to prevent or mitigate a Worst Case Discharge due to the above potential threats include:

- Periodic inspection of the tank to confirm integrity.
- Periodic inspection of the tank basin secondary containment to confirm integrity.
- Preventive maintenance as appropriate of the tank and associated piping.
- Training of facility personnel on the proper procedures in event of a natural disaster to minimize the potential impact.

Abnormal operations, which could result in a substantial threat of a worst case discharge, may include:

- Unintended closure of valves.
- Pressure differential exceeds or drops below the normal operating limits.
- Loss of communications.
- Operations of any safety device (i.e., relief valve or rupture disc).

If any of these events occur, the affected system will be investigated, corrective action initiated, and the situation monitored by pipeline personnel. All corrective actions will be performed by qualified personnel appropriate to the task.

The response actions to each of these scenarios are outlined in Section 3. The response resources, including detail on equipment and manpower, are identified in Appendix A. Facility response personnel list/telephone numbers and other internal/external resources telephone numbers are detailed in Figures 2.2 and 2.5.

Small/Average Most Probable Discharge

A small discharge at this Terminal is considered to be a discharge that does not exceed 50 barrels (2,100 gallons).

Description

This size discharge would most likely occur due to minor equipment failures or human error. Examples may include, but not limited to,

- Pump seal leak
- Truck loading rack hose rupture
- Valve leak
- Container rupture
- Storage spill.

The most likely location for a discharge of this size would be leaking Facility piping and would be gasoline, jet fuel, diesel, or lube oils.

This size discharge would likely be noticed quickly and appropriate clean up measures taken since product transfers are monitored by Facility personnel. These types of small spills are typically contained on the grounds of the Facility (earthen material or concrete). Adverse weather conditions would not hinder response efforts during a small discharge.

Prevention

Several steps can be taken to limit the number of occurrences and the amount of discharges. In particular, employees receive training periodically on the proper procedures for the loading of product to trucks. In addition, preventive maintenance of equipment is performed at regularly scheduled intervals to ensure that any weaknesses are discovered. Also, old or worn parts are replaced as needed. Annual product transfer and pipeline testing is the most important of these measures.

Additional Comments

While the Facility's OSRO or spill contractor would be notified and the best method for containment determined, such discharges that are contained at the Facility could be diverted to the product tanks that are not at maximum capacity. Spills that enter the bar ditch can be handled by response contract vacuum truck, absorbent pad and boom, or other equipment.

The closest body of navigable water is the East Basin Channel (see Figure 6.1). The storage tanks and the truck loading rack has adequate secondary containment so it is unlikely that a spill would reach the East Basin Channel or travel very far if it did. Therefore, the threat to sensitive areas (see Section 6) is minimal. Finally, this type of spill is not one that would result in a chain reaction of failures of other equipment.

Response Requirement

The Facility shall identify sufficient resources, by contract or other approved means, to respond to a *Small Discharge*. The response resources shall, as appropriate, include:

- 1,000' of containment boom and a means of deploying it within one (1) hour of the discovery of a spill.

- Oil recovery devices with an effective daily recovery capacity (50 bbls/day) equal to the amount of oil discharged in a *Small Discharge* which is available at the Facility within two (2) hours of the detection of an oil discharge.

- Oil storage capacity (100 bbls) for recovered oily material equivalent to twice the effective daily recovery rate.

Facility Response Resources/Capability

The Facility will respond to a ***Small Discharge*** with the manpower detailed in Figures 2.1 as well as local contract resources as detailed in Figure 2.2 and Appendix A.

- A 50 Bbl discharge typically will not escape the containment of the Facility.
- If a fifty (50) barrel discharge escaped the Facility or occurred as the result of a marine transfer operation, response operations would be implemented immediately upon discovery.
- Oil containment and recovery devices can be secured from contract resources (with a minimum effective daily recovery capacity of 50 Bbls) and can be implemented at the Facility, as the situation demands.
- A minimum of 100 Bbls of oil storage capacity for recovered oily material can be secured from contractor resources or made available within the Facility's storage facilities, as the
- Additional recovery and storage equipment may be secured from other Company and contract resources, as the situation demands.

Notes

- Equipment and personnel resources are detailed in Section 4.0 and Appendix A.
- Telephone notification and contact references are provided in Figures 2.1, 2.2, and 2.5.
- Response personnel are trained for responding to small discharges through regularly scheduled tabletop exercises, discharge prevention/safety meetings, FRP reviews, and actual responses to spills.

FIGURE B.1
AMPD INFORMATION - FRP

AMPD Response Coverage Information for

Equilon Enterprises LLC, dba Shell Oil Products US

1. **AMPD response provider** (check one): ☐ Plan Holder ☒ OSRO

   If OSRO, company name(s): Expiration date (Contract/other approved means)

2. **Equipment deployment personnel**are (check one):

   ☐Located at equipment site ☒On recall

3. **Physical location** (street address) of AMPD equipment (boom/skimmer/temporary storage) and qualified deployment personnel.

   Equipment Address (*1-hour response time):

   Boom: Spill boom is stored onsite at Berths 167 and 169 for OSRO deployment. Shell does not deploy boom.

   Equipment Address(*2-hour response time)

   Skimmer:

   Temporary Storage:

**Planning Assumptions: On-water speed, 5 knots; land speed, 35 miles per hour; notification/mobilization – 30 minutes*

Medium/Maximum Most Probable Discharge

A medium discharge at this Facility is considered to be a discharge that does not exceed 857 barrels (36,000 gallons).

Description

This size discharge would most likely occur due to a major equipment failure or during product transfer. Examples may include, but not limited to,

- Line or flange rupture
- Valve rupture
- Tank failure
- Tank overfill or failure
- Pipeline manifold rupture.

Because of dikes and other containment located throughout the Facility, it is very unlikely that the discharge would leave the Facility property or reach a navigable waterway before a spill containment could begin. Adverse weather conditions would increase the chances of a discharge entering the East Basin Channel; however, the following response actions would minimize the impacts on sensitive areas.

Additional Comments

Prevention

Several steps can be taken to limit the number of occurrences and the amount of discharges. In particular, employees receive training periodically on the proper procedures for transfers to and from tanks (e.g. proper tank gauging procedures). This training includes what to do in the event of an unusual occurrence such as equipment rupture (i.e. how to transfer spilled material to the miscellaneous tank or product tanks).

In addition, preventive maintenance of equipment is performed at regularly scheduled intervals to ensure that any weaknesses are discovered, such as tank inspections and hydrostatic testings. Old or worn parts are replaced as needed. Storage tank ages can be referenced in Appendix C.

Immediate Action

In the event of a medium size discharge, the OSRO or spill contractor would be notified. While waiting for the OSRO to arrive, qualified Facility personnel would complete internal and external notifications. Diked area containment of large spills can be handled with the use of contractor vacuum trucks. Medium discharges resulting from tank failure would more than likely be contained by the dike.

The Facility sits in close proximity to the East Basin Channel so the potential exists for a spill to reach navigable water. However, there are no environmentally sensitive areas in close proximity to the Facility, so damage to sensitive habitat would be minimal. Finally, the most likely chain reaction of failure would be fires resulting from accidental spark or downed power lines.

Response Requirement

The Facility shall identify sufficient response resources, by contract or other approved means, to respond to a *Medium Discharge*. The response resources shall, as appropriate, include:

- Oil recovery devices with an effective daily recovery capacity equal to 50% of the *Medium Discharge* volume that is capable of arriving on scene within the required time limits. (See Recovery Times on Table B-1.)

- Sufficient quantity of containment boom must arrive within the required time limits for oil collection and containment and for protection of fish and wildlife and sensitive environments, as appropriate. (See Recovery Times on Table B-1.)

- Temporary storage capacity equal to twice the daily recovery capacity.

Facility Response Resources/Capability

The Facility will initially respond to a ***Medium Discharge*** with a similar response to the Small Discharge. Additional response resources will be activated from an Oil Spill Removal Organization (s) (OSRO) as detailed in Figure 2.2 and Appendix A.

- Oil recovery devices with an effective daily recovery capacity of 428 Bbls (50% of the Medium/Maximum Most Probable Discharge volume) secured from the OSRO(s) will be on scene within 6 hours.
- 857 Bbls of oil storage capacity for recovered oily material will be secured from the OSRO(s) and/or made available within the Facility's storage facilities.
- Containment boom for oil collection and containment and for protection of fish and wildlife and sensitive areas will be secured from the OSRO(s) in the event that the spill escapes the boundaries of the Facility and impacts the storm water drainage channels and/or the East Basin Channel.

Notes

- Equipment and personnel resources are detailed in Section 4.0 and Appendix A.
- Telephone notification and contact references are provided in Figures 2.1, 2.2, and 2.5.
- Spill response personnel, including Facility members, are continually trained to respond to medium discharges through regularly scheduled tabletop exercises, discharge prevention/ safety meetings, FRP reviews, HAZWOPER training, and other PREP training.

EPA Worst Case Discharge

A worst-case discharge at this Facility is considered to be discharge that exceeds (b) (7)(F) [redacted]

Description

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

- Tank fire
- Earthquake-induced spills
- Catastrophic tank shell failure
- Tornado-induced spills
- Pipeline manifold rupture.

Diking and containment areas are located throughout the Facility. For a discharge this size to reach a navigable waterway, or leave the Facility property, diking would have to be damaged or destroyed (breached).

Additional Comments

Prevention

For a worst case discharge caused by a natural disaster, preparedness is more appropriate than prevention. The Facility employees receive training periodically on the proper procedures to deal with a natural disaster. Employees are also trained in steps to follow if the Facility must be evacuated (due to a tank fire or other emergency). In addition, preventive maintenance of tanks is performed at regularly scheduled intervals to ensure that any weaknesses are discovered. Storage tank ages can be located in Appendix C.

Worst Case Discharge and Adverse Weather

Calculation of the planning volume for a worst-case discharge are provided in this Appendix. It should be noted that it is not practical to consider all the variables associated with different weather scenarios so the planning distance could alter slightly. Severe rain events and associated flooding would also increase the chances of an oil spill from leaving the property.

Probable chain reactions of failures would be induced by the weather conditions. They would include, but not be limited to, fires, health hazards, and discharges of more than one product.

Worst Case Spill Pathway Scenario

In the event of tank rupture, the product may splash over the dike wall and enter the bar ditch, which is located adjacent to the Facility.

For a spill that is confined to the land along the pathway, Facility personnel would have at least two (2) options by which to contain the spill:

- Dams
- Trenches

Protection of Groundwater

The chances of groundwater impact due to a spill are minimal because the pathway between the Facility and the waterway is improved and/or impervious to a large extent. However, if a spill moved downward through the soil horizons and reached the groundwater table, then it would be necessary to contain and recover the product.

If the groundwater is near the surface, a possible solution might be a trench or an existing ditch. The back side of the trench or ditch could be lined with a polyethylene sheeting material which can serve to collect product for transfer to the oil/water separator. The groundwater would then be allowed to continue in its movement. If, however, the contaminated area is large and slow moving, an open trench may not be the answer. A deflecting barrier could be used as a structure which is more permanent than a trench or ditch and that moves the skimmed floating product to an upright recovery culvert with slits cut in the sides to allow the product to move inside and filter out the rocks.

Deep groundwater recovery could be accomplished by using a cone of depression type of pumping method. By placing a well suction beneath the floating product and producing a funnel type of effect, the product could be brought to a general area. This cone of depression forms a greater area of product. The second pump shaft could then be placed in this region.

Ditch Containment

A spill may also be contained in storm water ditches. Some practical containment methods are:

- A board skimming device
- Earth dam and weir
- Wire fence filter boom
- Culvert weir
- Under flow dam.

These methods are simple to construct and effective for containment.

Spills That Reach The Waterway

The Facility is located near the East Basin Channel (see Figure 6.1). The priority during larger spills is to prevent oil from reaching the waterway. Oil spill response organizations (OSROs) that are under contract with the Facility will be the initial responders. Some of these OSROs can initiate initial boom deployment and anchoring at the waterway within one hour. A Damage Assessment by the state and federal trustees would more than likely follow the response.

Response Requirement

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

- All resources shall be capable of arriving at the Facility within the applicable response tier requirements (Tier 1 = 6 hours; Tier 2 = 30 hours; Tier 3 = 54 hours).

- Oil recovery devices with an effective daily recovery capacity equal to the lesser of the WCD Response Planning Volume Calculations or the response caps. If the daily recovery rate exceeds the applicable contracting caps (see Table) then the Facility must identify additional resources equal to twice the cap or the amount necessary to reach the calculated planning volume.

- Temporary storage capacity equal to twice the daily recovery capacity.

- At least 20% of the on-water response equipment should be capable of operating in water of 6 feet or less depth.

- Containment boom for oil collection and containment and for protection of areas of environmental sensitivity or economic importance.

- Identify resources capable of responding to a shoreline clean-up operation involving the calculated volume of oil and emulsified oil that might impact the affected shoreline.

Response Requirement

The Facility shall identify sufficient response resources, by contract or other approved means, to respond to a Worst Case Discharge to the maximum extent practicable. The response resources shall, as appropriate, include:

- Oil recovery devices with an effective daily recovery capacity equal to the lesser of the WCD Response Planning Volume Calculation or the response caps. If the daily recovery rate exceeds the applicable contracting caps (see Table), then the Facility must identify additional resources equal to twice the cap or the amount necessary to reach the calculated planning volume.

- Temporary storage capacity equal to twice the daily recovery capacity.

- At least 20% of the on-water response equipment should be capable of operating in water of 6 feet or less depth.

- Containment boom for oil collection and containment and for protection of areas of environmental sensitivity or economic importance.

- Identify resources capable of responding to a shoreline clean-up operation involving the calculated volume of oil and emulsified oil that might impact the affected shoreline.

- The above Response Planning Volume requirements, including response times, are based on Attachment E-1 of Appendix E to 40 CFR Part 112. (See Recovery Times on Table B-1.)

Facility Response Resources/Capability

The Facility will respond to a ***Worst Case Discharge (WCD)*** initially with a similar response as identified for a Small or Medium Discharge. Facility Management will initiate “response actions” located in Section 3 immediately upon discovering a spill. Additional OSRO(s) will be activated as the situation demands. The response resources will be capable of arriving within the required response tiers and will include:

- Oil recovery devices with an effective daily recovery capacity equal to the lesser of the WCD Response Planning Volume Calculations or the response caps will be secured from the OSRO(s) and other Company resources. Any amount in excess of the required caps will be contracted for and responded to as part of the same response effort.

- Temporary storage capacity equal to twice the daily recovery capacity will be secured from OSRO(s), other Company resources, or made available within the Facility's storage facilities.

- At least 20% of the on-water response equipment secured from the OSRO(s) and other Company resources will be capable of operating in water of 6 feet or less depth.

- Containment boom for oil collection and containment and for protection of fish and wildlife and sensitive environments and socio-economic sensitivities will be secured from the OSRO(s) and other Company resources.

- Resources capable of responding to a shoreline clean-up operation involving the calculated volume of oil and emulsified oil that might impact the shoreline will be secured from the OSRO(s) and other Company resources.

- Overall response operations will be conducted under the Incident Command System with adequate Facility and Contract Response personnel to continue operations for a minimum of seven (7) days.

- The Response Planning Volume requirements, including response times, are based on Attachment E-1 of Appendix E of 40 CFR 112.

Transportation

Transportation would be a vital component for all stages of an oil spill response. Once a response team is activated, transportation to the spill site as quickly as possible is mandatory. Personnel, response equipment, materials, and supplies would need to be transported to and from command posts, the spill site, and staging areas. Transportation services would also be needed for wildlife rescue, surveillance, and waste disposal operations.

The various transportation modes that may be required during spill response operations include:

- Vehicles (trucks, trailers, busses, vans, ATVs).
- Fixed-wing aircraft.
- Helicopters.
- Marine vessels.

Equipment, personnel, and resources would be transported to the scene by the most expeditious means available. The mode of transportation would likely include a combination of vessels and vehicles, and possibly aircraft. Actual routes would be determined at the time of an incident and would depend upon the location of the incident, resources to be mobilized, estimated trajectory of the release, and current road, weather, and sea conditions.

Refer to the listing of transportation resources in Appendix. The ACP provides information on transportation logistics.

Notes

- Equipment and personnel resources are detailed in Section 4.0 and Appendix A.
- Telephone notification and contact references are provided in Figures 2.1, 2.2 and 2.5.
- Spill response personnel, including Facility members, are continually trained to respond to worst case discharges through regularly scheduled PREP exercises (i.e. TTX, QI notification, equipment deployment), discharge prevention/safety meetings, FRP reviews, and HAZWOPER training. A minimum of one tabletop exercise (TTX) in a triennial cycle will involve a Worst Case Discharge scenario.

DOT/PHMSA Worst Case Discharge

Description

A worst case discharge scenario involving breakout tankage uses the single largest volume tank or the response zone.

Volume

The maximum level of the largest tank allows for a maximum fill volume of (b) (7)(F)

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

Spill Prevention Measures	Percent Reduction Allowed
Maximum allowable credit or reduction	0 (sum of above)

Largest Breakout Tank * Maximum Allowable Credit = **Breakout Tank Worse Case Discharge**

Worst Case Discharge = (Greater of Breakout or Pipeline WCD) (b) (7)(F)

USCG Worst Case Discharge

Discharge from the maximum number of piping theoretically possible to be conducting transfers simultaneously and carrying oil between the marine transfer manifold and the non-transportation-related portion of the Facility. The discharge from each pipe is calculated as follows:

(b) (7)(F)

(b) (7)(F)

(b) (7)(F)

California OSPR
Discharge Volume Calculations

Reasonable Worst Case Spill (RWCS)

RWCS = "line fill" + "Other Spillage" = TOTAL

- This volume has been calculated to include the static and dynamic volumes of the largest pipeline (12-inch diameter). The static volume is the volume of the pipeline from the wharf manifold to the isolation tank valve and the dynamic volume is the volume of oil that could be lost during a 30-minute shut-down time.

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

APPENDIX C

HAZARD EVALUATION / PREVENTION

C.1 HAZARD IDENTIFICATION

Loading / Unloading of Transportation Vehicles

The Facility is located in an area devoted to marine oil terminals, industrial operations, and warehousing activities. The Port of Los Angeles is primarily an industrial land use, and contains vessel berths for shipping and receiving cargo. Tankers and barges calling at the Facility transfer light oil products, (gasolines, jet fuel, and diesel), gasoline additives, and lubricating oils (persistent oils). Material Safety Data Sheets (MSDS's) for the products are available at the Facility.

Overall length available to vessels at Berths 167, 168, and 169 is 1,256 feet. There is a dolphin for mooring lines at the extreme south end of Berth 169, accessed by a walkway from shoreside. The berths are outfitted for transfer as follows:

- Berth 167 has nine headers, seven 8-inch for transfer of petroleum products, and two 6-inch headers for vessels to discharge dirty ballast or slop oil to shore tankage.
- Berth 168 has six headers, five 8-inch for transfer of petroleum products, and one 6-inch header for vessels to discharge dirty ballast or slop oil to shore tankage.
- Berth 169 has nine headers, seven 8-inch for transfer of petroleum products and two 6-inch hoses for vessels to discharge dirty, ballast or slop oil to shore tankage.

There are two pumping stations at the facility, used for loading vessels, boosting vessel discharges, pumping oil storage tanks and pipeline transfers.

There are 12 above-ground tanks on the site. These tanks are used for the temporary storage of petroleum products before they are transferred to other facilities, or loaded onto tankers or barges. All of the tanks are within secondary containment structures. There are two sub-surface sumps and one underground tank used for controlling Facility drainage. Surface and subsurface piping connect the tanks.

Pump capacity at the facility has a typical throughput rate of about 18,000 barrels per hour, both to and from the facility. Actual capacities vary by direction and by product. Throughput at the facility averages 56,000 barrels per day. The facility can simultaneously load or unload, but the majority of transfers are unloading operations.

All Terminal operations are conducted from the Control Center located in the Terminal office.

The Control Center has communications systems, computers to monitor tank levels, remote high/low level alarms for tanks, pump start/stop and emergency shutdown; computers for data entry, entrance gate monitor and intercoms.

Dockhouses are located at Berths 167 and 169. Each has positive air pressure for operations in the hazardous class area. Both buildings have HVAC systems; computers to monitor tank levels, remote high/low level alarms for all tanks, pump start/stop and emergency shutdown; computers for data entry; lighting; Company phone system; entrance gate monitor and intercoms. Each has windows overlooking the dock area.

Mobile tubs are provided to contain hose or bleeder draining. Spill catchment basins surround manifold areas of Berths 168 and 169, and are equipped with piping that drains to a separate sump for each berth. Both sumps have a float-activated pump that discharges to a slop oil/ballast tank ashore. Vessel slop or dirty ballast is pumped ashore and processed for proper disposal.

The Facility is situated within the harbor such that there is no potential for flooding. Adequate drainage from all surface areas to the harbor is available.

The Facility is equipped with a number of features designed to ensure safety in all facets of Terminal operations. These features include:

- Safety equipment, such as fire equipment, showers, eye baths, protective clothing, breathing apparatus, etc. The equipment is checked on a routine basis to ensure that it is in the designated location and in operable condition, and to familiarize the operators with the equipment and its location.
- (b) (7)(F) [redacted]

Marine Terminal

MARINE OPERATIONS

Transfer Points:
Berth 167 - nine (9)
Berth 168 - six (6)
Berth 169 - nine (9)

Discharging Rate:
10,000 BPH (Vessel dependent)

Simultaneous Operations:
Two (2) operations (maximum)

Transfers per day:
Vessel operations occur daily

Products:
Gasoline, Diesel, Ethanol , Jet

Storage Tank Fields

Secondary containment is provided for the bulk storage tanks and/or transfer points at the Facility. Capacities are listed below for each as well as the facility total.

Secondary Containment volumes for all bulk storage tanks are detailed on the "Hazard Identification Tanks" form located in this Appendix. The capacities are fully detailed in the Facility's SPCC Plan which is maintained separately at the Facility.

Day-to-Day Operations

The day-to-day operations at the Facility that may present a risk of discharging oil or releasing a hazardous substance are:

- Vessel unloading operations
- Pipeline pumping, relieving operations

Work such as piping replacement/repair is rare and would only be done on portions of the system that are isolated from the active system.

Transfer Piping

LINE NAME: 502/503
LINE CAPACITY (BBL): 63
MAXIMUM FLOW RATE (BBL/HR): 7,000
PRODUCTS HANDLED: Gasoline, Diesel, Ethanol

LINE NAME: 512/513
LINE CAPACITY (BBL): 63
MAXIMUM FLOW RATE (BBL/HR): 5,000
PRODUCTS HANDLED: Gasoline, Diesel, Ethanol

Spill Prevention

The Company has a substance abuse policy which strongly discourages drug and alcohol abuse. Supervisors, designated management, and other employees are subject to random testing, particularly positions which are safety/environmentally sensitive. Treatment and rehabilitation is offered as necessary.

Moreover, as part of its spill prevention program, the Company continuously reviews and updates its policies, procedures, and practices. Spill prevention measures in effect at the Mormon Island Marine Terminal are summarized below.

Secondary Containment Drainage

The bulk storage tanks are used for the temporary storage of petroleum products before they are transferred to other facilities, or loaded onto tanker ships or barges. All tanks are within secondary containment structures. Two (2) sub-surface sumps (S-394 and S-395) and one (1) underground tank (M-12) are also present. Tank M-12 (Round Sump) is used as a collection sump for manifold pits and levee drains, prior to pumping into other tanks, for later separation of water and oil.

Marine Terminal Transfer Operations

The following conditions and practices enhance spill prevention at the marine terminal:

- The facility shall be manned by personnel thoroughly familiar with all operations and qualified to respond to an emergency.

- There shall be a minimum of one Product Handler on duty to coordinate all oil transfer movements to and from the facility.
- There shall be a minimum of one Product Handler designated as person-in-charge for each transferring vessel at the dock.
- At all times during loading/discharging operations, the Product Handlers will make periodic inspections and checks to insure safe practices, product quality, and that the environment is being protected.
- Product Handlers shall periodically scan the waters around the wharf during vessel unloading.
- Lighting shall be used to provide safe working conditions. All lighting shall be properly wired, protected, shielded, and explosion-proof. Photoelectric switches shall automatically illuminate the navigation lights.
- The use of extension lights shall be prohibited except in spaces tested as "gas-free".
- No lights other than vapor-proof lights shall be used in places subject to gas accumulation.
- (b) (7)(F) [redacted]
- There are emergency shut down switches at both dock manifolds and at each pump for cargo originating from Mormon Island storage tanks.
- The pipeline pumps are equipped with low flow or high pressure shutdown switches.
- Radios shall be properly maintained and the batteries changed when the "low cell" chirp from the radio is heard. Fully charged batteries are available in the Operations Office.
- The vessel's representative will receive a radio from the Product Handler to insure emergency shutdown by Product Handlers at the request of the ship's officer.
- A wharf emergency bull horn serves as an alternate means of communication should a radio fail.
- Fixed spill containment facilities will be inspected and no hoses will be handled unless all are in good repair and pumps are empty prior to conducting transfer operations.
- All cargo hoses shall have a blind flange on the ship end of the hose at all times when they are not connected to the ship's header and shall be slip blinded on the dock header or disconnected and blind flanged when not in use.
- All hoses not connected to dock headers shall be blind flanged at all times, except new, unused hoses. This includes hoses stored on the dock that are not in service.
- Cargo hoses that develop a leak, drip, bulge, or soft spot shall be immediately taken out of service and removed from the dock area for disposal.

- Cargo hoses that are to be moved shall be on dollies or hose carts to avoid abrasions or tears.

- Access to the wharf shall be by way of the main gate which is monitored by a Security Officer and Product Handlers. All personnel accessing the facility are required to have a TWIC or be monitored by an individual with a TWIC.

- Personnel shall receive training in operations and maintenance, spill prevention, spill response, and in applicable pollution control laws, rules, and regulations.

- Transfer of petroleum products shall be performed by personnel specifically trained in the operation of the facility and the U.S. Coast Guard Declaration of Inspection.

- The Regional Manager shall be required to ensure compliance with all U.S. Coast Guard and State of California State Lands Commission requirements and regulations applicable to equipment and transfer operations.

- No employee of the Company shall be assigned as a Terminal Person-In-Charge for the transfer of petroleum products unless he/she meets all the qualifications set forth in 33 CFR Subpart D, §154.710, and Title 2, Division 3, Chapter 1, Article 5 Section 2385(d)(2)(V) of the California Code of Regulations (CCR). Their names are on the list submitted to the Captain of the Port and the California State Lands Commission.

- Clearly defined procedures which must be followed during transfer operations are specified in the Marine Terminal Operations Manual.

- The Terminal Person-In-Charge shall shut down transfer operations if personnel violate U.S. Coast Guard regulations or the Company's policies and fail to correct the violation when so advised.

- The Terminal Person-In-Charge shall not initiate transfer operations if the vessel does not meet U.S. Coast Guard oil transfer and pollution prevention requirements and the Company's internal requirements.

- The Company shall not permit the unloading or discharging of unmanned vessels.

- Unmanned tank vessels other than fuel and diesel barges in local bunkering service shall not be permitted to remain on berth at this facility. When barges are alongside and unmanned, surveillance shall be provided by facility personnel.

- Prior to a transfer operation, the Terminal Person-In-Charge shall board the vessel and present the Vessel Person-In-Charge of the vessel with a copy of the Marine Terminal Operations Manual, if a manual is not already on board. Regulations shall be discussed, if necessary, to ensure a full understanding.

- Prior to a transfer operation, the Terminal Person-In-Charge shall present the Vessel Person-In-Charge of the vessel with the City of Los Angeles Fire Department Declaration of Inspection (Form F-306). All items shall be reviewed and adhered to, and the form shall be signed. The Los Angeles Fire Department Hazardous Cargo Inspector shall be notified that the vessel is ready for inspection.

- Prior to a transfer operation, the Terminal Person-In-Charge shall present and discuss with the Vessel Person-In-Charge of the vessel the Company's Load/Discharge Orders.

- Prior to a transfer operation, the Terminal Person-In-Charge shall complete the Marine Installation Report (Form M-142) with assistance from the Vessel Person-In-Charge of the vessel.

- Prior to a transfer operation, the Terminal Person-In-Charge and the Vessel Person-In-Charge (i.e., ship operator) shall go over each item on the "Declaration of Inspection", complete the form, and sign it.

- Vessels arriving for loading or vessels reloading after discharge shall have their tanks inspected by the Product Handler and ship's officer for suitability to load the nominated cargo.

- Discharging of products shall not be commenced, or if commenced, shall be discontinued while other vessels are securing or casting off within a hazardous distance, at the discretion of the Terminal Person-In-Charge.

- On initial start-up of the cargo transfer pump, the hose connection shall be checked for possible leaks by the Terminal Person-In-Charge.

- Continuous two-way voice communication via radio shall be maintained between the Terminal Person-In-Charge and the Vessel Person-In-Charge during transfer operations.

- Communications between shore-operating personnel shall be maintained throughout all transfers by an "intrinsically safe" two-way radio system.

- Pumps and all transfer systems shall be accessible only to authorized personnel.

- The maximum allowable discharging pressure shall be agreed to with the Vessel Person-In-Charge before the commencement of cargo transfer.

- Cargo hose connections by the crew aboard ship shall be made under the supervision and direction of the ship's officer. Each hose joint shall have only one clean gasket. Where flange couplings are used, all bolts shall be inserted and equa ly tightened to ensure a leak-proof connection. If leaks or drips occur, operations will be secured and replacement will be made of gaskets or fittings. The use of quick latch mechanical devices or C clamps is prohibited.

- All transfer piping and valves on the dock shall be capped or blanked when not in use.

- All transfer equipment shall be secured in the closed position when not in service.

- Fixed containers, enclosed deck areas or curbed areas on dock areas shall be available, empty, and in good order under or around each manifold or hose handling area.

- The maximum allowable working pressure shall be 125 psig. The Terminal Person-In-Charge shall periodically check the pressure gauge reading on the cargo transfer header.

- No ballast shall be pumped overboard by the vessel such an action would be in violation of the U.S. Pollution Prevention Regulations.

- Scuppers shall remain plugged and the deck shall not be not washed down when a vessel is at the wharf.

- It shall be the ship officer's responsibility to ensure that no tow boats, bunker barges, or small craft come alongside or within a hazardous distance while loading or discharging petroleum products or while tank covers or ullage ports are open.

- Discharging shall not be permitted if hazardous accumulations of vapors or spillage or overflow of products occur. If such conditions are discovered during transfer, pumping shall be stopped and not resumed until the condition is corrected.

- Discharging of cargo shall not be commenced (or if commenced, shall be stopped) during electrical storms.

- Overall loading of products shall be prohibited.

Bulk Storage of Petroleum Products

The following conditions and practices enhance spill prevention at the tank farm areas:

- All storage tanks were designed and constructed in accordance with A.P.I. standards and are compatible with the material stored. All tanks are contained within diked areas sufficient to contain the volume of the largest tank plus normal rainfall.

- Before any material that might have unique properties is stored in any tank, the potential impact on storage and transfer equipment shall be reviewed by appropriate facility personnel.

- All tanks are equipped with both local and remote gauging systems.

- All tank bottoms and all underground piping is cathodically protected.

- The liquid level sensing device readings shall be verified by a manually gauging every month to ensure reliable operations.

- High level alarms exist on all major tanks. These alarms provide visual and audible signals at a remote station that is constantly manned.

- All tanks are equipped with properly sized vents to prevent pressure or vacuum failure during filling or emptying.

- Storm waters contained by the tank farm dike area are inspected for oil sheen and tested for oil content prior to being discharged under the Terminal's NPDES Permit.

- During unattended or non-draining operations, valves are padlocked in the closed position for security.

- All drainage valves are either gate valves or ball valves that must be manually opened or closed. No flapper valves are allowed.

- Tanks shall be inspected by operating personnel during the normal course of their duties. Any visible leak shall be promptly corrected.

- Steam heating coils shall not be utilized at the facility at this time.

- Current policy is to avoid burying any future pipelines and to replace existing buried lines with overhead lines over the next several years.

- All appropriate pipeline termination points shall be capped or blind flanged which the pipelines are out-of-service for any period.
- There is no above-ground piping located in areas where motor vehicle traffic is allowed.
- The only land access to the area is via a security gate that can only be opened from the inside or with an access card.
- Area lights shall be switched on as required to light working areas and to provide security illuminations.
- All valves that control the flow of oil to or from the facilities are located inside the fenced area.
- Starter controls on all oil pumps in non-operating status are located where they are only accessible to authorized personnel.
- All lines that have the potential of being closed in during non-use have appropriate

(b) (7)(F)

[redacted]

(b) (7)(F)

[redacted]

Worst Case Release

Based on the above analysis, the worst case release from the terminal was determined to be (b) [redacted] es. (7)(F)

Documentation

The documentation and materials (drawings, diagrams, plot plans, etc.) used in the risk and hazard analysis are maintained at the Mormon Island Marine Terminal. The point of contact and address are:

Tony Fernandez
(310) 816-2318
Carson Terminal
Shell Oil Products US
20945 S. Wilmington Avenue
Carson, CA 90810

Risk and Hazard Analysis

Preface

The following analysis was conducted in 1994. In the interim period, operations at the Facility have remained essentially as indicate in the analysis, thus the review remains valid.

The mitigation measures identified in the analysis were each completed following the 1994 review.

Introduction

The risk and hazard analysis on the Mormon Island Marine Terminal was conducted on February 16, 1994 at the Terminal using the "checklist" methodology. The Terminal was divided into 27 components, or nodes, for analysis purposes. The analysis examined each node to determine what could cause a release of oil, how much could be released, and whether the release could reach marine waters. Existing safety features were examined and mitigation measures were recommended where needed.

Methodology

The "checklist" analysis technique as described in the American Institute of Chemical Engineers' Guidelines for Hazard Evaluation Procedures was utilized for the conduct of the risk and hazard analysis. Facility equipment was divided into four categories (pipelines, loading hoses, sumps and drains, and other) and a unique Hazard Analysis Checklist was developed for each category. A summary of the questions included in the checklists is provided in Table C 3.

The questions were designed to encompass a broad range of potential hazards such as corrosion, human error, natural disasters, fires, third parties, etc. The checklist form (worksheet) provided for three responses to each question: yes, no, or not applicable. The worksheet also contained boxes for each question to record the following information: potential hazard, safeguards in place to prevent the potential hazard from occurring, any remaining hazards after considering the safeguards, recommendations to mitigate any remaining hazards, and remarks. A copy of the first page of the worksheet for pipelines is provided as Figure C 1. As stated above, a total of 27 nodes were analyzed. The nodes, as categorized for analysis purposed, are listed in Table C-4.

The risk and hazard analysis was conducted at the Mormon Island Marine Terminal on February 16, 1994. Information available and utilized during the conduct of the risk and hazard analysis included P&IDs, plot plans, and the Wharf Operations Manual. Visual verifications were also conducted as required.

Mr. Tim Chambers of Reese-Chambers Systems Consultants, Inc. served as the team leader for the risk and hazard analysis. Mr. Chambers has over 14 years of experience conducting risk and hazard analyses and has served as team leader for the conduct of eight hazard and operability (HAZOP) studies. He also has or will be participating in 11 risk and hazard analyses in support of OSPR regulations.

TABLE C-3

Summary of Checklist Questions

1. Can release from node enter marine waters?
2. Does node have adequate containment?
3. Is mechanical design (internal and thermal stresses) appropriate?
4. Is node adequately protected from corrosion?
5. Is node constructed of proper material?
6. Does node have a drain?
7. Where does drain discharge to?
8. Are drain discharge facilities adequate?
9. Is node properly protected against overpressure?
10. Can node be overpressurized by pumps?
11. Does node have a pressure safety valve (PSV)?
12. Where does PSV discharge to?
13. Are PSV discharge facilities adequate?
14. Is node protected from mechanical damage?
15. Are valves in node appropriately designed?
16. Does node have leak detection?
17. Is node properly designed for earthquakes?
18. Is node adequately protected from vandalism?
19. Can node handle increase in temperature of product?
20. Can node handle decrease in temperature of product?
21. Can node handle increase in flow of product?
22. What happens if a valve is inadvertently left open?
23. What happens if a valve is inadvertently closed?
24. Is there adequate surveillance of the node?
25. Do personnel understand operation of the node?
26. Is there adequate protection from sending wrong product through the node?
27. Is there adequate protection from pumping reverse direction through node?
28. Is node properly designed for weather conditions?
29. What happens if node leaks/ruptures?
30. What happens if there is a power failure?
31. What happens if there is a hydraulics failure?
32. Is fire protection adequate?
33. Is node adequately protected from loss of communication/instrumentation?
34. What if pump fails?

See Pipeline Worksheet in Appendix H.

TABLE C-4

NODES

Pipelines

1. "A" and "B" lines
2. "C", "T", and "X" lines
3. "O" line
4. Lube line
5. Lube line 3-way valve
6. "Y" utility line
7. 6- and 12-inch ballast lines
8. 4-inch circulation line
9. Overshot line
10. Relief valve line
11. Manifold #1
12. Manifold #2
13. Manifold #3
14. Manifold #4
15. Gasoline manifold
16. Pump house manifold
17. Pump 12 manifold
18. Pipeline manifold

Loading Hoses

19. All

Sumps and Drains

20. Mast #2 and #3 pans
21. Mast #5 pan
22. Round sump

Other

23. Storm water processing system
24. Lube pump
25. Pump house pump
26. Gasoline manifold pumps
27. Pig launcher

Mr. David Felger of Shell is the Wharf Master/Manager of the Mormon Island Terminal. He has over 15 years of experience at the terminal.

Mr. Jim Eystad of Shell is Logistics Operation Foreman in charge of Shell Martinez wharf facility operations. His responsibilities include maintenance, oil spill training, inspection program, and agency coordination. He has been with the Company for 25 years, the last ten at the Martinez wharf.

Historical Spills

There have been no significant spills at the Mormon Island Marine Terminal that have reached tidal waters during the past ten years.

Inventory of Hazards Identified

The risk and hazard analysis identified several areas where facility components or operations could present the potential for a release to marine waters. These areas are summarized below.

Containment area penetrations - There are pipeline penetrations through the containment areas around the storage tanks. While these penetrations are sealed, there is no program in place to verify the integrity of these areas. Thus, a major release inside the containment area has the potential to leak through these penetration areas.

Ethanol line pump containment - The lube line pump does not have any local containment and thus a leak could potentially reach marine waters.

Ethanol line pump vulnerability - The lube line pump is located such that it could accidentally be struck by vehicle traffic in the area.

Ethanol line three-way valve vulnerability - The lube line three-way valve is located near marine waters and a release is possible from an 'O'-ring failure or from an impact by a motor vehicle.

Gasoline Manifold containment - A leak from a pump, valve, or flange at the Gasoline Manifold could drain toward and get in the storm drain system.

Gasoline Manifold vulnerability - The Gasoline Manifold is located near a parking lot and could accidentally be struck by vehicle traffic in the area.

Pipeline Manifold containment - A leak at the Pipeline Manifold could drain toward and get in the storm drain system.

Pipeline Manifold vulnerability - The Pipeline Manifold is located such that it could accidentally be struck by vehicle traffic in the area.

Pump 12 Manifold vulnerability - The Pump 12 Manifold is located such that it could accidentally be struck by vehicle traffic in the area.

Manifold #1 containment - Manifold #1 has some small local containment, however, this containment may not be adequate to prevent a moderate release from reaching the storm drain system.

Manifold #1 vulnerability - Manifold #1 is located near the roadway and could accidentally be struck by vehicle traffic in the area.

Manifold #2 vulnerability - Manifold #2 is located such that it could accidentally be struck by vehicle traffic in the area.

Manifold #3 vulnerability - Manifold #3 is located such that it could accidentally be struck by vehicle traffic in the area.

Manifold #4 containment - A leak at Manifold #4 could drain toward and get in the storm drain system.

Manifold #4 vulnerability - Manifold #4 is located such that it could accidentally be struck by vehicle traffic in the area.

Mitigation Plan

The following describes the measures recommended to mitigate the hazards identified and described in the previous section. All measures will be implemented by the end of 1995.

Containment area penetrations - Implement a program to inspect and/or test the containment system on an annual basis.

Lube line pump containment - Construct a local containment system around the pump.

Lube line pump vulnerability - Install crash posts or other system to protect the pump.

Lube line three-way valve vulnerability - Eliminate the three-way valve and replace it with an engineered system.

Gasoline Manifold containment - Construct a local containment system around the manifold.

Gasoline Manifold vulnerability - Install crash posts or other system to protect the manifold and pumps.

Pipeline Manifold containment - Construct a local containment system around the manifold.

Pipeline Manifold vulnerability - Install crash posts or other system to protect the manifold.

Pump 12 Manifold vulnerability - Install crash posts or other system to protect the manifold.

Manifold #1 containment - Construct a local containment system around the manifold.

Manifold #1 vulnerability - Install crash posts or other system to protect the manifold.

Manifold #2 vulnerability - Install crash posts or other system to protect the manifold.

Manifold #3 vulnerability - Install crash posts or other system to protect the manifold.

Manifold #4 containment - Construct a local containment system around the manifold.

Manifold #4 vulnerability - Install crash posts or other system to protect the manifold.

Remaining Risk

For oil to reach marine waters, two things must happen: (1) oil is released, and (2) it flows to marine waters. The risk and hazard analysis addressed each terminal component, including pipelines, that could potentially release oil, identified what type events (e.g., material failure, mechanical impact) could lead to a release, and estimated how much oil could be released. The analysis then addressed where the released oil could go, whether it could be contained on site, and how much, if any, could reach marine waters. Based on this analysis, mitigation measures were recommended as appropriate. These measures either addressed reducing the potential for a spill (e.g., equipment additions, operational procedures) or preventing the spill from reaching marine waters (e.g., containment additions). While it is believed that the risk of oil reaching marine waters has been mitigated to the maximum extent feasible, it is impossible to entirely eliminate this possibility. Thus, reasonably foreseeable worst case spill volumes for each facility component have been calculated. The largest reasonably foreseeable worst case spill that could potentially reach marine waters has been used to define the remaining risk and to drive the spill response planning effort. The reasonable worst case spill for the terminal was calculated in accordance with Title 14, Subdivision 4, Chapter 2, Subchapter 3, Section 817.02(d)(1)(A) of the California Code of Regulations. The assumptions used in the calculations are presented below. It is emphasized here that the probability of these size spills occurring and reaching marine waters is extremely remote.

Pipelines - The worst case spill from the pipelines has been calculated assuming that the line ruptures and the rupture is detected and the pump shut down and tank isolation valve closed within 30 minutes. Thus, the amount of oil that is released is the contents of the line from the tank isolation valve to the wharf plus 30 minutes of pumping loss. Table E-3 presents information on the worst case spill amount from each of the pipelines. As can be seen from the table, the worst case spill would be 3,650 bbl of oil from Lines A or B. It is noted here that with the loading procedures in place, the onsite personnel should be able to shut down the pumps and isolate the lines within one minute. Thus, the 30 minute time assumed in the calculations truly represents a worst case situation.

Loading hoses - Procedures for draining loading hoses should preclude spills during connection or disconnection. A worst case spill has been calculated as the contents of the loading hose plus one minute of pumping. The largest loading hose is 8 inches in diameter and 65 feet long, which would contain 4 bbl of oil. The maximum pumping loss in one minute would be 117 bbl of oil. Thus, the worst case release would be 121 bbl of oil.

Sumps and Drains - There are three catch pans on the wharf. The pans at Masts #2 and #3 gravity drain to the onshore sump which is equipped with a high level alarm. The pan at Mast #4 drains to a sump inside the tank containment area. There are also various other onshore collection systems, pits, and sumps which either must be pumped out or drained to the Round Sump. The Round Sump is equipped with a level indicator. The contents of the Round Sump are pumped to a storage tank located inside the tank containment area.

The worst case release from a sump or drain would occur if there were a pipeline release which flowed to and then overflowed the sump. Thus, the worst case spill from a sump or drain would be no more than the worst case spill from a pipeline.

TABLE C-5
Pipeline Worst Case Spill Calculations

(b) (7)(F)

Line Name	Diameter (inches)	Line Lenght (feet)	Line Capacity (bbl)	Loading/ Unloading Rate (bbl/hr)	Pumping Loss in 30 Minutes (bbl)
A	12	1075	150	7000	3500
B	12	1075	150	7000	3500
C	8	1375	85	5000	2500
T	12	881	123	7000	3500
X	12	951	133	7000	3500
Overshot	12	30	4	N/A	0
Relief Valve	12	403	56	N/A	0

Hazard Identification Tank Tables

Hazard Identification Tank Tables are located in Table C-2.

C.2 DISCHARGE DETECTION

The Facility has a discharge detection program which is intended to limit the effects of a hazardous material release.

Detection by Personnel

- Daily Visual Inspections (including tanks, secondary containment, aboveground piping, etc.) during operating personnel rounds. Refer to Appendix H for sample Tank Inspection and Secondary Containment Inspection checklists.
- Monthly inspection of tank gauges and cathodic protection readings.
- Quarterly inspections of the ground water monitoring system are performed.
- Annual Secondary Containment Inspection as part of the SPCC Plan.
- Annual Tank Inspections as part of the SPCC Plan.

(b) (7)(F)

(b) (7)(F)

C.3 FACILITY SELF-INSPECTIONS

Written procedures for and record of the Facility inspections of tanks and secondary containment are documented in this section. The Facility self-inspection requires two steps: 1) a checklist of items to inspect, and 2) a method of recording the actual inspection findings. All inspection records are maintained for a minimum of 5 years.

Operational Equipment Inspection

All piping is hydro-tested annually per Coast Guard and California State Lands Commission regulations. The minimum wall thicknesses vary depending on the pipe size. All of the Ultrasonic Testing (UT) records are on a computer database and available at any time. The hydrotest records are kept with the Regional Manager at Mormon Island and a copy with the Inspection Department.

The Company has a computer program that allows the Operators to input a work request for repair of equipment. The Regional Manager then reviews the work request for necessary information and forwards the request (electronically) to the Operations Specialist. The Operations Specialist then approves the request and schedules the work to be done with the Maintenance Foreman.

When a repair is made (other than a minor adjustment) on a pump, motor, tank or pipe, the Company Inspection Record System is updated with the repair made. This allows the Company to track any possible problems that are re-occurring and get a corrective action in place to solve the problem.

Piping is inspected on an interval set by the Inspection Record System program, which is based on the corrosion rate of the pipe. All of the piping has been drawn up and UT points identified. Using the original thickness and the date of installation, the program calculates the corrosion rate and reinspect time-frame.

FIGURE C.1
TANK INSPECTION CHECKLIST

The tanks are inspected against the following checklist at a minimum:

- Check tanks for leaks, specifically looking for:
  - Drip marks
  - Discoloration of tanks
  - Puddles containing spilled or leaked material
  - Corrosion
  - Cracks
  - Localized dead vegetation
- Check foundation for:
  - Cracks
  - Discoloration
  - Puddles containing spilled or leaked material
  - Settling
  - Gaps between tank and foundations
  - Damage caused by vegetation roots
- Check piping for:
  - Droplets of stored material
  - Discoloration
  - Corrosion
  - Bowing of pipe between supports
  - Evidence of stored material seepage from valves or seals
  - Localized dead vegetation

Records of the inspections are maintained at the Facility. These records are maintained for a period of five (5) years and are available for review at any time at the Facility Office.

FIGURE C.2
SECONDARY CONTAINMENT INSPECTION CHECKLIST

The Secondary Containment systems are inspected against the following checklist:

- Dike or berm system
    - Level of precipitation in dike/available capacity
    - Operational status of drainage valves
    - Dike or berm permeability
    - Debris
    - Erosion
    - Permeability of the earthen floor of diked area
    - Location/status of pipes, inlets, drainage beneath tanks, etc.
- Secondary containment
    - Cracks
    - Discoloration
    - Presence of spilled or leaked material (standing liquid)
    - Corrosion
    - Valve conditions
- Retention and drainage ponds (as applicable)
    - Erosion
    - Available capacity
    - Presence of spilled or leaked material
    - Debris
    - Stressed vegetation

Records of the inspections are maintained in the Facility. These records are maintained for a period of five (5) years and are available for review at any time at the Facility Office.

C.4 ANALYSIS OF THE POTENTIAL FOR A SPILL

The potential for a spill has been analyzed and deemed to be present, but unlikely. The probability of tank failure for single-wall storage tanks is 1.0×10^{-4}/tank-year (U.S. DOT, FEMA, and U.S. EPA Handbook of Chemical Hazard Analysis Procedures). The facility has 12 single-wall tanks which gives a spill frequency of 0.0012 spills/year.

Oil Spill History

Refer to the Reportable Oil Spill History portion of this Appendix for details concerning spill history for the life of the Facility.

Tank Age

Refer to the Hazard Identification Table located in this Appendix for the year of construction of each of the bulk storage containers at the Facility.

Horizontal Range of a Spill

Secondary containment dikes at the Facility will in most cases prevent the horizontal migration of a spill. Attenuations of any spilled material which might escape a diked area would be accomplished through the implementation of spill response activities by: (1) Facility personnel, or if necessary, (2) the spill response contractor listed in this Plan.

Vulnerability to a Natural Disaster

The Facility is located in a semi-active earthquake zone with occasional seismic activity.

The Company has historical data that defines the probability of seismic activity in the Mormon Island, California area. The construction of the Facility has taken the possibility of some seismic activity into consideration; the location of tank farms away from slide prone areas, and constructing the Facility, including all subgrade soil preparation, along with slope and tank construction in accordance with appropriate building codes and industry guidelines.

Other Factors

The actions taken to lessen hazards at the Facility tank farm reduces the probability to a low potential. Hazard reduction protective measures have been designed into tanks and into the construction of the Facility. Tanks were designed to industry standards which reduces the potential for hazards. Based on the care and construction of the tanks, the potential of any one tank rupturing and emptying product into the secondary containment is low. The potential of several tanks simultaneously rupturing is very low.

The Facility conforms to good engineering practices in the tank integrity inspection program. The inspection program reduces the likelihood of leaks. The Facility has not experienced a failure associated with a tank structure.

C.5 FACILITY DRAINAGE

Storm waters contained by the tank farm dike area are inspected for oil sheen and tested for oil content prior to being discharged under the Terminal's NPDES Permit. All drainage valves are either gate valves or ball valves that must be manually opened or closed. There are no flabber valves. During unattended or non-draining operations, valves are padlocked in the closed position for security.

C.6 REPORTABLE OIL SPILL HISTORY

NRC Reports subject to OPA 90 regulations as of the publication date of this Plan are summarized in the following table. Details obtained from Incident Reports are maintained on-site.

The reports contain the below listed information to the extent that such information is reasonably identifiable.

- Date of discharge.
- Location of discharge.
- Discharge cause(s)
- Material(s) discharged.
- Amount discharged.
- Amount of discharge that reached navigable waters.
- Amount recovered.
- Effectiveness and capacity of secondary containment.
- Clean-up actions taken.
- Steps taken to reduce possibility of recurrence.
- Total storage capacity of the tank(s) or impoundment(s) from which the material discharged.
- Enforcement actions.
- Effectiveness of monitoring equipment.
- Description of how spill was detected.

TABLE C-1

REPORTABLE OIL SPILL HISTORY
TO DATE THIS FACILITY HAS NOT EXPERIENCED A REPORTABLE SPILL

TABLE C-2

POTENTIAL SPILL SOURCES AND CONTAINER IDENTIFICATION
at stores oil)

Container I.D.	Substance Stored *(Oil & Haz. Substance)*	(b) (7)(F)	Container Type *(i.e. floating roof, fixed roof, etc.)*	Year Built	(b) (7)(F)	Integrity Testing Method
			CONTAINERS			
M-1 (Note 6)	Jet-A		Int. Floating Roof	1926		External & nternal (Note 5)
M-2 (Note 6)	Jet-A		Int. Floating Roof	1926		External & nternal (Note 5)
M-10 (Note 6)	Ethanol		Int. Floating Roof	1926		External & nternal (Note 5)
M-24 (Note 6)	Ethanol		Int. Floating Roof	1970		External & nternal (Note 5)
M-26 (Note 6)	Gasoline		Int. Floating Roof	1970		External & nternal (Note 5)
M-27 (Note 6)	Gasoline		Int. Floating Roof	1970		External & nternal (Note 5)
M-5 (Note 7)	Transmix		Int. Floating Roof	1926		External & nternal (Note 5)
M-17 (Note 7)	Contact Water		Int. Floating Roof	1926		External & nternal (Note 5)
M-25 (Note 7)	Recovered Oil		Int. Floating Roof	1970		External & nternal (Note 5)
M-6 (Note 7)	Out of Service		Int. Floating Roof	1926		External & nternal (Note 5)
M-13 (Note 7)	NALCO 5403		Cone Roof	----		External & nternal (Note 5)
M-28 (Note 7)	Diesel		Cone Roof	1970		External & nternal (Note 5)

Comments

Note 1: Tanks M-1 and M-17 are within the same containment area. The capacity is in excess of the volume of Tank M-1 (the largest tank) with allowance for precipitation, after subtracting the footprint of Tanks M-7 and M-17.

Note 2: Tanks M-2, M-5, and M-6 are within the same containment area. The capacity is in excess of the volume of Tank M-2 (the largest tank) with allowance for precipitation, after subtracting the footprint of Tanks M-5 and M-6.

Note 3: Tanks M-24, M-25, M-26, M-27, and M-28 are within the same containment area. This containment area has been connected to the tank M-10 and M-13 containment area with a one way check valve and the tank M-10 and M-13 containment area has been connected to the tank M-1 and M-17 containment area by a 10-inch underground culvert. The capacity of the three (3) containment areas is in excess of the volume of Tank M-26 (the largest tank) with allowance for precipitation, after subtracting the footprint of Tanks M-24, M-25, M-27, M-28, M-10, M-13, M-1, and M-17.

Note 4: Tanks M-10 and M-13 are within the same containment area.

Note 5: External & Internal refers to tank integrity testing methods that include recommended industry standards (i.e. API 653, etc.)

Note 6: Tanks fall under both EPA and DOT jurisdiction.

Note 7: Tanks fall under EPA jurisdiction.

POTENTIAL SPILL SOURCES AND CONTAINER IDENTIFICATION (Any container that stores oil)						
Container I.D.	**Substance Stored** *(Oil & Haz. Substance)*	**Average Quantity Stored** *(Gallons)*	**Maximum Capacity** *(Gallons)*	**Container Type** *(i.e. floating roof, fixed roof, etc.)*	**Year Built**	**Secondary Containment Capacity** *(Volume - Gallons)*
OIL FILLED OPERATIONAL EQUIPMENT						
There is no regulated Operational Equipment at this facility.						

Comments

POTENTIAL SPILL SOURCES AND CONTAINER IDENTIFICATION (Any container that stores oil)						
Container I.D.	**Substance Stored** *(Oil & Haz. Substance)*	**Average Quantity Stored** *(Gallons)*	**Maximum Capacity** *(Gallons)*	**Container Type** *(i.e. floating roof, fixed roof, etc.)*	**Year Built**	**Secondary Containment Capacity** *(Volume - Gallons)*
OIL FILLED MANUFACTURING EQUIPMENT						
There is no regulated Manufacturing Equipment at this facility.						

Comments

POTENTIAL SPILL SOURCES AND CONTAINER IDENTIFICATION (Any container that stores oil)						
Container I.D.	**Substance Stored** *(Oil & Haz. Substance)*	**Average Quantity Stored** *(Gallons)*	**Maximum Capacity** *(Gallons)*	**Container Type** *(i.e. floating roof, fixed roof, etc.)*	**Year Built**	**Secondary Containment Capacity** *(Volume - Gallons)*
COMPLETELY BURIED TANKS						
There are no regulated Buried Containers at this facility.						

Comments

There are no Completely or Partially Buried or Bunkered Metallic Storage Tanks.

POTENTIAL SPILL SOURCES AND CONTAINER IDENTIFICATION
(Any container that stores oil)

Container I.D.	Substance Stored *(Oil & Haz. Substance)*	(b) (7)(F)	Container Type *i.e. floating roof, fixed roof, etc.)*	Year Built	(b) (7)(F)
			IPMENT		
Pipelines west of Tk. M-10 along dike wall	Refined Products		Facility Piping	Varies	
Pipeline north of Tk. M-10	Refined Products		Facility Piping	Varies	
Pipelines along west side of parking lot	Refined Products		Facility Piping	Varies	
Transformer east of Office	Refined Products		Transformer	Unk	
Transformer at northeast corner of Electrical Building	Refined Products		Transformer	Unk	
TK-2554	Diesel		----	----	
TK-2555	Diesel		----	----	
Tote	DE-11		----	----	

Comments

NaN: refers to those containers that are not considered bulk storage containers (i.e. transformers, etc.) or have quantities that may vary.

POTENTIAL SPILL SOURCES					
SI Number	**Substance Stored** *(Oil & Haz. Substance)*	**Average Quantity Stored** *(Gallons)*	**Maximum Capacity** *(Gallons)*	**Surface Area**	**Year Built**
SURFACE IMPOUNDMENT					
There are no Surface Impoundments at this facility.					

Comments

There are no surface impoundments used for product storage at this Facility.

STORAGE TANK FAILURE			
Container I.D.	**Substance Stored** *(Oil & Haz. Substance)*	**Date of Failure**	**Cause**
This facility has had no storage tank failures.			

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

In case of an emergency within the Facility

In case of an emergency within the Facility that would necessitate evacuation, some or all of the following steps are taken, depending on type of emergency and circumstances:

- Sound an alarm or give verbal alarm.
- Call 911.
- Shut down loading, unloading, pipeline, and marine operations.
- Evacuate trucks from facility (provided that a safe operating environment exists).
- Divert incoming trucks/vessels to a safe distance away from the Facility.
- Evacuate all personnel to safe areas.

Community evacuation plans are in place and local authorities coordinate all community evacuations.

Evacuation Diagram

Evacuation Diagram
Click to view

(b) (7)(F)

APPENDIX E

TRAINING AND DRILLS

E.1 GENERAL TRAINING

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

E.2 HAZWOPER TRAINING

HAZWOPER (29 CFR 1910.120)

OSHA HAZWOPER training requirements are shown in the table below.

OSHA HAZWOPER TRAINING REQUIREMENTS		
Responder Classification	**Required Training Hours**	**Refresher**
29CFR 1910.120(q) Emergency Response		
First Responder - Employee Awareness Level	2 - 4 hrs demonstration of competency	Same
First Responder - Operations Level	24 hrs plus competency	8 hrs*
Incident Commander	24 hrs plus competency	8 hrs*

* Or sufficient content and duration to maintain competency.

All personnel responding to an incident must satisfy the applicable HAZWOPER training requirements of 29 CFR 1910.120. Personnel are trained to the level of HAZWOPER necessary to perform their emergency response duties. Team members are required under state and federal regulations to have appropriate up-to-date HAZWOPER training necessary to function in their assigned positions. Refresher training or a demonstration of competency is required annually to maintain HAZWOPER qualifications.

E.3 RESPONSE TEAM TRAINING

Response Team

The Company provides training related to discharge prevention, testing and response, including measures to repair pipeline ruptures and mitigate discharges. The training methods address oil discharges from the pipeline from several perspectives: human health and safety, rupture control and repair operations, pollution control, and overall (crisis) management of the emergency. Emergency Management in Houston, Texas is responsible for implementation and records maintenance of the emergency response training program. The coordination of employee schedules and location of the training sessions throughout the year is administered by Emergency Management. The competency of each training program is closely monitored by the Training Section through observation of and/or participation in actual training sessions. Shell and Motiva require that all response personnel, including contractors and casual labor, have the appropriate training necessary to serve on a response team during an emergency. Local team members will receive training in the Integrated Contingency Plan/Facility Response Plan. Each Local Response Team Member should review the Integrated Contingency Plan/Facility Response Plan whenever the Member's job position or responsibilities change under the Plan. A copy of this Plan will be available at all times to Team Members. 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 operator on a 24-hour basis. The name of and procedures for contacting the Qualified Individual on a 24-hour basis. That all reporting personnel know: The pipelines and response zone details for the affected area (Figure 1.1). The telephone number of the National Response Center and other required notifications (Section 2.0). The notification process. (Section 2.0). That all response personnel know: The characteristics and hazards of the oil discharged (Section 3.0). The conditions that are likely to worsen emergencies, including the consequences of facility malfunctions, and the appropriate corrective actions (SPLC's Operations Manual). 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). Team members will receive training in the following:

All response personnel shall know:

The characteristics and hazards of the oil discharged (Section 3.0).

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).

The proper firefighting procedures and use of equipment, fire suits, and breathing apparatus (Section 3.0).

All response team members (QI, AQI, Response Team) should review the appropriate parts of the Facility 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.

Qualified Individuals

Persons designated in the Plan as Qualified Individuals (QI's) have received the necessary training required to fulfill their responsibilities as described in Section 4.2.

Various training programs are in place to furnish these Qualified Individuals with required training.

Qualified Individual personnel are provided general information regarding the background and requirements of OPA 90 and the contents/purpose of the facility's response plan. These individuals may also be assigned other responsibilities within the response, such as Incident Commander, and will receive additional training for those roles, as required.

Additional personnel will receive the same training and will act as alternates to ensure 24 hour availability.

Incident Management Team

Assigned IC team members will receive ICS training and may also receive supplemental training in other related general topics.

Incident Commander: IC is trained to assume control of an incident. Training includes the Company's Incident Command System, how to implement the Facility's Response Plan, the associated risks of employees working in chemical protective clothing, decontamination procedures, how to implement the local emergency response plan, and knowledge of the state emergency response plan and of the Federal Regional Response Team.

Other Response Support

Personnel from other aspects of the Response Team can be made available depending on the spill event.

Other personnel whose skills are needed temporarily to perform immediate emergency support work (such as dump truck drivers and crane operators) are not required to meet the training requirements discussed above. However, these personnel must be briefed on the potential hazards and the duties to be performed at the site before participating in response operations. They must also receive instruction in the use of any safety and personal protective equipment needed and on all other appropriate safety and health precautions.

Company and Other Specialist Support

Experts would provide technical advice or guidance during response to a spill incident. Examples of such specialists might include chemists, biologists, industrial hygienists, physicians, or others with skills useful during a spill response operation. Such persons must receive appropriate training or demonstrate competency in their specialty. There are no specific requirements on training content or hours of training for these persons. However, the training must be sufficient for the individuals to maintain competency in their specific area of expertise. Training and demonstration of competency for skilled support personnel and specialists should be documented.

Contractor Training

The Company also recognizes that contract personnel must also have sufficient training in responding to emergency situations in accordance with HAZWOPER training requirements. The Company communicates this training need to its key contractors during contract negotiations and often specifically spells out this requirement in its contracts. The Company also tends to use well-known spill response contractors whose reputation and experience levels help ensure personnel who respond will be trained to appropriate levels. If contractors sub-contract to labor pools, documentation as to the training of casual laborers will be required.

The Company does not intend to utilize volunteer labor during response activities.

However, should Unified Command specify the use of volunteers, the Training Coordinator will be responsible for training volunteers to the standards specified in 29CFR1910.120 (OSHA).

Training Records and Maintenance

Training records for team members will be maintained at the Facility according to Federal, State, and local government requirements. Records will be maintained for five (5) years as per the U.S. Environmental Protection Agency.

E.4 RESPONSE TEAM EXERCISES

Company response personnel, government agencies, contractors, and other resources must participate in response exercises required by Federal, State, or local regulations and as detailed in the "National Preparedness for Response Exercise Program (PREP) Guidelines." The Company will conduct announced and unannounced drills to maintain compliance. The following table lists the triennial exercise cycle for facilities (see PREP Guidelines for full details).

TRIENNIAL CYCLE		
Total Number	**Frequency**	**Exercise Type/Description**
12	Quarterly	QI Notification Exercise
12 (optional)	Quarterly	Emergency Procedures Exercise
6	Semi-Annual	Equipment Deployment Exercise *(Facility-owned equipment)*
3	Annual	Response Team Tabletop Exercise
3	Annual	Equipment Deployment Exercise *(facilities with OSRO-owned equipment)*
3	Annual	Unannounced Exercise *(not a separate exercise)* Actual response can be considered as an unannounced exercise.

NOTE: All response plan components must be exercised at least once in the Cycle.

Quarterly QI Notification Exercise

- **Scope:** Exercise communication between facility personnel and the QI(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 QI 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.

Emergency Procedure Exercise (optional)

- **Scope:** Exercise the emergency procedures for the facility to mitigate or prevent any discharge or substantial threat of a discharge of oil or hazardous material from facility operational activities associated with oil transfers.

- **Objective:** Conduct an exercise of the facility's emergency procedures to ensure personnel knowledge of the actions to be taken to mitigate a spill. This exercise may be a walk-through of the emergency procedures.

- **Optional:** This is offered as an optional exercise to provide facilities with an exercise that may be conducted unannounced to fulfill the internal unannounced exercise requirement.

Semi-Annual/Annual Equipment Deployment Exercise (for facilities with equipment)

- **Scope:** Deploy and operate facility response equipment identified in the response plan. The equipment to be deployed must include the following, at a minimum:

    - 1,000 feet of representative type of boom;
    - one of each type of skimming system; or
    - the equipment necessary to respond to the facility's Small/Average Most Probable Discharge (AMPD), whichever is less.

- **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 Equipment Deployment Exercise (OSRO-owned equipment)

- **Review:** The Facility should verify that the OSRO(s) has completed the equipment deployment exercise requirements and has maintained the necessary documentation. The OSRO may deploy equipment at any location, so long as it occurs within an operating environment similar to the Facility's.

- **Scope:** USCG certified OSRO's must ensure and document that an exercise or response has been conducted in each response area in which they are certified. Non-certified OSRO's must deploy and operate response equipment identified in this response plan. The equipment to be deployed must include the following, at a minimum:

    - 1,000 feet of each type of boom listed in the plan.
    - One of each type of skimming system listed in the plan.

- **Objective:** OSRO must demonstrate the ability of the personnel (OSRO) to deploy and operate response equipment (OSRO). Ensure that the response equipment (OSRO) is in proper working order.

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 a local 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.

Unannounced Exercise

- An unannounced exercise is not a separate exercise. Any of the previously described exercises may be used as an unannounced exercise, except for the Quarterly QI Notification and annual OSRO-owned Equipment Deployment. An unannounced exercise is where the exercise participants do not have prior knowledge of the exercise, as would be the situation in an actual spill incident.

Government-Initiated Unannounced Exercise

- **Scope:** The Facility is required to participate in only one unannounced exercise every 36 months from the date of the last government-initiated unannounced exercise.

  - Exercises are limited to approximately four hours in duration.
  - Exercises would involve response to a Small/Average Most Probable Discharge scenario.
  - Exercise would involve equipment deployment to respond to a spill scenario.

- **Objective:** Conduct proper notifications to respond to unannounced scenario of a Small/Average Most Provable Discharge.

  - Demonstrate that the response is timely, conducted with an adequate amount of equipment for the scenario, and properly conducted.

- **General:** This exercise is only applicable to those facilities which are randomly chosen.

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 OPA 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 facility; 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/or DOT/PHMSA and five (5) years for the U.S. Environmental Protection Agency).

- All exercises should be documented and maintained at the facility; documentation should specify the: Type of exercise; Date and time of the exercise; Description of the exercise; Objectives met in the exercise; Components of the response plan exercised; and Lessons learned. Sample exercise forms are included in Appendix K. However, slight variations of the forms are acceptable and may be utilized at specific facilities. Exercise documentation should be kept on file for the required length of time depending on the regulating agency (three years for the U.S. Coast Guard and five years for the U.S. Environmental Protection Agency).

E.5 PURPOSE OF REVIEW AND EVALUATION

This section provides procedures and information useful to responders for post incident/exercise review and evaluation. Post incident/exercise reviews should be conducted in a timely manner following an incident/exercise. The Plan should be evaluated to determine its usefulness during the incident/exercise and appropriate revisions should be made. All incident/exercise documentation should be included in the Plan evaluation process.

Attendees

The following individuals should be in attendance at the Critique, as appropriate.

1. Emergency Response Coordinator
2. Incident Commander
3. Section Chiefs / Leaders
4. Safety Officers
5. Participating Managers / Supervisors
6. Representative from Environmental
7. Response Team Members
8. Designated Scribe
9. Facilitator / Discussion Leader
   (To be appointed by the Emergency Response Coordinator)

Critique Tracking Number

1. A Critique Tracking Number must be obtained from the Safety Department Incident Investigation Tracker.

2. Once the Critique is completed, it will be circulated through the Managers for review and sign off.

3. Critiques will be posted for review.

4. All Critiques will be filed in the Safety Office by the Emergency Response Coordinator.

Agenda for Critique

The Critique should be considered by the following agenda.

Specific follow-up questions are listed following this agenda.

Notification

- Immediate area of the emergency
- Total Facility
- Community (as appropriate to the incident; could include notification of the appropriate agencies)
- Emergency Response Team

Response to Notification

- Emergency Responders
- Total Facility
- Community (as appropriate)

Management of Incident (Incident Command Staff)

- Incident assessment of scene
- Security (of immediate area / reminder of plant)
- Communication / Information needs and flow
- Equipment / Training
- Medical Aspects
- Continuing Supplies / Manpower
- Cleanup / Decontamination
- All Clear

Outline of Review

Given below are items a team composed of outside people knowledgeable in spill response and key members of the response teams should examine. These questions are intended as guidelines only; many other questions are likely to be appropriate at each stage of a critique.

Detection

- Was the spill detected promptly?
- How was it detected?
- By whom?
- Could it have been detected earlier? How?
- Are any instruments or procedures available to consider which might aid in spill detection?

Notification

- Were proper procedures followed in notifying government agencies? Were notifications prompt?
- Was management notified promptly?
- Was management response appropriate?
- Was the Facility / Company notified promptly? If so, why, how, and who? If not, why not?

Assessment/Evaluation

- Was the magnitude of the problem assessed correctly at the start?
- What means were used for this assessment?
- Are any guides or aids needed to assist spill evaluation?
- What sources of information were available on winds and on water currents?
- Is our information adequate?
- Was this information useful (and used) for spill trajectory forecasts? Were such forecasts realistic?
- Do we have adequate information on product properties?
- Do we need additional information on changes of product properties with time, i.e., as a result of weathering and other processes?

Mobilization

- What steps were taken to mobilize spill countermeasures?
- What resources were used?
- Was mobilization prompt?
- Could it have been speeded up or should it have been?
- What about mobilization of manpower resources?
- Was the local spill cooperative used appropriately?
- How could this be improved?
- Was it appropriate to mobilize the Facility/company resources and was this promptly initiated?
- What other corporate resources are available and have they been identified and used adequately?

Response - Strategy

- Is there an adequate spill response plan for the location?
- Is it flexible enough to cope with unexpected spill events?
- Does the plan include clear understanding of local environmental sensitivities?
- What was the initial strategy for response to this spill?
- Is this strategy defined in the spill plan?
- How did the strategy evolve and change during this spill and how were these changes implemented?
    - What caused such changes?
    - Are there improvements needed? More training?

Response - Resources Used

- What resources were mobilized?
- How were they mobilized?
- How did resource utilization change with time? Why?
- Were resources used effectively?
    - Contractors
    - Government agencies
    - Company resources
    - Cooperatives
    - Volunteers
    - Consultants
    - Other (e.g., bird rescue centers)
- What changes would have been useful?
- Do we have adequate knowledge of resource availability?
- Do we have adequate knowledge of waste disposal capabilities?

Response - Effectiveness

- Was containment effective and prompt?
- How could it have been improved?
- Should the location or the local cooperative have additional resources for containment?
- Was recovery effective and prompt?
- How could it have been improved?
- Should the location or the local cooperative have additional resources for recovery of spilled product?
- Was contaminated equipment disposed of promptly and safely?
- Was there adequate in-house product separation, recovery, and disposal?
- How could it have been improved?
- Was there adequate outside disposal resources available?

Command Structure

- Who was initially in charge of spill response?
- What sort of organization was initially set up?
- How did this change with time? Why?
- What changes would have been useful?
- Was there adequate surveillance?
- Should there be any changes?
- Were communications adequate?
- What improvements are needed?
- How did the strategy evolve and change during this spill and how were these changes implemented?
- What caused such changes? Should financial procedures be developed to handle such incidents?

Measurement

- Was there adequate measurement or estimation of the volume of product spilled?
- Was there adequate measurement or estimation of the volume of product recovered?
- Was there adequate measurement or estimation of the volume of product disposed of?
- Should better measurement procedures be developed for either phase of operations?
- If so, what would be appropriate and acceptable?

Government Relations

- What are the roles and effects of the various government agencies which were involved?
- Was there a single focal point among the government agencies for contact?
- Were government agencies adequately informed at all stages?
- Should there have been better focus of communications to the agencies?
- Were government agencies adequately informed at all stages?
- Were too many agencies involved?

- Are any changes needed in procedures to manage government relations?
- Examples of affected U.S. agencies (there may be others):
    - U.S. Coast Guard
    - Environmental Protection Agency
    - National Oceanic and Atmospheric Administration
    - Dept of Fish and Wildlife
    - State Parks
    - Harbors and Marinas
    - States
    - Cities
    - Counties
- Was there adequate agreement with the government agencies on disposal methods?
- Was there adequate agreement with the government agencies on criteria for cleanup?
- How was this agreement developed?
- Were we too agreeable with the agencies in accepting their requests for specific action items (e.g., degree of cleanup)?
- Should there be advance planning of criteria for cleanup, aimed at specific local environmentally sensitive areas? (Such criteria should probably also be designed for different types of product.)

Public Relations

- How were relations with the media handled?
- What problems were encountered?
- Are improvements needed?
- How could public outcry have been reduced? Was it serious?
- Would it be useful to undertake a public information effort to "educate" reporters about product and effects to it if spilled?
- These areas should be investigated shortly after the incident to assure that actions taken are fresh in people's minds.

APPENDIX F

DISPOSAL PLAN

Click here to View

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

KEY TO RATINGS: 5 = Best; 1 = Worst

KEY TO COMMENTS:

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

STORAGE/DISPOSAL

Strict rules designed to ensure safe and secure handling of waste materials govern the Company‘s waste disposal activities. To ensure proper disposal of recovered oil and associated debris, the following guidelines should be considered:

- In the event of a product spill, the Facility has limited capacity to store recovered product and water. Separated product is pumped to trucks to be carried to the Facility for processing.
- Oily debris will be segregated on site and containerized for temporary storage prior to disposal in accordance with RCRA/CERCLA regulations.
- Transportation of waste material will be performed in accordance with all applicable federal and state guidelines.
- Waste associated with the spill will be disposed of at Company pre-approved sites which have the necessary permits to accept the type of waste to be discharged.

The HSSE Department will coordinate activities and secure the necessary permits to ensure proper disposal or recycling of recovered product and debris.

SAMPLING AND WASTE ANALYSIS PROCEDURES

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.

APPENDIX G

NATIONAL RESPONSE FRAMEWORK

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 4.1).

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 while the USCG representative serves as the Vice-Chairman. If it is activated for spills within the coastal zone of the United States, the USCG representative will hold the Chair.

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

Once activated, the NRT may:

1. Monitor the spill, evaluate reports from the On-Scene Coordinator (OSC), and recommend appropriate actions for abating the spill.
2. Request oil spill response resources from Federal, State and local governments or private agencies.
3. Coordinate the supply of equipment, personnel, or technical advice to the affected region from other regions or districts.
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

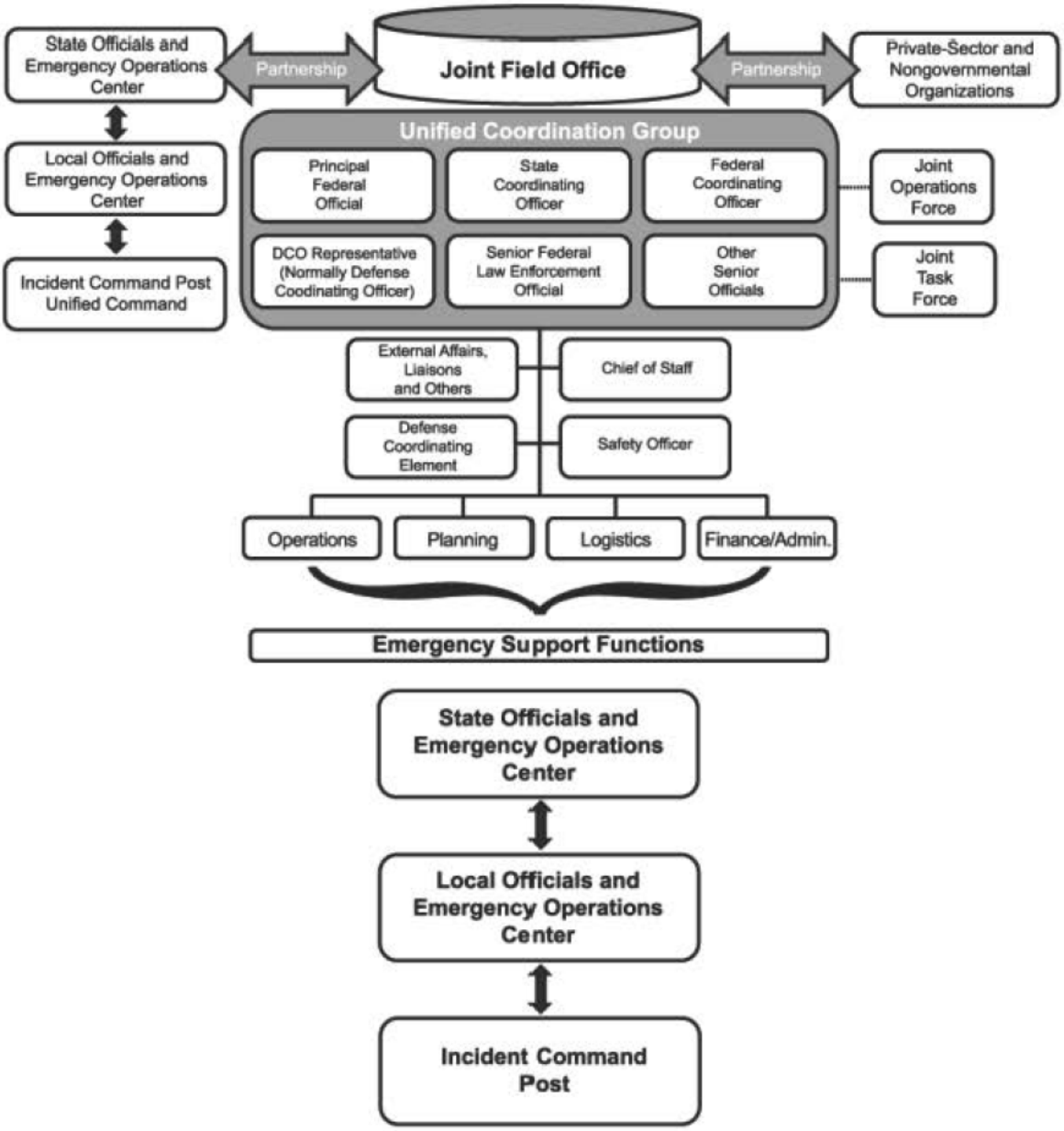


FIGURE G.2

FEDERAL REPRESENTATION ON NATIONAL RESPONSE TEAM

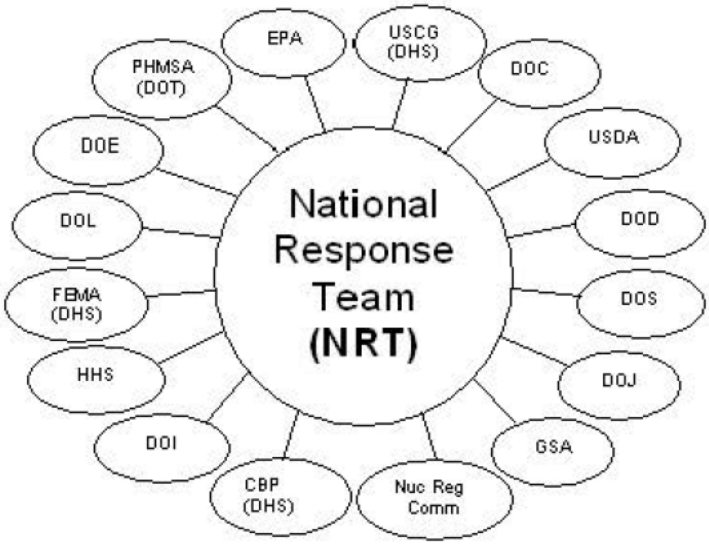


FIGURE G.3

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

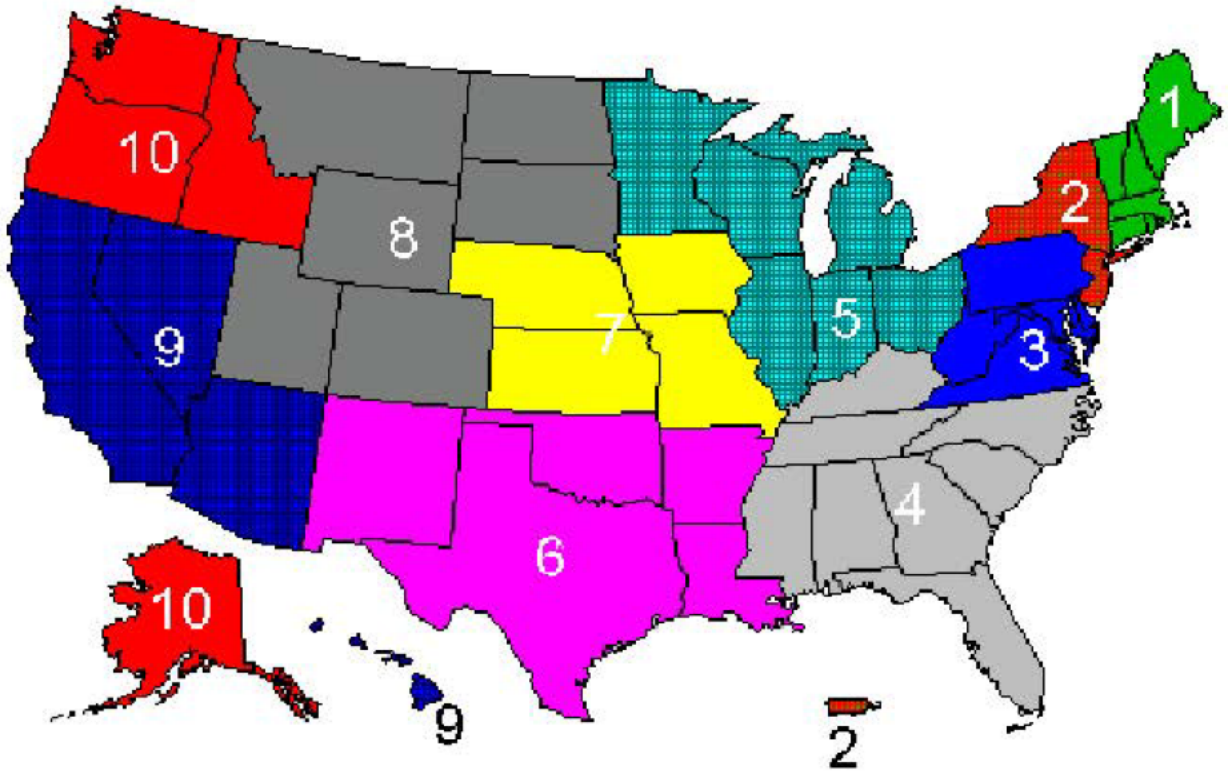
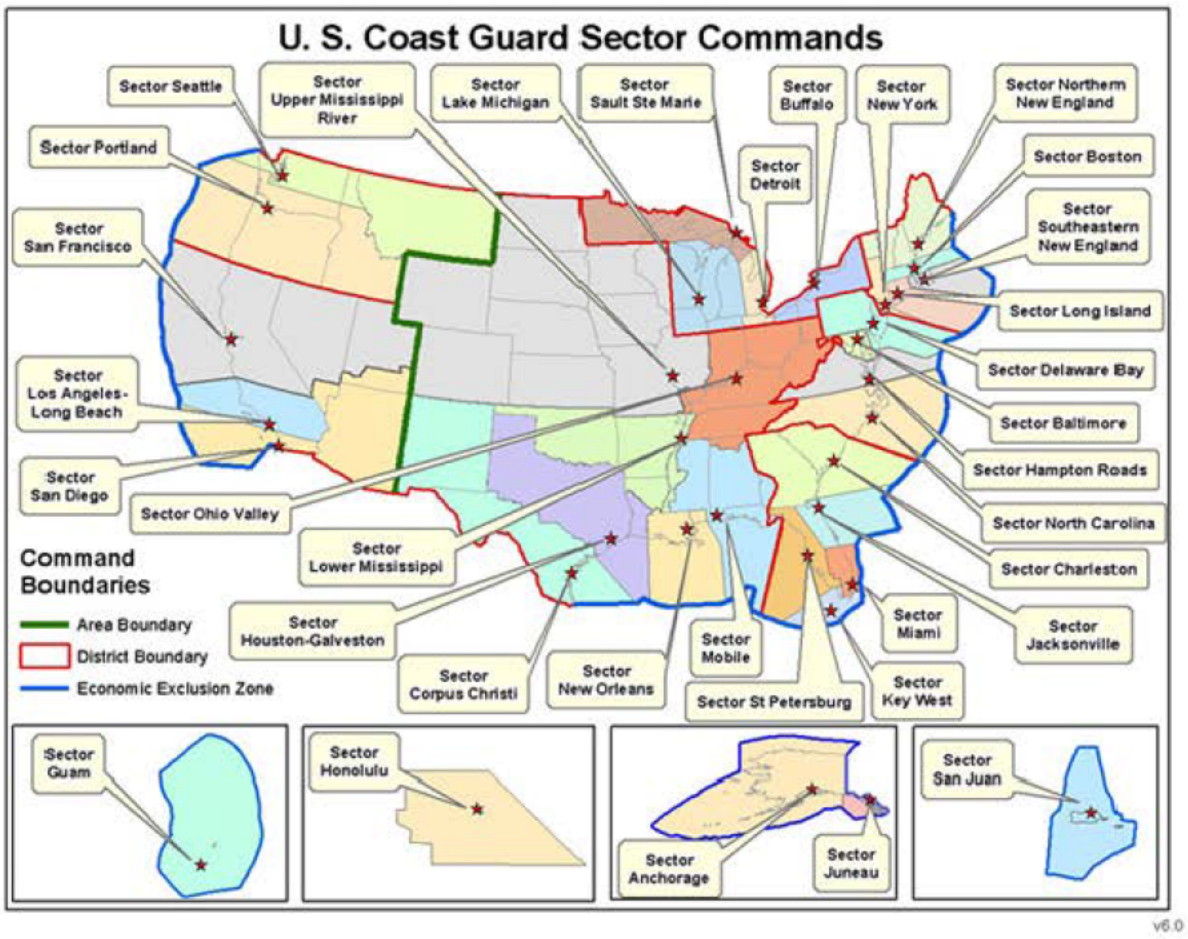


FIGURE G.4

U.S. COAST GUARD (USCG) DISTRICTS



APPENDIX H

SAMPLE MISCELLANEOUS FORMS

Acknowledgement and Plan Approval
Click to view

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.
I have reviewed this Plan and find it to be feasible and executable. In the event of a spill at the Mormon Island Marine Terminal, Shell will fully implement this Plan according to the guidelines set forth herein.

Plan Approved:

Rick Roper
Terminal Manager
Mormon Island Marine Terminal

Date: 2-13-13

Certificate of Qualified Individual and Alternate Qualified Individual
Click to view

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 pla 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

12 JAN 10
Date

Arthur Bailey, Manager Regional Engineering – North America Distribution

STATE OF TEXAS

COUNTY OF HARRIS

This Certification of Qualified Individual and Alternate Qualified Individual was acknowledged before me on JAN. 12, 2010 by Arthur Bailey, Manager Regional Engineering – North America Distribution of Shell Pipeline Company, LP, a Delaware Limited Liability Company, on behalf of said company.

SYLVIA P. TORRES
MY COMMISSION EXPIRES
November 18, 2011

Sylvia P. Torres

My commission expires Nov. 18, 2011

Certificate of Reponse Prepareness
Click to view

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 othr means approved by PHMSA, the availability of private personnel and equipment to respond, to the maximum extent practicable, to a worst case discharge or a substantial threat of such discharge.

Shell Pipeline Company, LP

12 JAN 10
Date

Arthur Bailey, Manager Regional Engineering – North America Distribution

STATE OF TEXAS

COUNTY OF HARRIS

This Certification of Response Preparedness was acknowledged before me on JAN. 12, 2010 by Arthur Bailey, Manager Regional Engineering – North America Distribution of Shell Pipeline Company, LP, a Delaware Limited Liability Company, on behalf of said company.

SYLVIA P. TORRES
MY COMMISSION EXPIRES
November 15 2011

Sylvia P. Torres

My commission expires NOV. 18, 2011

Discharge Prevention Meeting Log
Click to view

SAMPLE

DISCHARGE PREVENTION MEETING LOG

Date:	
Attendees:	

Subject/Issue	Required Action	Implementation

EM Notification Log
Click to view

EM NOTIFICATION LOG

Person on the EM staff to whom you relayed this emergency information:

Name: _____
Phone:(____)_____
Time: ____:____ AM or PM (circle one) Time Zone: EST or CST

Document any calls or actions that you take in regard to this Emergency Call (including calls where you leave a message):

Follow-up call:	Time Called:

Follow-up call:	Time Called:

Follow-up call:	Time Called:

Follow-up call:	Time Called:

Fire Protection Equipment
Click to view

INVENTORY LIST OF SHELL OWNED EQUIPMENT AND SUPPLIES FOR OIL REMOVAL

FIRE PROTECTION EQUIPMENT

QTY	EQUIPMENT
27	30# dry chemical extinguishers
1	8" line connected directly to the City of Los Angeles water main at 80-90 psi
32	Fire water monitors
5	Fire water hydrants
6	Stationary reels containing 100' of 1 1/2" hose
3	Emergency shower and eye baths
1	Emergency/fire alarm (can be activated at three locations)
2	Fire boat connections (1 each end of dock)
2	Pumper truck connection headers (located at main entrance)
2	Fire pump, diesel driven 2,500 GPM
1	4,500 gallon tank of AFFF-ATC fire fighting foam
1	Semi fixed foam induction system in tank farm
1	Fire water pump, electric driven 2,500 GPM

LOCATION	
1.	Fire extinguishers are positioned at the foot of selected stairways, in the pumphouse, in the laboratory and at several selected areas on the dock, and at the foot of the gangway of every vessel.
2.	Fire monitors are positioned on concrete retaining walls in the tank farm and at equal intervals on the dock. Each monitor has a swivel base and an adjustable nozzle.
3.	Fire hydrants are located throughout the tank farm and shore area and at frequent intervals on the dock.
4.	Stationary reels of hose are connected and ready for use at 6 locations on the dock.
5.	Three mobile carts containing 200' of 1 1/2" hose are spaced where they can readily be moved to a desired location quickly.
6.	Diesel fire pumps and electric fire pump located in Fire Pump House.
7.	Emergency eye bath and showers are located at each Berth and one on Shore at the Separator Box.
8.	Basket stretcher, Miller body splint, Medical First Responder First Aid Kit are located in the laboratory.
9.	Emergency Fire Alarm is a flashing light and siren on top of the pump house and can be activated from either dock house area or from the pump house.
10.	Connections for the fireboat to boost firewater pressure are at the extreme ends of dock.
11.	A pumper truck connections to boost firewater pressure is located just outside the main entrance.
12.	A Diesel powered 2,500 GPM fire pump west of storm water separator box.

INVENTORY LIST OF SHELL OWNED EQUIPMENT AND SUPPLIES FOR OIL REMOVAL

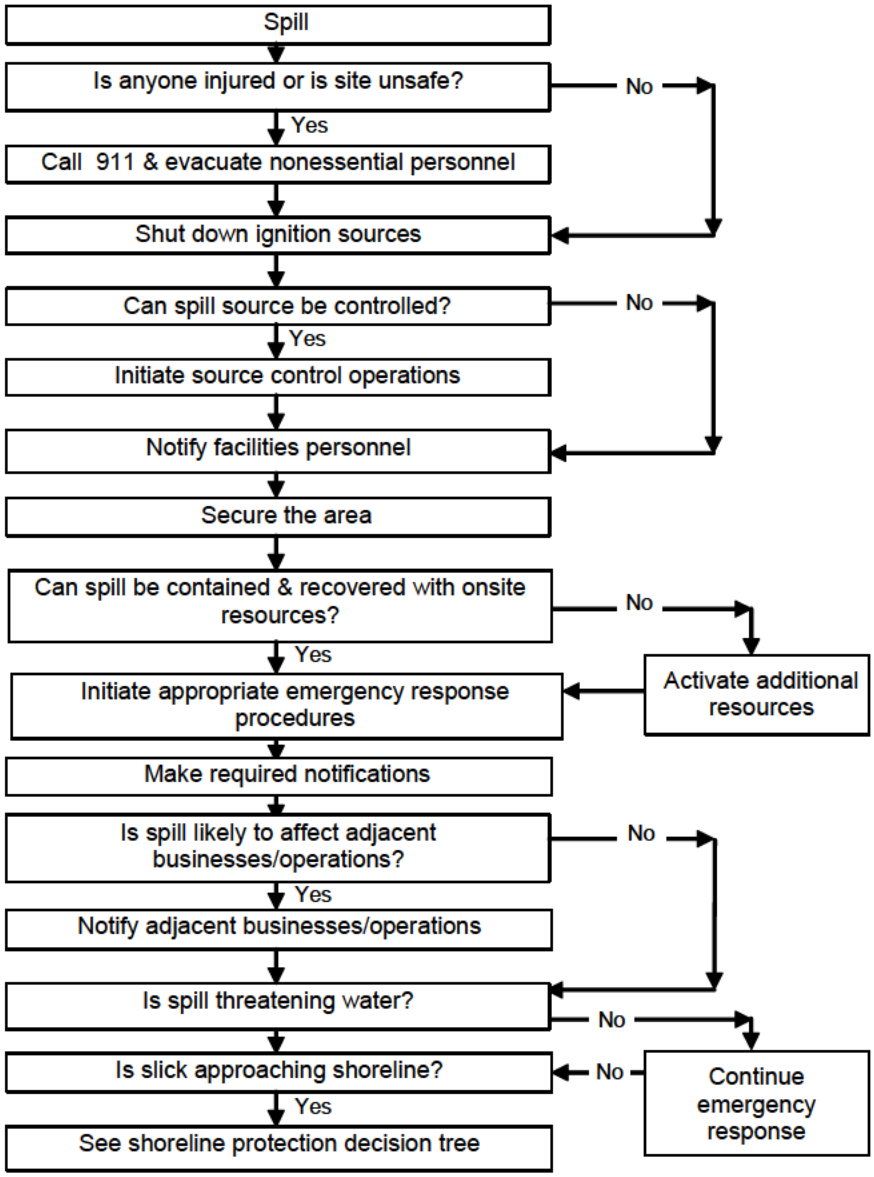
FIRE PROTECTION EQUIPMENT (Cont'd)

EQUIPMENT CONDITION	
1.	It is essential that all fire fighting equipment be in good working order, ready for any emergency.
2.	Each month all fire extinguishers are checked for proper location, that the seal is unbroken, that the test card is certified and valid and that cylinder test date had not expired.
3.	All monitors are tested every month to insure that the nozzle adjusts correctly and that the swivel and valve are in proper working order. Each hydrant is flushed and checked to be sure that a snipe is present to assist opening valves if necessary.
4.	All firewater hoses are pressure tested annually to design system pressure of 150 psi by operations.
5.	Emergency shower and eye baths are tested monthly to insure proper working order.
6.	Emergency alarm is tested monthly.

General Oil Spill Response
Click to view

EMERGENCY RESPONSE FLOWCHARTS

General Oil Spill Response



ICS Forms and Site Safety Plan
Click to view

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):

ORG	NAME

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**	

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: ☐Single ☐Double ☐Double-Bottom ☐Double-Sided

Hull Material:

Type of Propulsion: ☐Diesel ☐Steam ☐Gas Turbine ☐Nuclear ☐Other

Petroleum Products or Crude Oil ☐Yes ☐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: ☐Grounding ☐Collision ☐Allision ☐Explosion ☐Fire ☐Other

Number of Tanks Impacted: Total Capacity of Affected Tanks:

Material(s) Spilled: Viscosity:

Estimated Quantity Spilled: (☐Gallons/☐Barrels) Classification: ☐Minor ☐Medium ☐Major

Source Secured?: ☐Yes ☐No If Not, Estimated Spill Rate: ☐Barrels ☐Gallons / Hour

Notes:

INCIDENT STATUS

Injuries/Casualties: ☐ SAR Underway

Vessel Status: ☐Sunk ☐Aground ☐Dead in Water Set and Drift:

☐Anchored ☐Berthed ☐Under Tow Estimated Time to Dock / Anchor:

☐Enroute to Anchorage / Berth Under Own Power Estimated Time of Arrival:

☐Holed: ☐Above Waterline ☐Below Waterline ☐At Waterline Approximate Size of Hole:

☐Fire: ☐Extinguished ☐Burning ☐Assistance Enroute ☐Assistance On-Scene

☐Flooding: ☐Dewatering ☐Lightering ☐Assistance Enroute ☐Assistance On-Scene

☐List: ☐Port ☐Starboard Degrees: ☐Trim: ☐Bow ☐Stern Degrees:

ENVIRONMENTAL INFORMATION

Wind Speed: Knots	Wind Direction:	Air Temperature: F°	Water Temperature: F°
Wave Height: Feet	Wave Direction:	Conditions:	Tide: ☐Slack ☐Flood ☐Ebb
Current: Knots	Current Direction:		High Tide at: Hours
Swell Height: Feet	Swell Direction:		Low Tide at: Hours

Prepared By: Date / Time Prepared

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)

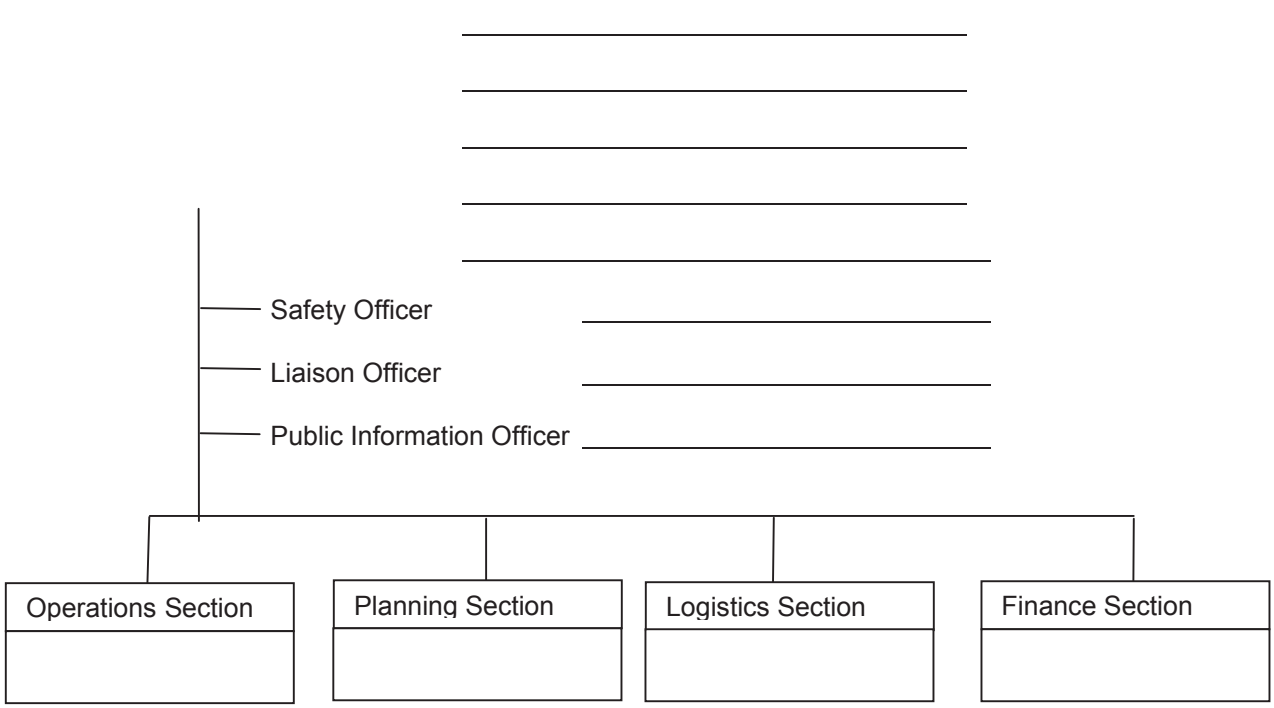
4. Current Situation:

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

5. Initial Response Objectives, Current Actions, Planned Actions

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

6. Current Organization (fill in additional appropriate organization)



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

7. Resources Summary

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

1. Incident Name	2. Operational Period (Date/Time) From: To:	INCIDENT OBJECTIVES ICS 202-CG

3. Objective(s)

4. Operational Period Command Emphasis (Safety Message, Priorities, Key Decisions/Directions)

Approved Site Safety Plan Located at:

5. Prepared by: (Planning Section Chief) **Date/Time**

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

3. Incident Commander(s) and Staff

Agency	IC	Deputy

Safety Officer:	
Information Officer:	
Liaison Officer:	

4. Agency Representatives

Agency	Name

5. PLANNING/INTEL SECTION

Chief	
Deputy	
Resources Unit	
Situation Unit	
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	

7. OPERATION SECTION

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

8. FINANCE/ADMINISTRATION SECTION

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

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

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

5. Operations Personnel Name Affiliation Contact # (s)

Operations Section Chief: _____

Branch Director: _____

Division/Group Supervisor/STAM: _____

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

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

7. Work Assignments

8. Special Instructions

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

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

Emergency Communications

Medical _____ Evacuation _____ Other _____

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

1. Incident Name	2. Operational Period (Date/Time) From: To:	ASSIGNMENT LIST ATTACHMENT ICS 204a-CG
3. Branch	4. Division/Group	
5. Strike Team/Task Force/Resource (Identifier)	6. Leader	7. Assignment Location

8. Work Assignment Special Instructions, Special Equipment/Supplies Needed for Assignment, Special Environmental Considerations, Special Site Specific Safety Considerations

Approved Site Safety Plan Located at:

9. Other Attachments (as needed)

☐ Map/Chart ☐ Weather Forecast/Tides/Currents ☐ _____

☐ _____ ☐ _____ ☐ _____

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

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

3. BASIC RADIO CHANNEL USE

SYSTEM / CACHE	CHANNEL	FUNCTION	FREQUENCY	ASSIGNMENT	REMARKS

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

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

3. Basic Local Communications Information

Assignment	Name	Method(s) of contact (radio frequency, phone, pager, cell #(s), etc.)

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

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

3. Medical Aid Stations

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

4. Transportation

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

5. Hospitals

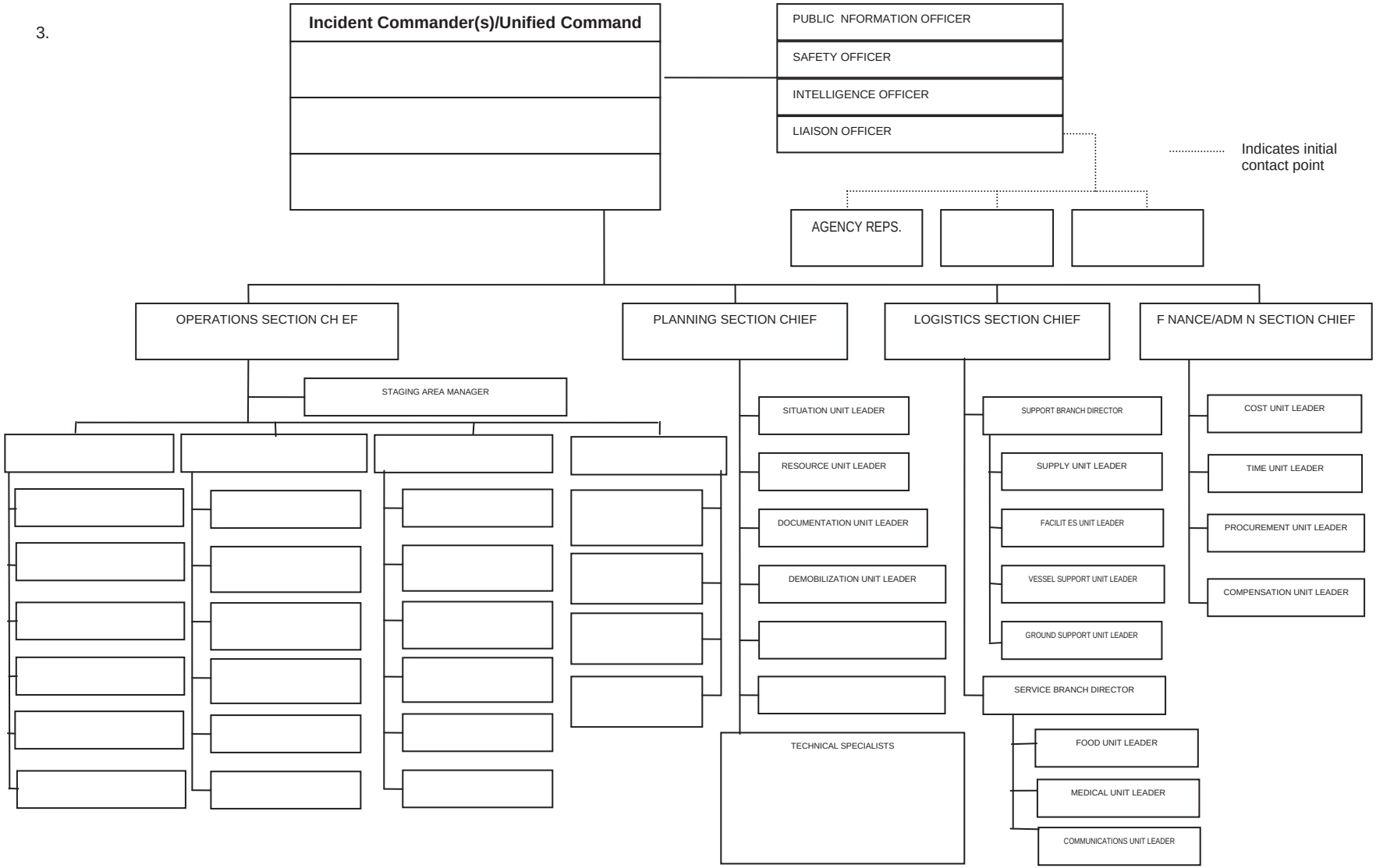
Hospital Name	Address	Contact #	Travel Time		Burn Ctr?	Heli-Pad?
			Air	Ground		

6. Special Medical Emergency Procedures

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

1. Incident Name	2. Operational Period (Date/Time) From: To:	INCIDENT ORGANIZATION CHART ICS 207-CG

3.



4. Prepared By: (Resources Unit Leader)	5. Date/Time Prepared:

1. Incident Name	2. Operational Period (Date / Time) From: To: Time of Report	INCIDENT STATUS SUMMARY ICS 209-CG

3. Type of Incident

☐	Oil Spill	☐	HAZMAT	☐	AMIO
☐	SAR/Major SART	☐	SI/Terrorism	☐	Natural Disaster
☐	Marine Disaster	☐	Civil Disturbance	☐	Military Outload
☐	Planned Event	☐	Maritime HLS/Prevention	☐	

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

☐	Oil/HAZMAT	☐	SAR/LE	☐	
☐		☐		☐	
☐	Marine Disaster	☐	Civil Disturbance	☐	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 –					

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	
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:	☐ Secured ☐ 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)

					Died in Facility	
Type of Wildlife	Captured	Cleaned	Released	DOA	Euthanized	Other
Birds						
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)

Air	Since Last Report	Total
Number of Sorties/Patrols		
Area Covered (square miles)		
Total Time On-Scene (In Hours)		
Surface	Since Last Report	Total
Number of Sorties/Patrols		
Area Covered (square miles)		
Total Time On-Scene (In Hours)		

6. Use of Force Summary

Category	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

Currently In Force

Type	Initiating Unit	Initiated Date	Activity #

Removed Since Last Report

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 ☐ Available / Staged ☐ Assigned _____ ☐ 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**	

ICS-211-CG CHECK-IN LIST	1. INCIDENT NAME:	2. CHECK-IN LOCATION: ☐ BASE ☐ CAMP _____ ☐ STAGING AREA _____ ☐ ICP ☐ OTHER _____	3. DATE/TIME:

CHECK-IN INFORMATION

4. LIST PERSONNEL (OVERHEAD) BY AGENCY NAME – OR LIST EQUIPEMENT BY THE FOLLOWING FORMAT:
S=Supplies H=Helicopter O=Overhead VL=Vessels
E=Equipment C=Crew A=Aircraft VH=Vehicle

AGENCY	SINGLE ST/ TF	KIND	TYPE	ID NO. /NAME – RESOURCE ID	5. ORDER/ NUMBER	6. DATE/TIME CHECK-IN	7. LEADER'S NAME	8. TOTAL NO. PERSONNEL	9. INCIDENT CONTACT INFORMATION	10. INCIDENT LODGING INFO/CONTACT NFO	11. HOME UNIT	12. METHOD OF TRAVEL	13. INCIDENT ASSIGNMENT	14. OTHER QUALIFICATION	15. SENT TO RESTAT TIME/INT

16. ICS 211-CG PAGE _____ of _____

17. PREPARED BY (Name and Position) USE BACK FOR REMARKS OR COMMENTS

NRC Incident No. #_____

1. Incident Name	2. Operational Period (Date / Time) From: To:	3. Check-in Location ☐ Command Post ☐ Other ☐ Staging Area ____ ____	**CHECK-IN LIST (Equipment)** **ICS 211e-OS**

Equipment Check-in Information					**9. Initial Incident Check-In?**	**10. Time**	
4. Equipment Description	**5. Equipment Identifier**	**6. Supplier/Owner**	**7. Assignment**	**8. Contact Information**	(X)	In	Out
					☐		
					☐		
					☐		
					☐		
					☐		
					☐		
					☐		
					☐		
					☐		
					☐		
					☐		
					☐		
					☐		
					☐		
					☐		
					☐		
					☐		
					☐		
					☐		
					☐		
					☐		

11. Prepared by: **Date / Time**	**12. Date / Time Sent to Resources Unit**

NRC Incident No. #_____

1. Incident Name	2. Operational Period (Date / Time) From: To:	3. Check-in Location ☐ Command Post ☐ Other ☐ Staging Area ____ ____	**CHECK-IN LIST (Personnel)** **ICS 211p-OS**

Personnel Check-in Information				**8. Initial Incident Check-In?**	**9. Time**	
4. Name	**5. Company/Agency**	**6. ICS Section / Assignment / Quals.**	**7. Contact Information**	(X)	In	Out
				☐		
				☐		
				☐		
				☐		
				☐		
				☐		
				☐		
				☐		
				☐		
				☐		
				☐		
				☐		
				☐		
				☐		
				☐		
				☐		
				☐		
				☐		
				☐		
				☐		
				☐		
				☐		

10. Prepared by: **Date / Time**	**11. Date / Time Sent to Resources Unit**

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**	

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

5. Personnel Assigned

NAME	ICS POSITION	HOME BASE

6. Activity Log (Continue on Reverse)

TIME	MAJOR EVENTS

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

1. Incident Name	2. Operational Period (Date/Time) From: To:	UNIT LOG (CONT.) ICS 214-CG

6. Activity Log (Continue on Reverse)

TIME	MAJOR EVENTS

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

NRC Incident No. #________________________________

1. Incident Name	**2. Operational Period (Date/Time)** From: To:	**INDIVIDUAL LOG** **ICS 214a-OS**

3. Individual Name	**4. ICS Section**	**5. Assignment/Location**

6. Activity Log **Page of**

Time	Major Events

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

OPERATIONAL PLANNING WORKSHEET

1.INCIDENT NAME

2. DATE & TIME PREPARED

3. OPERATIONAL PERIOD (DATE & TIME)

4. DIVISION/ GROUP/ OTHER LOCATION	5. WORK ASSIGNMENTS	6. KINDS OF RESOURCES	7. OVERHEAD	8. SPECIAL EQUIPMENT & SUPPLIES	9. REPORTING LOCATION	10. REQUESTED ARRIVAL TIME
		REQ				
		HAVE				
		NEED				
		REQ				
		HAVE				
		NEED				
		REQ				
		HAVE				
		NEED				
		REQ				
		HAVE				
		NEED				
		REQ				
		HAVE				
		NEED				
		REQ				
		HAVE				
		NEED				
		REQ				
		HAVE				
		NEED				
		REQ				
		HAVE				
		NEED				
		REQ				
		HAVE				
		NEED				
		REQ				
		HAVE				
		NEED				

11. TOTAL RESOURCES REQUIRED	
12. TOTAL RESOURCES ON HAND	
13. TOTAL RESOURCES NEEDED	

ICS 215 USCG 12-02

14. PREPARED BY (NAME & POSITION)

RADIO REQUIREMENTS WORKSHEET ICS 216	1. INCIDENT NAME	2. DATE	3. TIME
4. BRANCH	5. AGENCY	6. OPERATIONAL PERIOD	7. TACTICAL FREQUENCY
8. DIVISION/ GROUP: AGENCY:	DIVISION/ GROUP: AGENCY:	DIVISION/ GROUP: AGENCY:	

9. AGENCY	ID NO.	RADIO RQMTS	AGENCY	ID NO.	RADIO RQMTS	AGENCY	ID NO.	RADIO RQMTS

216 ICS	PAGE of	5. PREPARED BY (COMMUNICATIONS UNIT)

RADIO FREQUENCY ASSIGNMENT WORKSHEET ICS 217

1 INCIDENT NAME	2 DATE	3 OPERATIONAL PERIOD (DATE/TIME)

5 INCIDENT ORGANIZATION

4 RADIO DATA

SOURCE	FUNCTION	CH #	FREQUENCY	TOTAL BY REQ

6 AGENCY	ID	CH #	FREQUENCY	

7 TOTAL RADIOS REQUIRED		
217 ICS		7 PREPARED BY (NAME/POSITION)

SUPPORT VEHICLE INVENTORY ICS 218	1. INCIDENT NAME	2. DATE PREPARED	3. TIME PREPARED

VEHICLE INFORMATION

a. TYPE	b. MAKE	c. CAPACITY/SIZE	d. AGENCY/OWNER	e. I.D. NO.	f. LOCATION	g. RELEASE TIME

ICS 218	PAGE	5. PREPARED BY (GROUND SUPPORT UNIT)

NRC Incident No. #_____

1. Incident Name	2. Operational Period (Date / Time) From: To:	AIR OPERATIONS SUMMARY ICS 220-CG

3. Distribution

☐ Fixed-Wing Bases _____ ☐ Helibase _____

4. Personnel and Communications

	Air Operations Director	Air / Air Frequency	Air / Ground Frequency
Air Operations Director			
Air Tactical Supervisor			
Air Support Supervisor			
Helicopter Coordinator			
Fixed-Wing Coordinator			

5. Remarks (Spec. Instructions, Safety Notes, Hazards, Priorities)

6. Location / Function	7. Assignment	8. Fixed-Wing		9. Helicopter		10. Time		11. Aircraft Assigned	12. Operating Base
		NO.	TYPE	NO.	TYPE	Available	Commence		
	13. TOTALS								

14. Air Operation Support Equipment

15. Prepared by **Date / Time**

1. Incident Name	2. Operational Period (Date / Time) From: To:	DEMOB. CHECK-OUT ICS 221-CG
3. Unit / Personnel Released	4. Release Date / Time	

5. Unit / Personnel

You and your resources have been released, subject to signoff from the following:
(Demob. Unit Leader "X" appropriate box(es))

Logistics Section

☐ Supply Unit _____

☐ Communications Unit _____

☐ Facilities Unit _____

☐ Ground Unit _____

Planning Section

☐ Documentation Unit _____

Finance / Admin. Section

☐ Time Unit _____

Other

☐ _____ _____

☐ _____ _____

☐ _____ _____

6. Remarks

_____

_____

_____

_____

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

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	

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

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**	

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

3. Environmentally-Sensitive Areas and Wildlife Issues

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

Narrative

4. Archaeo-cultural and Socio-economic Issues

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

Narrative

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

NRC Incident No. #_____

1. Incident Name	2. Operational Period (Date/Time) From: To:	ACP Site Index ICS 232a-CG

3. Index to ACP/GRP sites shown on Situation Map

Site #	Priority	Site Name and/or Physical Location	Action	Status

Note: This form is designed to be posted next to the situation map. Use additional sheets, as needed.

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

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		Y	N	
☐	☐	Oxygen Deficient/Enriched	☐	☐	Chemical/MSDS # _____
☐	☐	Flammable Atmosphere	☐	☐	Physical Site Hazard _____
☐	☐	Toxic Atmosphere: _____	☐	☐	Traffic _____
☐	☐	Boat Operations	☐	☐	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
☐	☐	Oxygen Level	☐Y	☐N	___ every ___
☐	☐	LEL	☐Y	☐N	___ every ___
☐	☐	Hydrogen Sulfide	☐Y	☐N	___ every ___
☐	☐	Benzene	☐Y	☐N	___ every ___
☐	☐	VOC: _____	☐Y	☐N	___ every ___
☐	☐	Other: _____	☐Y	☐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
☐ Hard Hat	☐ Safety Glasses	☐ SCBA/Air Line w/Escape	☐ Ear Plugs	☐ Leather	☐ Steel-toes	☐ FR Coveralls
☐ Safety Harness	☐ Goggles	☐ Air Line	☐ Ear Muffs	☐ Rubber	☐ Rubber	☐ Level A
☐ PFD	☐ Face-shield	☐ Air Purifying (Full Mask)	☐ Combination	☐ Nitrile	☐ Hip-boots	☐ Level B
	☐ Tinted Lens	Cartridge Type: ☐ OV ☐ Hepa-OVV		☐ PVC	☐ Chemical Resistant	☐ Level C
				☐ _____	☐ _____	☐ 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													
	Level													
	By													
	Time													
	Level													
	By													
	Time													
	Level													
	By													
	Time													
	Level													
	By													

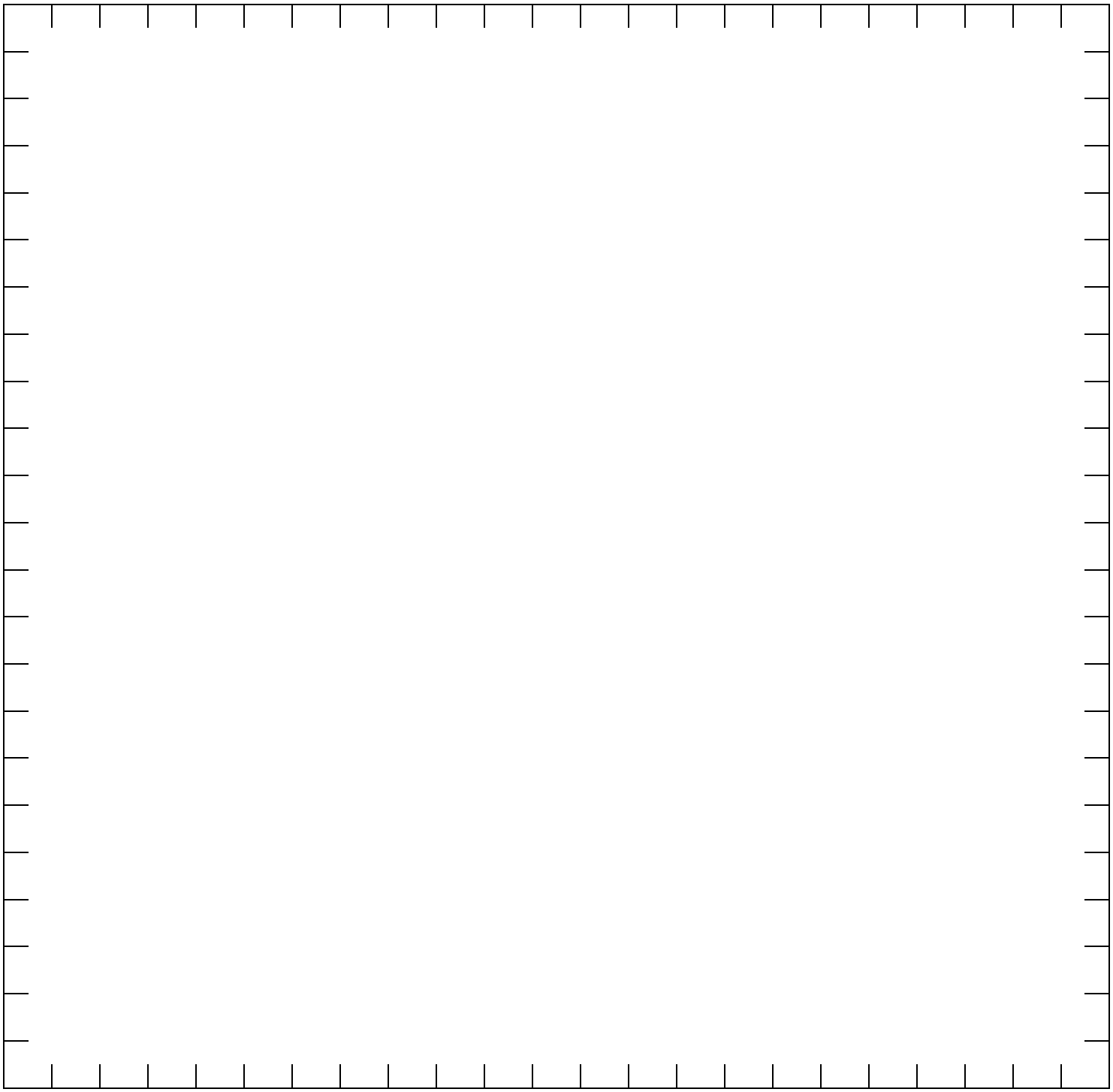
Equipment: Type: _____ Mnfter: _____ Calibration / Expiration: _____

Type: _____ Mnfter: _____ Calibration / Expiration: _____

Date: _____ **NRC Incident No. #** _____

XII. Work Area Diagram

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



Date: _____ **NRC Incident No. #** _____

XIII. Crew Signatures from Specific Location: _____

Print Name	Signature	Time In	Time Out	Reviewed SSP	
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*
				☐ *Yes*	*Initial:*

XIV. Authorizing Signature

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

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

Personnel Response Training Log
Click to view

SAMPLE

PERSONNEL RESPONSE TRAINING LOG

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

Pipeline Worksheet
Click to view

PIPELINE WORKSHEET - MORMON ISLAND

Pipeline: _____ **Date:**

Question	Answer (Y,N or N/A)	Potential Hazard	Safeguards	Remaining Hazards	Recommendations	Remarks
A. GENERAL QUESTIONS						
1. Can pipeline release enter tidal waters?						
2. Does pipe have adequate containment?						
B. DESIGN QUESTIONS						
3. Is mechanical design (internal and thermal stresses) appropriate?						
4. Is pipe adequately protected from corrosion?						

Product Spill Data Log
Click to view

SPECIFIC INCIDENT RESPONSE CHECKLIST

ROAD TRANSPORT EMERGENCY, SPECIFIC RESPONSE (Cont'd)

PRODUCT SPILL DATA LOG

Following this procedure will help facilitate emergency response operations for oil spills and other environmental concerns.

Please be prepared to provide the following information to the appropriate person or agencies: The incident's location, specific address, the closest highway mile marker to the incident, the nearest town or city, and the name and contact number of the person making the call.

City: _____ State: _____

Person reporting spill: _____ Phone Number: _____

Responsible party: _____ Phone Number: _____

On scene contact: _____ Phone number: _____

Description of incident (injuries, type and volume of spill, weather and land conditions, damage to property and equipment, etc.)

Surface affected: Soil/grass Asphalt Concrete

Water affected: Surface Groundwater Coastal

Sensitive receptors (e.g. storm sewer, drainage ditch): _____

Note any initial actions that may have been taken to control the incident.

SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

ROAD TRANSPORT EMERGENCY, SPECIFIC RESPONSE (Cont'd)

PRODUCT SPILL DATA LOG (Cont'd)

Contacts Made and Reporting Results (Example: 911 or Shell Emergency Response):

Contact 1: Name_____

Person's Name: _____

Phone Number: _____

Information Reported:_____

_____

_____

_____

Information Received (Ex: Incident Number):_____

_____

_____

_____

Contact 2: Name_____

Person's Name: _____

Phone Number: _____

Information Reported:_____

_____

Information Received (Ex: Incident Number):_____

_____

_____

_____

_____

SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

ROAD TRANSPORT EMERGENCY, SPECIFIC RESPONSE (Cont'd)

PRODUCT SPILL DATA LOG (Cont'd)

Contact 3: Name_____

Person's Name: _____

Phone Number: _____

Information Reported:_____

_____

_____

_____

Information Received (Ex: Incident Number):_____

_____

_____

_____

_____

Contact 4: Name_____

Person's Name: _____

Phone Number: _____

Information Reported:_____

_____

Information Received (Ex: Incident Number):_____

_____

_____

_____

_____

SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

ROAD TRANSPORT EMERGENCY, SPECIFIC RESPONSE (Cont'd)

DEFINITIONS

Major Spill – A spill that may require outside assistance to remove, and/or that impacts a storm drain or body of water.

A major spill may also be a Reportable Spill (see definition). In this case, the Contract Carrier must notify the National Response Center (1-800-424-8802) and possibly state and/or local regulatory agencies. Refer to the Core Plan at the beginning of this manual for all Agency/Emergency contact numbers.

Minor Spill – A spill that is small enough to be easily cleaned up by the driver and which does not impact a storm drain or body of water. Some states require certain minor spills to be reported. Contract Carrier is responsible for appropriate notifications.

Under Operational Control – Delivering products on behalf of Shell.

Qualified Individual Notification Exercise
Click to view

Qualified Individual (QI) Notification Exercise

Internal Exercise Documentation

1. Date performed: _____
2. Exercise or actual response: _____
3. Person initiating exercise: _____
4. Name of person notified: _____
   Is this person identified in the response plan as the: ☐ QI ☐ AQI
5. Time initiated: _____
   Time QI or AQI responded: _____
6. Method used to contact:
   ☐ Telephone ☐ Pager ☐ Radio
   ☐ Other _____
7. Description of notification procedure:
   _____
   _____
   _____
   _____
   _____
8. Identify which components of your response plan were exercised during this particular exercise:

Organizational Design

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

Operational Response

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

Response Support

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

Certifying Signature: _____ Name (Printed): _____
Date: _____

Secondary Containment Inspection Checklist
Click to view

SAMPLE

Secondary Containment Inspection Checklist

Inspected By: _____ Date: _____

Facility Secondary Containment systems are visually inspected daily. The following checklist is a sample that may be used, if applicable:

Inspection Item	Inspection Results			Remarks
	OK	Needs Further Attention	N/A	
Dike or berm system				
Level of precipitation in dike/available capacity				
Operational status of drainage valves				
Dike or berm permeability				
Permeability of the earthen floor of diked area				
Location/status of pipes, inlets, drainage beneath tanks, etc.				

Inspection Item	Is condition present?			Remarks
	Yes	No	N/A	
Dike or berm system				
Debris				
Erosion				
Secondary containment				
Cracks				
Discoloration				
Presence of spilled or leaked material (standing liquid)				
Corrosion				
Valve conditions				
Retention and drainage ponds (as applicable)				
Erosion				
Available capacity				
Presence of spilled or leaked material				
Debris				
Stressed vegetation				

Records of the daily and annual inspection are maintained at the Facility. These records are available for review at any time at the Facility Office.

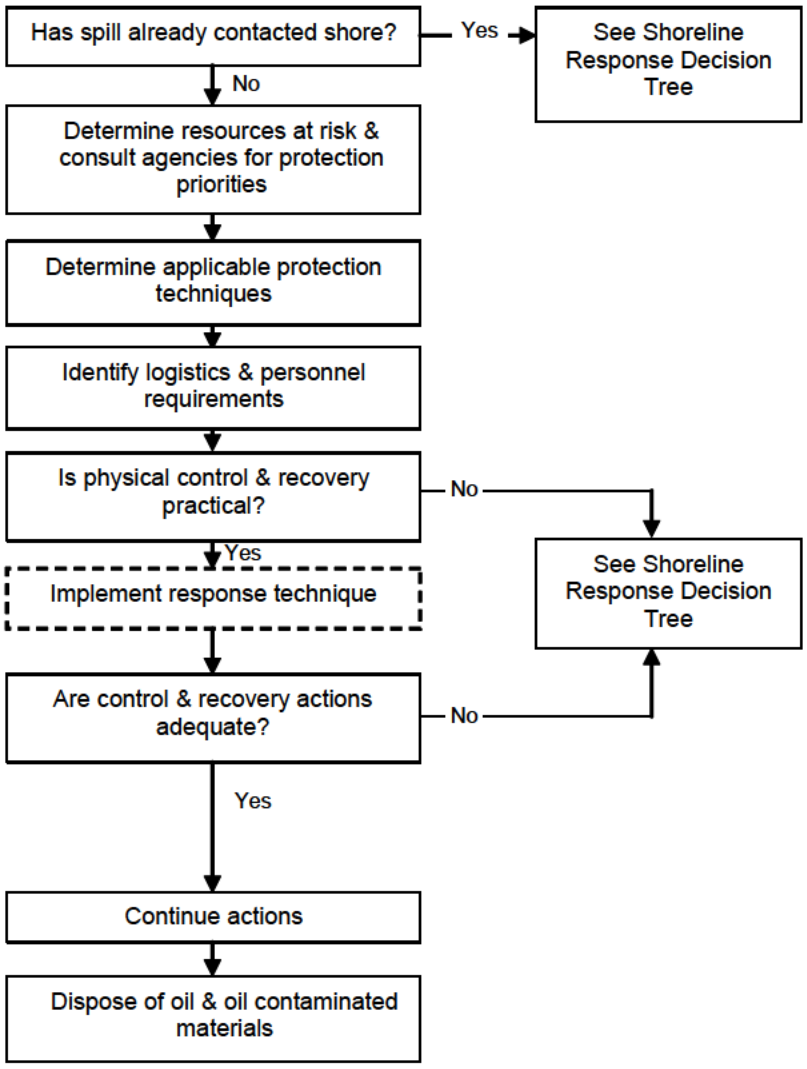
Security Incident Response Checklist - Bomb Threat (via Phone)
Click to view

(b) (7)(F)

Shoreline Protection Decision Tree
Click to view

EMERGENCY RESPONSE FLOWCHARTS *CCR §817.02(f)(3)*

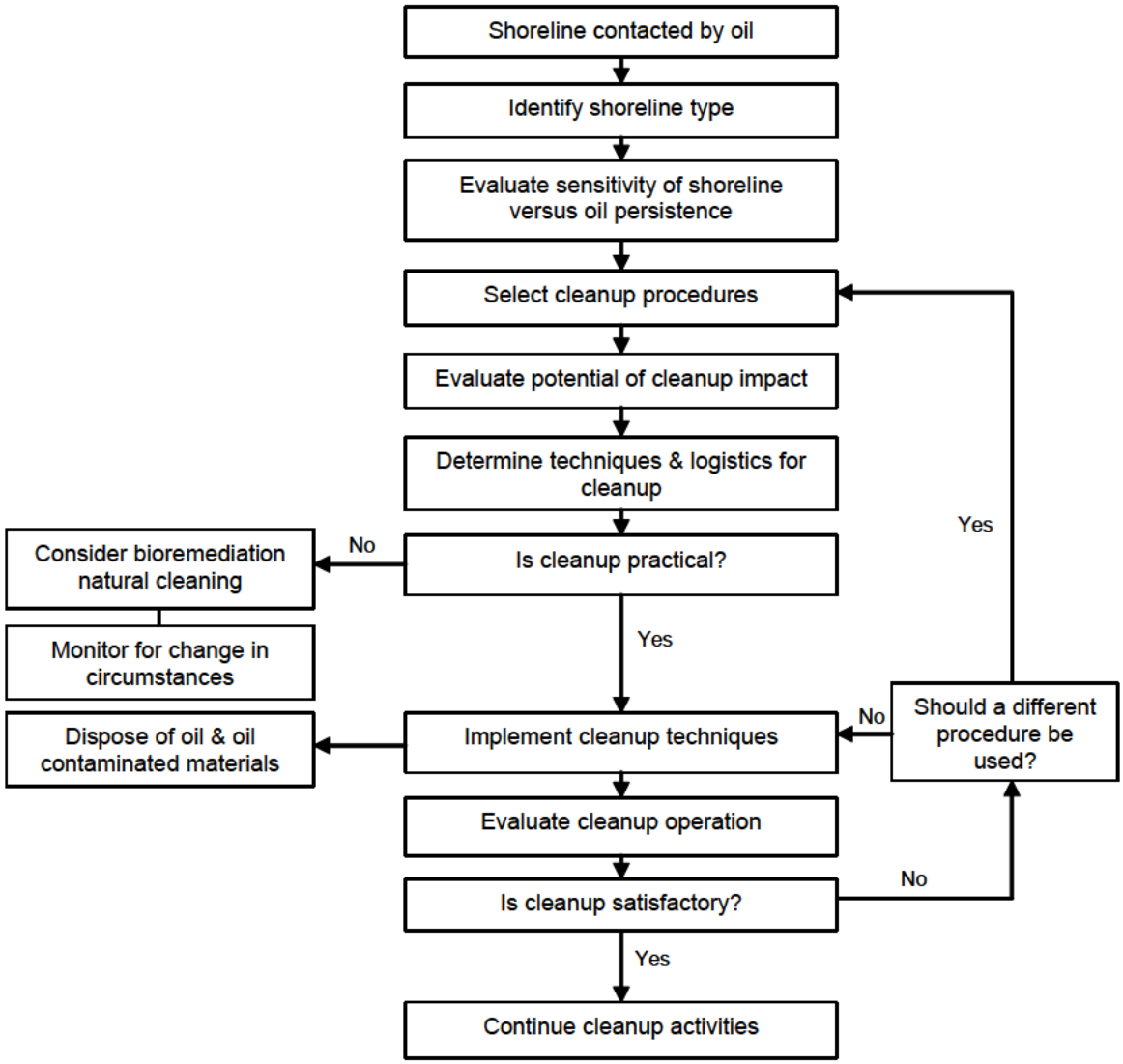
Shoreline Protection Decision Tree



Shoreline Response Decision Tree
Click to view

EMERGENCY RESPONSE FLOWCHARTS *CCR §817.02(f)(3)*

Shoreline Response Decision Tree



Spill Management Team Tabletop Exercise
Click to view

Spill Management Team Tabletop Exercise

Internal Exercise Documentation

1. Date(s) performed: _____

2. Exercise or actual response? _____Exercise _____Actual Response
   If an exercise, announced or unannounced? _____Announced _____Unannounced

3. Location of tabletop: _____

4. Time started: _____ Time completed: _____

5. Response plan scenario used (check one):

   _____ Average most probable discharge
   _____ Maximum most probable discharge
   _____ Worst case discharge

   Size of (simulated) spill _____

6. Describe how the following objectives were exercised:

   a) Spill Management Team's knowledge of oil-spill response plan:

   b) Proper notifications:

   c) Communications system:

   d) Spill Management Team's ability to access contracted oil spill removal organizations:

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

Spill Management Team Tabletop Exercise

Internal Exercise Documentation (Cont'd)

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

_____
_____
_____
_____
_____

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

Organization Design:

_____ 1. Notification
_____ 2. Staff Mobilization
_____ 3. Ability to operate within management system

Operational Response:

_____ 4. Discharge Control
_____ 5. Assessment
_____ 6. Containment
_____ 7. Recovery
_____ 8. Protection
_____ 9. Disposal

Response Support:

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

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

_____
Certifying Signature

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

Tank Inspection Checklist
Click to view

SAMPLE

Tank Inspection Checklist

Inspected By: _____ Date: _____

Facility Tanks are visually inspected daily and are thoroughly inspected annually as detailed in the Facility's SPCC Plan. The following checklist is a sample that may be used, if applicable:

Inspection Item	Is condition present?			Remarks
	Yes	No	N/A	
Check tanks for leaks, specifically looking for:				
■ Drip marks				
■ Discoloration of tanks				
■ Puddles containing spilled or leaked material				
■ Corrosion				
■ Cracks				
■ Localized dead vegetation				
Check foundation for:				
■ Cracks				
■ Discoloration				
■ Puddles containing spilled or leaked material				
■ Settling				
■ Gaps between tank and foundations				
■ Damage caused by vegetation roots				
Check piping for:				
■ Droplets of stored material				
■ Discoloration				
■ Corrosion				
■ Bowing of pipe between supports				
■ Evidence of stored material seepage from valves or seals				
■ Localized dead vegetation				

Records of the annual inspection are maintained at the Facility. These records are available for review at any time at the Facility Office.

GLOSSARY OF TERMS AND 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 (bbl): Measure of space occupied by 42 U.S. gallons at 60 degrees Fahrenheit.

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

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

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

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

Chemical Agents: Means those elements, compounds, or mixtures that coagulate, disperse, dissolve, emulsify, foam, neutralize, precipitate, reduce, solubilize, oxidize, concentrate, congeal, entrap, fix, make the pollutant mass more rigid or viscous, or otherwise facilitate the mitigation of deleterious effects or the removal of the oil pollutant from the water. Chemical agents include biological additives, dispersants, sinking agents, miscellaneous oil spill control agents, and burning agents, but do not include solvents.

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.

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

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. A 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. A Damage assessment includes planning for restoration and determining the costs of restoration.

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

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

Dispersants: Means those chemical agents that emulsify, disperse, or solubilize oil into the water column or promote the surface spreading of oil slicks to facilitate dispersal of the oil into the water column.

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

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

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

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

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

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

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

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

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

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 non radioactive 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 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 area 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.

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.
- Persona 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.

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.

FACILITY SPECIFIC GLOSSARY

Reportable Spills: Include, but are not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, or dumping of oil into the navigable waters of the United States or any release of a hazardous substance into the environment, which exceed the reportable quantity as promulgated in 40 CFR parts 110,117, and 302.

ACRONYMS

AC	Area Committee
AOR	Area of Review
AQI	Alternate Qualified Individual
ACP	Area Contingency Plan
ACPs	Area Contingency Plans
bbl/hr	Barrel per Hour
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
BPD	Barrels Per Day
BOD	Biological Oxygen Demand
BOEM	Bureau of Ocean Energy Management
BOM	Bureau of Mines
BSEE	Bureau of Safety and Environmental Enforcement
CAER	Community Awareness and Emergency Response
CAS Number	Chemical Abstracts Service
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFR	Code of Federal Regulations
CG	Coast Guard
CHEMTREC	Chemical Transportation Emergency Center
COE	U.S. Army Corps of Engineers
COTP	Captain of the Port
CPI	Corrugated Plate Interceptor
CRZ	Contamination Reduction Zone
CST	Civil Support Team
CWA	Clean Water Act (Federal - Public Law 100-4)
CWS	Community Water System
CZM	Coastal Zone Management
DECON	Decontamination
DENR	Department of Environment and Natural Resources
DHS	Department of Homeland Security
DNR	Department of Natural Resources
DOC	Department of Commerce
DOCL	Documentation Unit Leader
DOD	Department of Defense
DOE	Department of Energy
DOI	Department of Interior
DOJ	Department of Justice
DOL	Department of Labor
DOS	Department of State

DOT	Department of Transportation
EBS	Emergency Broadcast System
EDRC	Estimated Daily Recovery Capability
EET	Environmental Emergency Team
EHS	Extremely Hazardous Substance
EMS	Emergency Management System
EOC	Emergency Operations Center
EPA	U. S. Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act of 1986 (Title III of SARA)
EQ	Environmental Quality
ESA	Endangered Species Act
ETA	Estimated Time of Arrival
FAA	Federal Aviation Administration
FAX	Facsimile Machine
FBI	Federal Bureau of Investigation
FCC	Federal Communications Commission
FEMA	Federal Emergency Management Agency
FIR	Field Investigation Report
FOSC	Federal On-Scene Coordinator
FR	Federal Register
FRDA	Federal Resources Damage Assessment
FRF	Federal Revolving Fund
GIS	Geographic Information System
GSA	General Services Administration
HAZMAT	Hazardous Material
HAZWOPER	Hazardous Waste Operations and Emergency Response Standard
HEPA OVV	High Efficiency Particle Air Device
HF ERW	High Frequency Electric-Resistance Weld
HHS	Department of Health and Human Services
HLS	Homeland Security
HOPD	Head Office Products Distribution
HVAC	Heating, Ventilating, and Air Conditioning
IAP	Incident Action Plan
IBRRC	International Bird Rescue Research Center
IC	Incident Commander
ICS	Incident Command System
ID NO.	Identification Number
IMH	Incident Management Handbook
IMS	Incident Management System
KM	Kilometer
KP	Kilometer Point
LE	Law Enforcement

LEPC	Local Emergency Planning Committee
LFL	Lower Flammable Limit
LO	Liaison Officer
LOSC	Local On-Scene Coordinator
LPG	Liquefied Petroleum Gas
LRT	Local Response Team
LSC	Logistics Section Chief
LF ERW	Low Frequency Electric-Resistance Weld
LEL	Lower Explosive Limit
MBL	Mobile
MEDEVAC	Medical Evacuation
MMS	Minerals Management Service, replaced by BSEE
MOU	Memorandum of Understanding
MSDS	Material Safety Data Sheets
MSO	Marine Safety Office
MSRC	Marine Spill Response Corporation
NCP	National Contingency Plan
NCWS	Non-Community Water System
NEECP (CA)	National Environmental Emergencies Contingency Plan
NEPA	National Environmental Policy Act
NFPA	National Fire Protection Association
NIMS	National Incident Management System
NOAA	National Oceanographic Atmospheric Administration
NRC	National Response Center
NRDAR	Natural Resource Damage Assessment and Restoration
NRS	National Response System
NRT	National Response Team
NSF	National Strike Force
NSFCC	National Strike Force Coordination Center
O&M	Operations and Maintenance
OCC	Operations Coordination Center
OP	Operational Period
OPA	Oil Pollution Act
OPS	Operations
OSC	On-Scene Coordinator
OSC	Operation Section Chief
OSHA	Occupational Safety & Health Administration
OSLTF	Oil Spill Liability Trust Fund
OSPRA	Oil Spill Prevention and Response Act
OSRO	Oil Spill Removal Organization
OSRP	Oil Spill Response Plan
OSRV	Oil Spill Response Vessel
OV	Organic Vapor

PCB	Polychlorinated Biphenyl's
PFD	Personal Floatation Device
PGR	Pager
PHMSA	Pipeline and Hazardous Materials Safety Administration
PIAT	Public Information Assist Team
POC	Point of Contact
POLREP	Pollution Report
PPE	Personal Protective Equipment
PPM	Parts Per Million
PREP	Preparedness for Response Exercise Program
PSC	Planning Section Chief
PSD	Prevention of Significant Deterioration
PVC	Polyvinyl Chloride
PWSD	Public Water Supply District
QI	Qualified Individual
RACT	Reasonably Achievable Control Technology
RCP	Regional Contingency Plan
RCRA	Resource Conservation and Recovery Act
RECON	Reconnaissance
REP	Radiological Emergency Preparedness
RERT	Radiological Emergency Response Team
RESL	Resource Leader
RP	Responsible Party
RPIC	Responsible Party Incident Commander
RQ	Reportable Quantity
RRT	Regional Response Team
RSPA	Research and Special Programs Administration (replaced by PHMSA)
R/W	Right-of-Way
RWD	Rural Water District
SAR	Search and Rescue
SARA	Superfund Amendments and Reauthorization Act
SART	Search and Rescue Transporter
SCADA	Supervisory Control and Data Acquisition
SCBA	Self Contained Breathing Apparatus
SDWA	Safe Drinking Water Act
SERC	State Emergency Response Center
SERC	State Emergency Response Commission
SI	Security Incident
SIC	State Implementation Plan
SITL	Situation Unit Leader
SMT	Spill Management Team
SO	Security Officer

SONS	Spill of National Significance
SOP	Standard Operating Procedure
SOR	Statutory Orders and Regulations
SORS	Spilled oil Recovery System
SOSC	State On-Scene Coordinator
SPCC	Spill Prevention, Control, and Countermeasure
Sq. Ft.	Square Foot
SSC	Scientific Support Coordinator (NOAA)
SSPs	Site Safety Plans
STAM	Staging Area Manager
STEL	Short Term Exposure Limits
SUPSALV	United States Navy Supervisor of Salvage
SWD	Salt Water Disposal
TBA	To be Assigned
TSB	Transportation Safety Board
TSC	Temporary Storage Capacity
TSCA	Toxic Substances Control Act
TSD	Temporary Storage and Disposal
TSDF	Treatment, Storage or Disposal Facility
TWIC	Transportation Worker Identification Credential
UC	Unified Command
UCS	Unified Command System
UN Number	United Nations
US	United States
USACOE	U. S. Army Corps of Engineers
USCG	United States Coast Guard
USDA	U. S. Department of Agriculture
USDL	U. S. Department of Labor
USDOD	U. S. Department of Defense
USDOE	U. S. Department of Energy
USDW	Underground Source of Drinking Water
USEPA	U. S. Environmental Protection Agency
USFWS	U. S. Fish and Wildlife Services
USGS	U. S. Geological Survey
VOC	Volatile Organic Compound
Vol.	Volume
VOSS	Vessel of Opportunity Skimmer System
Vsl.	Vessel
WCD	Worst Case Discharge

REGULATORY CROSS REFERENCE

U.S. EPA - OPA 90 *40 CFR Part 112.20 and Appendix F*			
40 CFR 112.20	**40 CFR 112 Appendix F**	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
-----	1.0	***Model Facility-Specific Response Plan***	-----
(1)	1.1	***Emergency Response Action Plan***	-----
(1)(i)		1. Qualified Individual Information	ERAP - QI Info, 1.0
(1)(ii)		2. Emergency Notification Phone List	ERAP, 2.0
(1)(iii)		3. Spill Response Notification Form	ERAP - Notifications
(1)(iv)		4. Response Equipment List and Location	ERAP, App. A
-----		5. Response Equipment Testing and Deployment	ERAP, App. A
(1)(v)		6. Facility Response Team	ERAP, 4.0
(1)(vi)		7. Evacuation Plan	ERAP, App. D
(1)(vii)		8. Immediate Actions	ERAP, 3.1
(1)(viii)		9. Facility Diagram	ERAP, Fig. 1.3
(2)	1.2	***Facility Information***	-----
	1.2.1	Facility name and location	Fig. 1.1
	1.2.2	Latitude and Longitude	Fig. 1.1
	1.2.3	Wellhead Protection Area	Fig. 1.1
	1.2.4	Owner/operator	Fig. 1.1
	1.2.5	Qualified Individual	Fig. 1.1
	1.2.6	Date of Oil Storage Start-up	Fig. 1.1
	1.2.7	Current Operation	Fig. 1.1
	1.2.8	Dates and Types of Substantial Expansion	Fig. 1.1
(3)	1.3	***Emergency Response Information***	-----
(3)(iii)	1.3.1	Notification	2.0
(3)(i)	1.3.2	Response Equipment List/Location	App. A
(3)(ii)	1.3.3	Response Equipment Testing/Deployment	App. A
(3)(vi)	1.3.3	Response Equipment Testing/Deployment	App. A
(3)(i)	1.3.4	Personnel	Fig. 2.1
(3)(iv)	----	A description of information to pass to response personnel	Fig. 2.3

U.S. EPA - OPA 90 *40 CFR Part 112.20 and Appendix F*			
40 CFR 112.20	**40 CFR 112 Appendix F**	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
(3)(v)	----	A description of response personnel capabilities, including:	-----
	----	• duties of persons at the Facility during a response action	3.3
	----	• response times and qualifications...	Fig. 2.1
(3)(ii)	----	• Evidence of Contractual Arrangements	App. A
(3)(vii)	1.3.5	Evacuation Plan/Diagrams	App. D
(3)(viii)	1.3.5	Evacuation Plan/Diagrams	App. D
-----	1.3.6	Qualified Individual's Duties	4.2
(3)(ix)	-----	A description of the duties of the qualified individual that include	-----
(3)(ix)(A)	-----	Activate internal alarms and hazard communications systems	4.2
(3)(ix)(B)	-----	Notify all response personnel, as needed	4.2
(3)(ix)(C)	-----	Identify the character, exact source, amount, and extent of release	4.2
(3)(ix)(D)	-----	Notify and provide necessary information to the appropriate Federal, State, and local authorities	4.2
(3)(ix)(E)	-----	Assess the interaction of the spilled substance with water and/or other substances stored at the Facility	4.2
(3)(ix)(F)	-----	Assess the possible hazards to human health and environment	4.2
(3)(ix)(G)	-----	Assess and implement prompt removal actions	4.2
(3)(ix)(H)	-----	Coordinate rescue and response actions	4.2
(3)(ix)(I)	-----	Use authority to immediately access company funding	4.2
(3)(ix)(J)	-----	Direct cleanup activities until properly relieved	4.2
(4)	1.4	***Hazard Evaluation***	-----
	1.4.1	Hazard Identification	Fig. 1.1, App. C
	1.4.2	Vulnerability Analysis	6.2
	1.4.3	Analysis of the Potential for an Oil Spill	App. C
	1.4.4	Facility Reportable Oil Spill History	App. C

U.S. EPA - OPA 90 *40 CFR Part 112.20 and Appendix F*			
40 CFR 112.20	**40 CFR 112 Appendix F**	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
(5)	1.5	***Discharge Scenarios***	-----
(5)(ii)	1.5.1	Small and Medium Discharges	App. B
(5)(iii)	1.5.2	Small and Medium Discharges	App. B
(5)(i)	1.5.3	Worst Case Discharge	App. B
(6)	1.6	***Discharge Detection Systems***	-----
	1.6.1	Discharge Detection by Personnel	C.2
	1.6.2	Automated Discharge Detection	C.2
(7)	1.7	***Plan Implementation***	-----
(7)(i)	1.7.1	Response actions to be carried out by facility personnel or contracted personnel, Response Resources for Small, Medium, and Worst Case Spills	3.1, 3.3, App. B
(7)(iii)	1.7.2	Disposal Plans	App. F
(7)(iv)	1.7.3	Containment and Drainage Planning	C.1
(8)	1.8	***Self-Inspection, Drills/Exercises, and Response Training***	-----
(8)(i)	1.8.1	Facility Self-Inspection	App. C
(8)(i)	1.8.1.1	Tank Inspection/Secondary Containment	App. C
(8)(i)	1.8.1.2	Response Equipment Inspection	App. A
(8)(ii)	1.8.2	Facility Drills/Exercises	App. E
(8)(iv)	1.8.2.1	Qualified Individual Notification Drill Log	App. H
(8)(iv)	1.8.2.2	Spill Management Team Tabletop Exercise Log	App. H
(8)(iii)	1.8.3	Response Training	App. E
(8)(iv)	1.8.3.1	Personnel Response Training Log	App. H
(8)(iv)	1.8.3.2	Discharge Prevention Meeting Log	App. H
(9)	1.9	***Diagrams***	-----
		(1) Site Plan Diagram	App. C
		(2) Site Drainage Plan Diagram	1.0
		(3) Site Evacuation Plan Diagram	App. D
(10)	1.10	***Security***	App. C
(11)	2.0	***Response Plan Cover Sheet***	Foreword
-----	3.0	***Acronyms***	Glossary and Acronyms Tab

U.S. EPA - OPA 90 *40 CFR Part 112.20 and Appendix F*			
40 CFR 112.20	**40 CFR 112 Appendix F**	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
(a)	1.8.2	Develop a training and drill program that satisfies the requirements of this section	App. E
(b)	1.8.3	Develop a facility response training program to train personnel involved in response activities.	App. E
(b)(1)	1.8.3	Proper instruction of facility personnel in the procedures to respond to discharges of oil and in applicable oil spill response laws, rules, and regulations	App. E
(b)(2)	1.8.3	Training shall be functional in nature according to job tasks for both supervisory and non-supervisory operational personnel	App. E
(b)(3)	1.8.2	Trainers shall develop specific lesson plans on subject areas relevant to facility personnel involved in oil spill response and cleanup	App. E
(c)	1.8.2	Develop a program of facility response drills/ exercises, including evaluation procedures. Can follow PREP.	App. E

U.S. EPA - RCRA *49 CFR Part 265.50 - 265.56*		
§ 265.50 - 56	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
§ 265.50 - APPLICABILITY		
	The regulations in this subpart apply to owners and operators of all hazardous waste facilities, except as 265.1 provides otherwise.	§ 1.5 – Regulatory Compliance
§ 265.51 - Purpose and implementation of contingency plan		
(a)	Each owner or operator must have a contingency plan for his facility. The contingency plan must be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water.	§ 1.1 – Plan Purpose/Objectives
(b)	The provisions of the plan must be carried out immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents that could threaten human health or the environment.	§ 1.1 – Plan Purpose/Objectives
§ 265.52 - Content of contingency plan		
(a)	The contingency plan must describe the actions facility personnel must take to comply with 265.51 and 265.56 in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility.	§ 3.3 – Incident Specific Response Actions
(b)	If the owner or operator has already prepared a Spill Prevention, Control, and Countermeasure (SPCC) Plan in accordance with Part 112 of this chapter, or Part 1510 of Chapter V, or some other emergency or contingency plan, he need only amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this part.	App. F – Disposal Plan
(c)	The plan must describe arrangements agreed to by local police departments, fire departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services, pursuant to 265.37.	§ 2.2 – External Notifications and Fig. 2.5 – External Notification References
(d)	The plan must list names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator (see 265.55), and this list must be kept up to date. Where more than one person is listed, one must be named as primary emergency coordinator and others must be listed in the order in which they will assume responsibility as alternates.	Fig. 1.1 – Facility Information and Fig. 2.1 – Internal Notification References

U.S. EPA - RCRA *49 CFR Part 265.50 - 265.56*		
§ 265.50 - 56	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
§ 265.52 - Content of contingency plan (cont'd)		
(e)	The plan must include a list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment), where this equipment is required. This list must be kept up to date. In addition, the plan must include the location and a physical description of each item on the list, and a brief outline of its capabilities.	App. A – Response Equipment/ Resources
(f)	The plan must include an evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan must describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes (in cases where the primary routes could be blocked by releases of hazardous waste or fires).	§ App. D – Evacuation Plan
§ 265.53 - Copies of contingency plan		
	A copy of the contingency plan and all revisions to the plan must be:	
(a)	Maintained at the facility, and	Foreword – Distribution List and § 1.3 – Plan Distribution Procedures
(b)	Submitted to all local police departments, fire departments, hospitals, and State and local emergency response teams that may be called upon to provide emergency services.	Foreword – Distribution List and § 1.3 – Plan Distribution Procedures
§ 265.54 - Amendment of contingency plan		
	The contingency plan must be reviewed, and immediately amended, if necessary, whenever:	
(a)	Applicable regulations are revised;	§ 1.4 – Plan Review and Update Procedures
(b)	The plan fails in an emergency;	§ 1.4 – Plan Review and Update Procedures

U.S. EPA - RCRA *49 CFR Part 265.50 - 265.56*		
§ 265.50 - 56	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
§ 265.54 - Amendment of contingency plan (cont'd)		
(c)	The facility changes in its design, construction, operation, maintenance, or other circumstances in a way that materially increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency;	§ 1.4 – Plan Review and Update Procedures
(d)	The list of emergency coordinators changes; or	§ 1.4 – Plan Review and Update Procedures
(e)	The list of emergency equipment changes.	§ 1.4 – Plan Review and Update Procedures
§ 265.55 - Emergency Coordinator		
	At all times, there must be at least one employee either on the facility premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures. This emergency coordinator must be thoroughly familiar with all aspects of the facility's contingency plan, all operations and activities at the facility, the location and characteristics of waste handled, the location of all records within the facility, and the facility layout. In addition, this person must have the authority to commit the resources needed to carry out the contingency plan. *[Comment: The emergency Coordinator's responsibilities are more fully spelled out spelled out in 265.56. Applicable responsibilities for the emergency coordinator vary, depending on factors such as type and variety of waste(s) handled by the facility, and type and complexity of the facility.]*	Foreword – Certif. of QI and AQI, § 4.2 – Qualified Individual, and Fig. 2.1 – Internal Notification References
§ 265.56 - Emergency procedures		
(a)	Whenever there is an imminent or actual emergency situation, the emergency coordinator (or his designee when the emergency coordinator is on call) must immediately:	§ 4.2 – Qualified Individual
(a)(1)	Activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and	§ 4.2 – Qualified Individual
(a)(2)	Notify appropriate State or local agencies with designated response roles if their help is needed.	§ 4.2 – Qualified Individual

U.S. EPA - RCRA *49 CFR Part 265.50 - 265.56*		
§ 265.50 - 56	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
§ 265.56 - Emergency procedures (cont'd)		
(b)	Whenever there is a release, fire, or explosion, the emergency coordinator must immediately identify the character, exact source, amount, and areal extent of any released materials. He may do this by observation or review of facility records or manifests and, if necessary, by chemical analysis.	§ 4.2 – Qualified Individual
(c)	Concurrently, the emergency coordinator must assess possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment must consider both direct and indirect effects of the release, fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water run-offs from water or chemical agents used to control fire and heat-induced explosions).	§ 4.2 – Qualified Individual
(d)	If the emergency coordinator determines that the facility has had a release, fire, or explosion which could threaten human health, or the environment, outside the facility, he must report his findings as follows:	§ 4.2 – Qualified Individual
(d)(1)	If his assessment indicates that evacuation of local areas may be advisable, he must immediately notify appropriate local authorities. He must be available to help appropriate officials decide whether local areas should be evacuated; and	§ App. D – Evacuation
(d)(2)	He must immediately notify either the government official designated as the on-scene coordinator for that geographical area (in the applicable regional contingency plan under part 1510 of this title), or the National Response Center (using their 24-hour toll free number 800/424–8802). The report must include:	Fig. 2.5 – External Notification References
(d)(2)(i)	Name and telephone number of reporter:	Fig. 2.3 – Notification Data Sheet
(d)(2)(ii)	Name and address of facility;	Fig. 2.3 – Notification Data Sheet
(d)(2)(iii)	Time and type of incident (e.g., release, fire);	Fig. 2.3 – Notification Data Sheet
(d)(2)(iv)	Name and quantity of material(s) involved, to the extent known;	Fig. 2.3 – Notification Data Sheet

U.S. EPA - RCRA *49 CFR Part 265.50 - 265.56*		
§ 265.50 - 56	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
§ 265.56 - Emergency procedures (cont'd)		
(d)(2)(v)	The extent of injuries, if any; and	Fig. 2.3 – Notification Data Sheet
(d)(2)(vi)	The possible hazards to human health, or the environment, outside the facility.	Fig. 2.3 – Notification Data Sheet
(e)	During an emergency, the emergency coordinator must take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous waste at the facility. These measures must include, where applicable, stopping processes and operations, collecting and containing released waste, and removing or isolating containers.	§ 3.3 – Incident Specific Response Actions
(f)	If the facility stops operations in response to a fire, explosion or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes or other equipment, wherever this is appropriate.	§ 3.3 – Incident Specific Response Actions
(g)	Immediately after an emergency, the emergency coordinator must provide for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility. *[Comment: Unless the owner or operator can demonstrate, in accordance with § 261.3(c) or (d) of this chapter, that the recovered material is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of Parts 262, 263, and 265 of this chapter.]*	App. F – Disposal Plan
(h)	The emergency coordinator must ensure that, in the affected areas(s) of the facility:	-----
(h)(1)	No waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and	App. F – Disposal Plan
(h)(2)	All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.	§ 5.1 – Incident Action Plan , § 5.3 – Site Safety Plan, § 3.4 – Safety

U.S. EPA - RCRA *49 CFR Part 265.50 - 265.56*		
§ 265.50 - 56	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
§ 265.56 - Emergency procedures (cont'd)		
(i)	The owner or operator must notify the Regional Administrator, and appropriate State and local authorities, that the facility is in compliance with paragraph (h) of this section before operations are resumed in the affected area(s) of the facility.	Fig. 2.5 – External Notification References
(j)	The owner or operator must note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within 15 days after the incident, he must submit a written report on the incident to the Regional Administrator. The report must include:	-----
(j)(1)	Name, address, and telephone number of the owner or operator;	§ 2.2 – External Notifications
(j)(2)	Name, address, and telephone number of the facility;	§ 2.2 – External Notifications
(j)(3)	Date, time, and type of incident (e.g., fire, explosion);	§ 2.2 – External Notifications
(j)(4)	Name and quantity of material(s) involved;	§ 2.2 – External Notifications
(j)(5)	The extent of injuries, if any;	§ 2.2 – External Notifications
(j)(6)	An assessment of actual or potential hazards to human health or the environment, where this is applicable; and	§ 2.2 – External Notifications
(j)(7)	Estimated quantity and disposition of recovered material that resulted from the incident.	§ 2.2 – External Notifications

USCG OPA 90 FINAL RULE *33 CFR Part 154*		
33 CFR 154.1026	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
(a)	The response plan must identify a qualified individual and at least one alternate that meet the requirements of this section.	ERAP, Fig. 1.1
(c)	The owner or operator shall provide each qualified individual and alternate qualified individual identified in the plan with a document designating them as a qualified individual and specifying their full authority to...(1)...contract with OSRO, (2) act as liaison with FOSC; and (3) obligate funds...	Fig. 1.1
33 CFR 154.1028		
(a)	When required in this subpart, the availability of response resources must be ensured...	App. A
33 CFR 154.1029		
(a)	The response plan must use the appropriate criteria in this section to develop the worst case discharge.	App. B
33 CFR 154.1030		
(a)	The plan must be written in English.	Entire Plan
(b)	A response plan must be divided into the sections listed in this paragraph and formatted in the order specified herein unless noted otherwise. It must also have some easily found marker identifying each section listed below. The following are the sections and subsections of a facility response plan:	ERAP, TOC, Tabs and Cross Reference
(b)(1)	Introduction and plan contents.	1.0
(b)(2)	Emergency response action plan:	-----
(b)(2)(i)	Notification procedures.	ERAP, 2.0, 2.1, 2.2, Fig. 2.1, Fig. 2.5
(b)(2)(ii)	Facility's spill mitigation procedures.	ERAP, 3.1, 3.3
(b)(2)(iii)	Facility's response activities.	ERAP, 3.3, 3.4, 3.5
(b)(2)(iv)	Fish and wildlife and sensitive environments.	ERAP, 6.0, Fig. 6.1, Fig. 6.2
(b)(2)(v)	Disposal plan.	App. F
(b)(3)	Training and Exercises:	-----
(b)(3)(i)	Training procedures.	E.1
(b)(3)(ii)	Exercise procedures.	E.4
(b)(4)	Plan review and update procedures.	1.4
(b)(5)	Appendices.	-----
(b)(5)(i)	Facility-specific information.	Fig. 1.1
(b)(5)(ii)	List of contacts.	Fig. 2.1, 2.5

USCG OPA 90 FINAL RULE *33 CFR Part 154*		
33 CFR 154.1030	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
(b)(5)(iii)	Equipment lists and records.	A.1, Figs. A.1, A.2 & A.5
(b)(5)(iv)	Communications plan.	A.2
(b)(5)(v)	Site-specific safety and health plan.	5.3, App. H
(b)(5)(vi)	List of acronyms and definitions.	Glossary of Terms/Acronyms
(b)(5)(vii)	A geographic-specific Appendix for each zone in which a mobile facility operates.	N/A
(c)	The required contents for each section and subsection of the plan are contained in 154.1035, 154.1040, and 154.1041, as appropriate.	-----
(d)	The sections and subsections of response plans submitted to the COTP must contain at a minimum all the information required in 154.1035, 154.1040, and 154.1041, as appropriate. It may contain other appropriate sections, subsections, or information that are required by other Federal, State, and local agencies.	See Cross Reference
(e)	For initial and subsequent submission, a plan that does not follow the format specified in paragraph (b) of this section must be supplemented with a detailed cross-reference section to identify the location of the applicable sections required by this subpart.	See Cross Reference
(f)	The information contained in a response plan must be consistent with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 CFR part 300) and the Area Contingency Plan(s) (ACP) covering the area in which the facility operates. Facility owners or operators shall ensure that their response plans are in accordance with the ACP in effect 6 months prior to initial plan submission or the annual plan review required under 154.1065(a). Facility owners or operators are not required to, but may at their option, conform to an ACP which is less than 6 months old at the time of plan submission.	Entire Plan, Acknowledgement Page
33 CFR 154.1035		
(a)	*Introduction and plan content.* This section of the plan must include facility and plan information as follows:	1.0
(a)(1)	The facility's name, street address, city, county, state, ZIP code, facility telephone number, and tele-facsimile number, if so equipped. Include mailing address if different from street address.	Fig. 1.1

USCG OPA 90 FINAL RULE *33 CFR Part 154*		
33 CFR 154.1035	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
(a)(2)	The facility's location described in a manner that could aid both a reviewer and a responder in locating the specific facility covered by the plan, such as, river mile or location from a known landmark that would appear on a map or chart.	Fig. 1.1
(a)(3)	The name, address, and procedures for contacting the facility's owner or operator on a 24-hour basis.	Fig. 1.1
(a)(4)	A table of contents.	Foreword - TOC
(a)(5)	During the period that the submitted plan does not have to conform to the format contained in this subpart, a cross index, if appropriate.	Cross Reference
(a)(6)	A record of change(s) to record information on plan updates.	Foreword - Revision Record
(b)	Emergency Response Action Plan. This section of the plan must be organized in the subsections described in this paragraph:	-----
(b)(1)	*Notification procedures.* (i) This subsection must contain a prioritized list identifying the person(s), including name, telephone number, and their role in the plan, to be notified of a discharge or substantial threat of a discharge of oil. The telephone number need not be provided if it is listed separately in the list of contacts required in the plan. This Notification Procedures listing must include --	2.0
(b)(1)(A)	Facility response personnel, the spill management team, oil spill removal organizations, and the qualified individual(s) and the designated alternate(s); and	Fig. 1.1, Fig. 2.1, Fig. 2.5
(b)(1)(B)	Federal, State, or local agencies, as required.	Fig. 2.5
(b)(1)(B)(ii)	This subsection must include a form, which contains information to be provided in the initial and follow-up notifications to Federal, State, and local agencies.	Fig. 2.3
(b)(2)	*Facility's spill mitigation procedures.* (i) This subsection must describe the volume(s) and oil groups that would be involved in the --	-----
(b)(2)(A)	Average most probable discharge from the MTR facility;	App. B (Response Capability Scenarios)
(b)(2)(B)	Maximum most probable discharge from the MTR facility;	App. B (Response Capability Scenarios)
(b)(2)(C)	Worst case discharge from the MTR facility; and	App. B (Response Capability Scenarios)

USCG OPA 90 FINAL RULE *33 CFR Part 154*		
33 CFR 154.1035	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
(b)(2)(D)	Where applicable, the worst case discharge from the non-transportation-related facility. This must be the same volume provided in the response plan for the non-transportation-related facility.	App. B (Response Capability Scenarios)
(b)(2)(D)(ii)	This subsection must contain prioritized procedures for facility personnel to mitigate or prevent any discharge or substantial threat of a discharge of oil resulting from operational activities associated with internal or external facility transfers including specific procedures to shut down affected operations. Facility personnel responsible for performing specified procedures to mitigate or prevent any discharge or potential discharge shall be identified by job title. A copy of these procedures shall be maintained at the facility operations center. These procedures must address actions to be taken by facility personnel in the event of a discharge, potential discharge, or emergency involving the following equipment and scenarios:	3.3, B.3
(b)(2)(D)(ii)(A)	Failure of manifold, mechanical loading arm, other transfer equipment, or hoses, as appropriate;	3.3, B.3
(b)(2)(D)(ii)(B)	Tank overfill;	3.3, B.3
(b)(2)(D)(ii)(C)	Tank failure;	3.3, B.3
(b)(2)(D)(ii)(D)	Piping rupture;	3.3, B.3
(b)(2)(D)(ii)(E)	Piping leak, both under pressure and not under pressure, if applicable;	3.3, B.3
(b)(2)(D)(ii)(F)	Explosion or fire; and	3.3, B.3
(b)(2)(D)(ii)(G)	Equipment failure (e.g. pumping system failure, relief valve failure, or other general equipment relevant to operational activities associated with internal or external facility transfers.)	B.3
(b)(2)(D)(iii)	This subsection must contain a listing of equipment and the responsibilities of facility personnel to mitigate an average most probable discharge.	3.1, Fig. A.1
(b)(3)	*Facility's response activities.* (i) This subsection must contain a description of the facility personnel's responsibilities to initiate a response and supervise response resources pending the arrival of the qualified individual.	3.1, 4.2
(b)(3)(ii)	This subsection must contain a description of the responsibilities and authority of the qualified individual and alternate as required in 154.1026.	4.0
(b)(3)(iii)	This subsection must describe the organizational structure that will be used to manage the response actions. This structure must include the following functional areas.	Fig. 4.1
(b)(3)(iii)(A)	Command and control;	Fig. 4.1
(b)(3)(iii)(B)	Public information;	Fig. 4.1

USCG OPA 90 FINAL RULE *33 CFR Part 154*		
33 CFR 154.1035	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
(b)(3)(iii)(C)	Safety;	Fig. 4.1
(b)(3)(iii)(D)	Liaison with government agencies;	Fig. 4.1
(b)(3)(iii)(E)	Spill Operations;	Fig. 4.2
(b)(3)(iii)(F)	Planning;	Fig. 4.3
(b)(3)(iii)(G)	Logistics support; and	Fig. 4.4
(b)(3)(iii)(H)	Finance.	Fig. 4.5
(b)(3)(iv)	This subsection must identify the oil spill removal organizations and the spill management team to:	-----
(b)(3)(iv)(A)	Be capable of providing the following response resources:	-----
(b)(3)(iv)(A)(*1*)	Equipment and supplies to meet the requirements of 154.1045, 154.1047 or subparts H or I of this part, as appropriate; and	App. A
(b)(3)(iv)(A)(*2*)	Trained personnel necessary to continue operation of the equipment and staff of the oil spill removal organization and spill management team for the first 7 days of the response.	App. A
(b)(3)(iv)(B)	This section must include job descriptions for each spill management team member within the organizational structure described in paragraph (b)(3)(iii) of this section. These job descriptions should include the responsibilities and duties of each spill management team member in a response action.	4.0, Fig. 4.1
(b)(3)(v)	For mobile facilities that operate in more than one COTP zone, the plan must identify the oil spill removal organization and the spill management team in the applicable geographic-specific Appendix. The oil spill removal organization(s) and the spill management team discussed in paragraph (b)(3)(iv)(A) of this section must be included for each COTP zone in which the facility will handle, store, or transport oil in bulk.	N/A
(b)(3)(vi)	For facilities that handle, store, or transport group II through group IV petroleum oils, and that operate in waters where dispersant use in pre-authorized, this subsection of the plan must also separately list the resource providers and specific resources, including appropriately trained dispersant-application personnel, necessary to provide the dispersant capabilities required in the subpart. All resources providers and resources must be available by contract or other approved means as described in §154.1028(a). The dispersant resources to be listed within this section must include the following:	App. A
(b)(3)(vi)(A)	Identification of each primary dispersant staging site to be used by each dispersant-application platform to meet the requirements of this subpart.	App. A

USCG OPA 90 FINAL RULE *33 CFR Part 154*		
33 CFR 154.1035	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
(b)(3)(vi)(B)	Identification of the platform type, resource-providing organization, location, and dispersant payload for each dispersant-application platform identified. Location data must identify the distance between the platform's home base and the identified primary dispersant staging site for this section.	App. A
(b)(3)(vi)(C)	For each unit of dispersant stockpile required to support the effective daily application capacity (EDAC) of each dispersant-application platform necessary to sustain each intended response tier of operation, identify the dispersant product resource provider, location, and volume. Location data must include the stockpile's distance to the primary staging sites where the stockpile would be loaded onto the corresponding platforms.	App. A
(b)(3)(vi)(D)	If an oil spill removal organization has been evaluated by the Coast Guard, and its capability is equal to or exceeds the response capability needed by the owner or operator, the section may identify only the oil spill removal organization, and not the information required in paragraphs (b)(3)(vi)(A) through (b)(3)(vi)(C) of this section.	App. A
(b)(3)(vii)	This subsection of the plan must also separately list the resource providers and specific resources necessary to provide aerial oil tracking capabilities requir4ed in this subpart. The oil tracking resources to be listed within this section must include the following:	App. A
(b)(3)(vii)(A)	The identification of a resource provider; and	App. A
(b)(3)(vii)(B)	Type and location of aerial surveillance aircraft that are ensured available, through contract or other approved means, to meet the oil tracking requirements of §154.1045(j).	App. A
(b)(3)(viii)	For mobile facilities that operate in more than one COTP zone, the plan must identify the oil spill removal organization and the spill management team in the applicable geographic-specific Appendix. The oil spill removal organization(s) and the spill management team discussed in paragraph (b)(3)(iv) or this section must be included for each COTP zone in which the facility will handle, store, or transport oil in bulk.	App. A
(b)(3)(ix)	For mobile facilities that operate in more than one COTP zone, the plan must identify the oil spill removal organization and the spill management team in the applicable geographic-specific Appendix. The oil spill removal organization(s) and the spill management team discussed in paragraph (b)(3)(iv)(A) of this section must be included for each COTP zone in which the facility will handle, store, or transport oil in bulk.	App. A

USCG OPA 90 FINAL RULE *33 CFR Part 154*		
33 CFR 154.1035	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
(b)(4)	*Fish and wildlife and sensitive environments.* (i) This section of the plan must identify areas of economic importance and environmental sensitivity, as identified in the ACP, which are potentially impacted by a worst case discharge. ACPs are required under Section 311(j)(4) of the FWPCA to identify fish and wildlife and sensitive environments. The applicable ACP shall be used to designate fish and wildlife and sensitive environments in the plan. Changes to the ACP regarding fish and wildlife and sensitive environments shall be included in the annual update of the response plan, when available.	6.0
(b)(4)(ii)	For a worst case discharge from the facility, this section of the plan must --	-----
(b)(4)(ii)(A)	List all fish and wildlife and sensitive environments identified in the ACP which are potentially impacted by a discharge of persistent oils, non-persistent oils, or non-petroleum oils.	Figs. 6.1, 6.2
(b)(4)(ii)(B)	Describe all the response actions that the facility anticipates taking to protect these fish and wildlife and sensitive environments.	6.3
(b)(4)(ii)(C)	Contain a map or chart showing the location of those fish and wildlife and sensitive environments which are potentially impacted. The map or chart shall also depict each response action that the facility anticipates taking to protect these areas. A legend of activities must be included on the map page.	6.0
(b)(4)(iii)	For a worst case discharge, this section must identify appropriate equipment and required personnel, available by contract or other approved means as described in 154.1028, to protect fish and wildlife and sensitive environments which fall within the distances calculated using the methods outlined in this paragraph as follows:	2.0, 6.0, App. A, App. B
(b)(4)(iii)(A)	Identify the appropriate equipment and required personnel to protect all fish and wildlife and sensitive environments in the ACP for the distances, as calculated in paragraph (b)(4)(iii)(B) of this section, that the persistent oils, non-persistent oils, or non-petroleum oils are likely to travel in the noted geographic area(s) and number of days listed in Table 2 of Appendix C of this part;	2.0, 6.0, App. A
(b)(4)(B)	Calculate the distances required by paragraph (b)(4)(iii)(A) of this section by selecting one of the methods described in this paragraph;	-----
(b)(4)(B)(*1*)	Distances may be calculated as follows:	App. B
(b)(4)(B)(*1*)(*i*)	For persistent oils and non-petroleum oils discharged into non-tidal waters, the distance from the facility reached in 48 hours at maximum current.	-----

USCG OPA 90 FINAL RULE *33 CFR Part 154*		
33 CFR 154.1035	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
(b)(4)(B)(*1*)(*ii*)	For persistent and non-petroleum oils discharged into tidal waters, 15 miles from the facility down current during ebb tide and to the point of maximum tidal influence or 15 miles, whichever is less, during flood tide.	-----
(b)(4)(B)(*1*)(*iii*)	For non-persistent oils discharged into non-tidal waters, the distance from the facility reached in 24 hours at maximum current.	-----
(b)(4)(B)(*1*)(*iv*)	For non-persistent oils discharged into tidal waters, 5 miles from the facility down current during ebb tide and to the point of maximum tidal influence or 5 miles, whichever is less, during flood tide.	-----
(b)(4)(B)(*2*)	A spill trajectory or model may be substituted for the distances calculated under paragraph (b)(4)(iii)(B)(*I) of this section.* The spill trajectory or model must be acceptable to the COTP.	N/A
(b)(4)(B)(*3*)	The procedures contained in the Environmental Protection's Agency's regulations on oil pollution prevention for non-transportation-related onshore facilities at 40 CFR part 112, Appendix C, Attachment C-III may be substituted for the distances listed in non-tidal and tidal waters; and	App. B (Response Planning Volume Calculations)
(b)(4)(C)	Based on historical information or a spill trajectory or model, the COTP may require the additional fish and wildlife and sensitive environment's also be protected.	-----
(b)(5)	*Disposal Plan.* This subsection must describe any actions to be taken or procedures to be used to ensure that all recovered oil and oil contaminated debris produced as a result of any discharge are disposed according to Federal, state, or local requirements	App. F
(c)	*Training and exercises.* This section must be divided into the following two subsections:	-----
(c)(1)	*Training procedures.* This subsection must describe the training procedures and programs of the facility owner or operator to meet the requirements in 154.1050.	E.3
(c)(2)	*Exercise procedures.* This subsection must describe the exercise program to be carried out by the facility owner or operator to meet the requirements in 154.1055.	E.4
(d)	*Plan review and update procedures.* This section must address the procedures to be followed by the facility owner or operator to meet the requirements of 154.1065 and the procedures to be followed for any post-discharge review of the plan to evaluate and validate its effectiveness.	1.4
(e)	*Appendices.* This section of the response plan must include the Appendices described in this paragraph.	-----
(e)(1)	*Facility-specific information.* This Appendix must contain a description of the facility's principal characteristics.	-----

USCG OPA 90 FINAL RULE *33 CFR Part 154*		
33 CFR 154.1035	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
(e)(1)(i)	There must be a physical description of the facility including a plan of the facility showing the mooring areas, transfer locations, control stations, locations of safety equipment, and the location and capacities of all piping and storage tanks.	Figs. 1.1 & 1.3
(e)(1)(ii)	The Appendix must identify the sizes, types, and number of vessels that the facility can transfer oil to or from simultaneously.	Fig. 1.1
(e)(1)(iii)	The Appendix must identify the first valve(s) on facility piping separating the transportation-related portion of the facility from the non-transportation-related portion of the facility, if any. For piping leading to a manifold located on a dock serving tank vessels, this valve is the first valve inside the secondary containment required by 40 CFR part 112.	Fig. 1.3
(e)(1)(iv)	The Appendix must contain information on the oil(s) and hazardous material handled, stored, or transported at the facility in bulk. A material safety data sheet meeting the requirements of 29 CFR 1910.1200, 33 CFR 154.310(a)(5) or an equivalent will meet this requirement. This information can be maintained separately providing it is readily available and the Appendix identifies its location. This information must include --	Maintained separately at the Facility
(e)(1)(iv)(A)	The generic or chemical name;	Maintained separately at the Facility
(e)(1)(iv)(B)	A description of the appearance and odor;	Maintained separately at the Facility
(e)(1)(iv)(C)	The physical and chemical characteristics;	Maintained separately at the Facility
(e)(1)(iv)(D)	The hazards involved in handling the oil(s) and hazardous materials. This shall include hazards likely to be encountered if the oil(s) and hazardous materials come in contact as a result of a discharge; and	Maintained separately at the Facility
(e)(1)(iv)(E)	A list of firefighting procedures and extinguishing agents effective with fires involving the oil(s) and hazardous materials.	Maintained separately at the Facility
(e)(1)(iv)(E)(v)	The Appendix may contain any other information which the facility owner or operator determines to be pertinent to an oil spill response.	-----

USCG OPA 90 FINAL RULE *33 CFR Part 154*		
33 CFR 154.1035	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
(e)(2)	*List of contacts.* This Appendix must include information on 24-hour contact of key individuals and organizations. If more appropriate, this information may be specified in a geographic-specific Appendix. The list must include --	-----
(e)(2)(i)	The primary and alternate qualified individual(s) for the facility;	Fig. 1.1
(e)(2)(ii)	The contact(s) identified under paragraph (b)(3)(iv) of this section for activation of the response resources; and	Fig. 2.2
(e)(2)(iii)	appropriate Federal, State, and local officials.	Fig. 2.5
(e)(3)	*Equipment list and records.* This Appendix must include the information specified in this paragraph.	-----
(e)(3)(i)	The Appendix must contain a list of equipment and facility personnel required to respond to an average most probable discharge, as defined in 154.1020. The Appendix must also list the location of the equipment.	App. A, Fig. A.1, App. B
(e)(3)(ii)	The Appendix must contain a detailed listing of all the major equipment identified in the plan as belonging to an oil spill removal organization(s) that is available, by contract or other approved means as described in 154.1028(a), to respond to a maximum most probable or worst case discharge, as defined in 154.1020. The detailed listing of all major equipment may be located in a separate document referenced by the plan. Either the Appendix or the separate document referenced in the plan must provide the location of the major response equipment.	App. A
(e)(3)(iii)	It is not necessary to list response equipment from oil spill removal organization(s) when the organization has been classified by the Coast Guard and their capacity has been determined to equal or exceed the response capability needed by the facility. For oil spill removal organization(s) classified by the Coast Guard, the classification must be noted in this section of the plan. When it is necessary for the Appendix to contain a listing of response equipment, it shall include all of the following items that are identified in the response plan: Skimmers; booms; dispersant application, in-situ burning, bioremediation equipment and supplies, and other equipment used to apply other chemical agents on the NCP Product Schedule (if applicable); communications, firefighting, and beach cleaning equipment; boats and motors; disposal and storage equipment; and heavy equipment. The list must include for each piece of equipment --	App. A
(e)(3)(iii)(A)	The type, make, model, and year of manufacture listed on the nameplate of the equipment;	N/A
(e)(3)(iii)(B)	For oil recovery devices, the effective daily recovery rate, as determined using Section 6 of Appendix C of this part;	N/A

USCG OPA 90 FINAL RULE *33 CFR Part 154*		
33 CFR 154.1035	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
(e)(3)(iii)(C)	For containment boom, the overall boom height (draft and freeboard) and type of end connectors;	N/A
(e)(3)(iii)(D)	The spill scenario in which the equipment will be used for or which it is contracted;	N/A
(e)(3)(iii)(E)	The total daily capacity for storage and disposal of recovered oil;	N/A
(e)(3)(iii)(F)	For communication equipment, the type and amount of equipment intended for use during response activities. Where applicable, the primary and secondary radio frequencies must be specified.	N/A
(e)(3)(iii)(G)	Location of the equipment; and	N/A
(e)(3)(iii)(H)	The date of the last inspection by the oil spill removal organization(s).	N/A
(e)(4)	*Communications plan.* This Appendix must describe the primary and alternate method of communication during discharges, including communications at the facility and at remote locations within the areas covered by the response plan. The Appendix may refer to additional communications packages provided by the oil spill removal organization. This may reference another existing plan or document.	A.2
(e)(5)	*Site-specific safety and health plan.* This Appendix must describe the safety and health plan to be implemented for any response location(s). It must provide as much detailed information as is practicable in advance of an actual discharge. This Appendix may reference another existing plan requiring under 29 CFR 1910.120.	5.3, App. H
(e)(6)	*List of acronyms and definitions.* This Appendix must list all acronyms used in the response plan including any terms or acronyms used by Federal, State, or local governments and any operational terms commonly used at the facility. This Appendix must include all definitions that are critical to understanding the response plan.	Glossary of Terms/Acronyms
33 CFR 154.1045		
(a)	The owner or operator of a facility that handles, stores, or transports Group I through Group IV petroleum oils shall use the criteria in this section to evaluate response resources identified in the response plan for the specified operating environment.	App. A
(a)(1)	The criteria in Table 1 of Appendix C of this part are to be used solely for identification of appropriate equipment in a response plan. These criteria reflect conditions used for planning purposes to select mechanical response equipment and are not conditions that would limit response actions or affect normal facility operations.	App. A

USCG OPA 90 FINAL RULE *33 CFR Part 154*		
33 CFR 154.1045	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
(a)(2)	The response resources must be evaluated considering limitations for the COTP zones in which the facility operates, including but not limited to--	App. A
(a)(2)(i)	Ice conditions;	
(a)(2)(ii)	Debris;	
(a)(2)(iii)	Temperature ranges;	
(a)(2)(iv)	Weather-related visibility; and	
(a)(2)(v)	Other appropriate environmental conditions as determined by the COTP.	
(a)(3)	The COTP may reclassify a specific body of water or location within the COTP zone. Any reclassifications will be identified by the COTP in the applicable ACP. Reclassifications may be to--	App. A
(a)(3)(i)	A more stringent operating environment if the prevailing wave conditions exceed the significant wave height criteria during more than 35 percent of the year; or	App. A
(a)(3)(ii)	A less stringent operating environment if the prevailing wave conditions do not exceed the significant wave height criteria for the less stringent operating environment during more than 35 percent of the year.	App. A
(b)	Response equipment must--	----
(b)(1)	Meet or exceed the operating criteria listed in Table 1 of Appendix C of this part;	App. A
(b)(2)	Function in the applicable operating environment; and	App. A
(b)(3)	Be appropriate for the petroleum oil carried.	App. A
(c)	The response plan for a facility that handles, stores, or transports Group I through Group IV petroleum oils must identify response resources that are available, by contract or other approved means as described in Sec. 154.1028(a)(1)(4), to respond to the facility's average most probable discharge. The response resources must include, at a minimum--	App. A
(c)(1)	1,000 feet of containment boom or two times the length of the largest vessel that regularly conducts petroleum oil transfers to or from the facility, whichever is greater, and the means of deploying and anchoring the boom available at the spill site within 1 hour of the detection of a spill; and	App. A
(c)(2)	Oil recovery devices and recovered oil storage capacity capable of being at the spill site within 2 hours of the discovery of a petroleum oil discharge from a facility.	App. A

USCG OPA 90 FINAL RULE *33 CFR Part 154*		
33 CFR 154.1045	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
(d)	The response plan for a facility that handles, stores, or transports Group I through Group IV petroleum oils must identify response resources that are available, by contract or other approved means as described in Sec. 154.1028(a)(1)(4), to respond to a discharge up to the facility's maximum most probable discharge volume.	App. A
(d)(1)	The response resources must include sufficient containment boom, oil recovery devices, and storage capacity for any recovery of up to the maximum most probable discharge planning volume, as contained in Appendix C.	App. A
(d)(2)	The response resources must be appropriate for each group of petroleum oil identified in Sec. 154.1020 that is handled, stored, or transported by the facility.	App. A
(d)(3)	These response resources must be positioned such that they can arrive at the scene of a discharge within the following specified times:	App. A
(d)(3)(i)	The equipment identified in paragraphs (c)(1) and (c)(2) of this section or in Sec. 154.1040(d) must arrive within the times specified in those paragraphs or that section, as appropriate.	App. A
(d)(3)(ii)	In higher volume port areas and the Great Lakes, response resources must be capable of arriving on scene within 6 hours of the discovery of a petroleum oil discharge from a facility.	App. A
(d)(3)(iii)	In all other locations, response resources must be capable of arriving on scene within 12 hours of the discovery of a petroleum oil discharge from a facility.	App. A
(d)(4)	The COTP may determine that mobilizing response resources to an area beyond the response times indicated in this paragraph invalidates the response plan. In this event, the COTP may impose additional operational restrictions (e.g., limitations on the number of transfers at a facility), or, at the COTP's discretion, the facility may operate with temporarily modified response plan development and evaluation criteria (e.g., modified response times, alternate response resources, etc.).	App. A
(e)	The response plan for a facility that handles, stores, or transports Group I through Group IV petroleum oils must identify the response resources that are available, by contract or other approved means as described in Sec. 154.1028(a)(1)(4), to respond to the worst case discharge volume of petroleum oil to the maximum extent practicable.	App. A
(e)(1)	The location of these response resources must be suitable to meet the response times identified in paragraph (f) of this section for the applicable geographic area(s) of operation and response tier.	App. A

USCG OPA 90 FINAL RULE *33 CFR Part 154*		
33 CFR 154.1045	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
(e)(2)	The response resources must be appropriate for--	-----
(e)(2)(i)	The volume of the facility's worst case discharge;	App. B
(e)(2)(ii)	Group(s) of petroleum oil as identified in Sec. 154.1020 that are handled, stored, or transported by the facility; and	ERAP, Fig. 1.1
(e)(2)(iii)	The geographic area(s) in which the facility operates.	ERAP, Fig. 1.1
(e)(3)	The response resources must include sufficient boom, oil recovery devices, and storage capacity to recover the worst case discharge planning volumes.	App. A
(e)(4)	The guidelines in Appendix C of this part must be used for calculating the quantity of response resources required to respond at each tier to the worst case discharge to the maximum extent practicable.	App. A
(e)(5)	When determining response resources necessary to meet the requirements of this section, a portion of those resources must be capable of use in close-to-shore response activities in shallow water. The following percentages of the response equipment identified for the applicable geographic area must be capable of operating in waters of 6 feet or less depth.	App. A
(e)(5)(i)	Offshore--10 percent.	App. A
(e)(5)(ii)	Nearshore/inland/Great Lakes/rivers and canals--20 percent.	App. A
(e)(6)	The COTP may determine that mobilizing response resources to an area beyond the response times indicated in this paragraph invalidates the response plan. In this event, the COTP may impose additional operational restrictions (e.g., limitations on the number of transfers at a facility), or, at the COTP's discretion, the facility may be permitted to operate with temporarily modified response plan development and evaluation criteria (e.g., modified response times, alternate response resources, etc.).	App. A
(f)	(f) Response equipment identified in a response plan for a facility that handles, stores, or transports Group I through Group IV petroleum oils must be capable of arriving on scene within the times specified in this paragraph for the applicable response tier in a higher volume port area, Great Lakes, and in other areas. Response times for these tiers from the time of discovery of a discharge are...	App. A
(g)	For the purposes of arranging for response resources for a facility that handles, stores, or transports Group I through Group IV petroleum oils, by contract or other approved means as described in Sec. 154.1028(a)(1)-(4), response equipment identified for Tier 1 plan credit must be capable of being mobilized and en route to the scene of a discharge within 2 hours of notification. The notification procedures identified in the plan must provide for notification and authorization of mobilization of identified Tier 1 response resources--	App. A

USCG OPA 90 FINAL RULE *33 CFR Part 154*		
33 CFR 154.1045	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
(g)(1)	Either directly or through the qualified individual; and	App. A
(g)(2)	Within 30 minutes of a discovery of a discharge or substantial threat of discharge.	App. A
(h)	Response resources identified for Tier 2 and Tier 3 plan credit must be capable of arriving on scene within the time specified for the applicable tier.	App. A
(h)(i)	The owner or operator of a facility that handles, stores, or transports groups II through IV petroleum oils within the inland, nearshore, or offshore areas where pre-authorization for dispersant use exists must identify in their response plan, and ensure the availability of, through contract or other approved means, response resources capable of conducting dispersant operations within those areas.	App. A
(h)(1)	Dispersant response resources must be capable of commencing dispersant-application operations at the site of a discharge within 7 hours of the decision by the Federal On-Scene Coordinator to use dispersants.	App. A
(h)(2)	Dispersant response resources must include all of the following:	App. A
(h)(2)(i)	Sufficient volumes of dispersants for application as required by paragraph (i)(3) of this section. Any dispersants identified in a response plan must be of a type listed on the National Oil and Hazardous Substances Pollution Contingency Plan Product Schedule (which is contained in 40 CFR part 300, and available online from the U.S. Government Printing Office).	App. A
(h)(2)(ii)	Dispersant-application platforms capable of delivering and applying the dispersant on a discharge in the amounts as required by paragraph (i)(3) of this section. At least 50 percent of each EDAC tier requirement must be achieved through the use of fixed-wing, aircraft-based application platforms. For dispersant-application platforms not detailed within the DMP2, adequacy of performance criteria must be documented by presentation of independent evaluation materials (e.g., field tests and reports of actual use) that record the performance of the platform.	App. A
(h)(2)(iii)	Dispersant-application systems that are consistent in design with, and are capable of applying dispersants within, the performance criteria in ASTM F1413-07 (incorporated by reference, see Sec. 154.106). For dispersant-application systems not fully covered by ASTM F1413-07, such as fire monitor-type applicators, adequacy of performance criteria must be documented by presentation of independent evaluation materials (e.g., laboratory tests, field tests, and reports of actual use) that record the design of performance specifications.	App. A

USCG OPA 90 FINAL RULE *33 CFR Part 154*		
33 CFR 154.1045	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
(h)(2)(iv)	Dispersant-application personnel trained in and capable of applying dispersants according to the recommended procedures contained within ASTM F1737-07 (incorporated by reference, see Sec. 154.106).	App. A
(h)(3)	Dispersant stockpiles, application platforms, and other supporting resources must be available in a quantity and type sufficient to treat a facility's worst-case discharge (as determined by using the criteria in Appendix C, Section 8) or in quantities sufficient to meet the requirements in Table 154.1045 (i) of this section, whichever is the lesser amount.	App. A
(i)	Tiers for Effective Daily Application Capability Note to Table 154.1045(i): Gulf Coast Tier 1 is higher due to greater potential spill size and frequency in that area, and it is assumed that dispersant stockpiles would be centralized in the Gulf area. Alternative application ratios may be considered based upon submission to Coast Guard Headquarters, Office of Incident Management and Preparedness (CG-533, 202-372-2234, 2100 2nd Street, SW., room 2100, Washington, DC 20593) of peer-reviewed scientific evidence of improved capability.	N/A
(j)	The owner or operator of a facility handling Groups I through IV petroleum oil as a primary cargo must identify in the response plan, and ensure the availability through contract or other approved means, of response resources necessary to provide aerial oil tracking to support oil spill assessment and cleanup activities. Facilities operating exclusively on inland rivers are not required to comply with this paragraph. Aerial oil tracking resources must:	N/A
(j)(1)	Be capable of arriving at the site of a discharge in advance of the arrival of response resources identified in the plan for tiers 1, 2, and 3 Worst-Case Discharge response times, and for a distance up to 50 nautical miles from shore (excluding inland rivers);	N/A
(j)(2)	Be capable of supporting oil spill removal operations continuously for three 10-hour operational periods during the initial 72 hours of the discharge;	N/A
(j)(3)	Include appropriately located aircraft and personnel capable of meeting the response time requirement for oil tracking from paragraph (j)(1) of this section; and	N/A
(j)(4)	Include sufficient numbers of aircraft, pilots, and trained observation personnel to support oil spill removal operations, commencing upon initial assessment, and capable of coordinating on-scene cleanup operations, including dispersant and mechanical recovery operations. Observation personnel must be trained in:	N/A

USCG OPA 90 FINAL RULE *33 CFR Part 154*		
33 CFR 154.1045	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
(j)(4)(i)	The protocols of oil-spill reporting and assessment, including estimation of slick size, thickness, and quantity; and	N/A
(j)(4)(ii)	The use of assessment techniques in ASTM F1779-08 (incorporated by reference, see Sec. 154.106), and familiar with the use of other guides, such as NOAA's "Open Water Oil Identification Job Aid for Aerial Observation," and NOAA's "Characteristic Coastal Habitats" guide (available on the Internet at http://response.restoration.noaa.gov/use the following links in the order presented: Home[bond]Emergency Response[bond] Responding to Oil Spills).	N/A
(k)	A response plan for a facility that handles, stores, or transports Group I through Group IV petroleum oils must identify response resources with firefighting capability. The owner or operator of a facility that does not have adequate firefighting resources located at the facility or that can not rely on sufficient local firefighting resources must identify and ensure, by contract or other approved means as described in Sec. 154.1028(a)(1)-(4), the availability of adequate firefighting resources. The response plan must also identify an individual located at the facility to work with the fire department for petroleum oil fires. This individual shall also verify that sufficient well-trained firefighting resources are available within a reasonable time to respond to a worst case discharge. The individual may be the qualified individual as defined in Sec. 154.1020 and identified in the response plan or another appropriate individual located at the facility.	Fig. 2.5, App. A
(l)	The response plan for a facility that handles, stores, or transports Groups I through IV petroleum oils must identify equipment and required personnel available, by contract or other approved means as described in Sec. 154.1028(a) (1)-(4), to protect fish and wildlife and sensitive environments.	App. A
(l)(1)	Except as set out in paragraph (k)(2) of this section, the identified response resources must include the quantities of boom sufficient to protect fish and wildlife and sensitive environments as required by Sec. 154.1035(b)(4).	App. A
(l)(2)	The resources and response methods identified in a facility response plan must be consistent with the required resources and response methods to be used in fish and wildlife and sensitive environments, contained in the appropriate ACP. Facility owners or operators shall ensure that their response plans are in accordance with the ACP in effect 6 months prior to initial plan submission or the annual plan review required under Sec. 154.1065(a). Facility owners or operators are not required to, but may at their option, conform to an ACP which is less than 6 months old at the time of plan submission.	3.0, App. A

-

USCG OPA 90 FINAL RULE *33 CFR Part 154*		
33 CFR 154.1045	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
(m)	The response plan for a facility that handles, stores, or transports Groups I through IV petroleum oils must identify an oil spill removal organization(s) with response resources that are available, by contract or other approved means as described in Sec. 154.1028(a) (1)-(4), to effect a shoreline cleanup operation commensurate with the quantity of emulsified petroleum oil to be planned for in shoreline cleanup operations.	App. A
(m)(1)	Except as required in paragraph (l)(2) of this section, the shoreline cleanup response resources required must be determined as described in Appendix C of this part.	App. A
(m)(2)	The resources and response methods identified in a facility response plan must be consistent with the required shoreline cleanup resources and methods contained in the appropriate ACP. Facility owners or operators shall ensure that their response plans are in accordance with the ACP in effect 6 months prior to initial plan submission or the annual plan review required under Sec. 154.1065(a). Facility owners or operators are not required to, but may at their option, conform to an ACP which is less than 6 months old at the time of plan submission.	3.0, App. A
(n)	Appendix C of this part describes the procedures to determine the maximum extent practicable quantity of response resources that must be identified and available, by contract or other approved means as described in Sec. 154.1028(a) (1)-(4), for the maximum most probable discharge volume, and for each worst case discharge response tier.	App. A, App. B
(n)(1)	Included in Appendix C of this part is a cap that recognizes the practical and technical limits of response capabilities that an individual facility owner or operator can be expected to contract for in advance.	App. A, App. B

USCG OPA 90 FINAL RULE *33 CFR Part 154*		
33 CFR 154.1045	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
(n)(2)	Table 5 in Appendix C of this part lists the caps that apply in February 18, 1993, and February 18, 1998. Depending on the quantity and type of petroleum oil handled by the facility and the facility's geographic area of operations, the resource capability caps in this table may be reached. The owner or operator of a facility whose estimated recovery capacity exceeds the applicable contracting caps in Table 5 shall identify sources of additional equipment equal to twice the cap listed in Tiers 1, 2, and 3 or the amount necessary to reach the calculated planning volume, whichever is lower. The identified resources must be capable of arriving on scene not later than the Tier 1, 2, and 3 response times in this section. No contract is required. While general listings of available response equipment may be used to identify additional sources, a response plan must identify the specific sources, locations, and quantities of equipment that a facility owner or operator has considered in his or her planning. When listing Coast Guard classified oil spill removal organization(s) which have sufficient removal capacity to recover the volume above the response capability cap for the specific facility, as specified in Table 5 in Appendix C of this part, it is not necessary to list specific quantities of equipment.	App. A, App. B
(o)	The Coast Guard will continue to evaluate the environmental benefits, cost efficiency and practicality of increasing mechanical recovery capability requirements. This continuing evaluation is part of the Coast Guard's long term commitment to achieving and maintaining an optimum mix of oil spill response capability across the full spectrum of response modes. As best available technology demonstrates a need to evaluate or change mechanical recovery capacities, a review of cap increases and other requirements contained within this subpart may be performed. Any changes in the requirements of this section will occur through a public notice and comment process. During this review, the Coast Guard will determine if established caps remain practicable and if increased caps will provide any benefit to oil spill recovery operations. The review will include, at least, an evaluation of: 1. Best available technologies for containment and recovery; 2. Oil spill tracking technology; 3. High rate response techniques; 4. Other applicable response technologies; and 5. Increases in the availability of private response resources.	-----

USCG OPA 90 FINAL RULE *33 CFR Part 154*		
33 CFR 154.1050	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
33 CFR 154.1050		
(a)	A response plan submitted to meet the requirements of Sec. 154.1035 or Sec. 154.1040, as appropriate, must identify the training to be provided to each individual with responsibilities under the plan. A facility owner or operator must identify the method to be used for training any volunteers or casual laborers used during a response to comply with the requirements of 29 CFR 1910.120.	E.3
(b)	A facility owner or operator shall ensure the maintenance of records sufficient to document training of facility personnel; and shall make them available for inspection upon request by the U.S. Coast Guard. Records for facility personnel must be maintained at the facility for 3 years.	E.3
(c)	Where applicable, a facility owner or operator shall ensure that an oil spill removal organization identified in a response plan to meet the requirements of this subpart maintains records sufficient to document training for the organization's personnel and shall make them available for inspection upon request by the facility's management personnel, the qualified individual, and U.S. Coast Guard. Records must be maintained for 3 years following completion of training.	E.3
(d)	The facility owner or operator remains responsible for ensuring that all private response personnel are trained to meet the Occupational Safety and Health Administration (OSHA) standards for emergency response operations in 29 CFR 1910.120.	E.3
33 CFR 154.1055		
(a)(1)	Qualified individual notification exercises (quarterly).	E.4
(a)(2)	Spill management team tabletop exercises (annually). In a 3-year period, at least one of these exercises must include a worst case discharge scenario.	E.4
(a)(3)(i)	Equipment deployment exercises: Semiannually for facility owned and operated equipment.	E.4
(a)(3)(ii)	Equipment deployment exercises: Annually for oil spill removal organization equipment.	E.4
(a)(4)	Emergency procedures exercises (optional)	E.4

USCG OPA 90 FINAL RULE *33 CFR Part 154*		
33 CFR 154.1057	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
33 CFR 154.1057 Inspection and maintenance of response resources.		
(a)	A facility owner or operator required to submit a response plan under this part must ensure that--	-----
(a)(1)	Containment booms, skimmers, vessels, and other major equipment listed or referenced in the plan are periodically inspected and maintained in good operating condition, in accordance with manufacturer's recommendations, and best commercial practices; and	Fig. A.2
(a)(2)	All inspection and maintenance is documented and that these records are maintained for 3 years.	E.4
(b)	For equipment which must be inspected and maintained under this section the Coast Guard may--	Fig. A.2
(b)(1)	Verify that the equipment inventories exist as represented;	-----
(b)(2)	Verify the existences of records required under this section;	-----
(b)(3)	Verify that the records of inspection and maintenance reflect the actual condition of any equipment listed or referenced; and	-----
(b)(4)	Inspect and require operational tests of equipment.	-----
(c)	This section does not apply to containment booms, skimmers, vessels, and other major equipment listed or referenced in the plan and ensured available from an oil spill removal organization through the written consent required under Sec. 154.1028(a)(5).	N/A
33 CFR 154.1060 Submission and Approval procedures.		
(a)	The owner or operator of a facility to which this subpart applies shall submit one copy of a facility response plan meeting the requirements of this subpart to the COTP for initial review and, if appropriate, approval.	1.5, Foreword - Distribution List
(b)	The owner or operator of a facility to which this subpart applies shall include a statement certifying that the plan meets the applicable requirements of subparts F, G, H, and I of this part, as appropriate.	Foreword
(c)	For an MTR facility that is located in the inland response zone where the EPA Regional Administrator is the predesignated Federal On- Scene Coordinator, the COTP may consult with the EPA Federal On-Scene Coordinator prior to any final approval.	-----
(d)	For an MTR facility identified in Sec. 154.1015(c) of this subpart that is also required to prepare a response plan under 40 CFR part 112, if the COTP determines that the plan meets all applicable requirements and the EPA Regional Administrator raises no objection to the response plan contents, the COTP will notify the facility owner or operator in writing that the plan is approved.	Whole Document

USCG OPA 90 FINAL RULE *33 CFR Part 154*		
33 CFR 154.1060	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
(e)	The plan will be valid for a period of up to 5 years. The facility owner or operator must resubmit an updated plan every 5 years as follows:	1.4
(e)(1)	For facilities identified in only Sec. 154.1015(b)of this subpart, the 5-year period will commence on the date the plan is submitted to the COTP.	1.4
(e)(2)	For facilities identified in Sec. 154.1015(c) of this subpart, the 5-year period will commence on the date the COTP approves the plan.	1.4
(e)(3)	All resubmitted response plans shall be accompanied by a cover letter containing a detailed listing of all revisions to the response plan.	1.4
(f)	For an MTR facility identified in Sec. 154.1015(c)(2) the COTP will notify the facility owner or operator in writing that the plan is approved.	-----
(g)	If a COTP determines that a plan does not meet the requirements of this subpart either upon initial submission or upon 5-year resubmission, the COTP will return the plan to the facility owner or operator along with an explanation of the response plan's deficiencies. The owner or operator must correct any deficiencies in accordance with Sec. 154.1070 and return the plan to the COTP within the time specified by the COTP in the letter describing the deficiencies.	-----
(h)	The facility owner or operator and the qualified individual and the alternative qualified individual shall each maintain a copy of the most current response plan submitted to the COTP. One copy must be maintained at the facility in a position where the plan is readily available to persons in charge of conducting transfer operations.	Foreword - Distribution List
33 CFR 154.1065 Plan review and revision procedures.		
(a)	A facility owner or operator must review his or her response plan (s) annually. This review shall incorporate any revisions to the plan, including listings of fish and wildlife and sensitive environments identified in the ACP in effect 6 months prior to plan review.	1.4
(a)(1)	For an MTR facility identified in Sec. 154.1015(c)of this subpart as a "significant and substantial harm facility," this review must occur within 1 month of the anniversary date of COTP approval of the plan. For an MTR facility identified in Sec. 154.1015(b) of this subpart, as a "substantial harm facility" this review must occur within 1 month of the anniversary date of submission of the plan to the COTP.	1.4
(a)(2)	The facility owner or operator shall submit any revision(s) to the response plan to the COTP and all other holders of the response plan for information or approval, as appropriate.	1.4

USCG OPA 90 FINAL RULE *33 CFR Part 154*		
33 CFR 154.1065	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
(a)(2)(i)	Along with the revisions, the facility owner or operator shall submit a cover letter containing a detailed listing of all revisions to the response plan.	1.4
(a)(2)(ii)	If no revisions are required, the facility owner or operator shall indicate the completion of the annual review on the record of changes page.	1.4
(a)(2)(iii)	The COTP will review the revision(s) submitted by the owner or operator and will give written notice to the owner or operator of any COTP objection(s) to the proposed revisions within 30 days of the date the revision(s) were submitted to the COTP. The revisions shall become effective not later than 30 days from their submission to the COTP unless the COTP indicates otherwise in writing as provided in this paragraph. If the COTP indicates that the revision(s) need to be modified before implementation, the owner or operator will modify the revision(s) within the time period set by the COTP.	-----
(3)	Any required revisions must be entered in the plan and noted on the record of changes page.	Foreword
(3)(b)	The facility owner or operator shall submit revisions to a previously submitted or approved plan to the COTP and all other holders of the response plan for information or approval within 30days, whenever there is--	1.4
(3)(b)(1)	A change in the facility's configuration that significantly affects the information included in the response plan;	1.4
(3)(b)(2)	A change in the type of oil (petroleum oil group)handled, stored, or transported that affects the required response resources;	1.4
(3)(b)(3)	A change in the name(s) or capabilities of the oil spill removal organization required by Sec. 154.1045;	1.4
(3)(b)(4)	A change in the facility's emergency response procedures;	1.4
(3)(b)(5)	A change in the facility's operating area that includes ports or geographic area(s) not covered by the previously approved plan. A facility may not operate in an area not covered in a plan previously submitted or approved, as appropriate, unless the revised plan is approved or interim operating approval is received under Sec. 154.1025; or	N/A
(3)(b)(6)	Any other changes that significantly affect the implementation of the plan.	1.4

USCG OPA 90 FINAL RULE *33 CFR Part 154*		
33 CFR 154.1065	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
(3)(c)	Except as required in paragraph (b) of this section, revisions to personnel and telephone number lists included in the response plan do not require COTP approval. The COTP and all other holders of the response plan shall be advised of these revisions and provided a copy of the revisions as they occur.	1.4
(3)(d)	The COTP may require a facility owner or operator to revise a response plan at any time as a result of a compliance inspection if the COTP determines that the response plan does not meet the requirements of this subpart or as a result of inadequacies noted in the response plan during an actual pollution incident at the facility.	-----

DOT/PHMSA *49 CFR Part 194*		
49 CFR 194.105	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
(a)	... determine the worst case discharge ... provide methodology, including calculations, used to arrive at the volume.	App. B
(b)	The worst case discharge is the largest volume, in barrels, of the following:	-----
(b)(1)	... maximum release time in hours, plus the maximum shutdown response time in hours, multiplied by the maximum flow rate expressed in barrels per hour, plus the largest line drainage volume after shutdown of the line section(s) ...; or	App. B
(b)(2)	The largest foreseeable discharge for the line section(s) within a response zone, expressed in barrels, based on the maximum historic discharge, if one exists, adjusted for any subsequent corrective or preventative action taken; or	N/A (App. B)
(b)(3)	If the response zone contains one or more breakout tanks, the capacity of the single largest tank or battery of tanks within a single secondary containment system, adjusted for the capacity or size of the secondary containment system, expressed in barrels.	N/A (App. B)
(b)(4)	Operators may claim prevention credits for breakout tank secondary containment and other specific spill prevention measures as follows:...	N/A (App. B)
49 CFR 194.107		
(a)	Each response plan must plan for resources for responding, to the maximum extent practicable, to a worst case discharge, and to a substantial threat of such a discharge.	5.0, App. A
(b)	An operator must certify in the plan ... reviewed NCP and each applicable ACP...	Foreword
(b)(1)	As a minimum to be consistent with the NCP as a facility response plan must:	-----
(b)(1)(i)	Demonstrate an operator's clear understanding of the function of the Federal response structure...	App. G
(b)(1)(ii)	Establish provisions to ensure the protection of safety at the response site; and	5.3
(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...	6.4
(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. A, App. B, App. F
(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

DOT/PHMSA *49 CFR Part 194*		
49 CFR 194.107	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
(b)(2)(iv)	Establish the procedures for obtaining an expedited decision on use of dispersants or other chemicals.	6.4
(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, App. B
(c)(1)(iv)	The name, address, and telephone number of the oil spill response organization, if appropriate,	Fig. 2.2, App. A
(c)(1)(v)	Response activities and response resources,	3.0, App. A
(c)(1)(vi)	Names and telephone numbers of Federal, state, and local agencies which the operator expects to have pollution control responsibilities or support,	Fig. 2.5
(c)(1)(vii)	Training procedures,	App. E
(c)(1)(viii)	Equipment testing,	App. A
(c)(1)(ix)	Drill program - an operator will satisfy the requirement for a drill program by following the National Preparedness for Response Exercise Program (PREP) guidelines. An operator choosing not to follow PREP guidelines must have a drill program that is equivalent to PREP. The operator must describe the drill program in the response plan and OPS will determine if the program is equivalent to PREP.	App. E
(c)(1)(x)	Plan review and update procedures;	1.4
(c)(2)	An Appendix for each response zone that includes the information required in paragraph (c)(1)(i)-(ix) of this section and the worst case discharge calculations that are specific to that response zone. An operator submitting a response plan for a single response zone does not need to have a core plan and a response zone Appendix. The operator of a single response zone onshore pipeline shall have a single summary in the plan that contains the required information in 194.113.7; and.	N/A
(c)(3)	A description of the operator's response management system including the functional areas of finance, logistics, operations, planning, and command. The plan must demonstrate that the operator's response management system uses common terminology and has a manageable span of control, a clearly defined chain of command, and sufficient trained personnel to fill each position.	4.0
49 CFR 194.111		
(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

DOT/PHMSA *49 CFR Part 194*		
49 CFR 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
(b)	The information summary for the response zone Appendix, required in 194.107, must include:	----
(b)(1)	The information summary for the core plan.	Fig. 1.1
(b)(2)	The names or titles and 24-hour telephone numbers of the qualified individual(s) and at least one alternate qualified individual(s);	Fig. 1.1
(b)(3)	The description of the response zone, including county(s) and state(s), for those zones in which a worst case discharge could cause substantial harm to the environment.	Fig. 1.1
(b)(4)	A list of line sections for each pipeline contained in the response zone, identified by milepost or survey station number, or other operator designation.	Fig. 1.1
(b)(5)	The basis for the operator's determination of significant and substantial harm.	Foreword
(b)(6)	The type of oil and volume of the worst case discharge.	Fig. 1.1
49 CFR 194.115		
(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
49 CFR 194.117		
(a)	Each operator shall conduct training to ensure that:	-----
(a)(1)	All personnel know --	-----
(a)(1)(I)	Their responsibilities under the response plan	App. E
(a)(1)(ii)	The name and address of, and the procedure for contacting, the operator on a 24-hour basis	2.0, App. E
(a)(1)(iii)	The name of, and procedures for contacting, the qualified individual on a 24-hour basis	2.0, App. E

DOT/PHMSA *49 CFR Part 194*		
49 CFR 194.117	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
(a)(2)	Reporting personnel know --	-----
(a)(2)(i)	The content of the information summary of the response plan.	App. E
(a)(2)(ii)	The toll-free telephone number of the National Response Center	2.0, App. E
(a)(2)(iii)	The notification process	2.0, App. E
(a)(3)	Personnel engaged in response activities know --	-----
(a)(3)(I)	The characteristics and hazards of the oil discharged	3.0, App. E
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, App. E
(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, App. E
(a)(3)(iv)	The proper firefighting procedures and use of equipment, fire suits, and breathing apparatus	App. E
(b)	Each operator shall maintain a training record for each individual that has been trained as required by this section. These records must be maintained in the following manner as long as the individual is assigned duties under the response plan	-----
(b)(1)	Records for operator personnel must be maintained at the operator's headquarters	App. E
(b)(2)	Records for personnel engaged in response, other than operator personnel, shall be maintained as determined by the operator.	App. E
(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
49 CFR 194.119		
(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...	N/A
(f)	...PHMSA may require an operator to provide a copy of the response plan to the OSC...	-----

OSHA EMERGENCY ACTION PLANS *(29 CFR Part 1910.38) and Employee Alarm Systems (29 CFR Part 1910.165)*		
29 CFR	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
1910.38	***Emergency action plan:***	
(a)	Application	1.0
(b)	Written and Oral Emergency Plans	Entire Plan
(c)	Elements:	-----
(c)(1)	Procedures for reporting a fire or other emergency;	2.0, 3.0
(c)(2)	Procedures for emergency evacuation, including type of evacuation and exit route assignments;	App. D
(c)(3)	Procedures to be followed by employees who remain to operate critical plant operations before they evacuate;	3.0
(c)(4)	Procedures to account for all employees after emergency evacuation has been completed.	App. D
(c)(5)	Procedures to be followed by employees performing rescue and medical duties;	3.3
(c)(6)	The name or job titles of every employee who may be contacted by employees who need more information about the plan or an explanation of their duties under the plan.	2.0
(d)	Alarm system	2.1
(e)	Training	App. E
(f)	Review of Emergency Action Plan	1.4
1910.165	***Employee alarm systems:***	
(b)	General requirements	2.1
(b)(1)	Purpose of alarm system	2.1
(b)(4)	Preferred means of reporting emergencies	2.1
(d)	Maintenance and testing	App. A

OSHA HAZWOPER *29 CFR 1910.120*		
29 CFR	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
1910.120(q)	***Emergency response to hazardous substance releases:***	
(1)	Emergency response plan	Entire Plan
(2)	Elements of an emergency response plan:	-----
(i)	Pre-emergency planning and coordination with outside parties	2.0, App. A
(ii)	Personnel roles, lines of authority, training, and communication	2.0, 4.0, App. E
(iii)	Emergency recognition and prevention	3.0
(iv)	Safe distances and places of refuge	App. D
(v)	Site security and control	App. C.1
(vi)	Evacuation routes and procedures	App. D
(vii)	Decontamination procedures	3.4
(viii)	Emergency medical treatment and response procedures	3.3
(ix)	Emergency alerting and response procedures	2.0, 3.0
(x)	Critique of response and follow-up	E.5
(xi)	PPE and emergency equipment	3.4, App. A
(xii)	Emergency response plan coordination and integration	1.2
(3)	Procedures for handling emergency response:	-----
(i)	The senior emergency response official responding to an emergency shall become the individual in charge of a site-specific Incident Command System (ICS).	3.0, 4.0, 5.0
(ii)	The individual in charge of the ICS shall identify, to the extent possible, all hazardous substances or conditions, present and shall address as appropriate site analysis, use of engineering controls, maximum exposure limits, hazardous substance handling procedures, and use of any new technologies.	3.0, 4.0, 5.0
(iii)	Implementation of appropriate emergency operations and use of PPE.	3.0, 4.0, 5.0
(iv)	Employees engaged in emergency response and exposed to hazardous substances presenting an inhalation hazard or potential inhalation hazard shall wear positive pressure self-contained breathing apparatus while engaged in emergency response.	3.0, 4.0, 5.0
(v)	The individual in charge of the ICS shall limit the number of emergency response personnel at the emergency site, in those areas of potential or actual exposure to incident or site hazards, to those who are actively performing emergency operations.	3.0, 4.0, 5.0
(vi)	Backup personnel shall stand by with equipment ready to provide assistance or rescue.	3.0, 4.0, 5.0

OSHA HAZWOPER *29 CFR 1910.120*		
29 CFR	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
1910.120(q)	***Emergency response to hazardous substance releases (cont'd):***	
(vii)	The individual in charge of the ICS shall designate a safety official, who is knowledgeable in the operations being implemented at the emergency response site.	3.0, 4.0, 5.0
(viii)	When activities are judged by the safety official to be an IDLH condition and/or to involve an imminent danger condition, the safety official shall have authority to alter, suspend, or terminate those activities.	3.0, 4.0, 5.0
(ix)	After emergency operations have terminated, the individual in charge of the ICS shall implement appropriate decontamination procedures.	3.0, 4.0, 5.0
(x)	When deemed necessary for meeting the tasks at hand, approved self-contained compressed air breathing apparatus may be used with approved cylinders from other approved self-contained compressed air breathing apparatus provided that such cylinders are of the same capacity and pressure rating.	3.0, 4.0, 5.0
(4)	Skilled support personnel	4.0, App. E
(5)	Specialist employees	4.0, App. E
(6)	Training	App. E
(7)	Trainers	App. E
(8)	Refresher training	App. E
(9)	Medical surveillance and consultation	3.0
(10)	Chemical protective clothing	3.0
(11)	Post-emergency response operations	3.0, 5.0, App. E

CALIFORNIA OSPR CROSS REFERENCE		
OSPR SECTION	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
817.02(a)(1)(A)	Name and address of facility	Foreword
817.02(a)(1)(B)	Owner/Operator of facility	Response Plan Cover Sheet, Fig. 1.1
817.02(a)(1)(C)	Contact person	Fig. 1.1, § 2.0
817.02(a)(1)(D)	Plan review statement	§ 1.4
817.02(a)(1)(E)	Financial responsibility certification number	Foreword
817.02(a)(2)	Qualified individual and alternates	Fig. 1.1
817.02(a)(3)	Agent for service of process	Foreword, Fig. 1.1
817.02(a)(4)	Response organization(s)/contractor verification	Fig. 2.5, App. A
817.02(a)(5)	Response organization(s) contract location	App. A
817.02(b)(1)(A)	Facility description	Fig. 1.1
	- diagrams	Fig. 1.3
	- age, design, general condition	Fig. 1.1
817.02(b)(1)(B)	Products handled/daily throughput	Fig. 1.1
817.02(b)(1)(C)	Normal handling procedures	Fig. 1.1
817.02(b)(1)(D)	Hours of operation	Fig. 1.1
817.02(b)(1)(E)	Spill from E&P facility	N/A
817.02(b)(2)(A)	Site topography, drainage, and nearby watercourses	App. C
817.02(b)(2)(B)	Vicinity maps	Fig. 1.2, Fig. 1.3
817.02(b)(2)(C)	Seasonal hydrographic and climatic conditions	Fig.1.1
817.02(b)(2)(D)	Physical geographic features	Fig. 1.1
	- water depths	§ 6.0
	- shoreline types	§ 6.0
817.02(b)(2)(E)	Logistical resources	§ 2.0
	- Fire services	§ 2.0
	- Medical services	§ 2.0
	- Hotel accommodations	§ 2.0
817.02(b)(2)(F)	Shoreline Access/Staging	§ 6.0, App. H
817.02(c)(1)(A)	Risk and Hazard Analysis	App. C, App. H
817.02(c)(1)(B)	Evaluation methods	App. C, App. H
	- Composition of working group	App. C, App. H
	- Documentation of analysis	App. C, App. H
817.02(c)(1)(C)	Summary of analysis	App. C, App. H

CALIFORNIA OSPR CROSS REFERENCE		
OSPR SECTION	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
817.02(c)(1)(C)(1)	Analysis method	App. C, App. H
817.02(c)(1)(C)(2)	Inventory of hazards identified in analysis	App. C, App. H
817.02(c)(1)(C)(3)	Analysis of potential hazards	App. C, App. H
817.02(c)(1)(C)(4)	Control measures	App. C, App. H
817.02(c)(1)(C)(5)	Spill predictions	App. C, App. H
817.02(c)(1)(D)	Availability of analysis	App. C, App. H
817.02(c)(2)(A)	Spill trajectories	§ 3.0, § 6.0, App. H
817.02(c)(2)(B)	Toxicity of spills	§ 6.0
	- Seasonal sensitivity	§ 6.0
	- Prioritization of areas	§ 6.0
817.02(c)(3)(A)	Environmentally sensitive areas	§ 6.0
817.02(c)(3)(B)	Economically and culturally sensitive areas	§ 6.0
817.02(c)(4)(A)	Testing, maintenance, and inspection procedures	App. C
817.02(c)(4)(B)	Methods to reduce spills	App. C
817.02(c)(4)(B)(1)	Standard procedures	App. C
817.02(c)(4)(B)(2)	Testing schedule	App. C
817.02(c)(4)(B)(3)	Description of secondary containment	App. C
817.02(c)(4)(C)	Communication during operations	App. A
817.02(c)(4)(D)	Protection measures for flood prone areas	§ 3.0, App. C
817.02(c)(4)(E)	Implementation of measures identified in Risk and Hazard Analysis	App. C, App. H
817.02(d)(1)	Reasonable worst case spills	App. B
817.02(d)(2)	Persistence and emulsification factors - Response Planning Volumes	App. B
817.02(d)(3)	Response capability standards	App. B
817.02(d)(3)(A)	Total equipment required	App. A, App. B
817.02(d)(3)(B)	Daily Recovery Rate	App. B
817.02(d)(4)(A)	Non-cascadable equipment in High Volume Port	App. B
817.02(d)(5)(A)	Demonstration of access to on-water response equipment and services	App. A
817.02(d)(5)(B)(1)	Location, inventory, and ownership of equipment	App. A
817.02(d)(5)(B)(2)	Inventory of non-mechanical response equipment	App. A
817.02(d)(5)(B)(3)	Storage and transfer equipment	App. A
817.02(d)(5)(B)(4)	Rated capacity and operational characteristics of equipment	App. A

CALIFORNIA OSPR CROSS REFERENCE		
OSPR SECTION	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
817.02(d)(5)(B)(5)	Derated capacity for major equipment	App. A
817.02(d)(5)(B)(6)	Vessels dedicated for oil recovery	App. A
817.02(d)(5)(B)(7)	Vessels of opportunity available	App. A
817.02(d)(5)(B)(8)	Pumping and Transfer equipment	App. A
817.02(d)(5)(B)(9)	Storage, maintenance, and inspection of equipment	App. A
817.02(d)(5)(B)(10)	List of response positions/job descriptions	§ 4.0, App. A
817.02(d)(5)(B)(10)(2)	Match of personnel and equipment	§ 4.0
817.02(d)(5)(B)(10)(3)	Personnel for 14 day response	§ 4.0
817.02(d)(5)(B)(11)	Procedures to transport equipment during normal/adverse conditions	§ 4.0
817.02(d)(5)(C)	List of response personnel and qualifications	§ 4.0
817.02(d)(5)(F)	Availability of personnel and equipment for on-water response	§ 4.0
817.02(d)(5)(G)	Group 5 oils	App. B
817.02(d)(6)(A)	On-water containment and recovery methods	§ 3.0, App. H
817.02(d)(6)(B)	Nearshore containment/recovery methods	§ 3.0, App. H
817.02(d)(6)(C)	Chemical/non-mechanical recovery methods	§ 3.0, App. H
817.02(d)(6)(D)	Methods for tracking oil	§ 3.0, App. H
817.02(d)(6)(E)	Locations of weather stations to be used	§ 2.0
817.02(e)(1)	Shoreline Response Planning Volumes	App. B
817.02(e)(2)	Shoreline response equipment and services	App. A
817.02(e)(2)(A)(1)	Amount of equipment required for shoreline response	App. A
817.02(e)(2)(A)(2)	Location, inventory, and ownership of equipment	App. A
817.02(e)(2)(A)(3)	Storage and maintenance, and inspection of equipment	§ 4.0, App. A
817.02(e)(2)(B)(1)	List of response positions/job descriptions	§ 4.0, App. A
817.02(e)(2)(B)(2)	Match of personnel and equipment	§ 4.0, App. A
817.02(e)(2)(B)(3)	Personnel for 14 day response	§ 4.0, App. A
817.02(e)(2)(C)	Availability of personnel/equipment for shoreline response	§ 4.0, App. A
817.02(e)(3)	Reserved	--------
817.02(e)(4)(A)(1)	Shoreline protection procedures	§ 6.0, App. H
817.02(e)(4)(A)(2)	Shoreline containment/recovery procedures	§ 6.0, App. H

CALIFORNIA OSPR CROSS REFERENCE		
OSPR SECTION	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
817.02(e)(4)(A)(3)	Minimization of impacts from response procedures	§ 6.0, App. H
817.02(e)(4)(B)	Site specific protection, response, and clean-up strategies	§ 6.0, App. H
817.02(e)(4)(C)	Utilize all strategies appropriate to the potential impact sites	§ 6.0, App. H
817.02(e)(4)(D)	Contracted, trained spill response personnel	App. A
817.02(f)(1)	Organization of Spill Management Team - use of Unified Command	§ 4.0
817.02(f)(1)(A)	Chain of command	§ 4.0
817.02(f)(1)(B)	Public Information Officer incorporation into ICS	§ 4.0
817.02(f)(1)(C)	Safety program	§ 3.0, App. C
817.02(f)(2)(A)	Establishment of central command post	§ 6.0
817.02(f)(2)(B)	Establishment of communications post	§ 6.0
817.02(f)(2)(C)	Establishment of staging areas	§ 6.0
817.02(f)(3)	Depiction of major stages of response	§ 3.0
817.02(f)(4)(A)	Fire, explosion, and rescue procedures	§ 3.0
817.02(f)(4)(B)	Medical/first aid procedures	§ 3.0
817.02(f)(4)(C)	Ground, marine, and air traffic control	§ 3.0
817.02(f)(4)(D)	Management of access and decontamination	§ 3.0
817.02(f)(4)(E)	PPE for responders	§ 3.0
817.02(f)(5)(A)	Spill minimization/mitigation procedures	§ 3.0
817.02(f)(5)(B)	Shutdown and mitigation procedures for specific personnel	§ 3.0
817.02(f)(5)(B)(1)	Transfer equipment failure	§ 3.0
817.02(f)(5)(B)(2)	Tank overfill	§ 3.0
817.02(f)(5)(B)(3)	Tank failure	§ 3.0
817.02(f)(5)(B)(4)	Pipe rupture	§ 3.0
817.02(f)(5)(B)(5)	Pipe leak	§ 3.0
817.02(f)(5)(B)(6)	Explosion and/or fire	§ 3.0
817.02(f)(5)(B)(7)	Other failures	§ 3.0
817.02(f)(6)(A)	Communication procedures	App. A
817.02(f)(6)(B)	Communication function/channels/procedures	App. A
817.02(f)(6)(C)	Broadcast ranges	App. A
817.02(f)(6)(D)	Back-up communications	App. A
817.02(f)(7)	Post spill review procedures	§ 3.0

CALIFORNIA OSPR CROSS REFERENCE		
OSPR SECTION	**BRIEF DESCRIPTION**	**LOCATION IN PLAN**
817.02(f)(8)	Procedures to manage access and designate exclusion, decontamination and safe zones	§ 3.0
817.02(f)(9)	Procedures to develop Site Safety Plan	§ 5.0
817.02(g)(1)(A)	Spill reporting to applicable agencies	§ 2.0
817.02(g)(1)(B)	Central reporting office or individual and alternate	§ 2.0
817.02(g)(1)(C)	Prioritization of notifications	§ 2.0
817.02(g)(2)(A)	Notification of QI, OES and NRC	§ 2.0
817.02(g)(2)(B)	Notification of response contractor(s)	§ 2.0
817.02(g)(2)(C)	Telephone list	§ 2.0
817.02(g)(3)	Call-out procedures for additional equipment	§ 2.0, § 4.0
817.02(g)(4)	Notification checklist	§ 2.0
817.02(h)(1)	Identification of sufficient temporary storage	§ 3.0, App. H
817.02(h)(2)	Personnel responsible for temporary storage	§ 3.0, App. H
817.02(h)(3)	Temporary storage site criteria and methods	§ 3.0, App. H
817.02(h)(4)	Agencies responsible for approving temporary storage	§ 3.0, App. H
817.02(h)(5)	Information to expedite approval for temporary storage	§ 3.0, App. H
817.02(i)	Wildlife rehabilitation	§ 6.0
817.02(j)(1)(A)	Type and frequency training	App. E
817.02(j)(1)(B)	Use of volunteers	App. A
817.02(j)(2)(A)	Training to reduce operational risks identified in Hazard and Risk Analysis	App. E
817.02(j)(2)(B)(1)	Training for personnel involved in operations that could result in spill	App. E
817.02(j)(2)(B)(2)	Schedule and type of training for each position	App. E
817.02(j)(2)(C)	Prerequisites for positions	App. E
817.02(j)(2)(D)	Training Regulation Compliance	--------
817.02(j)(3)	Safety Training for all spill response personnel, including non-permanent responders	App. E
817.02(j)(4)	Maintain training records for 3 years	--------
817.02(k)	Drills and Exercises	--------
817.02(k)(1)	Describe the drill and exercise program	App. E
817.02(k)(2)	Training sessions may constitute creditable drills and exercises?	App. E
817.02(k)(3)	Ensure all response resources identified in the Plan participate in equipment deployment exercises at least once every three years	App. E

CALIFORNIA CODE OF REGULATIONS 22 CCR §66264.52 and §66264.53		
A Large Quantity Generator (LQG) must comply with the requirements of 22 CCR §66264.52 and §66264.53. Specifically, this part, titled "Contingency Plan and Emergency Procedures", requires that generators have a written contingency plan to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden releases of hazardous waste or hazardous waste constituents to air, soil, or surface water. The provisions of the Plan must be carried out immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents that could threaten human health or the environment.		
Regulatory Citation	**Regulatory Requirement**	**Location in Plan**
22 CCR §66264.52(a)	A description of the actions that Facility personnel must take to respond to hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to the air, soil, or surface water.	Section 3.0 (all)
22 CCR §66264.52(b)	If the owner or operator has already prepared a Spill Prevention, Control, and Countermeasure (SPCC) Plan in accordance with Title 40 CFR Part 112, or Part 1510, or some other emergency or contingency plan, the owner or operator need only amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this chapter.	Regulatory Cross Reference
22 CCR §66264.52(c)	Arrangements agreed to by local police departments, fire departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services and to indicate whether State or local authorities decline to enter into such arrangements.	Foreword - Distribution List (Arrangements Pending)
22 CCR §66264.52(d)	A listing of names, addresses, and phone numbers (office and home) of all persons qualified to act as an emergency coordinator. The list must be kept up to date.	Section 1.0 - Figure 1.1, Section 2.0 - Figure 2.1
22 CCR §66264.52(e)	A list of all emergency equipment at the Facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems and decontamination equipment) where this equipment is required. The list must be kept up to date. The Contingency Plan must include the location and a physical description of each item on the list, and a brief outline of its capabilities.	Appendix A, Appendix D, Evacuation Diagram
22 CCR §66264.52(f)	An evacuation plan for Facility personnel where there is a possibility that evacuation could be necessary. The Plan must include signals to be used to begin evacuation, evacuation routes, and alternate evacuation routes.	Appendix D (all)
22 CCR §66264.52(g)	The plan shall include the current telephone number of the State Office of Emergency Services.	Section 2.0 - Figure 2.5

CALIFORNIA CODE OF REGULATIONS 22 CCR §66264.52 and §66264.53		
Regulatory Citation	**Regulatory Requirement**	**Location in Plan**
22 CCR §66264.53(a)	A copy of the contingency plan and all revisions to the plan shall be:	-----
22 CCR §66264.53(a)(1)	Maintained at the facility; and	Foreword - Distribution List
22 CCR §66264.53(a)(2)	Submitted to all local police departments, fire departments, hospitals, and State and local emergency response teams that may be called upon to provide emergency services	Section 2.0 - Figure 2.5
22 CCR §66264.53(b)	The contingency plan shall be submitted to the Department with Part B of the permit application under Chapter 20, of this division and, after modification or approval, will become a condition of any permit issued.	Submitted independent of this Plan