INTEGRATED CONTINGENCY PLAN

LOUISIANA PIPELINE RESPONSE ZONE

PHMSA Sequence Number 74

Owner/Operator:

Phillips 66
600 N. Dairy Ashford, TA-2136
Houston, Texas 77079

24-Hour Number:

(800) 231-2551 or (877) 267-2290

Volume 1 of 1

Prepared by: The Response Group, Inc. 13939 Telge Road; Cypress, Texas 77429

Master Table of Contents

Core – Table of Contents

Section I – Table of Contents

Sec. I-1 Purpose and Scope of Plan Coverage

This Integrated Contingency Plan (ICP) is designed to follow the National Response Team's (NRT) Integrated Contingency Plan Guidance (Federal Register # 61: 28641-28664). This ICP is a mechanism to consolidate multiple plans that the Company is required to maintain throughout the United States.

The purpose of this Plan is to help Facility personnel prepare for and respond quickly and safely to a spill incident originating at the Facility. The Plan's primary purpose is to ensure an effective, comprehensive response and prevent injury or damage to company employees, the public and the environment.

The specific objectives of the Plan are to:

- Define alert and notification procedures to be followed when a spill incident occurs.
- Document equipment, manpower and other resources available to assist with a spill incident response.
- Describe an oil spill response team, assign individuals to fill the positions on the team, and define the roles and responsibilities of team members.
- Define organizational lines of responsibility to be adhered to during a spill incident response.
- Outline response procedures and techniques to be used during a spill incident.
- Provide guidelines for handling a spill response operation.

The Company ICP Core contains information applicable to the following entities:

- Phillips 66 (previously associated with ConocoPhillips),
- Phillips 66 Company (previously associated with ConocoPhillips Company),
  - Chisholm Pipeline Company,
  - WesTTex 66 Pipe Line Company,
  - Phillips 66 Pipeline LLC (previously ConocoPhillips Pipe Line Company; Phillips Pipe Line Company merged with Tosco Pipeline Company and Union Pipeline Company and then with Conoco Pipeline Company to form ConocoPhillips Pipe Line Company.)
    - Lake Charles Pipe Line Company
    - Heartland Pipeline Company
    - Yellowstone Pipe Line Company
    - Pioneer Investment Corp.
    - Pioneer Pipe Line company
    - Salt Lake Terminal Company
    - 66 Pipe Line Company
    - Phillips Texas Pipeline Company, LTD.

Herein out everything is referred to Phillips 66 Company and will be referred to throughout this plan as the "Company.

Sec. I-2 Regulatory Compliance

This ICP is based on the National Incident Management System (NIMS) and the Incident Command System (ICS). This plan utilizes the standard format guidance provided for by the National Response Team. For the purposes of this plan the following federal agencies and their corresponding regulatory requirements are included in the plan.

The plan is intended to satisfy the requirements of regulatory agencies mandating written procedures to address planning and response to emergencies, including:	
✓	U.S. Environmental Protection Agency's (EPA) Oil Pollution Prevention Regulations, 40 CFR, Part 112, that requires a Non-Transportation Related Facility Response Plan.
✓	The Department of Transportation's (DOT) regulations as defined in 49 CFR 192.615, 194, 195.402 and similar regulations issued by the state agencies.
✓	U.S. Coast Guard, 33 CFR, Part 154
✓	The National Contingency Plan and applicable Area Contingency Plans.
✓	OSHA's 29 CFR 1910.
✓	Applicable State and Local requirements
✓	Oil Pollution Act of 1990 (OPA 90).
✓	Company has opted to follow the PREP Guidelines for exercise/drilling purposes.

Sec. I-2.1 Interface With Other Plans

This Plan has been prepared in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The NCP provides for an organized and coordinated response by Federal agencies to discharges and threats of discharge of oil into the environment if the responsible party's response actions are improper or insufficient.

The NCP calls for a system of regional and local contingency plans. Regional and local agencies subsequently developed Area Contingency Plans (ACPs) that conform to the NCP. Both the NCP and the respective ACP are used to provide a framework for liaison and assistance during an oil spill response. This liaison may be in part or in full depending on the necessary level of Federal, State or Local agency involvement.

OPA '90 regulations stipulate that EPA-regulated facilities review Emergency Response Plans annually to insure conformance with the applicable ACP [30 CFR 112.20(g)(2)]. DOT regulated facilities are required to review and certify compliance with the applicable ACP every five years [49 CFR 194.121(a)]. Inconsistencies are corrected prior to compliance certification. Conformance is reviewed and certified by Company staff at headquarters.

Area Contingency Plans have been renamed as Regional Integrated Contingency Plans (RICP). RICPs can be found by EPA Region at the following U.S. National Response Team website: www.nrt.org.

The major agencies, and their contingency plans and responsibilities, are discussed below.

National Response Team (NRT): consists of representatives of primary and advisory Federal agencies. It serves as the national body for planning and preparedness, including recommending revisions to the NCP. The NRT may be activated in the event of a pollution incident, which exceeds the response capabilities of the Regional Response Team.

Regional Response Team (RRT): consists of representatives from selected Federal and State agencies and is the regional body responsible for planning and preparedness. The RRT functions as an emergency advisory and assistance team to the Federal On Scene Coordinator.

Federal On-Scene Coordinator (FOSC): the USCG provides the FOSC for oil spills occurring in the coastal zone and on inland navigable waterways. The EPA acts as FOSC in other inland areas. A Memorandum of Understanding for each region defines federal jurisdiction boundaries between the USCG and EPA. The FOSC has developed a Federal, Local Contingency Plan for each zone of responsibility.

Sec. I-3 General Facility Identification Information

Each geographic area and type of operations has its own unique challenges. In the guidance provided for by the National Response Teams ICP format all geographic specific operations and their corresponding regulatory requirements are found in the appropriate ICP Geographical Annexes to this plan. The corresponding facility specific information will also be found in the applicable ICP Geographical Annex.

Required emergency response notifications will be made during any emergency response operation. Refer to the Annex Notification Section located in this plan for contact information.

Emergency response operations involve actions taken at, or in close proximity to, the site of an incident that are designed to mitigate the situation, establish unified command and control over the incident, ensure the safety of responders and general public, develop plans of action, and facilitate communications. Emergency response operations also include actions taken away from the incident scene to support on-scene response operations, facilitate planning, address the concerns of external parties, and manage the financial aspects of response operations.

This plan demonstrates the potential response capabilities available by the Company to respond to any product release within the United States. It is not a guarantee of what will occur or the equipment/deployment sequencing that will be used in an actual spill event. Nothing in this plan is intended to limit the discretion of Company employees to select any sequence of actions or to take whatever time they deem necessary to maximize the effectiveness of the response, consistent with safety considerations.

This plan represents a planning standard but is not and should not be regarded as a performance guarantee. Response operations in any spill event will be tailored to meet the actual circumstances.

This response plan contains information applicable to the Company. This plan applies to emergency response operations carried out by the on-site field personnel and the Emergency Response Team. This plan applies to any type or size of incident that may occur within the United States.

The plan contains prioritized procedures for personnel to follow in the event of a release or other emergency situation involving Company assets.

Sec. I-4 Management Certification

MANAGEMENT CERTIFICATION

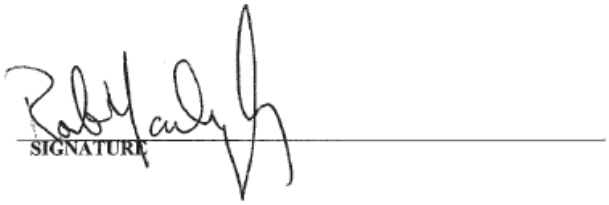
This plan is approved for implementation as herein described. Manpower, equipment and materials will be provided in accordance with all applicable regulatory requirements. The Company is dedicated to protection of the environment and commits to implement the necessary measures, as specified in this Plan, as necessary in a spill response emergency.

In addition to any OSRO and non-company resources listed in this Plan, the necessary personnel and equipment resources, owned or operated by the Company, are available to respond to a discharge within appropriate response times.

This plan has been prepared in accordance to and is consistent to the National Contingency Plan and the applicable Area Contingency Plan(s) for the business units covered by this plan.

This plan represents a planning standard, but is not and should not be regarded as a performance guarantee. Response operations in any incident will be tailored to meet the actual circumstances.

CERTIFICATION SIGNATURE:



SIGNATURE

Rob Yarbrough
PRINTED NAME

Director, Emergency Preparedness, Response & Security
TITLE

March 2012
DATE

Sec. I-5 Consistency with NCP and ACPs

This ICP has been prepared and is maintained in accordance with the policies and information contained in the National Contingency Plan (NCP) as well as in the applicable Area Contingency Plans and their corresponding geographically specific requirements.

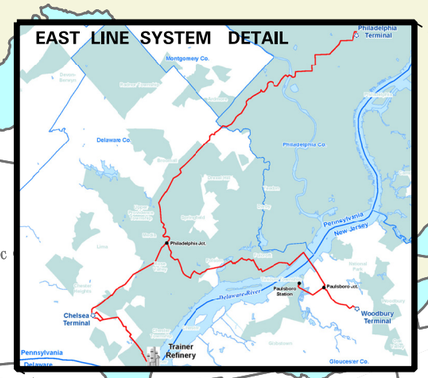
Areas of concern regarding consistency with NCP, and ACP's:	
•	Identification of environmentally and economically sensitive areas potentially impacted by a spill
•	Descriptions of Company's response strategies and responsibilities
•	Integration of Company's response efforts with those of the federal, state and local agencies

Response Zone	Applicable ACPs
Louisiana Response Zone (74)	EPA Region 6 Regional Intergraded Contingency Plan; USCG One Gulf Plan, MSO Port Arthur GRP and MSO New Orleans GRP
Texas Response Zone (75)	EPA Region 6 Regional Intergraded Contingency Plan; USCG One Gulf Plan, MSO Houston/Galveston GRP
Montana and Wyoming Response Zone (128)	EPA Region 8 Regional Contingency Plan; Clark Fork and Flathead Basin, Montana Sub-ACP; EPA Region 10 Northwest ACP
Kansas Response Zone (546)	EPA Region 7 Intergraded Contingency Plan
Oklahoma Response Zone (547)	EPA Region 6 Regional Intergraded Contingency Plan
Missouri Response Zone (551)	EPA Region 7 Intergraded Contingency Plan; EPA Greater St. Louis Sub-ACP
Illinois Response Zone (946)	EPA Region 5 Regional Intergraded Contingency Plan; EPA Greater St. Louis Sub-ACP; MSO Chicago ACP
Colorado Response Zone (953)	EPA Region 8 Regional Contingency Plan
California Response Zone (1277)	USCG 2000 ACP Los Angeles/Long Beach; USCG 2000 ACP for the California North Coast, San Francisco Bay and Delta, Central Coast; EPA Region 9 Mainland Regional Contingency Plan
East Washington Response Zone Plan (132)	EPA Region 10-Regional Contingency Plan; Northwest ACP

CPPL U.S. PIPELINES DIVISION MAP

CPPL DIVISIONS
LEGEND
- WEST COAST
- BILLINGS
- EAST/GULF
- AMARILLO
- CENTRAL

EAST LINE SYSTEM DETAIL



FERNDALE REFINERY
RENTON
TACOMA
PORTLAND
SPOKANE
MOSES LAKE
THOMPSON FALLS
Yellowstone
RAIL TERM.
MISSOULA
MISSOULA RAIL TERM.
Yellowstone
HELENA
GREAT FALLS
Glacier
BOZEMAN
BILLINGS
BILLINGS REFINERY
Seminoe
SHERIDAN
CASPER
ROCK SPRINGS
Pioneer
Seminoe
NORTH SALT LAKE
SACRAMENTO
RODEO REFINERY
RICHMOND
Line 200
Line 400
Line 300
Line 100
SANTA MARIA REFINERY
LOS ANGELES
COLTON
WILMINGTON REFINERY
CARSON REFINERY
ALBUQUERQUE
LAJUNTA
Powder River
COMMERCE CITY
Borger to Denver Products
Powder River
SUNRAY
AMARILLO
BORGER
Line O
OKC
Cushing
GLENPOOL
Chisholm
Wood River
Cherokee 8"
OPL 12"
Wichita Falls
WA 80
LUBBOCK
DES MOINES
LINCOLN
KANSAS CITY
HARTFORD
WOOD RIVER REFINERY
E. ST. LOUIS
8" 10"
Gold
PAOLA
Blue
JEFF CITY
Conway Gold
Blue
WICHITA N.
WICHITA S.
Standish
Ark City 1&2
PONCA CITY
MT. VERNON
EZ
SWEENY REFINERY
WESTLAKE REFINERY
Louisiana Gathering System
WESTLAKE
CRMT
PASADENA
LAKE CHARLES
LAKE CHARLES COKE HANDLING
ALLIANCE REFINERY
BAYWAY REFINERY
LINDEN
TREMLEY POINT
CHELSEA
PHILADELPHIA
TRAINER REFINERY
WOODBURY
RIVERHEAD

Gulf of St. Lawrence
Atlantic Ocean
Pacific Ocean
Gulf of Mexico

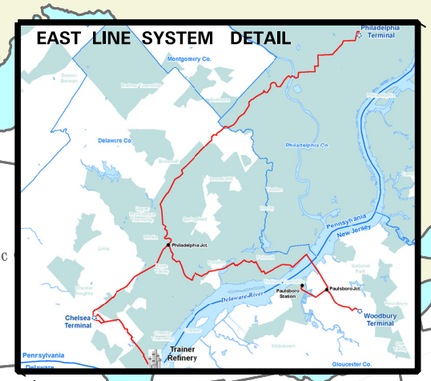
U.S. Pipelines & Facilities
LEGEND
- REFINED PRODUCTS (OWNED & OPERATED)
- REFINED PRODUCTS (JOINTLY OWNED/OPERATED)
- NOTE: BORGER TO DENVER PRODUCTS IS JOINTLY OWNED AND OPERATED
- NATURAL GAS PIPELINES (OWNED & OPERATED)
- NGL/LPG PIPELINES (OWNED & OPERATED)
- NGL/LPG PIPELINE (JOINTLY OWNED/OPERATED)
- CRUDE PIPELINES (OWNED & OPERATED)
- PETROCHEMICAL PIPELINES (TEXAS GULF COAST)
- IDLE PIPELINES
- REFINERIES
- TERMINALS

FILE: MZ521ZB.DGN
BASEMAP REVISION DATE: 10/31/11
DIVISION MAP REVISION DATE: 01/23/2012

CPPL U.S. TERMINALS DIVISION MAP

CPPL DIVISIONS LEGEND
- WEST COAST
- BILLINGS
- EAST/GULF
- AMARILLO
- CENTRAL

EAST LINE SYSTEM DETAIL



U.S. Pipelines & Facilities

LEGEND
- REFINED PRODUCTS (OWNED & OPERATED)
- REFINED PRODUCTS (JOINTLY OWNED/OPERATED)
- NOTE: BORGER TO DENVER PRODUCTS IS JOINTLY OWNED AND OPERATED
- NATURAL GAS PIPELINES (OWNED & OPERATED)
- NGL/LPG PIPELINES (OWNED & OPERATED)
- NGL/LPG PIPELINE (JOINTLY OWNED/OPERATED)
- CRUDE PIPELINES (OWNED & OPERATED)
- PETROCHEMICAL PIPELINES (TEXAS GULF COAST)
- IDLE PIPELINES
- REFINERIES
- TERMINALS

FILE: MZ521ZB.DGN
BASEMAP REVISION DATE: 10/31/11
DIVISION MAP REVISION DATE: 10/19/11

Sec. I.6 Plan Implementation, Review and Update Procedures

Sec. I-6.1 Plan Implementation

This section outlines initial response procedures and implementation upon notification of a release. The Plan and the Facility's Spill Response Team become effective immediately upon notification of any type of spill, leak or emergency situation occurring at the Facility.

The specific action taken to control, contain and clean up a spill will vary with the type of oil spilled, and type of incident that has occurred. The incident commander will analyze the situation and exercise good judgment in formulating the best action plan for the type of incident that occurs. For initial Emergency Response Actions, see section 1.

This plan shall also be implemented in times of natural disasters (i.e., earthquakes, floods, tornadoes, hurricanes, etc.) as well as incidents involving civil unrest or terrorism, which could potentially adversely impact a Company asset resulting in the release of oil or highly volatile liquids. Each Incident Commander, in consultation with the incident command structure, shall be responsible to take any necessary action to minimize the impact that a natural disaster might have on a Company asset. Precautionary measures will be taken, as deemed appropriate by the Incident Commander, in consultation with the incident command structure, to prevent a release. The Commander will consider population, environmentally sensitive areas, pipeline or facility system design, and operating and maintenance practices when determining what precautionary measures to implement. These precautionary measures may include increasing patrols on pipelines, decreasing operating pressures, or shutting in lines, etc.

Sec. I-6.2 Plan Review and Update Procedures

Reviewing and updating this Plan shall be the responsibility of the Facility Manager. Revisions to the Plan may result from: 1) scheduled annual reviews; 2) as a result of conducting formal drills and training exercises; 3) from a response to an accidental discharge; 4) a change in the facility's configuration that materially alters the information included in the response plan; and 5) a material change at the facility (or with a contracted OSRO) which alters the required response capabilities and/or resources. All revisions to the Plan shall be distributed to all Plan holders. In addition, any material or significant changes at the facility that mandate a change in this Plan as described in pages 3, 4 and 5 of this Section shall be submitted to the appropriate regulatory agency. The following sections outline the procedures to be followed to ensure that the Plan is periodically reviewed and updated so that the Plan remains current and functional.

Plan revisions or amendments may be generated as a result of the annual and review process, or by a post drill/post discharge review as discussed above. If new or different operating conditions or information is determined to substantially affect the implementation of this Plan, the Facility Manager shall immediately modify this Plan to address such a change. Within 30 days of changes in the Record Copy of the Plan, revisions and amendments will be submitted to the appropriate Federal and State Agencies listed in this Plan. In addition, the Facility Manager will ensure all revisions and amendments are provided to each Plan holder for incorporation into his/her Plan. Applicable Agency (DOT, EPA & USCG) regulatory language is included below to assist with determining conditions and timeframes for various Agency plan revisions and submittals.

USCG Plan Revisions

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.

For an MTR facility, this review must occur within one month of the anniversary date of COTP approval of the plan. For an MTR facility identified as a “substantial harm facility” this review must occur within 1 month of the anniversary date of submission of the plan to the COTP.

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.

- 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.
- If no revisions are required, the facility owner or operator shall indicate the completion of the annual review on the record of changes page.
- 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.

Any required revisions must be entered in the plan and noted on the record of changes page.

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 30 days, whenever there is:

- A change in the facility's configuration that significantly affects the information included in the response plan;
- A change in the type of oil (petroleum oil group) handled, stored or transported that affects the required response resources;
- A change in the name(s) or capabilities of the oil spill removal organization;
- A change in the facility's emergency response procedures;
- 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;
- Any other changes that significantly affect the implementation of the plan.

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.

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 or as a result of inadequacies noted in the response plan during an actual pollution incident at the facility.

EPA Plan Revisions

The owner or operator of a facility for which a response plan is required shall revise and resubmit revised portions of the response plan within 60 days of each facility change that materially may affect the response to a worst case discharge, including:

- A change in the facility's configuration that materially alters the information included in the response plan;
- A change in the type of oil handled, stored or transferred that materially alters the required response resources;
- A material change in capabilities of the oil spill removal organization(s) that provide equipment and personnel to respond to discharges of oil;
- A material change in the facility's spill prevention and response equipment or emergency response procedures; and
- Any other changes that materially affect the implementation of the response plan.

For EPA-associated ERP's, amendments to personnel and telephone number lists included in the response plan and a change in the oil spill removal organization(s) that does not result in a material change in support capabilities do not require approval by the Regional Administrator. Facility owners or operators shall provide a copy of such changes to the Regional Administrator as the revisions occur.

DOT Plan Revisions

Each operator shall review its response plan at least every 5 years from the date of submission and modify the plan to address new or different operating conditions or information included in the plan.

If a new or different operating condition or information would substantially affect the implementation of a response plan, the operator must immediately modify its response plan to address such a change and, within 30 days of making such a change, submit the change to RSPA.
Examples of changes in operating conditions that would cause a significant change to an operator's response plan are:

- An extension of the existing pipeline or construction of a new pipeline in a response zone not covered by the previously approved plan;

- Relocation or replacement of the pipeline in a way that substantially affects the information included in the response plan, such as a change to the worst case discharge volume;
- The type of oil transported, if the type affects the required response resources, such as a change from crude oil to gasoline;
- The name of the oil spill removal organization;
- Emergency response procedures;
- The qualified individual;
- A change in the NCP or an ACP that has significant impact on the equipment appropriate for response activities; and
- Any other information relating to circumstances that may affect full implementation of the plan.

In addition, per 49 CFR 194.107 (c)(1)(x) and 194.121 (a)(2), Company will review and re-submit this Plan to the U.S. DOT Office of Pipeline Safety for approval every 5 years from the last Plan approval date.

Sec. I-7 Glossary/Acronyms

Term	Definition
A	
Absorbent Material	Any of several materials designed to absorb oil, both hydrocarbon and non-hydrocarbon.
Access/Staging Areas	Designated areas offering access to spill sites for the gathering and deployment of spill response equipment and personnel.
Adverse Weather	The weather conditions that will be considered when identifying response systems and equipment in a response plan for the applicable operation 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 assisting or cooperating agency that has been delegated full authority to make decisions on all matters affecting his/her agency's participation at the incident.
Air Operations Branch Director	The person primarily responsible for preparing and implementing the air operations portion of the Incident Action Plan. Also responsible for providing logistical support to helicopters assigned to the incident.
Alert	Means an incident has occurred at the terminal that has the potential to affect off-site locations.
Allocated Resources	Resources dispatched to an incident.
Alteration	Any work on a tank or related equipment involving cutting, burning, welding, or heating operations that changes the physical dimensions or configuration of a tank.
Area	The geographic area for which a separate and distinct Area Contingency Plan has been prepared as described in the Oil Pollution Act of 1990. For EPA Areas with sub-area plans or annexes to the Area Contingency Plan, the EPA Regional Administrator will decide which sub-area is to be exercised within the triennial cycle.
Area Committee (AC)	Area Committees are those committees comprised of Federal, State and Local officials, formed in accordance with Section 4202 of the Oil Pollution Act of 1990, whose task is to prepare an Area Contingency Plan for the Area for response to a discharge of oil or hazardous substance.
Area Spill Management Team	The Area Spill Management Team is the group of individuals within the Coast Guard or EPA OSC organization with responsibility for spill response management within the respective Area.

Term	Definition
A (Cont'd)	
Assigned Resources	Resources checked-in and assigned work tasks on an incident.
Assignments	Tasks given to resources to perform within a given operational period, based upon tactical objectives in the Incident Action Plan.
Assistant	Title for subordinates of the Command Staff positions. The title indicates a level of technical capability, qualifications, and responsibility subordinate to the primary positions. Assistants may also be used to supervise unit activities at camps.
Assisting Agency	An agency directly contributing tactical or service resources to another agency.
Available Resources	Incident-based resources that are immediately available for assignment.
Average Most Probable Discharge	(Small Oil Spill) – The size of the discharge as defined in 33 CFR 154.1020 (a discharge of the lesser of 50 barrels or 1 percent of the volume of the worst case discharge), 33 CFR 155.1020 (a discharge of 50 barrels of oil from the vessel during oil transfer operations) – (for Coast Guard regulated facilities & vessels); for EPA, the tiered planning quantity of 2,100 gallons or less, provided this amount is less than the worst case discharge; for PHMSA and BOEMRE, the size of the discharge as defined in each agency's respective regulations, as appropriate; and the size of the discharge as defined in the respective Area Contingency Plan.
B	
Barrel	Measure of space occupied by 42 U.S. gallons at 60 degrees Fahrenheit.
Base	The location as which the primary logistics functions are coordinated and administered. The Incident Command Post may be collocated with the base. There will only be one base per incident.
Boom	Any number of specially designed devices that float on water and are used to contain or redirect the flow of oil on the waters surface.
Boom Deployment	The methodology for installing boom based on differing water depths, currents, wave heights, etc.
Booming Strategies	Techniques which identify the location, quantity, and type of boom required to protect differing water bodies and their shore lines. These strategies are developed by identifying potential spill scenarios and assuming certain conditions which affect oil movement on water.

Term	Definition
B (Cont'd)	
Branch	The organizational level having functional/geographic responsibility for major incident operations. The Branch level is organizationally between Section and Division/Group in the Operations Section, and between Section and Units in the Logistics Section.
C	
Cache	A pre-determined complement of tools, equipment, and/or supplies stored in a designated location, and available for incident use.
Camp	A geographical site, within the general incident area, separate from the base, equipped and staffed to provide sleeping areas, food, water, and sanitary services to incident personnel.
Captain of the Port Zone (COTP)	Refers to a zone specified in 33 CFR Part 3 and the seaward extension of that zone to the outer boundary of the exclusive economic zone (EEZ).
CERCLA	The Comprehensive Environmental Response, Compensation Liability Act regarding hazardous substance releases into the environment and the cleanup of inactive hazardous waste disposal sites.
Certification	The act of confirming that an exercise: 1) was completed, 2) met the required objectives, and 3) was evaluated to determine effectiveness of the response plan based on exercise performance.
Check-In	The process whereby resources first report to an incident response. Check-in locations include: Incident Command Post (Resources Unit), Incident Base, Camps, Staging Areas, Heli-bases and Division/Group Supervisors (for direct line assignments).
CHEMTREC	Chemical Transportation Emergency Center which provides information and/or assistance to emergency responders. Can be reached 24 hours a day by calling 800-424-9300.
Chief	The ICS title of individuals responsible for command of functional sections: Operations, Planning, Logistics, and Finance/Administration.
Clean-up	For the purposes of this document, clean-up refers to the removal and/or treatment of oil, hazardous substances, and/or the waste or contaminated materials generated by the incident. Clean up includes restoration of the site and its natural resources.

Term	Definition
C (Cont'd)	
Clean-Up Contractor	Non-company person contractually engaged to respond and clean up an oil spill.
Clear Text	The use of plain English in radio communications transmissions. No Ten Codes nor agency specific codes are used when using Clear Text.
Coastal Waters	All tidally influenced waters extending from the head of tide seaward to the three marine league limit of state jurisdiction; and non-tidally influenced waters extending from the head of tide in the arms inland to the point at which navigation by regulated vessels is naturally or artificially obstructed.
Command	The act of directing, ordering, and/or controlling resources by virtue of explicit legal, agency, or delegated authority. May also refer to the Incident Command/Unified Command.
Command Post	A site located in the cold zone where response decisions and activities can be planned, coordinated, and managed. The Incident Commander and regulatory On-Scene Coordinator(s) may operate from this location.
Command Staff	It consists of the Information Officer, Safety Officer and Liaison Officer, who report directly to the Incident Commander. They may have an assistant or assistants, as needed.
Communication Equipment	Equipment that will be utilized during response operations to maintain communication between employees, contractors, Federal/State/Local agencies. (Radio/telephone equipment and links).
Communications Unit	A vehicle (trailer or mobile van) used to provide the major part of an incident Communications Center.
Company Away Team	Volunteer Emergency Tier II Responders
Complex	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 CWA.
Containment Boom	A flotation/freeboard device, made with a skirt/curtain, longitudinal strength member, and ballast unit/weight designed to entrap and contain the product for recovery.
Contamination Reduction Zone	The area between the contaminated zone and the clean zone. This area is designed to reduce the probability that can clean zone will become contaminated. Also known as the warm zone.
Contingency Plan	A document used by (1) Federal, State, and Local agencies to guide ties planning and response procedures regarding spill of oil, hazardous substances, or other emergencies; (2) a document used by industry as a response plan to spills of oil, hazardous substances, or other emergencies occurring upon their vessels or at their facilities.

Term	Definition
	C (Cont'd)
Contract or Other Approved Means	1. A written contractual agreement with a response contractor. The agreement should identify and ensure the availability of the specified personnel and equipment described under this plan within stipulated response times in the specified geographic areas; 2. Certification by the facility owner or operator that the specified personnel and equipment described under this plan are owned, operated, or under the direct control of the facility owner or operator, and are available within the stipulated times in the specified geographic areas; 3. Active membership in a local or regional oil spill removal organization that has identified specific personnel and equipment described under this plan that are available to respond to a discharge within stipulated times in the specified geographic areas; 4. A document which: a) Identifies the personnel, equipment, services, capable of being provided by the response contractor within stipulated response times in specified geographic areas; b) Sets out the parties' acknowledgment that the response contractor intends to commit the resources in the event of a response; c) Permits the Coast Guard to verify the availability of the response resources identified through tests, inspections and drills; and d) Is incorporated by reference in the response plan; or 5. With the written consent of the response contractor or the oil spill removal organization, the identification of a response contractor or oil spill removal organization with specified equipment and personnel which are available within stipulated response times in specific geographic areas: a) For a facility that could reasonably be expected to cause substantial harm to the environment; b) For a facility that handles, stores, or transports Group V petroleum oil; and c) For a facility that handles, stores, or transports non-petroleum oil.
Cooperating Agency	An agency supplying assistance other than direct tactical, support, or service functions or resources to the incident control effort (e.g., Red Cross, telephone company, etc.).

Term	Definition
C (Cont'd)	
Cost Unit	Functional unit within the Finance/Administration Section responsible for tracking costs, analyzing cost data, making cost estimates, and recommending cost-saving measures.
Critical Areas	Areas which, if impacted by a spill, may result in threats to public health and/or safety.
Crude Oil	Any liquid hydrocarbon mixture occurring naturally in the earth, whether or not treated to render it suitable for transportation, and includes crude oil from which certain distillate fractions may have been removed and crude oil to which certain distillate fractions may have been added.
Cultural Resources	Current, historic, prehistoric, and archaeological resources which include deposits, structures, sites, ruins, buildings, graves, artifacts, fossils, or other objects of antiquity which provide information pertaining to historical or prehistoric culture of people as well as the natural history of the state.
D	
Damage Assessment	The process of determining and measuring damages and injury to the human environment and natural resources, including cultural resources. Damages include differences between the conditions and use of natural resources and the human environment that would have occurred without the incident, and the conditions and use that ensued following the incident. Damage assessment includes planning for restoration and determining the costs of restoration.
Decontamination	The removal of hazardous substances from personnel and equipment necessary to prevent adverse health effects.
Deputy	A fully qualified individual who, in the absence of a superior, could be delegated the authority to manage a functional operation or perform a specific task. In some cases, a Deputy could act as relief for a superior, and, therefore, must be fully qualified in the position. Deputies can be assigned to the Incident Commander, General Staff, and Branch Directors.
Demobilization Unit	Functional unit within the Planning Section responsible for assuring orderly, safe and efficient demobilization of incident resources.
Director	The ICS title for individuals responsible for supervising a Branch.
Discharge	Any spilling, leaking, pumping, pouring, emitting, emptying, or dumping.
Discharge Clean-up Organization	A corporation, proprietorship, partnership, company organization, or association that has, as its primary function, engaged itself in the response to, clean up, and removal of spills of oil or hazardous substance.

Term	Definition
D (Cont'd)	
Dispatch	To move resources from one place to another.
Dispatch Center	A facility from which resources are directly assigned to an incident.
Dispersants	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 flotation/freeboard device, made with a skirt/curtain, longitudinal strength member, and ballast unit/weight designed to deflect or divert floating product towards a pick up point or away from certain areas.
Division	The organization level having responsibility for operation within a defined geographic area or with functional responsibility. The Division level is organizationally between the Task Force/Strike Team and the Branch.
Documentation Unit	Functional unit within the Planning Section responsible for collecting, recording and safeguarding all documents relevant to the incident.
Duty Officer	company support designed to provide communication assistance to the Incident Commander.
E	
Emergency Planning Zone	The area designated by the jurisdiction boundaries of those communities that are within a radial distance of one-half mile from the terminal.
Emergency Medical Technician (EMT)	A health-care specialist with particular skills and knowledge in pre-hospital emergency medicine.
Emergency Operations Center (EOC)	A pre-designated facility established by an agency or jurisdiction to coordinate the overall agency or jurisdictional response and support to an emergency response.
Emergency Response	The response to any occurrence that results, or is likely to result in a release of a hazardous substance due to an event.
Emergency Service	Those activities provided by the 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 (ESA)	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.
Equipment Activation	The movement, staging, deployment and/or operation of response equipment as determined by the plan holder in consultation with the exercise design team.
Equipment Deployment Exercise	An equipment deployment exercise is an exercise where response equipment is deployed to a specific site and operated in its normal operating medium.

Term	Definition
E (Cont'd)	
Estuary	Unique environment at the mouth of coastal rivers where fresh water and sea water meet, providing important habitat for marine life, birds, and other wildlife.
Exclusion Zone	The area where contamination does or may occur.
Exclusive Economic Zone	The zone contiguous to the territorial sea of the United States extending to a distance up to 200 nautical miles from the baseline from which the breadth of the territorial sea is measured.
Exercise Design Team	A team comprised of federal, state and industry representatives with responsibility for designing an Area Exercise. The exercise design team is charged with working with the lead plan holder to develop the scope, parameters and exercise scenario, although the lead plan holder retains the final decision on these.
F	
Facilities Unit	Functional unit within the Support Branch of the Logistics Section that provides fixed facilities for the incident. These facilities may include the Incident Base, feeding areas, sleeping areas, sanitary facilities, etc.
Facility	Any pipeline, structure, equipment, or device used for handling oil including, but not limited to, underground and aboveground storage tanks, impoundments, mobile or portable drilling or workover rigs.
Facility That Could Reasonably Be Expected to Cause Significant and Substantial Harm	Any fixed MTR on-shore facility (including piping and any structures that are used for the transfer of oil between a vessel and a facility) that is capable of transferring oil, in bulk, to or from a vessel of 250 barrels or more, and a deepwater port. This also includes any facility specifically identified by the COTP.
Facility That Could Reasonably Be Expected to Cause Substantial Harm	Any mobile MTR facility that is capable of transferring oil to or from a vessel with a capacity of 250 barrels or more. This also includes any facility specifically identified by the COTP.
Federal On-Scene Coordinator (FOSC)	The pre-designated Federal On-Scene Coordinator operating under the authority of the National Contingency Plan (NCP).
Finance / Administration Section	The Section responsible for all incident costs and financial considerations. Includes the Time Unit, Procurement Unit, Compensation/Claims Unit and Cost Unit.
First Responders, First Response Agency	A public health or safety agency (i.e., fire service or police department) charged with responding to a spill during the emergency phase and alleviating immediate danger to human life, health, safety, or property.

Term	Definition
F (Cont'd)	
Fish and Wildlife and Sensitive Environments	Areas that may be identified by either their legal designation or by evaluations of Area Committees (for planning) or members of the Federal On-Scene Coordinator's spill response structure (during responses). These areas may include wetlands, National and State parks, critical habitats for endangered/threatened species, wilderness and natural resource areas, marine sanctuaries and estuarine reserves, conservation areas, preserves, wildlife areas, wildlife refuges, wild and scenic rivers, recreational areas, national forests, Federal and State lands that are research national areas, heritage program areas, land trust areas, and historical and archeological sites and parks. These areas may also include unique habitats such as aquaculture sites and agricultural surface water intakes, bird nesting areas, critical biological resource areas, designated migratory routes, and designated seasonal habitats.
Food Unit	Functional unit within the Service Branch of the Logistics Section responsible for providing meals for incident personnel.
Function	In ICS, function refers to the five major activities in the ICS, i.e., Command, Operations, Planning, Logistics, and Finance/Administration. The term function is also used when describing the activity involved, e.g., "the planning function."
G	
General Emergency	An incident has occurred and the affected community is implementing protective actions.
General Staff	The group of incident management personnel comprised of: Incident Commander, Operations Section Chief, Planning Section Chief, Logistics Section Chief, and Finance/Administration Section Chief.
Geographic Information System (GIS)	An electronic information system that provides a geo-referenced data base to support management decision-making.
Geographic Response Site (GRS)	Emergency planning/response geographical site.
Ground Support Unit	Functional unit within the Support Branch of the Logistics Section responsible for fueling, maintaining, and repairing vehicles, and the ground transportation of personnel and supplies.
Group	Groups are established to divide the incident into functional areas of operation. Groups are composed of resources assembled to perform a special function not necessarily within a single geographic division. (See Division.) Groups are located between Branches (when activated) and Single Resources in the Operations Section.

Term	Definition
H	
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 or discoloration upon water, shoreline, tidal flat, beach, or marsh, or to cause a sludge or emulsion to be deposited beneath the surface of the water or on a shoreline, tidal flat, beach, or marsh.
Hazardous Chemicals	All chemicals that constitute a physical hazard or a health hazard as defined by 29 CFR 1910.1200, with the exceptions listed in section 311(e). This term comprises approximately 90 percent of all chemicals.
Hazardous Material	Any 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 TWC.
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.
Health Hazard	A chemical for which there is statistically significant evidence based on at least one study conducted in accordance with established scientific principles that acute or chronic health effects may occur in exposed employees.
Helibase	A location within the general incident area for parking, fueling, maintaining, and loading helicopters.
Helispot	A location where a helicopter can take off and land. Some helispots may be used for temporary loading.
High Consequence Area (HCA)	Includes commercially navigable waterway, a high population area, other populated area, (which means a place, as defined and delineated by the Census Bureau, that contains a concentrated population, such as an incorporated or unincorporated city, town, village, or other designated residential or commercial area), and an unusually sensitive area, as defined in §195.6

Term	Definition
I	
High Population Area (HPA)	Urbanized area, as defined and delineated by the Census Bureau that contains 50,000 or more people and has a population density of at least 1,000 people per square mile.
Immediate Response Steps	The immediate steps that are to be taken by the spill observer after detection of a spill.
Incident	Any event that results in the spill or release of oil or hazardous materials.
Incident Action Plan (IAP)	Is initially prepared at the first meeting, contains general control objectives reflecting the overall incident strategy, and specific action plans for the next operational period. When complete, the Incident Action Plans will include a number of attachments.
Incident Area	Legal geographical area of the incident including affected area(s) and traffic route(s) to corresponding storage and disposal sites.
Incident Base	See “BASE”
Incident Commander	The individual responsible for managing all incident operations.
Incident Command Post (ICP)	The location at which the primary command functions are executed; may be collocated with the incident base.
Incident Command System	A standardized on-scene emergency management system specifically designed to allow its user(s) to adopt an integrated organizational structure equal to the complexity and demands of single or multiple incidents, without being hindered by jurisdictional boundaries.
Incident Communication Center	The location of the Communications Unit and the Message Center.
Incident Management Handbook (IMH)	The IMH is intended to be used as an easy reference job aid for responders; designed to assist responders in the use of the National Incident Management System (NIMS) Incident Command System (ICS) during response operations.
Company Away Team	Made up of Company volunteers from across North America. Will assist with activation, deployment and integration of the ICS/UCS spill response organization. ICS/UCS Division/Group Leaders are available
Incident Objectives	Statements of guidance and direction necessary for the selection of appropriate strategies, and the tactical direction of resources. Incident objectives are based on realistic expectations of what can be accomplished when all allocated resources have been effectively deployed. Incident objectives must be achievable and measurable, yet flexible enough to allow for strategic and tactical alternatives.
Incident Situation Display	The Situation Unit is responsible for maintaining a display of status boards that communicate critical incident information vital to establishing and maintaining an effective command and control environment.
Incident Support Team (IST)	Company responders.

Term	Definition
I (Cont'd)	
Industry	For the purpose of these guidelines, industry means the oil and hazardous substance industry required to submit response plans and comply with exercise requirements, as specified in appropriate vessel, facility, pipeline, and Outer Continental Shelf platform regulations. The USCG, EPA, RSPA and MMS administer these regulations.
Information Officer (IO)	A member of the Command Staff responsible for providing incident information to the public and news media or other agencies or organizations. There is only one Information Officer per incident. The Information Officer may have assistants.
Initial Clean-up	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 company personnel and Federal/State/Local agencies that a spill has occurred, including all pertinent available information surrounding the incident.
Injury	A measurable adverse change, either long- or short-term, in the chemical or physical quality of the viability of a natural resource resulting either directly or indirectly from exposure to a discharge of oil, or exposure to a product of reactions resulting from a discharge of oil.
Inland Area	The area shoreward of the boundary lines defined in 46 CFR Part 7, except in the Gulf of Mexico. In the Gulf of Mexico, it means the area shoreward of the lines of demarcation (COLREG lines) defined in 80.740 – 80.850 of Title 33 of the CFR. The inland area does not include the Great Lakes.
Interim Storage Site	A site used to temporarily store recovered oil or oily waste until the recovered oil or oily waste is disposed of at a permanent disposal site. Interim storage sites include trucks, barges, and other vehicles, used to store waste until the transport begins.
Internally Reported Event	Refers to an incident has occurred that does not meet the reporting criteria established for notification of off-site authorities. No evacuation has occurred.
J	
Joint Information Center (JIC)	A facility established within, or near, the Incident Command Post where the Information Officer and staff can coordinate and provide incident information to the public, news media, and other agencies or organizations. The JIC is normally staffed with representatives from the FOSC, SOSC and RP.

Term	Definition
J (Cont'd)	
Jurisdiction	A range or sphere of authority. At an incident, public agencies have jurisdiction related to their legal responsibilities and authority for incident mitigation. Jurisdictional authority at an incident can be political/geographical (e.g., city, county, state, or Federal boundary lines), or functional (e.g., police department, health department, etc.). (See Multi-Jurisdiction).
Jurisdictional Agency	The agency having jurisdiction and responsibility for a specific geographical area, or a mandated function.
L	
Landing Zone	See "HELISPOT"
Lead Agency	The government agency that assumes the lead for directing response.
Lead Federal Agency	The agency that coordinates the federal response to incidents on navigable waters. The lead Federal agencies are: • U. S. Coast Guard (USCG): Oil and chemically hazardous materials incidents on navigable waters. • U. S. Environmental Protection Agency (EPA): Oil and chemically hazardous materials incidents on inland waters.
Lead State Agency	The agency that coordinates state support to Federal and/or Local governments or assumes the lead in the absence of Federal response.
Leader	The ICS title for an individual responsible for a Task Force/Strike Team or functional Unit.
Liaison Officer (LO)	A member of the Command Staff responsible for coordinating with stakeholder groups and representatives from assisting and cooperating agencies.
Light Oil Terminal Operations	The storage and distribution of gasoline and diesel fuel to wholesale customers.
Local Emergency Planning Committees (LEPC)	Provide input regarding a state's implementation of federal law. LEPC's provide local emergency planning, representing a variety of disciplines interested in hazardous materials management designed to help the State Chemical Emergency Planning and Response Commission (CEPRC) fit the needs of a particular region. CEPRC's are usually established by an Executive Order to fill the requirement in Title III, the Federal Superfund Amendments and Reauthorization Act of 1986. The act requires that each governor establish a state emergency response commission to address a variety of hazardous materials planning and community right-to-know issues.

Term	Definition
L (Cont'd)	
Local On Scene Coordinator (LOSC)	Local Government Representative.
Location Boundaries	Areas where oil may be expected to impact during the first day of a spill event.
Logistics Section	The Section responsible for providing facilities, services and materials for the incident.
Lower Explosive Limit	Air measurement to determine the lowest concentration of vapors that support combustion. This measurement must be made prior to entry into a spill area.
Lube Oil Terminal Operations	The blending of lubricating oils to Company specifications, and the operation of filling lines for packaging the finished oils for distribution to sales outlets.
M	
Managers	Individuals within ICS organizational units who are assigned specific managerial responsibilities (e.g., Staging Area Manager or Camp Manager).
Marinas	Small harbors with docks, services, etc. for pleasure craft.
Marine Facility	Any facility used for tank vessel wharfage or anchorage, including any equipment used for the purpose of handling or transferring oil in bulk to or from a tank vessel.
Marine Transportation Related Facility (MTR)	An on-shore facility, including piping and any structure used to transfer oil to or from a vessel, subject to regulation under 33 CFR Part 154 and any deepwater port subject to regulation under 33 CFR Part 150.
Maximum Extent Practicable	The limitations used to determine oil spill planning resources and response times for on-water recovery, shoreline protection, and cleanup for worst-case discharges from onshore non-transportation-related facilities in adverse weather. It considers the planned capability to respond to a worst case discharge in adverse weather, as contained in a response plan that meets the requirements in 112.20 or in a specific plan approved by the Regional Administrator.
Maximum Most Probable Discharge	(Medium Oil Spill) - The size of the discharge as defined in 33 CFR 154.1020 (a discharge of the lesser of 1,200 barrels or 10 percent of the volume of a worst case discharge), 33 CFR 155.1020 (a discharge of 2,500 barrels of oil for vessels with an oil cargo capacity equal to or greater than 25,000 barrels, or 10 percent of the vessel's oil cargo capacity for vessels with a capacity of less than 25,000 barrels) - (for Coast Guard regulated facilities & vessels); for EPA regulated facilities, a discharge greater than 2,100 gallons and less than or equal to 36,000 gallons or 10 percent of the capacity of the largest tank at the facility, whichever is less; for RSPA and MMS, the size of the discharge as defined in each agency's respective regulations, if appropriate; and the size of the discharge as defined in the respective Area Contingency Plan.

Term	Definition
M (Cont'd)	
Medical Unit	Functional unit within the Service Branch of the Logistics Section responsible for developing the Medical Plan, and for providing emergency medical treatment for incident response personnel.
Message Center	The message center is part of the Communications Center and collocated with or adjacent to it. It receives, records, and routes information about resources reporting to the incident, resource status, and handles administration and tactical traffic.
Multi-Agency Coordination	A generalized term which describes the functions and activities of representatives of involved agencies and/or jurisdictions who come together to make decisions regarding the prioritizing of incidents, and the sharing and use of critical resources. The MAC organization is not a part of the on-scene ICS and is not involved in developing incident strategy or tactics.
Multi-Agency Incident	An incident where one or more agencies assists a jurisdictional agency or agencies. May be single or Unified Command.
N	
National Contingency Plan	The plan prepared under the Federal Water Pollution Control Act (33 United State Code SS1321 et seq) and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 United State Code SS9601 et seq), as revised from time to time.
Natural Resource	Land, fish, wildlife, biota, air, water, groundwater, drinking water supplies, and other resources belonging to, managed by, held in trust by, appertaining to or otherwise controlled by the state, federal government, private parties, or a municipality.
Natural Resource Damage Assessment (NRDA)	The process of collecting and analyzing information to evaluate the nature and extent of injuries resulting from an incident, and determine the restoration actions needed to bring injured natural resources and services back to baseline and make the environment whole for interim losses. (15 CFR 990.30)
Nearshore Area	The area extending seaward 12 miles from the boundary lines defined in 46 CFR Part 7, except in the Gulf of Mexico.
Non-Crude Oil	Any oil other than crude oil.
Non-Persistent or Group I Oil	Refers to a petroleum-based oil that, at the time of shipment, consists of hydrocarbon fractions -- a) At least 50% of which by volume, distill at a temperature of 340° C (645° F); and At least 95% of which by volume, distill at a temperature of 370° C (700° F).
Non-Petroleum Oil	Oil of any kind that is not petroleum-based. It includes, but is not limited to, animal and vegetable oils.
Northwest Area Contingency Plan (NWACP)	Geographically area plan required by regulations.

Term	Definition
O	
Ocean	The offshore area and nearshore area as defined in this Appendix.
Officer	The ICS title for personnel responsible for the Command Staff positions of Safety, Liaison and Information.
Offshore Area	Refers to the area beyond 12 nautical miles measured from the boundary lines defined in 46 CFR Part 7 extending seaward to 50 nautical miles, except in the Gulf of Mexico.
Oil or Oils	Naturally occurring liquid hydrocarbons at atmospheric temperature and pressure coming from the earth, including condensate and natural gasoline, and any fractionation thereof, including, but not limited to, crude oil, petroleum gasoline, fuel oil diesel oil, oil sludge, oil refuse, and oil mixed with wastes other than dredged spoil. Oil does not include any substance listed in Table 302.4 of 40 CFR Part 302 adopted August 14, 1989, under Section 101(14) of the Federal Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended by P.L. 99-499.
Oil Spill Cooperative	Multi-company cooperative organization developed by industry to assist with oil spill response and clean up. Typically, manpower and equipment are identified by a company on a voluntary basis.
Oil Spill Removal Organization (OSRO)	An entity that provides oil spill response resources, and includes any for-profit or not-for-profit contractor, cooperative, or in-house response resources that have been established in a geographic area to provided required response resources.
Oil Spill Response Contractors	Persons/Companies contracted to undertake a response action to contain and/or clean up a spill.
Oily Waste	Oil-contaminated waste resulting from an oil spill or spill response operations.
On Scene Coordinator (OSC)	The federal official pre-designated by EPA or the USCG to coordinate and direct federal responses under subpart D, or the official designated by the lead agency to coordinate and direct removal actions under subpart E of the National Contingency Plan.
Operating Area	refers to the Rivers and Canals, Inland, Nearshore, Great Lakes or Offshore geographic location(s) in which a facility is handling, storing or transporting oil.
Operating Environment	refers to Rivers and Canals, Inland, Great Lakes, or Ocean. These terms are used to define the conditions in which response equipment is designed to function.
Operational Period	The period of time scheduled for execution of a given set of operational actions specified in the Incident Action Plan. Operational Periods can be various lengths, usually not over 24 hours.

Term	Definition
O (Cont'd)	
Operations Section	Responsible for all operations directly applicable to the primary mission. Directs unit operational plans preparation, requests or releases resources, makes expedient changes to the Incident Action Plan (as necessary) and reports such to the Incident Commander. Includes the Recovery and Protection Branch, Emergency Response Branch, Air Operations Branch, and Wildlife Branch.
Out-of-Service Resources	Resources assigned to an incident but unable to respond for mechanical, rest, or personnel reasons.
Owner or Operator	Any person, individual, partnership, corporation, association, governmental unit or public or private organization of any character.
P	
Persistent Oil	Under OPA 90, persistent oils are petroleum-based oils that do not meet the distillation criteria for a non-persistent oil. Persistent oils are classified based on a specific gravities as follows: • Group II – specific gravity less than .85; • Group III – specific gravity between .85 and less than .95; • Group IV – specific gravity .95 to and including 1.0.; and • Group V – specific gravity greater than 1.0.
Person	Any political subdivision, government agency, municipality, industry, public or private corporation, copartnership, association, firm, individual, or any other entity whatsoever.
Plan	Oil spill response, cleanup and disposal contingency plan.
Planning Meeting	A meeting, held as needed throughout the duration of an incident, to select specific strategies and tactics for incident control operations and for service and support planning.
Planning Section	Responsible for collecting, evaluating and disseminating tactical information related to the incident, and for preparing and documenting Incident Action Plans. The section also maintains information on the current and forecast situation, and on the status of resources assigned to the incident. Includes the Situation, Resource, Environmental, Documentation, and Demobilization Units, and Technical Specialists.
Polrep	Pollution Report
Primary Response Contractor(s)	An individual, company, or cooperative that has contracted directly with the plan holder to provide equipment and/or personnel for the containment or cleanup of spilled oil.
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.

Term	Definition
P (Cont'd)	
Procurement Unit	Functional unit within the Finance/Administration Section responsible for financial matters involving vendor contracts.
R	
Radio Cache	A cache may consist of a number of portable radios, a base station, and, in some cases, a repeater stored in a predetermined location for dispatch to incidents.
Recorders	Individuals within ICS organizational units who are responsible for recording information. Recorders may be found in Planning, Logistics and Finance/Administration.
Recreational Areas	Publicly accessible locations where social/sporting events take place.
Regional Response Team (RRT)	A Federal response organization, consisting of representatives from specific Federal and state agencies, responsible for regional planning and preparedness before an oil spill occurs and for providing advice to the FOSC in the event of a major or substantial spill.
Regulated Vessel	A vessel with a capacity to carry 10,000 U.S. gallons or more of oil as fuel or cargo.
Repair	Any work necessary to maintain or restore a tank or related equipment to a condition suitable for safe operation.
Reporting Location	Any one of six facilities/locations where incident assigned resources may be checked in. The locations are: Incident Command Post-Resources Unit, Base, Camp, Staging Area, Helibase, or Division/Group Supervisors (for direct line assignments.) Check-in for each specific resource occurs at one location only.
Resources	All personnel and major items of equipment available, or potentially available, for assignment to incident tasks on which status is maintained.
Resources Unit	Functional unit within the Planning Section responsible for recording the status of resources committed to the incident. The Unit also evaluates resources currently committed to the incident, the impact that additional responding resources will have on the incident, and anticipated resource needs.
Response Activities	Refers to 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 the environment.
Response Contractors	Persons/companies contracted to undertake a response action to contain and/or clean up a spill.

Term	Definition
R (Cont'd)	
Response Guidelines	Guidelines for initial response that are based on the types of product involved in the spill, these guidelines are utilized to determine clean-up methods and equipment.
Response Resources	The personnel, equipment, supplies and other capability necessary to perform the response activities identified in a response plan.
Response Plan	A practical plan used by industry for responding to a spill. Its features include (1) identifying the notification 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 that required by regulatory agencies to prevent confusion during a spill incident.
Responsible Party (RP)	The owner/operator of the vessel or facility that is the spill source.
Responsible Party Incident Commander (RPIC)	Responsible Party's designated incident commander.
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.
S	
Safety Officer (SO)	A member of the Command Staff responsible for monitoring and assessing safety hazards or unsafe situations, and for developing measures for ensuring personnel safety. The Safety Officer may have assistants.
Section	The organization level having functional responsibility for primary segments of incident operation such as: Operations, Planning, Logistics, Finance/Administration. The Section level is organizationally between Branch and Incident Commander.
Securing the Source	Steps that must be taken to stop the spill of oil at the source of the spill.
Self-Certification	Self-certification involves the following action on the part of the plan holder: 1) completed the exercise, 2) ensured the exercise met the required objectives, and 3) evaluated effectiveness of the plan based on exercise performance. Documentation must be approved and signed by an appropriate official within the organization.

Term	Definition
S (Cont'd)	
Self-Evaluation	Self-evaluation means the plan holder evaluates effectiveness of the plan during the exercise using the stated objectives as minimum criteria and an evaluation process, which adequately measures performance. The plan holder is then responsible for correcting deficiencies identified in the evaluation process.
Service Branch	A Branch within the Logistics Section responsible for service activities at the incident. Includes the Communications, Medical and Food Units.
Ship	Any boat, ship, vessel, barge or other floating craft of any kind.
Single Resource	An individual, a piece of equipment and its personnel complement, or a crew or team of individuals with an identified work supervisor that can be used on an incident.
Site Emergency	means an incident has occurred and the entire terminal, with the exception of critical employees has been sheltered on-site or evacuated.
Site Safety and Health Plan (SSHP)	Site-specific document required by state and Federal OSHA regulations and specified in the Area Contingency Plan. The SSHP, at minimum, addresses, includes, or contains the following elements: health and safety hazard analysis for each site task or operation, comprehensive operations workplan, personnel training requirements, PPE selection criteria, site-specific occupational medical monitoring requirements, air monitoring plan, site control measures, confined space entry procedures (if needed), pre-entry briefings (tailgate meetings, initial and as needed), pre-operations commencement health and safety briefing for all incident participants, and quality assurance of SSHP effectiveness.
Site Conditions	Details of the area surrounding the facility, including shoreline descriptions, typical weather conditions, socioeconomic breakdowns, etc.
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.
Situation Unit	Functional unit within the Planning Section responsible for collecting, organizing and analyzing incident status information, and for analyzing the situation as it progresses. Reports to the Planning Section Chief.
Skimmers	Mechanical devices used to skim the surface of water and recover floating oil. There are four basic categories of skimmers; suction heads, floating weirs, oleophilic surface units, and hydrodynamic devices. These vary in efficiency depending on the type of oil and size of spill.

Term	Definition
S (Cont'd)	
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.
Source Control	Actions necessary to control the spill source and prevent the continued release of oil or hazardous substance(s) into the environment.
Span of Control	On how many organizational elements may be directly managed by one person. Span of Control may vary from three to seven, and a ratio of one to five reporting elements is recommended.
Spill Management Team (SMT)	The spill management team is the group of personnel identified to staff the appropriate organizational structure to manage spill response implementation in accordance with the response plans.
Spill Observer	The first company individual who discovers an oil spill. This individual must function as the responsible person-in-charge until relieved by an authorized supervisor.
Spill Response	All actions taken in responding to spills of oil and hazardous materials, i.e., 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 preapproved on a list maintained in each region.
Staging Area	The location where incident personnel and equipment are staged awaiting tactical assignment.
Stakeholders	Any person, group, or organization affected by, and having a vested interest in, the incident and/or the response operation.
State Emergency Response Commission (SERC)	A group of officials appointed by the Governor to implement the provisions of Title III of the Federal Superfund Amendments and Reauthorization Act of 1986 (SARA). The SERC approves the State Oil and Hazardous Substance Discharge Prevention and Contingency Plan and Local Emergency Response Plans.
State On-Scene Coordinator (SOSC)	The pre-designated State On-Scene Coordinator.
Strategy	The general plan or direction selected to accomplish incident objectives.

Term	Definition
S (Cont'd)	
Strike Team	Specified combinations of the same kinds and types of resources, with common communications and a leader.
Substantial Threat of a Discharge	Any incident or condition involving a facility that may create a risk of discharge of fuel or cargo oil. Such incidents include, but are not limited to storage tank or piping failures, above ground or underground leaks, fires, explosions, flooding, spills contained within the facility, or other similar occurrences.
Supervisor	The ICS title for individuals responsible for directing the activities of a Division or Group.
Supply Unit	Functional unit within the Support Branch of the Logistics Section responsible for ordering equipment and supplies required for incident operations.
Support Branch	A Branch within the Logistics Section responsible for providing personnel, equipment and supplies to support incident operations. Includes the Supply, Facilities, Ground Support and Vessel Support Units.
Supporting Materials	Refers to the several attachments that may be included with an Incident Action Plan (e.g., communications plan, map, site safety and health plan, traffic plan, and medical plan).
T	
Tabletop Exercise (TTX)	A tabletop exercise is an activity in which key members of the plan holder's staff with emergency management responsibilities are gathered together informally, usually in a conference room, to discuss actions to be taken during an oil or hazardous substance spill, based upon the response plan and their standard operating procedures. The primary characteristic is a verbal "walk through" of a response. The tabletop exercise is designed to elicit constructive discussion by the participants, usually without time constraints, as they examine and resolve problems based on the response plan. A tabletop exercise has participants practice problem solving and resolve questions of coordination and assignment of responsibilities in a non-threatening format, under minimum stress.
Tactical Direction	Directions given by the Operations Section Chief including: the tactics appropriate for the selected strategy; the selection and assignment of resources; tactics implementation; and performance monitoring for each operational period.
Tactics	Deploying and directing resources during an incident to accomplish the desired objective.
Task Force	A group of resources with common communications and a leader assembled for a specific mission.
Technical Specialists	Personnel with special skills or technical expertise who can be used anywhere within the ICS organization.

Term	Definition
T (Cont'd)	
Temporary Flight Restrictions (TFR)	Temporary airspace restrictions for non-emergency aircraft in the incident area. TFRs are established by the FAA to ensure aircraft safety and are normally limited to a five-nautical-mile radius and 2000 feet in altitude.
Tidal Current Charts	Comprehensive charts which contain the predicted tidal current for each day of the year for designated areas. These charts specify the direction and speed of the current in the specific areas.
Tidal Current Tables	Tables which contain the predicted times and heights of high and low waters for each day of the year for designated areas.
Time Unit	Functional unit within the Finance/Administration Section responsible for recording time for incident personnel and hired equipment.
Toxic Substances	Substances that have the capacity to produce personal injury or illness to man through ingestion, inhalation or absorption through any of the body's surfaces.
Tribal On Scene Coordinator (TOSC)	Local Tribal Agency Representative.
U	
Unauthorized Spill	Spills excluding those authorized by an in compliance with a government permit, seepage from the earth solely from natural causes, and unavoidable, minute spills of oil from a properly functioning engine, of a harmful quantity of oil from a vessel or facility either: (1) into coastal water; or (2) on any waters or land adjacent to coastal waters where harmful quantity of oil may enter coastal waters or threaten to enter coastal waters if the spill is not abated, not contained and the oil is not removed.
Underwriter	An insurer, a surety company, a guarantor, or any person other than an owner or operator who undertakes to pay all or part of the liability of an owner or operator.
Unified Command (UC)	A command structure consisting of the Federal On Scene Coordinator, the State On Scene Coordinator and the Responsible Party. The Unified Command is utilized during a spill response to achieve the coordination necessary to carry out an effective and efficient response.
Unit	The organizational element having functional responsibility for a specific incident planning, logistic, or finance/administration activity.
Unusual Event	Means an incident has occurred which is noticeable and dramatic from the Terminal perimeter, however, no outside assistance is required and no evacuation outside the incident scene has occurred.

Term	Definition
V	
Verification	The act of ensuring that an exercise was certified. The Coast Guard, EPA, RSPA or MMS will conduct verification.
Vessel Support Unit	Functional unit within the Support Branch of the Logistics Section responsible for implementing the Vessel Routing Plan; for fueling, maintaining, and repairing vessels and other vessel support equipment; and coordinating transportation on the water and between or among shore resources.
Volunteer	For purpose of the NIMS, a volunteer is any individual accepted to perform services by the lead agency, which has authority to accept volunteer services, when the individual performs services without promise, expectation, or receipt of compensation for services performed. See, e.g., 16 U.S.C. 742f(c) and 29 CFR 553.101.
W	
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	for an on-shore non-transportation-related facility means - ". . . the largest foreseeable discharge in adverse weather conditions as determined using the [EPA Final Rule] . . . worksheets . . ." (EPA Final Rule, 40 CFR 112.2, July 1, 1994).
Worst Case Unauthorized Discharge	The largest foreseeable unauthorized spill under adverse weather conditions. For facilities located above the high water line of coastal waters, a worst case spill includes those weather conditions most likely to cause oil spilled from the facility to enter coastal waters.
Worst Case Discharge	The size of the discharge as defined in 33 CFR 154.1020 (in the case of an onshore facility and deepwater port, the largest foreseeable discharge in adverse weather conditions meeting the requirements of 33 CFR 154.1029), 33 CFR 155.1020 (a discharge in adverse weather conditions of a vessel's entire oil cargo) - (for Coast Guard regulated facilities & vessels); for EPA, the size of the discharge required in 40 CFR 112.20; for RSPA and MMS, the size of the discharge as defined in each agency's respective regulations, as appropriate; and the size of the discharge as defined in the respective Area Contingency Plan.

Acronyms

Acronym	Description
ACP	Area Contingency Plan
ADAPTS	Air Deliverable Anti-Pollution Transport
AFFF	Aqueous Film Forming Foam
AGT	Any Gross Tonnage (TONS)
AOR	Area of Responsibility
API	American Petroleum Institute
ARPA	Automatic Radar Plotting Aid
AST	Aboveground Storage Tank
ASTM	American Society for Testing and Materials
AT	Airtight
ATSDR	Agency for Toxic Substances and Disease Registry
AWG	American Wire Gauge
B	Beam
BBL	Barrel (Unit of Volume Equal to 42 Gallons)
C	Degrees Centigrade
C3	Command, Control, and Communications
C & R	Cargoes and Restriction (List)
CCR	California Code of Regulations
CDB	Continuous Discharge Book
CDG	Subcommittee on the Carriage of Dangerous Goods, IMO
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
CFM	Cubic Feet per Minute
CFR	Code of Federal Regulations
CG or USCG	Coast Guard
CGA	Compressed Gas Association
CGIS	Coast Guard Intelligence Service
CH	Cargo Hold
CHEMTREC	Chemical Transportation Emergency Center
CHRIS	Chemical Hazards Response Information System

Acronym	Description
CMA	Chemical Manufacturers Association
CMST	Crisis Management Support Team
CNG	Compressed Natural Gas
CO	Commanding Officer
COA	Certificate of Adequacy
COC	Certificate of Compliance
COE	U.S. Army Corps of Engineers (also USACE)
COF	Certificate of Fitness
COFR	Certificate of Financial Responsibility
COI	Certificate of Inspection
COIL	Central Oil Identification Laboratory
COMDTINST	Commandant Instruction
COMDTNOTE	Commandant Notice
COMDTPUB	Commandant's Publication
CONUS	Continental United States
COPH	Cargoes of Particular Hazard
CORE	Contingency Response
COTP	Captain of the Port
COW	Crude Oil Washing
C/S	General Cargo Ship
CSA	Canada Standards Association
CSC	International Convention for Safe Containers, 1972
CT	Cargo Tank
C/V	Container Vessel
CVS	Commercial Vessel Safety Program
CWA	Clean Water Act
DEIS	Draft Environmental Administration
DL	Decision Letters
DOSC	Deputy On-Scene Coordinator
DOT/PHMSA	U.S. Department of Transportation/Pipeline & Hazardous Materials Safety Administration
DWT	Deadweight Tons

Acronym	Description
EEBA	Emergency Escape Breathing Apparatus
EEI	Essential Elements of Information
EERU	Environmental Emergency Response Unit
EG	Emergency Generator Room
EIS	Environmental Impact Statement
EMT	Emergency Medical Technician
EO	Executive Order
EOC	Emergency Operations Center
EOD	Explosive Ordinance Disposal
EP	Estimated Position
EPA	U.S. Environmental Protection Agency
EPR&S	TPTN Emergency Preparedness, Response & Security Group
ERAD	Environmental and Regulatory Affairs Department
ERM	Environmental Response Map
ERT	Emergency Response Team
ESA	Environmentally Sensitive Area
ESD	Emergency Shutdown
ETF	Emergency Task Force
FCC	Federal Communications Commission
FCL	Flammable Cryogenic Liquid
FMC	Federal Maritime Commission
FOIA	Freedom of Information Act
FOIL	Field Oil Identification Laboratory
FEMA	Federal Emergency Management Agency
FOSC	Federal On-Scene Coordinator
FP	Flashpoint
FPN	Federal Project Number
FR	Federal Register
FT	Fuel Tank
FTJ	Failure to Join
FWPCA	Federal Water Pollution Control Act (as amended) (33 U.S.C. 1251 et seq.)

Acronym	Description
GAL	Gallons
GMT	Greenwich Mean Time
GPM	Gallons Per Minute
GRS	Geographical Response Site
GT	Gross Tons
HAZMAT	Hazardous Materials
HAZWOPER	Hazardous Waste Operations and Emergency Response
HCA	High Consequence Area
HP	High Pressure
HPA	High Population Area
IC	Incident Commander
ICS	Incident Command System
IDHL	Immediately Dangerous to Life and Health
IG	Inert Gas
IGS	Inert Gas System
CMST	Crisis Management Support Team
IMH	Incident Management Handbook
IOPP	International Oil Pollution Prevention Convention
IS	Intrinsically Safe
IST	Incident Support Team
JRT	Joint Response Team
JTTF	Joint Terrorism Task Force
KW	Kilowatt
LEL	Lower Exposure Limit
LEPC	Local Emergency Planning Committee
LNG	Liquefied Natural Gases
LOA	Length Overall
LOC	Letter Of Compliance
LOP	Line Of Position
LOSC	Local On Scene Coordinator
LOX	Liquefied Oxygen

Acronym	Description
LP	Low Pressure
LPG	Liquefied Petroleum Gases
LRT	Local Response Team
MAWP	Maximum Allowable Working Pressure
MMS	Mineral Management Service
MSDS	Material Safety Data Sheet
MSL	Mean Sea Level
MSO	Coast Guard District Marine Safety Office
MSRC	Marine Spill Response Corporation
N/A	Not Applicable
NC	Not Certified
NCP	National Contingency Plan
NEPA	National Environmental Policy Act
NIOSH	National Institute of Standards and Technology
NLS	Noxious Liquid Substances
NM	Nautical Mile
NMT	Not More Than
NOAA	National Oceanic and Atmospheric Administration
NPRM	Notice of Proposed Rulemaking
NRC	National Response Center
NRDA	Natural Resources Damage Assessment
NRT	National Response Team
NSF	National Strike Force
NWACP	North West Area Contingency Plan
OPA 90	Oil Pollution Act of 1990
ORB	Oil Record Book
OSC	On-Scene Coordinator
OSHA	Federal Occupational Safety and Health Administration
OSRL	Oil Spill Response Limited
OSRO	Oil Spill Response Organization
OT	Oil Tight

Acronym	Description
OVA	Organic Vapor Analyzer
OVM	Organic Vapor Monitor
OWS	Oily Water Separator
PEL	Permissible Exposure Limit
PID	Photo Ionization Detector
POLREP	Pollution Report
PPE	Personal Protective Equipment
PPM	Parts Per Million
PSI	Pounds per square inch
QDC	Quick Disconnect Coupling
QI	Qualified Individual
RA	Regional Administrator
RCP	Regional Contingency Plan
RCRA	Resource Conservation and Recovery Act
RRT	Regional Response Team
SARA	Superfund Amendments and Reauthorization Act
SDWA	Safe Water Drinking Act of 1986
SERC	State Emergency Response Commission
SHO	Safety and Health Official
SI	Surface Impoundment
SIC	Standard Industry Codes
SMART	Special Monitoring for Applied Response Technologies
SPCC	Spill Prevention, Control, and Countermeasures
SSC	Scientific Support Coordinator
STEL	Short-term Exposure Level
TLV	Threshold Limit Value
TLV-C	Threshold Limit Value - Ceiling
TOSC	Tribal On Scene Coordinator
TPTN	Transportation
TWA	Time-weighted Average
UEL	Upper Exposure Limit

Acronym	Description
USCG	U.S. Coast Guard
USGS	U.S. Geological Survey
U.S.	United States
U.S.C.	U.S. Code
USFWS	U.S. Fish and Wildlife Service
USPCI	U.S. Pollution Control, Incorporated
UST	Underground Storage Tank
UTV	Utility Vehicle
WT	Water Tight

Section II – Table of Contents

Sec. II-1 Discovery

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

Sec. II-2 Initial Response

Immediate actions are required at the onset of an emergency response to mitigate the extent of a release, minimize the potential hazard to human health and the environment, and implement an effective response. It is also important to act decisively and in so doing, create a professional working atmosphere among Company and regulatory authority personnel and public officials. This section is intended to provide guidance for determining the appropriate initial response and notification actions that should be carried out in the event of a release or other emergency incident.

General guidelines on the procedures and sequence for making the various internal and external notifications following any type of product release or other emergency incident can be found elsewhere in this plan in the applicable ICP Geographical Annex. The information provided herein focuses primarily on internal notifications and reporting with some general information provided for external notifications. Relevant external notifications will be found in the geographic specific ICP Geographical Annex along with all notification checklists applicable to that area.

Sec II-2.1 On-Scene Incident Commander / Qualified Individual

It is the On-Scene Incident Commander's / Qualified Individual's responsibility to first make the appropriate notifications, then to initiate response operations. This individual has absolute authority to obligate any funds necessary to carry out all required and/or directed response activities. This individual will also act as liaison with city, county, state and federal agencies. They are also responsible to direct operations of the Emergency Response Teams, activate the Company Emergency Management Team as appropriate as appropriate.

Sec. II-3 Notification Procedures

Primary communications for Company response activities will consist of the following:	
✓	Company mobile phones, hard line phones, faxes, and Company intranet devices.
✓	Communications needs beyond primary communications devices will be supplied by Company contracted OSRO's.

Sec II-3.1 Field Personnel

Any person who observes or becomes aware of a release shall immediately report the incident to the person in charge. Information related to the incident should be captured on the Incident Report Form located in this section.

The minimum duties required of the QI (or PIC for Marine Terminals) include:	
✓	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 appropriate Federal, State, and local authorities with the designated response roles, including the National Response Center, State Emergency Response Commission, and Local Emergency Planning Commission
✓	Assess the possible hazards to human health and the environment due as a result of the release. This assessment must consider both the direct and indirect effects of the release (i.e., the effects of any hazardous surface waters runoffs from water or chemical agents used to control fire and heat-induced explosion)
✓	Assess and implement prompt removal actions to contain and then remove the substance released
✓	Coordinate rescue and response action as previously arranged with all response personnel
✓	Use authority to immediately access company funding to initiate response, mitigation and clean-up activities
✓	Direct clean-up activities until properly relieved of this responsibility

Sec II-3.2 Emergency Response Team Contact Information

The Emergency Response Team may be activated as a group or individually, depending upon the size, location, nature, and complexity of the incident.

The response organization is capable of providing trained personnel, services, and response equipment on a twenty-four hour per day basis.

Sec II-3.3 Field Notifications

1. Call 911 or local emergency phone number for the jurisdiction affected by the incident.
2. Notify Person In Charge.
3. Notify the Company Control Center.
4. Notify the Duty Officer to activate support resources, as needed.

Sec II-3.4 Required Notification Information

The Incident Report Form should be used to document information and to log notifications. Provide the following information regarding the incident, when making internal notifications:

- Brief description of the incident, including the location.
- The impact or potential impact.
- Contact name and telephone number to obtain follow-up information.

Sec II-3.5 Duty Officer Role

The Duty Officer is a support tool designed to provide communication assistance to the Company Incident Commander. The Duty Officer is in place to provide a 24/7 contact that can assist with internal notifications to facilitate a timely response to emergency situations.

NOTE: ***Regardless of the situation, the ultimate responsibility for making proper internal and external notification is with the Incident Commander.*** The Duty Officer is a support tool, available to the Incident Commander to ensure that timely internal and external notifications are made in an effective and efficient manner.

Sec II-3.5.1 Duty Officer Response

When notified, the duty officer will contact the requested company representative (SME), following the detailed requests received by the caller, the Notification Flowchart and Internal Contact List. The company representative (SME) will determine the applicable internal and external notifications and ensure that they are completed. The SME will also ensure that other appropriate company representatives (SME) have been notified in the notification process.

Sec II-3.6 Emergency “Meet-Me” Conference Line Activation

The company has established a transportation conference number that is active 24/7 to assist in the management of emergencies. (Refer to the List of Contacts, Emergency Notification Telephone List, located in this plan for support resource contact information), dial the number and pass code listed; instruct others involved in the incident to do the same. The line is capable of receiving up to thirty phone connections simultaneously to assist in the management of the event.

Sec II-3.7 Incident Reporting Guidance

Refer to the Company Website.

Sec II-3.8 Notifications Requirements & Threshold Criteria

Each business unit, staff or group shall provide notification to Corporate Executive Management via the 24-hour Notification Hotline as soon as possible after the occurrence of any incident that meets the Notification Threshold Criteria.

Crisis Management Notification Requirements & Thresholds	
✓	The following identify internal and external reporting thresholds.
• Incidents	
✓	An incident resulting in an on-the-job employee or contractor fatality, or public fatality.
✓	Lost workday on-the-job injury to an employee or contractor.
✓	Resulting in one or more injuries requiring immediate overnight hospitalization and treatment of employee, contractor or the public.
✓	Incident resulting in multiple injuries/illnesses to employees, contractors or to the public.
• Spills and Releases	
✓	To environmentally sensitive areas, national parks or wildlife habitats and refuges which are likely to attract media attention or cause closure, stoppage or re-routing of traffic on a public road or waterway.
✓	Liquid hydrocarbon spills or releases from primary containment greater than 100 bbls (15.9 cubic meters).
✓	Hazardous chemical spills or releases from primary containment greater than 5,000 bbls (2.27 metric tons).
✓	On-shore produced water spills or releases greater than 100 bbls (15.9 cubic meters).
• Property Damage/Business Interruption	
✓	Property damage events likely to exceed $100,000.00 (USD) in estimated damages (Examples: fire, explosion, acts of nature, vandalism, theft, etc.).
✓	Any situation that should be brought to the attention of Corporate Management (CM&ER) due to actual or potential impact on the Company such as: Unscheduled business interruption that will likely result in $1, 000, 000 (USD) or more in estimated losses. This also applies to Partner/JV operated operations that meet the criteria.
• Evacuation/Shelter-In-Place	
✓	Evacuation beyond facilities of Company employees' and contractor personnel.
✓	Shelter-In-Place of the public
✓	Mandatory evacuation of the public.
• Well Control Incidents	
✓	Loss of surface well control that endangers the rig, onsite personnel or the environment.

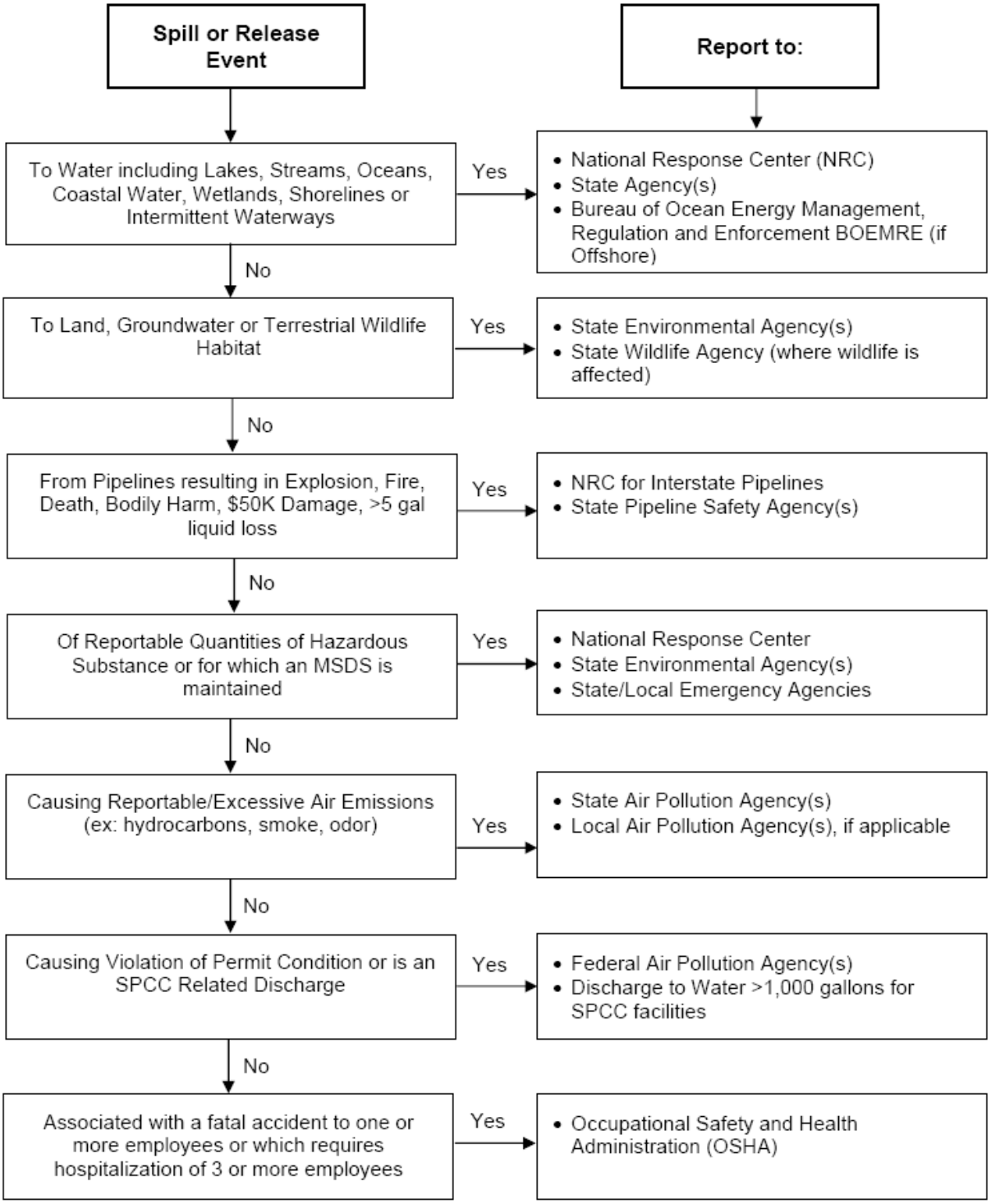
• Public Relation/Actual or Potential Impact	
✓	Serious transportation issues such as derailments involving our products and spills or releases resulting in traffic stoppage or evacuations.
✓	Acts of terrorism (e.g. bomb threats, sabotage, kidnapping, employee violence, etc.).
✓	That attracts, or could attract media attention including, but not limited to confrontations with anti-industry groups.
✓	Multiple complaints of acute illness by third parties allegedly caused by Company operations or products (i.e.: calls by more than one individual.).
• External Department of Transportation Reporting Thresholds	
✓	An incident involving a pipeline system failure that resulted in either a fire or explosion not intentionally set by the operator; or significant, in the judgment of the operator, even though it did not meet any other criteria as listed in this section.
✓	Spill or release to environmentally sensitive areas, as described by the Department of Transportation (DOT)
✓	Spill or release in any water of the United States.
✓	Spill cleanup/product loss costs reaching and exceeding $50,000.00.
✓	Property Damage costs reaching and exceeding $50,000.00
Transportation – HSE Manager Reporting Threshold	
In addition to above threshold criteria for incidents, the following requires notification to the Transportation HSE Manager or alternate as per the Incident Notification and Investigation Policy:	
✓	An incident involving an employee or contractor OSHA recordable injury or illness.

Sec II-3.9 Notification and Support Teams

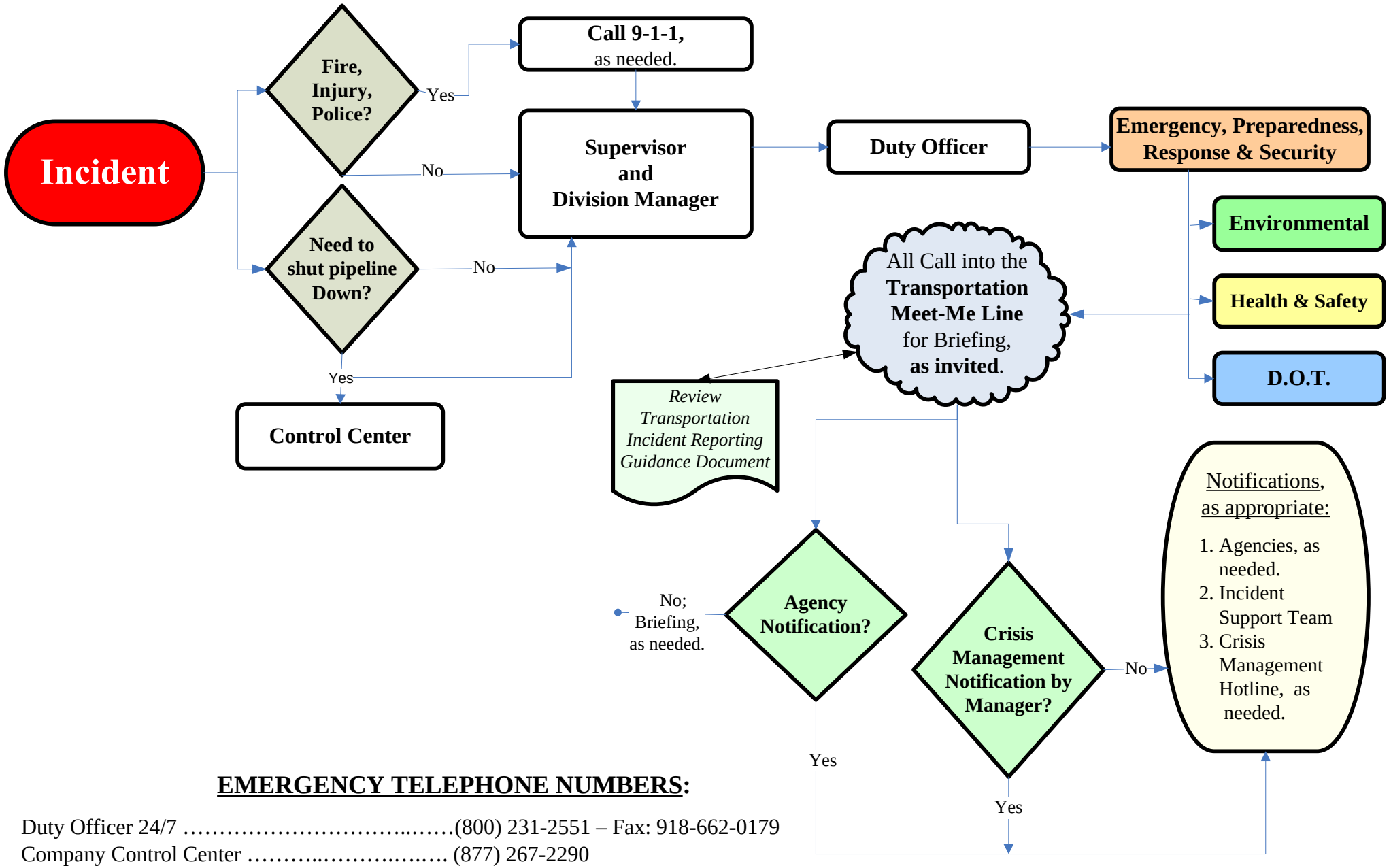
Subject Matter Expert (SME) – Primary Company Representative	
Contacts in the following areas provide support for internal and external notifications; assist with supporting plans, assessment and documentation:	
✓	Environmental Director
✓	Health & Safety Director
✓	DOT Regulatory Compliance Manager
✓	Emergency Preparedness, Response & Security Director

Incident Support Team (IST)	
Consists of the personnel in the following positions:	
✓	Pipelines Manager
✓	Terminals Manager
✓	Division Managers
✓	Logistics Manager
✓	Engineering & Projects Manager
✓	Health, Safety & Environmental Manager
✓	Emergency Preparedness, Response & Security Director
✓	TPTN Tier 1 Team and/or any other support staff, as deemed necessary by the IST, or requested by the IC.
Company Away Team	
Activation of the team can be made through the Crisis Management Hotline. Follow the Notification Flowchart located in this Section. A description of the Company Away Team organization is as follows:	
✓	Approximately thirty ICS positions can be staffed a minimum of three personnel deep.
✓	The team is made up of Company volunteers from across North America
✓	Operations Division/Group Leaders are available
✓	One hundred plus personnel are available for activation
✓	Will assist with activation, deployment and integration of the ICS spill response organization
✓	Resources also include dedicated communications equipment (i.e., computers, phones, radios, etc.).
✓	Typically the team members attend two weeks of response training and/or exercises annually. Additionally, specialized training in Fire & HAZMAT Response, Oil Spill Response, Incident Command System (NIMS) and Incident/Consequence Management is provided depending on the ICS position.
Tier 1 Response	
✓	Any response that can be effectively managed completely within Transportation services, including functional resources and contractors.
Tier 2 Response	
✓	Any response that requires resources beyond Transportation's ability to effectively manage (i.e., one or more away team resource(s) are deployed to assist with response management).
Tier 3 Response	
✓	Any response that requires the activation of the Crisis Management Support Team (CMST) to assist with the management of the response.

Figure Sec II-1 Overview of External Notifications for Major Incidents



Transportation Notifications Flowchart



EMERGENCY TELEPHONE NUMBERS:

Duty Officer 24/7 ……..……(800) 231-2551 – Fax: 918-662-0179
Company Control Center ……..…….…… (877) 267-2290
Transportation Meet Me Conference Line ……..(866) 836-3169; Pass Code: 157528
Axiom Medical Consulting ……..…… (281) 419-7063
Employee Hotline (Evacuation & Natural Disaster)….. (866) 379-3822
Crisis Management Hotline ……..(800) 342-5119 *or* 281-293-5119

Revision: 20120417

Figure Sec II-3 Transportation Incident Notification & Reporting Tool

QI/IC Field Version

The following incidents should be immediately reported to the Transportation Duty Officer. The Transportation Duty Officer will contact the on-call Transportation Emergency Preparedness, Response and Security (EPR&S) team member. EPR&S will contact the person reporting the incident to the Duty Officer to determine the level of response and support required and if an Incident Briefing meeting should be scheduled. Incidents marked as "Crisis Hotline Notification" will need to be immediately reported to the Transportation Duty Officer. Transportation HSE is responsible for reporting incidents to the Crisis management Hotline.

Incident Notification Criteria **Duty Officer Number: 1-800-231-2551**
INJURY:
Incident resulting in an on-the-job employee, contractor or public fatality.
Incident resulting in one or more injuries requiring immediate overnight hospitalization and treatment of employee, contractor or the public.
Incident resulting in multiple injuries/illnesses to employees, contractors or the public.
SPILLS/RELEASES:
Greater than 5-gallons, or potential to exceed 5-gallons. This includes suspected, but not yet confirmed potential leaks.
HVL (Any volume.)
To environmentally sensitive areas, any water of the United States, national Parks or wildlife habitats and refuges. (Any volume)
That attracts or is likely to attract media attention.
That causes closure, stoppage or re-routing of traffic on public road or waterway.
PROPERTY DAMAGE/BUSINESS INTERRUPTION:
Property damage events exceeding or likely to exceed $25,000 in estimated damages (example fire, explosion, pipeline repairs, collision, act of nature, vandalism, theft, etc.)
Unscheduled business interruption events exceeding or likely to exceed $1,000,000 (USD) or more in estimated losses regardless of cause.
EVACUATION/SHELTER IN PLACE
Evacuation beyond facilities of employees or contractor personnel (includes evacuation as a result of storms or threat of storms).
Shelter-In-Place of employees or contractors.
Shelter-In-Place or mandatory evacuation of the public.
PUBLIC RELATIONS/ACTUAL OR POTENTIAL COMPANY IMPACT
Any situation that attracts or is likely to attract media attention.
Serious transportation incidents such as derailments involving our products resulting in a closure of a public road and/or re-routing or stoppage of traffic.
Acts of terrorism (bomb threat, sabotage, kidnapping, employee violence, etc.)
Confrontations with anti-industry groups that could attract media attention.
Multiple complaints of acute illness by third parties allegedly caused by our operations or products (i.e. calls by more than one individual)
SECURITY
Theft or Vandalism of Company property, equipment and/or facility
Security Breach (trespassing)
Suspicious activity (Picture tacking, parking near facility, etc.)
Threats by telephone or warnings from local enforcement.

Sec II-3.10 External Notifications

Sec II-3.10.1 Agencies (Federal, State & Local)

The Incident Commander is responsible for assuring that all required notifications/reports are completed in a timely manner for all incidents. All contacts with Local, State, and Federal regulatory agencies must be properly documented. The Duty Officer is a support tool designed to provide communication assistance to the Company Incident Commander. The Duty Officer is in place to provide a 24/7 contact to assist the Incident Commander with internal support team notifications to facilitate a timely response to emergency situations. Refer to the Transportation Notifications Flowchart, Incident Notification and Reporting Tool and the Incident Report Form located in this section. Upon completion of the initial notifications and the implementation of the initial response actions, periodic follow-up notifications should be made to the National Response Center and state agencies to provide updated information on the incident. The internal support teams may assist the Incident Commander with follow-up information to the agencies.

Sec II-3.10.2 National Response Center (NRC)

NRC	
If you have a spill/release to report, contact the NRC via the toll-free number or visit the NRC Web Site (http://www.nrc.uscg.mil) for additional information on reporting requirements and procedures. **Refer to Annex 2 Notifications**.	
Reporting Requirements	
☐ **Type**	All spills that impact or threaten navigable water or adjoining shorelines
☐ **Verbal:**	Within 1 Hour of release
☐ **Written:**	As requested by the agency

Sec II-3.10.3 Environmental Protection Agency (EPA)

EPA	
Refer to Annex 2 Notifications.	
Reporting Requirements	
Type	All spills that impact or threaten navigable water or adjoining shorelines
Verbal:	As soon as possible
Written:	As requested by the agency

Sec II-3.10.4 United States Coast Guard (USCG)

United States Coast Guard
U.S. Department of Homeland Security

Refer to Annex 2 Notifications.	
Reporting Requirements	
Type	All spills that impact or threaten navigable water or adjoining shorelines
Verbal:	As soon as possible
Written:	As requested by the agency

Sec II-3.10.5 Department of Transportation (DOT) – Pipeline and Hazardous Materials Safety Administration (PHMSA)

DOT/PHMSA	
Refer to Annex 2 Notifications.	
Reporting Requirements	
In addition to the reporting of accidents to the NRC, a written/electronic accident report (DOT/PHMSA F 7000-1), must be submitted as soon as practicable but no later than 30 days after the incident for releases resulting in the following:	
☐	Caused a death or a personal injury requiring hospitalization.
☐	Explosion or fire not intentionally set by the operator.
☐	Caused estimated property damage, including cost of cleanup and recover, value of lost product, and damage to the Company property or others or both, exceeding $50,000.
☐	Resulted in pollution of any stream, river, lake, reservoir, or other similar body of water that violated applicable water quality standards, caused a discoloration of the surface of the water or adjoining shoreline, or deposited a sludge or emulsion beneath the surface of the water or upon adjoining shorelines.
☐	In the judgment of the Incident Commander/Qualified Individual that the event was significant enough even though it did not meet the criteria of any of the above incidents.
The electronic form can be found at https://opsweb.phmsa.dot.gov. Notify the appropriate DOT Coordinator to complete the DOT/PHMSA F 7000-1.	

Sec II-3.10.6 Occupational Safety & Health Administration

OSHA *Occupational Safety & Health Administration*	
Refer to Annex 2 Notifications.	
Reporting Requirements	
☐	Basic requirement. Within eight (8) hours after the death of any employee from a work-related incident or the in-patient hospitalization of three or more employees as a result of a work-related incident, you must orally report the fatality/multiple hospitalization by telephone or in person. In accordance with 29 CFR 1904.39 the following information is to be supplied to OSHA when reporting an incident: ☐ Company name; ☐ Location of the Incident; ☐ Time of Incident; ☐ Number of fatalities or hospitalized employees; ☐ Names of any injured employees; ☐ Contact person and his/her phone number; ☐ A brief description of the incident.

Sec II-3.10.7 State and Local notifications

All required State and Local notifications will be listed as well. They can be found in the applicable **Annex 2 Notifications**.

Sec II-3.10.8 Follow-up Notifications

Upon completion of the initial notifications and the implementation of the initial response actions, periodic follow-up notifications shall be made to the National Response Center and State Agencies to provide updated information on the incident including (before to have you:	
•	Name of facility or pipeline
•	Time of release
•	Location of discharge
•	Name of material involved
•	Reason for discharge (e.g., material failure, excavation damage, corrosion, etc.)
•	Estimated volume of oil/product discharged
•	Weather conditions on-scene
•	Actions taken or planned by persons on scene

Sec II-3.10.9 Incident Command Posts

The Company has determined Incident Command Post (CP) locations within each operating area where adequate resources are available to command an incident. In response to most incidents, a CP is established at existing Company facilities. In the event of a significant incident for which Company facilities are not adequate, a more appropriate Command Post location must be selected based on the incident circumstances. Possible sources of other CP locations would include appropriate government, public, and commercial facilities available for CP purposes. Local governments usually maintain facilities which have been pre-designated for CP purposes. These facilities are often prescribed in Area Contingency Plans and/or local governments' Emergency Operations Plans.

Incident Command Post Characteristics	
•	Initial CP location should consider the nature and expected duration of the incident. The location is a safe area usually near the incident. The CP can be moved if necessary, although once established, it will normally not be relocated.
•	The CP should have the ability to provide security and controlled access.
•	The CP should be large enough to provide adequate working room for all assigned personnel, including agency representatives.
•	The CP should provide the resources necessary to manage the incident, e.g., meeting rooms, communications equipment, documentation equipment, materials and supplies needed to support the command function, etc.
•	The incident Communications Center, if established at an incident, is often located with or adjacent to the CP.

Sec II-3.10.10 Documentation

Documentation of a spill provides not only a historical account covering the entire period from pre-spill through cleanup actions to final post-spill assessment, but also serves as a legal instrument and a means to account for all cleanup costs. Documentation relies heavily upon detection and assessment functions, and together these functions provide the necessary data on the extent of the spill and the necessity for control measures. While facility personnel are in charge of this important function, it may be desirable to utilize consultants who can provide overall guidance on type of data collection required and, where necessary, assist in data collection or provide sampling survey personnel.

An important aspect to bear in mind when designing forms and entering data is to use a quantitative system. Avoiding relative or arbitrary terms such as large, small, thick, thin, a lot, not much, etc. These cause confusion and are not comparable between locations and individuals.

To ensure that all pertinent data and information are available for the incident report, documentation should commence immediately upon notification of a spill and should continue until termination of all operations. The Documentation Unit Leader should coordinate all documentation. The documentation unit leader, incident commander, deputy incident commander, directors, supervisors, and designated support personnel should keep notes on all

significant occurrences, including details and time of occurrence. Notes are best kept in chronological log format, to be compiled later in the final report. Every contact, written or verbal, with government personnel should be noted. All data should be written in a bound notebook, from which pages cannot be removed without leaving some track. Numbering of notebooks and pages may also help in filing of field data and provide for a method of reference later. These notebooks should also be used by supervisory personnel for documentation of an individual's activities. The Documentation Unit Leader should be responsible for distributing suitable notebooks to all personnel, and for assuring that personnel make proper use of the notebooks.

Sec. II-4 Response Management System

This Section describes specific duties and responsibilities of the members of the Company Response Team. This section should be used as a guide; specific circumstances during an incident response may require different actions. Certain duties, responsibilities and position titles listed here may not be needed in all circumstances and may change with time as the response evolves.

The Company response team consists of trained personnel that will respond to all company emergency incidents. Trained and qualified OSRO personnel will be called on fill ICS/UCS roles as required, including but not limited to positions in the Operations, Planning and Logistics sections.

Sec. II-4.1 Incident Command System Structure

The Company has adopted the National Incident Management System (NIMS) ICS/UCS organization as outlined in:

- Homeland Security Presidential Directive Five (HSPD-5)
- National Response Plan (NRP), December 2005

All Federal, State, tribal, and local levels of government, as well as many private sector and non-governmental organizations use ICS/UCS for a broad spectrum of emergencies. These range from small to complex incidents, both natural and manmade, and include acts of catastrophic terrorism. The Company has adopted the NIMS ICS/UCS to allow the partnership of Unified Command to be developed when required in training, exercises or responses.

Note: The document, FEMA 501, National Incident Management System was referenced in the development of this document.

ICS/UCS Organization	
The ICS/UCS is applicable across a spectrum of incidents that may differ in terms of size, scope, and complexity because of its:	
✓	Functional unit management structure.
✓	Modular organizational structure that is extendable to incorporate all necessary elements. Responsibility and performance begin with the incident command element, the IC/UC, and build from the top down.

Functional Areas	
ICS/UCS is usually organized around five major functional areas:	
✓	Command
✓	Operations
✓	Planning
✓	Logistics
✓	Finance/administration.
The IC will establish the sixth functional area, intelligence, based on the requirement of the situation at hand.	

Transitional Steps	
Some of the more important transitional steps that are necessary to apply ICS/UCS in a field incident environment include the following:	
✓	Recognize and anticipate the requirement that organizational elements will be activated and take the necessary steps to delegate authority as appropriate.
✓	Establish incident facilities as needed, strategically located, to support field operations.
✓	Establish the use of common terminology for organizational functional elements, position titles, facilities, and resources.
✓	Rapidly evolve from providing oral direction to the development of a written IAP.

Modular Extension	
The modular concept is based upon the following considerations:	
✓	Develop the form of the organization to match the function or task to be performed.
✓	Staff only those functional elements that are required to perform the task.
✓	Observe recommended span-of-control guidelines.
✓	Perform the function of any non-activated organizational element at the next highest level.
✓	Deactivate organizational elements no longer required.

Management Assignments	
The IC's initial management assignments will normally be one or more section chiefs to manage the major ICS/UCS functional areas.	
✓	Section chiefs will further delegate management authority for their areas as required.
✓	If needed, section chiefs may establish branches or units as appropriate for the section.
✓	Each functional unit leader will further assign individual tasks within the unit as needed.
✓	Section chiefs serve as the general staff for the IC.

Staffing	
Use the separate sections to organize staff as the need arises.	
✓	Section chiefs will further delegate management authority for their areas as required.
✓	If needed, section chiefs may establish groups/branches/units as appropriate for the section.

Leadership Titles	
✓	Incident Command; Incident Commander.
✓	Command Staff; Officer.
✓	Section; Section Chief.
✓	Branch; Branch Director.
✓	Divisions/Groups; and Supervisors (Supervisor is only used within the operations section).
✓	Unit; and Unit Leader (Applies to the subunits of the planning, logistics, and finance / administration sections).

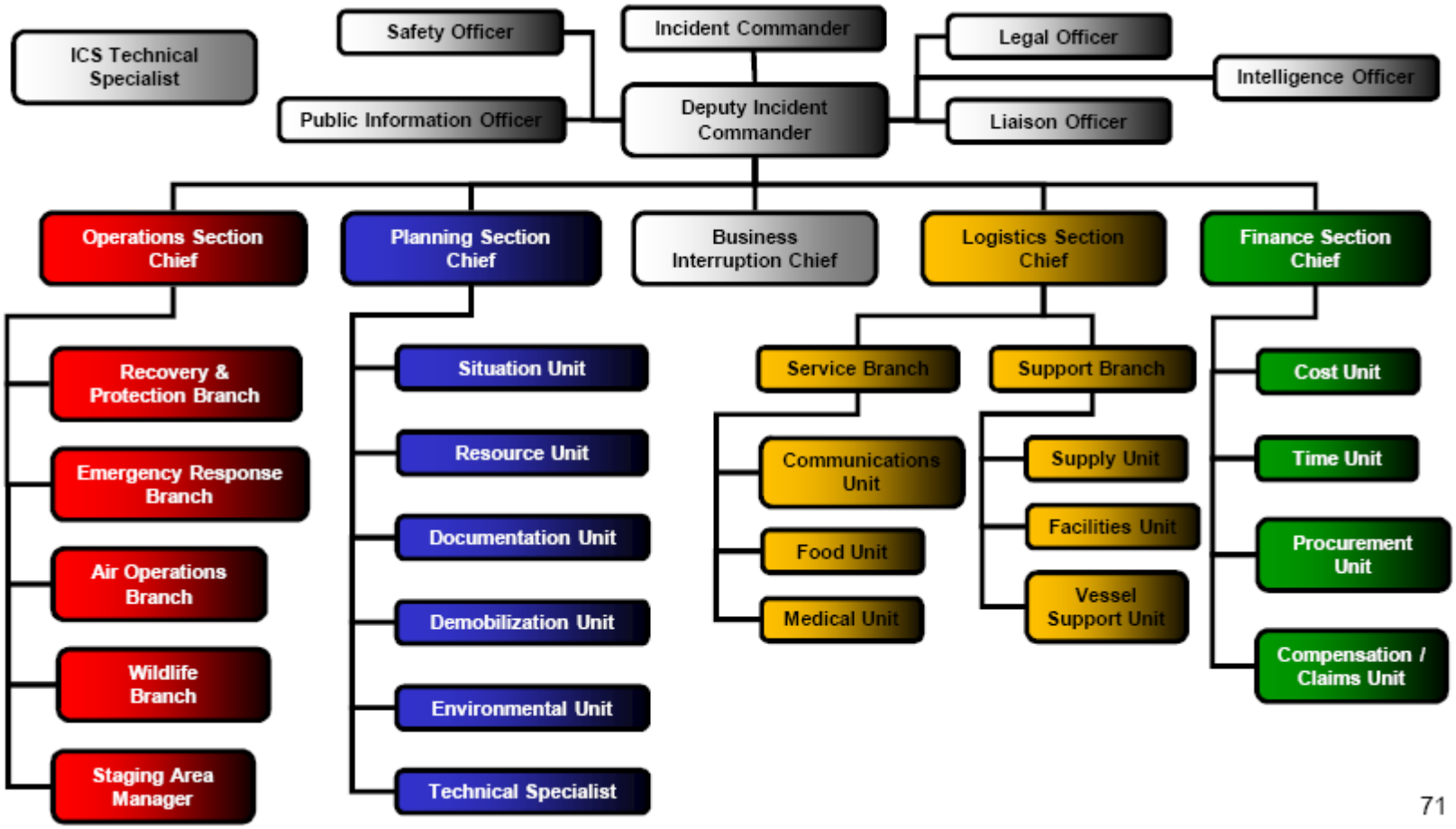
Partners	
Several types of agencies could be in the ICS/UCS, and work together or in combinations depending on the situation.	
✓	Fire
✓	Law enforcement
✓	Public health
✓	Public works/ Emergency services
✓	State Agencies
✓	Tribal Representatives
Other participants may include private individuals, companies, or nongovernmental organizations, some of which may be fully trained and qualified to participate as partners in the ICS/UCS.	

Tactical Operations	
The specific method selected for organizing and executing incident operations will depend on the:	
✓	Type of incident.
✓	Agencies involved.
✓	Objectives and strategies of the incident management effort.

Organization	
The organizational structure for incident tactical operations can vary and may be based on:	
✓	A method to accommodate jurisdictional boundaries.
✓	An approach that is strictly functional in nature.
✓	A mix of functional and geographical approaches.

Branches	
Establish branches in ICS/UCS for reasons such as:	
✓	The numbers of divisions and/or groups exceed the recommended span of control for the operations section chief.
✓	The nature of the incident calls for a functional branch structure.
✓	The incident is multi-jurisdictional.

Sec. II-4.2 Company IMT Organization Chart (Sample from IMH)



Sec. II-4.3 Common Responsibilities

Common Responsibilities Checklist	
Receive assignment from your agency, including:	
☐	Job assignment (e.g., Strike Team designation, position, etc.).
☐	Brief overview of type and magnitude of incident.
☐	Resource order number and request number.
☐	Reporting location & time.
☐	Travel instructions.
☐	Any special communications instructions (e.g., travel, radio frequency).
☐	Monitor incident related information from media, internet, etc., if available.
☐	Assess personal equipment readiness for specific incident and climate (e.g.) medications, money, computer, medical record, etc.). Maintain a checklist of items and possible a personal Go-Kit.
☐	Inform others as to where you are going and how to contact you.
☐	Review Incident Management Handbook.
☐	Take advantage of available travel to rest prior to arrival.
Upon arrival at the incident, check-in at the designated check-in location. Check-in may be found at any of the following locations:	
☐	Incident Command Post (CP), Base/Camps, Staging Areas, and Helibases.
☐	If you are instructed to report directly to a line assignment, check-in with the Division/Group Supervisor.
☐	Receive briefing from immediate supervisor.
☐	Agency Representatives from assisting or cooperating agencies report to the Liaison Officer (LNO) at the CP after check-in.
☐	Acquire work materials.
☐	Abide by organizational code of ethics.
☐	Participate in IMT meetings and briefings as appropriate.
☐	Ensure compliance with all safety practices and procedures. Report unsafe conditions to the Safety Officer.
☐	Supervisors shall maintain accountability for their assigned personnel with regard as to exact location(s) and personal safety and welfare at all times, especially when working in or around incident operations.
☐	Organize and brief subordinates.
☐	The Command and General staff shall ensure branches are identified, set up and allocate divisions and groups within them to stay within the recommended span of control. (1 Supervisor per 7 people) Put in Common Responsibilities
☐	Know your assigned communication methods and procedures for your area of responsibility and ensure that communication equipment is operating properly.
☐	Use clear text and ICS/UCS terminology (no codes) in all radio communications.
☐	Complete forms and reports required of the assigned position and ensure proper disposition of incident documentation as directed by the Documentation Unit.
☐	Ensure all equipment is operational prior to each work period.
☐	Report any signs/symptoms of extended incident stress, injury, fatigue or illness for yourself or coworkers to your supervisor.

Common Responsibilities Checklist (Cont'd)	
☐	Respond to demobilization orders and brief subordinates regarding Demobilization.
☐	Prepare personal belongings for demobilization.
☐	Return all assigned equipment to appropriate location.
☐	Complete Demobilization Check-out process before returning to home base.
☐	Participate in After-Action activities as directed.
☐	Carry out all assignments as directed.

Sec. II-4.4 Roles and Responsibilities

Sec. II.4.4.1 Incident Commander and Deputy IC Responsibilities

The Incident Commander's responsibility is the overall management of the incident. On most incidents, the command activity is carried out by a single IC. The IC is selected by qualifications and experience. The IC may have a deputy, who may be from the same agency, or from an assisting agency. Deputies may also be used at the section and branch levels of the ICS/UCS organization. Deputies may have the same qualifications as the person for whom they work, as they must be ready to take over that position at any time. When span of control becomes an issue for the IC, a Deputy IC/Chief of Staff may be assigned to manage the Command Staff.

Incident Commander and Deputy IC Checklist	
☐	Review common responsibilities.
☐	Obtain a briefing from the prior IC (201 Briefing).
☐	Determine incident objectives & general direction for managing the incident.
☐	Establish the immediate priorities.
☐	Establish a CP.
☐	Brief Command Staff and General Staff.
☐	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 internal and external stakeholders informed.
☐	Evaluate/Approve the use of trainees, volunteers, and auxiliary personnel.
☐	Authorize release of information to the news media.
☐	Ensure ICS 209 is completed and forwarded to appropriate higher authority.
☐	Order the demobilization of the incident when appropriate.

Sec. II.4.4.2 Safety Officer

The Safety Officer (SOFR) function is to develop and recommend measures for assuring personnel safety and to asses and/or anticipate hazardous and unsafe situations. Only one primary SOFR will be assigned for each incident. The SOFR may have specialists, as necessary, and the assistants may also represent assisting agencies or jurisdictions. Safety assistants may have specific responsibilities, such as air operations, hazardous materials, etc.

Safety Officer Checklist	
☐	Review Common Responsibilities.
☐	Identify hazardous situations associated with the incident.
☐	Complete the initial incident action plan site safety and control analysis (ICS Form 201-5)
☐	Participate in tactics and planning meetings, and other meetings and briefings as required.
☐	Review the IAP for safety implications.
☐	Provide safety advice in the IAP for assigned responders.
☐	Exercise emergency authority to stop and prevent unsafe acts.
☐	Investigate accidents that have occurred within the incident area.
☐	Assign assistants, as needed.
☐	Review and approve the medical plan (ICS Form 206).
☐	Develop the site safety plan and publish site safety plan summary (ICS Form 208) as required.

Sec. II.4.4.3 Public Information Officer

The Public Information Officer (PIO) is responsible for developing and releasing information about the incident to the news media, to incident personnel, and to other appropriate agencies and organizations. Only one primary PIO will be assigned for each incident, including incidents operating under a Unified Command (UC) and multiple jurisdiction incidents. The PIO may also have assistants as necessary, and the assistants may also represent assisting agencies or jurisdictions. Agencies have different policies and procedures relative to the handling of public information.

Public Information Officer Checklist	
☐	Review Common Responsibilities.
☐	Determine from the IC/UC if there are any limits on information release.
☐	Develop material for use in media briefings.
☐	Obtain IC/UC approval of media releases.
☐	Inform media and conduct media briefings.
☐	Arrange for tours and other interviews or briefings that may be required.
☐	Manage a Joint Information Center (JIC) if established.
☐	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.

Sec. II.4.4.4 Liaison Officer

Incidents that are multi-jurisdictional, or have several agencies involved, may require the establishment of the Liaison Officer (LNO) position on the Command Staff. Only one primary LNO will be assigned for each incident, including incidents operating under UC and multi-jurisdiction incidents. The LNO may have assistants as necessary, and the assistants may also represent assisting agencies or jurisdictions. The LNO is assigned to the incident to be the contact for assisting and/or cooperating Agency representatives.

Liaison Officer Checklist	
☐	Review common responsibilities.
☐	Be a contact point for agency representatives.
☐	Maintain a list of assisting and supporting agencies, including name and contact information. 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 Operations Section Chief during oil and HAZMAT responses.
☐	Coordinate response resource needs for incident investigation activities with the Operations Section Chief.
☐	Ensure that all required agency forms, reports and documents are completed prior to demobilization.
☐	Brief IC/UC on agency issues and concerns.
☐	Have debriefing session with the IC/UC prior to departure.
☐	Coordinate activities of visiting dignitaries.

Sec. II.4.4.5 ICS/UCS Technical Specialist

ICS/UCS Technical Specialist Checklist	
☐	Review common responsibilities.
☐	Determine site specific training requirements and need for a training program.
☐	Develop site specific training program and implement as necessary.
☐	Determine the feasibility of using trainees in the response.
☐	Review trainee assignments and modify if appropriate.
☐	Coordinate the assignments of trainees to incident positions with the Resources Unit.
☐	Keep the Safety Officer apprised of status of compliance with training requirements.
☐	Make follow-up contacts in the field to provide assistance and advice for trainees to meet training objectives, as appropriate, and with approval of Unit Leaders to ensure trainees receive performance evaluation.
☐	Monitor operational procedures and evaluate training needs.
☐	Respond to requests for information concerning training activities.
☐	Give the Training Specialist records and logs to the Documentation Unit at the end of each operational period.
☐	Maintain Unit Log (ICS 214).

Sec. II.4.4.6 Legal Officer

Legal Officer Checklist	
☐	Review common responsibilities.
☐	Obtain briefing from the Incident Commander.
☐	Advise the Incident Commander (IC) and the Unified Command (UC), as appropriate, on all legal issues associated with response operations.
☐	Establish documentation guidelines for and provide advice regarding response activity documentation to the response team.
☐	Provide legal input to the Documentation Unit, the Compensation/Claims Unit, and other appropriate Units as requested.
☐	Review press releases, documentation, contracts and other matters that may have legal implications for the Company.
☐	Participate in Incident Command System (ICS) meetings and other meetings, as requested.
☐	Participate in incident investigations and the assessment of damages (including natural resource damage assessments).
☐	Maintain Individual/Activity Log (ICS Form 214a).

Sec. II.4.4.7 Intelligence/Security Officer

Intelligence/Security Officer Checklist	
☐	Collect and analyze incoming intelligence information from all sources.
☐	Determine the applicability, significance, and reliability of incoming intelligence information.
☐	As requested, provide intelligence briefings to the IC/UC.
☐	Provide intelligence briefings in support of the Incident Command System Planning Cycle.
☐	Provide Situation Unit with periodic updates of intelligence issues that impact consequence management operations.
☐	Answer intelligence questions and advise Command and General Staff as appropriate.
☐	Supervise, coordinate, and participate in the collection, analysis, processing, and dissemination of intelligence.
☐	Assist in establishing and maintaining systematic, cross-referenced intelligence records and files.
☐	Establish liaison with all participating law enforcement agencies including the CGIS, FBI/JTTF, State and Local police departments.
☐	Conduct first order analysis on all incoming intelligence and fuse all applicable incoming intelligence with current intelligence holdings in preparation for briefings.
☐	Prepare all required intelligence reports and plans.
☐	As the incident dictates, determine need to implant Intelligence Specialists in the Planning and Operations Sections.

Sec. II.4.4.8 Operations Section Chief

The Operations Section Chief (OSC), a member of the General Staff, is responsible for the management of all operations directly applicable to the primary mission. The OSC will normally be selected from the organization/agency with the most jurisdictional responsibility for the incident and will work in the ICP.

The OSC activates and supervises organization elements in accordance with the IAP and directs its execution. The OSC also directs the preparation of Unit operational plans, requests or releases resources, makes expedient changes to the IAP, as necessary, and reports such to the IC. The OSC may have deputy OSC's who may be from the same organization or from an assisting agency. In complex incidents, the OSC may assign a Deputy OSC to supervise on-scene operations.

Operations Section Chief Checklist	
☐	Review common responsibilities.
☐	Obtain briefing from IC/UC.
☐	Request sufficient section supervisory staffing for both ops & planning activities.
☐	Convert operational incident objectives into strategic and tactical options through a work analysis matrix.
☐	Coordinate and consult with the PSC, SOFR, technical specialists, modeling scenarios, trajectories on selection of appropriate strategies and tactics to accomplish objectives.
☐	Identify kind and number of resources required to support selected strategies.
☐	Subdivide work areas into manageable units.
☐	Develop work assignments and allocate tactical resources based on strategy requirements.
☐	Coordinate planned activities with the SOFR to ensure compliance with safety practices.
☐	Prepare ICS 234 Work Analysis Matrix with PSC to ensure Strategies, Tactics and tasks are in line with ICS 202 Response Objectives to develop ICS 215.
☐	Participate in the planning process and the development of the tactical portions (ICS 204 and ICS 220) of the IAP.
☐	Assist with development of long-range strategic, contingency, and demobilization plans.
☐	Supervise Operations Section personnel.
☐	Monitor need for and request additional resources to support operations as necessary.
☐	Coordinate with the LOFR and AREP's to ensure compliance with approved safety practices.
☐	Evaluate and monitor current situation for use in next operational period planning.
☐	Interact and coordinate with Command on achievements, issues, problems, significant changes special activities, events, and occurrences.
☐	Troubleshoot operational problems with other IMT members.
☐	Supervise and adjust operations organization and tactics as necessary.
☐	Participate in operational briefings to IMT members as well as briefings to media, and visiting dignitaries.
☐	Develop recommended list of Section resources to be demobilized and initiate recommendation for release when appropriate.
☐	Receive and implement applicable portions of the Incident Demobilization Plan.

Sec. II.4.4.9 Planning Section Chief

The Planning Section Chief (PSC), a member of the General Staff, is responsible for the collection, evaluation, dissemination and use of incident information and maintaining status of assigned resources. Information is needed to 1) understand the current situation; 2) predict the probable course of incident events; 3) prepare alternative strategies for the incident; and 4) submit required incident status reports. The PSC may have a deputy PSC, who may be from the same organization or from an assisting agency. The Deputy PSC should have the same qualifications as the individual for whom they work and must be ready to take over position at any time.

Planning Section Chief Checklist	
☐	Review Common Responsibilities.
☐	Collect, process, and display incident information.
☐	Assist OSC in the development of response strategies.
☐	Supervise preparation of the IAP.
☐	Facilitate planning meetings and briefings.
☐	Assign personnel already on-site to ICS/UCS organizational positions as appropriate.
☐	Establish information requirements and reporting schedules for Planning Section Units (e.g., Resources, Situation).
☐	Determine the need for any specialized resources in support of the incident.
☐	Establish special information collection activities as necessary (e.g., weather, environmental, toxics, etc.).
☐	Assemble information on alternative strategies.
☐	Provide periodic predictions on incident potential.
☐	Keep IMT apprised of 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, and Site Safety) into the IAP.
☐	Develop other incident supporting plans (e.g., salvage, transition, security).
☐	Assist Operations with development of the ICS 234 Work Analysis Matrix.
☐	Maintain Unit Log (ICS 214).

Sec. II.4.4.10 Logistics Section Chief

The Logistics Section Chief (LSC), a member of the General Staff, is responsible for providing facilities, services, and material in support of the incident. The LSC participates in the development and implementation of the IAP and activates and supervises the Branches and Units within the Logistics Section.

The LSC may have Deputy LSCs, who may be from the same organization or from an existing agency. The Deputy LSC must have the same qualifications as the person for whom they work, as they must be ready to take over that position at any time.

Logistics Section Chief Checklist	
☐	Review Common Responsibilities.
☐	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 Logistics Branch Directors and Unit Leaders.
☐	Determine and supply immediate incident resource and facility needs.
☐	In conjunction with Command, develop and advise all Sections of the IMT resource approval and requesting process.
☐	Review proposed tactics for upcoming operational period for ability to provide resources and logistical support.
☐	Identify long-term service and support requirements for planned and expected operations.
☐	Advise Command and other Section Chiefs on resource availability to support incident needs.
☐	Provide input to and review the Communications Plan, Medical Plan and Traffic Plan.
☐	Identify resource needs for incident contingencies.
☐	Coordinate and process requests for additional resources.
☐	Track resource effectiveness and make necessary adjustments.
☐	Advise on current service and support capabilities.
☐	Develop recommended list of Section resources to be demobilized and initiate recommendation for release when appropriate.
☐	Receive and implement applicable portions of the Incident Demobilization Plan.
☐	Ensure the general welfare and safety of Logistics Section personnel.
☐	Maintain Unit Log (ICS 214).

Sec. II.4.4.11 Finance Section Chief

The Finance Section Chief (FSC), a member of the General Staff, is responsible for all financial, administrative and cost analysis aspects of the incident and for supervising members of the Finance/Admin Section. The FSC may have Deputy FSCs who may be from the same organization or from an assisting agency. The Deputy FSC must have the same qualifications as the person for whom they work, as they must be ready to take over that position at any time.

Finance Section Chief Checklist	
☐	Review Common Responsibilities.
☐	Participate in incident planning meetings and briefings as required.
☐	Review operational plans and provide alternatives where financially appropriate.
☐	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/Admin 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/Admin matters.
☐	Ensure that all personnel time records are accurately completed and transmitted to home agencies, according to policy.
☐	Provide financial input to demobilization planning.
☐	Ensure that all obligation documents initiated at the incident are properly prepared and completed.
☐	Brief agency administrative personnel on all incident-related financial issues needing attention or follow-up prior to leaving incident.
☐	Develop recommended list of Section resources to be demobilized and initial recommendation for release when appropriate.
☐	Receive and implement applicable portions of the Incident Demobilization Plan.
☐	Maintain Unit Log (ICS 214)

Sec. II-5 Response Procedures

A person evaluating a situation must assess the circumstances surrounding an event, to determine if an emergency situation exists, and respond accordingly. Company personnel are trained in hazards or emergency recognition procedures as described below.

An emergency in pipeline and facility operations often originates with the unexpected release or spill of commodities. Uncontained commodities and high vapor concentrations present substantial hazards for fires or explosions until they dissipate to safe levels. In these situations, sources of ignition must be controlled to eliminate fire and explosion hazards. The Company has strict rules for controlling sources of ignition within the property to avoid such explosions or fires. Potential sources of ignition become more difficult to control on public property. Early detection and quick response are the best actions to reduce the hazards.

The purpose of this section is to identify the response checklist/procedures to follow based on the type of incident that could occur at the facility and related pipeline systems. The checklists below are developed to allow the field personnel the ability to make sound decisions during the initial response of an incident. The checklists are not meant to substitute for emergency response knowledge, training, or sound judgment calls and do not account for all circumstances. In the event of any type of incident, it is imperative that the safety of **all** personnel be considered **first**, and then the protection of property second.

The level of required response is dependent upon the severity of the release, the size, potential environmental, social and economic impact and the expected public interest in the event.

Response Procedures Covered in this Section		Section
•	Initial Discovery	Sec II-5.1
•	Immediate Action Checklist	Sec II-5.2
•	General Initial Response Procedures – Terminals	Sec II-5.3
•	General Initial Response Procedures – Pipeline Maintenance Crews	Sec II-5.4
•	Emergency Shut Down	Sec II-5.5
•	Injury / Medical / Rescue	Sec II-5.6
•	Unconfirmed Report of a Leak	Sec II-5.7
•	Pipeline Leak or Rupture	Sec II-5.8
•	Failure of Manifold, Mechanical Loading Arm, Other Transfer Equipment or Hoses	Sec II-5.9
•	Tank Overfill	Sec II-5.10
•	Tank Failure	Sec II-5.11
•	Fire / Explosion	Sec II-5.12
•	Pipeline Station or Manifold Fire	Sec II-5.13
•	Truck Loading Rack Fire	Sec II-5.14
•	Tank Fire Pre-Plan / Flowchart	Sec II-5.15
•	Spill Response Strategy Guide	Sec II-5.16
•	Oil Spill / Release	Sec II-5.17
•	Oil Spill Surveillance	Sec II-5.18
•	Spills to Groundwater	Sec II-5.19
•	Natural Disasters	Sec II-5.20
•	Bomb Threat	Sec II-5.21

Sec. II-5.1 Initial Discovery / Response Actions

Initial response actions are those taken by local personnel immediately upon becoming aware of a discharge or emergency incident. Timely implementation of these initial steps is of the utmost importance because they can greatly affect the overall response operation.

Initial Discovery / Response Actions Checklist		
DISCOVERER	Initiate Initial Response Procedures and Notifications. A list of contact numbers is located in the Contacts section of this plan.	
INITIAL INCIDENT COMMANDER RESPONSE GUIDELINES		
The appropriate response to a particular incident may vary depending on the nature and severity of the incident.		
✓	**Action**	**Definition**
☐	Secure the source.	Act quickly to shut-in source, close valves, etc. (**IF SAFE TO DO SO, PROPERLY TRAINED & HAVE PROPER PPE**).
☐	Consider safety of personnel / call for medical assistance if needed.	Pull an alarm, push an evacuation button, use radio or call 911. **EVACUATE IF NECESSARY**.
☐	Shut off ignition sources.	Motors, open flames, electrical circuits.
☐	Coordinate rescue and medical response actions.	Perform this task only if trained to do so (i.e., member of medical & rescue teams) Refer to hospital listings in the Contacts section.
☐	Identify pollutant and assess possible hazards to human health and the environment.	Identify source and volume; characterize oxygen levels, explosive character, toxicity of air on scene, splash and ingestive hazards.
☐	Initiate containment if necessary and safe to do so.	Contact OSROs as necessary.
☐	Conduct air monitoring.	Monitor the air quality in the area near the release to ensure there are no organic vapors which may pose an inhalation or flammability hazard.
☐	Report all incidents to the Duty Officer.	Follow Notification Procedures in ICP Geographical Annex 2. Contact Numbers located in the Contacts section.
Initial Incident Commander	Name:	

Sec. II-5.2 Immediate Action Checklist

Spill Observer / Dispatcher	
•	If a pressure drop is noticed or a leak is suspected, notify the Terminal Supervisor and/or the maintenance supervisor immediately and stop all product transfers.
•	To minimize damage, close all automatic isolation valves, if available.
•	Assist with initial response actions as directed.
Line Flyer	
•	Report all abnormal activity and dead vegetation in the vicinity of a pipeline.
•	If action requires immediate attention, report via radio.
•	In the event radio contact cannot be made; the line flyer will land and report to Company management by telephone.
Terminal Supervisor / Maintenance Supervisor	
•	Determine level of response needed, hazards of product(s) involved and proper response guidelines to be followed. (For additional information refer to Company Maintenance Manual (MPR) - MPR-4005.)
•	Work with local law enforcement to make sure all personnel/citizens are a safe distance away from the hazard area.
•	Notify Fire Department as appropriate.
•	Notify Company management as appropriate.
•	Dispatch response team to the site of the suspected leak and assume the position of IC. Implement ICS/UCS and establish a workable CP and Communications Center. Determine the extent of spill or release, verify product type(s), identify material(s), estimate quantity spilled or released, approximate rate of discharge, estimate movement of the spill/vapor cloud, estimate the wind direction. (Report volume details within one hour per DOT regulations)
•	Instruct response team to eliminate sources of vapor cloud ignition. Shut down all engines and motors. (Refer to MPR-3001 and MPR-4003).
•	Review pipeline alignment sheets to become familiar with the location of mainline valves and elevation characteristics. Review environmentally sensitive area maps for the location of any sensitive area that may be impacted.
•	Advise response team on manual valves locations; order them closed if appropriate.
•	Note time of spill or time of first detection, location, source and cause of spill.
•	Make a note of response actions taken and by whom.
•	Instruct response team to attend to injured personnel.
•	Call out cleanup or general contractors, as necessary.
•	Collect information necessary to complete the Incident Report Form.
•	Make appropriate notifications to local and state governmental agencies of the spill and proposed actions. Document names of agencies called, person who received the calls, and the times the calls were made.
•	Complete the Incident Report Form and notifications.
•	Advise neighboring property owners and operators of any threat to their property or personnel.
•	Direct initial response actions.
•	Call additional emergency response contractors as necessary.

Sec II-5.3 General Initial Response Procedures – Terminals

This checklist is generic to all Company Plans and is included as an additional checklist to supplement facility specific checklists contained in this Plan.

Terminals	
•	Any employee observing a spill should take emergency action to stop the release at the source in a safe manner and immediately notify the Terminal or Maintenance Supervisor.
•	Upon becoming aware of a spill, the Facility Supervisor will assess the spill in terms of the location and volume and determine if the ICS/UCS should be activated.
•	Once it has been determined to activate the ICS/UCS, the Facility Supervisor will assume the role of Incident Commander and initiate the following actions: a) Confirm that injured personnel have been attended to and arrange for medical assistance and transportation to hospitals, if necessary, and ensure the safety of all response personnel. b) Confirm that personnel have been assigned to stop the release and flow of oil, and secure leaks. c) Assess the spill; determine parameters such as spill volume, extent, speed, and direction of movement. d) Integrate local evacuation plans into the Unified Command decision-making process. e) Confirm that containment equipment and oil spill contractors have been deployed. f) Notify the appropriate Company management. g) Notify appropriate federal, state and local government agencies, including local utilities and Company HSE personnel. h) Begin development of an initial incident action plan (ICS 201 Forms).
•	Once product is spilled on water, action should be taken as rapidly as possible to control and recover it to minimize damage to the environment. Physical removal of the oil is the preferred action in almost all cases. However, from a practical standpoint, much of the product spilled during a minor spill will be dispersed by wind and wave action. Effective physical removal will be dependent upon relatively calm weather and water conditions and the speed with which the slick can be corralled and removed.

Sec II-5.4 General Initial Response Procedures – Pipeline Maintenance Crews

These procedures have been designed to 1) provide safety to the public and company personnel when threatened by the release of hydrocarbons from a pipeline to the environment, and 2) to coordinate activities for prompt and safe repair of the pipeline and the return to normal operating conditions.

Events that require immediate response include:	
•	Extreme pressure reduction on the line
•	Extreme flow rate changes
•	Extreme measurement losses or gains
•	Receiving notices of an emergency nature such as: a) Release of hazardous liquids from a pipeline facility b) Operational malfunction causing a hazardous condition c) Fire, explosion, or natural disaster involving pipeline facilities d) Notification of a potential leak or hazard

Whenever any of the above conditions occur, the following emergency shutdown procedures should be initiated:	
•	Shutting in the line at the nearest block valves.
•	Notifying the nearest pump station and/or the appropriate control center.
•	Maintenance crewmembers should notify their immediate supervisor who will in turn notify appropriate Company contacts.
•	If the exact location of the leak is unknown, the Incident Commander will request a line flyer, or if it is at night, manpower might be used to walk the line.
•	Once a leak site has been located, the following information should be obtained. a) Have all ignition sources been eliminated? b) Are any schools, homes or commercial properties at risk and should they be evacuated? c) Should access to the area be restricted (roads blocked)? If so, assistance should be requested from law enforcement agencies. d) Have local response agencies been advised of the product's characteristics and handling precautions which are described in the MSDS's? e) Are railroads or utility companies in the area and have they been notified? f) Will product flow into any waterways or roadways? g) Work with Company Environmental Services to conduct a natural resource damage assessment.
•	The Duty Officer should be notified: a) Federal and/or state agencies may need to be contacted if a spill or release meets the criteria outlined in this manual. b) Following an assessment of the release site, an evaluation should be made regarding the effect of downtime on product scheduling. Appropriate Notifications will be made.

Sec II-5.5 Emergency Shutdown

In an emergency situation, it's imperative to identify where the source of the leak can be controlled. Mitigation can involve anything from shutdown of operations to patching a leak, containing a spill, dispersing a vapor cloud, protecting a sensitive area, recovering the spilled material, or other such activities that are involved in an emergency response. Because of the infinite number of circumstances under which an incident could occur and the variety of equipment that could be involved, it is impractical to describe procedures that should be followed in all foreseeable emergency situations.

More precise shutdown procedures can be found in the ICP Geographical Annex.

Sec. II-5.6 Injury / Medical / Rescue

Medical Emergency Checklist		
Procedures	✓	Date/Time
Activate professional medical care for the victim by: ☐ Call **911** to arrange for ground or air ambulance support. Provide the 911 dispatch the following information: ☐ Your name and location ☐ Type of medical emergency ☐ Name and location of the injured ☐ Condition of injured ☐ Contact phone number ☐ Transport injured to a local hospital or physician.	☐	__/__/__ ____:____
Caller's Name:		
Note: Evacuation of seriously ill or injured persons should be conducted by ground or air ambulance only. **Transportation by company or private vehicle should be discouraged, unless advised to do so by medical authorities**. All medical emergencies should be documented and applicable emergency notifications completed.		

Sec II-5.7 Unconfirmed Report of a Leak

Following an unconfirmed report of a leak, or the substantial threat of a leak, the sequential response actions that should be implemented immediately are:

Unconfirmed Report of a Leak		
Procedures	✓	Date/Time
Contact the Control Center and request a line balance check and shut down line if a leak is suspected or pipeline integrity is compromised.	☐	__/__/__ ____:____
Conduct aerial or ground reconnaissance of the area at the first possible opportunity (incident may occur at night or in inclement weather) and contact the Control Center to shut down line if reconnaissance detects a potential leak.	☐	__/__/__ ____:____
Isolate line segment	☐	__/__/__ ____:____
Start internal and external notification procedures.	☐	__/__/__ ____:____
Mobilize response and repair personnel.	☐	__/__/__ ____:____

Sec. II-5.8 Pipeline Leak or Rupture

Pipeline Leak or Rupture Checklist		
Procedures	✓	Date/Time
Assess situation and exercise caution.	☐	__/__/__ __:__
Eliminate all ignition sources onsite.	☐	__/__/__ __:__
Shut down pumps, close block valves, and shut down affected line.	☐	__/__/__ __:__
If person(s) down, refer to Medical Emergency Checklist.	☐	__/__/__ __:__
Contain spill (if safe to do so).	☐	__/__/__ __:__
Assign person to direct emergency response vehicles.	☐	__/__/__ __:__
Conduct air monitoring, per the Safety Officer's instruction.	☐	__/__/__ __:__
Make necessary notifications	☐	__/__/__ __:__
Ensure safety of personnel involved in spill response activities	☐	__/__/__ __:__
Coordinate deployment of containment and recovery equipment	☐	__/__/__ __:__
Designate staging areas for personnel and equipment	☐	__/__/__ __:__
Coordinate activities of clean-up contractors	☐	__/__/__ __:__
Set up Command Post, if warranted	☐	__/__/__ __:__

Emergency Response Guide First Responder

Piping Leak

SAFETY
1

- Your safety first and then the safety of others
- Stay out of the hazard area
- If performing Recon approach up wind, up hill, up stream
- Determine the immediate hot zone
- Do not attempt to contain spilled gasoline on water

ISOLATE AND DENY ENTRY

- Evacuate the immediate area
- Deny entry to the immediate area
- Ask others to help deny entry into the area
- If on the scene, ask agency resources to help deny entry into immediate area

NOTIFICATIONS

- Contact your Supervisor
- Contact Control Center
- Dial 911 if ambulance, police or fire dept. assistance is needed
- Contact local OSRO (Notifications Section of this Plan)
- Follow Notifications Procedures (Notifications Section of this Plan)

COMMAND MANAGEMENT
2

- Assume the role of Incident Commander
- Make an announcement to all on the scene that you have assumed Command
- Establish a Unified Command Post up wind, up hill and up stream of the incident in the cold zone
- Establish a Unified Staging Area up wind, up hill and up stream of the incident in the cold zone
- Begin assigning ICS positions as necessary
- Meet, greet & brief responding Agencies as they arrive at the Unified Command Post
- Ensure Safety Officer begins and completes a Site Safety Plan

IDENTIFICATION AND ASSESSMENT

- Continue to evaluate the hot zone and adjust accordingly
- Continue to monitor evacuation activities
- Ensure safe Recon to determine extent of impact on water, air, soil, plant life & wildlife

ACTION PLANNING

- Complete an ICS Form 201 and Incident Action Plan

FIRST RESPONDER GUIDE
UNIFIED COMMAND ICS ORGANIZATION

PROTECTIVE EQUIPMENT
3

- Ensure proper levels of PPE
- Ensure PPE is in line with Job Site Safety Plan

CONTAINMENT & CONTROL

- Containment & control strategies should be developed within the Unified IAP process/follow ACP
- Operations Section Chief oversees containment & control tactical deployment
- OSRO's work under the Operations Section and should not freelance

PROTECTIVE ACTIONS

- Ensure safe Recon to assess impact on water intakes, adjoining properties, public recreation sites & sensitive sites
- Protective action tactical deployment should be part of the Unified IAP

DECONTAMINATION / CLEANUP
4

- Decon activities take place under the ICS Ops Section
- Decon capabilities in place before entering Hot Zone
- Ensure proper PPE for Decon Team
- Clean up strategies should be part of the Unified IAP
- Decon runoff needs to be contained and properly disposed of

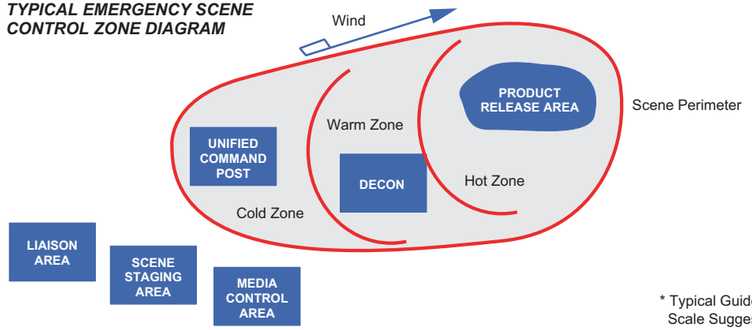
DISPOSAL

- Ensure early notification of HES
- Consult Waste Management Section of this Plan

DOCUMENTATION

- Ensure early completion of ICS Form 201 & SSHP
- Ensure proper retention of all incident related documents
- Ensure timely incident critique & record lessons learned

TYPICAL EMERGENCY SCENE CONTROL ZONE DIAGRAM



* Typical Guide/No Scale Suggested

SAFETY FIRST

FACILITY MITIGATION/PROTECTION ACTIONS

- Shut-off flow
- Isolate leaking section of piping
- Notify Terminal Superintendent or designee
- Place a container under the leak and attempt to temporarily plug the hole
- Initiate spill containment (if outside containment area)
- Evacuate contents of line with suctin pump or flush with water to remove remaining oil
- Block and purge affected equipment
- Initiate recovery/clean-up actions

INITIAL ICS/NOTIFICATION FORMS THAT MAY BE UTILIZED

- Incident Report Form & Notifications
- ICS Form 201 (Incident Breifing, 1-5)
- ICS Form 214 (Unit Log)
- Site Safety and Health Plan (SSHP)
- ICS Form 232 (Resources at Risk Summary)

DOT EMERGENCY RESPONSE GUIDEBOOK QUICK REFERENCE PAGES

Product	Guide #
Gasoline, Diesel & Crude Oil	128
Oil < 200°FP	171
LPG	119
Natural Gas	115

Emergency Response Guide First Responder

Piping Rupture

1

SAFETY
- Your safety first and then the safety of others
- Stay out of the hazard area
- If performing Recon approach up wind, up hill, up stream
- Determine the immediate hot zone
- Do not attempt to contain spilled gasoline on water

ISOLATE AND DENY ENTRY
- Evacuate the immediate area
- Deny entry to the immediate area
- Ask others to help deny entry into the area
- If on the scene, ask agency resources to help deny entry into immediate area

NOTIFICATIONS
- Contact your Supervisor
- Contact Control Center
- Dial 911 if ambulance, police or fire dept. assistance is needed
- Contact local OSRO (Notifications Section of this Plan)
- Follow Notifications Procedures (Notifications Section of this Plan)

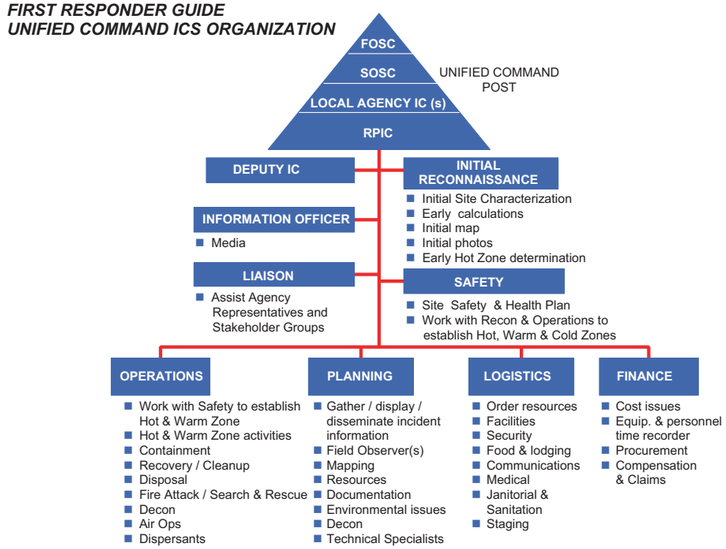
2

COMMAND MANAGEMENT
- Assume the role of Incident Commander
- Make an announcement to all on the scene that you have assumed Command
- Establish a Unified Command Post up wind, up hill and up stream of the incident in the cold zone
- Establish a Unified Staging Area up wind, up hill and up stream of the incident in the cold zone
- Begin assigning ICS positions as necessary
- Meet, greet & brief responding Agencies as they arrive at the Unified Command Post
- Ensure Safety Officer begins and completes a Site Safety Plan

IDENTIFICATION AND ASSESSMENT
- Continue to evaluate the hot zone and adjust accordingly
- Continue to monitor evacuation activities
- Ensure safe Recon to determine extent of impact on water, air, soil, plant life & wildlife

ACTION PLANNING
- Complete an ICS Form 201 and Incident Action Plan

FIRST RESPONDER GUIDE
UNIFIED COMMAND ICS ORGANIZATION



3

PROTECTIVE EQUIPMENT
- Ensure proper levels of PPE
- Ensure PPE is in line with Job Site Safety Plan

CONTAINMENT & CONTROL
- Containment & control strategies should be developed within the Unified IAP process/follow ACP
- Operations Section Chief oversees containment & control tactical deployment
- OSRO's work under the Operations Section and should not freelance

PROTECTIVE ACTIONS
- Ensure safe Recon to assess impact on water intakes, adjoining properties, public recreation sites & sensitive sites
- Protective action tactical deployment should be part of the Unified IAP

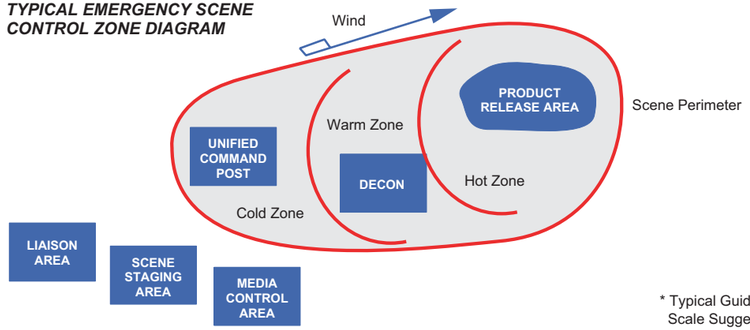
4

DECONTAMINATION / CLEANUP
- Decon activities take place under the ICS Ops Section
- Decon capabilities in place before entering Hot Zone
- Ensure proper PPE for Decon Team
- Clean up strategies should be part of the Unified IAP
- Decon runoff needs to be contained and properly disposed of

DISPOSAL
- Ensure early notification of HES
- Consult Waste Management Section of this Plan

DOCUMENTATION
- Ensure early completion of ICS Form 201 & SSHP
- Ensure proper retention of all incident related documents
- Ensure timely incident critique & record lessons learned

TYPICAL EMERGENCY SCENE CONTROL ZONE DIAGRAM



* Typical Guide/No Scale Suggested

SAFETY FIRST

FACILITY MITIGATION/PROTECTION ACTIONS
- Shut-off flow
- Isolate leaking section of piping
- Notify Supervisor or designee
- Place a container under the leak and attempt to temporarily plug the hole
- Initiate spill containment (if outside containment area)
- Evacuate contents of line with suctin pump or flush with water to remove remaining oil
- Block and purge affected equipment
- Initiate recovery/clean-up actions

INITIAL ICS/NOTIFICATION FORMS THAT MAY BE UTILIZED
- Incident Report Form & Notifications
- ICS Form 201 (Incident Breifing, 1-5)
- ICS Form 214 (Unit Log)
- Site Safety and Health Plan (SSHP)
- ICS Form 232 (Resources at Risk Summary)

DOT EMERGENCY RESPONSE GUIDEBOOK QUICK REFERENCE PAGES

Product	Guide #
Gasoline, Diesel & Crude Oil	128
Oil < 200°FP	171
LPG	119
Natural Gas	115

Sec. II-5.9 Failure of Manifold, Mechanical Loading Arm, Other Transfer Equipment or Hoses

Equipment Failure Checklist		
Procedures	✓	Date/Time
Immediately stop work activities.	☐	__/__/__ __:__
Shut off transfer pumps. Close header and tank valves.	☐	__/__/__ __:__
Notify Terminal Operations Manager and the Vessel PIC. (Marine Terminal)	☐	__/__/__ __:__
Drain remaining contents of dike to vessel tanks.	☐	__/__/__ __:__
Secure the area.	☐	__/__/__ __:__
Initiate oil spill cleanup response actions.	☐	__/__/__ __:__

Emergency Response Guide First Responder

Failure of Transfer Equip

SAFETY
1

- Your safety first and then the safety of others
- Stay out of the hazard area
- If performing Recon approach up wind, up hill, up stream
- Determine the immediate hot zone
- Do not attempt to contain spilled gasoline on water

ISOLATE AND DENY ENTRY

- Evacuate the immediate area
- Deny entry to the immediate area
- Ask others to help deny entry into the area
- If on the scene, ask agency resources to help deny entry into immediate area

NOTIFICATIONS

- Contact your Supervisor
- Contact Control Center
- Dial 911 if ambulance, police or fire dept. assistance is needed
- Contact local OSRO (Notifications Section of this Plan)
- Follow Notifications Procedures (Notifications Section of this Plan)

COMMAND MANAGEMENT
2

- Assume the role of Incident Commander
- Make an announcement to all on the scene that you have assumed Command
- Establish a Unified Command Post up wind, up hill and up stream of the incident in the cold zone
- Establish a Unified Staging Area up wind, up hill and up stream of the incident in the cold zone
- Begin assigning ICS positions as necessary
- Meet, greet & brief responding Agencies as they arrive at the Unified Command Post
- Ensure Safety Officer begins and completes a Site Safety Plan

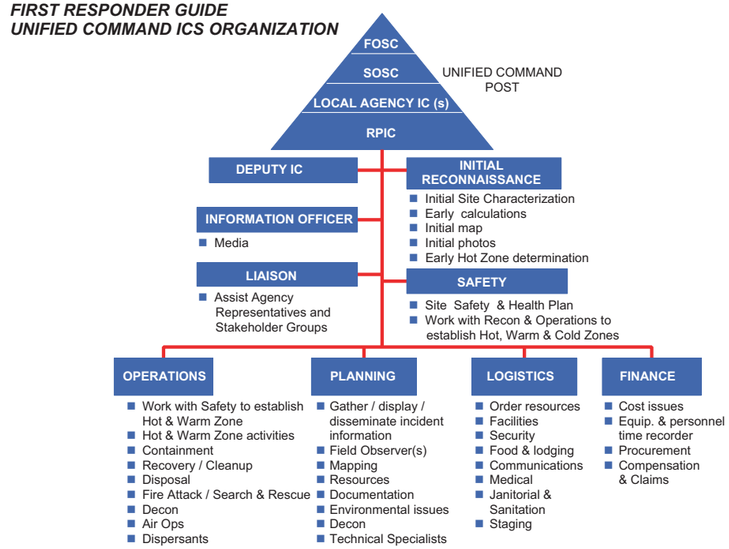
IDENTIFICATION AND ASSESSMENT

- Continue to evaluate the hot zone and adjust accordingly
- Continue to monitor evacuation activities
- Ensure safe Recon to determine extent of impact on water, air, soil, plant life & wildlife

ACTION PLANNING

- Complete an ICS Form 201 and Incident Action Plan

FIRST RESPONDER GUIDE
UNIFIED COMMAND ICS ORGANIZATION



PROTECTIVE EQUIPMENT
3

- Ensure proper levels of PPE
- Ensure PPE is in line with Job Site Safety Plan

CONTAINMENT & CONTROL

- Containment & control strategies should be developed within the Unified IAP process/follow ACP
- Operations Section Chief oversees containment & control tactical deployment
- OSRO's work under the Operations Section and should not freelance

PROTECTIVE ACTIONS

- Ensure safe Recon to assess impact on water intakes, adjoining properties, public recreation sites & sensitive sites
- Protective action tactical deployment should be part of the Unified IAP

DECONTAMINATION / CLEANUP
4

- Decon activities take place under the ICS Ops Section
- Decon capabilities in place before entering Hot Zone
- Ensure proper PPE for Decon Team
- Clean up strategies should be part of the Unified IAP
- Decon runoff needs to be contained and properly disposed of

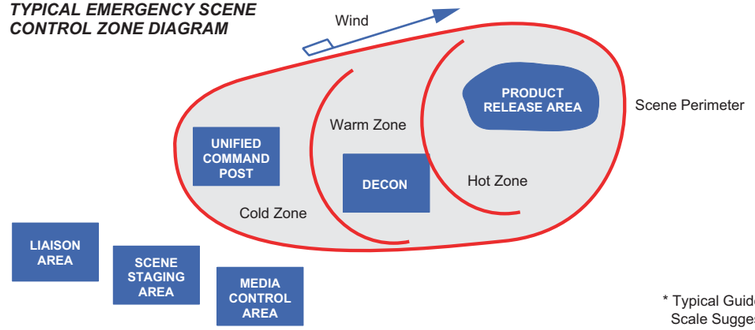
DISPOSAL

- Ensure early notification of HES
- Consult Waste Management Section of this Plan

DOCUMENTATION

- Ensure early completion of ICS Form 201 & SSHP
- Ensure proper retention of all incident related documents
- Ensure timely incident critique & record lessons learned

TYPICAL EMERGENCY SCENE CONTROL ZONE DIAGRAM



* Typical Guide/No Scale Suggested

SAFETY FIRST

FACILITY MITIGATION/PROTECTION ACTIONS

- Shut off tranfer pumps. Close header & tank valves
- Notify Terminal Operators/Manager/Vessel
- Drain remaining contents of like to vessel tanks
- Secure area
- Initiate response actions

INITIAL ICS/NOTIFICATION FORMS THAT MAY BE UTILIZED

- Notification Fax
- ICS Form 201 (Incident Breifing)
- ICS Form 214 (Unit Log)
- Site Safety and Health Plan
- ICS Form 232 (Resources at Risk Summary)

DOT EMERGENCY RESPONSE GUIDEBOOK QUICK REFERENCE PAGES

Product	Guide #
Gasoline	128
Diesel	128
Crude Oil	128
Oil < 200°FP	171

Emergency Response Guide First Responder

Equipment Failure

1

SAFETY
- Your safety first and then the safety of others
- Stay out of the hazard area
- If performing Recon approach up wind, up hill, up stream
- Determine the immediate hot zone
- Do not attempt to contain spilled gasoline on water

ISOLATE AND DENY ENTRY
- Evacuate the immediate area
- Deny entry to the immediate area
- Ask others to help deny entry into the area
- If on the scene, ask agency resources to help deny entry into immediate area

NOTIFICATIONS
- Contact your Supervisor
- Contact Control Center
- Dial 911 if ambulance, police or fire dept. assistance is needed
- Contact local OSRO (Notifications Section of this Plan)
- Follow Notifications Procedures (Notifications Section of this Plan)

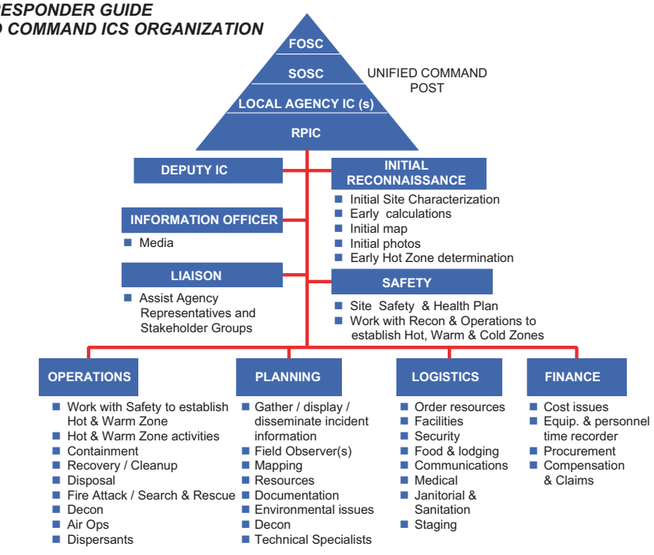
2

COMMAND MANAGEMENT
- Assume the role of Incident Commander
- Make an announcement to all on the scene that you have assumed Command
- Establish a Unified Command Post up wind, up hill and up stream of the incident in the cold zone
- Establish a Unified Staging Area up wind, up hill and up stream of the incident in the cold zone
- Begin assigning ICS positions as necessary
- Meet, greet & brief responding Agencies as they arrive at the Unified Command Post
- Ensure Safety Officer begins and completes a Site Safety Plan

IDENTIFICATION AND ASSESSMENT
- Continue to evaluate the hot zone and adjust accordingly
- Continue to monitor evacuation activities
- Ensure safe Recon to determine extent of impact on water, air, soil, plant life & wildlife

ACTION PLANNING
- Complete an ICS Form 201 and Incident Action Plan

FIRST RESPONDER GUIDE
UNIFIED COMMAND ICS ORGANIZATION



3

PROTECTIVE EQUIPMENT
- Ensure proper levels of PPE
- Ensure PPE is in line with Job Site Safety Plan

CONTAINMENT & CONTROL
- Containment & control strategies should be developed within the Unified IAP process/follow ACP
- Operations Section Chief oversees containment & control tactical deployment
- OSRO's work under the Operations Section and should not freelance

PROTECTIVE ACTIONS
- Ensure safe Recon to assess impact on water intakes, adjoining properties, public recreation sites & sensitive sites
- Protective action tactical deployment should be part of the Unified IAP

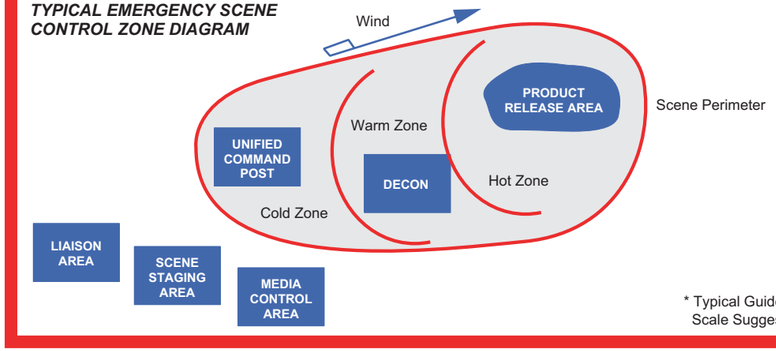
4

DECONTAMINATION / CLEANUP
- Decon activities take place under the ICS Ops Section
- Decon capabilities in place before entering Hot Zone
- Ensure proper PPE for Decon Team
- Clean up strategies should be part of the Unified IAP
- Decon runoff needs to be contained and properly disposed of

DISPOSAL
- Ensure early notification of HES
- Consult Waste Management Section of this Plan

DOCUMENTATION
- Ensure early completion of ICS Form 201 & SSHP
- Ensure proper retention of all incident related documents
- Ensure timely incident critique & record lessons learned

TYPICAL EMERGENCY SCENE CONTROL ZONE DIAGRAM



* Typical Guide/No Scale Suggested

SAFETY FIRST

FACILITY MITIGATION/PROTECTION ACTIONS
- Shut-off flow
- Notify Terminal Superintendent or designee
- Tighten leaky valve or fitting, if safe
- Transfer tank contents to avaliable tankage

INITIAL ICS/NOTIFICATION FORMS THAT MAY BE UTILIZED
- Notification Fax
- ICS Form 201 (Incident Breifing)
- ICS Form 214 (Unit Log)
- Site Safety and Health Plan
- ICS Form 232 (Resources at Risk Summary)

DOT EMERGENCY RESPONSE GUIDEBOOK QUICK REFERENCE PAGES

Product	Guide #
Gasoline	128
Diesel	128
Crude Oil	128
Oil < 200°FP	171

Sec. II-5.10 Tank Overfill

Tank Overfill Response Checklist		
Procedures	✓	Date/Time
Immediately stop work activities.	☐	__/__/__ ____:____
Shut off flow to tank.	☐	__/__/__ ____:____
If safe, ensure dike drains are closed (if applicable).	☐	__/__/__ ____:____
Initiate oil spill response actions.	☐	__/__/__ ____:____
Secure the area.	☐	__/__/__ ____:____
Notify terminal supervisor.	☐	__/__/__ ____:____
Begin transfer of contents to other tankage.	☐	__/__/__ ____:____

Sec. II-5.11 Tank Failure

Tank Failure Response Checklist		
Procedures	✓	Date/Time
Immediately stop work activities.	☐	__/__/__ ____:____
Shut off flow to tank.	☐	__/__/__ ____:____
If safe, ensure dike drains are closed (if applicable).	☐	__/__/__ ____:____
Initiate oil spill response actions.	☐	__/__/__ ____:____
Secure the area.	☐	__/__/__ ____:____
Notify terminal supervisor.	☐	__/__/__ ____:____
Begin transfer of contents to other tankage.	☐	__/__/__ ____:____

Emergency Response Guide First Responder

Tank Overfill

SAFETY
1

- Your safety first and then the safety of others
- Stay out of the hazard area
- If performing Recon approach up wind, up hill, up stream
- Determine the immediate hot zone
- Do not attempt to contain spilled gasoline on water

ISOLATE AND DENY ENTRY

- Evacuate the immediate area
- Deny entry to the immediate area
- Ask others to help deny entry into the area
- If on the scene, ask agency resources to help deny entry into immediate area

NOTIFICATIONS

- Contact your Supervisor
- Contact Control Center
- Dial 911 if ambulance, police or fire dept. assistance is needed
- Contact local OSRO (Notifications Section of this Plan)
- Follow Notifications Procedures (Notifications Section of this Plan)

COMMAND MANAGEMENT
2

- Assume the role of Incident Commander
- Make an announcement to all on the scene that you have assumed Command
- Establish a Unified Command Post up wind, up hill and up stream of the incident in the cold zone
- Establish a Unified Staging Area up wind, up hill and up stream of the incident in the cold zone
- Begin assigning ICS positions as necessary
- Meet, greet & brief responding Agencies as they arrive at the Unified Command Post
- Ensure Safety Officer begins and completes a Site Safety Plan

IDENTIFICATION AND ASSESSMENT

- Continue to evaluate the hot zone and adjust accordingly
- Continue to monitor evacuation activities
- Ensure safe Recon to determine extent of impact on water, air, soil, plant life & wildlife

ACTION PLANNING

- Complete an ICS Form 201 and Incident Action Plan

FIRST RESPONDER GUIDE
UNIFIED COMMAND ICS ORGANIZATION

PROTECTIVE EQUIPMENT
3

- Ensure proper levels of PPE
- Ensure PPE is in line with Job Site Safety Plan

CONTAINMENT & CONTROL

- Containment & control strategies should be developed within the Unified IAP process/follow ACP
- Operations Section Chief oversees containment & control tactical deployment
- OSRO's work under the Operations Section and should not freelance

PROTECTIVE ACTIONS

- Ensure safe Recon to assess impact on water intakes, adjoining properties, public recreation sites & sensitive sites
- Protective action tactical deployment should be part of the Unified IAP

DECONTAMINATION / CLEANUP
4

- Decon activities take place under the ICS Ops Section
- Decon capabilities in place before entering Hot Zone
- Ensure proper PPE for Decon Team
- Clean up strategies should be part of the Unified IAP
- Decon runoff needs to be contained and properly disposed of

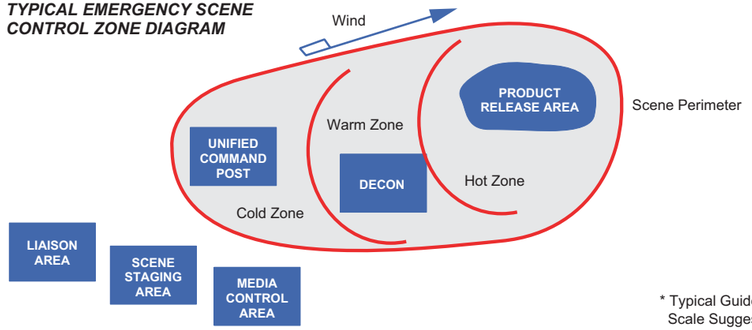
DISPOSAL

- Ensure early notification of HES
- Consult Waste Management Section of this Plan

DOCUMENTATION

- Ensure early completion of ICS Form 201 & SSHP
- Ensure proper retention of all incident related documents
- Ensure timely incident critique & record lessons learned

TYPICAL EMERGENCY SCENE CONTROL ZONE DIAGRAM



* Typical Guide/No Scale Suggested

SAFETY FIRST

FACILITY MITIGATION/PROTECTION ACTIONS

- Shut off flow to tank
- If safe, ensure dike drains are closed
- Begin transfer of contents to other tankage
- Notify Terminal Superintentent
- Secure area
- Initiate response actions

INITIAL ICS/NOTIFICATION FORMS THAT MAY BE UTILIZED

- Incident Report Form & Notifications
- ICS Form 201 (Incident Breifing, 1-5)
- ICS Form 214 (Unit Log)
- Site Safety and Health Plan (SSHP)
- ICS Form 232 (Resources at Risk Summary)

DOT EMERGENCY RESPONSE GUIDEBOOK QUICK REFERENCE PAGES

Product	Guide #
Gasoline, Diesel & Crude Oil	128
Oil < 200°FP	171
LPG	119
Natural Gas	115

Emergency Response Guide First Responder

Tank Failure

1

SAFETY
- Your safety first and then the safety of others
- Stay out of the hazard area
- If performing Recon approach up wind, up hill, up stream
- Determine the immediate hot zone
- Do not attempt to contain spilled gasoline on water

ISOLATE AND DENY ENTRY
- Evacuate the immediate area
- Deny entry to the immediate area
- Ask others to help deny entry into the area
- If on the scene, ask agency resources to help deny entry into immediate area

NOTIFICATIONS
- Contact your Supervisor
- Contact Control Center
- Dial 911 if ambulance, police or fire dept. assistance is needed
- Contact local OSRO (Notifications Section of this Plan)
- Follow Notifications Procedures (Notifications Section of this Plan)

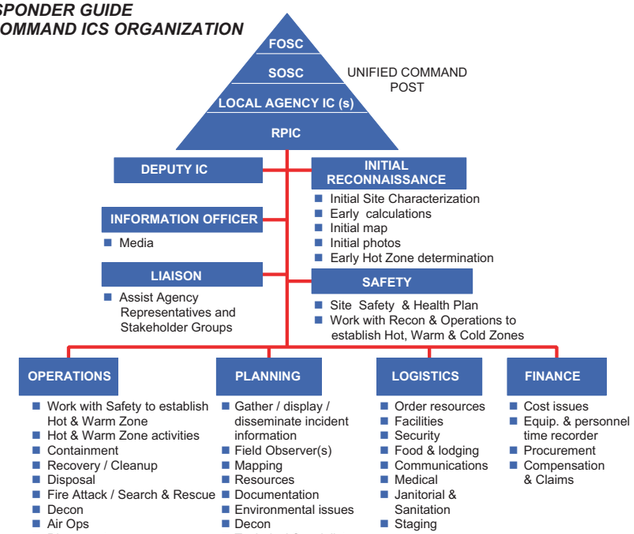
2

COMMAND MANAGEMENT
- Assume the role of Incident Commander
- Make an announcement to all on the scene that you have assumed Command
- Establish a Unified Command Post up wind, up hill and up stream of the incident in the cold zone
- Establish a Unified Staging Area up wind, up hill and up stream of the incident in the cold zone
- Begin assigning ICS positions as necessary
- Meet, greet & brief responding Agencies as they arrive at the Unified Command Post
- Ensure Safety Officer begins and completes a Site Safety Plan

IDENTIFICATION AND ASSESSMENT
- Continue to evaluate the hot zone and adjust accordingly
- Continue to monitor evacuation activities
- Ensure safe Recon to determine extent of impact on water, air, soil, plant life & wildlife

ACTION PLANNING
- Complete an ICS Form 201 and Incident Action Plan

FIRST RESPONDER GUIDE
UNIFIED COMMAND ICS ORGANIZATION



3

PROTECTIVE EQUIPMENT
- Ensure proper levels of PPE
- Ensure PPE is in line with Job Site Safety Plan

CONTAINMENT & CONTROL
- Containment & control strategies should be developed within the Unified IAP process/follow ACP
- Operations Section Chief oversees containment & control tactical deployment
- OSRO's work under the Operations Section and should not freelance

PROTECTIVE ACTIONS
- Ensure safe Recon to assess impact on water intakes, adjoining properties, public recreation sites & sensitive sites
- Protective action tactical deployment should be part of the Unified IAP

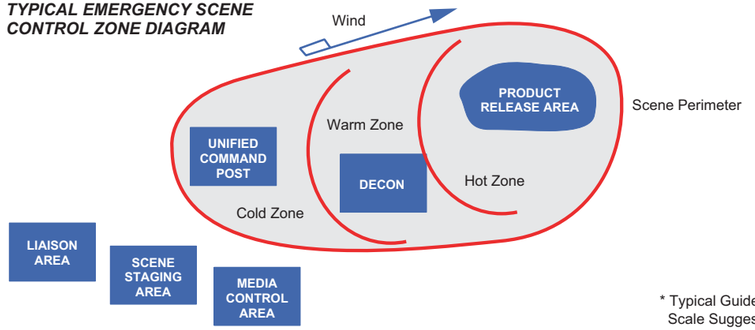
4

DECONTAMINATION / CLEANUP
- Decon activities take place under the ICS Ops Section
- Decon capabilities in place before entering Hot Zone
- Ensure proper PPE for Decon Team
- Clean up strategies should be part of the Unified IAP
- Decon runoff needs to be contained and properly disposed of

DISPOSAL
- Ensure early notification of HES
- Consult Waste Management Section of this Plan

DOCUMENTATION
- Ensure early completion of ICS Form 201 & SSHP
- Ensure proper retention of all incident related documents
- Ensure timely incident critique & record lessons learned

TYPICAL EMERGENCY SCENE CONTROL ZONE DIAGRAM



* Typical Guide/No Scale Suggested

SAFETY FIRST

FACILITY MITIGATION/PROTECTION ACTIONS
- If safe, ensure dike drains are closed
- Notify Terminal Superintendent or designee
- Secure area
- Initiate response actions

INITIAL ICS/NOTIFICATION FORMS THAT MAY BE UTILIZED
- Incident Report Form & Notifications
- ICS Form 201 (Incident Breifing, 1-5)
- ICS Form 214 (Unit Log)
- Site Safety and Health Plan (SSHP)
- ICS Form 232 (Resources at Risk Summary)

DOT EMERGENCY RESPONSE GUIDEBOOK QUICK REFERENCE PAGES

Product	Guide #
Gasoline, Diesel & Crude Oil	128
Oil < 200°FP	171
LPG	119
Natural Gas	115

Sec. II-5.12 Natural and Other Gas Leaks

Natural and Other Gas Leaks		
Procedures	✓	Date/Time
Immediately stop work activities.	☐	__/___/___ ____:____
Shut down and isolate flow.	☐	__/___/___ ____:____
Evacuate the area.	☐	__/___/___ ____:____
Eliminate sources of ignition.	☐	__/___/___ ____:____
All equipment used when handling product must be grounded.	☐	__/___/___ ____:____
Water spray may reduce vapors or divert vapor cloud.	☐	__/___/___ ____:____
If exposed, make sure exposed clothing is removed and decon occurs.	☐	__/___/___ ____:____

Sec. II-5.13 Natural and Other Gas Leak In or Near a Building

Natural and Other Gas Leaks In or Near a Building		
Procedures	✓	Date/Time
Immediately stop work activities.	☐	__/__/__ ____:____
Protect public first, then facilities.	☐	__/__/__ ____:____
Safely evacuate building if gas is detected inside building.	☐	__/__/__ ____:____
Always look and listen for any signs of escaped gas.	☐	__/__/__ ____:____
All open flames are to be extinguished.	☐	__/__/__ ____:____
Determine leak severity.	☐	__/__/__ ____:____
Do not enter building with audible leaking gas.	☐	__/__/__ ____:____
Test the environment to determine safe entry.	☐	__/__/__ ____:____
Evacuate people from adjacent buildings.	☐	__/__/__ ____:____
Shut off electrical power to building.	☐	__/__/__ ____:____
Eliminate all other potential sources of ignition.	☐	__/__/__ ____:____
Isolate the building from gas sources of ignition.	☐	__/__/__ ____:____
Close necessary inlet and outlet block valves and open blowdown valves.	☐	__/__/__ ____:____
After gas sources are shut off, utilize portable combustible gas indicator/detector to determine safe environment.	☐	__/__/__ ____:____

Emergency Response Guide First Responder

Natural and Other Gas Leaks

1

SAFETY
- Your safety first and then the safety of others
- Stay out of the hazard area
- If performing Recon approach up wind, up hill, up stream
- Determine the immediate hot zone

ISOLATE AND DENY ENTRY
- Evacuate the immediate area
- Deny entry to the immediate area
- Ask others to help deny entry into the area
- If on the scene, ask agency resources to help evaluate and deny entry into immediate area

NOTIFICATIONS
- Contact your Supervisor
- Contact Control Center
- Dial 911 if ambulance, police or fire department assistance is needed
- Contact local OSRO (Notifications Section of this Plan)
- Follow Notifications Procedures (Notifications Section of this Plan)

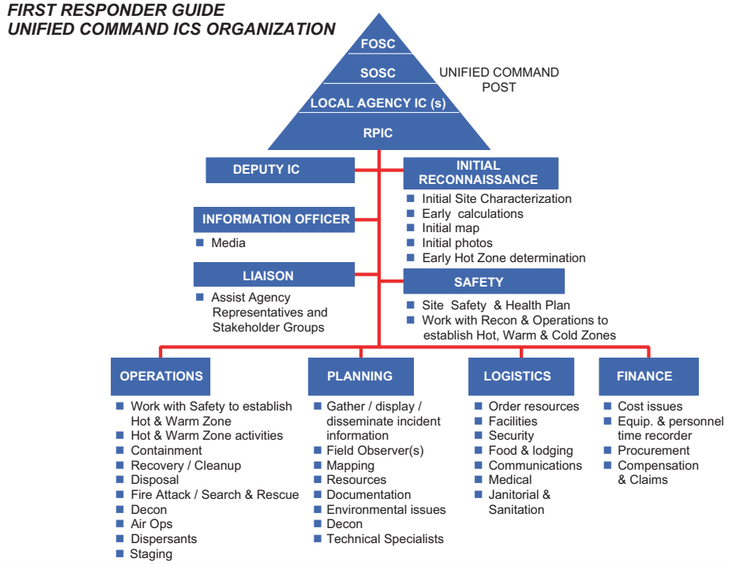
2

COMMAND MANAGEMENT
- Assume the role of Incident Commander
- Make an announcement to all on the scene that you have assumed Command
- Establish a Unified Command Post up wind, up hill and up stream of the incident in the cold zone
- Establish a Unified Staging Area up wind, up hill and up stream of the incident in the cold zone
- Begin assigning ICS positions as necessary
- Meet, greet & brief responding Agencies as they arrive at the Unified Command Post
- Ensure Safety Officer begins and completes a Site Safety Plan

IDENTIFICATION AND ASSESSMENT
- Continue to evaluate the hot zone and adjust accordingly
- Continue to monitor evacuation activities
- Ensure safe Recon to determine extent of impact on water, air, soil, plant life & wildlife

ACTION PLANNING
- Create an Initial Action Plan (ICS Form 201)

FIRST RESPONDER GUIDE
UNIFIED COMMAND ICS ORGANIZATION



3

PROTECTIVE EQUIPMENT
- Ensure proper levels of PPE
- Ensure PPE is in line with Site Safety Health Plan

CONTAINMENT & CONTROL
- Containment & control strategies should be developed within the Unified IAP process/follow ACP
- Operations Section Chief oversees containment & control tactical deployment
- OSROs work under the Operations Section and should not freelance

PROTECTIVE ACTIONS
- Ensure safe Recon to assess impact on water intakes, adjoining properties, public recreation sites & sensitive sites
- Protective action tactical deployment should be part of the Unified IAP

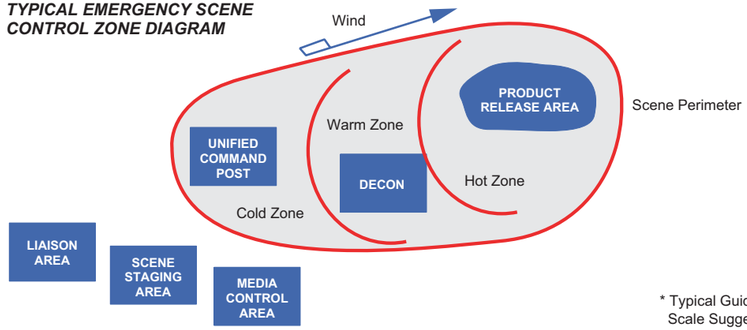
4

DECONTAMINATION / CLEANUP
- Decon activities take place under the ICS Ops Section
- Decon capabilities in place before entering Hot Zone
- Ensure proper PPE for Decon Team

DISPOSAL
- Minimal disposal issues

DOCUMENTATION
- Ensure early completion of ICS Form 201 & SSHP
- Ensure proper retention of all incident-related documents
- Ensure timely incident critique & record lessons learned

TYPICAL EMERGENCY SCENE
CONTROL ZONE DIAGRAM



* Typical Guide/No Scale Suggested

SAFETY FIRST

FACILITY MITIGATION/PROTECTION ACTIONS
- Shut down and isolate flow
- Evacuate the area
- Eliminate sources of ignition
- All equipment used when handling product must be grounded
- Water spray may reduce vapors or divert vapor cloud
- If exposed, make sure exposed clothing is removed and decon occurs

INITIAL ICS/NOTIFICATION FORMS THAT MAY BE UTILIZED
- Notification Fax
- ICS Form 201 (Incident Briefing)
- ICS Form 202
- Site Safety Plan
- ICS Form 215

DOT EMERGENCY RESPONSE GUIDEBOOK QUICK REFERENCE PAGES

Product	Guide #
Gasoline	128
Diesel	128
LPG	119
Natural Gas	115
Crude Oil	128

Emergency Response Guide First Responder

Natural and Other Gas Leak In or Near a Building

1

SAFETY
- Your safety first and then the safety of others
- Stay out of the hazard area
- If performing Recon approach up wind, up hill, up stream
- Determine the immediate hot zone

ISOLATE AND DENY ENTRY
- Evacuate the immediate area
- Deny entry to the immediate area
- Ask others to help deny entry into the area
- If on the scene, ask agency resources to help evaluate and deny entry into immediate area

NOTIFICATIONS
- Contact your Supervisor
- Contact Control Center
- Dial 911 if ambulance, police or fire department assistance is needed
- Contact local OSRO (Notifications Section of this Plan)
- Follow Notifications Procedures (Notifications Section of this Plan)

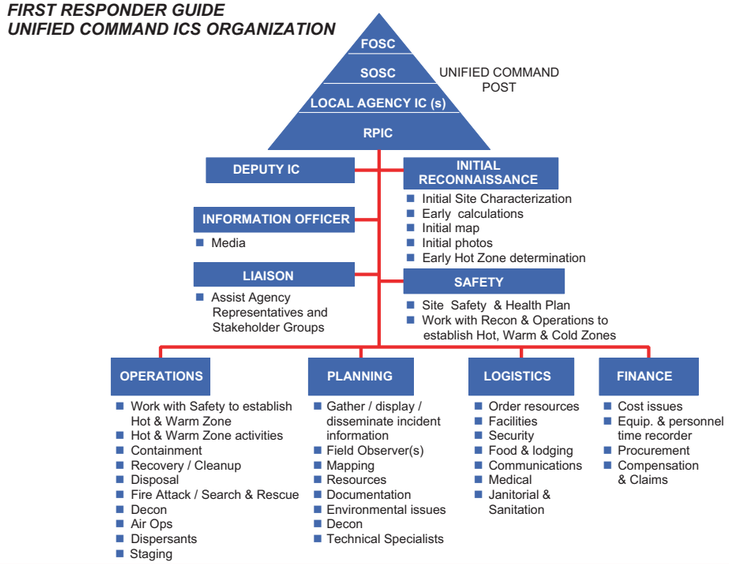
2

COMMAND MANAGEMENT
- Assume the role of Incident Commander
- Make an announcement to all on the scene that you have assumed Command
- Establish a Unified Command Post up wind, up hill and up stream of the incident in the cold zone
- Establish a Unified Staging Area up wind, up hill and up stream of the incident in the cold zone
- Begin assigning ICS positions as necessary
- Meet, greet & brief responding Agencies as they arrive at the Unified Command Post
- Ensure Safety Officer begins and completes a Site Safety Plan

IDENTIFICATION AND ASSESSMENT
- Continue to evaluate the hot zone and adjust accordingly
- Continue to monitor evacuation activities
- Ensure safe Recon to determine extent of potential impact on the area

ACTION PLANNING
- Create an Initial Action Plan (ICS Form 201)

FIRST RESPONDER GUIDE
UNIFIED COMMAND ICS ORGANIZATION



3

PROTECTIVE EQUIPMENT
- Ensure proper levels of PPE
- Ensure PPE is in line with Site Safety Health Plan

CONTAINMENT & CONTROL
- Containment & control strategies should be developed within the Unified IAP process/follow ACP
- Operations Section Chief oversees containment & control tactical deployment

PROTECTIVE ACTIONS
- Ensure safe Recon to assess impact on area
- Protective action tactical deployment should be part of the Unified IAP

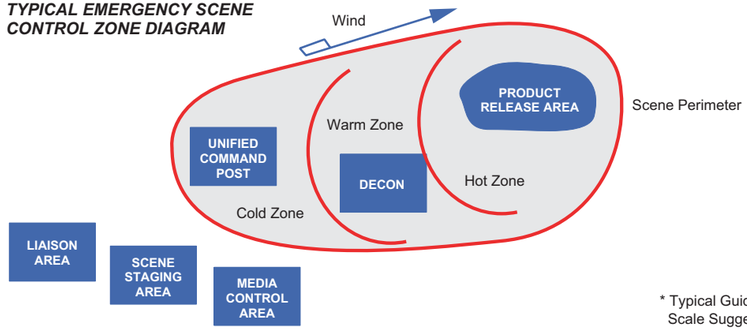
4

DECONTAMINATION / CLEANUP
- Decon activities take place under the ICS Ops Section
- Decon capabilities in place before entering Hot Zone
- Ensure proper PPE for Decon Team

DISPOSAL
- Minimal disposal issues

DOCUMENTATION
- Ensure early completion of ICS Form 201 & SSHP
- Ensure proper retention of all incident-related documents
- Ensure timely incident critique & record lessons learned

TYPICAL EMERGENCY SCENE CONTROL ZONE DIAGRAM



* Typical Guide/No Scale Suggested

GENERAL PROCEDURES

- Protect public first, then facilities
- Safely evacuate building if gas is detected inside building
- Always look and listen for any signs of escaped gas
- Do not open a building door if escaped gas is detected
- All open flames are to be extinguished
- Determine leak severity
- Do not enter building with audible leaking gas
- Test the environment to determine safe entry
- Evacuate people from adjacent buildings

GENERAL PROCEDURES (CONTINUED)

- Shut off electrical power to building
- Eliminate all other potential sources of ignition
- Isolate the building from gas sources if possible
- Close necessary inlet and outlet block valves and open blowdown valves
- After gas sources are shut off, utilize portable combustible gas indicator/detector to determine safe environment

INITIAL ICS/NOTIFICATION FORMS THAT MAY BE UTILIZED

- Notification Fax
- ICS Form 201 (Incident Briefing)
- ICS Form 202
- Site Safety Plan
- ICS Form 215

DOT EMERGENCY RESPONSE GUIDEBOOK QUICK REFERENCE PAGES

Product	Guide #
Gasoline	128
Diesel	128
LPG	119
Natural Gas	115
Crude Oil	128

Sec. II-5.14 Fire / Explosion

It is the Company's intention to comply with all applicable fire regulations. The objective of the emergency planning and response program is to produce a favorable outcome at the incident with minimal risk to the public, employees and contractors, and emergency responders.

Life safety shall be the highest priority for all personnel.

Fire / Explosion / Blowout Checklist		
Procedures	✓	Date/Time
Person in Charge – Call 911 and activate fire alarm.	☐	__/__/__ __:__
Eliminate all ignition sources.	☐	__/__/__ __:__
Begin Emergency Shut Down if necessary.	☐	__/__/__ __:__
If person(s) down, refer to Medical Emergency Checklist	☐	__/__/__ __:__
When fire is noticed at any facility, secure the source if safe to do so.	☐	__/__/__ __:__
Account for all personnel in the unit or area where the fire occurred.	☐	__/__/__ __:__
Evacuate all non-essential personnel, if necessary.	☐	__/__/__ __:__
Establish communications. Contact PIC.	☐	__/__/__ __:__
Search for and rescue missing or injured personnel as required.	☐	__/__/__ __:__
Use the buddy system.	☐	__/__/__ __:__
Ensure the Facility Operators control the process.	☐	__/__/__ __:__
Conduct air monitoring to ensure safety of personnel and appropriate PPE is required to respond. (For additional information, see the Site Safety and Health Plan and/or the Safety Coordinator.)	☐	__/__/__ __:__
Conduct initial fire fighting by IC/UC personnel (trained in the use of firefighting equipment and PPE), which may include use of monitors, deluge systems, and portable fire extinguishers.	☐	__/__/__ __:__
Evacuate nearby residents if required.	☐	__/__/__ __:__

Emergency Response Guide First Responder

Fire or Explosion

SAFETY
1

- Your safety first and then the safety of others
- Stay out of the hazard area
- If performing Recon approach up wind, up hill, up stream
- Determine the immediate hot zone
- Do not attempt to contain spilled gasoline on water

ISOLATE AND DENY ENTRY
- Evacuate the immediate area
- Deny entry to the immediate area
- Ask others to help deny entry into the area
- If on the scene, ask agency resources to help deny entry into immediate area

NOTIFICATIONS
- Contact your Supervisor
- Contact Control Center
- Dial 911 if ambulance, police or fire dept. assistance is needed
- Contact local OSRO (Notifications Section of this Plan)
- Follow Notifications Procedures (Notifications Section of this Plan)

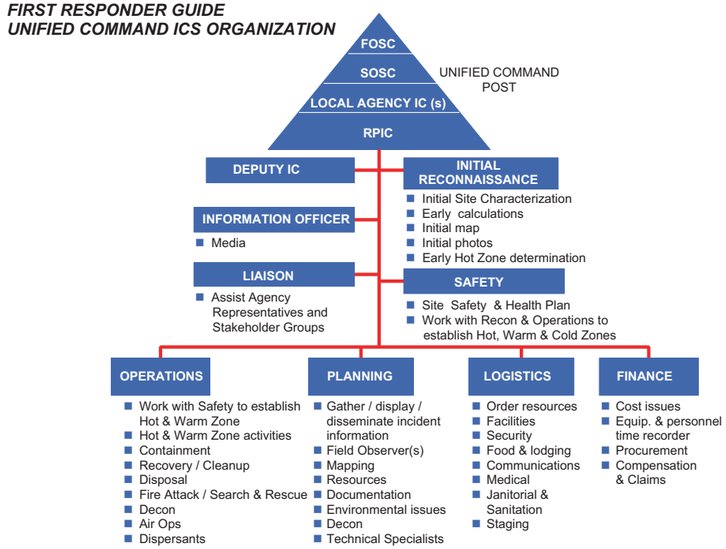
COMMAND MANAGEMENT
2

- Assume the role of Incident Commander
- Make an announcement to all on the scene that you have assumed Command
- Establish a Unified Command Post up wind, up hill and up stream of the incident in the cold zone
- Establish a Unified Staging Area up wind, up hill and up stream of the incident in the cold zone
- Begin assigning ICS positions as necessary
- Meet, greet & brief responding Agencies as they arrive at the Unified Command Post
- Ensure Safety Officer begins and completes a Site Safety Plan

IDENTIFICATION AND ASSESSMENT
- Continue to evaluate the hot zone and adjust accordingly
- Continue to monitor evacuation activities
- Ensure safe Recon to determine extent of impact on water, air, soil, plant life & wildlife

ACTION PLANNING
- Complete an ICS Form 201 and Incident Action Plan

FIRST RESPONDER GUIDE
UNIFIED COMMAND ICS ORGANIZATION



PROTECTIVE EQUIPMENT
3

- Ensure proper levels of PPE
- Ensure PPE is in line with Job Site Safety Plan

CONTAINMENT & CONTROL
- Containment & control strategies should be developed within the Unified IAP process/follow ACP
- Operations Section Chief oversees strategies

PROTECTIVE ACTIONS
- Ensure safe Recon to assess impact on area
- Protective action tactical deployment should be part of the Unified IAP

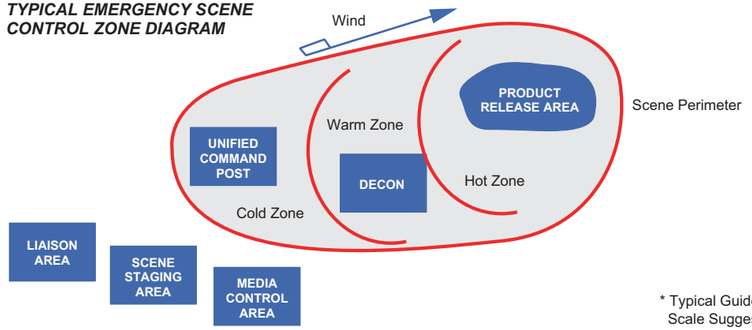
DECONTAMINATION / CLEANUP
4

- Decon activities take place under the ICS Ops Section
- Decon capabilities in place before entering Hot Zone
- Ensure proper PPE for Decon Team
- Clean up strategies should be part of the Unified IAP
- Decon runoff needs to be contained and properly disposed of

DISPOSAL
- Ensure early notification of HES
- Consult Waste Management Section of this Plan

DOCUMENTATION
- Ensure early completion of ICS Form 201 & SSHP
- Ensure proper retention of all incident related documents
- Ensure timely incident critique & record lessons learned

TYPICAL EMERGENCY SCENE CONTROL ZONE DIAGRAM



* Typical Guide/No Scale Suggested

SAFETY FIRST

FACILITY MITIGATION/PROTECTION ACTIONS

- Alert personnel
- Notify Supervisor or designee
- Activate alarm as required
- Notify local fire department
- Evacuate non-essential individuals
- Identify cause/source/materials involved
- Contain fire/spill/material released
- Consider potential for escalation
- Protect exposures

INITIAL ICS/NOTIFICATION FORMS THAT MAY BE UTILIZED

- Incident Report Form & Notifications
- ICS Form 201 (Incident Briefing, 1-5)
- ICS Form 214 (Unit Log)
- Site Safety and Health Plan
- ICS Form 232 (Resources at Risk Summary)

DOT EMERGENCY RESPONSE GUIDEBOOK QUICK REFERENCE PAGES

Product	Guide #
Gasoline, Diesel & Crude Oil	128
Oil < 200°FP	171
LPG	119
Natural Gas	115

Sec. II-5.14.1 Fire Prevention

Accumulated debris, oil waste, trash, and other potential fuels can be present in all operations and will add to the fire danger. Strict control and isolation of these fuel sources should be exercised to avoid their accumulation in inhabited areas. Gasoline storage and transfer should follow applicable codes. A fire extinguisher should also be made readily available. Smoking is not allowed near flammable materials. Welding and burning require a hot work permit where hydrocarbon mixtures may exist, i.e., vessels, tanks, pipelines, etc., which may contain explosive mixtures or atmospheres. All fires should be completely extinguished before fire-fighting personnel leave the work site.

Sec. II-5.15 Pipeline Station or Manifold Fire

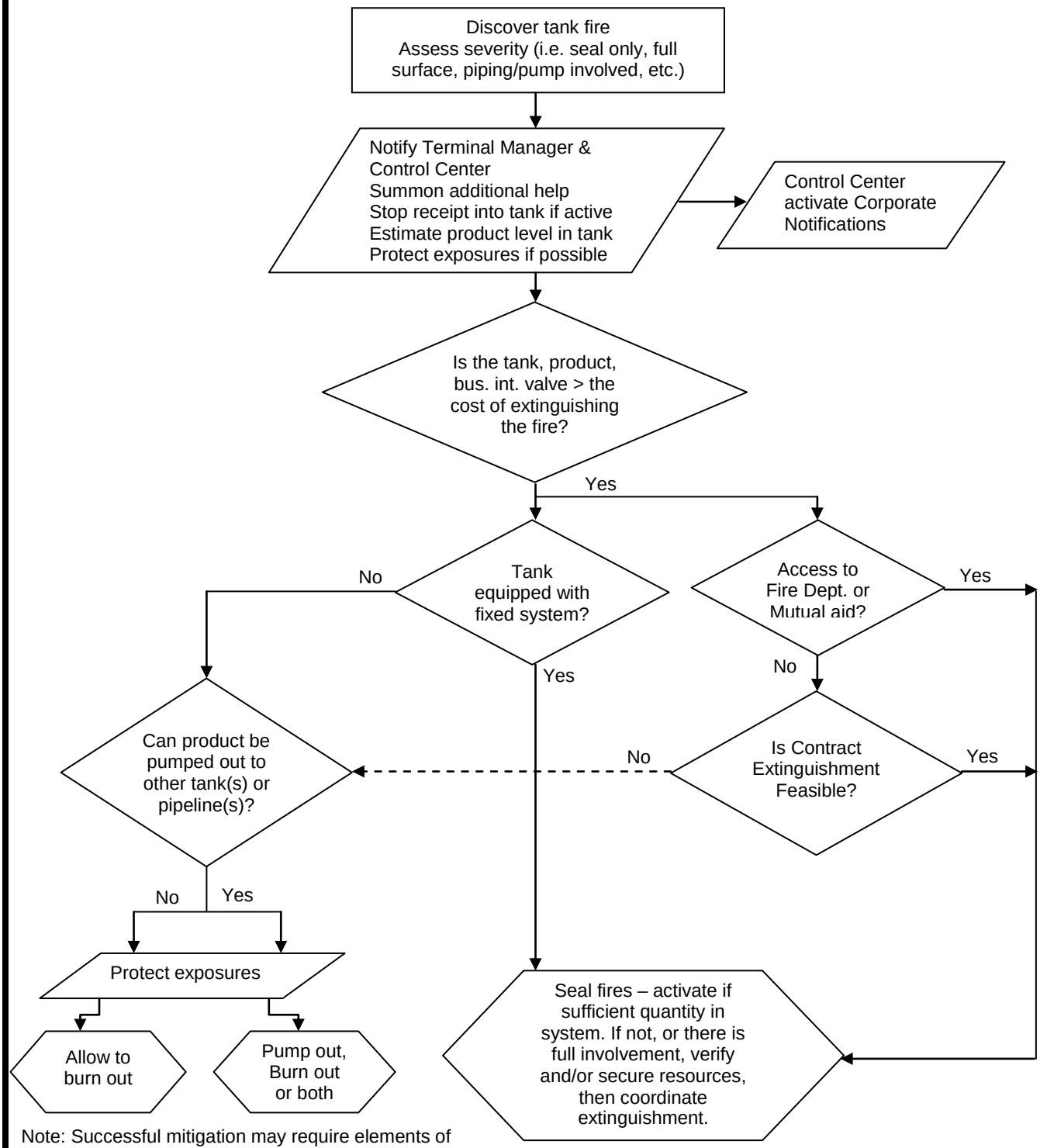
Pipeline Station or Manifold Fire		
Procedures	✓	Date/Time
Bear in mind it is better to take plenty of time in an emergency than to rush in and sustain personal injury.	☐	__/__/__ ____:____
Personnel should immediately evacuate hazardous area.	☐	__/__/__ ____:____
Extinguish fire at once, if possible, with the equipment at hand. a) If product cannot be shut off, it is better to let a controlled fire burn than to extinguish it as the fuel may spread and flashback occur.	☐	__/__/__ ____:____
If telephone is not in hazardous area, notify Supervisor and Control Center and proceed to shut down as outlined in Section II.	☐	__/__/__ ____:____
IF TELEPHONE IS IN HAZARDOUS AREA, do not attempt to use it. a) **Trip emergency shutdown control**. b) Close fuel supply valve if the emergency shutdown control fails. c) Get information to Supervisor and fire department as quickly as possible by any available means.	☐	__/__/__ ____:____
Reduce fuel supply by: a) Closing valves where possible. b) Close tank valves immediately. c) Close mainline fire gates valves on Supervisor's orders if not in the fire area. If in the fire area, the nearest upstream and downstream valves are to be closed.	☐	__/__/__ ____:____
Notify Terminal Supervisor, Operations Supervisor, and TPTN Duty Officer. Notify all off-site personnel of Facility Emergency Incident.	☐	__/__/__ ____:____
If foam is needed, contact necessary resources for assistance.	☐	__/__/__ ____:____
Post guards at gates or roadways. Call for any help deemed necessary: ambulance, sheriff (to barricade roads, etc.).	☐	__/__/__ ____:____
Isolate the fire as much as possible and control spreading to other properties by wetting with water.	☐	__/__/__ ____:____
After the fire has been extinguished or controlled, permit only authorized personnel to go near the location.	☐	__/__/__ ____:____
Public Relations: Contact EPR&S Group to request media support as needed.	☐	__/__/__ ____:____

Sec. II-5.16 Truck Loading Rack Fire

Truck Loading Rack Fire		
Procedures	✓	Date/Time
Be calm – Think first and act with care. Equipment can be replaced – lives cannot.	☐	__/__/__ __:__
Stop all loading on rack. **Trip emergency shutdown switch – close valves on loading riser.**	☐	__/__/__ __:__
Attempt to put out or control fire with dry chemical extinguisher. Prompt action can extinguish a small fire.	☐	__/__/__ __:__
Notify Fire Department	☐	__/__/__ __:__
If immediate action does not extinguish the fire, then:		
Clear rack of all truck not on fire and shut off fuel supply by closing all valves on loading lines.	☐	__/__/__ __:__
Advise Supervisor and/or other employees on duty of the fire.	☐	__/__/__ __:__
If anyone is injured or burned, remove from area.	☐	__/__/__ __:__
Summon help as needed: ambulance, sheriff, etc.	☐	__/__/__ __:__
In some cases it may be better to isolate the fire and permit it to exhaust the fuel, rather than to extinguish and risk an explosion.	☐	__/__/__ __:__
Water should be applied to lines, equipment and tanks in the fire and surrounding area.	☐	__/__/__ __:__
Good judgment is essential as to position of personnel because of potential hazard of heat-induced failure of piping and tanks.	☐	__/__/__ __:__
Turn off switches on electrical service in fire area.	☐	__/__/__ __:__
Close gates, post guards to keep spectators away, use sheriff or police to assist.	☐	__/__/__ __:__
Public Relations: Contact EPR&S Group to request media support as needed..		__/__/__ __:__

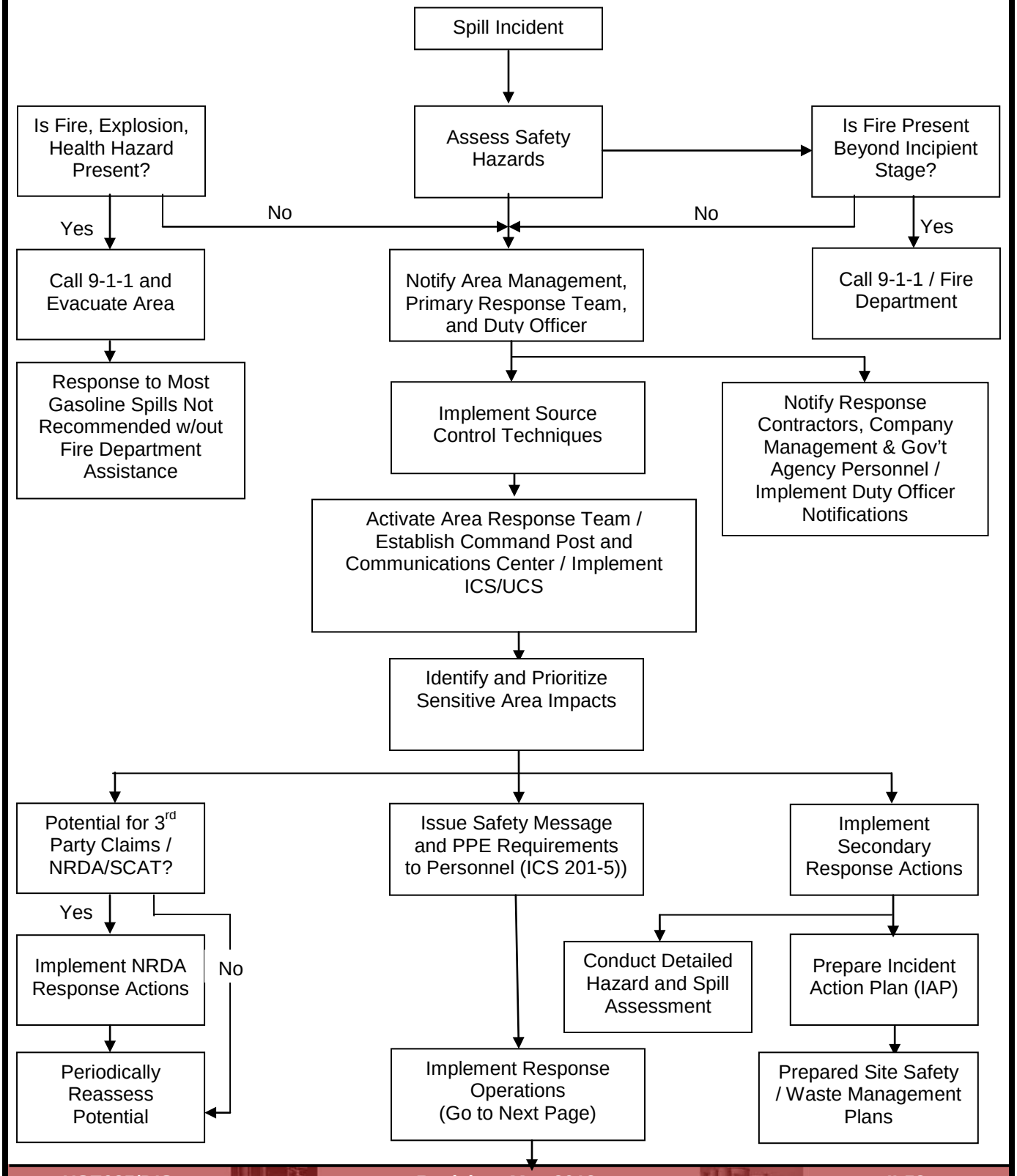
Sec. II-5.17 Tank Fire Pre-Plan / Flowchart

NOTE: REFER TO COMPANY EMERGENCY RESPONSE WEB SITE FOR A LINK TO THE TANK FIRE PRE-PLANS. DIAGRAMS AND OTHER REFERENCE MATERIALS CAN BE FOUND IN THE COMPANY OPERATIONS FIELD HANDBOOK.

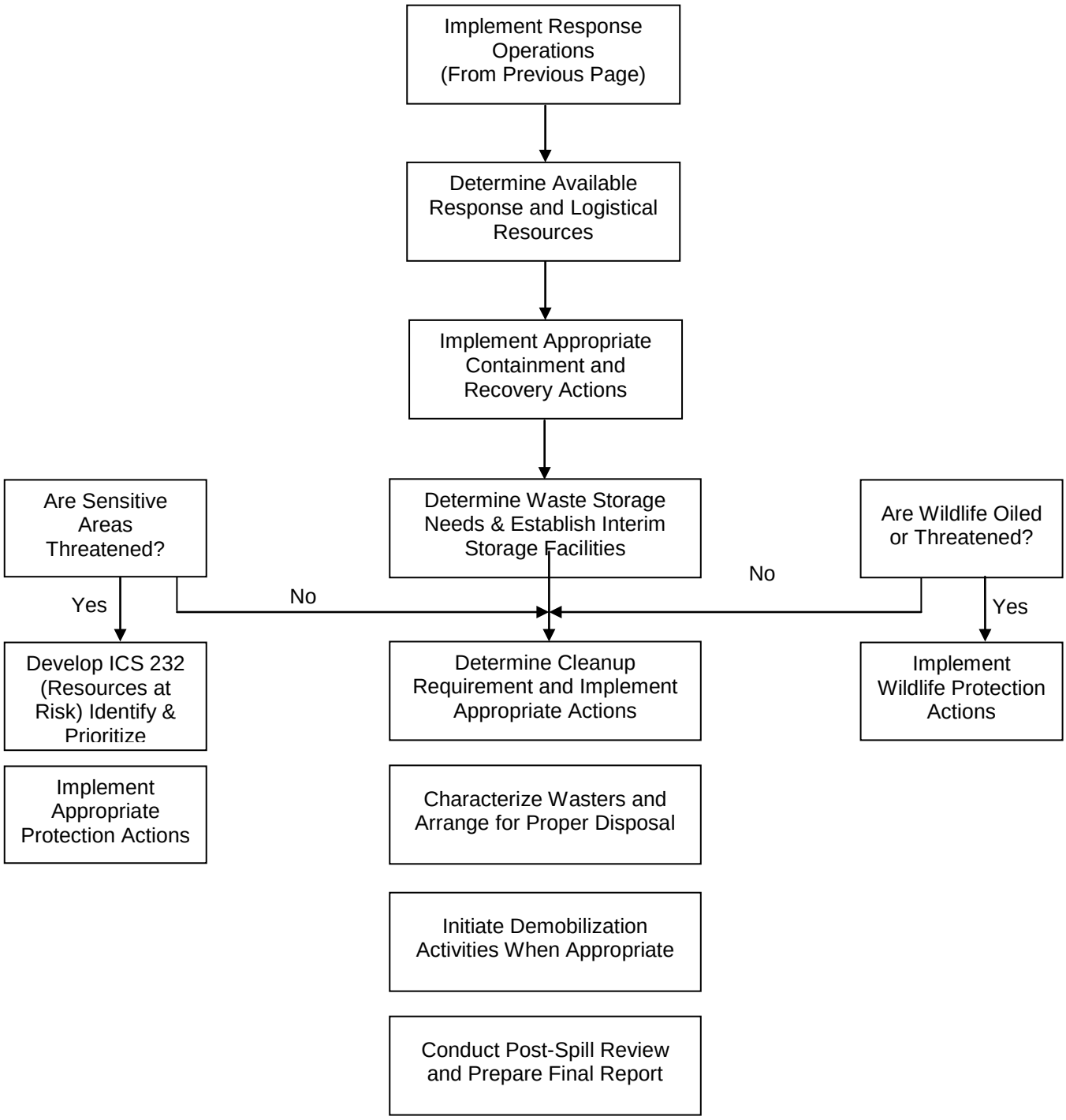


Note: Successful mitigation may require elements of all 3 options.

Sec. II-5.18 Spill Response Strategy Guide



Sec. II-5.18 Spill Response Strategy Guide (Cont'd)



Note: Pipeline Emergency Response operations dictate that the Company and Agency Incident Commanders will establish the location of the Incident Command Post and Communication Center. Factors that will be taken into account when deciding on the Incident Command Post will include but not be limited to: location of the pipeline release, personal and public safety, geography, preference of local, state and federal response personnel, weather, size of CP needed and workability.

Sec. II-5.19 Oil Spill / Release

Oil Release Checklist		
Procedures	✓	Date/Time
Consider safety of personnel.	☐	__/__/__ ____:____
Shut off ignition sources.	☐	__/__/__ ____:____
Stop the flow of spilled product.	☐	__/__/__ ____:____
Coordinate rescue and medical response actions.	☐	__/__/__ ____:____
Identify release and assess possible hazards to human health and the environment.	☐	__/__/__ ____:____
Report all spills to Supervisor and Management.	☐	__/__/__ ____:____

Sec. II-5.20 Oil Spill Surveillance

Spill Surveillance Guidelines	
•	Spill surveillance should begin as soon as possible to aid response personnel with assessing spill size, movement and potential impact locations.
•	Cloud shadows, sediment, floating organic matter, submerged sand banks or wind-induced patterns on the water may resemble an oil slick if viewed from a distance.
•	Use surface vessels to confirm the presence of any suspected oil slicks, if safe to do so. If possible, direct the vessels from the aircraft and photograph the vessels from the air to show their position and size relative to the slick.
•	It is difficult to adequately observe oil on the water from a boat, dock or shoreline.
•	Spill surveillance is best accomplished using helicopters or small planes. Helicopters are preferred due to their superior visibility and maneuverability characteristics.
•	If fixed-wing planes are used, high wing types provide better visibility than low-wing types.
•	Document all observations in writing and with photographs and/or videotapes.
•	Describe the approximate oil slick dimensions based on available reference points (i.e. vessel, shoreline features, facilities). Use aircraft or vessel (if safe to do so) to traverse the length and width of the slick while timing each pass. Calculate the approximate size and area of the slick by multiplying speed and time.
•	Record aerial observations on detailed maps.
•	In the event of reduced visibility, such as dense fog or cloud cover, boats may be used for patrols and documenting the location and movements of the spill. Boats will only be used if safe conditions are present, including on-scene weather and product characteristics.
•	Surveillance is also required during spill response operations in order to gauge effectiveness of response operations, to assist in locating skimmers and to continually assess size, movement and impact of spill.

Aerial Spill Surveillance Data Sheet

Incident Name:	**Date / Time:**
Environmental Conditions	
Wind Speed (kts):	Wind Direction:
Current Speed (kts):	Current Direction:
Air Temperature (°F)	Water Temperature (°F)
Comments	
Clear ☐	Partly Cloudy ☐ / Cloudy ☐

Spill Location				
Leading Edge	Latitude	Deg	Min	Sec
	Longitude	Deg	Min	Sec
Trailing Edge	Latitude	Deg	Min	Sec
	Longitude	Deg	Min	Sec

Spill Description						
	Barely Discernable	Silvery Sheen	Faint Colors	Bright Bands of Color	Dull Brown	Dark Brown
Length						
Width						

General Description

Sec. II-5.20 Oil Spill Surveillance (Cont'd)

Spill Volume Estimating	
Early in a spill response, estimation of spill volume is required in order to:	
•	Report to agencies
•	Determine liquid recovery requirements
•	Assess manpower and equipment requirements
•	Determine disposal and interim storage requirements

In the event that actual spill volumes are not available, it may be necessary to estimate this volume.

Spill Volume Estimation Methods	
•	**Water**: Visual observation and calibration with the A.P.I. Task Force on Oil Spill Cleanup, Committee for Air and Water Conservation's Spill Size Estimation Matrix. This matrix is included as Figure II-5.1 for spills to water. Other methods which can be used to determine size and volume of a spill include, but are not limited to: • Other methods which can be used to determine size and volume of a spill include, but are not limited to: • Vessel/line capacity formulas • Infra-red thermal imaging
•	**Land**: • Use the Transportation Spill to Land Estimation Tool • SCADA (Control Center calculation) • Tank Data Program

Figure II-5.1 – Spill Estimation Factors

Use this table to calculate the amount of an oil spill to water:

Estimated Area* (sq ft)	Estimated Amount of Spill in GALLONS**					
	Barely Discernible	Silvery Sheen	Faint Colors	Bright Bands of Color	Dull Brown	Dark Brown
1,000	< 1/8	< 1/8	< 1/8	< 1/8	< 1/8	< 1/8
5,000	< 1/8	< 1/8	< 1/8	< 1/8	< 1/8	3/8
10,000	< 1/8	< 1/8	< 1/8	< 1/8	1/4	2/5
15,000	< 1/8	< 1/8	< 1/8	< 1/8	3/8	1/2
20,000	< 1/8	< 1/8	< 1/8	1/4	2/5	1
30,000	< 1/8	< 1/8	< 1/8	1/4	3/5	1
50,000	< 1/8	< 1/8	1/4	2/5	1	3
100,000	< 1/8	1/4	2/5	3/4	3	5
300,000	3/8	3/5	1	2	6	14
600,000	1/2	1	2	4	13	29
900,000	3/4	2	3	7	20	43
1,000,000	7/8	2	4	7	22	47
1,250,000	1	2	5	9	27	59
1,500,000	1	3	5	11	32	70
1,750,000	2	3	6	13	38	82
2,000,000	2	4	7	14	43	94
4,000,000	4	8	15	30	90	95
6,000,000	5	11	22	44	132	286
8,000,000	7	15	29	58	174	377
10,000,000	9	18	36	72	216	468
12,500,000	11	23	45	90	270	585
15,000,000	14	27	54	108	324	702
17,500,000	16	32	63	126	378	819
20,000,000	18	37	72	144	432	936
22,500,000	21	41	82	164	492	1,066
25,000,000	23	45	90	180	540	1,170
27,500,000	25	50	100	200	600	1,300

*Arrived at by multiplying estimated length of spill by estimated width. Round up to next highest value.
**Calculated from guide published by the API Task Force on Oil Spill Cleanup, Committee for Air and Water Conservation.
< Means less than

Sec. II-5.20.1 Estimating Spill Trajectories

Oil spill trajectories may initially be estimated in order to predict direction and speed of the slick movement. Trajectory calculations provide an estimate of where oil slicks may impact shorelines and other sensitive areas and provide an estimate of the most likely locations for protection, containment and recovery.

The following methods may be used to predict spill movement:	
•	Vector Analysis (using wind speed/direction, tides, and current speed/direction)
•	Computer trajectory modeling programs (including but not limited to): • World Oil Spill Model (WOSM) • OilMap • General NOAA Oil Modeling Environment (GNOME)

The Company will utilize internal subject matter experts with consultants as necessary to perform trajectory analysis and fate & effect modeling.

Input variables for proper modeling include, but are not limited to:	
•	Spill location, volume, and time of spill
•	Nature of the spill - continuous or single incident
•	Wind speed & direction
•	Water movement (current) speed & direction
•	Water temperature
•	Sea state
•	Atmospheric temperature
•	Characteristics of spilled material

This information can be obtained from many sources, including but not limited to:	
•	Reports from personnel at the spill site
•	Commercial weather services
•	National Oceanic and Atmospheric Administration (NOAA)
•	Internal Company databases

Sec. II-5.20.2 Sampling and Testing

In defining an acceptable response to a spill incident, it is necessary to know certain physical and chemical characteristics of the spill material. If positive identification of the spilled material can be made without testing, product data may be obtained from a material safety data sheet (MSDS), product specification information, and/or records of product physical and chemical properties.

Occasionally a spill may occur in which the spilled material is not readily identifiable. Typically, laboratory analytical data for spill event samples will not be instantaneously available during an emergency. Therefore, it is necessary and desirable to field-categorize oils as the product reacts and changes in the environment. Although varying widely in physical and chemical properties, oil products have common basic features that permit their grouping for predictive evaluation of environmental effects and determination of control actions. In addition, as petroleum products react and change (e.g., weather) when exposed in the environment, the laboratory data may not be representative of "real-time" conditions; rather the data may instead reflect the chemical characteristics of the spilled material(s) at the time of sample collection.

The **Oil Spill Trajectory Request Form** is located in Section III of this plan.

Sec. II-5.21 Spills to Groundwater

Sec. II-5.21.1 General

Spills to bare ground will initially spread laterally on the surface and then begin migrating downward through the soil and, depending on a variety of factors and circumstances, could reach groundwater. During vertical migration the spill will spread laterally to some degree and a portion of the oil will be absorbed by the soil particles or become trapped in small pores eventually immobilizing the spill.

In general, oil will continue migrating downward until:
• Residual Saturation is reached (all of the oil is absorbed by the soil)
• Impenetrable Layer (silt, clay, sandstone, rock) is encountered
• Groundwater is reached

If a spill does reach groundwater, the oil will form a mound on the surface of the groundwater (water table) and begin to spread horizontally but preferentially in the direction of groundwater flow. For higher groundwater velocities, a narrow plume elongated in the direction of groundwater flow will form whereas for lower velocities the plume broadens and assumes a more circular pattern. The thickness of the plume or layer of oil on the water table will decrease with distance from the source.

As with vertical migration, a portion of the oil will adhere to soil particles and become trapped in small or water filled pores eventually becoming immobilized. For instantaneous or quasi-instantaneous spills, 40-70% of lateral spreading will generally occur in the first 24 hrs whereas 60-90% occurs in the first week.

Sec. II-5.21.2 Response Actions

In the event of a spill to bare ground, there are a number of actions that should be taken to assess the spill and, if groundwater is impacted, initiate recovery and limit the extent of impact. A decision guide is provided at the end of this section that outlines the general response actions that should be taken. Additional information on these response actions is also provided below.

Sec. II-5.21.3 Initial Assessment

As for any spill, the initial response actions for spills to bare ground should include the assessment of health and safety hazards. See the Site Safety and Health Plan as well as the following parameters.

Initial Assessment Parameters	
•	Spill Size and Product Accumulation (pooled oil) Depth
•	Product Type (viscosity)
•	Soil Type/Permeability/Moisture Content
•	Depth to Groundwater
•	Estimated Response Time to Initiation of Recovery Actions

Sec. II-5.21.4 Ground Impact Potential

Once the assessment is completed, the potential for the spill to impact underlying groundwater should be determined and generally requires some knowledge of the local hydrogeology including soil type/permeability and depth to groundwater, and groundwater flow direction. The common factors, along with selected examples, that contribute to a spill having a higher or lower potential to impact groundwater are:

Higher Potential	
•	Shallow Groundwater (generally <20 ft)
•	Low Viscosity Oil (gasoline)
•	Dry Soil with Low Oil Retention Capacity
•	Highly Permeable Soils (sand, gravel, coarse grained mixed sediment)
•	Large Volume
•	Pooled Oil (creates hydraulic head that enhances penetration)
•	Response Time (several hours before pooled oil recovery begins)

Lower Potential	
•	Deep Groundwater (generally >20 ft)
•	Medium to High Viscosity Oil (industrial fuel oils, crude, lubricants, etc.)
•	Wet or Moist Soils with High Oil Retention Capacity
•	Low Permeability Soils (silts, clays, fine grained mixed sediment)
•	Small Volume
•	No Pooled Oil on Surface
•	Response Time (expeditious recovery of pooled oil or saturated soils)

Sec. II-5.21.4 Ground Impact Potential (Cont'd)

For small spills that do not pool on the ground surface, vertical penetration into the soil is often limited to 4 to 8 inches with the exception of coarse gravels which could allow considerably deeper penetration. Depth of penetration can be estimated if you know the square footage of surface impact, soil type, depth to groundwater and spill volume. Using the above information and the table shown below, a calculation of how much oil can be adsorbed/retained by the soil between the surface and the water table. If the retention capacity is significantly greater than the spill volume, the potential for the spill to reach groundwater would be low and vice versa.

Retention Capacity	
Soil Type	Oil Retention Capacity (gal / yd^3)
Stones, coarse gravel	1
Gravel, coarse san	1.6
Coarse sand, medium sand	3
Medium sand, fine sand	5
Fine sand, silt	8

Sec. II-5.21.5 Supplemental Assessment

If the potential exists for a spill to reach groundwater, additional assessment activities should be conducted to confirm groundwater has been impacted and, if so, assess the extent of impacts. In most cases, experienced remediation contractors already under contract to the Company will be utilized to conduct subsequent assessment activities.

These activities commonly include:	
•	**Backhoes or Excavators** – excavate pits/trenches to determine penetration depth/groundwater impacts (limited to depths of 10–20 ft)
•	**Hand or Power Augers** – install borings to collect soil/water samples and can be used to install temporary wells (often limited to 15-30 ft)
•	**Direct Push Drilling Rigs –** install borings to collect soil/water samples and can be used to install temporary wells (often limited to 50-100 ft)
•	**Hollow Stem Auger (HAS) or rotary drill rigs -** install borings to collect soil samples and wells for groundwater samples (limited to 100-500 ft)

The type of method used often depends on equipment availability, depth to groundwater and access to the spill area. For areas with shallow groundwater and good access, backhoes or excavators are often the most expedient means of determining penetration depth and groundwater impacts. If access is limited, such as in many tank farms, hand or power augers can be used to install borings and collect samples. Direct push (Geoprobe) rigs can get into many areas but are generally truck mounted and will need road access. For areas with good access and where groundwater is deeper, hollow stem augers or rotary drill rigs are often the best equipment for subsequent assessment.

Sec. II-5.21.5 Supplemental Assessment (Cont'd)

Borings or pits should be installed, if safe to do so, in the main spill area where penetration is typically greatest. If groundwater impacts are confirmed or expected, additional borings or wells should be installed by stepping out laterally from the spill area and primarily in the down gradient direction until the groundwater impact area is delineated.

It is important to note that if intrusive activities (excavation, drilling, hand augers, etc.) are necessary, additional air monitoring of the excavation and breathing zone around the activities should be conducted to ensure additional hazards are not created by the activities. In addition, if excavation activities are conducted and it is necessary for workers to enter the excavation, confined space permitting and/or shoring regulations may apply.

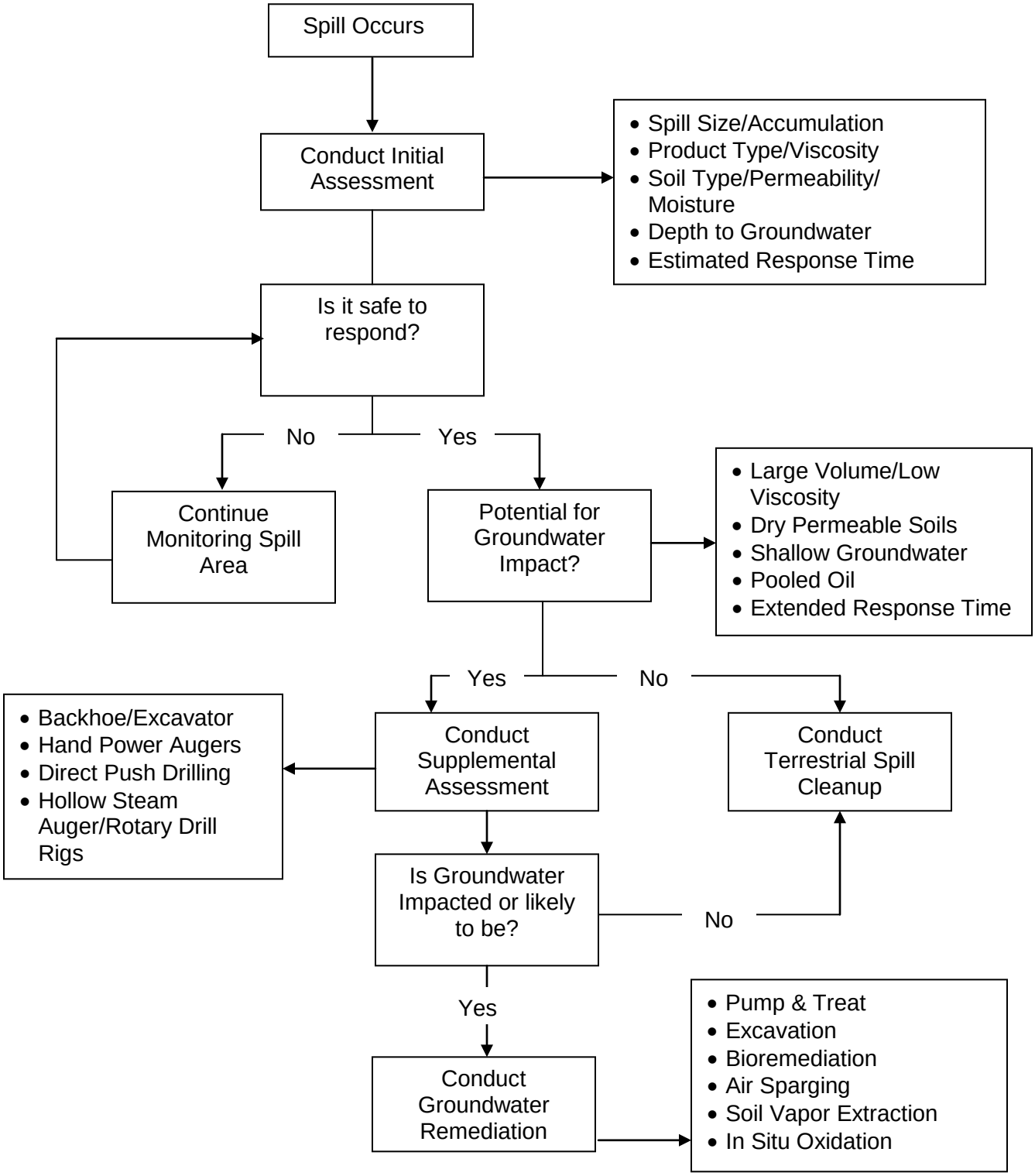
Sec. II-5.21.6 Recover/Remediation

In the event a spill does reach groundwater or the threat of reaching groundwater remains, recovery or remediation activities will need to be conducted to mitigate the impacts. The impacts could be limited to low concentrations of hydrocarbons that have dissolved into the groundwater or, for larger spills, involve a layer of oil/product floating (separate, or non-aqueous, phase hydrocarbons) on the groundwater surface (water table) accompanied by elevated concentrations of dissolved (aqueous phase) hydrocarbons in the groundwater.

Some of the more common groundwater remediation techniques include:	
•	Pump and Treat
•	Excavation
•	Bioremediation
•	Air Sparging
•	Soil Vapor Extraction
•	In Situ Oxidation

Selection of the most appropriate remediation technique will depend on a number of factors including product type, soil type, depth to groundwater, access, extent of impacts, current groundwater use, etc. The Company will utilize experienced remediation contractors to select and implement the most appropriate remediation technique(s). The local or regional remediation contractor(s) under contract to the Company are provided in the Contacts Section of this plan, along with their contact information.

Figure II-5.2 – Groundwater Spill Response Strategy Guide



Sec. II-5.22 Natural Disasters

This checklist identifies actions to be taken when the Pipeline and/or its facilities are threatened by thunderstorms, producing lightning or high winds.

Thunderstorms / Lightning / High Winds Checklist		
Procedures	✓	Date/Time
Establish communications with the Field office for weather updates.	☐	__/__/__ [00:00]
Upon notification by weather monitoring of impending severe weather conditions, notify the initial Incident Commander or the appropriate office of the situation.	☐	__/__/__ [00:00]
Personnel will be instructed to shut down all nonessential activities and take shelter where available until the storm has passed.	☐	__/__/__ [00:00]
Immediately bring personnel off vessels, tanks, pipe racks, and other elevated work areas. Suspend product loading operations and close all tank openings.	☐	__/__/__ [00:00]
Take shelter until the storm has passed.	☐	__/__/__ [00:00]

Tornado Safety Checklist		
If a ***tornado warning*** has been issued. Use the following checklist		
Procedures	✓	Date/Time
Establish communications with the Field office for weather updates.	☐	__/__/__ [00:00]
Sound the alarm.	☐	__/__/__ [00:00]
Have location personnel report to the designated area.	☐	__/__/__ [00:00]
Avoid all windows and proceed to an interior room on the lowest floor or tornado shelter, if available. • Interior stairwells will be one of the best shelters, if available.	☐	__/__/__ [00:00]
Seek shelter under a sturdy/heavy piece of furniture.	☐	__/__/__ [00:00]
Use your arms to protect the back of your head and neck.	☐	__/__/__ [00:00]
Once the all clear has sounded:		
Account for all Personnel	☐	__/__/__ [00:00]
Begin search and rescue if any personnel is missing	☐	__/__/__ [00:00]

Earthquake		
Procedures	✓	Date/Time
Assess situation and exercise caution.	☐	__/__/__ [00:00]
Emergency Shut Down, if necessary. Notify Control Center as needed.	☐	__/__/__ [00:00]
If damage has occurred, close the nearest block valves on either side of the damaged location.	☐	__/__/__ [00:00]
Conduct visual inspection of the line(s) using one or more of the following methods. ☐ Aircraft ☐ Vehicle ☐ Walking	☐	__/__/__ [00:00]
Evacuate the line for closer inspection and/or pressure test prior to resuming operations, if necessary.	☐	__/__/__ [00:00]
Inspect system integrity	☐	__/__/__ [00:00]
Check off-site areas for damage.	☐	__/__/__ [00:00]

River Flood, Severe Storm, Freeze Protection Preparedness Checklist		
Procedures	✓	Date/Time
Refer to applicable Flood, Hurricane, and Freeze Protection Preparedness Plan	☐	__/__/__ [00:00]

(b) (7)(F)

[redacted]

(b) (7)(F)

[redacted]

(b) (7)(F)

[redacted]

Sec. II-6 Detection Procedures

Sec. II-6.1 Release Detection

The Company has a number of safety systems and practices in place to prevent the occurrence and mitigate the subsequent impact of accidental releases. The systems are designed to alert operators with alarms and provide automatic shut-in functions in the event of a release. Pipeline operators are trained to respond to the various system alarms in order to identify and control releases immediately.

The routine responsibilities that ensure releases will be detected and mitigated as soon as possible by IC/UC personnel may include, but are not limited to the following:	
•	Regularly scheduled visual and aerial monitoring.
•	Routine walk-through and monitoring of process equipment to ensure proper operation of all equipment at each facility.
•	Immediate response to alarms and signals that may indicate a possible release.
•	Identification and control of the source as soon as safely possible.
•	Notify the Person in Charge.

All pipelines operated by the Company are equipped with high and low pressure sensors. In the event of a change in pipeline pressure beyond a specified set point, the pressure sensors will trigger an alarm to the facility operator and/or shut down the pipeline and process equipment.

The Company operators will perform the following procedures when they are alerted to a potential pipeline emergency:

Procedures	✓	Date/Time
Ensure that the pipeline pressure sensing equipment is not malfunctioning.	☐	__/__/__ [00:00]
The supervisor will request a field inspection of the pipeline in question to identify the source of the suspected leak.	☐	__/__/__ [00:00]
In the event an oil leak is discovered along the pipeline, this Plan will be activated.	☐	__/__/__ [00:00]
In the event a leak is not found, an investigation into the cause of the pressure change will continue until determined.	☐	__/__/__ [00:00]

Sec. II-6.2 Discharge Detection Systems

The Company will provide a detailed description of the procedures and equipment used to detect discharges. A section on discharge detection by personnel and a discussion of automated discharge, if applicable, will be included for both regular operations and after hours operations. In addition, the Company will discuss the reliability of any automated system, how it will be checked and how frequently the system will be inspected.

Sec. II-6.3 Discharge Detection by Personnel

Sec. II-6.3.1 Routine Inspections

Terminal operators perform routinely scheduled terminal inspections. Terminal equipment and current movements are checked for evidence of leaks or spills in addition to various other observations such as security, equipment operation, etc.

Sec. II-6.3.2 Safe Fill

When pipeline receipts or transfers are made, the volumes used in the calculations for space available use a safe fill height as the maximum operating level.

Sec. II-6.3.3 Receipt Monitoring

Terminal employees coordinate all receipts with pipeline representatives. This involves determination of the volume of each product grade prior to receipt. The receipt progress, incoming volumes and high level alarm signals are monitored at all times when product is being transferred into the terminal from the pipeline by the Control Center.

Sec. II-6.3.4 Tank Gauging

Each tank scheduled to receive a receipt is gauged prior to receipt to confirm that space is available for the receipt.

(b) (7)(F)

[redacted]

Sec. II-6.3.6 Volume Reconciliation

Tanks are gauged at month end as part of our physical inventory reconciliation program.

Sec. II-6.3.7 Pipe Testing

Belowground piping is periodically tested.

Sec. II-6.3.8 Observations and Documentation

The condition of tanks and equipment are observed when employees responsible for the operation and maintenance of the terminal are on shift. Documentation of these conditions will be logged periodically at the discretion of the local supervisor.

The following are elements of the oil inventory control system:

Sec. II-6.3.9 Physical Inventory

This currently serves as the basis for comparing an inventory-reporting period with the previous reporting period. Current practice uses end of month physical inventory [calculated in net barrels per petroleum measurement tables (ASTM D1250 80, 5B, and 6B)] as an opening inventory for the next month's reporting period.

Sec. II-6.3.10 Facility Throughput

Facility throughput is product leaving a tank primarily through a truck loading rack with meters. Meters on truck loading racks are to be calibrated according to a set interval. They are also reconciled in conjunction with physical inventory taking as well as on a standalone basis. Quantity loaded shall be determined on a net basis using temperature from temperature probes mounted at or near the loading rack and gross gallon quantities from meter pulses. These throughput quantities shall be deducted from inventory.

Sec. II-6.3.11 Product Variation

A physical inventory can be taken to compare with the book inventory quantity, if necessary. The difference between the book and physical quantity is a product variation. Variations may be positive or negative. Statistical Process Control (SPC) is the basis for determining whether this variation should trigger an investigative effort to determine whether product is unknowingly being discharged.

Sec. II-6.3.12 Statistical Process Control (SPC)

Control limits (both upper and lower) are set for each product variation based upon historical information at each facility. Product variations between the control limits are considered to be OK and do not require an investigation or documentation. These variations inside of limits are considered to be a "random" occurrence that is an inherent part of the control process. Product variations outside the control limits are to be investigated using techniques outlined in Transportation's Terminal Operation and Procedures Manual with documentation required at both the terminal and Accounting. The control limits will be periodically checked to determine if they are still valid or whether process changes or improvements have invalidated them.

If a release is detected, personnel are directed to notify the proper authorities (see the Notifications Section).

(b) (7)(F)

[redacted]

Sec. II-6.6 Good Engineering Practices.

The Company's approach to preventing discharges is to assure that all facilities are properly designed, constructed, maintained and operated.

Some examples of good engineering practices may include but are not limited to the following:

Engineering Practices	
•	Components in the pipeline system are designed and constructed in accordance with written specifications.
•	Components are inspected to ensure that quality is maintained during material procurement and construction.
•	Trained personnel are used during the construction of the facilities.
•	Various testing methods are used during construction of the facilities.
•	External and internal corrosion control methods are used to maintain the facilities in the best possible condition.
•	A preventive maintenance program reduces the potential for component malfunction or failure
•	Company personnel are properly trained to operate and maintain the pipeline system
•	Company has an extensive safety and drug testing program for its employees and requires the same for its contractors.
•	Company systems are designed and operated with safety factors in place. For example, the maximum operating pressure of a system is always less than the design pressure of the system and the test pressure of the system.
•	Pressures are monitored and controlled so that the maximum operating pressures are not exceeded.
•	When appropriate, internal inspection tools are used or lines are subjected to additional hydrostatic testing to determine and assure their integrity.
•	All wastes are stored in accordance with applicable regulatory requirements (DOT containers that are non-leaking, closed, in good condition, properly marked/labeled, inspected to ensure integrity, etc.)

Sec. II-6.7 Third-Party Damage Prevention

If the systems are properly designed, constructed, operated and maintained, then the most probably source of discharge is due to third-party damage. In order to minimize the risk of damage caused by a third-party a number of steps may be taken, including, but not limited to the following:

Prevention of Third-Party Damage	
•	The facilities are designed to reduce the chance of third-party damage. For example, most of the facilities are buried or located within fenced and locked areas.
•	Areas especially sensitive to third-party damage are road, railroad, and water crossings. Pipelines in these areas usually have additional wall thickness, or burial depth, or are cased to reduce the chance of damage.
•	Company facilities are normally located on well- maintained and clearly marked rights-of-way.
•	Company facilities are normally monitored by aerial or other patrol at least once per week to check for encroachment and construction activities.
•	Company participates in one-call pipeline locating and notification systems where available.
•	Company conducts education programs to reduce the possibility of third-party damage.

Sec. II-6.8 Corrosion Mitigation

For external corrosion prevention, the Company generally prevents corrosion of buried pipelines by using approved long-life pipeline coatings supplemented with cathodic protection. Aboveground facilities are generally inspected annually and provided protective coating systems to prevent corrosive deterioration. These primarily include buildings, aboveground pipelines and tanks.

In order to prevent internal corrosion of the pipelines, the Company uses chemical injection, pigging and corrosion inhibitors, and inspects pipelines located in high population density areas and environmentally sensitive areas with in-line inspection pigs, where appropriate. A large number of pipelines are hydrostatically tested.

Sec. II-6.9 Spill Mitigation

Source control and mitigation involve anything from shutdown of operations to patching a leak, containing a spill, dispersing a vapor cloud, protecting a sensitive area, recovering the spilled material, or other such activities that are involved in an emergency response. Because of the infinite number of circumstances under which an incident could occur and the variety of equipment that could be involved, it is impractical to describe procedures that should be followed in all foreseeable emergency situations.

Sec. II-6.10 Tank Overfill and Fire Prevention

Each tank is provided with a connection for a semi-fixed fire protection system. Individual foam laterals that run from connections outside the dike areas serve each tank. The foam laterals are controlled by manual valves. Connections to the tanks depend on roof construction. Foam fire fighting capabilities are provided by the Refinery and/or the Linden Fire Department.

Each bulk storage tank is equipped with a liquid level gauging device and an independent high-level alarm system with audible and visual alerts. During product movements the operator and field personnel maintain radio communication. All tanks are also manually gauged to check the accuracy of the automatic liquid level gauging system.

Delivery personnel monitor tank levels during the filling period for small mobile/portable tanks to provide overfill protection.

Sec. II-6.10.1 Storage Tank Overfill Lines

All overflow or vent lines on bulk storage tanks, as well as the building heating oil and gasoline additive tanks, are directed into the tank's secondary containment areas. Overflow lines on the jet fuel and diesel fuel additive tanks are directed into the truck rack secondary containment.

Sec. II-6.11 Visual Tank Inspection

The visual tank inspection checklist presented below has been included as guidance for inspections and monitoring. Also included in the visual tank inspection will be an inspection of the tank foundation and associated piping. All tankage, pumping equipment, piping and related terminal equipment are inspected every working day for leakage, malfunctions of seals, etc. Storage tanks are inspected monthly and annually and findings are recorded. Example forms are included in this plan. These records shall be maintained for a minimum of five years.

Check tanks for leaks, specifically looking for:	
•	Drip marks
•	Discoloration of tanks
•	Puddles containing stored materials
•	Corrosion
•	Cracks
•	Localized dead vegetation

Check foundation for:	
•	Cracks
•	Discoloration
•	Puddles containing stored materials
•	Settling
•	Gaps between tank and foundation
•	Damage cause by vegetation roots

Check piping for:	
•	Droplets of stored material
•	Discoloration
•	Corrosion
•	Bowing of pipe between supports
•	Evidence of stored material seepage on valves and seals
•	Localized dead vegetation

Terminal operators visually inspect all tanks each working day for leaks. Daily tank gauges are reviewed for evidence of product loss that would indicate a leak in the tank. Any visible oil leaks from tank seams, gaskets, rivets and/or bolts are corrected immediately.

Sec. II-6.12 Secondary Containment Inspection

The secondary containment areas shown on the site plans will be inspected on an annual basis. The inspections will include checking for the following:

Dike or berm system:	
•	Level of precipitation in dike/available capacity
•	Operation status of drainage valves
•	Debris
•	Erosion
•	Location/status of pipes, inlets, drainage beneath tanks, etc.

Secondary containment:	
•	Cracks
•	Discoloration
•	Presence of stored materials (standing liquid)
•	Corrosion
•	Valve conditions

Retention and drainage ponds:	
•	Erosion
•	Available capacity
•	Presence of stored material
•	Debris
•	Stressed vegetation

Sec. II-6.13 Pipeline Inspections

All pipelines within the Company Pipeline System are monitored on a regular and routine basis. Control Center personnel monitor and control line pressures and product flow rate, operate remotely controlled valves, operate pumps and engines, and monitor the type of product currently in the line at any given point. These control centers are operated on a 24-hour basis. Should a leak occur, the operators monitoring the lines can have the line shut down within minutes. The operators can then dispatch field personnel to physically inspect the line in the area of the suspected leak.

(b) (7)(F) These lines are observed regularly by facility/pipeline maintenance personnel. In addition to these inspections, aircraft that fly the pipeline on a scheduled weekly basis inspect the lines.

Sec. II-6.14 Buried Piping

Nearly all piping has been moved above grade. Most of the remaining buried, underground lines run under roadways. Some piping appears as "buried", but is really only penetrating an elevated roadway or containment berm for a short distance, approximately 20 feet. Even though such penetrations require sealing to not compromise the containment, any leakage from short, elevated lengths would appear where the pipe penetrates the berm/roadway, rather than migrate vertically downward through compacted clay berms/roadways. This leakage would readily be detected by personnel during routine visual inspections.

There are no existing state-of-the-art leak detection devices available for retrofitting to existing buried piping. When a leak is detected from a buried pipe, the Company will excavate, examine, and evaluate the pipe for the cause of the failure. Localized pipe failures will be repaired or replaced. For extensive pipe failures requiring substantial reconstruction, the Company will upgrade to the standard specified under the DPCC regulations. For the purposes of this plan, substantial reconstruction is defined as more than 50 percent of the replacement value of an existing pipe section from valve to valve.

Facility practices generally prohibit the installation of buried pipes, other than water and sewer lines. The need for new buried product piping is evaluated on a case-by-case basis. If such a need is identified, the Company will install new buried piping to the standard specified under the DPCC regulations. Should new elevated roadway/containment berm penetrations be required for a project, they will be constructed according to current practices.

Sec. II-6.14.1 Exposed Buried Piping

If a section of buried pipe is exposed for any reason, it is carefully examined for deterioration, and, if found to be deteriorated, shall be repaired or replaced. Buried piping requiring substantial reconstruction or replacement shall be rerouted above grade, if possible, or upgraded to new buried piping standards.

Sec. II-6.14.2 Out-of-Service Pipes

If not in service for extended periods of time, terminal pipe connections are blind flanged, plugged or capped and appropriately marked. This practice applies to- all piping in the terminal where an open-ended line could exist, whether or not protected by valving.

Sec. II-6.14.3 Pipe Supports

In accordance with good engineering practice and petroleum industry standards, pipe supports are designed to minimize abrasion and corrosion and allow for expansion and contraction of the pipeline.

Sec. II-6.14.4 Elevated Pipes

Elevated pipelines to the loading racks are sufficiently high and the supports adequately protected to prevent tank trucks from accidentally hitting them. Speed limit signs posted at the entrance of each loading rack bay limit any impact damage to aboveground pipelines.

Sec. II-6.15 Dike Drainage

Drainage of precipitation accumulation from dike areas is performed only after inspection of the accumulation to ensure compliance with applicable water quality standards. Any water possessing a film, sheen or discoloration on the surface is not discharged until such sheen has been physically removed with the use of absorbent pads.

Drain valves are sealed and locked at all times except when there is an operator on-site who:	
•	Inspects the water for a film, sheen, or discoloration;
•	Removes any film, sheen, or discoloration;
•	Monitors the discharge; and,
•	Records the discharge event in the SPCC plan.

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

Sec. II-6.17 Rack Drain

Rack drains are inspected to ensure that any petroleum release from the loading facilities can be conveyed through clean, open drains into proper on-site containment. Results of the rack drain inspections are recorded in the SPCC plan every six (6) months.

Sec. II-6.18 Cathodic Protection System

Cathodic protection systems are inspected to ensure proper function. Results are updated in once every six (6) months.

Sec. II-6.19 Delivery Lines and Manifold

The facility tests the delivery lines and manifold on an annual basis with a two (2) hour recorded pressure test.

Sec. II-7 Emergency Response Equipment, Testing & Deployment

Sec. II-7.1 Response Equipment for Small Discharges

Response equipment for small discharges (< 50 barrels) will primarily come from contracted OSRO's as well as any Company equipment stored locally. Much of this equipment is utilized for day-to-day booming of vessels, as well as for immediate rapid response to all leaks/discharges by terminal personnel and contractors. The equipment can be operated by terminal personnel and/or contractor personnel listed in this Plan. The Management Response Team may authorize additional contractor-supplied equipment and personnel, as needed. This Plan discusses onsite tank storage capacity for recovered oil/water mixtures.

***All OSRO specific information will be detailed in the applicable ICP Geographical Annex.**

Sec. II-7.2 Response Equipment for Medium Discharges

Response equipment for medium (1,200 barrels) discharges again will come from Contacted OSRO's as well as from Company equipment stored locally. Other contractors may be called upon as well depending on the specific needs. These too are listed in the applicable ICP Geographical Annex.

Sec. II-7.3 Response Equipment for Worst-Case Discharges

Response equipment for a worst-case discharge at any Company operational facility/pipeline is located in the applicable ICP Geographical Annex. The Company has guaranteed through contract or other approved means the ability to ensure appropriate response capabilities to any area worst case discharge. In addition, the Company has also ensured the ability to sustain prolonged operations as well.

Sec. II-8 Waste Management Plan

Sec. II-8.1 Introduction

The following wastes may be generated and could be determined to be "hazardous":	
•	Paint Chips
•	Avgas Filters
•	Petroleum contaminated materials that are not considered “of-spec product”

Most of the wastes are "hazardous" due to the benzene concentrations in the wastes (>0.5 mg/l) or ignitability. The avgas filters are frequently determined to be "hazardous" due to the lead concentrations (>5.0 mg/l) in the filters. The paint chips are typically hazardous for lead, chromium or both (>5.0 mg/l).

The following materials are more frequently generated and are not considered a solid waste or a “hazardous waste”.

These materials are exempt from the definition of a solid waste because they are classified as an “off-spec product” destined for product reclamation.	
•	Tank bottom water
•	Loading rack runoff
•	Tank bottom sludge
•	Oil/water separate sludge

It is the purpose of the Terminal’s hazardous waste contingency plan to minimize hazards to human health and the environment in the event of an emergency. This plan is designed to address emergencies that may occur during operations at this facility involving hazardous wastes.

Sec. II-8.2 Applicability

The plan must be carried out immediately whenever there is a fire, explosion or release of **hazardous waste** that could threaten human health or the environment.

Sec. II-8.3 Amendments to Plan

The contingency plan must be reviewed and immediately amended whenever:	
•	Applicable regulations are revised
•	Plan fails in an emergency
•	Facility changes in design, construction, operation, maintenance, or any way increasing the potential for fires, explosions, or releases of hazardous waste, or changes the response necessary in an emergency
•	List of emergency coordinators changes
•	List of emergency equipment changes

Sec. II-8.4 Identification of Emergency Coordinator

The names, addresses and phone numbers (office and home) of all persons qualified to act as emergency coordinator are located ICP Geographical Annex 2 of this plan.

Sec. II-8.5 Emergency Procedures

Whenever there is an imminent or actual emergency situation the emergency coordinator or alternate must immediately activate the facility alarm systems or communications system. The actions that must be taken in the event of a release of hazardous waste to the air, soil or surface water at the facility are located in this Core Plan.

Sec. II-8.6 Evacuation Plan

Due to the characteristics of the hazardous wastes generated, evacuation of a facility should not be necessary. In the event evacuation is necessary, the facility evacuation plan should be followed. A description of the signal(s) to be used and evacuation routes is provided. The facility drainage plan can be located at the end of this section.

Sec. II-8.7 Notification Requirements

The only emergency that may occur with regard to the management of hazardous waste at the facility is a sudden or non-sudden release of hazardous waste. The reportable quantity (RQ) for spills of D018 waste is 10 pounds (1.2 gallons). Any spill equal to or greater than the RQ must be reported to the National Response Center. Reporting procedures should follow the guidelines provided in this Core Plan.

Sec. II-8.8 Arrangements with Agencies and Contractors

As required by 40 CFR 264.53, all Terminals will have provided the police departments, fire departments, hospitals and State and Local Emergency Response Teams that may be called upon to provide emergency services. In addition, the Company will make every effort to invite local agencies to participate, as appropriate, in any exercise or drill. .

Sec. II-8.9 Emergency Equipment

Emergency Equipment	
•	A list of all spill response equipment available in the event of a release is listed in the appropriate ICP Geographical Annex of this Core Plan. A list of spill response contractors to be used by the facility in the event of a release that could surpass the response capabilities of the facility is also located in appropriate ICP Geographical Annex of this Core Plan.
•	A list of emergency fire equipment at the facility is located in the Emergency Procedures Plan.
•	A description of the facility's communication equipment and plan is provided in this Core Plan.
•	A description of the facility's alarm systems is provided in this Core Plan.

Federal, state and local rules designed to ensure safe and secure handling of waste materials govern the waste disposal activities of the Company. To ensure proper disposal of recovered oils plus associated debris, the Company's Waste Management and Recycling Guide should be consulted/followed. The Company's Environmental Group will advise/support IC/UC on all waste management needs during an emergency response to ensure compliance with all applicable regulations and internal waste management policies and guidelines.

The Company must describe how and where the facility intends to recover, reuse, decontaminate or dispose of materials after a discharge has taken place. The appropriate permits required to transport or dispose of recovered materials according to local, State and Federal requirements must be addressed.

Material that must be accounted for in the disposal plan, as appropriate, include	
•	Recovered product
•	Contaminated equipment and materials, including drums, tank parts, valves, shovels
•	Personnel protective equipment
•	Decontamination solutions
•	Adsorbents
•	Spent Chemicals

These plans must be prepared in accordance with Federal (e.g., the Resource Conservation and Recovery Act [RCRA], State and local regulations, where applicable.

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

Initial Waste Management Concerns:	
•	Skimmer Capacity
•	Periodic removal of contained oil
•	Adequate supply of temporary storage capacity and materials

The following action items should be conducted during a spill response:	
•	Development of a site-specific Safety and Health Plan addressing the proper PPE and waste handling procedures
•	Development of a Disposal Plan
•	Continuous tracking of oil disposition in order to better estimate amount of waste that could be generated over the short and long-term
•	Organization of waste collection, segregation, storage, transportation and proper disposal
•	Minimization of risk of any additional pollution
•	Regulatory review of applicable laws to ensure compliance
•	Documentation of all waste handling and disposal activities
•	Disposal of all waste in a safe and approved manner

Good hazardous waste management includes:	
•	Reusing materials when possible
•	Recycling or reclaiming waste
•	Treating waste to reduce hazards or reducing amount of waste generated

The management of the wastes generated in clean-up and recovery activities must be conducted with the overall objective of ensuring:

Overall Objectives	
•	Worker Safety
•	Waste Minimization
•	Cost-Effectiveness
•	Minimization of Environmental Impacts
•	Proper Disposal
•	Minimization of present and future environmental liability

Solid wastes such as sorbents, PPE, debris and equipment will typically be transported from the collection site to a designated site for:

Designated Site Activities	
•	Storage
•	Waste segregation
•	Cost-Effectiveness
•	Packaging
•	Transportation

Once this process is complete, the waste will be shipped off-site to an approved facility for required disposal.

A general flowchart for waste management guidelines is shown in Figure II-8.1. An overall checklist for containment and disposal is located in Figure II-8.2.

Sec. II-8.10 Storage

During an oil spill the volume of oil that can be recovered depends on the storage capacity available. Typical short-term storage methods are summarized in Figure II-8.3. If storage containers such as bags or drums are used, the container should be clearly marked and/or color-coded to indicate the type of material or waste contained and/or the ultimate disposal option.

Figure II-8.1 – Waste Management Flowchart

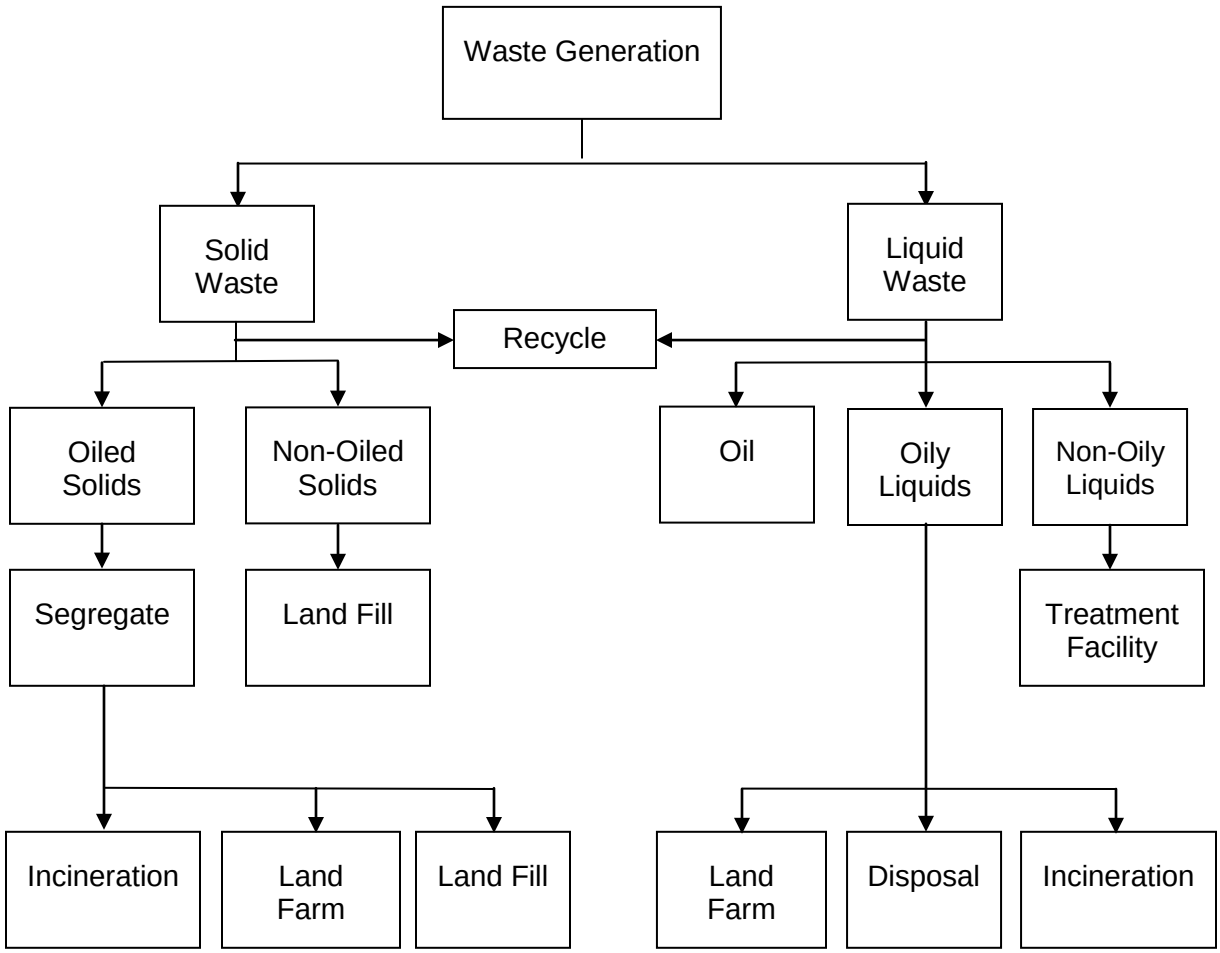


Figure II-8.2 – General Waste Containment and Disposal Checklist

Consideration	Yes / No / NA
Is the material being recovered as waste or reusable product?	
Has all recovered waste been containerized and secured so there is no potential for further leakage while the material is being stored?	
Has each of the discrete waste streams been identified?	
Has a representative sample of each waste stream been collected?	
Has the sample been sent to an approved laboratory for the appropriate analysis (i.e. hazardous waste determination)?	
Have the appropriate waste classification and waste code numbers for the individual waste streams been received?	
Has a temporary EPA identification number and generator number(s) been received, if they are not already registered with EPA?	
Have the services of registered hazardous waste transporter been contracted, if waste is hazardous?	
If the waste is nonhazardous, is the transporter registered?	
Is the waste being taken to an approved disposal site?	
Is the waste hazardous or Class I nonhazardous?	
If the waste is hazardous or Class I nonhazardous, is a manifest being used?	
Is the manifest properly completed?	
Are all Federal, State and Local laws/regulations being followed?	
Are all necessary permits being obtained?	
Has a Disposal Plan been submitted for approval/review?	
Have PPE and waste-handling procedures been included in the Site Safety and Health Plan to protect the health and safety of waste handling personnel?	

Figure II-8.3 – Temporary Storage Methods

	PRODUCT						
Containment	OIL	OIL/WATER	OIL/SOIL	OIL/DEBRIS (Small)	OIL/DEBRIS (Medium)	OIL/DEBRIS (Large)	**Capacity**
Drums			X	X			.2-.5 yd^3
Bags			X	X	X		1-2 yd^3
Boxes			X	X	X		1-5 yd^3
Open Top Rolloff	X	X	X	X	X	X	8-40 yd^3
Roll Top Rolloff	X	X	X		X	X	15-25 yd^3
Vacuum Box	X	X					15-25 yd^3
Frac Tank	X	X					500-20,000 gal
Poly Tank	X	X					200-4,000 gal
Vacuum Truck	X	X	X				2,000-5,000 gal
Tank Trailer	X	X					2,000-4,000 gal
Barge	X	X					3,000+ gal
Berm, 4 ft	X	X	X	X	X	X	1yd^3
Bladders	X	X					25-1,500 gal

Approved waste management facilities can be located on the Company website:
http://hse.conocophillips.net/EN/environmental/waste/program/Pages/index.aspx

Sec. II-9 Disposal Plan

Oil will be recovered and water will be disposed of as normal produced water through permitted UIC injection wells or third-party disposal wells. Solid waste recovered during clean-up activities will be stored in secure areas (lined, bermed temporary storage areas, lined pits, or tanks) until permits can be secured for proper disposal.

Disposal Options for contaminated soil, depending upon analysis, include but are not limited to the following:	
•	Surface remediation
•	Enhanced surface remediation
•	Third party recycling (adsorbents)
•	Third party disposal

These disposal options will be dependent upon laboratory analysis per current federal, state and local regulation. The Company Waste Management and Recycling Guide should be consulted for the appropriate analytical requirements for each waste stream. Necessary federal, state and local permits will be obtained by Company Environmental personnel.

Oil contaminated absorbent materials will be stored in covered secured containers and ultimately shipped for recycling.

Spilled material will be skimmed to recover product and minimize contamination of vegetation and soil. Low pressure flushing will also be used to enhance recovery of liquid product. Absorbent materials may be used to recover spilled material that vacuum trucks are unable to pick up. Absorbent materials (and booms) are then recycled and returned for potential future use. Other oil contaminated booms, boats, and boots, will be cleansed by qualified contractors or wiped down on site with rags. The rags will be disposed of properly.

The Company has contracted with USCG Certified OSROs for each ICP Geographical Annex. Contact information and response capability for each OSRO can be found in that particular ICP geographically Annex.

The OSRO(s) contracted to respond in each ICP Geographical Annex is capable of being on site and ensuring planned temporary storage and waste disposal activities are accomplished within the appropriate tier times. They will provide sufficient temporary storage to ensure enough capacity is available to respond to a worst-case discharge.

Figure II-9.1 Disposal Plan Form

Disposal Plan				**Page 1 of 3**
Date:			Location:	
Source of Release:				
Amount of Release:				
Incident Name:				
State On-Scene Coordinator:				
Federal On-Scene Coordinator:				
Time Required for Temporary Storage:				
Proposed Storage Method:				
Identified Storage Location / Staging Area:				
Disposal Priorities				
Sample Date:			Sample ID:	
Analysis Required (Type):				
Laboratory Performing Analysis:				
Disposal Options				
	Available	Likely	Possible	Unlikely
Landfill				
In-situ Bio-Remediation				
In-situ Burn				
Pit Burning				
Hydrocyclone				
Off Site Incineration				
Reclaim				
Recycle				
Resources Required for Disposal Option(s)				

Figure II-9.1 Disposal Plan Form (Cont'd)

Disposal Plan	Page 2 of 3
General Information	
Generator Name:	
US EPA ID#:	
Waste Properties:	
Waste Name::	
US EPA Waste Code:	
State Waste Code:	
EPA Hazardous Waste:	
Waste Storage and Transportation:	
Proposed Storage Method:	
Proposed Transportation Method:	
Permits Required for Storage:	
Permits Required for Transportation:	
Estimated Storage Capacity:	
Number and Type of Storage Required:	
Local Storage Available for Temporary Storage of Recovered Oil:	
PPE Required for Waste Handling:	
Waste Coordinator	Date:

Figure II-9.1 Disposal Plan Form (Cont'd)

Disposal Plan		Page 3 of 3
Sample Information		
Incident Name:		
Sample Number:	Date Sent:	
Source of Sample:		
Date Sample Data Received:		
Waste Hazardous? (Circle One)	YES	NO
Permits/Variances Requested:		
Approval Received on Waste Profile:		
Date Disposal Can Begin:		
Disposal Facilities:		
Profile Number:		
Storage Contractors:		
Waste Transporters:		
PPE Designated and In Accordance With Site Safety Plan:		
Additional Information:		
Waste Coordinator	Date:	

Sec. II-10 Containment and Recovery

Sec. II-10.1 General

Containment and recovery refers to the techniques or methods that can be employed to contain and recover petroleum spills on water or the containment of petroleum spills flowing overland. Recovery of terrestrial spills is often very similar, or uses the same techniques as shoreline cleanup.

The following considerations should be taken into account when planning or implementing containment and recovery operations:	
•	Containment is most effective when conducted near the source of the spill where the oil has not spread over a large area and the contained oil is of sufficient thickness to allow effective recovery and/or cleanup.
•	Feasibility is generally dependent on the size of the spill, available logistical resources, implementation time, and environmental conditions or the nature of the terrain in the spill area.
•	Aquatic (water) containment is primarily conducted through the use of oil spill containment booms.
•	Skimmers are usually the most efficient means of recovery of aquatic spills, although pumps, vacuum systems, and sorbents can also be effective, particularly in smaller waterways.
•	Terrestrial (land) containment typically involves berms or other physical barriers.
•	Recovery of free petroleum from the ground surface is best achieved by using pumps, vacuum sources, and/or sorbents.

Sec. II-10.2 Technique Selection - Terrestrial Containment and Recovery

The primary factors influencing terrestrial containment and recovery are:	
•	**Size** - Most containment techniques provide limited storage capacity.
•	**Slope** - Berms and barriers are generally less effective on steeper slopes and accessibility may be limited.
•	**Surface texture** - Rough surfaces with natural ridges and depressions enhance containment and should be taken advantage of whenever possible.
•	**Substrate permeability** - Highly permeable sediments will allow rapid penetration of oil into the substrate, thus complicating containment and recovery.
•	**Existing drainage courses** - Oil is more easily contained and recovered if it is flowing within, or can be diverted to, existing natural or manmade drainage structures.
•	**Stormwater runoff** - Runoff generally requires the containment of larger quantities of liquids and complicates oil recovery.

Sec. II-10.3 Technique Selection - Aquatic Containment and Recovery

Selection of an appropriate aquatic containment, protection and recovery technique depends on a number of factors including:	
•	**Current speed** - Surface currents greater than 1 knot can cause boom failure or entrainment of oil beneath the boom when the boom is deployed perpendicular to the current. If deployed at an angle, boom can generally be effective up to 2-3 knots.
•	**Water depth** - Depths greater than 50 feet can complicate boom anchor placement, whereas depths less than 2 feet can preclude effective boom use.
•	**Channel width** - Widths of more than 200 to 300 feet will generally preclude using booms to completely contain oil floating in the waterway, particularly if strong currents are present.
•	**Slick thickness** - Recovery effectiveness with pumps/vacuum systems and skimmers decreases as slick thicknesses decline, becoming relatively ineffective for very thin slicks or sheens.
•	**Shoreline access** - Obstacles (rocks, debris, man- made structures, etc.) in the water or steep or densely vegetated shorelines could restrict access and present safety and operational problems.
•	**Anchor points** - Soft bottom substrates can complicate boom anchor placement.
•	**Safety** - High currents and winds, large obstacles, and other dangerous conditions could present safety hazards and preclude certain techniques.

The OSRO(s) contracted to respond in each ICP Geographical Annex is capable of being on site and ensuring spill containment activities are accomplished within the appropriate tier times. They will provide sufficient containment equipment to ensure enough capacity is available to respond to a worst-case discharge.

Sec. II-10.4 Protection Technique Selection

Technique	Description	Primary Logistical Requirements	Use Limitations[1]	Potential Environmental Effects
Spills on Land				
A. Containment / Diversion Berms	Construct earthen berms ahead of advancing surface spill to contain spill or divert it to a containment area.	Equipment* 1 backhoe, bulldozer, front-end loader, or set of hand tools Personnel 4-8 Workers	• Steep Slopes • Porous substrate	• Disturbance to surface soils and vegetation • Increased oil penetration
B. Storm Drain Blocking	Block drain opening with sediments, plastic sheet, boards, etc. and secure prevent oil from entering drain.	Equipment* Misc. hand tools, 1 board, plastic sheet, mat, etc. Personnel 1-2 Workers	• May be advantageous for oil to enter drain • Heavy precipitation	• Increased oil penetration • Oil can spread to other areas
C. Blocking Dams	Construct dam in drainage course/stream bed to block and contain flowing oil. Cover with plastic sheeting. If water is flowing, install inclined pipes during dam construction to pass water underneath.	Equipment* 1 backhoe, bulldozer, front-end loader, or set of hand tools, 1 plastic sheeting roll Personnel 4-6 Workers	• Upstream storage capacity • Flowing water	• Increased oil penetration
D. Culvert Blocking	Block culvert opening with plywood, sediments, sandbags, etc. to prevent oil from entering culvert	Equipment* Misc. hand tools, misc. plywood, sandbags, etc Personnel 3-4 Workers	• Upstream storage capacity • Flowing water	• Increased oil penetration
E. Interception Trench	Excavate ahead of advancing surface/ near-surface spill to contain oil. Cover bottom and downgradient side with plastic.	Equipment* 1 backhoe or set of hand, tools, misc. plastic sheeting Personnel 3-6 Workers	• Slope • Depth to near-surface flow	• Increased oil penetration • Disturbance to surface soils and vegetation

Sec. II-10.4 Protection Technique Selection (Cont'd)

Technique	Description	Primary Logistical Requirements	Use Limitations[1]	Potential Environmental Effects
Spills on Water				
F. Diversion Booming	Boom is deployed from the shoreline at an angle towards the approaching slick and anchored or held in place with a work boat. Oil is diverted towards the shoreline for recovery.	Equipment* 1 boat, 3 anchor systems (min), 100 feet boom (min) Personnel 3 workers plus boat crew	• Currents >2-3 kts • Waves > 1-2 ft • Water depth >50 feet (anchoring) • Sensitive shorelines	• Minor substrate disturbance at anchor points • Heavy oiling at shoreline anchor point
G. Narrow Channel Containment Booming	Boom is deployed across entire river channel at an angle to contain floating oil passing through channel.	Equipment* 1 boat, vehicle, or winch; 1-2 booms (1.2 x channel width each); 2-10 anchor systems Personnel 2-3 Workers	• Currents >2-3 kts • Water depth >50 feet (anchoring) • Sensitive shorelines	• Minor substrate disturbance at anchor points • Heavy shoreline oiling at downstream anchor point
H. Sorbent Barriers	A barrier is constructed by installing two parallel lines of stakes across a channel, fastening wire mesh to the stakes, and filling the space between with sorbents.	Equipment* (per 100 ft of barrier): misc. hand tools, 1 boat, 20 fence posts, 200 ft wire mesh, 200 ft^2 sorbents, misc. fasteners, support lines, additional stakes, etc. Personnel 2-3 Workers	• Water depths >5-10 feet • Currents >0.5 kts • Soft substrate	• Minor substrate disturbance at post and shoreline anchor points • High substrate disturbance if boat is not used
I. Exclusion Booming	Boom is deployed across or around sensitive areas and anchored in place. Approaching oil is excluded from area.	Equipment* (per 500 ft of boom): 1 boat, 6 anchor systems, 750 ft boom (min) Personnel 3 workers plus boat crew	• Currents >1-2 kts • Waves >1-2 feet • Water depth >50 feet (anchoring)	• Minor substrate disturbance at anchor points

Sec. II-10.4 Protection Technique Selection (Cont'd)

Technique	Description	Primary Logistical Requirements	Use Limitations[1]	Potential Environmental Effects
Spills on Water (Cont'd)				
J. Deflection Booming	Boom is deployed from the shoreline away from the approaching slick and anchored or held in place with a work boat. Oil is deflected away from shoreline.	Equipment* 1 boat, 5 anchor systems, boom (200 feet) Personnel 3 workers plus boat crew	• Currents >2-3 kts • Waves >1-2 feet • Water depth >50 feet (anchoring) • Onshore winds	• Minor substrate disturbance at anchor points • Oil is not contained and may contact other shorelines
K. Inlet Dams	A dam is constructed across the inlet or channel using local shoreline sediments to prevent oil from entering inlet. Dam can be covered with plastic to minimize erosion.	Equipment* 1 backhoe, bulldozer, front-end loader, or set of hand tools, 1 plastic sheeting roll Personnel 2-6 workers	• Water outflow • Inlet depth >5 feet • Excessive inlet width	• Sediment/vegetation disturbance at borrow areas • Inlet substrate disturbance • Increases suspended sediments • Water in inlet can become stagnant
L. Debris / Ice Exclusion	Install fence barrier upstream of containment site to exclude debris/ice	Equipment* (per 100 ft of barrier): misc. hand tools, 1 boat, 10 fence posts, 100 feet cyclone fence, misc fasteners, support lines, etc. Personnel 2-3 workers	• Water depth >5-10 feet • Currents >3-4 kts • Soft substrate	• Minor substrate disturbance at post an anchor points

[1] In addition to implementation and accessibility.
* Need to establish a safe perimeter and follow safety precautions as appropriate before work begins.

Sec. II-10.5 Shoreline and Terrestrial Cleanup

Sec. II-10.5.1 General

In the event that terrestrial sediments do become oiled or that petroleum contacts and becomes stranded on a shoreline, cleanup operations should be undertaken to minimize the environmental effects of the petroleum. In most instances, cleanup efforts are not subject to the same time constraints as containment, recovery, and protection operations. As a result, better planning and greater attention to detail is possible. The exception is where there is a high probability of stranded oil becoming remobilized and migrating to previously unaffected areas. In this case, cleanup operations should be implemented immediately.

The following items should be considered in detail:	
•	Documentation of the location, degree, and/or extent of oil conditions
•	Evaluation of all environmental, cultural, economic, and political factors
•	Cleanup technique selection
•	Mitigation of physical and environmental damage associated with cleanup technique implementation
•	Cost-effectiveness

The shoreline or terrestrial oil conditions can range from those which require immediate and thorough cleanup to lightly oiled areas where no action may be the most environmentally sound option. The amount and type of oil, shoreline sensitivity, substrate or shoreline type, intrusive nature of the candidate techniques, and shoreline exposure are all factors that influence technique selection and whether or not cleanup will be required.

Sec. II-10.5.2 Cleanup Technique Selection - Shoreline

The selection of an appropriate shoreline cleanup technique is primarily dependent on the following factors:	
•	**Substrate type** - Finer-grained sediments typically require different techniques than coarse- grained sediments.
•	**Oil conditions** - Heavier oil conditions and larger areas may require more intrusive or mechanical methods, whereas lighter conditions may not require any form of cleanup. For example – removing lighter oils in a marsh area or wetland may cause more harm to the environment than allowing for natural attenuation and biodegrading.
•	**Shoreline slope** - Heavy equipment may not be usable on steeper shorelines.
•	**Shoreline sensitivity** - Intrusive techniques may create a greater impact than the oil itself.
•	**Oil penetration depth** - Significant penetration can reduce the effectiveness of several techniques.

Sec. II-10.5.3 Cleanup Technique Selection - Terrestrial

The selection of an appropriate terrestrial cleanup technique is primarily dependent on the following factors:	
•	**Size** - Larger areas will generally require the use of mechanical methods, whereas manual techniques can be used for smaller areas.
•	**Slope** - The use of heavy equipment is often restricted to gradually sloped areas, and manual techniques may be considered unsafe if used on steep terrain.
•	**Sediment type** - Softer sediments may reduce trafficability for heavy equipment and the presence of coarser sediments and bedrock could also restrict the use of certain types of heavy equipment.
•	**Oil penetration depth** - Significant penetration may require the use of heavy equipment or special subsurface remediation techniques.
•	**Impacted groundwater** - Special subsurface remediation techniques would likely be required.

Detailed containment and recovery guidelines, including diagrams and descriptions are described in the **Company's Operations Field Response Manual.**

The OSRO(s) contracted to respond in each ICP Geographical Annex are capable of being on site and ensuring spill recovery activities are accomplished within the appropriate tiered response times. They will provide sufficient recovery equipment to ensure enough capacity is available to respond to a worst-case discharge.

Sec. II-10.6 Non-Mechanical Response Options

Non-mechanical response options that could be used in responding to a spill include:	
•	Chemical treatment / dispersants
•	Bioremediation
•	In-situ Burning

Although the physical control and recovery of spilled oil is advocated and generally preferable, such actions are not always possible or practical because of factors including safety hazards, remote spill sites, or weather. When non-mechanical methods can result in reduced human hazard or environmental damage, consideration of their use is appropriate but will require regulatory approval.

Sec. II-10.7 Dispersants – Criteria for Use

Consideration of dispersant use during a spill must account for all aspects of the situation including:	
•	Nature of the oil
•	Resources at risk
•	Adequacy of cleanup techniques
•	Natural dispersion
•	Time
•	Logistics
•	Economics
•	Chemical dispensability of the oil
•	Nature of the oil/dispersant mixture

Special considerations such as threatened or endangered species, critical habitats, historical or cultural sites, and other structures must also be considered in the decision process.

Sec. II-10-7.1 Approval Process

All pre-approved dispersants are found in the NCP product schedule. This list is updated on a monthly or bimonthly basis. When considering dispersant use, only a product on this list may be used except during an emergency situation such as an immediate threat to human life. The Federal On-Scene Coordinator (FOSC) may authorize the use of dispersants when concurrence has been received by the RRT. In the case where dispersants are necessary due to an immediate threat, the FOSC may authorize their use and inform the RRT of the action by the most rapid mean of communication available.

Sec. II-10.8 In-situ Burning

When mechanical recovery of spilled oil is not feasible, in-situ burning should be considered as a potentially viable option. Since burning presents a potential safety and air pollution hazard to the surrounding area, approval from appropriate regulatory agencies is required.

In-situ burning alters the composition of the spilled oil by eliminating anywhere from 90 to 99 percent of the original volume of oil provided it is controlled within a fire resistant boom or other containment system. A portion of the original oil is released into the atmosphere as soot and gaseous emissions. Solid or semi-solid residues typically remain following a burn but are relatively easy to retrieve. They can be further reduced in volume through repeated burns, and ultimately are collected and removed from the marine environment.

Sec. II-10.8.1 Evaluation

In-situ burning generates a thick black smoke that contains primarily particulates, soot, and various gases (carbon dioxide, carbon monoxides, water vapor, nitrous oxides and PAHs). The components of the smoke are similar to those of car exhaust. Of these smoke constituents, small particulates less than 10 microns in diameter, known as PM-10, (which can be inhaled deeply into the lungs) are considered to pose the greatest risk to humans and nearby wildlife. Each affected area is considered on a case-by-case basis.

Decisions to burn or not to burn oil in areas considered case-by-case are made on the basis of the potential for humans to be exposed to the smoke plume, and pollutants associated with it. PM-10 exposure is generally limited to 150 micrograms per cubic meter. Smoke plume modeling is done to predict which areas might be adversely affected. In addition, in-situ burning responses require downwind air monitoring for PM-10. Aerial surveys are also conducted prior to initiating a burn to minimize the chance that concentrations of marine mammals, turtles and birds are in the operational area and affected by the response. SMART (Special Monitoring for Applied Response Technologies) protocols are used. They recommend that sampling is conducted for particulates at sensitive downwind sites prior to the burn (to gather background data) and after the burn has been initiated. Data on particulate levels are recorded and the Scientific Support Team forwards the data and recommendations to the Unified Command.

The potential for implementing a successful burn of spilled oil depends upon the knowledge and experience of those responsible for the assessment of the spill situation. Review of the spill conditions, together with the above spill checklist, will ensure that the safety issues, the benefits, and the environmental impacts will have been examined carefully. While steps may be taken to move critical equipment into position for a possible burn, there will be no attempt to ignite spilled oil without prior authorization from both Federal and/or State On-Scene Coordinators.

Before a spill on water is ignited, several factors must be considered:	
•	Oil type, amount and condition
•	Environmental conditions
•	Availability of personnel and equipment
•	Timing
•	Human safety
•	Danger of fire spreading
•	Presence of explosive vapors
•	Damage to nearby habitats that may prolong natural recovery

Sec. II-10.8.2 Approval Process and Monitoring

When a request for an in-situ burn is made:	
•	The burn must be outside the corporate city limits, except as deemed necessary by the local fire department.
•	Wind direction should move the smoke away from the city and/or populated Areas
•	Burning must be at least 300 feet from any adjacent properties.
•	Burning should commence between the hours of 9:00 am and 5:00 pm of the same day.
•	Wind speed should be between 6 and 23 mph during the burn period.
•	Burn should not be conducted during persistent atmospheric thermal inversions.

In general, SMART is conducted when there is a concern that the general public may be exposed to smoke from the burning oil. It follows that monitoring should be conducted when the predicted trajectory of the smoke plume indicates that the smoke may reach population centers, and the concentrations of smoke particulates at ground level may exceed safe levels. Monitoring is not required, however, when impacts are not anticipated.

Execution of in situ burning has a narrow window of opportunity. It is imperative that the monitoring teams are alerted of possible in situ burning and SMART operations as soon as burning is being considered, even if implementation is not certain. This increases the likelihood of timely and orderly

The monitoring teams are deployed at designated areas of concern to determine ambient concentrations of particulates before the burn starts. During the burn, sampling continues and readings are recorded both in the data logger of the instrument and manually in the recorder data log.

After the burn has ended and the smoke plume has dissipated, the teams remain in place for sometime (15-30 minutes) and again sample for and record ambient particulate concentrations. During the course of the sampling, it is expected that the instantaneous readings will vary widely.

However, the calculated time-weighted average readings are less variable, since they represent the average of the readings collected over the sampling duration, and hence are a better indicator of particulate concentration trend. When the time-weighted average readings approach or exceed the Level of Concern (LOC), the team leader conveys this information to the In-Situ Burn Monitoring Group Supervisor (ISB-MGS) who passes it on to the Technical Specialist in the Planning Section (Scientific Support Coordinator, where applicable), which reviews and interprets the data and passes them, with appropriate recommendations, to the Unified Command.

SMART activities are directed by the Operations Section Chief in the ICS/UCS. It is recommended that a "group" be formed in the Operations Section that directs the monitoring effort. The head of this group is the Monitoring Group Supervisor. Under each group there are monitoring teams. At a minimum, each monitoring team consists of two trained members: a monitor and assistant monitor. An additional team member could be used to assist with sampling and recording. The monitor serves as the team leader. The teams report to the Monitoring Group Supervisor who directs and coordinates team operations, under the control of the Operations Section Chief.

Communication of monitoring results should flow from the field (Monitoring Group Supervisor) to those persons in the ICS/UCS who can interpret the results and use the data. Typically, this falls under the responsibility of a Technical Specialist on in-situ burning in the Planning Section of the command structure. The observation and monitoring data will flow from the Monitoring Teams to the Monitoring Group Supervisor. The Group Supervisor forwards the data to the Technical Specialist. The Technical Specialist or his/her representative reviews the data and, most importantly, formulates recommendations based on the data. The Technical Specialist communicates these recommendations to the ICS/UCS. Quality assurance and control should be applied to the data at all levels. The Technical Specialist is the custodian of the data during the operation, but ultimately the data belongs to the ICS/UCS incident files. This will ensure that the data is properly archived, presentable, and accessible for the benefit of future monitoring operations.

Sec. II-10.9 Bioremediation

Sec. II-10.9.1 General

Bioremediation is the process of applying nutrients (fertilizer containing nitrogen and phosphorus) or genetically engineered bacteria to oiled terrestrial or shoreline areas to accelerate the natural biodegradation process. During this process, micro-organisms (bacteria) oxidize hydrocarbons, ultimately converting them to carbon dioxide and water. Biodegradation occurs primarily at the oil/water or oil/air interface and is limited by oxygen, moisture, and nutrient availability. It is also sensitive to temperature; the lower the ambient temperature, the lower the rate. If nutrients are used, they must be supplied in such a way that they will not be washed away by tides or any water runoff.

Sec. II-10.9.2 Evaluation

The decision to use bioremediation treatment should be based on the type of spill, the character of the area impacted, and the local political jurisdiction. In some cases, other forms of cleanup may be required in conjunction with nutrient addition to achieve the desired enhancement rate. Extensive efforts to achieve more acceptance of this technology are underway. As in the case of other oil spill response chemicals, approval must be obtained from the FOSC and SOSC before the nutrients are applied and the products must be listed on government product schedules where required. An expert should be consulted.

The use of biological additives is regulated under Subpart J of the NCP (40 CFR 300.900). Under the NCP, options for the authorization of biological agents are outlined, including a provision for conditional preapproval for use under certain conditions and in certain locations. Consult with the FOSC to determine whether an applicable preauthorization has been approved. The current application and approval procedure includes state approval and does not preempt the States from having their own testing criteria.

The Incident Commander will be responsible for providing the FOSC and SOSC with incident specific information needed to approve the conduct of bioremediation operations.

Sec. II-11 Water Quality and Sediment Quality Analysis

If the situations requires, following a release of oil to a waterway, Company will attempt to gather background data to determine the current conditions of the impacted waterway and sediments. An attempt will be made to collect samples ahead of the plume to determine current background conditions. Water quality data and sediment quality data will also be collected from within the impacted area to determine the changes in conditions. Following cleanup efforts, additional sampling will be conducted to demonstrate the effectiveness of the cleanup operations.

The sampling protocol will be determined by the volume and type of material spilled. In general, near surface water samples will be obtained along with sediment samples. In some cases, depending on spill-specific conditions, stratified sampling may be required. The following EPA analytical methods may be utilized to determine if oil from the Company release exists on the bottom sediments or within the water column. This is not intended to be an exhaustive list, but may be used as a guideline when deciding which methods to use.

Sec. II-11.1 EPA Analytical Methods**

Product	Constituent	Possible EPA Methods
GASOLINE	Benzene	8020, 8240
	Toluene	8020, 8240
	Ethylbenzene	8020,8240
	Xylenes	8020, 8240
DIESEL	Polynuclear Aromatic Hydrocarbons	8100, 8270, 8310
	BTEX	8020, 8240
OILS	Total Petroleum Hydrocarbons	418.1, Modified 8015

** Contact your Environmental Representative for assistance in selecting the proper analytical methods.

Sec. II-12 Drainage Plan

In addition to automated alarms and routine inspections to tanks and dikes, procedures are in place to further ensure the safety of personnel, equipment and protection of the environment. These procedures are intended to be followed at all times to maintain the safety of the facility and to mitigate or prevent the damage potential of a large-scale discharge.

The following elements will be addressed under general facility, storage tanks, the truck rack area, tank water draining, or facility piping and valves as appropriate:	
•	Available containment volume
•	Route of drainage
•	Drainage through construction materials
•	Type/quantity of valves and separators
•	Sump pump capacities
•	Weir/boom containment capacity and location
•	Other cleanup material
•	General Facility: The available containment volume of this facility is location in ICP Geographical Annex 1 of this plan.

Sec. II-12.1 Storage Tanks

Each storage tank has a diked area. However, adjacent tanks share common dike walls and accumulated liquids can be drained from one diked area to another through valve regulated drain lines. Accumulated water is removed from diked areas through locked drain valves as necessary. Water accumulation within diked areas is visually inspected for petroleum products and any accumulation of oil is removed with sorbent materials before the water is removed. Drain valves are locked closed when not in use.

Drainage from undiked areas is controlled as follows: The two dock loading/unloading areas are equipped with spill pans for catching spilled oil. These pans are covered when there is no barge loading in order to minimize the amount of rainwater that collects in the pans. The pans are piped into a quick drain system, consisting of large containment pits that would channel any spilled product into a 10,000-gallon storage tank. After a rain event, the water in the containment pit is visually inspected prior to being pumped out.

Inspections and drainage events are recorded in the terminal SPCC logbook that is retained for a period of three years.

Sec. II-12.2 Truck Rack Area

There is an aboveground sump for the truck loading rack area. The sump will handle a small amount of storm run-off and has the petroleum containment capacity of a tank truck compartment. The loading rack is covered in order to reduce the amount of rainfall entering the system. Accumulated oil and water is hauled to a company approved treatment facility. All other non-contact storm water leaves the facility via sheet flow.

Sec. II-12.3 Tank Water Drains

Discharge from tank water drains are prevented by:	
•	Procedures require terminal personnel to be present at all times during the water draining operation.
•	All water from the tank is drained into a water collection tank for disposal under guidelines established by applicable pollution control laws, rules and regulations.

Sec. II-13 Detection/Mitigation Procedures

Sec. II-13.1 Discharge Detection

The Company has a number of safety systems and practices in place to prevent the occurrence and mitigate the subsequent impact of accidental discharges. The systems are designed to alert operators with alarms and provide automatic shut-in functions in the event of a discharge. Pipeline operators are trained to respond to the various system alarms in order to identify and control releases immediately.

SAFETY SYSTEM LIST	
•	Prevention practices and procedures
•	Pipeline and breakout tank inspection and testing procedures
•	Discharge detection equipment and procedures
•	Recognition of emergency conditions and prediction of the consequences
•	Leak response actions
•	Public education

The detection of a discharge from the Company pipeline system may occur in a number of ways, including:	
•	Discharge detection by Company personnel, pipeline patrols, or the general public
•	Automated discharge detection by the Supervisory Control and Data Acquisition (SCADA) system at the Control Center which monitors flow and pressure on most lines as well as breakout tank oil levels.
•	Various other procedures and practices

Sec. II-13.2 Discharge Detection by Personnel

All pipelines operated by the Company are equipped with high and low pressure sensors. In the event of a change in pipeline pressure beyond a specified set point, the pressure sensors will trigger an alarm to the facility operator and/or shut down the pipeline and process equipment.

The routine responsibilities that ensure releases will be detected and mitigated as soon as possible by IC/UC personnel may include, but are not limited to the following:	
•	Regularly scheduled visual and aerial monitoring.
•	Routine walk-through and monitoring of process equipment to ensure proper operation of all equipment at each facility.
•	Immediate response to alarms and signals that may indicate a possible release.
•	Identification and control of the source as soon as safely possible.
•	Notify the Initial Incident Commander.

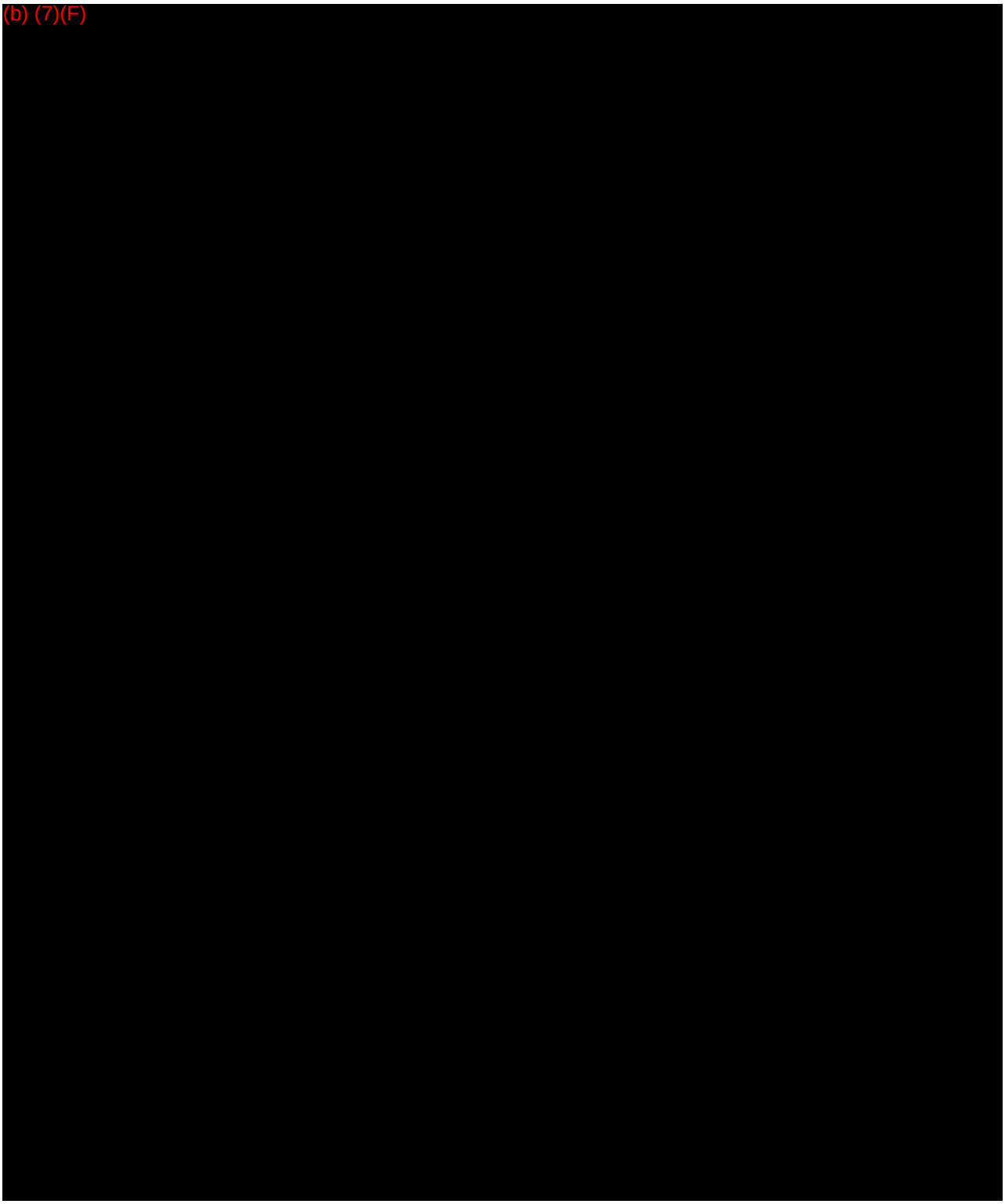
The Company operators will perform the following procedures when they are alerted to a potential pipeline emergency:		
Procedures	✓	Date/Time
Ensure that the pipeline pressure sensing equipment is not malfunctioning.	☐	__/___/___ [00:00]
The supervisor will request a field inspection of the pipeline ROW in question to identify the source of the suspected leak.	☐	__/___/___ [00:00]
In the event an oil leak is discovered along the pipeline, this Plan will be activated.	☐	__/___/___ [00:00]
In the event a leak is not found, an investigation into the cause of the pressure change will continue until determined.	☐	__/___/___ [00:00]

Right-of-way (ROW) marker signs are installed and maintained at road crossings and other noticeable points and provide an emergency 24-hour telephone number to be used by any person wishing to report a pipeline leak.

(b) (7)(F)

[redacted]

(b) (7)(F)



(b) (7)(F)

[redacted]

(b) (7)(F)

General Pipeline Leak Response Actions	
Travel to Suspected Site of Leak	
•	A means of locating the leak site is necessary for minimum travel time. The general location of the leak may be known from reports.
•	If precise directions are not available for finding the site, air surveillance and assistance from a helicopter or other aircraft may be necessary. Areas should maintain a list of companies with aircraft for charter.
Find Leak	
•	If oil continues to escape from the line, the leak may be detected visually.
•	If underwater, the leak can be found by having a diver survey the line. The line may have to be pressured up to force gas or oil out of the leak to aid in locating the leak.
Determine Extent of Damage	
•	In determining the extent of damage, three basic conditions of the line must be determined: • Degree of damage to the line • Length of damaged line • Misalignment angle if an underwater pipeline
Report to Area Supervisor	
•	Once the extent of damage has been determined, the following information should be reported: • Location of leak • Size of the Line • Type of coating • Length of damaged section • Misalignment angle • Water depth (if appropriate) • Local terrain conditions
Begin Repair Preliminaries	
•	Perform whatever repair preliminaries are possible if it safe to do so.

Sec. II-13.8 Source Control

This section provides guidelines for controlling a release near the source and mitigating the associated consequences. Source control and mitigation involve anything from shutdown of operations to patching a leak, containing a spill, dispersing a vapor cloud, protecting a sensitive area, recovering the spilled material, or other such activities that are involved in an emergency response. Because of the infinite number of circumstances under which an incident could occur and the variety of equipment that could be involved, it is impractical to describe procedures that should be followed in all foreseeable emergency situations.

In the event of a spill involving a pipeline leak or rupture, the initial mitigation actions will likely consist of:	
•	Shutting down the pipeline
•	Relieving the pressure on the affected line section
•	Isolating the line section by closing the appropriate valves
•	Evacuating the remaining contents of the affected line section
•	Exposing the leak or rupture and installing a temporary patch

If the incident were to involve a breakout tank leak or overfill, the initial mitigation actions may include:	
•	Terminating transfer operating to the tank, if in progress
•	Ensuring associated secondary containment system drain valves are closed
•	Transferring the tank contents into available tankage or back into the pipeline
•	Patching the leak if feasible and safe
•	Water flooding the containment area, if applicable, to minimize soil penetration

Source control measures are implemented as close as possible to the source of a spill to minimize the extent of the affected area and generally involve:	
•	Construction of barriers, trenches, or earthen berms for containment
•	Construction of berms or trenches for diverting spill to containment area
•	Deployment of containment booms in waterways down current of the source
•	Deployment of recovery equipment (pumps, vacuum trucks, skimmers)

Sec. II-13.9 Good Engineering Practices.

The Company's approach to preventing discharges is to assure that all facilities are properly designed, constructed, maintained and operated in accordance with applicable codes, regulations and good engineering practices.

Some examples of good engineering practices may include but are not limited to the following:

Engineering Practices	
•	Components in the pipeline system are designed and constructed in accordance with written specifications.
•	Components are inspected to ensure that quality is maintained during material procurement and construction.
•	Trained personnel are used during the construction of the facilities.
•	Various testing methods are used during construction of the facilities.
•	External and internal corrosion control methods are used to maintain the facilities in the best possible condition.
•	A preventive maintenance program reduces the potential for component malfunction or failure
•	Company personnel are properly trained to operate and maintain the pipeline system
•	Company has an extensive safety and drug testing program for its employees and requires the same for its contractors.
•	Company systems are designed and operated with safety factors in place. For example, the maximum operating pressure of a system is always less than the design pressure of the system and the test pressure of the system.
•	Pressures are monitored and controlled so that the maximum operating pressures are not exceeded.
•	When appropriate, internal inspection tools are used or lines are subjected to additional hydrostatic testing to determine and assure their integrity.
•	All wastes are stored in accordance with applicable regulatory requirements (DOT containers that are non-leaking, closed, in good condition, properly marked/labeled, inspected to ensure integrity, etc.)

Sec. II-13.9 Third-Party Damage Prevention

If the systems are properly designed, constructed, operated and maintained, then the most probable source of discharge is due to third-party damage. In order to minimize the risk of damage caused by a third-party a number of steps may be taken, including, but not limited to the following:

Prevention of Third-Party Damage	
•	The facilities are designed to reduce the chance of third-party damage. For example, most of the facilities are buried or located within fenced and locked areas.
•	Areas especially sensitive to third-party damage are road, railroad, and water crossings. Pipelines in these areas usually have additional wall thickness, or burial depth, or are cased to reduce the chance of damage.
•	Company facilities are normally located on well- maintained and clearly marked rights-of-way.
•	Company facilities are normally monitored by aerial or other patrol at least once per week to check for encroachment and construction activities.
•	Company participates in one-call pipeline locating and notification systems where available.
•	Company conducts education programs to reduce the possibility of third-party damage.

Sec. II-13.10 Corrosion Mitigation

For external corrosion prevention, the Company generally prevents corrosion of buried pipelines by using approved long-life pipeline coatings supplemented with cathodic protection. Aboveground facilities are generally inspected annually and provided protective coating systems to prevent corrosive deterioration. These primarily include buildings, aboveground pipelines and tanks.

In order to prevent internal corrosion of the pipelines, the Company uses chemical injection, pigging and corrosion inhibitors, and inspects pipelines located in high population density areas and environmentally sensitive areas with in-line inspection pigs, where appropriate. A large number of pipelines are hydrostatically tested. For further details regarding the Corrosion Prevention program, refer to the Company Pipeline Integrity Management Program.

Sec. II-13.11 Spill Mitigation

Source control and mitigation involve anything from shutdown of operations to patching a leak, containing a spill, dispersing a vapor cloud, protecting a sensitive area, recovering the spilled material, or other such activities that are involved in an emergency response. Because of the infinite number of circumstances under which an incident could occur and the variety of equipment that could be involved, it is impractical to describe procedures that should be followed in all foreseeable emergency situations.

Sec. II-13.12 Breakout Tanks

The visual tank inspection checklist presented below has been included as guidance for inspections and monitoring. Also included in the visual tank inspection will be an inspection of the tank foundation and associated piping. All tankage, pumping equipment, piping and related terminal equipment are inspected every working day for leakage, malfunctions of seals, etc. Storage tanks are inspected monthly and annually and findings are recorded. Example forms are included in this plan. These records shall be maintained for a minimum of five years.

Check tanks for leaks, specifically looking for:	
•	Drip marks
•	Discoloration of tanks
•	Puddles containing stored materials
•	Corrosion
•	Cracks
•	Localized dead vegetation

Check foundation for:	
•	Cracks
•	Discoloration
•	Puddles containing stored materials
•	Settling
•	Gaps between tank and foundation
•	Damage cause by vegetation roots

Check piping for:	
•	Droplets of stored material
•	Discoloration
•	Corrosion
•	Bowing of pipe between supports
•	Evidence of stored material seepage on valves and seals
•	Localized dead vegetation

Tank roof drains and firewall drains are normally kept closed.

The Company's major tanks have tank gauges which transmit oil heights to the Operations Control Center, where tank levels are monitored continuously. The tank gauges have alarms set for each tank for high tank level, low tank level, and emergency low tank level. Each tank also has an independent device which gives an alarm for emergency high tank level.

Sec. II-13-14 Response Procedures

A person evaluating a situation must assess the circumstances surrounding an event, to determine if an emergency situation exists, and respond accordingly. Company personnel are trained in hazards or emergency recognition procedures as described below.

An emergency in pipeline and facility operations often originates with the unexpected release or spill of commodities. Uncontained commodities and high vapor concentrations present substantial hazards for fires or explosions until they dissipate to safe levels. In these situations, sources of ignition must be controlled to eliminate fire and explosion hazards. The Company has strict rules for controlling sources of ignition within tank farm property to avoid such explosions or fires. Potential sources of ignition become more difficult to control on public property. Early detection and quick response are the best actions to reduce the hazards.

The purpose of this section is to identify the response checklist/procedures to follow based on the type of incident that could occur along the Pipeline System. The checklists below are developed to allow the field personnel the ability to make sound decisions during the initial response of an incident. The checklists are not meant to substitute for emergency response knowledge, training, or sound judgment calls and do not account for all circumstances. In the event of any type of incident, it is imperative that the safety of all personnel be considered first, and then the protection of property second.

Sec. II-14 Evacuation

Evacuation plans will be located in the applicable ICP Geographical Annex. All evacuation directives will be communicated through an audible signal, either through voice by the Emergency Response Coordinator, or by the activation of an alarm system. All facility personnel are trained routinely in evacuation and emergency response procedures. The facility contains no critical equipment that requires employees to continue to operate after the evacuation notification is made.

The purpose of the evacuation plan is to provide some guidance in the event shutdown and evacuation are necessary. In the event of an incident, the Terminal Operator will stop the flow of product by normal operating procedures. The facility supervisor shall be notified immediately of the emergency. Any terminal personnel who are not trained as Hazardous Material Technicians will evacuate the terminal. The Fire Department will be notified if there is a fire. Arriving personnel, equipment and fire resources will be met at the main terminal gate of the Facility, unless deemed unsafe to do so. Tactical deployment of arriving resources will depend on the current situation.

Evacuating personnel shall proceed in an orderly manner. The Operations Supervisor will account for all employees and arrange for medical assistance as required.

Sec. II-14.1 Training

The Company believes that constant training of its employees is the cornerstone of effective emergency response and mitigation of threats to human health and the environment. Personnel evacuation direction is further defined as follows:

- **Facility Employees** - All Company employees who are not directly involved with the abatement of the emergency will immediately evacuate the area of the emergency. They will proceed via an unthreatened route to the facility main gate and remain in a "stand by" mode until instructed by the Emergency Response Coordinator to do otherwise. Should access to the facility main gate be threatened by the emergency, proceed to a location on the facility unthreatened by the emergency and notify the Emergency Response Coordinator of your whereabouts as soon as practical.

- **Contractors, Freight Haulers, Vendors and Other Visitors** - All non-company personnel will immediately evacuate the plant when notified of an emergency. All material loading or unloading will cease. Personnel will proceed to the facility main gate via an unthreatened route. Non-Company personnel will exit immediately upon approval of the Emergency Response Coordinator. Should access to the facility main gate be threatened by the emergency, proceed to a location on the facility unthreatened by the emergency and notify the Emergency Response Coordinator of your whereabouts as soon as practical. After personnel evacuation was initiated, emergency response agencies and teams would be notified (either from on-site or off-site immediately after the evacuation was completed), and immediate response actions would be initiated to minimize threats to human health and the environment.

- **Community** - In the unlikely event that evacuation plans were required beyond the boundary of the facility, the Emergency Response Coordinator or designee would communicate further directives. These plans will include guidance of where to move potentially affected parties to minimize threats to human health and the environment.

When the alarm is sounded or a signal to evacuate is given all personnel should:

Evacuation Checklist		
Procedures	✓	Date/Time
Immediately stop work activities.	☐	__/__/__ [00:00]
Check the wind direction.	☐	__/__/__ [00:00]
Move upwind or cross wind.	☐	__/__/__ [00:00]
Check the wind again.	☐	__/__/__ [00:00]
Initial Incident Commander will conduct a head count to account for all personnel known to be at the facility.	☐	__/__/__ [00:00]
Initial Incident Commander will assist in alerting and escorting personnel, including visitors and contractors to the appropriate evacuation point.	☐	__/__/__ [00:00]
Initial Incident Commander will notify the TPTN Duty Officer.	☐	__/__/__ [00:00]
Initial Incident Commander will assist in hazard control activities as requested.	☐	__/__/__ [00:00]
Initial Incident Commander will initiate search and rescue of missing persons. Injured personnel will be transported to the nearest emergency medical facility.	☐	__/__/__ [00:00]
All other personnel will remain at the evacuation point until the "All Clear" signal is given.	☐	__/__/__ [00:00]
Note: Evacuation should be carried out in an orderly manner. Personnel should WALK, not run or panic.		

(b) (7)(F)

[redacted]

(b) (7)(F)

[redacted]

(b) (7)(F)

Sec. II-16 Site Safety and Health Plan

Sec. II-16.1 Introduction

This document describes the health and safety guidelines developed for the Response Operations to protect personnel, visitors, and the public from physical harm and exposure to hazardous materials or wastes. The procedures and guidelines contained herein are based upon the best available information at the time of the plan's preparation. Specific requirements will be reviewed and revised when new information is received and/or conditions change.

The Site Safety & Health (SS&H) Plan is designed to comply with applicable Federal, State OSHA regulations for Response Operations covered in 29 CFR 1910.120 and Company H&S Policies. Specifically, this program provides procedures and information for program administration, safety and health considerations, personal protective equipment, medical surveillance, training, site control, industrial hygiene monitoring programs, personal hygiene, sanitation, housekeeping, and the decontamination of both personal protective equipment and equipment utilized during the response.

The ICS Forms for the Site Safety and Health Plan (ICS 201-5 and ICS 208) are located in the Forms Section of this plan.

Sec. II-16.2 Scope

All spill response and remedial activities will be conducted in accordance with this SS&H Plan. This plan will cover all personnel, including Company employees, contractors, subcontractors, government employees, and visitors. The SS&H Plan will be modified as necessary and where applicable will address multiple work environments. A copy of this program will be posted at all command, operations, and field centers for the duration of the clean-up activity. It is the responsibility of each manger, supervisor, and crew foremen to be familiar with this plan and to assist in its implementation.

Sec. II-16.3 Program Administration

The Safety and Health Officer will administer the SS&H Plan. The Safety and Health Officer will be available to answer questions regarding effective implementation of the Program Plan. The Safety and Health Officer is supported by other staff personnel advisors in Safety, Industrial Hygiene, Occupational Medicine, Environmental, Operations and Legal.

It is the responsibility of the Safety and Health Officer to monitor the effectiveness of the SS&H Plan and to contact the appropriate support staff for guidance if changes to the plan are necessary.

All employees who may be directly involved in any clean-up activities are required to have completed HAZWOPER Training and to have been briefed on the contents of this SS&H Plan. All employers and employees will be responsible for adhering to all Federal, State and Local regulations that may not be specifically outlined in this program.

The Safety and Health Officer will enforce compliance with the SS&H Plan and all other requirements. Any deviations from the stipulated requirements, which are noted by the Safety and Health Officer or any other Company personnel, will be communicated to the responsible contractor. The contractor will take immediate actions to correct the deviations and prepare a written corrective action report to be submitted to the Safety and Health Officer.

Sec. II-16.4 Daily Safety Briefings

Site safety meetings/briefings are the first step in maintaining site safety. Daily meetings will be held at the start of each shift to ensure that all personnel understand site conditions and operating procedures, to ensure that personal protective equipment is being used correctly, to address worker health and safety concerns and to communicate any changes or revisions to the Site Safety and Health Plan.

Briefing Attendance Forms shall be used to document that individuals working the Response Operation recognize the hazards present and the policies and procedures required to minimize exposure or adverse effects of these hazards.

Sec. II-16.5 Visitor Policy

All visitors must provide all required training documentation prior to arrival on-site, if possible. The On-Scene Coordinator and Public Affairs Advisor, or their designee, must approve the site visit and shall coordinate visitor tours with the Spill Containment/Clean-up Organization. The SS&H shall designate a safe route through the site and away from the on-going operations, and provide for visitor escorts. The Team Leader/Foreman at the task site must be notified when the visitor approaches. The Team Leader-Foreman shall acknowledge visitor arrival onsite and communicate approval of the visit and acceptable duration for the visitor onsite.

Visitors are expected to dress appropriately for a field visit and when required, shall wear personal protective equipment (PPE) consistent with that used by workers at the Response Site.	
•	All visitors shall be approved prior to arrival at the Incident Site
•	All visitors to be escorted.

Sec. II-16.6 Response

During the initial response phase the ICS 201-5 form is used to ensure hazards are identified, evaluated and managed; and would typically be used for a Tier 1 response. The ICS 201-5 form can be supported by attachments such as the released product MSDS and other topics at the Safety Officers discretion. In a Tier 1 response the safety officer transitions to the ICS 208 form at their discretion

The Tier 2 response would typically use the MSDS, ICS 208 form and Medical Plan form. The ICS 201-5 form would be in place until the Tier 2 Safety team can transition from the Tier 1 team. The ICS 208 form can also be supported with attachments of MSDS and Medical Plan, at the Safety Officers discretion. MSDSs are available at the facility or may be accessed via the netMSDS intranet website at http://w3apps.phillips66.com/netmsds/ or the webMSDS internet website at: http://corpapps.phillips66.net/webmsds/MSDSViewer.aspx. When a response has transitioned to the "project phase" the project is usually turned over to a remediation project group. At that time a SSHP will be developed based on company safety and health procedures.

Sec. II-16.7 Site Safety and Health Plan Evaluation Checklist

SITE SAFETY & HEALTH PLAN EVALUATION CHECKLIST	
Name of Program Reviewed:	
Program Drafted By (Name/Organization):	
Program Reviewed By:	**Date of Review:**
Review Includes (check those appropriate):	
❒	Comprehensive Work Plan (post-emergency)
❒	Safety & Health Program (for planning not site-specific)
❒	Site-Specific Site Safety & Health Plan (post-emergency)
❒	Emergency Response Plans (emergency phase & routine sites)
Comprehensive Work plan [1910.120(b)(3)]	
❒	Work tasks, and objectives defined
❒	Methods of accomplishing tasks & objectives defined
❒	Personnel requirements for work plan accomplishments
❒	Training requirements identified (see 1910.120(e))
❒	Informational programs implemented (see 1910.120(i))
❒	Medical surveillance programs (see 1910.120(f))
Safety and Health Program [1910.120(b)]	
General:	
❒	A written safety and health program [1910.120(b)(1)]
❒	Organizational structure [1910.120(b)(1)(ii)(A)]
❒	Safety and health training program
❒	Medical surveillance program
❒	Employer SOP on safety and health
Organization Structure [1910.120(b)(2)]:	
❒	Chain of command identified
❒	Responsibilities of supervisors and employees
❒	Identifies supervisor
❒	Identifies site safety and health officer(s)
❒	Other personnel functions and responsibilities
❒	Lines of authority / responsibility / communications
Site-Specific Safety & Health Plan [1910.120(b)(4)]	
For spill response operations (as opposed to those that start from a remedial action) these plans will vary in detail as the response progresses. During the initial emergency phase, responders rely on generic emergency response plans - contingency plans - while a site-specific plan is being developed. As the response progresses into post-emergency phase recovery operations, a basic site-specific plan is used and may become quite detailed for prolonged or large cleanups. Finally, a spill response may become a fully controlled site cleanup (e.g., remedial cleanups) where a fully developed site-specific plan is developed, including detailed emergency response plans for on-site emergencies.	

SITE SAFETY & HEALTH PLAN EVALUATION CHECKLIST (CONT'D)

Site-Specific Safety & Health Plan [1910.120(b)(4)] (Cont'd)

General – Identify and/or specify:

❒	Risks for each task in work plan	❒	Employee training assignments
❒	Protective equipment for each task/objective	❒	Medical surveillance requirements
❒	Frequency and types of air monitoring	❒	Frequency and types of personnel monitoring
❒	Sampling techniques	❒	Air monitoring instruments to be used
❒	Maintenance and calibration for instrumentation	❒	Site control measures
❒	Site map	❒	Work zones
❒	Use of "buddy system"	❒	Alerting means for emergencies
❒	Safe working practices	❒	Nearest medical assistance
❒	Decontamination procedures	❒	Emergency response plan
❒	Confined space entry procedures	❒	Spill containment program
❒	Pre-entry briefings [1910.120(b)(4)(iii)	❒	Provisions for continual evaluation of plan

Site Characterization and Analysis:

❒	Spill sites shall be evaluated to identify specific site hazards and determine appropriate safety and health controls.

Preliminary Evaluation – Performed by a qualified person, prior to site entry, to identify and/or specify:

❒	Protection methods and site controls	❒	All inhalation/skin hazards
❒	Location and approximate size of site	❒	Description of response activity
❒	Duration of response activity	❒	Site topography and accessibility (include air and ground accessibility)
❒	Safety and health hazards anticipated	❒	Pathways for hazardous substance dispersion
❒	Status of emergency response units (rescue, fire, hazmat)		

Risk Identification [1910.120(c)(7):

❒	Employees on site are informed of identified risks	❒	All information concerning chemical, physical and toxicological properties of each substance available to the employer are made available to the responders

Detailed Evaluation [1910.120(c)(2)]:

❒	Immediately after preliminary evaluation, a detailed evaluation is conducted to determine safety controls and protection needed.

Monitoring [1910.120(h)]:

❒	Monitoring performed during initial entry	❒	Monitoring performed periodically
❒	Personnel monitoring performed		

Illumination Requirements [1910.120(m)]

❒	Areas accessible to employees are lighted to levels not less than the intensities outlined in Table H-120.1

Sanitation Requirements [1910.120(n)]:

❒	Potable(n)(1) / Non-potable water(n)(2)	❒	Toilet facilities (n)(3)
❒	Washing facilities (n)(6)	❒	Shower and change rooms (n)(7)

SITE SAFETY & HEALTH PLAN EVALUATION CHECKLIST (CONT'D)	
Emergency Response Plans [1910.120(l) and (q)] for emergency response operations (e.g., contingency plans used prior to site safety plan development), routine sites (e.g., emergency plans for remedial sites)	
Purpose is to prepare for anticipated emergencies:	
❒	Plan is written and available for inspection
Elements [1910.120(l)(2)(i-ix) to be specified	
❒	Pre-emergency planning
❒	Personnel roles, lines of communication
❒	PPE and emergency equipment
❒	Emergency recognition and prevention
❒	Safe distances and places of refuge
❒	Site security and control
❒	Evacuation routes and procedures
❒	Emergency medical treatment and first aid
❒	Emergency decon procedures
❒	Emergency alerting and response procedures
❒	Critique of response and follow-up
Additional Elements [1910.120(l)(3)(i)(A-B)]:	
❒	Site topography, layout and prevailing weather conditions
❒	Procedures for reporting incidents to: local, state, and federal government agencies
❒	Employee alarm system is installed to notify persons of an emergency situation
Additional Requirements [1910.120(l)(3)(ii-viii)] Emergency Response Plan shall be:	
❒	A separate section of Site Safety and Health Plan
❒	Compatible with federal, state and local plans
❒	Rehearsed as part of on-site training
❒	Current

Sec. II-16.8 Site Exposure Monitoring Plan

Site Name:	Date / Time:

	A. Monitoring Plan
➢	Air monitoring at the spill site and surrounding areas will be done to ensure site worker and community safety.
➢	Air monitoring will be done during work shift site characterization and on each work shift during cleanup activities until results indicate no further monitoring is required.
➢	All monitoring done at the cleanup site will be documented and the data maintained by qualified personnel on site.
➢	Monitoring will be done in accordance with OSHA 29 CFR 1920.120. Monitoring will be done: ❒ During initial site entry and characterization; ❒ If a new potential inhalation hazard is introduced into the work area; ❒ During cleanup activities, on each work shift; ❒ If a new task is begun that may involve potential inhalation exposure.
➢	Noise monitoring, radiation monitoring, etc. will be conducted as needed.
	B. Initial Site Monitoring
➢	Monitoring will be done during initial site entry. The monitoring will include checking for: ❒ Oxygen (O_2) deficiency using a direct reading oxygen meter; ❒ Flammable atmospheres (%LEL) using a combustible gas indicator; ❒ Benzene, hydrogen sulfide, hydrocarbons, and combustion by-products (SO_2, CO), as needed, using direct-reading instruments, colorimetric indicator tubes, and/or other valid methods.
➢	Instruments will be calibrated prior to and following use.
➢	All monitoring will be documented. (See attached form for example)
	C. Post-Emergency Monitoring (On-Going)
➢	Monitoring for benzene, hydrogen sulfide, hydrocarbons and combustion by-products will be done during each work shift on an on-going basis, as needed. Repeat initial site monitoring if any significant changes occur (i.e., temperature increases, more material released, wind direction changes, etc.)
➢	Checks for oxygen deficiency and flammable atmospheres will be made if confined spaces are encountered, or as required.
➢	Exposure monitoring shall be done as necessary. Personnel samples will be collected under the direction of the industrial hygiene personnel. Samples will be analyzed by a laboratory accredited by the American Industrial Hygiene Association.
➢	Results of site monitoring will be made available to site workers' supervision for informing all affected employees. Results will be available to the Command Center for review by regulatory agencies.

Sec. II-16.9 Industrial Hygiene HAZMAT Information – Field Data Form

Date:	Time	Wind Dir.	Wind Speed	Temp.
Event Description:				

Location Description	Time	PID / FID	H_2S	SO_2	CO	LEL	O_2	Benzene	Other	Comments
1.										
2.										
3.										
4.										
5.										
6.										
7.										
8.										
9.										
10.										
11.										
12.										

Sec. II-17 Personal Protective Equipment

All work shall be conducted in accordance with procedures established during pre-entry briefings and the attached Work Plan. Personal Protective Equipment shall be selected and used to protect personnel from hazards that are likely to be encountered as identified during the initial site characterization and subsequent monitoring.

The Safety and Health Officer will determine the PPE requirements for each task associated with the incident based on the work to be conducted, associated hazards, and the following criteria:

1. PPE Use and Limitations

Several factors must be considered when selecting and using PPE:

➢	The protective clothing, gloves and boots must be resistant to permeation or penetration by oil and other chemicals that may be encountered on the site.
➢	Protective clothing and gloves should be durable for heavy work.
➢	Protective clothing and glove materials must maintain protection and flexibility in hot or cold weather conditions.
➢	Protective clothing must be large enough to fit over other clothing without ripping and tearing.
➢	For respirator use, procedures must be in place for the proper selection, use, care, and fit testing of the respirators. Additionally, wearer must be advised as to respirator cartridge expected life and of monitoring for contaminant breakthrough, etc.
➢	Protective footwear must have non-slip soles. Additionally, conditions may require the use of steel toe and/or steel shank footwear.

2. Work Duration

The work duration is expected to last for the full shift and will involve moderate to heavy physical exertion during cleanup activities.

3. PPE Maintenance and Storage

PPE will be maintained and stored by an assigned work crew. Protective clothing and gloves will be evaluated during and at the end of each shift and will be replaced as necessary. Boots and other PPE may be decontaminated for re-use.

4. PPE Decontamination and Disposal

PPE may be decontaminated in designated areas by assigned crews using soap or other suitable cleanser and rinse water. The cleaning solution used will be disposed of in properly labeled containers according to applicable regulations. Contaminated protective gloves and any other PPE to be disposed of will be placed in properly labeled bags and disposed of according to applicable regulations.

5. PPE Training and Proper Fitting	
All site cleanup workers, supervisors and others entering the contaminated zone will be given training in proper use of PPE. The training will include:	
➢	How to use PPE
➢	When and where to use the PPE
➢	How to inspect PPE to determine if it is working properly
Care will be taken to ensure employees are provided properly fitted PPE.	
6. PPE Donning and Doffing Procedures	
Prior to starting work, all site cleanup workers and others required to wear PPE will be instructed on proper procedures for donning and doffing PPE. Doffing of contaminated clothing, gloves and boots must be done in a manner to prevent skin exposure to the oil or chemicals.	

Personal Protective Equipment (PPE)	
Respiratory:	Wear a positive pressure air supplied respirator in situations where there may be potential for airborne exposure above exposure limits. If exposure concentration is unknown or if conditions immediately dangerous to life or health (IDLH) exist, use a NIOSH approved self-contained breathing apparatus (SCBA) or equivalent operated in a pressure demand or other positive pressure mode. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.
Skin:	The use of thermally resistant gloves is recommended.
Eye/Face:	Approved eye protection to safeguard against potential eye contact, irritation or injury is recommended. Depending on conditions of use, a face shield may be necessary.
Other Protective Equipment:	A source of clean water should be available in the work area for flushing eyes and skin. Impervious clothing should be worn as needed.
	Suggestions for the use of specific protective materials are based on readily available published data. Users should check with specific manufacturers to confirm the performance of their products.

Sec. II-18 Decontamination

Decontamination is the systematic removal of residual chemicals from personnel and equipment after exposure to toxic, flammable and/or hazardous products.

The benefits of Decontamination include:	
•	Enhancing the safety of responders and other personnel.
•	Decreasing the hazard of environmental contamination.
•	Restricting contamination to the immediate area and minimizes the potential for injury to others.
•	Each step in the process reduces the amount of residual product on the clothing until safe and acceptable levels area achieved.

Non-Emergency / Routine vs. Emergency Decontamination	
•	**Routine decontamination** is designed to reduce the amount of residual product on the clothing until safe and acceptable levels are achieved.
•	**Emergency decontamination** is designed to remove the patient from the hazardous area, remove contaminated clothing and flush the product off the patient. This will be accomplished taking into account any medical considerations. Water should be used to perform the emergency decontamination of the patient. There is less regard for runoff retention, and the emphasis is to expedite emergency medical treatment.

Decontamination Methods	
There are many methods for decontamination. The proper method will be determined by the situation and materials involved.	
Dilution	The application of water to reduce the concentration of product to a point that it no longer presents a hazard.
Absorption	Mechanically pulled in or soaked up by the sorbent.
Chemical Degradation	Altering the chemical composition of the material to the point that it is less hazardous or easier to remove. For example, emulsifying a gasoline spill.
Disposal	Easiest form of “decontamination”.
Note: Contaminated products require proper disposal – incineration, burial, etc.	

Factors Influencing Methodology	
•	Product(s) involved
•	Hazards associated with the product(s)
•	Degree or extent of contamination
•	Physical and chemical properties of the product(s)

Sec. II-19 Response Termination and Follow-up Procedures

Termination activities are divided into three phases: debriefing the incident, post-incident analysis, and critiquing the incident. The extent to which these phases are undertaken depends on the nature and magnitude of the spill or release. Even a small product release could elicit very detailed termination activities. For example, a release of H_2S resulting with subsequent employee, or public, negative impact. Additionally, some spills or releases trigger outside agency reporting. These events would trigger the formal termination procedures outlined in this section.

Sec. II-19.1 Debriefing the Incident

Debriefings should begin as soon as the "emergency" phase of the operation is completed. Ideally, this should be before first responders leave the scene, and it should include the hazmat response team, sector officers, and other key players such as public information officers and agency representatives who the Incident Commander determines would benefit from being involved.

Debrief Checklist

Procedures	✓
Use safety meeting attendance forms and or memoranda to document the debriefing.	☐
Inform responders exactly what hazardous materials they were (possibly) exposed to and the signs and symptoms.	☐
Identify equipment damage and unsafe conditions requiring immediate attention or isolation for further evaluation	☐
Assign information-gathering responsibilities for a Post-Incident Analysis and critique.	☐
Summarize the activities performed by each sector, including topics for follow-up.	☐
Reinforce the positive aspects of the response.	☐
Debrief Performed By:	Date/Time

Sec. II-19.2 Post-Incident Analysis: (PIA)

Response Termination
Termination activities are divided into three phases: debriefing the incident, post-incident analysis, and critiquing the incident. The extent to which these phases are undertaken depends on the nature and magnitude of the spill or release. Even a small product release could elicit very detailed termination activities. For example, a release of H_2S with subsequent employee or public negative impact. Additionally, some spills or releases trigger outside agency reporting. These events would trigger the formal termination procedures outlined in this section.

General Information	
Debriefing the Incident	
❒	Debriefings should begin as soon as the “emergency” phase of the operation is completed. Ideally, this should be before first responders leave the scene, and it should include the hazmat response team, sector officers, and other key players such as public information officers and agency representatives who the IC determines would benefit from being involved.
❒	Inform responders exactly what hazardous materials they were (possibly) exposed to and the signs and symptoms.
❒	Identify equipment damage and unsafe conditions requiring immediate attention or isolation for further evaluation.
❒	Assign information-gathering responsibilities for a Post-Incident Analysis (PIA) and critique.
❒	Summarize the activities performed by each sector, including topics for follow-up.
Safety meeting attendance forms and or memoranda may be utilized to document the debriefing.	

Post-Incident Analysis:	
	PIA is the detailed, step-by-step review of the incident to establish a clear picture of the events that took place during the incident. It is conducted to establish a clear picture of the emergency response for further study.
	The PIA is not the same as investigations conducted to establish the probable cause of the accident for administrative, civil, or criminal proceedings. Those are usually conducted utilizing root cause or hazard and operability methodologies. One person or (or office) should be designated to collect information about the response during the debriefing. Additional data may be obtained from Command post logs, incident reports and eyewitness interpretations.
	Once all available data has been assembled and a rough draft report developed, the entire package should be reviewed by key responders to verify the available facts are arranged properly and actually occurred. The PIA should focus on four key topics: *Command and Control, Tactical Operations, Resources and Support Services*.
	*Command and Contro*l – Was command established and sectors organized? Did information flow from operations personnel through Sector Officers to the Incident Commander? Were response objectives communicated to the personnel expected to carry them out?
	Tactical Operations – Were the tactical options ordered by the IC and implemented by emergency response personnel effective? What worked? What did not?
	Resources – Were the resources adequate for the job? Are improvements needed to apparatus and/or equipment? Were personnel trained to do the job effectively?
	Support Services – Were the support services received from other organizations adequate? What is required to bring support to the desired level?
Critiquing the Incident:	
A commitment to critique an all hazardous material response will improve IMT performance by improving efficiency and pinpointing weaknesses. Use the tool as a valuable learning experience (everyone came to the incident with good intentions) A good critique promotes:	
	Trust in the response system as being self-correcting.
	Willingness to cooperate through teamwork.
	Continuing training of skills and techniques.
	Pre-planning for significant incidents.
	Sharing information between response agencies.

Critique Format:	
A critique leader is assigned. This can be anyone who is comfortable and effective working in front of a group. The critique leader should:	
❒	Control the critique. Introduce the players and procedures. Keep it moving and end on schedule.
❒	Ensure that specific questions receive detailed answers.
❒	Ensure that all participants follow the critique rules.
❒	Ensure that each operational group presents their observations.
❒	Keep notes of important points.
❒	Sum up the lessons learned.
❒	Follow up.
❒	Following the critique, forward the written comments to management. They should highlight suggestions for improving response capabilities and alternative solutions.
❒	When larger incidents are involved or injuries have occurred, formal reports shall be circulated so that everyone in the response system can understand the "lessons learned."

Section III – Table of Contents

Sec III-1 Overall Training

Experienced, well-trained people are essential for successful implementation of this Emergency Response Plan. Exercises are performed to check the effectiveness of the training and to test the Plan. An ongoing training and exercise program will be carried out at the facility. In addition to maintaining maximum familiarity with all aspects of the Plan, the training and exercise program is intended to provide members of the spill response team with the basic knowledge, skills and practical experience necessary to perform safe and effective spill response operations in accordance with the plan.

In order to have a successful exercise program, it is important for responders to be aware of and knowledgeable of the policies set forth in the Area Contingency Plan (ACP) and the use and location of Geographic Response Plans (GRPs) as applicable. Training on the contents of the ACP and use of the GRPs is conducted with annual ICS/UCS training, as applicable.

OSHA's Hazardous Waste Operations and Emergency Response (HAZWOPER) rule (29 CFR 1910.120) became law on March 6, 1990. It sets minimum training and/or competency requirements for people associated with an oil spill emergency. HAZWOPER requirements are described in the following section. Additional training and exercise requirements are discussed in the balance of this section.

The training coordinator will devise a training plan and schedule in response to governmental regulations and the specific requirements of the Company, and implement the training plan in cooperation with local oil spill response co-ops and selected contractors. Representatives of governmental agencies and other interested parties may be invited to observe or participate in these activities as determined appropriate.

Sec. III-2 Response Training

As required in the DOT regulation 49 CFR Appendix A to part 194 the company has developed a program for facility response training. Please refer to the appropriate training documentation, which is maintained and available in this section of the Core Plan.

Sec. III-2.1 Description of Response Training

The following summarizes the response training elements for all Facilities:	
•	Incident Command System (ICS) Training Program
•	Classroom Training
•	HAZWOPER Response Qualifications

Sec. III-3 Incident Command System (ICS)/HAZWOPER Training Program

Background

The Incident Command System (ICS) was first developed as a result of wild fires in southern California in the 1970s. In 1980, the ICS (originally developed by an entity called Firescope) made the transition into a national program called the National Incident Management System (NIMS). At that time, ICS became the backbone of a wider-based system for all Federal agencies with wildland fire management responsibility.

The NIMS ICS has also now been adopted by the U.S. Coast Guard for response to all oil and hazardous substance spills and has been integrated into the National Response System and therefore the National Contingency Plan of the U.S. The U.S. Federal Emergency Management Agency (FEMA) is adopting the ICS, as well as industry entities such as the National Fire Protection Association (NFPA).

In summary, the company ICS/UCS organizations and the associated training program was developed directly from NIMS.

Training Requirements

It is important to have well trained Spill Management Team. New Employees will complete ICS 100 and ICS 200 Level Training. Persons filling key roles in the ICS/UCS Organization (i.e. Command Staff Officers and General Staff Section Chiefs) will also complete ICS 300 Level Training and comply with one of the following:

Command and General Staff Additional Requirements	
•	Observe position a minimum of one WCD exercise
•	Serve as Deputy (position) a minimum of one WCD exercise
•	Serve previously in (position) in a WCD exercise or actual response

ICS 100, ICS 200, and ICS 300 Level Training can be achieved through various mediums including:

1. For ICS 100 and ICS 200 Level Training courses are available on-line through the FEMA Independent Study Courses through the Emergency Management Institute. A certificate will be provided upon completing each course. http://www.training.fema.gov/IS/crslist.asp:
    - IS-100 Introduction to Incident Command System, I-100
    - IS-200.a ICS for Single Resources and Initial Action Incidents

2. The Company also offers ICS 100, ICS 200, and ICS 300 internally online through Computer Based Training (CBT), via the Company Learning Management System. A certificate will be provided upon completing each course.

Training Requirements (Cont'd)

3. Instructor Lead Courses- ICS 100, ICS 200, and ICS 300 are also available though a class room setting. Contact the Company's Emergency Management Coordinator to scheduling the course internally. In addition the course being offered through the company, both the Emergency Management Institute and the National Fire Academy sponsor NIMS compliant ICS-300 Level Training. Please contact your local or State's Emergency Management Agency or State Fire Academy for details about when and where these courses will be available.

Personnel Response Training Logs

The Company will conduct Emergency Response Plan training annually for their personnel to meet the requirement for "personnel response training logs". **The actual retention of this activity's documentation is maintained in the Company Learning Management System.** Please consult the training coordinator for further information on these records.

Sec. III-3.1 Classroom Training

The Company conducts training at this facility. The topics applicable to response training may consist of, but are not limited to, the following:	
•	Facility Response Plan/OPA (annual)
•	SPCC/HWCP Training (annual)
•	PPE Use, Care and Maintenance
•	Biannual Boom Deployment Exercises (If owned and maintained at the facility)
•	Tabletop Drills per this ERP
•	Fire Extinguishing School
•	First Aid/CPR

Sec. III-3.2 HAZWOPER Response Qualifications

Certain designated Company employees are required to obtain qualifications to meet different levels of initial training (each require 8 hours of annual refresher training) in accordance with OSHA 1910.120 or HAZWOPER. The five (5) levels of HAZWOPER qualification applicable to Company employees are:	
•	First Responder - Awareness (Level 1) (Sufficient hours of training to demonstrate competencies)
•	First Responder - Operations (Level 2) (8 hours initial)
•	Hazardous Material Technician (Level 3) (24 hours initial)
•	Hazardous Material Specialist (Level 4) (24 hours initial)
•	"On-Scene" Commander or Incident Commander (Level 5) (24 hours initial)

Sec. III-3-3 HAZWOPER Levels

First Responder Awareness Level	
First responders at the Awareness Level are individuals who are likely to witness or discover a hazardous substance release and who have been trained to initiate an emergency response sequence by notifying the proper authorities of the release. They would take no further action beyond notifying the authorities of the release. First responders at the Awareness Level shall have sufficient training or have had sufficient experience to objectively demonstrate competency in the following areas:	
•	An understanding of what hazardous substances are, and the risks associated with them in an incident.
•	An understanding of the potential outcomes associated with an emergency created when hazardous substances are present.
•	The ability to recognize the presence of hazardous substances in an emergency.
•	The ability to identify the hazardous substances, if possible.
•	An understanding of the role of the first responder awareness individual in the employer's emergency response plan including site security and control and the U.S. Department of Transportation's Emergency Response Guidebook.
•	The ability to realize the need for additional resources, and to make appropriate notifications to the communication center.

Sec. III-3.3 HAZWOPER Levels (Cont'd)

First Responder Operations Level

First responders at the Operations Level are individuals who respond to releases or potential releases of hazardous substances as part of the initial response to the site for the purpose of protecting nearby persons, property, or the environment from the effects of the release. They are trained to respond in a defensive fashion without actually trying to stop the release.

Their function is to contain the release from a safe distance, keep it from spreading and prevent exposures. First responders at the Operational Level shall have received at least eight hours of training or have had sufficient experience to objectively demonstrate competency in the following areas in addition to those listed for the awareness level and the employer shall so certify:

•	Knowledge of the basic hazard and risk assessment techniques.
•	Know how to select and use proper personal protective equipment provided to the first responder operational level.
•	An understanding of basic hazardous materials terms.
•	Know how to perform basic control, containment and/or confinement operations within the capabilities of the resources and PPE available with their unit.
•	Know how to implement basic decontamination procedures.
•	An understanding of the relevant standard operating procedures and termination procedures.

Hazardous Materials Technician

Hazardous Materials Technicians are individuals who respond to releases or potential releases for the purpose of stopping the release. They assume a more aggressive role than a first responder at the operations level in that they will approach the point of release in order to plug, patch or otherwise stop the release of a hazardous substance. Hazardous Materials Technicians shall have received at least 24 hours of training equal to the first responder operations level and in addition have competency in the following areas and the employer shall so certify:

•	Know how to implement the employer's emergency response plan.
•	Know the classification, identification and verification of known and unknown materials by using field survey instruments and equipment.
•	Be able to function within an assigned role in the Incident Command System.
•	Know how to select and use proper specialized chemical personal protective equipment provided to the hazardous materials technician.
•	Understand hazard and risk assessment techniques.
•	Be able to perform advance control, containment and/or confinement operations within the capabilities of the resources and personal protective equipment available with the unit.
•	Understand and implement decontamination procedures.
•	Understand termination procedures.
•	Understand basic chemical and toxicological terminology and behavior.

Sec. III-3.3 HAZWOPER Levels (Cont'd)

Hazardous Materials Specialist	
Hazardous Materials Specialists are individuals who respond with and provide support to hazardous materials technicians. Their duties parallel those of the hazardous materials technician, however, those duties require a more directed or specific knowledge of the various substances they may be called upon to contain. The Hazardous Materials Specialist would also act as the site liaison with Federal, state, local and other government authorities in regards to site activities. Hazardous Materials Specialists shall have received at least 24 hours of training equal to the technician level and in addition have competency in the following areas and the employer shall so certify:	
•	Know how to implement the local emergency response plan.
•	Understand classification, identification and verification of known and unknown materials by using advanced survey instruments and equipment.
•	Know of the state emergency response plan.
•	Be able to select and use proper specialized chemical personal protective equipment provided to the hazardous materials specialist.
•	Understand in-depth hazard and risk techniques.
•	Be able to perform specialized control, containment, and/or confinement operations within the capabilities of the resources and personal protective equipment available.
•	Be able to determine and implement decontamination procedures.
•	Have the ability to develop a site safety and control plan.
•	Understand chemical, radiological and toxicological terminology and behavior.

On Scene Incident Commander	
Incident Commanders, who will assume control of the incident scene beyond the First Responder Awareness Level, shall receive at least 24 hours of training equal to the First Responder Operations Level and in addition have competency in the following areas and the employer shall so certify:	
•	Know and be able to implement the employer's Incident Command System.
•	Know how to implement the employer's emergency response plan.
•	Know and understand the hazards and risks associated with employees working in chemical protective clothing.
•	Know how to implement the local emergency response plan.
•	Know of the state emergency response plan and of the Federal Regional Response Team.
•	Know and understand the importance of decontamination procedures.

Sec. III-3.4 Refresher Training

Those employees who are trained in accordance with the above descriptions shall receive annual refresher training of sufficient content and duration to maintain their competencies, or shall demonstrate competency in those areas at least yearly.

Sec. III-3.5 HAZWOPER Training Certification and Documentation

The Company will certify that its spill management response team members assigned to all HAZWOPER levels have received the required training or equivalent and are competent. The Company will train and maintain its spill management team members to HAZWOPER per 29 CFR 1910.120(q) as a minimum. Upon receiving the initial HAZWOPER training, response team members will be issued a certificate indicating that they have completed the required amount of HAZWOPER training and can function as a response team member. A copy of the certificate is included in this Section. Documentation of specific training received by each employee is maintained within the Learning Management System.

Refresher training must satisfy the OSHA requirement to maintain competency and at least 4 hours[1] of refresher training must be completed. In order to maintain competency, the annual refresher may consist of any of the classes or combinations of classes listed in the Company approved HAZWOPER Courses Table outlined in this section.

[1]*Facilities located in the state of Washington require a minimum of 8-hours of refresher training annually.*

The Learning Management System may be queried to determine the amount of HAZWOPER training that an employee has received, as well as, to verify that the annual refresher training requirement has been met. The designated Facility Supervisor will determine the specific refresher training provided for each employee.

By completing one of these options, the company considers the individual certified per 29 CFR 1910.120(q)(8)(ii).

Sec. III-3.6 Response Contractors

All contractors responding to a spill/release that involves the Company will be required by their contracts to satisfy the HAZWOPER training requirements of 29 CFR 1910.120 for their position.

Sec. III-3.7 Other Response Personnel

Sec. III-3.7.1 Skilled Temporary Support Personnel

Company and other response support personnel whose skills are needed temporarily to perform immediate emergency support work (such as 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 be provided with all other appropriate safety and health precautions.

Sec. III-3.7.2 Specialist Employees

Specialist employees are experts who 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 annually. There are no specific requirements on training content or hours of training for these persons except that it entails whatever is necessary to maintain competency in their specific area of expertise. Training and demonstration of competency for skilled support personnel and specialists should be documented.

Sec. III-3.7.3 Casual Laborers

Casual laborers will generally not be hired, but may be employed by the Company's response contractors or other response organizations. Contractors will be responsible for providing the appropriate HAZWOPER training to these laborers prior to their involvement in response operations.

Sec. III-3.7.4 Volunteers

Normally, the Company will not hire and/or train volunteers for work on an oil spill response incident. Consequently, the company will refer volunteers to appropriate state and/or local agencies or organizations that are set up to handle volunteers. In addition, the Company will refer volunteers to appropriate wildlife rescue agencies or contractors, such as the International Bird Rescue Research Center, which may be contracted by the Company to work on the spill cleanup.

In the event that the Unified Command approved "volunteers" the Incident Action Plan will include them as resources with scope of work, training and PPE as required.

Sec. III-3.8 Waste Handling Training

Field operations personnel receive extensive regulatory-required training in HAZWOPER, HAZCOM, emergency response, fire fighting, and other areas as described in this section. Employees at sites which generate hazardous waste receive additional orientation and training specific to hazardous waste regulatory requirements, and hazardous waste emergency response. Site emergency coordinators (qualified individuals) also receive additional training on incident command systems.

Sec. III-3.9 Training Records

Training records will be maintained as long as personnel have duties under the Response Plan. Training documentation may be verified in the Company Learning Management System.

Sec. III-3.10 Company Approved HAZWOPER Courses

The following courses may be used for annual HAZWOPER Refresher Certification. A minimum of four (4) hours credit must be accrued annually to maintain HAZWOPER Refresher Certification. *(The state of Washington requires a minimum of 8-hours refresher training annually).*

Title	Area	Credit Hours	Frequency	References
Incident Command System (ICS)	ER	3.0	Initial/Annual	ERP
OPA '90 Plan Review	ER	1.0	Initial/Annual	ERP: EPA, DOT and USCG (PowerPoint or classroom)
OPA '90 Exercise - Table Top Exercise	ER	4.0	Annual	ERP
OPA '90 Exercise - Equipment Deployment	ER	3.0	Annual/ Semi-Annual	ERP
Security Training - Facility Personnel	ER	1.0	Initial & Changes	FSP (PowerPoint or classroom)
Security Training - Marine Facility Security Officer (FSO)	ER	4.0	Initial & Changes	FSO Training Program (PowerPoint or classroom)
Security - Facility Exercise	ER	2.0	Annual	FSP
Security - Marine Facility Quarterly Drill	ER	1.0	Initial & Quarterly	FSP
Combined Spill Response and Security Exercise	ER	4.0	Annual	ERP & FSP
Spill Prevention Control and Countermeasure Plans (SPCC)	ENV	1.0	Initial & Changes	ERP & SPCC
Spill Prevention Meeting	ER	1.0	As needed	ERP & FSP
Asbestos Communication of Hazard to Employees	HS	1.0	As needed	OSHA 1910.1001
Benzene	HS	1.0	Initial	OSHA 1910.1028
Field Survey Instruments & Equipment	HS	1.0	Annual	OSHA 1910.120
Fire Protection Equipment - Classroom	HS	1.0	Annual	OSHA 1910.155, 157, 158, 160, 164
Fire Protection Equipment – Hands-on	HS	1.0	Every 2 years	OSHA 1910.155, 157, 158, 160, 164
Hazard Communication	HS	2.0	Initial/As needed	OSHA 1910.1200
HAZWOPER – First Responder Awareness Level	ER	2.0	Initial/Annual	OSHA 1910.120
HAZWOPER – First Responder Operations Level	ER	2.0	Initial/Annual	OSHA 1910.120
HAZWOPER – General Training	ER	2.0	Initial/Annual	OSHA 1910.120
HAZWOPER – Hazardous Materials Technician	ER	24.0	Initial/Annual	OSHA 1910.120
HAZWOPER – On-Scene Incident Commander	ER	24.0	Initial/Annual	OSHA 1910.120
Hot Work Permits	HS	0.5	Initial/3-Years	OSHA 1910.120

Sec. III-3.10 Company Approved HAZWOPER Courses (Cont'd)

Title	Area	Credit Hours	Frequency	References
Hydrogen Sulfide – H2S	HS	1.0	Initial/3-Years	OSHA 1910.1028
Lead Awareness	HS	1.0	Initial/Changes	OSHA 1910.1025
Lockout/Tagout	HS	1.0	Initial/3-Years	OSHA 1910.147
Medical Services and First Aid - CPR	HS	6 Hours	Per Certification	OSHA 1910.151; Requires a Certified Instructor Course to be taught (determined locally)
NPDES Permitting and Hydrostatic Testing	ENV	1.0	As needed	Environmental Training Guideline
Occupational Exposure to Blood borne Pathogens	HS	1.0	Initial	OSHA 1910.1030
Occupational Noise Exposure	HS	12.0	Initial/ Annual (For Program Participants)	OSHA 1910.95
Permit-Required Confined Space Entry – General Awareness	HS	2.0	Initial/Periodically	OSHA 1910.146
Personal Protective Equipment	HS	1.0	Initial/As Needed	OSHA 1910.132, 133,135; OSHA 1926.500-503
RCRA-Personnel Training for Generators of Hazardous Waste Who accumulate waste on-site Storage	ENV	4.0	Initial/Annual	40 CFR 264.16 and 262.34
Respiratory Protection	HS	2.0	Initial/Annual	OSHA 1910.134
Safe Transportation of Hazardous Materials – Air	DOT	2.0	Initial/2 Years	IATA
Safe Transportation of Hazardous Materials – General Awareness	DOT	2.0	Initial/2 Years	49 CFR 172.704
Safe Transportation of Hazardous Materials – Highway	DOT	2.0	Initial/3 years	49 CFR 172.704
Safe Transportation of Hazardous Materials – Rail	DOT	2.0	Initial/3 years	49 CFR 172.704
Safe Transportation of Hazardous Materials – Water	DOT	2.0	Initial/3 years	49 CFR 172.704
Safety Related Work Practice - Electrical Hazards - Unqualified	HS	1.0	3-Years	OSHA 1910.331-.335
Security – General Awareness (Global)	SEC	1.0	Annual	
Specifications for Accident Prevention Signs and Tags	HS	1.0	As needed	OSHA 1910.145
Trenching and Excavation - Awareness	HS	1.0	Initial & Reg. Changes	OSHA 1926.651

Refer to the Learning Management System for additional course information and documentation.

Sec. III-4 Response Exercise Program

Experienced, well-trained people are essential for successful implementation of this Emergency Response Plan. Exercises are performed to check the effectiveness of the training and to test the Plan. An ongoing training and exercise program will be carried out at the facility. In addition to maintaining maximum familiarity with all aspects of the Plan, the training and exercise program is intended to provide members of the spill response team with the basic knowledge, skills and practical experience necessary to perform safe and effective spill response operations in accordance with the plan.

The Company exercise program is designed to be consistent with the exercise requirements as outlined in the National Preparedness for Response Exercise Program (PREP) Guidelines developed by the U.S. Coast Guard in conjunction with the Pipeline Hazardous Materials Safety Administration (PHMSA) and the U.S. Environmental Protection Agency (EPA). Participation in this program ensures that the Company meets all federal exercise requirements mandated by OPA '90.

The primary elements of the Company exercise program are notification exercises, tabletop exercises, facility-owned equipment deployment exercises, contractor exercises, unannounced exercises by government agencies and area-wide exercises conducted by industry and government agencies. The exercise year for all Company facilities will be from January 1 to December 31. The Facility Manager is responsible for implementing the exercise program.

All exercises and actual release event responses will be critiqued. If appropriate, the information derived from the post-exercise or post-event evaluation will be incorporated into the Emergency Response Plan. The IC will cause the facility plan to be updated as necessary and updates will be forwarded to Company Emergency Response & Security Group.

Sec. III-4.1 Exercise Format and Procedures

Exercises serve to evaluate the thoroughness and effectiveness of the emergency response component of the Emergency Response Plan by testing under simulated conditions. Exercises will be conducted in consistence with the PREP Guideline to maintain maximum effectiveness of the plan.

The following is a list of suggested organizations that should be invited to table top and equipment deployment exercises:	
•	Federal Agencies having jurisdictional responsibility during a spill or emergency (i.e. USCG, EPA, DOT).
•	State agencies having jurisdictional responsibility during a spill or emergency.
•	Local agencies having jurisdictional reasonability during a spill or emergency (i.e. Local Fire Department, LEPC, Law Enforcement, Health Department).
•	Other interested entities that may play a critical role during a spill or fire (i.e. Local Utilities).

Sec. III-4.2 Coordination with Local Emergency Services

During an event meetings should be conducted with all local emergency services departments. If possible, a single source of contacts with these departments should be appointed. Lines of communication to this source must be determined to allow quick contact. If the situation is expected to be of longer duration, off-duty police or security personnel may be required to assist. These people will be very useful in traffic control including ingress and egress from the site, and preventing unauthorized personnel from entering the area.

To ensure coordination between Fire, Police, and other appropriate Public Officials is possible during an emergency, the Area Supervisors are responsible for establishing liaisons with public officials to learn their responsibilities and resources for responding to an emergency. Field Operations are encouraged to involve local officials in drills/training programs, where appropriate.

Company personnel will coordinate with local emergency service officials as necessary to:	
•	Provide the officials with current information on all Company facilities within their jurisdiction
•	Exchange information about responsibilities and resources (both for Company and the officials) available for responding to hazardous liquid pipeline emergencies, and to discuss (preplan) possible responses to be made during potential emergency situations
•	Ensure that the names, addresses, and telephone numbers for the officials are current

Sec. III-4.3 Company Terminal Requirements

The program is on a 3-year cycle with different scenario requirements for the exercises throughout the cycle.

Each year a terminal will be required to conduct the following exercises:	
•	Four Notification Exercises which can be exercised in conjunction with a Tabletop and/or Equipment Deployment or separately.
•	One Tabletop Exercise (TTX) [1] which can be exercised alone or in conjunction with an Equipment Deployment.
•	Two Facility Equipment Deployments (EDX)[1] (if there is facility-owned spill response equipment on site). If the facility relies upon the pipeline area response equipment, that equipment should follow the pipeline response plan and equipment exercise program.
•	An Agency unannounced exercise, if initiated by jurisdictional agency.
•	An area exercise, if required by jurisdictional agency.
•	Document that primary OSRO contractors listed in the OPA '90 plan have conducted training consistent with the PREP guidelines.
•	Self-certification and documentation. (Credit may be taken for responses to actual events, as long as it is properly documented.

[1] *Annually, one exercise, either TTX or EDX must be unannounced.*

Sec. III.4.4 Company Pipeline Requirements

The program is also on a 3-year cycle with different scenario requirements for the exercises throughout the cycle.

Each year a pipeline response area will be required to conduct the following exercises:	
•	Four Notification Exercises which can be exercised in conjunction with a Tabletop and/or Equipment Deployment or separately.
•	One Tabletop Exercise (TTX) [1] which can be exercised alone or in conjunction with an Equipment Deployment.
•	One Pipeline Equipment Deployment (EDX)[1] (if the pipeline area has pipeline-owned spill response equipment.
•	An Agency unannounced exercise, if initiated by Jurisdictional agency.
•	Document that primary OSRO contractors listed in the OPA '90 plan have conducted training consistent with the PREP guidelines.
•	Self-certification and documentation. (Credit may be taken for responses to actual events, as long as it is properly documented.

Sec. III-4.5 Guiding Principles

Internal Exercises

Internal exercises are those that are conducted wholly within the Company. The internal exercises test the various components of the response plan to ensure the plan adequately meets the OPA '90 requirements for spill response.

The internal exercises include:	
•	Incident Commander (IC) Notification Exercises (Terminals)*
•	Internal Notification Exercises (Maintenance Groups)*
•	Spill Management Team Tabletop Exercises
•	Equipment Deployment Exercises (Facility-Owned Equipment)
•	Equipment Deployment Exercises (Response Contractors)
•	Government Initiated Unannounced Exercises

All of the internal exercises, with the exception of the government initiated unannounced exercises, will be self-evaluated and self-certified.

*The Qualified Individual is the Incident Commander for the Company. Refer to the job positions identified in the QI Delegation of Authority Letter located in the Introduction section of this plan that may serve as Incident Commander. Other delegated personnel in a supervisory position (i.e. a pump station supervisor, may act as the Incident Commander should a spill occur at his pump station). For the purposes of exercises, generally, the Terminal Supervisor or the Area Supervisor should be the contact person.

External Exercises

The external exercises go outside the Company to test the interaction of the Company with the response community. The external exercises will test the Company's entire plan and the coordination with members of the response community necessary to conduct an effective response to a pollution incident.

The external exercise includes: Area Exercises

An area exercise is conducted by EPA, the Coast Guard, DOT and industry working in cooperation to exercise the area contingency plan. This is a large-scale exercise that is planned and evaluated by all parties involved.

Sec. III-4.6 Triennial Cycle of Exercising the Entire Response Plan

Every three years all components of the entire response plan must be exercised. The purpose of this requirement is to ensure that all components of the plan function adequately for response to an oil or hazardous substance spill. By complying with the PREP Guidelines as set forth in this section, the Company meets this requirement.

Sec. III-4.7 Credit for Conducting an Exercise

When lesser-included exercises occur as part of larger exercises or a real event, the Company facility will receive credit for that lesser included exercise or real event when properly documented. For example, if a terminal responds to an actual spill, the activities involved in the spill response (i.e., the IC notification, the equipment deployment, etc.) will satisfy the requirements of these two exercises, provided the actual response activities meet the objectives of the exercises and are properly documented.

Credit for an Area Exercise will be given to the Company facility or facilities for an actual response to a spill in the Area if the plan was utilized for response to the spill and the objectives of the Area Exercise were met, properly documented and certified. The caveat to this statement is that if a The Company facility plan was scheduled for an Area Exercise and an actual spill occurred in the Area for which the facility's plan was not used (i.e., another company's plan was used or an agency plan was used), then the Company facility would not receive credit for the spill response.

Sec. III-4.8 Proper Documentation

Proper documentation includes documentation, which lists the exercise conducted, the objectives met and the results of the exercise evaluation. This documentation must be in writing and signed by an individual having responsibility for the asset conducting the exercise. All spill response exercise documentation records should be maintained on file at the facility for a minimum of five years.* This Section describes the proper exercise ICS/UCS documentation forms that should be used to document the corresponding exercises. All ICS forms in this section may be utilized to document exercises as well as assisting with actual response. Forms are found in the following locations:

- Section IV of this plan contains Company Forms.
- ERAP contains Initial Response Forms
- Company Website contains all Company and ICS Forms

*Note: Electronic documentation may be located on the Company Emergency Response website.

Sec. III-4.9 Certification Process

The Incident Commander or Exercise Facilitator certifies the response exercise.

Following an exercise or actual event, the responders should complete a critique of their response. The evaluation form located in this section should include the Company facility name, exercise date, type of exercise conducted, response plan or zone exercised and participants. This form is to be signed by the Incident Commander or Exercise Facilitator; then filed and retained for a minimum of five years at the facility.

Sec. III-4.10 EPA

EPA Regulated Facilities	
QI Notification Exercises	
Applicability	Facility
Frequency	Quarterly
Initiating Authority	Company policy
Participating Elements	Facility personnel and qualified individual
Scope	Exercise communications between facility personnel and qualified individual
Objectives	Contact must be made with a qualified individual or designee, as designated in the response plan.
Certification	Self-certification.
Verification	Environmental Protection Agency (EPA)
Records	
Retention	5 years
Location	Records to be kept at the facility
Evaluation	Self-evaluation.
Credit	Plan holder should take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit should be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated.

Sec. III-4.10 EPA (Cont'd)

EPA Regulated Facilities	
Spill Management Team Tabletop Exercises	
Applicability	Facility spill management team
Frequency	Annually
Initiating Authority	Company policy
Participating Elements	Spill management team as established in the response plan.
Scope	Exercise the spill management team's organization, communication, and decision-making in managing a spill response.
Objectives	Exercise the spill management team in a review of" • Knowledge of the response plan; • Proper notifications • Communications system • Ability access an OSRO; • Coordination of internal organization personnel with responsibility for spill response; • An annual review of the transition from a local team to a regional, national and international team, as appropriate • Ability to effectively coordinate spill response activity with the National Response System (NRS) infrastructure. (If personnel from the NRS are not participating in the exercise, the spill management team should demonstrate knowledge of response coordination with the NRS.) • Ability to access information in Area Contingency Plan for location of sensitive areas, resources available within the area, unique conditions of area, etc. At least one spill management team tabletop exercise in a triennial cycle would involve simulation of a worst-case discharge scenario.
Certification	Self-certification.
Verification	Environmental Protection Agency (EPA)
Records	
Retention	5 years
Location	At each facility
Evaluation	Self-evaluation.
Credit	Plan holder should take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit should be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated.

Sec. III-4.10 EPA (Cont'd)

EPA Regulated Facilities	
Equipment Deployment Exercises	
Applicability	Facilities with facility owned and operated response equipment.
Frequency	Semi-annually
Initiating Authority	Company policy
Participating Elements	Facility Personnel
Scope	Deploy and operate facility owned and operated response equipment identified in the response plan. The equipment to be deployed would be either (1) the minimum amount of equipment for deployment as described in "Guiding Principles", or (2) the equipment necessary to respond to a small discharge at the facility, whichever is less. All of the facility personnel involved in equipment deployment operations must be included in a comprehensive training program. All of the facility equipment must be included in a comprehensive maintenance program. Credit should be taken for deployment conducted during training. The maintenance program must ensure that the equipment is periodically inspected and maintained in good operating condition in accordance with the manufacturers' recommendations and best commercial practices. All inspection and maintenance must be documented by the owner.
Objectives	Demonstrate ability of facility personnel to deploy and operate equipment. Ensure equipment is in proper working order.
Certification	Self-certification.
Verification	Environmental Protection Agency (EPA)
Records	
Retention	5 years
Location	At each facility
Evaluation	Self-evaluation.
Credit	Plan holder should take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit should be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated.

Note: If a facility with facility owned and operated equipment also identified OSRO equipment in its response plan, the OSRO equipment must also be deployed and operated in accordance with the equipment deployment requirements for OSRO owned equipment.

Sec. III-4.10 EPA (Cont'd)

EPA Regulated Facilities	
Equipment Deployment Exercises	
Applicability	Facilities with OSRO response equipment cited in their response plan.
Frequency	Annually
Initiating Authority	Company policy
Participating Elements	Facility owner or operator and OSRO.
Scope	Deploy and operate response equipment identified in the response plan. The equipment to be deployed would be the minimum amount of equipment for deployment as described in "Guiding Principles." All of the OSRO personnel involved in equipment deployment operations must be included in a comprehensive training program. All of the OSRO equipment must be included in a comprehensive maintenance program. Credit should be taken for equipment deployment conducted during training. The maintenance program must ensure that the equipment is periodically inspected and maintained in good operating condition in accordance with the manufacturer's recommendations and best commercial practices. The facility owner or operator must ensure that inspection and maintenance by the OSRO is documented. The OSRO must provide inspection and maintenance information to the owner or operator. Plan holders must ensure that when a regional OSRO is identified in the response plan, the OSRO conducts annual equipment deployment exercises in each operating environment for each CG or EPA Contingency Planning Area, or EPA sub-area (where identified).
Objectives	Demonstrate the ability of the personnel to deploy and operate response equipment. Ensure the response equipment is in proper working order.
Certification	The facility owner or operator should ensure that the OSRO identified in the response plan provides adequate documentation that the requirements for this exercise have been met.
Verification	Environmental Protection Agency (EPA)
Records	
Retention	5 years, kept at the facility.
Evaluation	Self-evaluation.
Credit	Plan holder should take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit should be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated.

Note: If a facility with facility owned and operated equipment also identified OSRO equipment in its response plan, the OSRO equipment must also be deployed and operated in accordance with the equipment deployment requirements for OSRO owned equipment.

Sec. III-4.10 EPA (Cont'd)

EPA Regulated Facilities	
Government-Initiated Unannounced Exercises	
Applicability	EPA-regulated facility response plan holders within the region.
Frequency	Triennially, if successfully completed. A facility deemed by the CG/EPA not to have successfully completed the exercise may be required to participate in another government initiated unannounced exercise at the discretion of the exercising agency. (Plan holders who have successfully completed a PREP government-initiated unannounced exercise will not be required to participate in another one for at least 36 months from the date of the exercise).
Initiating Authority	EPA
Particip. Elements	EPA-regulated facility response plan holders.
Scope	Unannounced exercises are limited to a maximum of 10% of response plan holders per EPA region per year. Exercises are limited to approximately 4 hours in duration. Exercises should involve response to a small discharge scenario (assume 2,100 gallons outside secondary containment and discharged into or on navigable waters and adjoining shorelines.) Exercise would involve deployment of response equipment identified in the facility response plan to respond to spill scenario. PHMSA and MMS will cover unannounced exercises for pipelines and offshore facilities not a part of a complex in their exercise programs.
Objectives	Conduct proper notifications to respond to unannounced scenario of a small discharge. Demonstrate that the response is: • Timely as defined in Section 1 of these Guidelines; • Conducted with adequate amount of equipment for scenario; and • Properly conducted.
Certification	EPA
Verification	EPA
Records	
Retention	5 years, kept at the facility.
Evaluation	Evaluation to be conducted by initiating agency.
Credit	Credit may be granted by the initiating authority for an actual spill response when the PREP objectives are met, the response is evaluated by the initiating authority and a proper record is generated. Plan holders participating in this exercise may take credit for notification and equipment deployment exercises, if criteria for those exercises are met, the response is evaluated by the plan holder and a proper record is generated.

Sec. III-4.11 Coast Guard

Coast Guard Marine Transportation-Related (MTR) Facilities	
QI Notification Exercises	
Applicability	Facility
Frequency	Quarterly
Initiating Authority	Company policy.
Participating Elements	Facility personnel, qualified individual
Scope	Exercise communication between facility personnel and qualified individual.
Objectives	Contact must be made with a qualified individual or designee, as designated in the response plan.
Certification	Self-certification.
Verification	U.S. Coast Guard
Records	
Retention	3 years
Location	Records to be kept at the facility.
Credit	Plan holder should take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit should be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated. For plan holders handling both oil and hazardous substances, a single QI notification will satisfy exercise requirements for both plans, if both plans rely on the same QI. If the plan holder uses two different QIs, the plan holder is required to exercise both separately.

Sec. III-4.11 Coast Guard (Cont'd)

Coast Guard Marine Transportation-Related (MTR) Facilities	
Emergency Procedures Exercises (Optional)	
Applicability	Facility
Frequency	Quarterly
Initiating Authority	Facility owner or operator.
Particp. Elements	Facility personnel
Scope	Exercise the emergency procedures for the facility to mitigate or prevent any discharge or a substantial threat of such discharge or oil/HAZSUB resulting from facility operational activities associated with oil transfers.
Objectives	Conduct an exercise of the facility's emergency procedures to ensure personnel knowledge of actions to be taken to mitigate a spill. This exercise may be a walk-through of the emergency procedures. Exercise should involve one or more of the sections of the emergency procedures for spill mitigation. For example, the exercise should involved a simulation of a response to an oil spill. The facility should ensure that spill mitigation procedures for all contingencies at the facility are addressed at some time.
Certification	Self-certification.
Verification	U.S. Coast Guard
Records	
Retention	3 years
Location	Records to be kept at the facility.
Evaluation	Self-evaluation
Credit	Plan holder should take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit should be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated. **This section describes an option exercise to provide facilities with an exercise that may be conducted <u>unannounced</u> to fulfill the internal unannounced exercise requirement.** At facilities covered by both oil and hazardous substance plans, separate oil and hazardous substance exercises are not required. However, the shipboard personnel should alternate oil and hazardous substance scenarios each quarter.

Sec. III-4.11 Coast Guard (Cont'd)

Coast Guard Marine Transportation-Related (MTR) Facilities	
Spill Management Team Tabletop Exercise	
Applicability	Facility spill management team
Frequency	Annually
Initiating Authority	Company policy
Participating Elements	Spill management team as established in the response plan.
Scope	Exercise the spill management team's organization, communication, and decision-making in managing a spill response.
Objectives	Exercise the spill management team in a review of: • Knowledge of the response plan; • Proper notifications; • Communications system; • Ability to access an OSRO/HSRO; • Coordination of internal organization personnel with responsibility for spill response; • An annual review of the transition from a local team to a regional, national, and international team, as appropriate; • Ability to effectively coordinate spill response activity with the National Response System (NRS) infrastructure. (If personnel from the NRS are not participating in the exercise, the spill management team should demonstrate knowledge of response coordination with the NRS); • Ability to access information in the Area Contingency Plan for location of sensitive areas, resources available within the area, unique conditions of area, etc. • At least one spill management team tabletop exercise in a triennial cycle would involve simulation of a worst-case discharge scenario.
Certification	Self-certification.
Verification	U.S. Coast Guard
Records	
Retention	3 years
Location	Records to be kept at the facility.
Evaluation	Self-evaluation
Credit	Plan holder should take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit should be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated. Plan holders are responsible for ensuring that SMTs are familiar with Area Committees/Regional Response Teams (*RRTs) and Area Contingency Plans in every area in which the plan holder operates. While it is not practicable to require an SMT to exercise in every area/region in which they offer cover each year, each SMT is expected to review ACPs annually and the make-up of Area Committees/RRTs in all areas in which they offer coverage. Self-certification for exercise credit should include SMT certification that the SMT has completed annual review and is familiar with the ACPs and Area Committees in all areas in which the plan holder operates.

Sec. III-4.11 Coast Guard (Cont'd)

Coast Guard Marine Transportation-Related (MTR) Facilities	
Equipment Deployment Exercises	
Applicability	Facilities with facility owned and operated response equipment.
Frequency	Semiannually
Initiating Authority	Company policy
Particp. Elements	Facility personnel
Scope	Deploy and operate facility owned and operated response equipment identified in the response plan. The equipment to be deployed would be either (1) the minimum amount of equipment for deployment as described in "Guiding Principles", or (2) the equipment necessary to response to an average most probably discharge at the facility, whichever is less. All of the facility's personnel involved in equipment deployment operations must be included in a comprehensive training program. All of the facility's equipment must be included in a comprehensive maintenance program. Credit should be taken for deployment conducted during training. The maintenance program must ensure that the equipment is periodically inspected and maintained in good operating condition in accordance with the manufacturer's recommendations and best commercial practices. All inspection and maintenance must be documented by the owner.
Objectives	Demonstrate ability of facility personnel to deploy and operate equipment. Ensure equipment is in proper working order. Deployment should also include testing ACP containment, protection and diversion strategies.
Certification	Self-certification.
Verification	U.S. Coast Guard
Records	
Retention	3 years
Location	Records to be kept at the facility.
Evaluation	Self-evaluation
Credit	Plan holder should take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit should be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated. **Note: If a facility with facility owned and operated equipment also identifies OSRO equipment in its response plan, the OSRO equipment must also be deployed and operated in accordance with the equipment deployment requirements for OSRO owned equipment.**

Sec. III-4.11 Coast Guard (Cont'd)

Coast Guard Marine Transportation-Related (MTR) Facilities	
Equipment Deployment Exercises	
Applicability	Facilities with OSRO/HSRO response equipment cited in their response plan.
Frequency	Annually
Initiating Authority	Company policy
Participating Elements	Facility owner or operator and OSRO/HSRO.
Scope	Deploy and operate response equipment identified in the response plan. The equipment to be deployed would be the minimum amount of equipment as described in "Guiding Principles." All of the OSRO/HSRO personnel involved in equipment deployment operations must be included in a comprehensive training program. All of the OSRO/HSRO equipment must be included in a comprehensive maintenance program. Credit should be taken for equipment deployment conducted during training. The maintenance program must ensure that the equipment is periodically inspected and maintained in good operating condition in accordance with the manufacturer's recommendations and best commercial practices. The facility owner or operator must ensure that inspection and maintenance by the OSRO/HSRO is documented. The OSRO/HSRO must provide inspection and maintenance information to the owner or operator. Plan holders must ensure that when a regional OSRO/HSRO is identified in the response plan, the OSRO/HSRO conducts annual equipment deployment exercises in each operating environment for each CG Contingency Planning Area.
Objectives	Demonstrate ability of personnel to deploy and operate equipment. Ensure the response equipment is in proper working order. Whenever feasible, equipment deployment should also include ACP containment, protection and diversion strategies.
Certification	The facility owner or operator should ensure that the OSRO/HSRO identified in the response plan provides adequate documentation that the requirements for this exercise have been met.
Verification	U.S. Coast Guard
Records	
Retention	3 years
Location	Records to be kept at the facility.
Evaluation	Self-evaluation
Credit	Plan holder should take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit should be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated.

Sec. III-4.11 Coast Guard (Cont'd)

Coast Guard Marine Transportation-Related (MTR) Facilities	
Government-Initiated Unannounced Exercises	
Applicability	Vessel and MTR facility response plan holders within the area.
Frequency	Triennially, if successfully completed. A facility deemed by the CG/EPA not to have successfully completed the exercise may be required to participate in another government initiated unannounced exercise at the discretion of the exercising agency. (Plan holders who have successfully completed a PREP government-initiated unannounced exercise will not be required to participate in another one for at least 36 months from the date of the exercise.)
Initiating Authority	U.S. Coast Guard
Participating Elements	Vessel and MTR facility response plan holders.
Scope	Unannounced exercises are limited to a maximum of four exercises per area per year. Exercises are limited to approximately 4 hours in duration. Exercises must involved response to an average AMD scenario. PHMSA and MMS would cover unannounced exercises for pipelines and offshore facilities not part of a complex in their exercise program.
Objectives	Conduct proper notifications to response to unannounced scenario of an average most probable discharge. Demonstrate response is: • Timely – As a general rule, the regulatory planning standard is containment equipment (e.g., booms) on scene within one hour of notification and recovery equipment (skimmers and temporary storage) on scene within two hours. Therefore in a government-initiated unannounced exercise, plan holder should be able to initiate simulated clean up within approximately two hours of exercise commencement. • Conducted with adequate amount of equipment for scenario; • Properly conducted. Whenever feasible, equipment deployment should also include testing ACP containment, protection and diversion strategies.
Certification	U.S. Coast Guard
Verification	U.S. Coast Guard
Records	
Retention	3 years
Location	For facilities, at the facility. For vessels, in accordance with 33 CFR 155.1060(e)(2)
Evaluation	Evaluation to be conducted by initiating agency.
Credit	Credit may be granted by the initiating authority for an actual spill response when the PREP objectives are met, the response is evaluated by the initiating authority and a proper record is generated. Plan holders participating in this exercise may take credit for notification & equipment deployment exercises, if criteria for those exercises are met, the response is evaluated by the plan holder and a proper record is generated.

Sec. III-4.12 DOT (PHMSA)

Onshore Transportation Related Pipelines	
Owner or Operator Internal Notification Exercises	
Applicability	Pipeline owner or operator
Frequency	As indicated by the response plan and, at a minimum, consistent with the triennial cycle (quarterly)
Party Initiating Exercise	As indicated in the response plan
Participants	Facility response personnel and the facility's qualified individual
Scope	Exercise notification process between key facility personnel and the qualified individual to demonstrate the accessibility of the qualified individual
Objectives	Contact by telephone, radio, message-pager, or facsimile and confirmation established as indicated in response plan
Format	As indicated in response plan
Certification	Self-certification as indicated in response plan. Each plan should have a written description of the company's certification process.
Verification	Verification conducted by Pipeline and Hazardous Materials Safety Administration (PHMSA) during regular inspections* or PHMSA tabletop exercises. *Verification will not be done by inspections in the near term.
Records	
Retention	3 years
Location	Owner or operator shall retain records as indicated in response plan. PHMSA to retain verification records.
Credit	Plan holder should take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit should be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated.

Sec. III-4.12 DOT (PHMSA)[Cont'd]

Onshore Transportation Related Pipelines	
Internal Tabletop Exercises	
Applicability	Pipeline owner or operator
Frequency	As indicated by the response plan and, at a minimum, consistent with the triennial cycle (quarterly)
Party Initiating Exercise	As indicated in the response plan
Participants	Designated spill emergency response team members.
Scope	Demonstration of the response team's ability to organize, communicate, and make strategic decisions regarding population and environmental protection during a spill event.
Objectives	Designated emergency response team members should demonstrate: • Knowledge of facility response plan; • Ability to organize team members to effectively interface with a unified command; • Communication capability; and • Coordinate for response capability as outlined in response plan.
Format	Internal tabletop exercise as outlined in response plan.
Certification	Self-certification as indicated in response plan or as defined in the "Guiding Principles" section of this document, whichever is more stringent. Each plan should have a written description of the company's certification process.
Verification	Verification conducted by PHMSA during regular inspections* or PHMSA tabletop exercises. *Verification will not be done by inspections in the near term.
Records	
Retention	3 years
Location	Owner or operator shall retain records as indicated in response plan. PHMSA to retain verification records.
Credit	Plan holders should take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit should be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated.

Sec. III-4.12 DOT (PHMSA)[Cont'd]

Onshore Transportation Related Pipelines	
Owner/Operator Equipment Deployment Exercises	
Applicability	Pipeline owner or operator
Frequency	As indicated by the response plan and, at a minimum, consistent with the triennial cycle (quarterly). *The number of equipment deployment exercises should be such that equipment and personnel assigned to each response zone are exercised at least once per year. If the same personnel and equipment respond to multiple zones, they need only exercise once per year. If different personnel and equipment respond to various response zones, each must participate in an annual equipment deployment exercise.
Party Initiating Exercise	As indicated in the response plan
Participants	Designated spill emergency response team members.
Scope	Demonstrate ability to deploy spill response equipment* identified in the FRP. *May consist entirely of operator owned equipment, or a combination of OSRO and operator equipment.
Objectives	Designated emergency response personnel should demonstrate: • Ability to organize, and; • Ability to deploy and operate representative types of key response equipment as described in response plan.
Format	Announced deployment exercise indicated in response plan.
Certification	Self-certification as indicated in response plan. Each plan should have a written description of the company's certification process.
Verification	Verification conducted by PHMSA during regular inspections* or PHMSA tabletop exercises. *Verification will not be done by inspections in the near term.
Records	
Retention	3 years
Location	Owner or operator shall retain records as indicated in response plan. PHMSA to retain verification records.
Credit	Plan holders should take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit should be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated.

Sec. III-4.12 DOT (PHMSA)[Cont'd]

Onshore Transportation Related Pipelines	
Unannounced Exercises	
Applicability	Pipeline owner or operator
Frequency	Maximum of 20 unannounced PHMSA exercises conducted annually for the pipeline industry as a whole. A single owner or operator will not be required to participate in a PHMSA- initiated unannounced exercise, if they have already participated in one within the previous 36 months.
Party Initiating Exercise	PHMSA
Participants	Designated spill emergency response team members. Operations staff. On-Scene Coordinator (optional). State and local government (optional).
Scope	Demonstrate ability to respond to a worst-case discharge spill event.
Objectives	Designated emergency response team members should demonstrate adequate knowledge of their facility response plan and the ability to organize, communicate, coordinate, and respond in accordance with that plan.
Format	Unannounced tabletop exercise to discuss strategic issues.
Certification	Certification can be effectuated by PHMSA personnel conducting the exercise. PHMSA will provide written certification of the exercise date, participants, and response zone exercised.
Verification	Verification can be made by PHMSA personnel conducting the exercise.
Records	
Retention	3 years
Location	Owner or operator shall retain records as indicated in response plan. PHMSA to retain verification records.
Credit	Plan holders should take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit should be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated.

Section IV – Table of Contents

Sec. IV-1 Company Forms

Spill Response Equipment Inspection

If the facility lists response equipment in this plan, then the equipment shall be inspected on an annual basis. Equipment found to be defective would be repaired or replaced. Documentation of equipment inspection/maintenance records is available at the facility. An example of the response equipment inspection log has been included below:

FACILITY-OWNED EQUIPMENT INSPECTION LOG				
Equipment Location:			**Response Time**	
Inspected By:	**Print**		**Sign**	
Inspection Date:				
Recovery Capacity (EDRC):	Ex: 7,645 bpd x 20% daily recovery rate = 1,529 bpd EDRC (based on a 20% efficiency)			
Equipment Type	**Description - Model, Style, Size, Capacity, Shelf Life**	**Qty**	**Operational Status**	**Last Deployment Date**
EXAMPLE: Boom	*50' Acme 6x6 booms*	*100'*	*Good*	*7/01/11*

Retention: 5 years
Inspection Frequency: DOT/PHMSA: Annual

Aboveground Atmospheric Storage Tank
Monthly Routine In-Service Inspection

GPL-199

Rev 4 2011-05-13

Ref: 49CFR195.432 or 40 CFR112.1.8.1(f)(FRP), 112.7(e)(SPCC) and API-653
Also Use this Form for Annual Inspection of Small Storage Tanks Sized 10,000 gallons or less

Tank No: _____ **Location:** _____

Service: ☐ Break-Out ☐ Storage

Corrective action is required for any adverse condition noted (visible leaks or any notation on columns 4-9)
NOTE: Access onto a floating roof is not required by this form

(1) Employee Initials	(2) Date	(3) Visible Leaks (Yes/No)	(4) Shell Distortion	(5) Pressure/ Vaccum Relief Valves	(6) Corrosion (Handrails, Sketchplates, Attachments, Stairs, etc.)	(7) Tank Foundation Tank Pipe Supports Tank Dikes	(8) Coating Insulation Condition	(9) Nozzles, Tank Valves, Roof Drains & Tank Piping

Comments: Address all unsatisfactiory conditions above and corrective actions (SAP WO Number)

Date	Comments

NOTE: Any deficiencies noted during the inspection shall be reported to immediate company supervision and the TIG.
ANY LEAKS DISCOVERED DURING INSPECTION NEED TO BE REPORTED IMMEDIATELY.

Official Document Location: Livelink 34509973
Form: ADM090 MAX 12Y
Completed Form Retention: **HSE405 3Y** (required by EPA 40CFR 112.7(e) (SPCC Plan)
HSE480 5Y (required by facility emergency response plan 40 CFR 112.1.8.1(f) or if facility operates under a Title V Air Permit)

Doc. No.: GPL-205
Rev.: 2

Transportation - Pipelines and Terminals

PI Form - GPL-205 - Annual Tank Inspection Report

1. TERMINAL/FACILITY: _____

2. TANK #: _____

3. INSPECTOR: _____

4. SERVICE: _____

TANK TYPE: ____ External ____ Internal ____ Cone Roof ____ Spheroid ____ Sphere ____ Other

DATE: _____

5. CAPACITY: _____

(CHECK APPROPRIATE ANSWER OR MARK THROUGH THE QUESTION IF IT DOES NOT APPLY.)

TANK APPURTENANCES (ATMOSPHERIC STORAGE)

	YES	NO
6. Are the relief valve vent screens clean?	☐	☐
7. Do the combination pressure/vacuum pallets move freely to an open or closed position?	☐	☐
8. Are the liquid thermal relief valves on tank piping properly mounted to prevent piping overpressure?	☐	☐
9. Is a flame arrestor on the tank (see Std. 26.01-18)?	☐	☐
A. Do state regulations or local ordinance require it?	☐	☐
B. Can it be removed by applying a design hazard review or a Management of Change (MOC)?	☐	☐
10. Is tank gauge in satisfactory condition?	☐	☐
11. Is water drain valve in satisfactory condition?	☐	☐
12. Is roof drain apparently in satisfactory condition? (i.e., no staining at the base exit of the roof drain piping)	☐	☐

FILL IN ITEMS 14 THRU 27 FOR FIXED OR EXTERNAL FLOATING ROOFS

	YES	NO
13. Is the external roof resting on the surface of the stored liquid?	☐	☐
14. Is gauge hatch in satisfactory condition?	☐	☐
15. Is roof paint in satisfactory condition?	☐	☐
16. Is check valve mounted in roof sump, is it free of debris, and does the internal "clapper" operate freely?	☐	☐
17. Is roof leak-free? Any patches or epoxy-type repairs noted?	☐	☐
18. Are pontoon compartments free of hydrocarbon liquids?	☐	☐
19. Does floating roof deck area drain accumulated water well?	☐	☐
20. Is roof travel apparently free at all shell height positions?	☐	☐
21. Are roof drain sump(s) clear of debris?	☐	☐
22. Does roof have large quantities of accumulated dirt on deck area?	☐	☐
23. Is primary/secondary seal in satisfactory condition?	☐	☐
If not, how much is bad (in linear footage)?	ft	
24. Is seal fabric compatible for intended product service?	☐	☐
25. Are "grounding" shunts installed and spaced accordingly?	☐	☐
26. Are "pinholes" spotted on floating decks area? Accumulated liquid?	☐	☐

27. Additional comments: _____

FILL IN ITEM 28 FOR INTERNAL FLOATING ROOFS

28. Through manholes or roof hatches on the fixed roof, visually inspect the internal floating roof and primary seal or the secondary seal (if one is in service) for the following:

	YES	NO
(A) Is the internal floating roof not resting on the surface of the liquid inside the storage tank?	☐	☐
(B) Is there any liquid accumulated on top of the roof?	☐	☐
(C) Is the seal detached?	☐	☐
(D) Are there holes or tears in the seal fabric?	☐	☐
(E) Are there any defects in the floating roof?	☐	☐
(F) IFR to shell bonding issues (cables or shunts, etc)?	☐	☐

*If the answer to any of the above questions is yes, note corrective actions and date taken. _____

NOTE: Documentation is required to ensure that repairs are made within 45 days of identifying a defect. If a defect is found that cannot be repaired in 45 days, notify the area environmental coordinator.

FILL IN ITEMS 29 THRU 31 FOR LIFTER ROOF TANKS ONLY

A "Lifter Roof" is a fixed roof that moves and collects vapors.

	YES	NO
29. Is the relief valve opening mechanism in satisfactory condition?	☐	☐
30. Are the fixed roof stops in satisfactory condition?	☐	☐
31. Is roof travel apparently free at all positions?	☐	☐
32. For liquid seal, is the Launder apparently leak free?	☐	☐
33. Is liquid seal (i.e., diesel fuel) retaining specific gravity over time?	☐	☐

34 Additional comments: _____

SHELL

	YES	NO
35. Is the shell free of leaks?	☐	☐
36. Any flat or visible dents on tank shell?	☐	☐
37. Full appearance of girth welds/rivet joints on the vertical/horizontal weld/rivet seams?	☐	☐
38. Is external "sketchplate or chime" experiencing corrosion?	☐	☐
39. Is the wind girder satisfactorily guarded from corrosion or water accumulation?	☐	☐
40. Is the general condition of paint satisfactory?	☐	☐

41. Additional comments: _____

TANK BOTTOM/FOUNDATION AREA

	YES	NO
42. Is the edge tank bottom perimeter free of visible leaks?	☐	☐
43. Is tank berm properly sloped to divert storm water?	☐	☐
44. Are there any physical deformities caused by severe edge settlement?	☐	☐
45. Does the tank have a concrete ringwall?	☐	☐
If YES, please answer the following subparts:		
A. Are any sections of ringwall missing?	☐	☐
B. Are cracks wider than 1/8" in diameter visible around the tank perimeter?	☐	☐
C. Is there evidence of water migration into ringwall cracks?	☐	☐
46. If tank is on earthen foundation, are there any locations where tank is unsupported from soil?	☐	☐
47. If tank has leak detection system, checked & no leaks found?*	☐	☐

48. Additional comments: _____

* Be sure to seal tank double containment area after checking leak detection ports

FIRE PROTECTION - If Applicable to Storage Tank

	YES	NO
49. Are foam line(s) and connections braced satisfactorily?	☐	☐
50. Do foam chambers appear clean and unobstructed?	☐	☐
51. Does tank dike area drain satisfactorily?	☐	☐
52. Is the foam bladder vessel filled to 95% capacity?	☐	☐
53. Are adequate portable fire extinguishers located at the base of the tank stairway or inside the tank farm?	☐	☐
54. Have the internal glass membrane plates remained unbroken in the side-mounted enclosed-shell foam chambers?	☐	☐
55. Is dike capacity maintained to original design capacity?	☐	☐
56. Are adequate "No Smoking" and "Hot Work Permit" signs posted at tank dike entranceway?	☐	☐

57. Additional comments: _____

Distribution: Orig - Facility
Ref. Copy - Region Office (R) Regional Equipment Inspector

Retain inspection report for 2-year period if required by DOT 49CFR 195.404; or EPA 40 CFR 60.115b (NSPS)

Retain inspection report for 3-year period if required by EPA 40CFR 112.7(e) (SPCC Plan)

Retain inspection report for 5 years if required by facility emergency response plan 40 CFR 112.1.8.1(f) or if facility operates under a Title V Air Permit

TRANSPORTATION – PIPELINES & TERMINALS
EPR&S PREP - COMPANY TRAINING ROSTER/LOG

TRAINING DATE(S): _____ (YYYY-MM-DD) **START TIME:** _____ **END TIME:** _____

LOCATION: _____

_____

COMPANY CONTACT: _____ **PHONE:** _____

Roster/Log Instructions: Check all training that was successfully completed by participants in attendance. The Course description is associated with the Learning Management System (LMS) Course Express Number.

TRAINING COURSE TITLE/ LEARNING MANAGEMENT SYSTEM COURSE EXPRESS NUMBER:

- ☐ Incident Command System / TPTER000012
- ☐ OPA '90 Plan Review / TPTER000023
- ☐ Unannounced Tabletop Exercise / TPTER000021 (1/Y)
- ☐ Tabletop Exercise / TPTER000015
- ☐ Unannounced Equipment Deployment Exercise / TPTER000019
- ☐ Equipment Deployment Exercise / TPTER000013
- ☐ Unannounced Agency Drill / TPTER000018
- ☐ Spill Response Participation in an Actual OPA 90 Event / TPTER000022
- ☐ Security – Site Personnel / TPTER000030
- ☐ Security - Annual Exercise / TPTER000025
- ☐ Security - Marine FSO / TPTER000031
- ☐ Security - Marine Quarterly Drill / PTER000026
- ☐ Spill Prevention Briefing and SPCC Review / TPTHSE000323
- ☐ Other: _____

All classes listed above may be applied towards HAZWOPER Refresher Training.

- ☐ Hazwoper, 4-hr Refresher / TPTERHAZWOPER4
- ☐ Hazwoper, 8-hr Refresher (WA ONLY) / TPTERHAZWOPER8
- ☐ Certification-24 Hour HAZWOPER Technician Level / TPTER000003
- ☐ HAZWOPER QI-IC / TPTHSE000212
- ☐ HAZWOPER Supervisor Certification / TPTER000024
- ☐ Other: _____

☐ **Company Contact:** Send a copy of the completed Training Roster to an EPR&S Coordinator via Company Global Scan or Fax: 918-662-6807. Retain the original copy in the facility files.

► *For EPR&S and LMS use only:* ☐ *Review/Submit to LMS Training Administrator* *Initials:* _____ *Date:* _____

☐ *LMS Entry Completed* *Initials:* *Date:*

LIST OF ATTENDEES TRAINED / COMPLETED SUCCESSFULLY
(* = Did not complete)

LAST NAME, FIRST NAME (PRINT)	EMPLOYEE ID NO. *OR* COMPANY NAME	JOB TITLE & LOCATION	SIGNATURE
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
LAST NAME, FIRST NAME (PRINT)	EMPLOYEE ID NO. *OR* COMPANY NAME	JOB TITLE & LOCATION	SIGNATURE

TRANSPORTATION – PIPELINES & TERMINALS
EPR&S PREP - COMPANY TRAINING ROSTER/LOG

TRAINING DATE(S): _____ (YYYY-MM-DD) **START TIME:** _____

END TIME: _____

LOCATION: _____

_____

COMPANY CONTACT: _____ **PHONE:** _____

15.			
16.			
17.			
18.			
19.			
20.			
21.			
22.			
23.			
24.			
25.			
26.			
27.			
28.			
29.			
30.			
31.			
32.			
33.			
34.			
35.			
36.			
37.			
38.			
39.			
40.			
41.			
42.			
43.			
44.			

QUALIFIED INDIVIDUAL - NOTIFICATION EXERCISE

Facility Name: _____ **Date:** _____

☐ **Exercise** ☐ **Actual Response** **Quarter:** ☐ **1st** ☐ **2nd** ☐ **3rd** ☐ **4th**

Conducted After Normal Working Hours ☐ Yes ☐ No ☐ Yes ☐ No ☐ Yes ☐ No ☐ Yes ☐ No

(One of the quarterly QI Notification Exercises must be conducted after normal working hours.)

Exercise Initiated by ☐ **Terminal** ☐ **Pipeline** **Person Initiating Contact:** _____ (Name/Position)

Person Notified: _____ (Name/Position)

Is this person identified in your response plan as qualified individual; or designee? ☐ Yes ☐ No

Time Initiated: _____ **Number(s) Called** _____

Initiation Communication used: ☐ Telephone ☐ Radio ☐ Pager ☐ Other: _____

Call Complete: ☐ Yes ☐ No **Message Left:** _____

Time in which QI or designee responded: _____ **Number Called:** _____

Response Communication used: ☐ Telephone ☐ Radio ☐ Pager ☐ Other: _____

Other Notification: _____ (Name/Position)

Type of Communication used: ☐ Telephone ☐ Radio ☐ Pager ☐ Other: _____

Time Called: _____ **Number(s) Called** _____

Notification Complete: ☐ Yes ☐ No **Message Left:** _____

Response Time: _____ **Response Number Called:** _____

Emergency Scenario: _____

Changes to be implemented: _____

Time Table for Implementation: _____

Corrective Follow-up assignment _____

Facility Supervisor Signature: _____ **Date:** _____

SPILL MANAGEMENT TEAM (SMT) - TABLE TOP EXERCISE

Plan Name: _____ **Date:** _____

☐ **Announced Exercise** ☐ **Unannounced Exercise** ☐ **Actual Response**

Location: _____

Start time: _____ ☐ AM ☐ PM **Stop time:** _____ ☐ AM ☐ PM

Response Plan Scenario Used:
- ☐ Small Spill / Average Most Probable Discharge
- ☐ Medium Spill / Maximum Most Probable Discharge
- ☐ "Worst-Case" Discharge (WCD)

Product: _____ **Amount:** _____ bbls

1. **Did the Spill Management Team (SMT) utilize the ERP during the exercise?** ☐ Yes ☐ No
2. **Were internal and external notifications completed per the ERP?** ☐ Yes ☐ No
3. **Were communication systems adequate?** ☐ Yes ☐ No
4. **Were the Company Oil Spill Removal Organizations (OSRO) notified?** ☐ Yes ☐ No
5. **Was there good coordination with On-Scene Coordinator, State and applicable agencies?** ☐ Yes ☐ No
6. **Were sensitive site and resource information in the ERP accessed as needed?** ☐ Yes ☐ No
7. **Select which of the 15 PREP core components were employed during this particular exercise:**
   - ☐ Notifications
   - ☐ Staff mobilization
   - ☐ Operate within Response Management System
   - ☐ Discharge control
   - ☐ Assessment of discharge
   - ☐ Containment of discharge
   - ☐ Recovery of spilled material
   - ☐ Protection of sensitive areas
   - ☐ Disposal of recovered material & contaminated debris
   - ☐ Communications
   - ☐ Transportation
   - ☐ Personnel support
   - ☐ Equipment maintenance & support
   - ☐ Procurement
   - ☐ Documentation
8. **Evaluation:** Refer to the attached Exercise Critique for this information.
9. **Changes to be Implemented and person responsible for follow-up of corrective action:**

   _____

   _____

   _____
10. **Time Table for Implementation:**

    _____

    _____

    _____
11. **Self Certifying Signature:** _____

    Print Name / Position: _____

EQUIPMENT DEPLOYMENT EXERCISE (PREP-EDX)

PLAN NAME: _____ **DATE:** _____

EXERCISE TYPE: ☐ **Announced** ☐ **Unannounced** **or** ☐ **Actual Response**

DEPLOYMENT LOCATION: _____

TIME STARTED: _____ ☐ AM ☐ PM **TIME OSRO CALLED:** _____ ☐ AM ☐ PM ☐ N/A

TIME ON-SCENE: _____ ☐ AM ☐ PM **TIME BOOM DEPLOYED:** _____ ☐ AM ☐ PM ☐ N/A

TIME OSRO/RECOVERY EQUIPMENT ARRIVES ON-SCENE FOR DEPLOYMENT: _____ ☐ AM ☐ PM ☐ N/A

TIME COMPLETED EXERCISE: _____ ☐ AM ☐ PM

EQUIPMENT DEPLOYED:

☐ Company-Owned ☐ Co-op Equipment
☐ OSRO/Contractor owned ☐ Both Company & Co-op Equipment
☐ Both Company, OSRO/Contractor ☐ Company, OSRO/Contractor & Co-op

Name of participating OSRO, Co-op and/or Contractor: _____

DESCRIBE THE GOALS OF THE EQUIPMENT DEPLOYMENT AND LIST ANY AREA CONTINGENCY PLAN (ACP) STRATEGIES TESTED. (Refer to the ICS 201-1 form for sketch of equipment deployment location(s) and booming strategies.)

EXERCISE EVALUATION:

1. DEPLOYMENT OF FACILITY-OWNED EQUIPMENT:

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

Refer to the attached ICS Forms: 211-E (for a list of equipment deployed), 211-P (for personnel employed) or the 201-4 (Resource Summary).

b. All facility/pipeline personnel that are responsible for response operations are involved in a comprehensive training program? ☐ Yes ☐ No

If so, describe: _____

c. All pollution response equipment involved in a comprehensive maintenance program? ☐ Yes ☐ No

If so, describe the program: _____

d. Date of last equipment inspection: _____

e. Was the amount of equipment deployed at least the amount necessary to respond to the pipeline's/ facility's average most probable spill? ☐ Yes ☐ No

If not, describe why: _____

f. Was the equipment deployed by personnel responsible for its deployment in the event of an actual spill? ☐ Yes ☐ No

If not, describe why: _____

g. Was the equipment deployed in its intended operating environment? ☐ Yes ☐ No

If not, explain why: _____

h. Was all deployed equipment operational? ☐ Yes ☐ No

If not, explain why: _____

2. DEPLOYMENT OF OSRO AND/OR COOP-OWNED EQUIPMENT:

a. List type & amount of all equipment deployed (e.g., boom & skimmers) and number of support personnel employed.
Refer to the attached ICS Forms: 211-E (for a list of equipment deployed), 211-P (for personnel employed) or 201-4 (Resource Summary).

b. All response organization personnel that are responsible response operations involved in a comprehensive training program? ☐ Yes ☐ No
If so, describe the program: _____

c. All pollution response equipment involved in a comprehensive maintenance program? ☐ Yes ☐ No
If so, describe the program: _____

d. Date of last equipment inspection: _____

e. Was a representative sample (at least 1,000 ft. of each boom type and one of each skimmer type) deployed? ☐ Yes ☐ No
If not, describe why: _____

f. Was the equipment deployed by personnel responsible for its deployment in the event of an actual spill? ☐ Yes ☐ No
If not, describe why: _____

g. Was the equipment deployed in its intended operating environment? ☐ Yes ☐ No
If not, describe why: _____

h. Was all deployed equipment operational? ☐ Yes ☐ No
If not, explain why: _____

3. Select which of the 15 core components of the response plan were employed during this exercise:

- ☐ Notifications
- ☐ Staff mobilization
- ☐ Operate within Response Management System
- ☐ Discharge control
- ☐ Assessment of discharge
- ☐ Containment of discharge
- ☐ Recovery of spilled material
- ☐ Protection of sensitive areas
- ☐ Disposal of recovered material & contaminated debris
- ☐ Communications
- ☐ Transportation
- ☐ Personnel support
- ☐ Equipment maintenance & support
- ☐ Procurement
- ☐ Documentation

4. EDX CRITIQUE

(Description of lessons learned, procedures and schedule for implementation, and person(s) responsible for follow-up of corrective actions.

a. What went well?

_____

_____

_____

b. Areas for improvement?

_____

c. Corrective actions	**d. Implementation schedule**	**e. Person responsible for follow up of corrective actions**

5. SELF-CERTIFYING SIGNATURE: _____ DATE: _____

Print Name/Position: _____

Sec. IV-2 Industry Forms

NATIONAL PREPAREDNESS FOR RESPONSE EXERCISE PROGRAM (PREP)				
15 PREP COMPONENTS EVALUATION WORKSHEET				
Incident/Drill Name:		**Prepared by:**	**at:**	
Period: **to**		**Company Name:**		
ORGANIZATION DESIGN				
1) Notifications				
Components	**ICS/UCS Position Responsible**	**Completed (Y/N)**	**Date/Time Completed**	**Comments**
1a. Test the notifications procedures identified in the Area Contingency Plan and the associated Responsible Party Response Plan.				
2) Staff mobilization				
Components	**ICS/UCS Position Responsible**	**Completed (Y/N)**	**Date/Time Completed**	**Comments**
2a. Demonstrate the ability to assemble the spill response organization identified in the Area Contingency Plan and associated Responsible Party Response Plan.				
3) Ability to operate within the response management system described in the plan				
Components	**ICS/UCS Position Responsible**	**Completed (Y/N)**	**Date/Time Completed**	**Comments**
3.1 Unified Command: Demonstrate the ability of the spill response organization to work within a unified command.				
3.1.1 Federal Representation: Demonstrate the ability to consolidate the concerns and interests of the other members of the unified command into a unified strategic plan with tactical operations.				
3.1.2 State Representation: Demonstrate the ability to function within the unified command structure.				
3.1.3 Local Representation: Demonstrate the ability to within the unified command structure.				
Page 1 of 8				

NATIONAL PREPAREDNESS FOR RESPONSE EXERCISE PROGRAM (PREP)

15 PREP COMPONENTS EVALUATION WORKSHEET (Cont'd)

3) Ability to operate within the response management system described in the plan (Cont'd)

Components	ICS/UCS Position Responsible	Completed (Y/N)	Date/Time Completed	Comments
3.1.4 Responsible Party Representation: Demonstrated to function within the unified command structure organization to control and stop the discharge at the source.				
3.2. **Response Management System:** Demonstrate the ability of the response organization to operate within the framework of the response management system identified in their respective plans.				
3.2.1 Operations: Demonstrate the ability to coordinate or direct operations related to the implementation of action plans contained in the respective response and contingency plans developed by the unified command.				
3.2.2 Planning: Demonstrate the ability to consolidate the various concerns of the members of the unified command into joint planning recommendations and specific long-range strategic plans. Demonstrate the ability to develop short-range tactical plans for the operations division.				
3.2.3 Logistics: Demonstrate the ability to provide the necessary support of both the short-term and long-term action plans.				
3.2.4 Finance: Demonstrate the ability to document the daily expenditures of the organization and provide cost estimates for continuing operations.				
3.2.5 Public Affairs: Demonstrate the ability to form a joint information center and provide the necessary interface between the unified command and the media.				
3.2.6 Safety Affairs: Demonstrate the ability to monitor all field operations and ensure compliance with safety standards.				
3.2.7 Legal Affairs: Demonstrate the ability to provide the unified command with suitable legal advice and assistance.				

NATIONAL PREPAREDNESS FOR RESPONSE EXERCISE PROGRAM (PREP)

15 PREP COMPONENTS EVALUATION WORKSHEET (Cont'd)

4) Discharge control

Components	ICS/UCS Position Responsible	Completed (Y/N)	Date/Time Completed	Comments
4. Demonstrate the ability of the spill response organization to control and stop the discharge at the source.				
4.1 Salvage: Demonstrate the ability to assemble and deploy salvage resources identified in the response plan.				
4.2 Firefighting: Demonstrate the ability to assemble and deploy the firefighting resources identified in the response plan.				
4.3 Lightering: Demonstrate the ability to assemble and deploy the lightering resources identified in the response plan.				
4.4 Other salvage equipment and devices: (electrical and manual controls and barriers to control the source) Demonstrate the ability to assemble and deploy the other salvage devices identified in the response plan.				

5) Assessment of discharge

Components	ICS/UCS Position Responsible	Completed (Y/N)	Date/Time Completed	Comments
5. Demonstrate the ability of the spill response organization to provide an initial assessment of the discharge and provide continuing assessments of the effectiveness of the tactical operations plan for use.				

6) Containment of discharge

Components	ICS/UCS Position Responsible	Completed (Y/N)	Date/Time Completed	Comments
6. Demonstrate the ability of the spill response organization to contain the discharge at the source or In various locations for recovery operations.				

NATIONAL PREPAREDNESS FOR RESPONSE EXERCISE PROGRAM (PREP)

15 PREP COMPONENTS EVALUATION WORKSHEET (Cont'd)

7) Recovery of spilled material

Components	ICS/UCS Position Responsible	Completed (Y/N)	Date/Time Completed	Comments
7. Demonstrate the ability of the spill response organization to recover, mitigate, and remove the discharged product. Includes mitigation and removal activities, e.g. dispersant use, ISB use, and bioremediation use.				
7.1 On-Water Recovery: Demonstrate the ability to assemble and deploy the on-water response resources identified In the response plans.				
7.2 Shore-Based Recovery: Demonstrate the ability to assemble and deploy the shoreside response resources identified in the response plans.				

8) Protection of sensitive areas

Components	ICS/UCS Position Responsible	Completed (Y/N)	Date/Time Completed	Comments
8. Demonstrate the ability of the spill response organization to protect the environmentally and economically sensitive areas identified in the Area Contingency Plan and the respective industry response plan.				
8.1 Protective Booming: Demonstrate the ability to assemble and deploy sufficient resources to implement the protection strategies contained in the Area Contingency Plan and the respective industry response plan.				
8.2 Water Intake Protection: Demonstrate the ability to quickly identify water intakes and implement the proper protection procedures from the Area Contingency Plan or develop a plan for use.				
8.3 Wildlife Recovery and Rehabilitation: Demonstrate the ability to quickly identify these resources at risk and implement the proper protection procedures from the Area Contingency Plan to develop a plan for use.				

NATIONAL PREPAREDNESS FOR RESPONSE EXERCISE PROGRAM (PREP)

15 PREP COMPONENTS EVALUATION WORKSHEET (Cont'd)

8) Protection of sensitive areas (Cont'd)

Components	ICS/UCS Position Responsible	Completed (Y/N)	Date/Time Completed	Comments
8.4 Population Protection (Protect Public Health and Safety): Demonstrate the ability to quickly identify health hazards associated with the discharged product and the population at risk from these hazards, and to implement the proper protection procedures from the Area Contingency Plan or develop a plan for use.				

9) Disposal of recovered material and contaminated debris

Components	ICS/UCS Position Responsible	Completed (Y/N)	Date/Time Completed	Comments
9. Demonstrate the ability of the spill response organization to dispose of the recovered material and contaminated debris.				

10) Communications

Components	ICS/UCS Position Responsible	Completed (Y/N)	Date/Time Completed	Comments
10. Demonstrate the ability to establish an effective communications system for the spill response organization.				
10.1 Internal Communications: Demonstrate the ability to establish an intra-organization communications system. This encompasses communications at the command post and between the command post and deployed resources.				
10.2 External Communications: Demonstrate the ability to establish communications both within the response organization and other entities (e.g., RRT, claimants, media, regional or HQ agency offices, non-governmental organizations, etc.).				

NATIONAL PREPAREDNESS FOR RESPONSE EXERCISE PROGRAM (PREP)

15 PREP COMPONENTS EVALUATION WORKSHEET (Cont'd)

11) Transportation

Components	ICS/UCS Position Responsible	Completed (Y/N)	Date/Time Completed	Comments
11. Demonstrate the ability to provide effective multi-mode transportation both for execution of the discharge and support functions.				
11.1 Land Transportation: Demonstrate the ability to provide effective land transportation for all elements of the response.				
11.2 Waterborne Transportation: Demonstrate the ability to provide effective waterborne transportation for all elements of the response.				
11.3 Airborne Transportation: Demonstrate the ability to provide the necessary support of all personnel associated with the response.				

12) Personnel support

Components	ICS Position Responsible	Completed (Y/N)	Date/Time Completed	Comments
12. Demonstrate the ability to provide the necessary support of all personnel associated with the response.				
12.1 Management: Demonstrate the ability to provide administrative management of all personnel involved in the response. This requirement includes the ability to move personnel into or out of the response organization with established procedures.				
12.2 Berthing: Demonstrate the ability to provide overnight accommodations on a continuing basis for a sustained response.				
12.3 Messing: Demonstrate the ability to provide suitable feeding arrangements for personnel involved with the management of the response.				
12.4 Operational and Administrative Spaces: Demonstrate the ability to provide suitable operational and administrative spaces for personnel involved with the management of the response.				

NATIONAL PREPAREDNESS FOR RESPONSE EXERCISE PROGRAM (PREP)

15 PREP COMPONENTS EVALUATION WORKSHEET (Cont'd)

12) Personnel support (Cont'd)

Components	ICS Position Responsible	Completed (Y/N)	Date/Time Completed	Comments
12.5 Emergency Procedures: Demonstrate the ability to provide emergency services for personnel involved in the incident.				

13) Equipment maintenance and support

Components	ICS Position Responsible	Completed (Y/N)	Date/Time Completed	Comments
13. Demonstrate the ability to maintain and support all equipment associated with the response.				
13.1 Response Equipment: Demonstrate the ability to provide effective maintenance and support for all response equipment. Provide effective waterborne transportation for all elements of the response.				
13.2 Response Equipment: Demonstrate the ability to provide effective maintenance and support for all equipment that supports the response. This requirement includes communications equipment, transportation equipment, administrative equipment, etc.				

14) Procurement

Components	ICS Position Responsible	Completed (Y/N)	Date/Time Completed	Comments
14. Demonstrate the ability to establish an effective procurement system.				
14.1 Personnel: Demonstrate the ability to procure sufficient personnel to mount and sustain an organized response. This requirement includes insuring that all personnel have qualifications and training required for their position within the response organization.				
14.2 Response Equipment: Demonstrate the ability to procure sufficient response equipment to mount and sustain an organized response.				
14.3 Support Equipment: Demonstrate the ability to procure sufficient support equipment to support and sustain an organized response.				

NATIONAL PREPAREDNESS FOR RESPONSE EXERCISE PROGRAM (PREP)

15 PREP COMPONENTS EVALUATION WORKSHEET (Cont'd)

15) Documentation

Components	ICS Position Responsible	Completed (Y/N)	Date/Time Completed	Comments
15. Demonstrate the ability of the spill response organization to document all operational and support aspects of the response and provide detailed records of decisions and actions taken.				

Page 8 of 8

Annex – Table of Contents

Annex 1 – Table of Contents

Annex 1 – Table of Contents

1.0 Owner & Operator

The Owner and Operator of this pipeline is:

OWNER /OPERATOR ADDRESS	Phillips 66 Company 600 North Dairy Ashford, TA-2136 Houston, TX 77079

RESPONSE ZONE ASSET ADDRESS	See each specific Response Zone area in this Annex

1.1 Purpose of Plan

This Annex is designed to show the Company's compliance with the regulations set forth by the Department of Transportation in 49 CFR 194/195.

This Annex is also designed to provide field personnel with the information necessary to respond to incidents in a safe and efficient manner. For purposes of this plan, incidents are defined as events that happen within the Louisiana Response Zone's pipeline system, that create unacceptable impacts on people, property, or the environment and require emergency response operations.

Emergency response operations involve actions taken at, or in close proximity to, the site of an incident that are designed to mitigate the situation and get initial control over the incident, ensure safety of all concerned, develop plans of action, and facilitate communications

1.2 Scope of Plan

This plan applies to emergency response operations carried out by the company personnel and the Emergency Response Team. This plan applies to any type or size of incident that may occur within the Louisiana Response Zone. The plan contains prioritized procedures for personnel to follow in the event of a release or other emergency situation within the pipeline response zone.

1.3 Objectives

The objectives of this plan are to:	
✓	Comply with 49 CFR 194 and 195 regulations
✓	Comply with the Occupational Safety and Health Act requirements for an employee emergency plan and fire prevention plan as described in 29 CFR 1910.38 and the emergency planning and response requirements according to 29 CFCR 1910.119(n) and 29 CFR 1910.120
✓	Follow the format described in Appendix A of 49 CFR part 194
✓	Define the roles and responsibilities for Company personnel.
✓	Detail Emergency Response Team notification and activation procedures.
✓	Provide Company personnel with rapid access to the tools needed to carry out emergency response operations.

1.4 Management Certification

MANAGEMENT CERTIFICATION

This plan is approved for implementation as herein described. Manpower, equipment and materials will be provided as required in accordance with this Plan. The Company is dedicated to protection of the environment and commits to implement the necessary measures, as specified in the Plan, as necessary in a spill response emergency.

In addition to any OSRO and non-company resources listed in this Plan, the necessary personnel and equipment resources, owned or operated by the facility owner or operator, are available to respond to a discharge within appropriate response times.

This plan has been prepared in accordance to and is consistent to the National Contingency Plan and the applicable Area Contingency Plan(s) for the facilities covered by this plan.

CERTIFICATION SIGNATURE:

SIGNATURE

Rob Yarbrough
PRINTED NAME

Director, Emergency Preparedness, Response & Security
TITLE

May 2012
DATE

1.5 Qualified Individual Delegation of Authority

Phillips 66 Company
600 North Dairy Ashford
Houston, TX 77079-1175
Phone: (281) 293-1000

May 1, 2012

I hereby delegate the authority to act as Qualified Individual (QI), as stated in the Company Emergency Response Plans, to the following positions:

- Division Pipeline Managers,
- Pipeline Area/Facility/Terminal Supervisors and designated Operators,
- Terminal Supervisors/Superintendents and designated Operators,
- HSE Manager,
- Emergency Preparedness, Response & Security Director and Coordinators,
- Health & Safety Director and Coordinators, and
- Environmental Director and Coordinators.

Listed below is a summary of the responsibilities and authority of the QI:

- Activate internal alarms and hazard communication systems,
- Activate personnel and equipment maintained by the operator,
- Identify character, exact source, amount, and extent of the release,
- Notify and provide information to appropriate Federal, State and Local authorities,
- Assess interaction of spilled substance with water and/or other substances stored at facility and notify on-scene response personnel,
- Assess possible hazards to human health and the environment,
- Assess and implement prompt removal actions,
- Coordinate rescue and response actions,
- Direct cleanup activities activating and contracting with required oil spill removal organizations,
- Act as a liaison with the On-Scene Coordinator, and
- Obligate any funds required to carry out all required and directed oil spill response activities.

Deborah G. Adams
President, Transportation
600 North Dairy Ashford, TA-2034
Houston, TX 77079-1175

It is the Qualified Individual's responsibility to first make the appropriate notifications, then to initiate response operations. This individual has absolute authority to obligate any funds necessary to carry out all required and/or directed response activities. This individual will also act as liaison with city, county, state and federal agencies and serve as the On-Scene Incident Commander. The Response Zone QI and Alternate are identified in Annex 2.

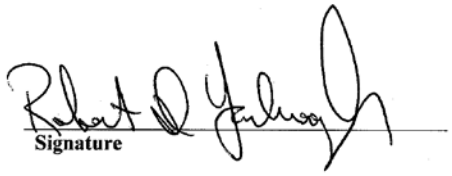
The following checklist (the checklist is not all inclusive) serves as a guide to the On-Scene Incident Commander/Qualified Individual.

The minimum duties required of the QI / PIC include:	
✓	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 appropriate Federal, State, and local authorities with the designated response roles, including the National Response Center, State Emergency Response Commission, and Local Emergency Planning Commission
✓	Assess the possible hazards to human health and the environment due as a result of the release. This assessment must consider both the direct and indirect effects of the release (i.e., the effects of any hazardous surface waters runoffs from water or chemical agents used to control fire and heat-induced explosion)
✓	Assess and implement prompt removal actions to contain and then remove the substance released
✓	Coordinate rescue and response action as previously arranged with all response personnel
✓	Use authority to immediately access company funding to initiate response, mitigation and clean-up activities
✓	Direct clean-up activities until properly relieved of this responsibility

1.6 Significant and Substantial Harm Certification

Applicability of Significant and Substantial Harm – DOT / PHMSA All Relevant Pipelines as Listed below in this Section
Pipeline Name: Lake Charles Area
Is the pipeline greater than 6 and 5/8 inches (168 mm) in outside nominal diameter YES_____X_____ NO_____
Is the pipeline greater than 10 miles (16 kilometers) in length YES _____ NO _____X_____
Has the line section experienced a release greater than 1,000 barrels within the past five (5) years, YES_____ NO_____X_____
Has any line section experienced two or more reportable releases, as defined in 49 CFR 195.5, within the past five (5) years, or YES_____X_____ NO_____
Does any line section contain any electric resistance welded pipe, manufactured prior to 1970 and operates at a maximum operating pressure established under 40 CFR 195.406 that corresponds to a stress level greater than 50 percent of the specified minimum yield strength of the pipe, or YES_____ _____ NO_____X _____
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_____X_____ NO_____
Is any link 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_____X_____ NO_____
Based on the DOT/PHMSA criteria above, ***ALL*** of the Company Pipelines are considered to be a system of Significant and Substantial Harm. The Company certifies to the Pipeline and Hazardous Materials Safety Administration of the Department of Transportation that we have obtained, by contract or other approved means, the necessary private personnel and equipment to respond, to the maximum extent practicable, to a worst case discharge.

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining information, I believe that the submitted information is true, accurate and complete.



Robert Yarbrough — Name

May 2012 — Date

U.S. Department
of Transportation

**Pipeline and
Hazardous Materials
Safety Administration**

1200 New Jersey Ave., S.E.
Washington, DC 20590-0001

Melanie M. C. Barber
Environmental Planning Officer
United States Department of Transportation
Office of Pipeline Safety
Room E22-210
1200 New Jersey Avenue, S.E.
Washington, D.C. 20590

February 26, 2009

Ms. Lynnette Langlois
ConocoPhillips
Coordinator – Emergency Response and Security
600 North Dairy Ashford; TR-2002
Houston, TX 77079

Dear Ms. Langlois:

The United States Department of Transportation Pipeline and Hazardous Materials Safety Administration Office of Pipeline Safety has received fourteen Facility Response Plans that ConocoPhillips filed under the Oil Pollution Act of 1990. I am writing to notify you that I have approved the Facility Response Plans on the dates listed below. ConocoPhillips will continue to update the Facility Response Plans and complete the Facility Response Plan Questionnaire as we discussed during the February 25, 2009 teleconference.

1. Company Core Plan, Sequence Number 1599, July 10, 2008
2. California Response Zone, Sequence Number 1277, July 10, 2008.
3. Colorado Response Zone, Sequence Number 953, July 10, 2008.
4. East Washington Response Zone, Sequence Number 132, February 26, 2009.
5. East Washington Core Plan, Sequence Number 1497, February 26, 2009.
6. Illinois Response Zone, Sequence Number 946, July 10, 2008.
7. Kansas Response Zone, Sequence Number 546, July 10, 2008.

8. Louisiana Response Zone, Sequence Number 74, July 10, 2008.
9. Missouri Response Zone, Sequence Number 551, July 10, 2008.
10. Montana and Wyoming Response Zone, Sequence Number 128, July 10, 2008.
11. Oklahoma Response Zone, Sequence Number 547, July 10, 2008.
12. Texas Response Zone, Sequence Number 75, July 10, 2008.
13. Clifton Ridge, Pecan Grove & Gulf Coast Lubes Plant Complex, Sequence Number 1027, July 10, 2007.
14. Portland Terminal, Sequence Number 1611, July 10, 2008

Sincerely,

Melanie M. C. Barber
Environmental Planning Officer

1.8 Lake Charles Pipeline Area

Sec. 1.8.1 Response Zone Information Summary

Response Zone Description	The Response Zone Area covered in this plan includes approximately 10 miles of 16" pipeline between the Phillips 66 Lake Charles Refinery and Lake Charles Pipeline, as well as the associated tank farm. (The term tank farm will include associated piping within the facility boundary.) The entire pipeline system is located in Calcasieu Parish, LA.				
Operator	Lake Charles Pipeline				
Address	1851 Clifton Ridge Road				
City	Sulphur	State	Louisiana	Zip	70665
Parish	Calcasieu	Telephone	337-882-1521		
Owner	Phillips 66				
Address	600 North Dairy Ashford, 2136 Tarkington Building				
Emergency Telephor (24 hr)	800-231-2551 or 877-267-2290				
City	Houston	State	Texas	Zip	77079
County	Harris	Telephone	281-293-3891		

Sec. 1.8.2 Description of Operations

Lake Charles Pipe Line (LCPL) operations covered by this plan, gather petroleum product by pipeline from the ConocoPhillips Lake Charles and Citgo Refineries located in Southwest Louisiana; Calcasieu Parish.

LCPL has 17 above ground storage tanks with total product storage of (b) (7)(F) barrels. The approximately 9-miles of pipeline that transfers product from the Phillips 66 Lake Charles Refinery to Lake Charles Pipe Line is a 16” steel pipe. Associated piping within the tank farm ranges in size, i.e., 2”, 6”, 8”, 10”, 12”, 16”, 20” and 36” inch. The system is comprised of pipe manufactured from the early 1960's to present.

The geography of the area through which the system passes consists of alluvial plain dissected by multiple creeks, rivers, bayous, and drainage canals.

The typical land use throughout the system is Industrial/Commercial with 3 small parcels of marsh and highway Right of Way.

Sec. 1.8.3 Pipeline Information

Description of Response Areas

Area	Location
1	Company Refinery property to the intersection of the Southern Pacific Railroad siding at Trousdale Rd.
2	Trousdale Rd. Crossing.
3	Trousdale Rd. across Dunham-Price plant to Southern Pacific mainline track crossing.
4	S.P.R.R. to Highway 90.
5	Highway 90 to Interstate 10.
6	Interstate 10 crossing to the point where the pipeline corridor leaves the adjacent I-10 Right of Way.
7	I-10 Right of Way to and including Maple Fork of Bayou D'Inde.
8	Maple Fork to La. 108 and north side of Bayou D'Inde.
9	Bayou D'Inde crossing and R.O.W. adjacent to Westlake Polymers plant, across Oxychem to the boundary of the Cit-Con Oil Corp. Plant.
10	Cit-Con Oil Corp. to and including La. 108 crossing. La. 108 crossing adjacent to La. 1133 to the entrance of the Lake Charles Pipe Line tank farm.
11	Lake Charles Pipeline Tank Farm, associated piping within tank farm and between LCPL and Citgo, Explorer and Colonial.

Lake Charles Pipeline (LCPL) Description

Name	Diameter	Length	Product	Description
LC01	16”	8.87 miles	Gasoline, Diesel & Kerosene	Pipeline from ConocoPhillips Lake Charles Refinery to LCPL
LC02	20”	0.57 miles	Diesel	Non-DOT Pipeline from Citgo Refinery to LCPL
LC03	6”	1.1 miles	Transmix	Pipeline from LCPL to Citgo Refinery
LC04	36”	1455 feet	Gasoline	Pipeline from LCPL to Colonial
LC05	36”	800 feet	Distillate; diesel/kerosene mix	Pipeline from LCPL to Colonial
LC06	12”	1460 feet	Gasoline, Diesel & Kerosene	Pipeline from Colonial to LCPL
LC07	16”	3093 feet	Gasoline, Diesel & Kerosene	Pipeline from LCPL to Explorer
LC08	6”	2871 feet	Gasoline, Diesel & Kerosene	Pipeline from Explorer to LCPL

Sec.1.8.4 Breakout Tanks

TANK[2] NO.	TANK TYPE	TANK DATE	SUBSTANCE STORED (Oil & Hazardous)	QUANTITY STORED (gallons)	MAXIMUM CAPACITY (gallons)	FAILURE/ CAUSE
10	IFR	1963	Gasoline	(b) (7)(F)		None
11	IFR	1963	Gasoline			None
12	IFR	1963	Gasoline			None
13	IFR	1963	Diesel			None
14	IFR	1963	Gasoline			None
15	CONE	1963	Diesel			None
16	CONE	1963	Diesel			None
17	CONE	1963	Kero/Jet			None
18	CONE	1963	Kero/Jet			None
19	IFR	1963	Gasoline			None
20	IFR	1963	Gasoline			None
21	IFR	1963	Gasoline			None
22	IFR	1974	Gasoline			None
23	CONE	1974	Kero/Jet			None
24	CONE	2006	Diesel			None
49	IFR	1968	Transmix			None
50	IFR	2009	Transmix			

Breakout Tank means a tank used to:
Relieve surges in an oil pipeline or
Receive and store oil transported by a pipeline for reinjection and continued transportation by pipeline.
Lake Charles Pipeline tanks receive and store oil transported by a pipeline for reinjection and continued transportation by pipeline.
[2] Tank = any container that stores oil.

Line Sections Which Could Cause Significant and Substantial Harm

(b) (7)(F)

Types of Oil and Volume of Worst Case Discharge

The 16” pipeline associated with this plan transports refined petroleum products (gasoline, kerosene, and diesel fuel) from the Phillips 66 Lake Charles Refinery to Lake Charles Pipeline. These same petroleum products are received and stored within the tank farm for re-injection and continued transportation by pipeline. MSDS for each oil type transported by this facility may be reviewed on the Company intranet.

(b) (7)(F)

Sec. 1.8.2 Worst Case Discharge Calculations

The worst-case discharge volume calculations are based on the guidance provided by the Department of Transportation, Interim Final Rule, 40 CFR Part 194. A worst-case discharge is defined as the largest foreseeable discharge in adverse weather conditions that a pipeline could discharge in a response area. The worst-case discharge is based on the comparison of several factors.

First is the result of the calculation of the flow rate times the maximum time to detect the spill, plus the rate of flow times the time to shut down the pipeline, plus the drainage volume after shutdown of the pipeline.

Worst-Case Discharge =

(Line flow x SCADA response)
+
(gravity flow x manual response)
+
(volume between manual block valves)

SCADA = Supervisory Control and Data Acquisition System

Manual Response = Total time to physically turnoff manual valves nearest spill location

---

Second, the worst-case discharge could be a foreseeable discharge for a line section based on the maximum historic discharge.

Third, if the line section within the response area contains break out tanks, the worst-case discharge may be the quantity of the largest tanks or tank battery within a single containment dike, adjusting for the capacity of the containment system.

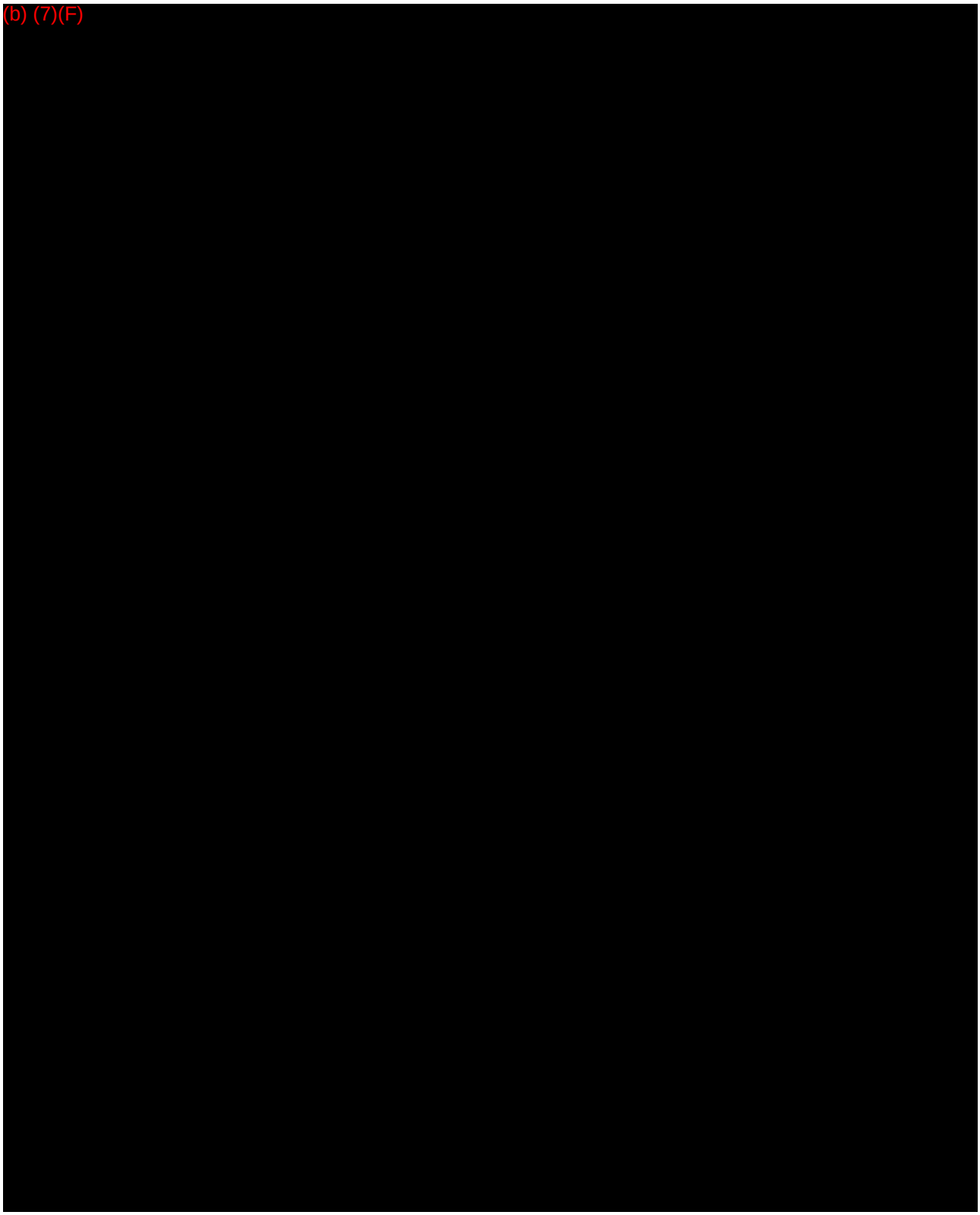
The Company reviewed the historic spill data for each line and noted the volume of the breakout tankage along the lines and has concluded that the first example (which considers line flow and response time) is the most applicable in the Company's case. The calculations for this response area, as per 40 CFR 194 guidelines, have been included in this section.

(b) (7)(F)

Sec. 1.8.3 Leak History

Leak history for Lake Charles Pipe Line is maintained on the Company Incident Tracking System and will be made available to RSPA upon request.

(b) (7)(F)



(b) (7)(F)

[redacted]

Proximity to Wells, Waterways and Drinking Water Intakes

The pipelines and associated tank farm of this operation are located such that a WCD would in all likelihood; should the release occur at any of the previously identified sensitive areas, reach the Calcasieu River, a navigable waterway. No drinking water intakes or wells would be affected.

Proximity to Fish, Wildlife and Sensitive Areas

Any spill moving offsite from this facility could impact the Calcasieu River Estuary and thus have impact to fish, shellfish and migratory waterfowl.

Likelihood a Discharge Will Travel Offsite

Any major release outside the tank farm will travel offsite.

Location of Spilled Material

The geology of the region is consistent with deltaic deposits of very fine silts, clays, and some alluvial sands. However, spilled oil would have a tendency to travel overland with little surface penetration due to soil water saturation.

Material Discharged

The WCD for this facility consist of Group II and III oils, as previously discussed. Although all products handled by this operation are combustible and/or flammable and are toxic in various concentrations, there is no threat of reactivity when mixed with soil or water.

Weather

The weather associated with a WCD as planned for would be a hurricane making landfall. This may delay response for 24 to 36 hours. In the event of a weather disaster of this magnitude, most if not all of a gasoline spill would be dispersed to the environment. A diesel fuel spill would be greatly dispersed but limited recovery would be possible in pooled areas

Probability of Chain Reaction Failures

None of the pipelines associated with this facility are located such that debris from floodwaters or vessel traffic on navigable waters would likely cause a chain reaction failure. The tank farm is designed with sufficient spacing and engineering control to provide a margin of safety to prevent chain reactions from occurring. Additionally, preventive maintenance and inspections assist in identifying areas of potential concern and are corrected accordingly.

Sec. 1.8.7 Spill Response Equipment

Equipment is located at the Clifton Ridge Marine Terminal.

- 24 x 100 ft. sections of river spill boom enclosed within 3 trailers
- Flat bottom workboat with 75 HP motor and trailer
- Various quantities of absorbent material in loose, pad and towel form

Sec. 1.8.8 Discharge Detection and Mitigation

(b) (7)(F)

[redacted]

Through the use of public education, Lake Charles Pipe Line has established relationships with community, public and emergency response agencies that enable quick notification in the event of a spill. The line segments associated with this system traverse industrial areas; therefore notification of a release is immediate.

Lake Charles Pipe Line, as required by DOT Part 195, has established line patrols that meet or exceed the required patrols in part 195. Fixed wing aircraft, helicopters, and patrols on the ground perform these patrols.

Additional patrols will be performed in the event an emergency is suspected or reported. The method of detection may be aerial patrols or may consist of ground foot patrols or vessel patrols on water. All patrols in search of suspected oil spills will be conducted utilizing the appropriate precautions with the appropriate PPE.

Responsible personnel and their contact information are listed in the Notifications Section of this RZ Appendix.

Abnormal Conditions

Lake Charles Pipe Line Company Operations Procedures Manual covers operating procedures for handling abnormal operating conditions. This manual is located at the Lake Charles Pipe Line Company facility. Abnormal conditions (consistent with 49 CFR 195.402(d)) are occurrences that develop on the system due to equipment malfunctions, unauthorized changes, and upsets in operating conditions that exceed pre-established limits but generally do not result in pipeline breaks or leaks. Abnormal conditions are detected by alarm messages that alert the Operations Coordinator of the specific equipment malfunction or operating limit exceeded. An audible alarm sounds and a message appears in red at the bottom of the CRT assigned to the pipeline on the console.

The alarms listed in the Operations Procedures Manual are general in scope and encompass all systems controlled by the Oil Movements Group; however, as a result of hardware limitations, each alarm may not apply to this system.

It should be remembered that these represent abnormal conditions. If any doubt exists as to the proper course of action, the Operations Coordinator should obtain the advice and assistance of supervisory personnel. The safest course of action should be pursued to the extent of shutting down the line.

1.9 Louisiana Gathering Area

Sec. 1.9.1 Area Information Summary

Response Zone Description	Refer to the next page for detailed Line Section/Response Area Information.				
Operator	Louisiana Gathering System				
Address	456 Aymond Street				
City	Eunice	State	Louisiana	Zip	70535
Parish	St. Landry	Telephone	337-457-0389		
Owner	Phillips 66				
Address	600 North Dairy Ashford, 2136 Tarkington Building				
Emergency Telephor (24 hr)	800-231-2551				
City	Houston	State	Texas	Zip	77079
County	Harris	Telephone	281-293-3891		

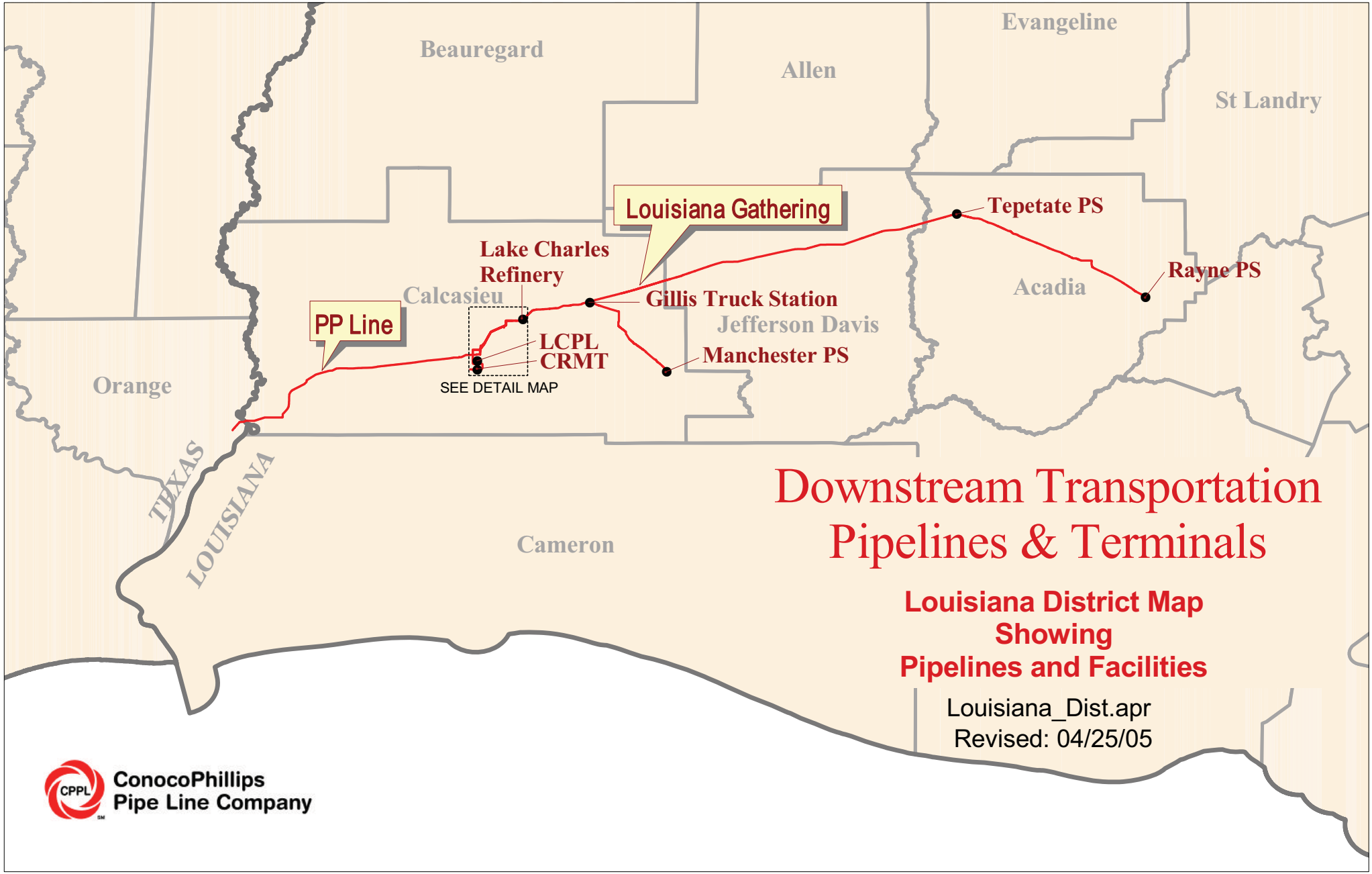
The basis on which the operator determined that the zone meets the criteria for "Significant and Substantial Harm": A line section has experienced a release in excess of 1000 bbl. in the last five years, the line section has reported at least two reportable releases within the previous five years and the line section is located within a one-mile radius of potentially affected environmentally sensitive areas and could reasonably be expected to reach one of these areas.

Sec. 1.9.2 Pipeline Information

The pipeline associated with this plan transports only various Louisiana sweet crude oil (Group II).

Line Sections and Response Area Locations

Parish	Description of Line Segment	Operational Status
Calcasieu Allen Jefferson Davis Acadia	Tepetate Station to Westlake (8" Main Line)	Active
Acadia Evangeline St. Landry	Rayne Station to Tepetate Station (6")	Active
Calcasieu	Manchester Station (12 miles of 4") to 8" Tie-In at Gillis	Active


Beauregard
Allen
Evangeline
St Landry
Louisiana Gathering
Tepetate PS
Lake Charles
Refinery
Rayne PS
Calcasieu
Gillis Truck Station
Acadia
PP Line
Jefferson Davis
LCPL
CRMT
Manchester PS
SEE DETAIL MAP
Orange
TEXAS
LOUISIANA
Cameron
Downstream Transportation
Pipelines & Terminals
Louisiana District Map
Showing
Pipelines and Facilities
Louisiana_Dist.apr
Revised: 04/25/05
CPPL
ConocoPhillips
Pipe Line Company

Sec. 1.9.3 Description of Operations

Company operations covered by this plan gather crude oil by pipeline from production leases throughout a seven parish area of southwest Louisiana and a two parish area of southeast Louisiana.

Line size varies throughout the system from 4 inch O.D. (outside diameter) to 8 inch O.D. steel line pipe. The system is comprised of pipe manufactured from the early 1940's to present.

The geography of the area through which the system passes consists of alluvial plain dissected by multiple creeks, rivers, bayous and drainage canals.

The typical land use throughout the system is agricultural with marsh and wildlife refuges interspersed over the entire area.

The system meets the definition for “Significant and Substantial Harm” for the following reasons:

1. A line section has experienced a release in excess of 1000 bbl. in the last five years.

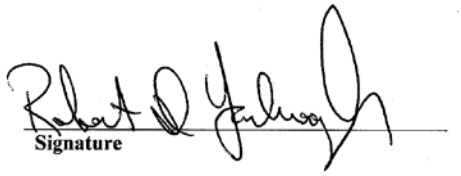
2. The line section has reported at least two reportable releases within the previous five years.

3. The line section is located within a one-mile radius of potentially affected environmentally sensitive areas and could reasonably be expected to reach one of these areas.

Sec. 1.9.4 Significant and Substantial Harm Certification

Applicability of Significant and Substantial Harm – DOT / PHMSA All Relevant Pipelines as Listed below in this Section
Pipeline Name: Louisiana Gathering Area
Is the pipeline greater than 6 and 5/8 inches (168 mm) in outside nominal diameter, and greater than 10 miles (16 kilometers) in length, YES_____X_____ NO_____
Has the line section experienced a release greater than 1,000 barrels within the past five (5) years, YES_____ NO_____X_____
Has any line section experienced two or more reportable releases, as defined in 49 CFR 195.5, within the past five (5) years, or YES_____X_____ NO_____
Does any line section contain any electric resistance welded pipe, manufactured prior to 1970 and operates at a maximum operating pressure established under 40 CFR 195.406 that corresponds to a stress level greater than 50 percent of the specified minimum yield strength of the pipe, or YES_____ NO_____X_____
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_____X_____ NO_____
Is any link 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_____X_____ NO_____
Based on the DOT/PHMSA criteria above, ***ALL*** of the Company Pipelines are considered to be a system of Significant and Substantial Harm. The Company certifies to the Pipeline and Hazardous Materials Safety Administration of the Department of Transportation that we have obtained, by contract or other approved means, the necessary private personnel and equipment to respond, to the maximum extent practicable, to a worst case discharge.

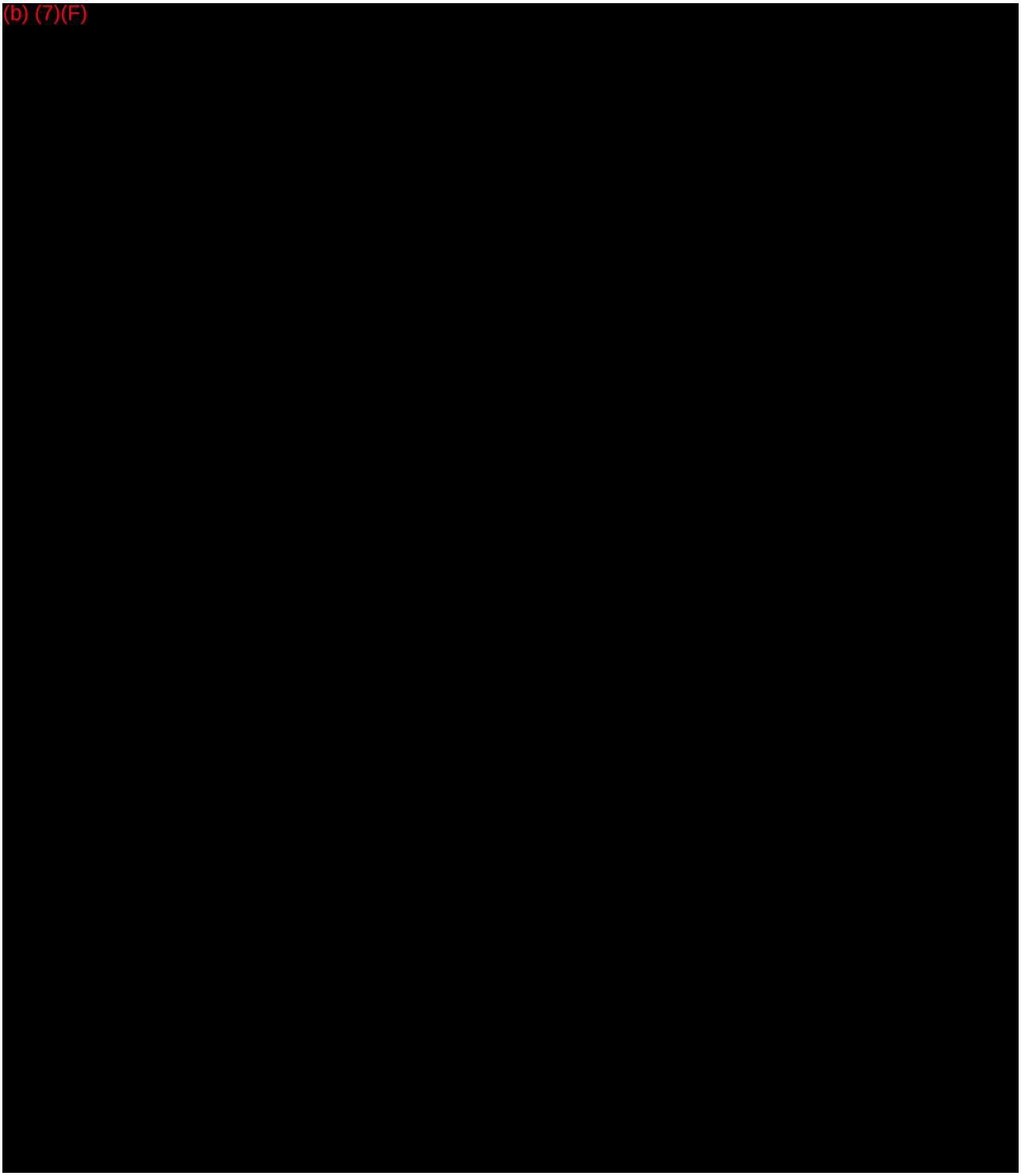
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining information, I believe that the submitted information is true, accurate and complete.



Robert Yarbrough — Name

May 2012 — Date

(b) (7)(F)



(b) (7)(F)

Sec. 1.9.7 Spill Response Equipment

The Louisiana Gathering Area relies on response equipment supplied by U.S. Coast Guard-approved OSROs under contract with Company.

Refer to the Oil Spill Removal Organizations (Sec 2 of this Annex) for copies of OSRO agreements.

Abnormal Conditions

Louisiana Gathering System Operations Procedures Manual covers operating procedures for handling abnormal operating conditions. This manual is located at the Louisiana Gathering System facility. Abnormal conditions (consistent with 49 CFR 195.402(d)) are occurrences that develop on the system due to equipment malfunctions, unauthorized changes, and upsets in operating conditions that exceed pre-established limits but generally do not result in pipeline breaks or leaks. Abnormal conditions are detected by alarm messages that alert the Operations Coordinator of the specific equipment malfunction or operating limit exceeded. An audible alarm sounds and a message appears in red at the bottom of the CRT assigned to the pipeline on the console.

The alarms listed in the Operations Procedures Manual are general in scope and encompass all systems controlled by the Oil Movements Group in Houston, Texas; however, as a result of hardware limitations, each alarm may not apply to this system.

It should be remembered that these represent abnormal conditions. If any doubt exists as to the proper course of action, the Operations Coordinator should obtain the advice and assistance of supervisory personnel. The safest course of action should be pursued to the extent of shutting down the line.

After the Field or Oil Movements have cleared an abnormal alarm condition, it is the Operations Coordinator's responsibility to monitor the area until line conditions have stabilized and the Operations Coordinator is assured of a safe operation.

The various alarm messages and a brief description, the causes and the remedial action to be taken are located in Chapter 3 of the Louisiana Gathering System Operations Procedures Manual. These alarms refer to field hardware alarms, and are not to be confused with host software "limit" alarms, which serve as warnings to the Operations Coordinator.

1.10 Lake Charles Coke Handling Terminal

Sec. 1.10.1 Area Information Summary

Response Area Location	The Terminal (Terminal) is a bulk storage and transfer facility located adjacent to the Port of Lake Charles, bulk facility on Bayou D'Inde Road, south of Sulphur, Louisiana.				
Maintenance Group Name	Lake Charles Coke Handling Terminal				
Address	3351 Bayou D'Inde Road Westlake, LA 70669				
Telephone	337-882-0640				
Parish	Calcasieu				
Owner/Operator	Phillips 66				
Owner Location (street)	600 North Dairy Ashford, 2136 Tarkington Building				
Emergency Telephone	800-231-2551				
City	Houston	State	Texas	Zip	77079
County	Harris	Telephone	281-293-3891		

Sec. 1.10.2 Terminal Overview and Objectives

The terminal is jointly owned by the Company and Citgo Petroleum Corp. and operated by the Company (see Drawing A-1 in the appendix)

The facility receives bulk petroleum coke, primarily fuel grade, from the Company and Citgo refineries. The coke is transported of the facility via transports of approximately 80,000 lb. GVW. The trucks are end dump equipped and unload on designated surge pads for each respective owner, thus allowing the coke to be segregated and stored on designated storage pads (2 each for Company and Citgo).

The coke is then traps-shipped via a conveyor system from the terminal to conveyors owned and operated by the Port of Lake Charles. Once the coke has been delivered to Transfer Point 7 (TP7), it is in the custody of the Port of Lake Charles to the receiving vessel. The coke is scaled on the belt at the terminal and tonnage calculated again once aboard the vessel.

Additionally, there are periods when the stored coke is re-loaded on trucks for special shipment or during times of refinery down time, to satisfy other customer needs that do not require water born volumes. This activity is the exception rather than the norm.

The Terminal – Emergency Response Plan is developed in compliance with requirements of OSHA Standard 1910.38 and 1910.106. The essence of these standards is the requirement for a site specific plan that employees are trained to understand and comply with to protect themselves in the event of emergencies.

The objective of this section of the Annex is to provide in as simple a format as is compliant, a tool for the operation and its employees to implement in the event of an emergency and includes the following:

1. The roles and responsibilities of each employee in a site emergency.
2. Evacuation routes and places of gathering for employees during an emergency.
3. Activation of emergency alarms.
4. Medical and rescue responsibilities and procedures.
5. Fire prevention plans.
6. Training guidance.
7. Procedures for reporting an emergency.
8. Oil spill response procedures.
9. Procedures for off-site emergency events.

The Terminal ERP is developed to function under Incident Command System and can be expanded utilizing this format to include other Company resources as needed.

Sec. 1.10.3 Emergency Escape/Evacuation Procedures

The Terminal consists of the following areas of concern with respect to escape/evacuation:

- General – see Drawing A-2 in the appendix for detail
- Stacker/Reclaimer – see Drawing A-2 in the appendix for detail
- Tower – see Drawing A-4 in the appendix for detail
- Grizzly Pit – see Drawing A-2 in the appendix for detail
- Shop – See Drawing A-5 in the appendix for detail
- Office – see Drawing A-3 in the appendix for detail
- Storage Pads – see Drawing A-2 in the appendix for detail
- Surge Pads – see Drawing A-2 in the appendix for detail

The following procedures were developed by site personnel, after assessment of potential emergency conditions and should be used to escape and evacuate from emergencies relating to these specific areas of the facility during an emergency that would require an evacuation:

Stacker/Reclaimer – The stacker/reclaimer normal access is limited to the walkway originating at the north end of each machine at ground level and proceeding through a series of walks and ladders to the operators cab on the machine. Employees whose normal access is blocked in an emergency should use the enclosed ladder to first level access ladder immediately outside the equipment cab, then proceed via the safest route to the designated gathering area outside the main gate.

Tower – Normal access to and from the tower is via a stairway from the ground floor, through the crusher levels to, the control center. Should this access be blocked in an emergency, employee's can evacuate via the walkways adjacent to the beltways on either side of the tower to ground level. Once on the ground, the employee should follow designated evacuation routes to the designated point of gathering outside the main gate.

Grizzly Pit – Access to the pit is via the beltway from ground level to the work area below the grizzly. Employees may find normal access routes blocked in an emergency. In this case, employees should use the emergency ladder leading straight up and out of the pit. No employee is to enter the grizzly pit without notification and approval from site management.

Shop Area – The shop area is equipped with drive through and walk through doors on the west side, walk through doors on the east side and an access door to the office area. Employees should select the closest, safest exit during an emergency and proceed to the designated gathering area outside the main gate.

Office Area – The office area has an exit door on the west side of the building and a door connecting to the shop area. In an emergency, employees should proceed to the nearest safe exit and proceed to the designated gathering area outside the main gate.

Storage Pads 1 thru 4 – Storage pad access is very open with multiple access/egress routes. During an emergency, employees should proceed via the safest route, avoiding the scene of the emergency, to the designated gathering area outside the main gate.

Surge Pad Area – Access to this area is very open with multiple access/egress routes. During an emergency, employees should proceed via the safest route, avoiding the scene of the emergency, to the designated gathering area outside the main gate.

Procedures for Employees Who Remain to Operate

A terminal emergency such as fire requires the complete evacuation of the terminal. No employee will remain to operate the facility. All processes should be shut down arid all employees evacuate via approved evacuation routes to the designated place of gathering.

Procedures to Account for All Employee's Following Evacuation

The District Director, Operations Supervisor, Technician and/or Mechanic shall be responsible for accounting for all personnel, including employee's visitors, drivers and contractors.

Persons responsible for accounting for all employees should report to the responding agency Incident Commander that all personnel are accounted for or the last known location of any missing employee's.

Rescue and Medical Duties for Those Employees Who Are to Perform Them

Terminal personnel are not responsible for performance of medical or rescue duties. Medical and rescue will be performed by professional third party responders.

Ambulance or 911
Hospitals or 911

Employee Fire Response Duties

Terminal employees are provided training to respond only to insipient fires. The following are the expectations for employees with this level of training:

1. If an employee encounters a fire at a stage that can be controlled by means of a readily accessible fire extinguisher (small 5, 10, 15 or 20 lb. Halon, or 20 to 30 pound dry chemical), the employee may elect to attempt to extinguish.

    - The first step taken by the employee is an assessment of whether the fire might be controlled by the most readily available equipment. If, in the employee's opinion, the fire cannot be readily extinguished with the first available extinguisher, the employee should proceed to step 2.
    - If the fire is in an area with limited ingress and egress, or heavily smoke filled, or has confined or limited passage, then the employee should immediately proceed to step 2 and forgo any firefighting effort.
    - If an employee is the least uncomfortable with an attempt to extinguish the fire for any reason, he should immediately proceed to step 2.

2. If an employee's attempt to extinguish a fire is unsuccessful, then the employee should immediately evacuate the area, sound the alarm and initiate the call to 911 for assistance.

Preferred Means of Reporting Fire and Other Emergency

The preferred method of reporting fire or other emergency is to provide the necessary information to facility management and allow them to make the notification. However, all employees of the Terminal are authorized to notify emergency response personnel, primarily 911, when or if a fire or other emergency exists.

Additionally, facility personnel should notify Gulf Coast Transportation Management and Public Relations as soon as practical following an incident.

Sec. 1.10.4 Employee Roles and Responsibilities

Employee	Fire	Medical Emergency	Oil Spill	Rescue
District Director	1. Assess situation 2. Attempt to extinguish, if feasible 3. Call 911 if necessary 4. Sound evacuation 5. Initiate Tier II response 6. Notify/direct drivers/visitors	1. Notify 911 2. May attempt first aid 3. Secure facility 4. Notify management 5. Notify Public Relations	1. Sound alarm 2. Evacuate if necessary 3. Secure the facility 4. Initiate response procedures 5. Make notifications 6. Notify/direct drivers /visitors	1. Notify 911 2. Secure facility 3. Notify management 4. Limit access 5. Notify Public Relations
Facility Supervisor	1. Assess 2) Attempt to extinguish, if feasible 2. Call 911 if necessary 3. Sound evacuation 4. Initiate Tier II response 5. Notify/direct drivers/visitors	1. Notify 911 2. May attempt first aid 3. Secure facility 4. Notify management 5. Notify Public Relations	1. Sound alarm 2. Evacuate if necessary 3. Secure the facility 4. Initiate response procedures 5. Make notifications 6. Notify/direct drivers/visitors	1. Notify 911 2. Secure facility 3. Notify management 4. Limit access 5. Notify Public Relations
Mechanic	1. Assess 2. Attempt to extinguish, if feasible 3. Call 911 if necessary 4. Sound evacuation 5. Initiate Tier II response	1. Notify 91 1 2. May attempt first aid 3. Secure facility 4. Notify management 5. Notify Public Relations	1. Sound alarm 2. Evacuate if necessary 3. Secure the facility 4. Initiate response procedures 5. Make notifications	1. Notify 91 1 2. Secure facility 3. Notify management 4. Limit access 5. Notify Public Relations
Technician	1. Assess 2. Attempt to extinguish, if feasible 3. Call 911 if necessary 4. Sound evacuation 5. Initiate Tier II response	1. Notify 911 2. May attempt first aid 3. Secure facility 4. Notify management 5. Notify Public Relations	1. Sound alarm 2. Evacuate if necessary 3. Secure the facility 4. Initiate response procedures 5. Make notifications	1. Notify 911 2. Secure facility 3. Notify management 4. Limit access 5. Notify Public Relations
Operator	1. Assess 2. Attempt to extinguish, if feasible 3. Call 911 if necessary 4. Sound evacuation 5. Initiate Tier II response	1. Notify 911 2. May attempt first aid 3. Secure facility 4. Notify management 5. Notify Public Relations	1. Sound alarm 2. Evacuate if necessary 3. Secure the facility 4. Initiate response procedures 5. Make notifications	1. Notify 911 2. Secure facility 3. Notify management 4. Limit access 5. Notify Public Relations
Truck Driver or Casual Employee	1. Notify facility operations 2. Follow facility instructions 3. Evacuate if ordered	1. Notify facility operations 2. May aid operations 3. Follow facility instruction	1. Sound alarm 2. Follow evacuation order	1. Notify facility operations 2. Follow facility instruction

Sec. 1.10.5 Alarm Systems

Alarm Systems will provide warning for emergency .action or allow time to evacuate – at the first indication of an emergency, all employee's will be notified via radio, telephone or visual signal of the emergency and be told to evacuate if necessary.

Means of alarm if audible, will be via radio, intercom or phone and be recognizable above ambient noise and light levels.

- **Citizen Band Radio Frequency is Channel 34 -** Includes coke trucks, front end loaders and control tower control room)
- **Facility Intercom System** - Includes office, control tower on all levels, shop, grizzly pits, MCC building and periodically along each conveyor belt)
- **Facility Telephone System -** All offices, shop, control tower and MCC.

The alarm will be distinctive and recognizable as a signal of emergency.

All employees will be trained on preferred method of reporting emergency and the procedure for sounding an emergency alarm.

Fire Prevention Plan

List of workplace hazards:

(See chemical inventory list, HAZCOM Program for additional detail)

Area	Material	Hazard
Shop	Solvents, Oxygen, Acetylene, cleaners, lubricating oils, electrical	Flammable/combustible liquids, electrical fire
Pad 1, 2, 3 & 4	Petroleum coke, electrical	Hot coke, electrical fire
Tower	Electrical	Electrical fire
Diesel Storage	Diesel	Combustible liquid
Office	Cleaners, electrical	Flammable liquids/aerosols, electrical fire
Grizzly/storage pads	Petroleum coke	Hot coke, incidental combustible liquid spill/fire from vehicles
Entire Facility	Chlorine Release from Louisiana Pigments Corp. – Off site	Respiratory hazard – Acute

Sec. 1.10.6 Emergency Procedures as a Result of Chlorine Pipeline Failure

This procedure is developed as a guideline for employees at the Terminal in an emergency created by a release of chlorine from the pipeline crossing the north end of the terminal property.

In the event of such an emergency, personnel at the terminal will immediately notify all employees, contractors, visitors and truck drivers of the release and inform them of the alternative evacuation route and place of gathering outside the gate at TP-7. At the earliest practical moment, Terminal employees should contact PPG by phone and inform them of the release and them communicate and follow the guidance given by PPG.

In the event of a release from this pipeline, all operations at the Terminal should be suspended immediately and the facility evacuated until given the all clear by PPG or responding agencies.

(b) (7)(F)

[redacted]

(b) (7)(F)

[redacted]

(b) (7)(F)

(b) (7)(F)

[redacted]

(b) (7)(F)

[redacted]

1.11 Orange Products Pipeline System

Sec. 1.11.1 Area Information Summary

Response Area Location	From the COP Lake Charles Refinery located in Westlake, LA
	to the DuPont-Sabine River Works Plant located in Orange, TX.
Maintenance Group Name	Orange Products Pipeline System
Address	1723 Pak Tank Road; Sulphur, LA 70665
Telephone	(337) 583-3386
Parish/County	Calcasieu Parish, LA/Orange County, TX
Owner	Phillips 66
Location	600 North Dairy Ashford, TA-2136; Houston, TX 77079
County	Harris
Emergency Number	(800) 231-2551

Sec. 1.11.2 Pipeline Information

The Orange Product Pipeline delivers (HVL) Propane/Propylene from the Westlake Meter Station (which receives product via the COP Lake Charles Refinery pumps) thru the Orange Meter Station to the DuPont Sabine River Works Plant. There is also a connection at MP6 that consists of a meter skid which delivers product to the Citgo Propylene Fractionation Unit (PFU) facility located in Sulphur, LA. The pipeline is approximately 35 miles long and consists of (3) 6" pipeline segments (MP 0 to MP 5.076, MP 5.114 to MP 5.133, and MP 6.905 to 34.666), a 4" pipeline segment (MP 5.076 to MP 5.114), an 8" pipeline segment (MP 5.139 to MP 6.905), and a 3" pipeline segment (MP 34.966 to MP 35.077). The pipeline is operated from the COP Logistics Center.

Sec. 1.11.3 Pipeline Data

Pipeline System Name:	Orange Products Pipeline System									
COP Code	Line Name	Segment	Status	Mileage	Date	ST	Diameter/Mileage			
							3”	4”	6”	8”
OP-01	P-Line LCR Blending Station to DuPont SRW	LCR Blending Station to MP6 (Approx. Citgo Connection)	Active	5.67	1961	LA		0.05	5.03	0.59
OP-01		MP6 to TX/LA State Line	Idle	27.67	1961	LA	0.13		26.22	1.32
OP-01		TX/LA State Line to DuPont SRW	Idle	1.73	1961	TX			1.73	
OP-02	Orange Products Tie-In to Citgo	Orange Products Tie-In to Citgo	Active	0.42	2005	LA			0.42	

Sec. 1.11.4 Pump Data

The delivery pumps are owned and operated by the COP Lake Charles Refinery. There are two identical pumps that operate alternately. The current pumps are limited to a maximum case pressure of 740 psig. The pumps have a maximum pump differential of 343 psi at a rate of 102 gpm @ 0.465 S.G. & 90° F. Therefore, the maximum discharge of the pumps is 623 psi (Lake Charles Refinery propane bullets (D-2301 & D-2302) feeding the pump have a design pressure of 280 psig.) There is also a minimum flow bypass system at the refinery that limits the system to a minimum flow of 2,000 bbls/day. When the bypass is fully open and the pipeline is blocked in, the line pressure is 580 psig.

Maximum operating pressures

Westlake Product Meter Station	1480 psig
Westlake to Orange Pipeline Segment	908 psig
Orange Product Meter Station	1480 psig
Citgo Connection Meter Station	1480 psig

1.12 WESTLAKE PETROLEUM PRODUCTS TERMINAL

Westlake Petroleum Products Terminal (WLPT) is a petroleum product truck loading facility located adjacent to the Phillips 66 Refinery on Old Spanish Trail in Westlake, Louisiana. The terminal is owned and operated by Phillips 66 Company

The facility receives petroleum products via transfer lines from the Company refinery and trans-loads through automated meters to customer transports. The facility is computer automated to allow authorized drivers access to products on a 24 hour, 7-day per week basis.

This section of Annex 1 is addressed to ensure n compliance with requirements of OSHA Standard 1910.38 and 1910.106. The essence of these standards is that employees are trained to understand and comply with to protect themselves in the event of emergencies.

The objects of this is to provide in as simple a format as is compliant, a tool for the operation and its employees to implement in the event of an emergency and includes the following:

1. The roles and responsibilities of each employee in a site emergency.
2. Evacuation routes and places of gathering for employees during an emergency.
3. Activation of emergency alarms.
4. Medical and rescue responsibilities and procedures.
5. Fire prevention plans.
6. Training guidance.
7. Procedures for reporting an emergency.
8. Oil spill response procedures, and;
9. Procedures for off-site emergency events.

Sec. 1.12.1 Emergency Escape/Evacuation Procedures

The WLPT consists of the following areas of concern with respect to escape/evacuation:

- Designated Gathering Areas – see drawing #2 in the appendix for detail
- General Area Drawing - see drawing #1 in the appendix for detail

The following procedures were developed by site personnel, after assessment of potential emergency conditions and should be used to escape and evacuate from emergencies relating to these specific areas of the facility during an emergency that would require an evacuation:

(b) (7)(F)

[redacted]

Shop Area -An attached shop/garage is located on the west side of the control room and is equipped with drive through door on the south and walk through door on the north side of the building. In an emergency, employees should exit through the walk through door and proceed westerly to the designated gathering area outside the main gate.

Office Area - The office area has an exit door on the east side of the building. In an emergency, employees should proceed to the nearest safe exit and proceed to the designated gathering area outside the main gate.

Truck Rack Area – The rack area access is very open with multiple access/egress routes. During an emergency, employees should proceed via the safest route, avoiding the scene of the emergency, to the designated gathering area outside the main gate.

Procedures for Employees who remain to Operate:

A terminal emergency such as fire may require the complete evacuation of the terminal. If no employees remain to operate the facility, all processes should be shut down and all employees evacuated via approved evacuation routes to the designated place of gathering.

Procedures to Account for All Employee's following Evacuation

The Facility Manager, Technician and/or Operator shall be responsible for accounting for all personnel, including employee's visitors, drivers and contractors.

Persons responsible for accounting for all employees should report to the responding agency Incident Commander that all personnel are accounted for or the last known location of any missing employee's.

Rescue and Medical duties for those employees who are to perform them

Westlake Petroleum Products Terminal personnel are not responsible for performance of medical or rescue duties. Professional third party responders will perform medical and rescue assistance. Refer to the Notifications, Phone List Section for local Calcasieu Parish Sheriff's Office, Ambulance, Fire Dept. and Hospital contact information

Employee Fire Response Duties

Westlake Petroleum Products Terminal employees are provided training to respond only to insipient fires. The following are the expectations for employees with this level of training:

1) If an employee encounters a fire at a stage that can be controlled by means of a readily accessible fire extinguisher (small 5, 10, 15 or 20 lb. halon, or 20 to 300 pound dry chemical), the employee may elect to attempt to extinguish.

   a) The first step taken by the employee is an assessment of whether the fire might be controlled by the most readily available equipment. If, in the employee's opinion, the fire cannot be readily extinguished with the first available extinguisher, the employee should proceed to step 2.

   b) If the fire is in an area with limited ingress and egress, or heavily smoke filled, or has confined or limited passage, then the employee should immediately proceed to step 2 and forgo any firefighting effort.

   c) If an employee is the least uncomfortable with an attempt to extinguish the fire for any reason, he should immediately proceed to step 2.

2) If an employee's attempt to extinguish a fire is unsuccessful, then the employee should immediately evacuate the area, sound the alarm and initiate the call to 911 for assistance.

Sec. 1.12.2 Employee Roles and Responsibilities

Employee	Fire	Medical Emergency	Oil Spill
Facility Manager	1) Assess situation 2) Attempt to extinguish, if feasible 3) Call 911 if necessary 4) Sound evacuation 5) Initiate Tier II response 6) Notify/direct drivers/visitors	1) Notify 911 2) May attempt first aid 3) Secure facility 4) Notify management 5) Notify Public Relations	1) Sound alarm 2) Evacuate, if necessary 3) Secure the facility 4) Initiate response procedures 5) Make notifications 6) Notify/direct drivers/visitors
Maintenance Coordinator	1) Assess situation 2) Attempt to extinguish, if feasible 3) Call 911 if necessary 4) Sound evacuation 5) Initiate Tier II response 6) Notify/direct drivers/visitors	1) Notify 911 2) May attempt first aid 3) Secure facility 4) Notify management 5) Notify Public Relations	1) Sound alarm 2) Evacuate, if necessary 3) Secure the facility 4) Initiate response procedures 5) Make notifications 6) Notify/direct drivers/visitors
Technician	1) Assess 2) Attempt to extinguish, if feasible 3) Call 911 if necessary 4) Sound evacuation 5) Initiate Tier II response	1) Notify 911 2) May attempt first aid 3) Secure facility 4) Notify management 5) Notify Public Relations	1) Sound alarm 2) Evacuate, if necessary 3) Secure the facility 4) Initiate response procedures 5) Make notifications
Operator	1) Assess 2) Attempt to extinguish, if feasible 3) Call 911 if necessary 4) Sound evacuation 5) Initiate Tier II response	1) Notify 911 2) May attempt first aid 3) Secure facility 4) Notify management 5) Notify Public Relations	1) Sound alarm 2) Evacuate, if necessary 3) Secure the facility 4) Initiate response procedures 5) Make notifications

Sec. 1.12.3 Alarm Systems

Alarm Systems will provide warning for emergency action or allow time to evacuate - at the first indication of an emergency, all employees will be notified via radio, telephone or visual signal of the emergency and be told to evacuate if necessary.

Means of alarm if audible will be via radio, intercom or phone and be recognizable above ambient noise and light levels.

The alarm will be distinctive and recognizable as a signal of emergency. All employees will be trained on preferred method of reporting emergency and the procedure for sounding an emergency alarm.

For all other aspects of emergency response refer to the Core Plan or the Clifton Ridge Marine Terminal ERP.

1.13 LOUISIANA AREA PIPELINES DIVISION OFFICE

The Louisiana Area Division Office is located at:

1723 Pak Tank Road
Sulpher, LA 70655

In the event of an emergency at this location Emergency escape procedures and route assignments have been posted in the office, and all employees have been trained in the correct procedures to follow. New employees are trained when assigned to a work area. A sample escape diagrams are posted in the office area are included with this plan, near the end of this section; refer to – Figures 4D-1, 4D-2 and 4D-3.

During some emergency situations, it will be necessary for some specifically assigned and properly trained employees to remain in work areas that are being evacuated long enough to perform critical operations. These assignments are necessary to ensure proper emergency control.

Person	Responsibilities
Person in-Charge	• Person-in-Charge or designee in the event of an emergency; • Notifies Company management and other emergency response agencies for assistance in the event of a emergency; • Coordinates with any emergency response agencies; • Shuts down critical operations • Provides rescue and medical duties if necessary; • Acts as evacuation warden; • Prepares and submits any reports to agencies and the Company.
All other Employees	Read and understand this Section of the Annex, report to proper assembly area for headcount. Note: Should be familiar enough with this plan to act as the person-in-charge if so designated.
Contractors	Read this Section of the Annex, report to proper assembly area for headcount
Visitors	Read this Section of the Annex, report to proper assembly area for headcount
Truck Drivers	Read this Section of the Annex, report to proper assembly area for headcount

All other emergency response efforts should follow the procedures outline in the Company Core Plan.

Sec. 1.13.1 Maintained Pipelines and Descriptions

The Louisiana Area Pipelines Division maintains the following Louisiana Department of Natural Resources (LADNR) regulated intrastate pipelines:

Name	Length	Diameter	Product	Description
CON71 (WL01)			Out of service	Purged with Nitrogen
CON72 (WL02)			Out of service	Purged with Nitrogen
CON75 (WL03)			Out of service	Purged with Nitrogen
CON 79 (WL04)	1.75 mi	6”	Praxair Hydrogen	Pipeline from Praxair to LCPL

Access to pipeline

(b) (7)(F)

[redacted]

(b) (7)(F)

[redacted]

All other emergency response efforts should follow the procedures outline in the Company Core Plan.

Annex 2 – Table of Contents

2.0 Notifications Overview

Immediate actions are required at the onset of an emergency response to limit the extent of a release, minimize the potential hazard to human health and the environment, and implement an effective response. It is also important to act decisively to create a professional working atmosphere among Company and regulatory authority personnel and public officials. This section is intended to provide guidance for determining the appropriate initial response and notification actions that should be carried out in the event of a release or other emergency incident.

This Section II of the Core Plan outlines general guidelines on the procedures and sequence for making the various internal and external notifications following discovery of a pipeline release or other emergency incident.

The internal notification procedures are essentially the same for all emergency incidents although the external notifications will vary depending on the type of incident, type and quantity of material released, and the consequences (injuries, deaths, and property damage).

Company personnel have the authority and obligation to terminate any operation in response to an abnormal, threatening, or hazardous situation

2.1 Incident Reporting

Incident Reporting Guidance can be located on the Company web site. Utilize the following Incident Report Form to log all pertinent information relative to Louisiana response zone incident response. When filling out this form, try to complete as much (if not all) information as possible.

TRANSPORTATION – HEALTH & SAFETY
EPR&S PREP - INCIDENT REPORT FORM

Company, Agency and environmental notifications must be made quickly. **Do NOT wait for all incident information before calling the National Response Center at 800-424-8802.** Use this form to record as much incident information as possible. **Communicate within 30 to 60 minutes of discovery time**. Use the Emergency Notifications Log to document all communication, any additional information and distribution.

I. INCIDENT TYPE

A. Check all that apply: ☐ **Release** ☐ **Security** ☐ **Fire** ☐ **Other (Specify)** _____

B. REPORTING PARTY

Name/Title: _____
Company: _____
Address: _____
City, State Zip: _____
Call Back #: _____

C. SUSPECTED RESPONSIBLE PARTY

Name/Title: _____
Company: _____
Address: _____
City, State Zip: _____
Call Back #: _____

D. **Calling for the Responsible Party?** ☐ Yes ☐ No

II. INCIDENT LOCATION INFORMATION

Incident Location: ☐ Terminal ☐ Pump Station ☐ Vessel ☐ Pipeline ☐ Truck ☐ Rail

Owner Name: _____ Operator Name: _____
Address: 600 N. Dairy Ashford, TA-2136 Address: _____
City, State, Zip: Houston, TX 77079 City, State, Zip: _____
County/Parish: _____ Hwy or River Mile Marker: _____
Section-Township-Range: _____ Latitude _____ Longitude _____
Dist./Dir. to Nearest City: _____ Facility Storage Capacity: _____ (bbls)
Container Type (☐ AST/ ☐ UST) _____ Container Capacity _____ (bbls)
Site Supervisor/Contact: _____ Call Back #: _____

III. INCIDENT DESCRIPTION & IMPACTS

Date/Time Discovered: _____ Discovered by: _____
Material Released: _____ Quantity Released: _____ (bbls/lbs)
Duration of the Release: _____ Weather Conditions: _____
Quantity to Surface Water: _____ Temperature: _____ °F Humidity: _____
Off Company Property? ☐ Yes ☐ No Wind Speed: _____ Direction: _____
Evacuations: ☐ Yes ☐ No # Evacuated: _____ Name of Surface Water _____
Fire: ☐ Yes ☐ No # Hospitalized: _____ Distance to Water: _____ (ft/mi)
Explosion: ☐ Yes ☐ No # of Injuries: _____ # of Fatalities _____ Media coverage expected? ☐Yes ☐ No
If Operator error, has Drug and Alcohol program been initiated? ☐Yes ☐ No **DOT jurisdiction event?** ☐Yes ☐ No

If DOT event, list those completing Drug and Alcohol testing? _____

Incident description (Including Source and or Cause of the Incident) _____

Impacted area description _____

Damage description and estimate ($, days down, etc.) _____

Actions taken to correct, control or mitigate (Change in Security Level, FSP and/or ERP Implemented, etc.) _____

Agency/Person Contacted	Notified By	Office Phone	Cell Phone	Other Phone	Date & Time Notified	Log #	Comments
IV. EMERGENCY NOTIFICATIONS - LOG							
Duty Officer/		800-231-2551	N/A	Fax: 918-662-0179			Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No

Agency/Person Contacted	Notified By	Office Phone	Cell Phone	Other Phone	Date & Time Notified	Log #	Comments
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No

V. ADDITIONAL INFORMATION

** Alternate NRC contact information: Fax: 202-267-2165, TDD: 202-267-4477, or e-mail: lst-nrcinfo@comdt.uscg.mil

VI. PREPARED BY AND DISTRIBUTION

Prepared by: _____ **Date:** _____ **IMPACT Entry Complete:** ☐ Yes ☐ No

* Notify the appropriate Company DOT Coordinator to complete the *PHMSA FORM F 7000-1*, as applicable.

2.2 Emergency Notification Responsibilities

All Personnel	
The most important thing is individual personal safety	
•	Always think before responding.
•	Never rush into the scene of an incident.
•	Always assess the situation first and know the hazards.
•	Never perform any actions that may put your safety at risk

Initial Response Checklist	
The first employee who responds to the scene of an emergency should take the following actions	
•	*For emergencies reported to or observed.* Notify the Louisiana Response Zone Area Supervisor
•	Upon initial discovery, employees should notify local emergency services as needed. If anyone is seriously injured, or the emergency is beyond the Response Zone's abilities, dial 911 immediately. Be sure to give your name, phone number, nature of emergency, exact location, and the number of injuries.
•	If safe, take prompt action to eliminate any dangers.
•	If necessary, evacuate everyone from the danger area to a safe location.
•	Contact a spill response contractor if product has been released or discharged.
•	Promptly decide: • Whether or not the emergency situation can be readily brought under control and if immediate action can be taken. **Always use the correct PPE**. • If there is a spill, deploy necessary local equipment and absorbent material and begin mitigation procedures.
•	Direct the initial phase of control, containment, and response until a supervisor arrives.
•	Area supervisor (or designee) notifies the following: • Initial company response personnel • Response resources (if not already done so) • Applicable regulatory agencies

LAKE CHARLES PIPELINE TERMINAL

Emergency Notification Contact List

Emergency Response Numbers

Group/Function	Telephone	Other Telephone/Fax
Duty Officer	800-231-2551	Fax: 918-662-0179
Control Center Emergency Hotline	877-267-2290	800-231-2566
Company "Meet Me" Number	866-836-3169	Pass Code: 157528
Employee Hotline (Natural Disaster)	866-397-3822	
Axiom Medical Monitoring	281-419-7063	

Qualified Individual / Incident Commander (QI / IC) Contact List

Name / Job Title	Office Phone	Home Phone	Cell Phone	Resp. Time
QI/IC David A. Bryant, Facility Supervisor	(337) 882-1521	(___) ___-____	(281) 866-5723	1 hr
Office: 1851 Clifton Ridge Rd, Sulphur, LA 70665		**Home:** LA		
Alt. QI/IC Carl Trent, Maintenance Specialist	(337) 882-1521	(b) (6)	(337) 540-8317	1 hr
Office: 1851 Clifton Ridge Rd, Sulphur, LA 70665		**Home:** (b) (6)		

Incident Support Team

Position	Name	Office Phone	Home Phone	Mobile Phone
EPR&S Contact	Rob Yarbrough	(281) 293-3891	(b) (6)	(281) 627-3177
Environmental Contact	Jim Phelan	(281) 293-3715		(580) 761-3233
DOT Contact	Todd Tullio	(832) 379-6255		(405) 371-1477
Health & Safety Contact	Brad A. Hendrix	(918) 661-0140		(918) 977-0137
Manager, Division	Alvin Brass	(832) 379-6208		(337) 255-2444
Manager, HSE	Travis J. Wilke	(281) 293-2515		(580) 401-0047
Manager, Engineering & Projects	Dave J Barney	(281) 293-4385		(281) 467-4732
Manager, Logistics	Doug B. Sauer	(918) 661-0271		(832) 274-8478
Alternate QI/IC	Greg Ragle	(337) 583-3360		(337) 802-4367

Transportation Tier 1 Responders

Name	Office Phone	Home Phone	Mobile Number	Resp. Time
Nunez, Phillip - Operator	(337) 882-1521	(b) (6)	(___) ___-____	1 hr
O' Neal, Jeff - Senior Technician	(337) 882-1521		(___) ___-____	1 hr
Fleming, Ray - Operator	(337) 882-1521		(___) ___-____	1 hr

Emergency Response Contractors

Name	Phone	Alt. Phone	Resp. Time
Contract			
Clean Harbors Cooperative, LLC	(732) 661-2548		1 hr
Enviromental, Safety & Health Consulting S	(877) 437-2634		1 hr
MSRC & STAR Contractors	(800) 645-7745	(800) 259-6772	1 hr
Other			
CHEMTREC	(800) 424-9300		<Unknown>

Agency/Other Telephone Numbers

Agency/Group	Telephone	Other Telephone/Fax
Federal		
National Response Center	(800) 424-8802	(202) 267-2675
EPA Region 06	(800) 372-7745 (24-hr)	(214) 665-6489
FBI - Lake Charles, LA Office	(337) 433-6353	(225) 522-4671
National Weather Service - NOAA	www.weather.gov	(206) 526-6317
U.S. Coast Guard Marine Safety Office	(314) 269-2463	
USCG (Lake Charles, LA)	(337) 433-3765	
USCG (Port Arthur, TX)	(409) 723-6500	
State		
Dept. of Natural Resources, LA (LADNR)	225-342-5505	
Dept. of Public Safety - LA	(504) 325-6595	
Dept. of Public Safety - LA HAZMAT Hotline	(225) 925-6595	
DEQ - LA	(225) 763-3908	
DEQ - Lake Charles, LA	(337) 475-8644	
State Police	(504) 925-6595	
Local		
Fire: Calcasieu Parish, LA	911	(337) 491-3700
Fire: Carlyss, LA	911	(337) 583-2365
Ambulance: Calcasieu Parish	911	(337) 491-3700
Immigration Border Patrol	(337) 477-9245	
Sheriff: Calcasieu Parish	911	(337) 491-3700
Hospital: West Cal-Cam	(337) 527-4274	
Hospital:Lake Charles Memorial	(337) 494-3036	
Media: KKGB FM Radio 101.3	(337) 439-3300	
Media: KPLC TV-7	(337) 439-9071	
Lake Charles Refinery First Responder/Rescue Team	(337) 491-5301	(337) 491-5333
LEPC: Calcasieu Parish, LA	(337) 437-3512	(337) 439-9911
National Weather Service; Lake Charles, LA	(337) 477-5285	
Neighbors		
Citco (Alirio Zambrano)	(337) 708-6614	(337) 515-2939
Clifton Ridge Marine Terminal	(337) 583-3360	
COP Gulf Coast Lubes Plant	(337) 583-3320	ETN-581-3320
COP Lake Charles Coke Handling Terminal	(337) 882-0640	(337) 540-4759
COP Lake Charles Refinery; Employee Emergency Info	(337) 491-5411	ETN-640-5411
Railroad: Kansas City Southern	(337) 882-5433	
Railroad: Union Pacific	(337) 439-5783	Manager: (225) 305-2685
Railroad: Union Pacific; Alternate Contacts	(402) 321-2743	(318) 792-6514
Sentinel Transportation (Cliff Jones)	(337) 788-4746	(337) 319-9788
Sentinel Transportation; Lake Charles (Kelly Beard	(337) 882-6830	(337) 474-2745
Sentinel Transportation; Lake Charles (S. Herman)	(337) 882-6831	

LOUISIANA GATHERING SYSTEM AREA (LAGS)

Emergency Notification Contact List

Emergency Response Numbers

Group/Function	Telephone	Other Telephone/Fax
Duty Officer	800-231-2551	Fax: 918-662-0179
Control Center Emergency Hotline	877-267-2290	800-231-2566
Company "Meet Me" Number	866-836-3169	Pass Code: 157528
Employee Hotline (Natural Disaster)	866-397-3822	
Axiom Medical Monitoring	281-419-7063	

Qualified Individual / Incident Commander (QI / IC) Contact List

Name / Job Title	Office Phone	Home Phone	Cell Phone	Resp. Time
QI/IC Mark Dardeau, Area Supervisor	(337) 583-3361	(b) (6)	(337) 287-0968	1 hr
Office: 2115 Davison Rd, Sulphur, LA 70665		**Home:** (b) (6)		
Alt. QI/IC Gary Mangrum, Facility Supervisor	(337) 583-3360	(b) (6)	(337) 660-5688	1 hr
Office: 2115 Davison Rd, Sulphur, LA 70665		**Home:** (b) (6)		

Incident Support Team

Position	Name	Office Phone	Home Phone	Mobile Phone
EPR&S Contact	Rob Yarbrough	(281) 293-3891	(b) (6)	(281) 627-3177
Environmental Contact	Jim Phelan	(281) 293-3715		(580) 761-3233
DOT Contact	Todd Tullio	(832) 379-6255		(405) 371-1477
Health & Safety Contact	Brad A. Hendrix	(918) 661-0140		(918) 977-0137
Manager, Division	John A. Roark	(832) 379-6209		(281) 650-1867
Manager, HSE	Travis J. Wilke	(281) 293-2515		(580) 401-0047
Manager, Engineering & Projects	Dave J Barney	(281) 293-4385		(281) 467-4732
Manager, Logistics	Doug B. Sauer	(918) 661-0271		(832) 274-8478

Transportation Tier 1 Responders

Name	Office Phone	Home Phone	Mobile Number	Resp. Time
Nevels, Mike - CFR	(337) 583-3382	(b) (6)	(337) 292-0331	1 hr
Rougeau, Greg - Pipeliner	(337) 583-3276		(337) 540-0115	1 hr
Galloway, James - Technician	(337) 583-3394		(337) 249-5996	1 hr
Palomino, Rico E. - Technician	(337) 583-3388		(337) 842-8904	1 hr
Whitehead, Brian K. - Technician	(337) 583-3387		(337) 764-5880	1 hr

Emergency Response Contractors

Name	Phone	Alt. Phone	Resp. Time
Contract			
Clean Harbors Cooperative, LLC	(732) 661-2548		1 hr
Enviromental, Safety & Health Consulting S	(877) 437-2634		1 hr
MSRC & STAR Contractors	(800) 645-7745	(800) 259-6772	1 hr
Other			
CHEMTREC	(800) 424-9300		1 hr

Agency/Other Telephone Numbers

Agency/Group	Telephone	Other Telephone/Fax
Federal		
National Response Center	(800) 424-8802	(202) 267-2675
FBI - Lake Charles, LA Office	(337) 433-6353	(225) 522-4671
National Weather Service - NOAA	www.weather.gov	(206) 526-6317
U.S. Coast Guard Marine Safety Office	(314) 269-2463	
USCG (Lake Charles, LA)	(337) 433-3765	
USCG (Port Arthur, TX)	(409) 723-6500	
State		
Dept. of Natural Resources, LA (LADNR)	225-342-5505	
Dept. of Public Safety - LA	(504) 325-6595	
Dept. of Public Safety - LA HAZMAT Hotline	(225) 925-6595	
DEQ - Lake Charles, LA	(337) 475-8644	
Highway Dept. (Opelousas)	(337) 233-7404 (24-h	
LA Highway Dept. (Crowley Office)	(337) 233-7404 (24-hr)	(337) 788-7502
LA Highway Dept. (Lafayette Office)	(337) 233-7404	
State Police (Lafayette)	(337) 262-5880	
State Police (Lake Charles)	(337) 491-2511	
Local		
Fire: St.Landry Parish; Eunic	(337) 457-4204	
Fire: Westlake, LA	(337) 436-7417	
Ambulance: Acadian	(800) 259-1111	
Ambulance: Sulphur, LA	(337) 527-9999	
Ambulance: Westlake, LA	(337) 433-0691	
Police:St.Landry Parish;Eun	(337) 457-2626	
Sheriff: Lake Charles, LA	(337) 491-3700	
Sheriff:St.LandryParish;Eu	(337) 457-4115	
Hospital: West Cal-Cam Sulphur	(337) 527-7034	
Hospital:Eunice(Moosa Memorial	(337) 457-5244	
Hospital:St.Patrick's,Lake Cha	(337) 436-2511	
Media: KKGB FM Radio 101.3	(337) 439-3300	
Media: KPLC TV-7	(337) 439-9071	
Lake Charles Refinery First Responder/Rescue Team	(337) 491-5301	(337) 491-5333
Lake Charles, LA Ambulance Service	911	(337) 433-4411
Lake Charles, LA Hospital (Memorial)	(337) 494-3036	
Lake Charles, LA Police Station	911	(337) 491-1311
LEPC: Calcasieu Parish, LA	(337) 437-3512	(337) 439-9911
National Weather Service; Lake Charles, LA	(337) 477-5285	
Railroad: Acadian (Short Line Operator)	(337) 942-4085	
Railroad: BN/SF (Layayette, LA)	(337) 882-5433	(817) 234-6164
Railroad: U/SP (Lake Charles,LA)	(337) 439-5783	(800) 877-7267
Neighbors		
COP Clifton Ridge Marine Terminal	(337) 583-3360	
COP Gulf Coast Lubes Plant	(337) 583-3320	ETN-581-3320
COP Lake Charles Coke Handling Terminal	(337) 882-0640	(337) 540-4759
COP Lake Charles Pipeline Terminal	(337) 882-1521	
COP Lake Charles Refinery; Employee Emergency Info	(337) 491-5411	ETN-640-5411
Railroad: Kansas City Southern	(337) 882-5433	
Railroad: Union Pacific	(337) 439-5783	Manager: (225) 305-2685
Railroad: Union Pacific; Alternate Contacts	(402) 321-2743	(318) 792-6514
Sentinel Transportation (Cliff Jones)	(337) 788-4746	(337) 319-9788

LAKE CHARLES COKE HANDLING TERMINAL

Emergency Notification Contact List

Emergency Response Numbers

Group/Function	Telephone	Other Telephone/Fax
Duty Officer	800-231-2551	Fax: 918-662-0179
Control Center Emergency Hotline	877-267-2290	800-231-2566
Company "Meet Me" Number	866-836-3169	Pass Code: 157528
Employee Hotline (Natural Disaster)	866-397-3822	
Axiom Medical Monitoring	281-419-7063	

Qualified Individual / Incident Commander (QI / IC) Contact List

Name / Job Title	Office Phone	Home Phone	Cell Phone	Resp. Time
QI/IC Shannon Castille, Area Supervisor	(337) 882-0640	(b) (6)	(337) 540-4759	1 hr
Office: 3351 Bayou D' Inde Rd, Westlake, LA 70669		**Home:** (b) (6)		
Alt. QI/IC John Chiasson, Technician	(337) 738-7894	(b) (6)	(337) 297-0768	1 hr
Office: 3351 Bayou D' Inde Rd, Westlake, LA 70669		**Home:**		

Incident Support Team

Position	Name	Office Phone	Home Phone	Mobile Phone
EPR&S Contact	Rob Yarbrough	(281) 293-3891	(b) (6)	(281) 627-3177
Environmental Contact	Jim Phelan	(281) 293-3715		(580) 761-3233
DOT Contact	Todd Tullio	(832) 379-6255		(405) 371-1477
Health & Safety Contact	Brad A. Hendrix	(918) 661-0140		(918) 977-0137
Manager, Division	John A. Roark	(832) 379-6209		(281) 650-1867
Manager, HSE	Travis J. Wilke	(281) 293-2515		(580) 401-0047
Manager, Engineering & Projects	Dave J Barney	(281) 293-4385		(281) 467-4732
Manager, Logistics	Doug B. Sauer	(918) 661-0271		(832) 274-8478
Alternate QI/IC	Byron P. Sonnier	(337) 882-0640		(337) 297-0767

Transportation Tier 1 Responders

Name	Office Phone	Home Phone	Mobile Number	Resp. Time
LaFleur, Chris - Operator	(337) 882-0640	(b) (6)	(___) ___-____	1 hr
Chiasson, John - Technician	(337) 738-7894		(337) 297-0768	1 hr
Richard, Terrell - Operator	(337) 882-0640		(___) ___-____	1 hr
Clark, Rollie D. - Operator	(337) 882-0640		(___) ___-____	1 hr
Langley, Patrick - Operator	(337) 882-0640		(___) ___-____	1 hr
Fruge, James - Operator	(337) 882-0640		(___) ___-____	1 hr
Pierce, Kevin - Operator	(337) 882-0640		(___) ___-____	1 hr
Sonnier, Byron P. - Technician	(337) 882-0640		(337) 297-0767	1 hr

Emergency Response Contractors

Name	Phone	Alt. Phone	Resp. Time
Contract			
Clean Harbors Cooperative, LLC	(732) 661-2548		1 hr
Enviromental, Safety & Health Consulting S	(877) 437-2634		1 hr
MSRC & STAR Contractors	(800) 645-7745	(800) 259-6772	1 hr
Other			
CHEMTREC	(800) 424-9300		1 hr

Agency/Other Telephone Numbers

Agency/Group	Telephone	Other Telephone/Fax
Federal		
National Response Center	(800) 424-8802	(202) 267-2675
EPA Region 06	(800) 372-7745 (24-hr)	(214) 665-6489
FBI - Lake Charles, LA Office	(337) 433-6353	(225) 522-4671
National Weather Service - NOAA	www.weather.gov	(206) 526-6317
U.S. Coast Guard Marine Safety Office	(314) 269-2463	
USCG (Lake Charles, LA)	(337) 433-3765	
USCG (Port Arthur, TX)	(409) 723-6500	
State		
Dept. of Natural Resources, LA (LADNR)	225-342-5505	
Dept. of Public Safety - LA	(504) 325-6595	
Dept. of Public Safety - LA HAZMAT Hotline	(225) 925-6595	
DEQ - Lake Charles, LA	(337) 475-8644	
State Police	(504) 925-6595	
Local		
Fire: Calcasieu Parish, LA	911	(337)491-3700
Fire: Carlyss, LA	911	(337) 583-2365
Ambulance: Calcasieu Parish, L	911	(337) 491-3700
Sheriff: Calcasieu Parish, LA	911	(337) 491-3700
Hospital: West Cal-Cam	(337) 527-4274	
Hospital:Lake Charles Memorial	(337) 494-3036	
Media: KKGB FM Radio 101.3	(337) 439-3300	
Media: KPLC TV-7	(337) 439-9071	
Lake Charles Refinery First Responder/Rescue Team	(337) 491-5301	(337) 491-5333
LEPC: Calcasieu Parish, LA	(337) 437-3512	(337) 439-9911
National Weather Service; Lake Charles, LA	(337) 477-5285	
Neighbors		
COP Gulf Coast Lubes Plant	(337) 583-3320	ETN-581-3320
COP LC Refinery Employee Emergency Info.	(337) 491-5411	ETN-640-5411
COP-CRMT	(337) 583-3360	
COP-LCPL	(337) 882-1521	
Railraod: Union Pacific	(337) 439-5783	Manager: (225) 305-2685
Railroad: Kansas City Southern	(337) 882-5433	
Railroad: Union Pacific; Alternate Contacts	(402) 321-2743	(318) 792-6514
Sentinel Transportation (Cliff Jones)	(337) 788-4746	(337) 319-9788
Sentinel Transportation-Lake Charles (K. Beard)	(337) 882-6830	
Sentinel Transportation-Lake Charles (S. Hermann)	(337) 882-6831	

ORANGE PRODUCTS PIPELINE AREA

Emergency Notification Contact List

Emergency Response Numbers

Group/Function	Telephone	Other Telephone/Fax
Duty Officer	800-231-2551	Fax: 918-662-0179
Control Center Emergency Hotline	877-267-2290	800-231-2566
Company "Meet Me" Number	866-836-3169	Pass Code: 157528
Employee Hotline (Natural Disaster)	866-397-3822	
Axiom Medical Monitoring	281-419-7063	

Qualified Individual / Incident Commander (QI / IC) Contact List

Name / Job Title	Office Phone	Home Phone	Cell Phone	Resp. Time
QI/IC Mark Dardeau, Area Supervisor	(337) 583-3361	(b) (6)	(337) 287-0968	1 hr
Office: 2115 Davison Rd, Sulphur, LA 70665		**Home:** (b) (6)		
Alt. QI/IC Gary Mangrum, Facility Supervisor	(337) 583-3360	(b) (6)	(337) 660-5688	1 hr
Office: 2115 Davison Rd, Sulphur, LA 70665		**Home:** (b) (6)		

Incident Support Team

Position	Name	Office Phone	Home Phone	Mobile Phone
EPR&S Contact	Rob Yarbrough	(281) 293-3891	(b) (6)	(281) 627-3177
Environmental Contact	Jim Phelan	(281) 293-3715		(580) 761-3233
DOT Contact	Todd Tullio	(832) 379-6255		(405) 371-1477
Health & Safety Contact	Brad A. Hendrix	(918) 661-0140		(918) 977-0137
Manager, Division	John A. Roark	(832) 379-6209		(281) 650-1867
Manager, HSE	Travis J. Wilke	(281) 293-2515		(580) 401-0047
Manager, Engineering & Projects	Dave J Barney	(281) 293-4385		(281) 467-4732
Manager, Logistics	Doug B. Sauer	(918) 661-0271		(832) 274-8478

Transportation Tier 1 Responders

Name	Office Phone	Home Phone	Mobile Number	Resp. Time
Nevels, Mike - CFR	(337) 583-3382	(b) (6)	(337) 292-0331	1 hr
Rougeau, Greg - Pipeliner	(337) 583-3276		(337) 540-0115	1 hr
Ragle, Greg - Maintenance Coordinator	(337) 583-3360		(337) 802-4367	1 hr

Emergency Response Contractors

Name	Phone	Alt. Phone	Resp. Time
Contract			
Clean Harbors Cooperative, LLC	(732) 661-2548		1 hr
Enviromental, Safety & Health Consulting S	(877) 437-2634		1 hr
MSRC & STAR Contractors	(800) 645-7745	(800) 259-6772	1 hr
Other			
CHEMTREC	(800) 424-9300		1 hr

Agency/Other Telephone Numbers

Agency/Group	Telephone	Other Telephone/Fax
Federal		
National Response Center	(800) 424-8802	(202) 267-2675
FBI - Lake Charles, LA Office	(337) 433-6353	(225) 522-4671
National Weather Service - NOAA	www.weather.gov	(206) 526-6317
U.S. Coast Guard Marine Safety Office	(314) 269-2463	
USCG (Lake Charles, LA)	(337) 433-3765	
USCG (Port Arthur, TX)	(409) 723-6500	
State		
Dept. of Natural Resources, LA (LADNR)	225-342-5505	
Dept. of Public Safety - LA	(504) 325-6595	
Dept. of Public Safety - LA HAZMAT Hotline	(225) 925-6595	
DEQ - Lake Charles, LA	(337) 475-8644	
LA State Police (Lake Charles)	(337) 491-2511	
Railroad Commission of TX, Dist. 03	(713) 869-5001 (24-hr)	
TCEQ Region 12 (Houston) Emergency Coordinator	(713) 767-3500	M-F 8am to 5pm
TX General Land Office	(800) 832-8224	
TX Highway Patrol (Beaumont)	(409) 924-5400	
Local		
Fire: Calcasieu Parish, LA	911	(337) 491-3700
Fire: Carlyss, LA	911	(337) 583-2365
Fire: Orange, TX	(409) 988-7360	
Ambulance: Orange County, LA	(409) 738-2912	
Ambulance: Sulphur, LA	(337) 527-9999	
Police Dept: W. Orange, TX	(409) 883-7574	
Police: Lake Charles, LA	911	(337) 491-1311
Sheriff: Lake Charles, LA	(337) 491-3700	
Sheriff: Orange County, TX	(409) 883-2612	
Hospital: Baptist Orange, TX	(409) 883-9361	
Hospital: West Cal-Cam; Sulphu	(337) 527-7034	
Media: KKGB FM Radio 101.3	(337) 439-3300	
Media: KPLC TV-7	(337) 439-9071	
LEPC: Calcasieu Parish, LA	(337) 437-3512	(337) 439-9911
LEPC: Orange County, TX	409-883-2612	
National Weather Service; Lake Charles, LA	(337) 477-5285	
Neighbors		
COP Gulf Coast Lubes Plant	(337) 583-3320	ETN-581-3320
COP Lake Charles Coke Handling Terminal	(337) 882-0640	(337) 540-4759
COP Lake Charles Pipeline Terminal	(337) 882-1521	(281) 866-5723
COP Lake Charles Refinery; Employee Emergency Info	(337) 491-5411	ETN-640-5411
Railroad: Kansas City Southern	(337) 882-5433	
Railroad: Union Pacific	(337) 439-5783	Manager: (225) 305-2685
Railroad: Union Pacific; Alternate Contacts	(402) 321-2743	(318) 792-6514
Sentinel Transportation (Cliff Jones)	(337) 788-4746	(337) 319-9788

WESTLAKE PRODUCTS TERMINAL

Emergency Notification Contact List

Emergency Response Numbers

Group/Function	Telephone	Other Telephone/Fax
Duty Officer	800-231-2551	Fax: 918-662-0179
Control Center Emergency Hotline	877-267-2290	800-231-2566
Company "Meet Me" Number	866-836-3169	Pass Code: 157528
Employee Hotline (Natural Disaster)	866-397-3822	
Axiom Medical Monitoring	281-419-7063	

Qualified Individual / Incident Commander (QI / IC) Contact List

Name / Job Title	Office Phone	Home Phone	Cell Phone	Resp. Time
QI/IC David A. Bryant, Facility Supervisor	(337) 882-1521	(___) ___-____	(281) 866-5723	1 hr
Office: 1851 Clifton Ridge Rd, Sulphur, LA 70665		**Home:** LA		
Alt. QI/IC Frank Webb, Operator	(337) 491-5245	(b) (6)	(337) 540-9949	1 hr
Office: 1980 Old Spanish Trail, Westlake, LA 70669		**Home:** (b) (6)		

Incident Support Team

Position	Name	Office Phone	Home Phone	Mobile Phone
EPR&S Contact	Rob Yarbrough	(281) 293-3891	(b) (6)	(281) 627-3177
Environmental Contact	Jim Phelan	(281) 293-3715		(580) 761-3233
DOT Contact	Todd Tullio	(832) 379-6255		(405) 371-1477
Health & Safety Contact	Brad A. Hendrix	(918) 661-0140		(918) 977-0137
Manager, Division	Alvin Brass	(832) 379-6208		(337) 255-2444
Manager, HSE	Travis J. Wilke	(281) 293-2515		(580) 401-0047
Manager, Engineering & Projects	Dave J Barney	(281) 293-4385		(281) 467-4732
Manager, Logistics	Doug B. Sauer	(918) 661-0271		(832) 274-8478
Alternate QI/IC	Carl Trent	(337) 882-1521		(337) 540-8317

Transportation Tier 1 Responders

Name	Office Phone	Home Phone	Mobile Number	Resp. Time
Trent, Carl - Maintenance Specialist	(337) 882-1521	(b) (6)	(337) 540-8317	1 hr
Nunez, Phillip - Operator	(337) 882-1521		(___) ___-____	1 hr
O' Neal, Jeff - Senior Technician	(337) 882-1521		(___) ___-____	1 hr
Fleming, Ray - Operator	(337) 882-1521		(___) ___-____	1 hr

Emergency Response Contractors

Name	Phone	Alt. Phone	Resp. Time
Contract			
Clean Harbors Cooperative, LLC	(732) 661-2548		1 hr
Enviromental, Safety & Health Consulting S	(877) 437-2634		1 hr
MSRC & STAR Contractors	(800) 645-7745	(800) 259-6772	1 hr
Other			
CHEMTREC	(800) 424-9300		1 hr

Agency/Other Telephone Numbers

Agency/Group	Telephone	Other Telephone/Fax
Federal		
National Response Center	(800) 424-8802	(202) 267-2675
EPA Region 06	(800) 372-7745 (24-hr)	(214) 665-6489
FBI - Lake Charles, LA Office	(337) 433-6353	(225) 522-4671
National Weather Service - NOAA	www.weather.gov	(206) 526-6317
U.S. Coast Guard Marine Safety Office	(314) 269-2463	
USCG (Lake Charles, LA)	(337) 433-3765	
USCG (Port Arthur, TX)	(409) 723-6500	
State		
Dept. of Natural Resources, LA (LADNR)	225-342-5505	
Dept. of Public Safety - LA	(504) 325-6595	
Dept. of Public Safety - LA HAZMAT Hotline	(225) 925-6595	
DEQ - Lake Charles, LA	(337) 475-8644	
Highway Dept. (Lake Charles)	(337) 439-2406 (24-h	
State Police (Lake Charles Off	(337) 491-2511	
Local		
Fire: Carlyss, LA	911	(337) 583-2365
Fire: Westlake, LA	(337) 436-7417	
Ambulance: Sulphur	(337) 527-9999	
Ambulance: Westlake	(337) 433-0691	
Police: Westlake, LA	(337) 433-4151	
Sheriff: Calcasieu Parish, LA	911	(337) 491-3700
Hospital: Lake Charles Memoria	(337) 494-3036	
Hospital: West Cal-Cam	(337) 527-4274	
Media: KKGB FM Radio 101.3	(337) 439-3300	
Media: KPLC TV-7	(337) 439-9071	
Lake Charles Refinery First Responder/Rescue Team	(337) 491-5301	(337) 491-5333
LEPC: Calcasieu Parish, LA	(337) 437-3512	(337) 439-9911
National Weather Service; Lake Charles, LA	(337) 477-5285	
Neighbors		
COP Clifton Ridge Marine Terminal	(337) 583-3360	
COP Gulf Coast Lubes Plant	(337) 583-3320	
COP Lake Charles Coke Handling Terminal	(337) 882-0640	
COP Lake Charles Pipeline Terminal	(337) 882-1521	
COP Lake Charles Refinery; Employee Emergency Info	(337) 491-5411	
Railroad: Kansas City Southern	(337) 882-5433	
Railroad: Union Pacific	(337) 439-5783	Manager; (225) 305-2685
Railroad: Union Pacific; Alternate Contacts	(402) 321-2743	(318) 792-6514
Sentinel Transportation (Cliff Jones)	(337) 788-4746	

LOUISIANA PIPELINE DIVISION OFFICE

Emergency Notification Contact List

Emergency Response Numbers

Group/Function	Telephone	Other Telephone/Fax
Duty Officer	800-231-2551	Fax: 918-662-0179
Control Center Emergency Hotline	877-267-2290	800-231-2566
Company "Meet Me" Number	866-836-3169	Pass Code: 157528
Employee Hotline (Natural Disaster)	866-397-3822	
Axiom Medical Monitoring	281-419-7063	

Qualified Individual / Incident Commander (QI / IC) Contact List

Name / Job Title	Office Phone	Home Phone	Cell Phone	Resp. Time
QI/IC Greg Ragle, Maintenance Coordinator	(337) 583-3360	(b) (6)	(337) 802-4367	1 hr
Office: 1723 Pak Tank Rd, Sulphur, LA 70665		**Home:** (b) (6)		
Alt. QI/IC Mark Dardeau, Area Supervisor	(337) 583-3361	(b) (6)	(337) 287-0968	1 hr
Office: 2115 Davison Rd, Sulphur, LA 70665		**Home:** (b) (6)		

Incident Support Team

Position	Name	Office Phone		Mobile Phone
EPR&S Contact	Rob Yarbrough	(281) 293-3891	(b) (6)	(281) 627-3177
Environmental Contact	Jim Phelan	(281) 293-3715		(580) 761-3233
DOT Contact	Todd Tullio	(832) 379-6255		(405) 371-1477
Health & Safety Contact	Brad A. Hendrix	(918) 661-0140		(918) 977-0137
Manager, Division	John A. Roark	(832) 379-6209		(281) 650-1867
Manager, HSE	Travis J. Wilke	(281) 293-2515		(580) 401-0047
Manager, Engineering & Projects	Dave J Barney	(281) 293-4385		(281) 467-4732
Manager, Logistics	Doug B. Sauer	(918) 661-0271		(832) 274-8478

Transportation Tier 1 Responders

Name	Office Phone	Home Phone	Mobile Number	Resp. Time
Galloway, James - Technician	(337) 583-3394	(b) (6)	(337) 249-5996	1 hr
Palomino, Rico E. - Technician	(337) 583-3388		(337) 842-8904	1 hr

Emergency Response Contractors

Name	Phone	Alt. Phone	Resp. Time
Contract			
Clean Harbors Cooperative, LLC	(732) 661-2548		1 hr
Enviro-Clean Services LLC	(405) 728-9575		1 hr
MSRC & STAR Contractors	(800) 645-7745	(800) 259-6772	1 hr

Agency/Other Telephone Numbers

Agency/Group	Telephone	Other Telephone/Fax
Federal		
National Response Center	(800) 424-8802	(202) 267-2675
EPA Region 06	(800) 372-7745 (24-hr)	(214) 665-6489
FBI - Lake Charles, LA Office	(337) 433-6353	(225) 522-4671
National Weather Service - NOAA	www.weather.gov	(206) 526-6317
U.S. Coast Guard Marine Safety Office	(314) 269-2463	
USCG (Lake Charles, LA)	(337) 433-3765	
USCG (Port Arthur, TX)	(409) 723-6500	
State		
Dept. of Natural Resources, LA (LADNR)	225-342-5505	
Dept. of Public Safety - LA	(504) 325-6595	
Dept. of Public Safety - LA HAZMAT Hotline	(225) 925-6595	
DEQ - Lake Charles, LA	(337) 475-8644	
LA State Police (Lake Charles)	(337) 491-2511	
Local		
Fire: Calcasieu Parish, LA	911	(337) 491-3700
Fire: Carlyss, LA	911	(337) 583-2365
Ambulance: Calcasieu Parish, L	911	(337) 491-3700
Sheriff: Calcasieu Parish, LA	911	(337) 491-3700
Hospital: West Cal-Cam	(337) 527-4274	
Hospital:Lake Charles Memorial	(337) 494-3036	
Media: KKGB FM Radio 101.3	(337) 439-3300	
Media: KPLC TV-7	(337) 439-9071	
Lake Charles Refinery First Responder/Rescue Team	(337) 491-5301	(337) 491-5333
LEPC: Calcasieu Parish, LA	(337) 437-3512	(337) 439-9911
National Weather Service; Lake Charles, LA	(337) 477-5285	
Neighbors		
COP Clifton Ridge Marine Terminal	(337) 583-3360	
COP Gulf Coast Lubes Plant	(337) 583-3320	ETN-581-3320
COP Lake Charles Coke Handling Terminal	(337) 882-0640	(337) 540-4759
COP Lake Charles Pipeline Terminal	(337) 882-1521	(509) 714-5385
COP Lake Charles Refinery (Employee Emergency Info	(337) 491-5411	ETN-640-5411
Railroad: Kansas City Southern	(337) 882-5433	
Railroad: Union Pacific	(337) 439-5783	(225) 305-2685 (Mgr.)
Railroad: Union Pacific; Alternate Manager	(402) 321-2743	(318) 792-6514
Sentinel Transportation (Cliff Jones)	(337) 788-4746	(337) 319-9788
Sentinel Transportation-Lake Charles (K. Beard)	(337) 882-6830	(337) 474-2745
Sentinel Transportation-Lake Charles (S. Herman)	(337) 882-6831	

2.4 Contractors

The company has response agreements with various Oil Spill Response Organizations (OSRO) and contractors. These contractors will be activated on an as-needed basis and typically only if the incident requires resources beyond those available from Louisiana Response Zone. The contract service agreements follow:

2.4.1 Marine Spill Response Corporation (MSRC)

MARINE SPILL RESPONSE CORPORATION
SERVICE AGREEMENT

EXECUTION INSTRUMENT

The MSRC SERVICE AGREEEMENT 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

ConocoPhillips
[Name of COMPANY]

a _____
[Type of entity and place of organization]

with its principal offices located at 600 North Dairy, Ashford, Houston TX 77079 (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. LeMPA 189 [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 Feb. 18, 2005.

ConocoPhillips Co. [COMPANY]

By: _____ [signature]

Antonio J. Vilas [print name]

Title: General Manager

Address: 600 North Dairy
Ashford, Houston TX 77079

Telephone: 281-293-1000 Fax: _____

MARINE SPILL RESPONSE CORPORATION:

By: Judith R. Norell
Judith R. Norell
Marketing & Customer Service Manager
220 Spring Street, Suite 500
Herndon, VA 20170
(703) 326-5617; Fax: (703) 326-5660

MSRC 24 Hour Emergency Telephone Numbers

MSRC 24-HOUR EMERGENCY NUMBERS

TELEPHONE:

1-800-OIL SPIL (1-800-645-7745)

1-800-259-6772

1-732-417-0175 (COMMERCIAL)

FACSIMILE:

1-800-635-6772

1-732-417-0097 (COMMERCIAL)

ALTERNATE NUMBER

1-703-326-5609

MSRC Technical Information Bulletin

MSRC
Marine Spill Response Corporation

August 6, 2002

MSRC Technical Information Bulletin 02-03

Additional MSRC Emergency Response Contact Number

Dear Customer:

MSRC is always striving to ensure redundancies in all of our spill response capabilities, whether with response equipment or in our infrastructure. With this in mind, MSRC wanted to ensure that, if in the extremely unlikely event our toll free (800) access numbers or the commercial (732) area code toll number affiliated with MSRC's 24-hour call-out system became disabled through a local or regional telephone line problem, we would have an alternate system in place to enable our customers to contact us.

As you are aware, MSRC has three primary emergency response contact telephone numbers, which are:

(800) OIL-SPIL,
(800) 259-6772 (MSRC), and
(732) 417-0175.

All three of these numbers ring into the same MSRC system.

In the unlikely event that our manned facility is unable to accept calls to the above numbers due to any type of outage either on the part of the local or national carriers, we have developed a redundant system, run through a different geographic area. If the three primary numbers do not work, please call **(703) 326-5609**. A voice mailbox system will answer and instruct you to leave a message, **Please do not forget to include your name, your company, and a contact phone number.** Upon leaving a message, the system will automatically page several MSRC personnel to retrieve the message. Our goal is to return your call within five minutes. If you do not receive a call back in five minutes, **Please call the number again and repeat the process to ensure that your call is received and acted upon**.

Please note: This (703) area code number is **only** for those emergencies where the primary (800) and (732) numbers into our manned facility do not work. As mentioned earlier, this new procedure is designed to provide an additional redundancy in MSRC's 24-hour emergency response call-out system.

Marine Spill Response Corporation
980 West Lincoln Road
Lake Charles, LA 70606-4870
(337) 475-6400
http://www.msrc.org/

MSRC STARS Contractors

The following MSRC STARS contractors will be activated through MSRC.

Eagle Construction & Environmental Services POC: Tracy Clark	Gonzales, LA (800) 336-0909
Garner Environmental Services, Inc. POC: John Pavlicek	New Orleans, LA (800) 424-1716
Clean Harbors POC: Bill Gereighty	New Orleans, LA (800) 207-7745

2.4.2 Environmental Safety & Health Consulting Services Inc (ES&H)

65499.0-MSA-L48

MASTER SERVICES AGREEMENT

CONOCOPHILLIPS COMPANY

CONTRACT NO. 65499.0-MSA-L48

With

Environmental Safety & Health Consulting Services Inc

Effective 08/11/2008

65499.0-MSA-L48

This Agreement is effective on 08/11/2008 (mm, dd, yyyy), by and between ConocoPhillips Company, (hereinafter called "Company") and Environmental Safety & Health Consulting Services Inc (hereinafter called "Contractor").

WHEREAS, Company may from time to time desire Contractor to perform work and/or provide items of equipment, machinery, materials or supplies in the conduct of Company's operations; and

WHEREAS, Company and Contractor desire to establish certain general terms and conditions, which shall apply to and become part of each and every contract, whether written or oral, entered into between the parties.

NOW, THEREFORE, in consideration of the mutual promises contained herein, the parties agree that this Agreement shall consist of this signature document and the following Sections attached hereto and made a part hereof:

SECTION I – STATEMENT OF WORK
SECTION II – COMPENSATION, INVOICING AND PAYMENTS
SECTION III – TERMS AND CONDITIONS, PART 1
SECTION IV - TERMS AND CONDITIONS, PART 2
SECTION V - EXHIBITS

ENTIRE AGREEMENT AND OTHER CONDITIONS

This Agreement reflects the entire agreement between the parties with respect to its subject matter. Except for any secrecy or other nondisclosure agreements between the parties, all other oral or written agreements, contracts, understandings, conditions, or representations with respect to the subject matter of this Agreement are superseded by this Agreement.

General or special conditions in any of Contractor's price lists, invoices, tickets, receipts or other documents presented to Company relating to the work hereunder are null and void, regardless of whether signed by an employee of Company.

SIGNATURES:

ConocoPhillips Company	Environmental Safety & Health Consulting Services Inc
Signature	**Signature** Davian M. Ploger
Name Ray Rocato	**Name** Davian M. Ploger
Title Procurement Supervisor	**Title** President/CEO
Date 11/6/08	**Date** October 22, 2008

65499.0-MSA-L48

Page 4 of 53

indirectly to MBE and WBE subcontractors and suppliers for goods, equipment and services used in the performance of the Work

7. NOTICES

Unless otherwise specifically provided, all notices and other communications provided for in this Agreement or any contract hereunder shall be in writing and shall be effective upon receipt. Such notices and communications shall be given either: (a) by hand delivery to an authorized representative of the party to whom directed, or (b) by United States mail, postage prepaid, or (c) by courier service, charges prepaid, or (d) by facsimile to the address of the party as designated in any contract hereunder for matters relating to any specific work under that contract or to the following addresses for matters relating to this Agreement:

COMPANY:

ConocoPhillips Company
P. O. Box 2197
Houston, TX 77252-2197
Attn: MSA Contracting - WL 3 9th Floor - Purchasing
Facsimile No.: 832-486-6498

CONTRACTOR:

Environmental Safety & Health Consulting Services Inc
P.O. Box: 54653, NEW ORLEANS, LA, 70154-4653, US
Attn:
Facsimile No.: _____

Any notice, other than a force majeure notice under Section III Article 9, delivered after normal business hours at the receiving party's place of business shall not be deemed delivered until the receiving party's following business day. Either party may at any time change its address, facsimile number or attention recipient upon written notice to the other party.

8. TERMINATION OF AGREEMENT AND CONTRACTS

8.1. This Agreement shall continue in full force and effect for a term of one (1) year from the date this Agreement is made and from month to month thereafter unless terminated at any time during the term of this Agreement by thirty (30) days written notice by one party hereto to the other party, except, regardless of whether notice is given, this Agreement shall not be terminated by Contactor with respect to contracts which have not yet been completed.

8.2. Company may terminate any contract entered into under this Agreement immediately upon notice with or without cause. If Company terminates such a contract in the absence of a material breach by or attributable to Contractor, Company shall owe Contractor only the compensation earned to the time of notice of termination plus any demobilization fee provided for in such contract. In the event the termination was due to a material breach by or attributable to Contractor, Company shall owe Contractor only the compensation earned to time of notice of termination plus any demobilization fee provided for in such contract less any additional costs and expenses incurred by Company by reason of such breach including additional costs incurred by having to obtain a replacement contractor. Such termination and deduction for additional costs and expenses shall be without prejudice to the other legal or equitable remedies which may be available to Company.

8.3. If work or deliveries under a contract are to be effected on or for an offshore facility, and if that offshore facility becomes an actual, constructive, arranged or compromised total loss, such contract shall terminate to the extent it pertains to the offshore facility from the moment the loss occurs, and Company shall owe Contractor only the compensation earned to time of notice plus any demobilization fee provided for in such contract.

8.4. Notwithstanding Article 8.2, Company may terminate this Agreement and/or any contract entered into under this Agreement as allowed under Section III, Article 1, Ethics and Conflicts of Interest and Article 9, Force Majeure.

8.5. Notwithstanding the termination of this Agreement and any contract hereunder, the parties shall continue to be bound by the provisions of this Agreement that require some action or forbearance after such termination, or that pertain to enforcement of rights under this Agreement or any contract hereunder which accrued or vested prior to termination, including but not limited to, provisions pertaining to ethics, confidentiality, intellectual property rights, governing law, liens, audit, risk structure, insurance, indemnities, taxes, dispute resolution and warranty.

9. GENERAL PROVISIONS

9.1. The captions and headings used in this Agreement are intended for convenience only and shall not be used for purposes of construction or interpretation.

9.2. No waiver by either party of any one or more defaults by the other party in the performance of this Agreement or any contract hereunder shall operate or be construed as a waiver of any future default or defaults by the same party, whether of a like or a different character.

9.3. It is intended that if any provision of this Agreement is unenforceable for any reason, it shall be adjusted rather than voided, if possible, in Scope of Work to achieve the intent of the parties. In any event, all other provisions of this Agreement shall be deemed valid, binding, and still enforceable.

9.4. In the event that either party commits any material breach of this Agreement including, without limitation, any breach of any indemnity obligation, in addition to any other remedy that the aggrieved party may have at law or in equity, it shall be entitled to recover all costs, including court costs and attorney's fees, incurred in any proceeding wherein the aggrieved party seeks redress for such breach.

9.5. Neither this Agreement nor any contract hereunder shall be considered an exclusive contract. Company shall have the right to hire others to perform the same or similar work.

9.6. Exhibits "A" through "H" attached hereto are incorporated and made a part of this Agreement. Company reserves the right to revise such exhibits from time to time, which revisions shall be binding as to work performed subsequent to receipt of the revision by Contractor.

65499.0-MSA-L48-SOW-L48-1.0

ConocoPhillips Company

Attn:

Also send a copy of notice as instructed per "Notices" in the related Agreement. Any changes must be pre-approved by Company in writing.

Contractor agrees to furnish and deliver all items and perform all work described herein and on any continuation pages hereto for the consideration shown herein. The rights and obligations of the parties shall be governed by the above-referenced Agreements, and such provisions, representations, certifications and specifications as are attached or incorporated by reference herein.

CONOCOPHILLIPS COMPANY	**Environmental Safety & Health Consulting Services Inc**
Signature: Ray Rosato	Signature: Davian M. Ploger
Name: Ray Rosato	Name: Davian M. Ploger
Title: Procurement Supervisor	Title: President/CEO
Date: 11/6/08	Date: October 22, 2008

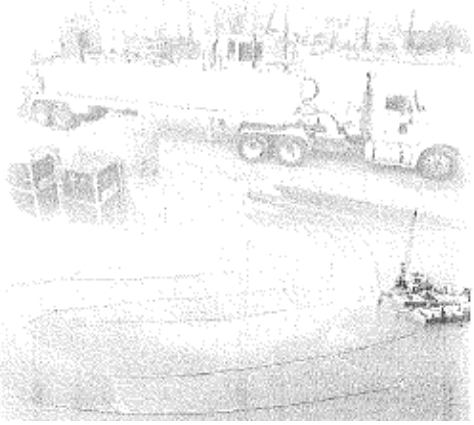
END OF DOCUMENT

ES&H
The Total Assurance Team

EMERGENCY RESPONSE RATE SCHEDULE

January 2009

24-Hour Emergency Response
(877) 4 ESANDH
(877) 437-2634



PERSONNEL

Experienced emergency response personnel are available for complete spill clean-up operations, 24 hours a day, 7 days a week. Normal hours of operation are from 0800 through 1600 daily, Monday through Friday. All labor charges will be in accordance with ES&H Daily Tickets. Overtime for personnel will be charged at time and a half between 1600 through 0800 Monday through Friday, weekends from 1600 Friday through 0800 Monday. Double time rates will be charged for all National Holidays. Per Diem of $125.00 per day, per employee will be charged for all work-performed 50 miles outside of employee's home base. There will be a 4-hour minimum service charge on all labor call outs. All call outs will be charged portal-to-portal. Travel time for personnel will be charged at regularly hourly rates unless agreed otherwise with the client. Lunches and meals provided at the job site or in the field will be billed at **Cost + 20%.**

LEVEL D PPE

Level D PPE shall be used when the atmosphere contains no known hazard and work functions preclude splashes, immersion, or the potential for unexpected inhalation of or contact with hazardous levels of any chemical. Level D protective equipment such as hard hats, personal flotation devices (PFD), steel toe rubber boots, safety glasses, ear plugs, Tyvek coveralls, and inner protective gloves are provided by ES&H at a cost of $50.00 per person, for each day the person is on the work site. Level D PPE is not charged for administrative, support, or delivery personnel.

LEVEL C PPE

Level C PPE shall be used when the atmospheric contaminants, liquid splashes, or other direct contact will not adversely affect or be absorbed through any exposed skin. Secondly, the types of air contaminants have been identified, concentrations measured, and an air purifying respirator (APR) is available that can remove the contaminants. Level C protective equipment such as disposable chemical resistant coveralls (poly-coated Tyvek, CPF-1 & CPF-2), 2 piece chemical splash suits, chemical resistant outer protective gloves and NIOSH approved full face APR's shall be invoiced individually as used.

HEAT STRESS

Due to the possibility of elevated temperatures throughout the year, ES&H shall provide all spill response personnel with water and sports drinks to be consumed throughout the work shift in an effort to minimize the effects of elevated temperatures and prevent heat related injuries. Ice chests and ice shall also be provided by ES&H. Water and sports drinks shall be invoiced per case and ice shall be invoiced per bag (8 pounds).

SITE SAFETY

In the event ES&H mobilizes twelve (12) or more response personnel to a spill site, one or more qualified safety officers will also be mobilized to assist with site safety. The number of safety officers mobilized will be site specific, based upon the logistics of the different work zones. Safety officers will remain on site and work with response personnel throughout the duration of the project until it is agreed upon by ES&H Management and Customer Representatives that these services are no longer required.

AUTOMOTIVE EQUIPMENT

A mileage charge of $0.75 per mile will be charged for all automotive equipment. Fuel for all automotive equipment is included in the $0.75 per mile charge.

BOOM ANCHORS & BUOYS

For each 1000 feet of containment boom deployed, ES&H shall charge a minimum of five (5) anchors, five (5) anchor buoys, and the necessary rope. In areas of strong currents, additional anchors may be deployed to hold containment boom in desired locations. All anchors will be billed at the daily rental rate. Lost or destroyed anchors and buoys will be replaced at **Cost + 20%.**

COMMERCIAL TRANSPORATION

For all employees who do not reside in the local commuting area for the work site, ES&H will be reimbursed for costs incurred for employee travel to and from the work site on the basis of ES&H's incurred cost plus 20% for all commercial transportation.

STAND-BY-RATES

Stand-by rates will be ½ the daily rate for equipment. These rates may be negotiated based upon the circumstances causing the need for a stand-by situation. Full rates will apply for personnel and per diem.

TAXES

All federal, state, and municipal taxes, except income taxes and advalorem taxes, now and hereinafter imposed with respect to services rendered; to rental equipment; to the processing, manufacture, repair, delivery, transportation of equipment and supplies shall be added to and become part of the total price payable by the client, unless the proper exemption certificates are furnished.

TERMS

All equipment not listed in this rate schedule, whether requested by the contracting company or needed to complete work in progress, will be negotiated for price with a client company representative. A 20% handling charge will be added to the cost of any equipment rented or subcontracted, which is or is not listed in this rate schedule.

REPLACEMENT OF DAMAGED EQUIPMENT

All equipment and supplies are subject to a replacement charge at ES&H cost + 20% if damaged, or if decontamination is impossible.

DECONTAMINATION OF EQUIPMENT

A mutually agreed price for cleaning contaminated containment boom shall be decided upon and can vary depending on the degree of contamination. The charges for cleaning all other equipment is ½ the daily rental rate. Time and materials will also be included. Any waste water disposal will be at cost + 20%.

Decontamination pools provided by ES&H shall be invoiced as a daily rental item as listed in the following pages. However, in the event that decontamination pools are damaged or destroyed during decontamination activities, ES&H reserves the right to invoice Cost + 20% for repairs and/or replacement.

ROLL OFF BOXES

Roll off box delivery and pickup charges vary according to the distance from the site location. The cost for roll off liners is $ 45.00 each. Box liners are mandatory, however if the roll off box requires cleaning at the end of the rental period, the customer will incur the cleaning charges.

INVOICES

Invoices will be rendered either on a daily basis or at the completion of the job, depending on the duration of the job. Invoices will contain all applicable Federal, State and, Local taxes. All charges are payable NET CASH within thirty (30) days from the date of invoice. Finance charges will be applied to invoices with an unpaid balance beginning thirty-one (31) days from the date of invoice. Finance charges are computed at the periodic rate of 1.5% per month (18% per annum.)

OIL SPILL RESPONSE	HOURLY RATE	
ADMINISTRATIVE PERSONNEL	**Regular**	**Overtime**
Project Manager	$75.00	$112.50
Sr. Project Accountant	$65.00	$97.50
Accounting Specialist	$52.00	$78.00
Transportation/Disposal Coordinator	$45.00	$67.50
Logistics Coordinator	$42.00	$63.00
Field Clerk	$38.00	$57.00
Administrative/ Logistics Support	$35.00	$52.50
RESPONSE PERSONNEL	**Regular**	**Overtime**
Supervisor	$55.00	$82.50
Foreman	$45.00	$67.50
Specialized Equipment Operator	$42.00	$63.00
Boat Operator	$40.00	$60.00
Mechanic	$40.00	$60.00
Confined Space Entry Technician	$38.00	$57.00
Technician	$34.00	$51.00
SAFETY PERSONNEL	**Regular**	**Overtime**
Safety Officer	$55.00	$82.50
Air Monitoring/Sampling Technician	$45.00	$67.50
Fire Watch/Hole Watch	$35.00	$52.50

HAZMAT RESPONSE	HOURLY RATE	
ADMINISTRATIVE PERSONNEL	**Regular**	**Overtime**
Project Manager	$85.00	$127.50
Project Accountant	$65.00	$97.50
Accounting Specialist	$52.00	$78.00
Transportation/Disposal Coordinator	$55.00	$82.50
Logistics Coordinator	$42.00	$63.00
Field Clerk	$38.00	$57.00
Administrative/Logistics Support	$35.00	$52.50
RESPONSE PERSONNEL	**Regular**	**Overtime**
Supervisor	$65.00	$97.50
Foreman	$55.00	$82.50
Heavy Equip./Specialized Response Equip. Operator	$52.00	$78.00
Mechanic	$50.00	$75.00
Confined Space Entry Technician	$48.00	$72.00
Hazmat Technician	$43.00	$64.50
SAFETY PERSONNEL	**Regular**	**Overtime**
Safety Officer	$60.00	$90.00
Air Monitoring/Sampling Technician	$55.00	$82.50
Fire Watch/Hole Watch	$45.00	$67.50

RESPONSE VEHICLES	
Pick Up Truck	$125.00 / day
1 Ton Pick Up Truck	$150.00 / day
1.5 Ton Truck	$175.00 / day
Personnel Van	$125.00 / day
4 x 4 Pick Up	$200.00 / day
4 x 4 ATV	$275.00 / day
RTV Mule	$450.00 / day
Command Post (Mobile)	$1000.00 / day
Tractor Truck	$95.00 / hour
130bbl Vacuum Truck	$75.00 / hour
70bbl Vacuum Truck	$70.00 / hour
Flatbed Freightliner (Drum Truck)	$80.00 / hour
Roll Off Delivery (Single)	$95.00 / hour
Roll Off Delivery (Double)	$160.00 / hour
Forklift (Used @ ES&H Offices Only)	$50.00 / hour

RESPONSE TRAILERS	
48' Response Trailer	$200.00 / day
36' Response Trailer	$180.00 / day
32' Response Trailer	$175.00 / day
28' Response Trailer	$150.00 / day
24' Response Trailer	$135.00 / day
20' Response Trailer	$125.00 / day
16' Response Trailer	$100.00 / day
12' – 14' Response Trailer	$75.00 / day
8' – 10' Response Trailer	$50.00 / day
6' Response Trailer	$25.00 / day

MARINE EQUIPMENT	
42' Barge Boat with Radar, GPS, & Twin Engines	$1200.00 / day
36' – 38' Barge Boat with Radar, GPS, & Twin Engines	$1000.00 / day
30' – 32' Barge Boat with Radar, GPS, & Twin Engines	$800.00 / day
26' – 30' Barge Boat with Twin Engines	$750.00 / day
22' – 24' Barge Boat with Single Engine	$600.00 / day
32' Response Boat with Twin Engines	$900.00 / day
30' Response Boat with Twin Engines	$875.00 / day
28' Response Boat with Twin Engines	$850.00 / day
26' Response Boat with Radar, GPS, & Twin Engines	$800.00 / day
25' Cabin Boat with Radar, GPS & Single Engine	$700.00 / day
24' – 25' Response Boat with Twin Engines	$550.00 / day
18' – 20' Response Boat with Single Engine	$375.00 / day
16' Response Boat with Single Engine	$250.00 / day
12' – 14' Response Boat with Single Engine	$150.00 / day
12' – 14' Response Boat (No Engine)	$100.00 / day
24' Marine Equipment Repair/Maintenance Trailer	$150.00 / day
Pirogue	$35.00 / day
Air Boat	$750.00 / day
Oil Barge (30bbl to 50bbl)	$250.00 / day
Oil Barge Set (225bbl capacity)	$1000.00 / day

SPILL CONTROL EQUIPMENT	
6" Containment Boom	$0.75 / ft / day
10" Containment Boom	$1.00 / ft / day
18" Containment Boom	$1.40 / ft / day
24" Containment Boom	$3.00 / ft / day
36" Containment Boom	$4.00 / ft / day
42" Containment Boom	$5.50 / ft / day
48" Containment Boom	$6.00 / ft / day
Bullet Anchor	$5.00 / each
10 LB Anchor	$20.00 / each / day
15 LB Anchor	$25.00 / each / day
22 LB Anchor	$40.00 / each / day
40 LB Anchor	$65.00 / each / day
65 LB Anchor	$80.00 / each / day
Boom Lights (small, battery powered) (includes batteries)	$15.00 / each / day
Boom Lights (large, battery powered) (includes batteries)	$25.00 / each / day
Chemical Boom Lights	$15.00 / each
Anchor Buoys	$25.00 / each
Boom Stakes	$15.00 / each

SKIMMERS	
Marco Skimmer	$5000.00 / day
Marco Backing Belt (replacement)	$1200.00 / each
Marco Light Oil Belt (replacement)	$1200.00 / each
Marco Filterbelt / Pad (replacement)	$700.00 / each
Marco Diesel Pad (replacement)	$700.00 / each
Mobile Drum Skimmer Barge System	$3500.00 / day
Drum Skimmer Package (small)	$715.00 / day
Drum Skimmer Package (medium)	$765.00 / day
Drum Skimmer Package (large)	$815.00 / day
Portable Mini-Vac System	$1250.00 / day
Triton Vacuum Unit	$1500.00 / day
Manta Ray Skimmer	$150.00 / day
Skimpack	$125.00 / day
Aluminum (small)	$150.00 / day
Aluminum (large)	$200.00 / day
Slurp Skimmer	$150.00 / day
Rope Mop I-4	$350.00 / day
Rope Mop II-4	$400.00 / day
Rope Mop II-6	$450.00 / day
Rope Mop II-9	$500.00 / day
12" Tail Pulley	$10.00 / day
16" Tail Pulley	$20.00 / day
4" Rope Mop (rental)	$1.00 / ft / day
6" Rope Mop (rental)	$1.25 / ft / day
9" Rope Mop (rental)	$1.50 / ft / day
4" Rope Mop (replacement)	$23.75 / ft
6" Rope Mop (replacement)	$26.00 / ft
9" Rope Mop (replacement)	$40.00 / ft
Pelican Skimmer	$100.00 / day
Duke Bill Skimmer	$25.00 / day
300 Gallon Poly Tote Tank (recovered product storage)	$35.00 / day

MISCELLANEOUS	
Sorbent Pad (100 / bale)	$45.00 / bale
Sorbent Pad – Universal (50 / bale)	$70.00 / bale
5" Sorbent Boom (40' / bale)	$105.00 / bale
8" Sorbent Boom (40' / bale)	$145.00 / bale
Sorbent Roll (144' x 38")	$135.00 / roll
Sorbent Sweep (100' / bale)	$95.00 / bale
Pompom Snare (30 / box)	$55.00 / box
Pompom Snare (50' on rope)	$85.00 / box
Pompom Snare (100' on rope)	$200.00 / box
Sorbent Part (27 LB / bale)	$93.00 / bale
Fiber Pearl	$25.00 / bag
Industrial Rug	$250.00 / roll
Spag Sorb. (4cu ft / bag)	$80.00 / bag
Spag Sorb. Boom (32' / box)	$200.00 / bag
Peat Moss (3.8 cu. Ft.)	$25.00 / bag
Oil Gator (50LB)	$25.00 / bag
Pitchfork	$20.00 / each
Rake	$20.00 / each
Shovel (Flat, Spade, Scoop)	$20.00 / each
Flat Shovel (Non-Sparking)	$25.00 / each
Squeegee	$20.00 / each
Scrub Brush	$15.00 / each
Rope, 1/4 (roll)	$60.00 / roll
Rope, 3/8 (roll)	$75.00 / roll
Rope, 1/2 (roll)	$85.00 / roll
Rope, 3/4 (roll)	$150.00 / roll
Pool Net	$25.00 / each
Pollution Net	$25.00 / each
Pollution Bags (50 / roll)	$85.00 / roll
Visqueen	$90.00 / roll
30 gal. Plastic Drum	$70.00 / each
55 gal. Plastic Drum	$72.00 / each
55 gal. Steel Drum	$55.00 / each
85 gal. Steel Salvage Drum	$170.00 / each
95 gal. Plastic Salvage Drum	$195.00 / each
Duct Tape	$6.00 / roll
Pollution Cans	$20.00 / each
Decon Sprayer	$45.00 / each
Barrier Tape	$35.00 / each
Mylar Flagging (1" X 200' Roll)	$20.00 / each
Cane Poles (12' – 15')	$12.00 / each
Hand Cleaner	$5.00 / each
Rags / Wipes (10 # Box)	$15.00 / box
Roll Off Box Liner	$45.00 / each
Disposable Hand Wipes	$35.00 / each
Outboard Oil	$18.00 / gallon
Hose Condom	$30.00 / roll
Micro Blaze (5 gal.)	$275.00 / each
Micro Blaze (55 gal.)	$2900.00 / each
RW 358 TX Soap (5 gal.)	$35.00 / each
Multec 1500 (5 gallon bucket)	$125.00 / each

MISCELLANEOUS cont'd	
Multec 1500 (55 gallon drum)	$900.00 / each
D-Limonene (55 gallon drum)	$900.00 / each
Sample Containers	$5.00 / each
Drinking Water (16 ounce bottles)	$15.00 / case
Drinking Water (5 gallon)	$20.00 / each
Sports Drinks (16 ounce bottles)	$25.00 / case

PERSONAL PROTECTIVE EQUIPMENT	
Polypro Coveralls (Particulate Contaminants Only)	$ Level D PPE
Tyvek Coveralls (Dry Contaminants Only)	$ Level D PPE
Polycoated Tyvek Coveralls	$16.00 / each
CPF – 1 Suit	$24.00 / each
CPF – 2 Suit	$70.00 / each
CPF – 3 Suit	$100.00 / each
CPF – 4 Suit	Cost + 20%
Saranex Suit	$35.00 / each
Acid Suit	$150.00 / each
Disposable Slicker Suit	$15.00 / each
Heavy Duty Slicker Suit	$35.00 / each
Fire Retardant Coveralls	$125.00 / each
Bunker Gear	$175.00 / each
Bunker Gear Refurbishment	$200.00 / each
Hazmat Boots	$100.00 / pair
Tyvek Boot Covers	$5.00 / pair
Rubber Boot Covers	$20.00 / pair
Chemical Resistant Boots	$75.00 / pair
Hip Boots	$75.00 / pair
Chest Waders	$150.00 / pair
Cotton Gloves	$3.50 / pair
PVC Rubber Gloves	$5.50 / pair
Nitrile Gloves (25/box)	$45.00 / box
Safety Glasses	$10.00 / each
Safety Shields	$20.00 / each
Dust / Particulate Mask	$3.00 / each
Half Face Respirator	$25.00 / day
Full Face Respirator	$50.00 / day
5 Min Escape Pack	$100.00 / day
SCBA	$175.00 / day
2 Bottle Breathing Air Cascade System (high pressure)	$200.00 / day
4 Bottle Breathing Air Cascade System (high pressure)	$275.00 / day
6 Bottle Breathing Air Cascade System (high pressure)	$350.00 / day
8 Bottle Breathing Air Cascade System (high pressure)	$400.00 / day
20 Bottle Breathing Air Cascade System (high pressure)	$600.00 / day
Low Pressure Breathing Air Refills	$35.00 / each
High Pressure Breathing Air Refills	$50.00 / each
Breathing Air Compressor	$250.00 / day
H.E.P.A. APR Cartridges	$30.00 / pair
Organic Vapor / H.E.P.A. Cartridges	$30.00 / pair
Chemical Vapor APR Cartridges	$30.00 / pair

PERSONAL PROTECTIVE EQUIPMENT cont'd	
Emergency Signal Horn	$15.00 / each
Safety Harness	$50.00 / day
Lifeline with Safety Hook	$10.00 / day
Tripod / Winch Retrieval System	$160.00 / day
Level D PPE	$50.00 / man / day

SAFETY SUPPORT EQUIPMENT	
Draeger Chip Measuring System	$100.00 / day
Draeger CMS Sample Chip (10 Samples/chip)	$250.00 / each
4 Gas Air Monitoring Instrument	$100.00 / day
FID	$295.00 / day
PID	$275.00 / day
4 Gas PID + VOC Capabilities	$300.00 / day
Ultra Rae Chemical Specific PID	$150.00 / day
Ultra Rae Chemical Specific Detection Tubes (6 Tubes/box)	$100.00 / day
Chemical Tube Pump	$50.00 / day
LudLum Model #2 Norm Survey Meter	$50.00 / day
LudLum Model #3 Norm Survey Meter	$50.00 / day
Chemical Tubes	$15.00 / each
10 lb. A, B, C Dry Chemical Fire Extinguisher	$15.00 / each
20 lb. A, B, C Dry Chemical Fire Extinguisher	$25.00 / day
Portable Hard Wash Station (including servicing)	$75.00 / day
Portable Eye Wash Station (Wall Mount Type)	$20.00 / day
USCG Approved First Aid Kit / Burn Kit	$15.00 / day
Portable Industrial Air Conditioning	Cost + 20%
Forced Air Heaters (250k – 400k BTU)	$35.00 / day
10' x 10' Personnel Tent, Table, & Chairs	$50.00 / day
30' x 30' Personnel Tent, Table, & Chairs	$150.00 / day

MISCELLANEOUS SUPPORT EQUIPMENT	
1" Diaphragm Pump (Gas or Air)	$75.00 / day
2" Diaphragm Pump (Gas or Air)	$110.00 / day
3" Diaphragm Pump (Gas or Air)	$135.00 / day
2" Gas or Diesel Centrifugal Pump	$90.00 / day
3" Gas or Diesel Centrifugal Pump	$110.00 / day
2" Peristaltic Pump (Vac Pump)	$300.00 / day
2" Wash Pump Package (includes 25' Suction/ 100'Discharge)	$140.00 / day
3" Wash Pump Package (includes 25' Suction/ 100'Discharge)	$160.00 / day
1" Air Diaphragm Pump	$65.00 / day
2.8 kW Generator	$70.00 / day
5 kW Generator	$90.00 / day
8 kW – 10 kW Generator	$125.00 / day
15 kW Generator	$175.00 / day
30 kW Generator	$250.00 / day
55 kW Generator	$350.00 / day
10 cfm Air Compressor	$100.00 / day
90 cfm Air Compressor	$150.00 / day
185 cfm Air Compressor	$175.00 / day
375 cfm Air Compressor	$300.00 / day
3/8" Air Hose	$0.15 / ft / day
3/4" Air Hose	$0.25 / ft / day
Heavy Duty Garden Hose	$0.25 / ft / day

MISC. SUPPORT EQUIPMENT cont'd	
1" Suction / Discharge Hose	$0.25 / ft / day
2" Suction / Discharge Hose	$0.40 / ft / day
3" Suction / Discharge Hose	$0.55 / ft / day
4" Suction / Discharge Hose	$0.65 / ft / day
5" Suction / Discharge Hose	$0.75 / ft / day
6" Suction / Discharge Hose	$0.85 / ft / day
2" USCG Approved Hose (Pressure Tested)	$1.20 / ft / day
3" USCG Approved Hose (Pressure Tested)	$1.50 / ft / day
4" Disposable Flex Hose	Cost + 20%
6" Disposable Flex Hose	Cost + 20%
Generated Light Plant	$175.00 / day
Explosion Proof Drop Light	$50.00 / day
Halogen Light Stand	$50.00 / day
Pneumatic Foam Machine	$200.00 / day
Wildlife Hazing Cannon (Includes One Full Propane Bottle)	$50.00 / day
20 # Propane Bottle (Propane Refill Included)	Cost + 20%
Acetylene/ Oxygen Torch Set	$50.00 / day
Acetylene/ Oxygen Bottle Refill	Cost + 20%
Rope Ladder	$20.00 / day
8' Fiberglass Step Ladder	$20.00 / day
24' Fiberglass Extension Ladder	$25.00 / day
40' Aluminum Extension Ladder	$40.00 / day
1500 psi Pressure Washer	$95.00 / day
3000 psi Pressure Washer	$180.00 / day
3500 psi Pressure Washer	$200.00 / day
3000 psi Hot Water Pressure Washer	$250.00 / day
4000 psi Hot Water Pressure Washer	$350.00 / day
350 gallon Poly Tote Tank (clear water storage)	$50.00 / day
Pressure Washer Hose	$0.35 / ft / day
Drum Pump	$200.00 / each
12' Extension Pressure Wand	$10.00 / day
Weedeater (Grass Cutting)	$35.00 / day
Weedeater (Brush Cutting)	$45.00 / day
Air Blower	$35.00 / day
Turbine Air Blower (Ram Fan)	$75.00 / day
4" Cone Blower	$55.00 / day
5" Cone Blower	$65.00 / day
Chain Saw	$35.00 / day
Wheelbarrow	$25.00 / day
Disposable Decon Pool	$20.00 / each
Decon Pool 10 x 10	$150.00 / day
Decon Pool 12 x 50	$200.00 / day
Decon Pool 25 x 50	$275.00 / day
Decon Pool 25 x 100	$425.00 / day
Roll Off Boxes (20 – 25 cubic yard) (Household Garbage)	$25.00 / day
Roll Off Boxes (20 – 25 cubic yard) (Contaminated Debris)	$40.00 / day
Roll Off Boxes (40 cubic yard)	$40.00 / day
Vacuum Box	$75.00 / day
Wooden Pallets (used)	$10.00 / each
Camper Trailers (3 man capacity)	$350.00 / day
Pop-up Camper (2 man capacity)	$275.00 / day

COMMUNICATIONS EQUIPMENT	
Disposable Camera & Photo Processing	$30.00 / each
Digital Camera	$50.00 / day
Cellular Phone (No Air Time)	$50.00 / day
Satellite Phone (No Air Time)	$150.00 / day
Wireless Internet Card	$10.00 each / day
VHF Radio	$25.00 / day
UHF Radio	$25.00 / day
Portable Radio Repeater	$275.00 / day
Fax Machine	$50.00 / day
Laptop Computer & Printer, Text	$125.00 / day
Poster Printer	$250.00 / day
Copier	$100.00 / day
Handheld GPS	$50.00 / day

EQUIPMENT, MATERIAL, & SUPPLIES, ETC. COST PLUS	
Equipment Fuel	Cost + 20%
Port-o-Lets (rental & servicing)	Cost + 20%
Frac Tank	Cost + 20%
Marine Portable Tanks (any size)	Cost + 20%
Excavator, Backhoe, Dozer	Cost + 20%
Forklift, Crane, Cherry Picker	Cost + 20%
Third Party Transportation Services (Equipment/Materials)	Cost + 20%
Lunches / Catering Services	Cost + 20%
Propane Bottle Refills	Cost + 20%
Tug Boat	Cost + 40%
Deck Barge	Cost + 40%
Spud Barge	Cost + 40%
Crew Boat	Cost + 40%
OSRV / Lift Boat	Cost + 40%
Welding / Cutting Services (to secure equipment on barges)	Cost + 20%
Float Plane / Helicopter Service	Cost + 20%
Decon Facility Rental / Improvements	Cost + 20%

MISCELLANEOUS SERVICES	
Non - Hazardous Drum Disposal (Oily Sorbents / Debris)	$100.00 / each
Non - Hazardous Drum Disposal (Soil / Sand / Rocks)	$150.00 / each
Non - Hazardous Waste Water Disposal (Pending Approval)	$0.19 / gallon

HAZMAT EQUIPMENT & MATERIALS	
16' Hazmat Response Trailer	$200.00 / day
32' Hazmat Response Trailer	$300.00 / day
Chemical Absorbent Pads (100 per bale)	$125.00 / bale
5" Chemical Absorbent Boom	$120.00 / bale
8" Chemical Absorbent Boom	$175.00 / bale
2" Pneumatic Chemical Transfer Pump	$350.00 / day
2" Chemical Suction / Discharge Hose	$2.00 / ft / day
pH Meter	$50.00 / day
pH Test Strips	$3.00 / each

HAZMAT EQUIPMENT & MATERIALS cont'd	
PCB Test Kit	$50.00 / each
Mercury Test Kit	$50.00 / each
Mercury Spill Kit	$250.00 / each
Betts Emergency Value	$750.00 / day
Plug & Patch Kit	$500.00 / day
Bonding & Grounding Kit	$100.00 / day
Non-Sparking Hand Tools Set	$50.00 / day
Pogo Pump	$25.00 / day
Drum Labels	$2.00 / each
Traffic Safety Cones	$5.00 / each / day
Personnel Decon Pool	$20.00 / each
Shrink Wrap	$50.00 / roll
Pallet Puller	$25.00 / day
Drum Dolly	$25.00 / day
Drum Lift / Dump	$25.00 / day
Hazmat Drum Liner	$125.00 / roll
Drum Thief	$30.00 / each
Wet / Dry Vac	$40.00 / day
Sodium Bicarbonate (50 lb.)	$25.00 / each
Muriatic Acid (1 Gallon)	$20.00 / each
Acetic Acid (1 Gallon)	$15.00 / each
Floor Dry (40 LB)	$25.00 / each
Lime (50 lb.)	$20.00 / bag
Stay Dry (40 lb.)	$15.00 / bag

OFFICE LOCATIONS

Corporate Office
1730 Coteau Road
Houma, LA 70364
Phone: 985-851-5350

Fourchon Office
106 17th Street
Golden Meadow, LA 70357
Phone: 985-396-2798

Morgan City Office
3189 Highway 70
Morgan City, LA 70380
Phone: 985-385-6730

New Iberia Office
2917 Fairchild Drive
New Iberia, LA 70572
Phone: 337-365-9890

Marrero Office
3260 Barataria Boulevard
Marrero, LA 70072
Phone: 504-340-0336

Houston Response Office
8930 Lawndale, Suite A
Houston, TX 77012
Phone: 1-877-437-2634

Lake Charles Office
2812 S. Beglis Parkway
Sulphur, LA 70063
Phone: 337-625-9226

Houston Consulting Office
650 N. Sam Houston Pkwy. E, Suite #313
Houston, TX 77060
Phone: 281-448-6600

LaPlace Office
1085 Bert Street
LaPlace, LA 70068
Phone: 985-652-4885

24-Hour Emergency Response
(877) 4 ESANDH
(877) 437-2634

esandh.com
info@esandh.com

2.4.3 Clean Harbors Environmental Services, Inc.

RECEIVED
MAR 2 4 2006
Risk Management & Remediation

Master Service Agreement

CONOCOPHILLIPS COMPANY

CONTRACT NO.
2006-GPS-MSA-NC-0041

With

CLEAN HARBORS ENVIRONMENTAL SERVICES, INC.

Effective
February 21, 2006

2006-GPS-MSA-NC-0041

MASTER SERVICE AGREEMENT
INDEX

2006-GPS-MSA-NC-0041

CONOCOPHILLIPS COMPANY
MASTER SERVICE AGREEMENT

Revised: 26 January 2005 (Refining U.S. Operations) Agreement Number: 2006-GPS-MSA-NC-0041

This Agreement is made on this 21st day of February, 2006, by and between ConocoPhillips Company (hereinafter called "Company"), and Clean Harbors Environmental Services, Inc. (hereinafter called "Contractor").

WHEREAS, Company may from time to time desire Contractor to perform work and/or provide items of equipment, machinery, materials or supplies in the conduct of Company's operations; and

WHEREAS, Company and Contractor desire to establish certain general terms and conditions, which shall apply to and become part of each and every contract, whether written or oral, entered into between the parties.

NOW, THEREFORE, in consideration of the mutual promises contained herein, the parties agree as follows:

SECTION I – STATEMENT OF WORK
SECTION II – COMPENSATION, INVOICING AND PAYMENTS
SECTION III – TERMS AND CONDITIONS, PART 1
SECTION IV - TERMS AND CONDITIONS, PART 2
SECTION V - EXHIBITS

ENTIRE AGREEMENT AND OTHER CONDITIONS
This Agreement reflects the entire agreement between the parties with respect to its subject matter. Except for any secrecy or other nondisclosure agreements between the parties, all other oral or written agreements, contracts, understandings, conditions, or representations with respect to the subject matter of this Agreement are superseded by this Agreement.

General or special conditions in any of Contractor's price lists, invoices, tickets, receipts or other documents presented to Company relating to the work hereunder are null and void, regardless of whether signed by an employee of Company.

SIGNATURES:

ConocoPhillips Company		**Clean Harbors Environmental Services, Inc.**	
Signature:	William A Kitchen	Signature:	John R. Hamblick
Name:	William A. Kitchen	Name:	John R. Hamblick
Title:	Manager Risk Management and Remediation	Title:	V.P. - Refinery
Date:	April 3, 2006 RJS	Date:	March 21, 2006

A women-owned business is defined as one that is at least 51% owned by a woman or group of women and has its management and daily business controlled by one or more such individuals (hereinafter referred to singularly as an "WBE" or in a group as "WBEs").

Contractor shall report quarterly to Company the dollar amounts paid by Contractor to MBE and WBE subcontractors and suppliers for goods, equipment and services used in the performance of the work.

9. NOTICES

Unless otherwise specifically provided, all notices and other communications provided for in this Agreement or any contract hereunder shall be in writing and shall be effective upon receipt. Such notices and communications shall be given either: (a) by hand delivery to an authorized representative of the party to whom directed, or (b) by United States mail, postage prepaid, or (c) by courier service guaranteeing delivery within two days or less, charges prepaid, or (d) by facsimile to the address of the party as designated in any contract hereunder for matters relating to any specific work under that contract or to the following addresses for matters relating to this Agreement:

COMPANY:

ConocoPhillips Company
315 South Johnstone
Bartlesville, OK 74004
Attn: Craig Blake C.P.M.
Facsimile No.: 918-661-3307
Phone No.: 918-661-1703
e-mail: b.c.blake@conocophillips.com

CONTRACTOR:

Clean Harbors Environmental Services, Inc.
1501 Washington Street
Braintree, MA 02185
Attn: General Counsel
Facsimile No.: 781-356-1375
Phone No.: 800-282-0058
e-mail: mcdonaldm@cleanharbors.com

Any notice, other than a force majeure notice under Section III, Article 9, Force Majeure, delivered after normal business hours at the receiving party's place of business shall not be deemed delivered until the receiving party's following business day. Either party may at any time change its address, facsimile number or attention recipient upon written notice to the other party.

10. TERMINATION OF AGREEMENT AND CONTRACTS

This Agreement shall continue in full force and effect for an initial term of one (1) year from the date of this Agreement and from month to month thereafter unless terminated at any time during the initial term or thereafter by thirty (30) days written notice by one party hereto to the other party, except, regardless of whether notice is given, this Agreement shall not terminate with respect to contracts which have not yet been paid for or completed.

Company may terminate any contract entered into under this Agreement immediately upon notice with or without cause. If Company terminates such a contract in the absence of a material breach by Contractor, Company shall owe Contractor only the compensation earned to the time of notice of termination plus any demobilization fee provided for in such contract. In the event the termination was due to a material breach by Contractor, Company shall owe Contractor only the compensation earned to time of notice of termination plus any demobilization fee provided for in such contract less any additional costs and expenses incurred by Company by reason of such breach including additional costs incurred by having to obtain a replacement contractor. Such termination and deduction for additional costs and expenses shall be without prejudice to the other legal or equitable remedies which may be available to Company.

The releases and indemnities contained in this Agreement shall survive the termination of this Agreement and any contract hereunder.

11. COMPANY ENTRY AND ACCESS TO FACILITIES

Company reserves the right to move into Contractor's on-site work and storage areas as necessary to complete Company work. Company's partial occupancy shall not constitute acceptance of Contractor's work.

Use of roads on Company's premises shall be allowed from the public roads to job site for access and transportation of Contractor's personnel, materials and equipment. Pipe supports or other structures spanning roadways will not be removed or altered to accommodate dimensions of equipment or vehicles supplied by Contractor. Company will designate the entrance gates for use by Contractor's personnel, materials and equipment. Contractor shall perform all work with minimum interference with the operations of Company and others on Company's premises.

Contractor shall not do work on Company premises except during Company's standard working hours without the prior written consent of the Company's Representative, except in the case of an emergency.

12. GENERAL PROVISIONS

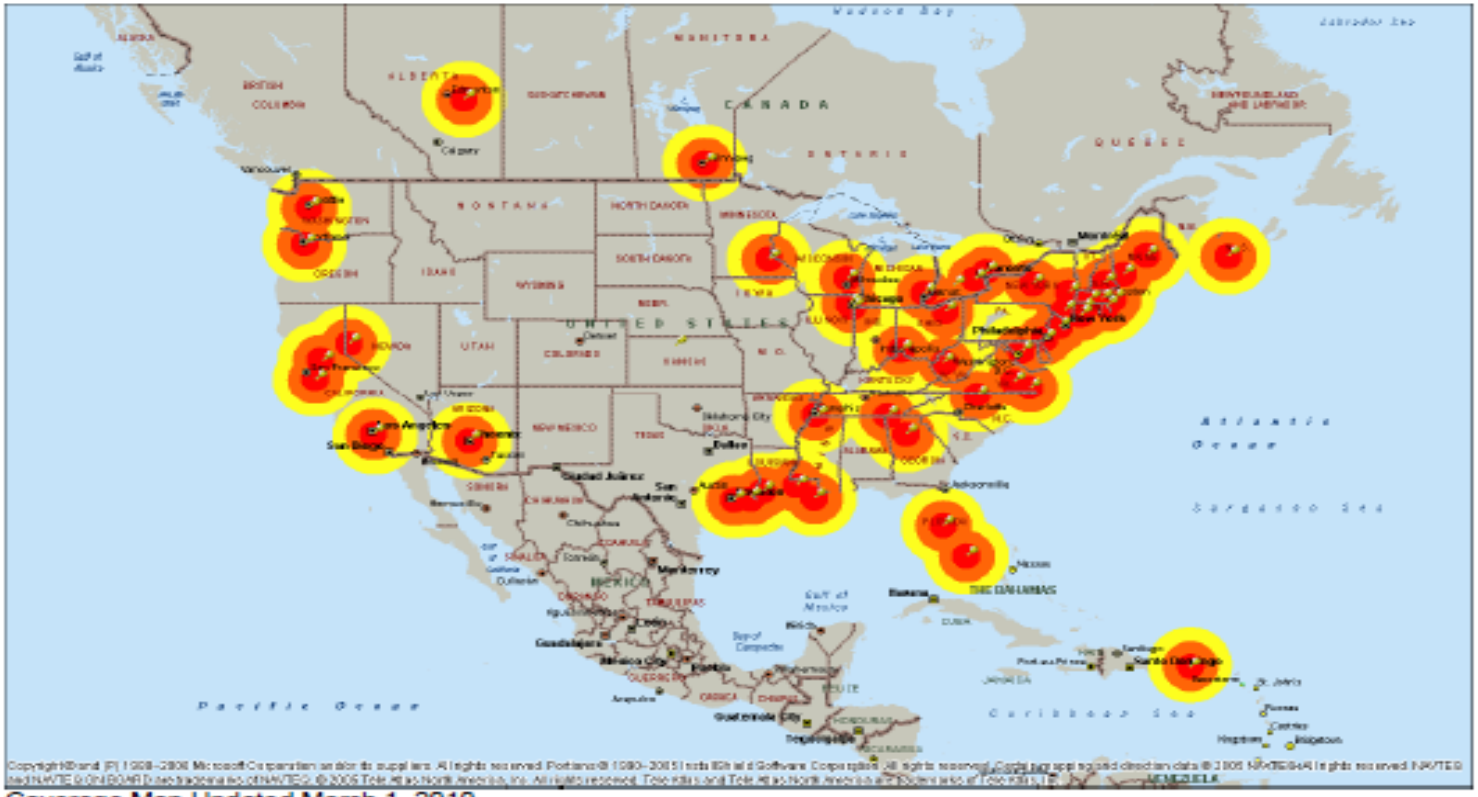
12.1 The captions and headings used in this Agreement are intended for convenience only and shall not be used for purposes of construction or interpretation.

12.2 No waiver by either party of any one or more defaults by the other party in the performance of this Agreement or any contract hereunder shall operate or be construed as a waiver of any future default or defaults by the same party, whether of a like or a different character.

12.3 It is intended that if any provision of this Agreement is unenforceable for any reason, it shall be adjusted rather than voided, if possible, in order to achieve the intent of the parties. In any event, all other provisions of this Agreement shall be deemed valid, binding, and still enforceable.

12.4 In the event that either party commits any material breach of this Agreement including, without limitation, any breach of any indemnity obligation, in addition to any other remedy that the aggrieved party may have at law or in equity, it shall be entitled to recover all costs, including court costs and attorney's fees, incurred in any proceeding wherein the aggrieved party seeks redress for such breach.

EMERGENCY RESPONSE COVERAGE MAP



Coverage Map Updated March 1, 2010.

Red = Estimated 1-Hr Response Time
Orange = Estimated 2-Hr Response Time
Yellow = Estimated 3-Hr Response Time

1.800.OIL.TANK (1.800.645.8265) – 24-HR NATIONWIDE EMERGENCY RESPONSE #

SULPHUR, LA/LAKE CHARLES SERVICE CENTER	**24-Hr. #**	**337.882.1025**
3201 Petro Drive	**24-Hr. #**	**800.645.8265**
Sulphur, LA 70663	**Fax #**	**337.882.1029**

Eddy Yates, General Manager EPA / Federal ID #: N/A

Personnel Authorized to release equipment / materials / manpower, etc:

Perl Bryan
Brad Dickes
Mark Scroggs
Wilmer Johnson
Eddy Yates

40-Hour OSHA Trained Personnel:

Supervisor	1
Foreman	1
Field Technician	5
Class B Driver	1
Class A Driver	1

Equipment List **Item Description / Manufacturer**	**Location**	**Capacity / Size / Key Features**	**# of Units**	**A**	**T**	**P**	**D**
(1) Vessels & Marine Support Equipment							
Power Workboat, Custom Flat	Sulphur	22', 115 HP, LA 1369 FB, V283	1	Y	Y	N	N
Power Workboat, Custom Flat	Sulphur	16', 25 HP, LA 1160 EM, V287	1	Y	Y	N	N
(2) Motor Vehicles & Vacuum Equipment							
Pickup	Sulphur	F150, F250	3	Y	Y	N	N
ER/Spill Trailer	Sulphur	34' HAZMAT Response Trailer	2	Y	Y	N	N
(3) Pumps and Pressure Equipment							
Double Diaphragm Pump	Sulphur	2"	1	Y	Y	N	N
Trash Pump	Sulphur	2"					
(4) Oil Spill Containment Booms							
Oil Containment Boom	Sulphur	18", Mix, On Trailer CH331	700	Y	Y	N	Y
Oil Containment Boom	Sulphur	18", Mix, Storage	1500	Y	Y	N	Y
Oil Containment Boom	Sulphur	18", Mix, On Trailer CH335	700	Y	Y	N	Y

1.800.OIL.TANK (1.800.645.8265) – 24-HR NATIONWIDE EMERGENCY RESPONSE #

(5) Environmental Monitoring Equipment								
(6) Recovery Equipment								
Disc Skimmer, Crucial	Sulphur	Hydraulic, ORD, 3", 50 GPM	1	Y	Y	N	Y
(7) Beach or Earth Cleaning and Excavating Equipment								
(8) Generators / Compressors / Light Towers								
Power Generator	Sulphur	<10KW	1	Y	Y	N	N
10 CFM Compressor	Sulphur		1	Y	Y	N	N
(9) Health and Safety Equipment								
(10) Communications								
(11) Miscellaneous								
Roll-Off Container	Sulphur	25-Yard	2	Y	Y	N	N

Emergency Response Subcontractors

Section 3 – Table of Contents

Sec. 3.0 Sensitive Area General Response Strategies

Sec. 3.0.1 Lake Charles

Proximity to Wells, Waterways and Drinking Water Intakes

The pipelines and associated tank farm of this operation are located such that a WCD would in all likelihood; should the release occur at any of the previously identified sensitive areas, reach the Calcasieu River, a navigable waterway. No drinking water intakes or wells would be affected.

Proximity to Fish, Wildlife and Sensitive Areas

Any spill moving offsite from this facility could impact the Calcasieu River Estuary and thus have impact to fish, shellfish and migratory waterfowl.

The following are only example of potential strategies that could be used if an incident impacts a sensitive area. These strategies are not a guarantee of what will occur or the equipment/resource deployment that will be used. Strategic planning will be tailored to meet the need of the actual circumstance.

Sensitive Area Identification

Sensitive Area	Location/Response Area
Bayou D'Inde	8
Bayou Verdine	4
Maple Fork Bayou	7
Economic Area	
Company Refinery	1
Westlake Polymer	9
Oxy Petrochem	9
Citgo Petroleum Refinery (wastewater pond via Indian Marais)	11

Sec. 3.0.2 Louisiana Gathering

Sensitive Area Identification

Tepetate Station to Westlake

Sensitive Area	Location
(b) (7)(F)	

Rayne Station to Tepetate Station

Sensitive Area	Location
(b) (7)(F)	

Sensitive Area Response Strategies

Response Area	Parish	Description of Line Segment	Operational Status
1-1	Calcasieu Allen Jefferson Davis Acadia	Tepetate Station to Westlake (8” Main Line)	Active
1-3	Acadia Evangeline St. Landry	Rayne Station to Tepetate Station (6”)	Active
1-4	Calcasieu	Manchester Station (12 miles of 4”) to 8” Tie-In at Gillis	Active

Response Area 1

- Begin internal and external notification procedure.
- Close block valves on either side of affected response corridor.
- Request agency assistance, as needed, to secure the scene and remove non-essential personnel from affected area.
- Initiate aerial and surface surveillance, if possible. Confirm location, direction of flow/movement and establish communications with surveillance personnel.
- Activate LaGS Response Team and Contract spill response personnel/equipment to establish defensive posture at the most practicable downstream location on response corridor not yet contaminated. Initiate deployment strategy based on surveillance information.
- Establish Incident Command Post location and establish communication network.
- Establish contact with U.S. Coast Guard concerning navigational issues on response corridor.
- Deploy containment and protection boom, based on surveillance, to protect marshes and bayous.
- Activate the Louisiana Area Response Team and/or Gulf Coast Regional Response Team, as needed.
- Establish Unified Command with responding agencies and develop the initial Incident Action Plan.
- Initiate protection of sensitive areas.
- Determine wildlife protection/rehabilitation needs from surveillance. Refer to Wildlife Contingency Plan.
- Begin arrangements for proper disposal of waste.
- Monitor cleanup activities.
- Properly dispose of waste.
- Complete cleanup – restore damaged areas.
- Submit reports

Response Area 2

- Begin internal and external notification procedure.
- Close block valves on either side of affected response corridor.
- Request agency assistance, as needed, to secure the scene and remove non-essential personnel from affected area.
- Initiate aerial and surface surveillance, if possible. Confirm location, direction of flow/movement and establish communications with surveillance personnel.
- Activate LAGS Response Team and Contract spill response personnel/equipment (MSRC, Clean Gulf, etc.) to establish defensive posture at the most practicable downstream location on response corridor not yet contaminated. Initiate deployment strategy based on surveillance information.
- Establish Incident Command Post location and establish communication network.
- Establish contact with U.S. Coast Guard concerning navigational issues on response corridor.
- Deploy containment and protection boom, based on surveillance, to protect marshes and bayous.
- Activate the Louisiana Area Response Team and/or Gulf Coast Regional Response Team, as needed.
- Establish Unified Command with responding agencies and develop the initial Incident Action Plan.
- Initiate protection of sensitive areas.
- Determine wildlife protection/rehabilitation needs from surveillance. Refer to Wildlife Contingency Plan.
- Begin arrangements for proper disposal of waste.
- Monitor cleanup activities.
- Properly dispose of waste.
- Complete clean up – restore damaged areas.
- Submit reports.

Mitigation/Response Procedures

The following are prioritized procedures for facility personnel to mitigate or prevent a worst case discharge or substantial threat of a worst case discharge of oil resulting from operational activities.

Facility Failure at Pump Station

- Notify Operators of Louisiana Gathering System.
- Shut down pump station and all lines into and out of the station.
- In case of fire or explosion, notify local fire department.
- Run stations downstream until they go down on low suction.
- Isolate station by closing station block valves.
- Notify Supervisors for additional assistance.
- Dispatch personnel and emergency equipment to the emergency site.
- Follow details set forth in this Facility Response Plan that include: evacuate area, contain product, prevent ignition, recover product, etc.
- Notify Gulf Coast Region Office and/or Supervisors so they can make emergency notification to federal and state officials, if necessary.

Facility Failure in Environmental Area

- Notify Operators of Louisiana Gathering System.
- Shut down the pipeline.
- Run stations downstream until they go down on low suction.
- Close upstream and downstream block valves.
- Notify Supervisors for additional assistance.
- Dispatch crew with pollution control equipment.
- Follow details set forth in this Facility Response Plan that include: evacuate area, contain product, prevent ignition, recover product, etc.
- Notify Gulf Coast Region Office and/or Supervisors so they can make emergency notification of federal and state officials, if necessary.

Facility Failure in Populated Area

- Notify Operators of Louisiana Gathering System.
- Shut down the pipeline.
- Run stations downstream until they go down on low suction.
- Close upstream and downstream block valves.
- Notify Supervisors for additional assistance.
- Dispatch personnel and emergency equipment to the emergency site.
- Notify local authorities, if necessary, to evacuate residential area.
- Notify local residents of problem, if necessary.

- Follow details in this Facility Response Plan that include: evacuate area, contain product, prevent ignition, recover product, etc.
- Notify Gulf Coast Region Office and/or Supervisors so they can make emergency notification of federal and state officials, if necessary.

Failure at Tank

- Shut down any deliveries into the tank.
- Check all secondary containment devices, i.e. dikes, dike drains.
- Notify Supervisors for additional assistance.
- Transfer out of tank, if possible.
- Dispatch personnel and emergency equipment to the emergency site.
- Follow details in this Facility Response Plan, which include: evacuate area, contain product, prevent ignition, recover product, etc.
- Notify Gulf Coast Region Office and/or Supervisors so they can make emergency notification of federal and state officials, if necessary.

Failure in Rural Area

- Notify Operators at Louisiana Gathering System with initial assessment of the situation. Operators will immediately call supervisors.
- Shut down the pipeline.
- Run stations downstream until they go down on low suction.
- Close upstream and downstream block valves.
- Notify local Supervisor for additional assistance and identify emergency site locations and make assessments.
- Dispatch crew with pollution control equipment.
- Follow details in this Facility Response Plan that include: evacuate area, contain product, prevent ignition, recover product, notify local area contacts (including Industry Associates), etc.
- Notify Gulf Coast Region Management and/or Supervisors so they can make emergency notification of federal and state officials, if necessary.

Environmental Sensitivities MAP LIST

Kinder to Lake Charles

Biological Resources

Tepetate to Kinder

Biological Resources

Rayne to Tepetate

Biological Resources

Explanation of Ranking Categories Employed by Natural Heritage Programs Nationwide

Federal Ranks
Global Element Ranks
State Element Ranks

LOUISIANA GATHERING System Map LIST

Tepetate Leg

Westlake (Map Reference # 30093B3, CPL# A6-75)
Hecker (Map Reference # 30093C1, CPL# A6-78)
Moss Bluff (Map Reference # 30093C2, CPL# A6-77)
Buhler (Map Reference # 30093C3, CPL# A6-76)
Hathaway (Map Reference # 30092C6, CPL# A6-83)
Welsh North (Map Reference # 30092C7, CPL# A6-82)
Fenton (Map Reference # 30092C8, CPL# A6-81)
Basile (Map Reference # 30092D5, CPL# A6-85)
Elton (Map Reference # 30092D6, CPL# A6-84)

Rayne 6”

Mire (Map Reference # 30092C2, CPL# A6-89)
Branch (Map Reference # 30092C3, CPL# A6-88)
Iota (Map Reference # 30092C4, CPL# A6-87)
Eunice South (Map Reference # 30092D4, CPL# A6-86)
Basile (Map Reference # 30092D5, CPL# A6-85)

Grand Isle to Golden Meadow

Barataria Pass (Map Reference # 29089C8, CPL# A6-73)
Bay Tambour (Map Reference # 29090C1, CPL# A6-72)
Mink Bayou (Map Reference # 29090C2, CPL# A6-71)
Bay Courant (Map Reference # 29090C3, CPL# A6-70)

Ville Platte Leg

Eunice South (Map Reference # 30092D4, CPL# A6-86)
Basile (Map Reference # 29090C1, CPL# A6-85)
Chataignier (Map Reference # 30092E3, CPL# A6-91)
Eunice North (Map Reference # 30092E4, CPL# A6-90)
Tate Cove (Map Reference # 30092F2, CPL# A6-93)
N.E. Ville Platte (Map Reference # 30092F3, CPL# A6-92)

Manchester Leg

Iowa (Map Reference # 30093B1, CPL# A6-79)
Hecker (Map Reference # 30093C1, CPL# A6-78)
Moss Bluff (Map Reference # 30093C2, CPL# A6-77)

The following are only example of potential strategies that could be used if an incident impacts a sensitive area. These strategies are not a guarantee of what will occur or the equipment/resource deployment that will be used. Strategic planning will be tailored to meet the need of the actual circumstance.

Sec. 3.1 Historical/Archaeological Sites

Environmental Response Scenario

The following scenario provides probable, effective response actions in the event of a spill to a historical / archaeological site. Depending on the site-specific conditions, Company may choose to respond in a manner different from that described below. The manpower, equipment and recovery rates are all dependent upon site-specific conditions and Company will respond in an appropriate manner.

Description of the Affected Area

Historical / Archaeological Sites are areas such as battlefields, homes of historically or culturally significantly individuals, and prehistoric dwellings and burial grounds designated by federal, State and local governments for preservation. Historical / Archaeological Sites may be either remote from, or close to, human habitation. Historical / Archaeological Sites are generally identified and marked as such on maps and at public access points.

1. Public Health and Safety Concerns

   Immediate evacuation of the public from the affected area, and their subsequent health and safety are a major concern. The danger zone for the public will generally be downwind of the point of discharge and the resulting plume.

2. Project Personnel Safety Concerns

   The greatest safety concern for project personnel is fire and explosion. Response team personnel will conduct continuous air monitoring for flammable vapors with a combustible gas meter and will suspend operations when readings exceed 10 percent of the lower explosive limit (LEL). Response team personnel will use non-sparking equipment whenever monitoring indicates explosion/fire potential. Smoking paraphernalia, including lighters, will not be permitted in the work areas under any circumstances.

   Other safety concerns for project personnel and Company representatives and the regulatory agency's representatives are inhalation of hydrocarbon vapors (specifically benzene vapors), skin contact with liquid hydrocarbon, heat stress and cold exposure, and contact with, or bites from, poisonous plants, insects, snakes, rodents and large wildlife indigenous to the Natural area.

Air monitoring analysis will dictate the level of PPE utilized by workers in the exclusion zone. The support area, including break and eating areas, will be located in a safe area, and upwind of the exclusion zone wherever possible. The response contractor will exercise due care to avoid damage to the historical/archaeological site.

3. Property and Environmental Impact

   Property impact of a spill in a historical / archeological site will be a major concern. Major historical / archaeological sites sometimes have considerable commercial value due to tourism. A spill may have adversely affect the commercial value of adjacent public and private property, as well as the historical / archeological site itself.

   Environmental impact on a historical / archeological site will vary depending on the size of undeveloped land and water affected by the spill. Petroleum hydrocarbons may have an adverse impact on most forms of plant and animal life, and can destroy the exposed natural portion of a historical/archaeological site.

4. Potential Logistical Problems

   Logistic support at historical/archaeological sites will vary from site to site. Historical sites typically have good transportation and utility service. Archeological sites are frequently in remote areas lacking both transportation and utilities. It may be necessary to set up support areas, lay-down areas, etc., outside the site itself, in order to minimize disturbance of the site.

   Transportation of personnel, equipment and materials into and out of the area should not require specialized vehicles. Temporary utilities, including potable water, fuel and electricity may be available locally.

Initial Response Strategies

1. The Company Incident Commander will:

   - Initiate evacuation of the public from the immediate area of the spill and from the area toward which the plume is moving,
   - Initiate appropriate actions to isolate the pipeline or any other source of the spill; i.e., turn off the nearest block valves and shut down the flow of product.
   - Order immediate deployment of the response contractor's oil containment boom (minimum 200 ft long), complete with anchors,
   - Notify the response contractor's program manager that a spill is in progress and
   - Notify the appropriate Federal, State and Local regulatory agencies. A Local, State and Federal agency notification is listed in this FRP.

2. The response contractor's program manager should dispatch a response supervisor to the location of the spill by the fastest means practical. The response contractor's supervisor should be equipped with a one-day supply of PPE to include supplied air, and a radio or mobile telephone. The response contractor's supervisor should contact the Company Incident Commander immediately on arrival at the site and jointly assess the magnitude of the problem, noting any special considerations that may affect selection of resources required to complete the response action.

3. The response contractor's program manager should mobilize the Tier 1 response team while the response contractor's supervisor is en route to the site. The Tier 1 response team should be capable of removing 1,500 BBL of product per day, should be enroute within 2 hours of notification, and should arrive on-site within 12 hours of notification. This response team may consist of:

   - 8 HAZWOPER-trained personnel (including a supervisors and a site safety officer),
   - 2 pick-up trucks,
   - 1 one-ton box truck/associated supplies,
   - 2 vacuum trucks,
   - 1 van,
   - 2 work boats, if needed
   - 2,000 ft of containment boom,
   - one foam trailer with applicator and foam to cover 90,000 square feet,
   - a seven (7)-day supply of PPE,
   - 12 sets of air bottles,
   - lights,
   - 2 skimmers,
   - 1 generator,
   - 1 air compressor,
   - PID/LEL,
   - detector tube specific for benzene (not affected by other hydrocarbons)
   - 4 radios, and
   - expendable supplies (absorbent booms & pads, PPE)

   The Tier 1 team should immediately report to the response contractor's supervisor for a briefing on the response action, a tailgate health and safety meeting, and a briefing by appropriate authorities concerning care to be taken to avoid damage to the historical/archaeological site. The response contractor's supervisor should direct the team's activities from this point on, including setting up laydown areas and support areas.

4. The response contractor's program manager should begin mobilizing the Tier 2 and Tier 3 response teams once the Tier 1 team is enroute to the site.

   The Tier 2 response team should be capable of removing 3,000 BBL per day, should be on-site within 36 hours of notification, and may consist of the Tier 1 response team, plus:
   - 12 HAZWOPER-trained personnel,
   - 4 work boats,
   - 4,000 feet of containment boom,
   - 2 skimmers,
   - 2 vans,

- 2 pick-up trucks,
- 2 vacuum trucks,
- 1 skid unit (1,500 gallon capacity),
- 8 radios, and
- 24 air bottles

The Tier 3 response team should be capable of removing 6,000 BBL per day, should be on-site within 60 hours of notification, and may consist of the Tier 1 and Tier 2 response teams, plus:

- 23 men,
- 2 pick-up trucks,
- 4 vans,
- 1 supply trailer,
- 4 work boats,
- 6,000 feet of containment boom,
- 3 vacuum trucks,
- 3 skimmers,
- 12 radios, and
- 48 air bottles

5. The first task of the Tier 1 response team should be to minimize the spread of the hydrocarbon on the water and ground surface in order to protect the public, the historical / archeological site features and environmentally sensitive areas downstream of the spill. The team should place a containment boom on water or construct earthen berms of imported clay on land as close as possible to the point of origin of the spill to minimize the area of most severe contamination. The placement of the containment boom/ berm will also be based on personnel safety considerations for the personnel setting up the containment boom / berm. The team may then place one or more secondary booms / berms farther away, in the path(s) of the plumes deemed by the Company Incident Commander and the response supervisor to be the most dangerous to the public or to the environment.

6. Health and Safety Plan

   Initial health and safety response actions will be in accordance with the Site Safety Plan Appendix. The Site Safety Officer will complete a Site-Specific Health and Safety Plan after the initial hazard assessment is conducted.

7. Implementation of Air Monitoring Program

   Company's Incident Commander will assign a Site Safety Officer (SSO) who will begin monitoring activities (using a PID, an LEL meter and benzene-specific detection tubes) in the area of the spill immediately on arrival, to assess the danger from fire and explosion in the work area, determine potential exposure to benzene, delineate the exclusion zone, and establish the support zone. Instruments, frequency of readings, records and responses to action levels will conform to the Health and Safety Plan. The SSO will pay particular attention to LEL readings.

   As soon as possible after the SSO completes his initial air monitoring for the spill site hazard assessment and delineates the work zones, he/she will begin a perimeter air-monitoring program to confirm that the exclusion zone is properly sized and to document potential offsite migration of vapors that could impact the unprotected public or wildlife.

8. Contingency Planning

   The Company Incident Commander, the SSO and the response contractor's supervisor will identify evacuation routes of egress and procedures, safe distances and places of refuge, and emergency alerting procedures to be used in the event of an uncontrollable situation such as fire or explosion.

9. Assessment of Affected Area(s)

   The Company Incident Commander and the response contractor's supervisor will jointly review the maps provided in this FRP, inspect the affected area(s) and assess:

   - The nature of the spilled liquid -
   - Source of the spill,
   - Direction(s) of spill migration,
   - Apparent or otherwise known subsurface geophysical feature that might impact the work; i.e., subsurface sand layers, water table elevation,
   - Overhead and buried utility lines, pipelines, etc.,
   - Nearby population, property or environmental features that might be affected by the contained spill, or by an uncontained spill.

   The Tiers 1, 2, and 3 response team resources in personnel, equipment and material will be assessed to determine if they are adequate to effectively perform the work.

   If the Company Incident Commander determines that additional resources are required, the IC will request additional resources for the Tier 2 and 3 response teams from the response contractor's program manager if deemed necessary by the assessment. Additional equipment may include backhoes, dump trucks, watercraft, generators, light sets, bulldozers and front-end loaders. Equipment operators, laborers, and engineers may be mobilized as necessary. Additional material may include more spill booms, absorbent materials, foam and imported clay for berms.

10. Delineation of Exclusion and Support Zones

    The Site Safety Officer (SSO) will mark the limits of the exclusion zone with red plastic tape, using existing trees to support the tape where possible. The support zone will be marked with green plastic tape if in the SSO's judgment such marking is necessary to avoid confusion with a contaminated area. If the exclusion zone cannot be physically marked, the SSO will annotate a site map or layout sketch and brief all personnel on the zone layout prior to site entry.

11. Protection of Downstream Sensitive Areas

    Company's Incident Commander, the response contractor's supervisor and SSO will inspect the boom / berm system to ensure that it is effectively protecting the public and environmentally sensitive areas downstream of the spill. The response contractor's supervisor will direct placement of additional booms / berms or relocation of existing booms / berms if ongoing measures are judged to be ineffective.

Ongoing Response

1. Recovering Wildlife for Transfer to Treatment Facilities

   The response contractor will cooperate with Company and local wildlife assistance agencies to recover birds, fish, small and large animals affected by the spill, for transportation by the appropriate wildlife agencies to treatment facilities.

2. Recovery and Transfer of Free Product

   Construction of the free product temporary storage area as close as practical to, but outside of, the historical / archeological site will start after the containment booms / berms are in place and judged effective in limiting the spread of the plume. The storage will consist of frac tanks or rubber bladders. The tanks or bladders will be surrounded by a berm built up from on-site materials or imported clay.

   The contractor's response team will recover free product with vacuum trucks, sorbent booms and pads, oil skimmers and vacuum pumps.

3. Install Siphon Dams, Etc.

   The contractor's response team may construct a siphon dam to contain the spilled product if contaminated surface water is flowing. A siphon dam is built of earth with steel or plastic pipes embedded through it at a vertical angle such that the lighter, floating product is trapped behind the dam while the water below it is permitted to flow through the pipes.

4. Debris Removal

   Debris will consist of steel, concrete, timber and vegetation contaminated by the spilled product, plus product-soaked sorbent materials and trash generated by the response team. Debris will be inspected by appropriate agency experts for historically or archaeologically important artifacts or other material prior to its disposal.

   Company will remove and dispose of debris or may direct the response contractor to do so. Ultimate disposal may depend on the degree of contamination and is subject to approval by the regulating agencies.

   Typically, steel and concrete will be transported to a landfill. Timber and vegetation will be either landfilled or incinerated off-site. The regulatory agencies may permit on-site burning of timber and vegetation under some circumstances.

5. Stabilize Damaged or Affected Structures

   The response contractor will construct temporary bracing and shoring as necessary to prevent collapse of structures and foundations that might impede or endanger the response work. This may include timber shoring as temporary replacements for sleepers under a damaged pipeline section and historically or archaeologically important buildings or other structures.

   Company will stabilize damaged major pipeline bridges and pipeline river crossings, if needed.

6. Initial Response and Draft Work Plan

   The response contractor will prepare a draft work plan and submit it to Company. The work plan will include:

   - Special measures to avoid damage to historical/archaeological features, materials and artifacts,
   - A summary of initial response actions and results,
   - Subsequent planned activities,
   - Water and soil removal and treatment and/or disposal,
   - Air monitoring program,
   - Sampling and Analysis Plan,
   - Restoration and repairs, and
   - A schedule for the work.

7. Debriefing/Dissemination of Information and Data

   The Company Incident Commander will interface with the regulatory agencies and news media. The response contractor will not disseminate any information or data without approval of the Company Incident Commander. The response contractor may furnish personnel to assist the Company Incident Commander in debriefing
   .

8. Documentation of Cleanup Efforts and Progress

   The response contractor will prepare and maintain records, including photos and/or video, documenting the response. Records and documents will include the supervisor's daily notes, personnel time sheets, equipment usage logs, material delivery tickets, daily air monitoring logs, and soil and water analysis reports.

   The response contractor's program manager will submit to the Company Incident Commander a report summarizing the accomplishments of the preceding week, the cost status and the response activity schedule.

9. Public Relations/Agency Liaison

   The Company Incident Commander will provide all direct contact with the news media and with regulatory agencies.

Cleanup Strategies Historical/Archaeological Sites

1. Access on or Through Historical/Archaeological Sites

   Because of the potential for irrecoverable damage to historical/archaeological sites, vehicle and equipment access will be strictly controlled and coordinated with the appropriate government entities and/or custodians. When equipment is permitted to enter or cross a historical/archaeological site. Access routes will be clearly marked and the response crews will be thoroughly briefed on where and where not, they may place and utilize equipment. On this type of site, the probability is high that the amount of laborers will dramatically increase to compensate for equipment not being permitted on the site or equipment usage being limited.

2. Protection of Historical/Archaeological Sites

   Once human health and safety concerns have been addressed, priority will be given to protecting historical/archaeological sites from contamination or to limiting further contamination. Whenever the release is waterborne, booms will typically be deployed as the isolating/protecting mechanism. Because of potential access restrictions, boats used to deploy the boom may have to be landed at some distance from the site and floated to the scene. The first responder should identify potential boat launch sites and communicate this to the response crew prior to their arrival.

   If the release is overland, then protection and isolation of historical/archaeological sites becomes more difficult. Typically, overland releases are contained by digging berms and trenches downstream of the spill. However, in the event that the spill occurs on or near historical/archaeological areas, it is possible that digging of berms and trenches will be severely curtailed or prohibited. Therefore, berms will be constructed either from sorbent materials or from imported fill.

3. Recovery of Product from Water and Treatment of Contaminated Water

   Typically, product is recovered from surface water (i.e., rivers, lakes, and ponds) by a combination of mechanical skimming, vacuum recovery, and the use of sorbent materials. As mentioned above, access of equipment through or near historical/archaeological sites may be restricted or prohibited altogether. It may become necessary for recovery equipment to be launched some distance from the release site. This may have an impact on response time and will be factored accordingly. Temporary storage of recovered product may be accomplished by the use of small barges or other containers.

   The treatment of contaminated water will have several challenges under this scenario. It will most likely not be feasible to store contaminated water in traditional storage containers such as tanks, at least in close proximity to the site. This could be overcome by pumping across or around the site to a place where adequate storage can be staged. The Company Incident Commander or the first responder will have to assess the situation quickly and communicate with the response crew in order to ensure that sufficient quantities of the correct equipment are deployed.

   Once the contained waters have been stored, treatment options can be explored. Possible treatment options include steam or air stripping, oil/water separation, carbon adsorption, or other methodologies or combinations of methodologies.

4. Cleaning of Affected Structures

   Traditional methods of cleaning structures affected by released product include wiping, hot water, low or high-pressure wash-down, and/or the use of surfactants, emulsifiers, or other agents. Because of the potential for irrecoverable damage to historical/archaeological structures, the method of choice for cleaning structures will be wiping with sorbent pads. Alternative methods will be discussed with the appropriate authorities and used only with their concurrence.

5. Solids Handling/Removal

   Removal of product-laden soils will be conducted only with the concurrence and at the direction of the cognizant authorities.

   Sorbent materials and other solid residue will be placed in trash bags and removed from the site for disposition.

   Because of the nature of historical/archaeological sites, contaminated debris will be removed only with the concurrence and at the direction of the cognizant authorities.

Site Restoration

1. Sampling and Analysis to Verify Cleanup

   Sampling and analysis of the remaining soils and water will be coordinated with local, State and federal agencies to verify that the cleanup meets their requirements.

2. Rebuild/Reconstruct Affected Structures/Areas

   Historical / archaeological site restoration activities will be site-specific and may entail major efforts by a combination of Company and multiple regulatory and preservation agencies. As early as possible, Company should determine the feasibility and practicality of restoration in consultation with the appropriate authorities so that detailed, deliberate plans, specifications and costs can be prepared.

3. Final Report

   The response contractor will prepare a Final Report for Company, summarizing the actions taken during the response activities, with particular attention to restoration and verification of cleanup.

Sec. 3.2 Natural Areas

Environmental Response Scenario

The following scenario provides probable, effective response actions in the event of a spill to a natural area. Depending on the site-specific conditions, Company may choose to respond in a manner different from that described below. The manpower, equipment, and recovery rates are all dependent upon site-specific conditions and Company will respond in an appropriate manner.

Description of the Affected Area

Natural areas are areas designated by federal, State and local governments to remain in their undeveloped condition. A natural area may include any type of terrain, including sea shore, deserts, streams, lakes, swamps, forests, and mountainous areas. Natural areas are usually remote from human habitation, and are not developed for residential or commercial use. Natural areas are generally identified and marked as such on maps.

1. Public Health and Safety Concerns

   Since natural areas are by definition uninhabited and tourism is not encouraged, the immediate evacuation is not expected to require a major effort. The danger zone for the public will generally be downwind of the point of discharge and the resulting plume.

2. Project Personnel Safety Concerns

   The greatest safety concern for project personnel is fire and explosion. The response team personnel will conduct continuous air monitoring for flammable vapors with a combustible gas meter and will suspend operations when readings exceed 10 percent of the lower explosive limit (LEL). Response team personnel will use non-sparking equipment whenever monitoring indicates explosion/fire potential. Smoking paraphernalia, including lighters, will not be permitted in the work areas under any circumstances.

   Other safety concerns for project personnel and Company representatives and the regulatory agencies' representatives are inhalation of hydrocarbon vapors (specifically benzene vapors), skin contact with liquid hydrocarbons, heat stress and cold exposure, and contact with, or bites from, poisonous plants, insects, snakes, rodents and large wildlife indigenous to the natural area.

   Air monitoring analysis will dictate the level of PPE utilized by workers in the exclusion zone. The support area, including break and eating areas, will be located in a safe area, and upwind of the exclusion zone wherever possible.

3. Property and Environmental Impact

   Natural areas are not developed and have little commercial value. Environmental impact on a natural area can be immediate and extensive. Petroleum hydrocarbons may have an adverse Environmental impact on a natural area can be immediate and extensive.

Petroleum hydrocarbons may have an adverse impact on most forms of plant and animal life, and can destroy the exposed portion of a natural area. Major natural areas provide habitats and food supplies for wildlife and are sources of oxygen for the atmosphere.

4. Potential Logistical Problems

   Very little logistic support can be expected in natural areas. There will be few if any roads into and through such areas, and probably no utilities in the area. Support areas, lay-down areas, etc will be established in available clearings, or land will be cleared for the purpose.

   Transportation of personnel, equipment and materials into and out of the area may require specialized vehicles such as UTVs, swamp buggies, airboats or barges. The response contractor should possess, or have ready access to, the minimum required equipment.

   Temporary utilities, including potable water, fuel and electricity will probably be absent and must be brought in by the response contractor's team.

Initial Response Strategies

1. The Company Incident Commander or designee will:

   - Initiate evacuation of the public from the affected areas and from the area toward which the plume is moving,
   - Initiate appropriate actions to isolate the pipeline or any other source of the spill; i.e., turn off the nearest block valves and shut down the flow of product,
   - Order immediate deployment of the response contractor's oil containment boom (minimum 200 ft long), complete with anchors,
   - Notify the response contractor's program manager that a spill is in progress and
   - Notify the appropriate Federal State, and local regulatory agencies. Local, State and Federal agency notification is listed in this FRP.

2. The response contractor's program manager should dispatch a response supervisor to the location of the spill by the fastest means practical. The response supervisor should be equipped with a one-day supply of PPE to include supplied air, and a radio or mobile telephone. The response supervisor should contact the Company Incident Commander immediately on arrival at the site and jointly assess the magnitude of the problem, noting any special considerations that may affect selection of resources required to complete the response action, particularly the contaminated media; i.e., soil, water, or both.

3. The response contractor's program manager should mobilize the Tier 1 response team while the response supervisor is en route to the site. The Tier 1 response team should be capable of removing 1,500 BBL of product per day, should be enroute within 2 hours of notification, and should arrive on-site within 12 hours of notification. A response team may consist of:

   - 8 HAZWOPER-trained personnel (including a supervisors and a site safety officer),
   - 2 pick-up trucks,
   - 1 one-ton box truck/associated supplies,
   - 2 vacuum trucks,

- 1 van,
- 2 work boats,
- 2,000 ft of containment boom,
- one foam trailer with applicator and foam to cover 90,000 square feet,
- a seven (7)-day supply of PPE,
- 12 sets of air bottles,
- lights,
- 2 skimmers,
- 1 generator,
- 1 air compressor,
- PID/LEL,
- detector tube specific for benzene (not affected by other hydrocarbons)
- 4 radios, and
- expendable supplies (absorbent booms & pads, PPE)

The Tier 1 team should immediately report to the response contractor's supervisor for a briefing on the response action and a tailgate health and safety meeting. The response contractor's supervisor should direct the team's activities from this point on, including setting up laydown areas and support areas.

4. The response contractor's program manager should begin mobilizing the Tier 2 and Tier 3 response teams once the Tier 1 team is enroute to the site.

   The Tier 2 response team should be capable of removing 3,000 BBL per day, should be on-site within 36 hours of notification, and should consist of the Tier 1 response team, plus:

   - 12 HAZWOPER-trained personnel,
   - 4 work boats,
   - 4,000 feet of containment boom,
   - 2 skimmers,
   - 2 vans,
   - 2 pick-up trucks,
   - 2 vacuum trucks,
   - 1 skid unit (1,500 gallon capacity),
   - 8 radios, and
   - 24 air bottles

The Tier 3 response team should be capable of removing 6,000 BBL per day, should be on-site within 60 hours of notification, and may consist of the Tier 1 and Tier 2 response teams, plus:

- 23 HAZWOPER-trained personnel,
- 2 pick-up trucks,
- 4 vans,
- 1 supply trailer,
- 4 work boats,
- 6,000 feet of containment boom,
- 3 vacuum trucks,
- 3 skimmers,
- 12 radios, and
- 48 air bottles

5. The first task of the Tier 1 response team should minimize the spread of the product on water and ground surface in order to protect the public and environmentally sensitive areas downstream of the spill. The team should place a containment boom on water or construct earthen berms on land as close as possible to the point of origin of the spill to minimize the area of most severe contamination. The placement of the containment boom / berm will also be based on personnel safety considerations for the personnel setting up the containment boom / berm. The team may then place one or more secondary booms / berms farther away, in the path(s) of the plumes deemed by the Company Incident Commander and the response supervisor to be the most dangerous to the public or to the environment.

6. Health and Safety Plan

   Initial health and safety response actions will be in accordance with the Site Safety Plan Appendix. The Site Safety Officer will complete a Site Specific Health and Safety Plan after the initial hazard assessment is conducted.

7. Implementation of Air Monitoring Program

   Company's Incident Commander will assign a Site Safety Officer (SSO) who will begin monitoring activities (using a PID, an LEL meter and benzene-specific detection tubes) in the area of the spill immediately on arrival, to assess the danger from fire and explosion in the work area, determine potential exposure to benzene, delineate the exclusion zone, and establish the support zone. Instruments, frequency of readings, records and responses to action levels will conform to the Health and Safety Plan. The SSO will pay particular attention to LEL readings.

   As soon as possible after the SSO completes initial air monitoring for the spill site hazard assessment and delineates the work zones, he/she will begin a perimeter air-monitoring program to confirm that the exclusion zone is properly sized and to document potential offsite migration of vapors that could impact the unprotected public or wildlife
   .

8. Contingency Planning

   The Company Incident Commander, the SSO and the response contractor's supervisor will identify evacuation routes of egress and procedures, safe distances and places of refuge, and emergency alerting procedures to be used in the event of an uncontrollable situation such as fire or explosion.

9. Assessment of Affected Area(s)

   The Company Incident Commander and the response contractor's supervisor will jointly review the maps and inspect the affected area(s) and assess:

   - The nature of the spilled liquid,
   - Source of the spill,
   - Direction(s) of spill migration,
   - Apparent or otherwise known subsurface geophysical feature that might impact the work; i.e., subsurface sand layers, water table elevation,
   - Overhead and buried utility lines, pipelines, etc.,
   - Nearby population, property or environmental features that might be affected by the contained spill or by an uncontained spill.

   The Tiers 1, 2, and 3 response team resources in personnel, equipment and material will be assessed to determine if they are adequate to effectively perform the work.

   If the Company Incident Commander determines that additional resources are required, the IC will request additional resources for the Tier 2 and 3 response teams from the response contractor's program manager. Additional equipment may include backhoes, dump trucks, watercraft, generators, light sets, bulldozers and front-end loaders. Equipment operators, laborers, and engineers may be mobilized as necessary. Additional material may include more spill booms, absorbent materials, foam and imported clay for berms.

10. Delineation of Exclusion and Support Zones

    The Site Safety Officer (SSO) should mark the limits of the exclusion zone with red tape, using existing trees to support the tape where possible. The support zone will be marked with green tape if in the SSO's judgment such marking is necessary to avoid confusion with a contaminated area. If the exclusion zone cannot be physically marked, the SSO will annotate a site map or layout sketch and brief all personnel on the zone layout prior to site entry.

11. Protection of Downstream Sensitive Areas

    Company's Incident Commander, the response contractor's supervisor, and SSO will inspect the boom / berm system to ensure that it is effectively protecting the public and environmentally sensitive areas downstream of the spill. The response contractor's supervisor will direct placement of additional booms / berms or relocation of existing booms / berms if ongoing measures are judged to be ineffective.

Ongoing Response

1. Recovering Wildlife for Transfer to Treatment Facilities

   The response contractor will cooperate with Company and local wildlife assistance agencies to recover birds, fish, small and large animals affected by the spill, for transportation by the appropriate wildlife agencies to treatment facilities.

2. Recovery and Transfer of Free Product

   Construction of the free product temporary storage area will start after the containment booms / berms are in place and judged effective in limiting the spread of the plume. The storage will consist of frac tanks or rubber bladders. The tanks or bladders will be surrounded by a berm built up from on-site materials or imported clay. Construction may require some cleaning of trees and shrubs.

   The response team will recover free product with vacuum trucks, sorbent booms and pads, oil skimmers and vacuum pumps.

3. Install Siphon Dams, Etc.

   The response team may construct a siphon dam to contain the spilled product if contaminated surface water is flowing. A siphon dam is built of earth with steel or plastic pipes embedded through it at a vertical angle such that the lighter, floating product is trapped behind the dam while the water below it is permitted to flow through the pipes.

4. Debris Removal

   Debris will consist of steel, concrete, timber and vegetation contaminated by the spilled product, plus product-soaked sorbent materials and trash generated by the response team. Contaminated trees and shrubs are anticipated to make up the majority of the debris.

   Company will remove and dispose of debris or may direct the response contractor to do so. Ultimate disposal may depend on the degree of contamination and is subject to approval by the regulating agencies.

Typically, steel and concrete will be transported to a landfill. Timber and vegetation will be either landfilled or incinerated off-site. The regulatory agencies may permit on-site burning of timber and vegetation under some circumstances.

5. Stabilize Damaged or Affected Structures

   The response contractor will construct temporary bracing and shoring as necessary to prevent collapse of structures and foundations that might impede or endanger the response work. This may include timber shoring as temporary replacements for sleepers under a damaged pipeline section.

   Company will stabilize damaged major pipeline bridges and pipeline river crossings, if needed.

6. Initial Response and Draft Work Plan

   The response contractor will prepare a draft work plan and submit it to Company. The work plan will include:

   - A summary of initial response actions and results,
   - Subsequent planned activities,
   - Water and soil removal and treatment and/or disposal,
   - Air monitoring program,
   - Sampling and Analysis Plan,
   - Restoration and repairs, and
   - A schedule for the work.

7. Debriefing/Dissemination of Information and Data

   The Company Incident Commander will interface with the regulatory agencies and news media. The response contractor will not disseminate any information or data without approval of the Company Incident Commander. The response contractor may furnish personnel to assist the Company Incident Commander in debriefing.

8. Documentation of Cleanup Efforts and Progress

   The response contractor will prepare and maintain records, including photos and/or video, documenting the response. Records and documents will include the supervisor's daily notes, personnel time sheets, equipment usage logs, material delivery tickets, daily air monitoring logs, and soil and water analysis reports.

   The response contractor's program manager will submit to the Company Incident Commander a report summarizing the accomplishments of the preceding week, the cost status and the response activity schedule.

9. Public Relations/Agency Liaison

   The Company Incident Commander will provide all direct contact with the news media and with regulatory agencies.

Cleanup Strategies for Natural Areas

1. Access on or Through Natural Areas

   Natural areas will probably have few, if any, existing roads. Use of overland or waterborne access will require the approval of the cognizant authorities. The Company Incident Commander will request the cognizant authorities to mark the approved routes and work areas for the use of the response contractor. If overland transportation routes are practical and acceptable to the appropriate authorities, the response contractor may construct temporary roads into the spill area, and construct such staging and laydown areas. The response contractor will minimize the size and number of vehicles used in the response.

   Water-borne transportation may be a practical alternative to roads, in some instances. In such cases, the response contractor may use workboats and/or barges to mobilize the response equipment to the site. Equipment sizes may be limited by the capacity of available watercraft and possible restrictions on the use of powered boats. The response contractor may have to construct a temporary landing to tie up the watercraft and offload the equipment.

   The terrain in some natural area may be so rugged that land and water transportation is impractical. In such cases, the response contractor may have to use helicopters to lift personnel and equipment to the site. Since heavy equipment is not readily air-transportable, most of the response work may have to be done using labor and hand tools, with a limited amount of lightweight equipment. Helicopter landing zones will be located, and if necessary cleared, at the direction of Company and the appropriate government agencies.

   Roads, staging areas, watercraft landings and helicopter landing zones will be restored to their pre-spill conditions as described in SITE RESTORATION below.

2. Protection of Natural Areas

   Once human health and safety issues have been addressed, the next priority will be given to limiting the spread of spilled product and further contamination of plant and animal life. This is usually accomplished primarily with containment booms and berms. The Company Incident Commander and the first responder will identify the land areas and/or water bodies threatened by the spill, and select the boom and berm locations. The Company Incident Commander will communicate special or additional equipment and material needs to the contractor's response team.

   Where a body of water is affected or threatened by the spill, the response contractor will usually deploy containment booms as close downstream of the spill site as may be safe and practical. If the impacted area includes rough water, such as rapids and falls, the boom may have to be installed at a distance downstream, where the water is calm enough for the boom

to be effective. This may increase the volume of contaminated water to be collected and treated. If use of the nearest effective deployment site is denied by the cognizant authorities, or if lack of roads, cliffs, heavy forests etc. make its use impractical, it may be necessary to deploy the boom at another site even further downstream.

Containment of an overland spill is normally done with ditches and berms, but only with the concurrence at the direction of the cognizant authorities. The response contractor may dig ditches and build berms downslope of the spill site to stop the overland flow of the spilled product. In some cases it may be possible to use this ditch/berm system to divert the product to a collection point downslope of the spill. If the soil dug from the ditches is clay, it may be used to build the berms. Sandy or gravelly soils do not make good barrier berm material. If importing clay from offsite is impractical and no clay is available onsite, the response contractor may have to use sorbent materials, i.e., sorbent booms and pads, to construct the berm.

3. Recovery of Product from Water and Treatment of Contaminated Water.

Product is typically recovered from water bodies such as lakes, ponds and rivers by a combination of mechanical skimming, vacuum recovery, and sorbent materials. The point of recovery may be some distance downstream of the spill site, if access to a closer location is denied or is impractical. This may increase the response time, the amount of contaminated water, and the length of shoreline to be cleaned and restored. The size and capacity of skimming equipment, pumps, piping, and tankage may be limited by access restrictions, as described above.

Product spilled onto the ground is usually recovered by excavating the product-laden soils. Other methods such as by soil/vapor extraction, or pumping from recovery wells may be considered as part of the long-term plan. Porous soils, such as sands and gravels may permit the product to soak in to a depth of several feet or more, usually until it is stopped by a layer of clay, solid rock or a water table. Soils contaminated with product will be excavated only with the concurrence of and as directed by, the appropriate government agencies. Clay soils usually retain the product at or near the surface, and require less excavation than sandy/gravelly soils.

The methods of temporary storage of the contaminated water will be site-specific, and will be highly dependent on site access. Barges may be practical where contaminated waters are navigable. Tank trailers or frac tanks may be used if roads are accessible or constructible. Rubber bladder tanks may be used, but require cleared, relatively smooth laydown areas.

The decision to treat contaminated water onsite or transport it offsite for treatment may be made by Company and the cognizant authorities with consideration of factors such as availability of utilities, suitable land area, and a comparison of the difficulties of getting the treatment equipment to the site versus the difficulties of getting the contaminated water to an offsite treatment facility. The urgency of completing the response and restoration of the spill area may also affect this decision. Once the contained waters have been stored, treatment options can be explored. Possible treatment options include steam or air stripping, oil/water separation, carbon adsorption, or other methodologies or combinations of methodologies.

4. Cleaning of Affected Structures

   Man-made structures can be cleaned by traditional methods that include wiping, hot water, low or high-pressure washdown and use of surfactants, emulsifiers or other agents. The use of surfactants, emulsifiers and other agents may be prohibited in, or adjacent to, rough water due to the difficulty of recovery of the wash water.

   Affected natural structures may include large rocks and boulders, which can usually be cleaned by the same methods as man-made structures. Cleaning rocky shorelines along rapids and near waterfalls, and rocky cliffs, may require special safety precautions and special equipment such as safety lines.

   Cleaning methods and materials to be used at a spill will be discussed with the appropriate authorities and used only with their concurrence.

   Washdown water and other liquids from cleaning activities should be contained by the boom or ditch/berm system, then collected and treated with the contaminated ground and surface waters.

5. Solids Handling and Removal

   Removal of product-laden soils will be conducted only with the concurrence and at the direction of the appropriate authorities. The extent of excavation will probably be limited, since excavation will mar the natural state of the affected area.

   Sorbent materials and other solid residue will be placed in trash bags and removed from the site for disposition. The response contractor will take particular care to remove all his site-generated wastes from the area, and will conduct a final walking inspection of the entire area with the Company Incident Commander to confirm that this has been done prior to departure.

   Contaminated soils and other solids will be removed from the site unless the cognizant authorities direct differently. Solids will probably be removed from the site by truck where roads are available or by barges where navigable waterways are reasonably close. In areas so remote that the only access is by aircraft, removal of solids from the site may be impractical. In this event, the Company Incident Commander and the appropriate authorities will determine if onsite containment or disposal is acceptable, and if it is, the best methods of doing so consistent with protection of the environment and the public health and safety.

Site Restoration

1. Sampling and Analysis to Verify Cleanup

   Sampling and analysis of the remaining soils and water will be coordinated with local, State and federal agencies to verify that the cleanup meets their requirements.

2. Rebuild/Reconstruct Affected Structures/Areas

   Natural area restoration activities will vary considerably from site to site and may entail major efforts by a combination of Company and multiple regulatory and other government agencies. Typical efforts may include seeding and mulching with wild grasses, and the planting of shrubs and seedling trees. New seeding and plantings will be similar to those removed during the response. Temporary access roads, shoreline landings, helicopter landing zones and staging/laydown areas will be regraded and returned to a natural state.

   As early as possible, Company should determine the feasibility and practicality of restoration in consultation with the appropriate authorities so that detailed, deliberate plans, specifications, and costs can be prepared.

3. Final Report

   The response contractor will prepare a Final Report for Company, summarizing the actions taken during the response activities, with particular attention to restoration and verification of cleanup.

Sec. 3.3 National, State and Local Parks

Environmental Response Scenario

The following scenario provides probable, effective response actions in the event of a spill to a national, State or local park. Depending on the site-specific conditions, Company may choose to respond in a manner different from that described below. The manpower, equipment, and recovery rates are all dependent upon site-specific conditions and Company will respond in an appropriate manner.

Description of the Affected Area

National, State and local parks are areas designated by various government agencies for the benefit of the general public. The larger public parks may have a general office with a recreational area and/or a camping ground. Much of a major park may be relatively undeveloped. The smaller public parks could be limited to combination general buildings, rest rooms, recreation areas, playgrounds, swimming pools, camping areas, hiking paths, or undeveloped terrain. A public park maybe located in almost any type of terrain, including shorelines, forests, deserts, and mountainous areas. Parks are usually, but not always, populated by administrative personnel, campers and hikers, with a variety of mammals, reptiles, birds, fish and insects. Public parks are identified and marked as such on maps and sometimes along their boundaries.

1. Public Health and Safety Concerns

   Many National, State and local parks are close to centers of human habitation, where a spill is likely to have a major, direct effect on public safety and health. A major priority will be evacuation of the public in the affected area. The danger zone for the public will generally be downwind of the point of discharge and the resulting plume.

2. Project Personnel Safety Concerns

   The greatest safety concern for project personnel is fire and explosion. The response contractor's team personnel will conduct continuous air monitoring for flammable vapors with a combustible gas meter and will suspend operations when readings exceed 10 percent of the lower explosive limit (LEL). Response contractor's team personnel will use non-sparking equipment whenever monitoring indicates explosion/fire potential. Smoking paraphernalia, including lighters, will not be permitted in the work areas under any circumstances.

   Other safety concerns for project personnel and Company representatives and the regulatory agencies' representatives are inhalation of hydrocarbon vapors (specifically benzene vapors), skin contact with liquid hydrocarbon, and heat stress and cold exposure. Contact with, or bites from, poisonous plants, insects, snakes, rodents and large wildlife will be a concern in some remote parks.

Air monitoring analysis will dictate the level of PPE utilized by workers in the exclusion zone. The support area, including break and eating areas, will be located in a safe area, and upwind of the exclusion zone wherever possible.

3. Property and Environmental Impact

   Property impact of a spill on a public park will depend on the extent to which it has been improved or developed. Public parks are frequently well developed and have considerable commercial value; a spill may have a serious impact on the commercial value of public property.

   Environmental impact on a public park will vary depending on the size of undeveloped land and water affected by the spill. Petroleum hydrocarbons may have an adverse impact on most forms of plant and animal life, and can destroy the exposed natural portion of a public park.

4. Potential Logistical Problems

   Availability of roads and utilities are site-specific and may vary from place to place within a single large park. It may be necessary to close existing public and private roads for the duration of the response activities. There may be insufficient solid level ground or a wide enough clearing in which to set up support areas, lay-down areas, etc.

   Transportation of personnel, equipment and materials into and out of some parks may require specialized vehicles such as UTVs, swamp buggies, airboats or helicopters. The response contractor should possess, or have ready access to, the minimum required equipment.

   Temporary utilities, including potable water, fuel and electricity may be available at some parks and absent at others. If not available, they must be brought in by the contractor's response team.

Initial Response Strategies

1. The Company Incident Commander will:

   - Initiate evacuation of the public from the affected areas and from the area toward which the plume is moving,
   - Initiate appropriate actions to isolate the pipeline or any other source of the spill; i.e., turn off the nearest block valves and shut down the flow of product,
   - Order immediate deployment of the contractor's oil containment boom (minimum 200 ft long), complete with anchors,
   - Notify the response contractor's program manager that a spill is in progress and
   - Notify the appropriate Federal, State, and local regulatory agencies. Local, State and Federal agency notification is listed in this FRP.

2. The response contractor's program manager should dispatch a response supervisor to the location of the spill by the fastest means practical. The response supervisor should be equipped with a one-day supply of PPE to include supplied air, and a radio or mobile telephone.

The response supervisor should contact the Company Incident Commander immediately on arrival at the site and jointly assess the magnitude of the problem, noting any special considerations that may affect selection of resources required to complete the response action.

3. The response contractor's program manager should mobilize the Tier 1 response contractor's team while the response supervisor is en route to the site. The Tier 1 response contractor's team should be capable of removing 1,500 BBL of product per day, should be en route within 2 hours of notification, and should arrive on-site within 12 hours of notification. This response team may consist of:

   - 8 HAZWOPER-trained personnel (including a supervisors and a site safety officer),
   - 2 pick-up trucks,
   - 1 one-ton box truck/associated supplies,
   - 2 vacuum trucks,
   - 1 van,
   - 2 work boats,
   - 2,000 ft of containment boom,
   - one foam trailer with applicator and foam to cover 90,000 square feet,
   - a seven (7)-day supply of PPE,
   - 12 sets of air bottles,
   - lights,
   - 2 skimmers,
   - 1 generator,
   - 1 air compressor,
   - PID/LEL,
   - detector tube specific for benzene (not affected by other hydrocarbons)
   - 4 radios, and
   - expendable supplies (absorbent booms & pads, PPE)

   The Tier 1 team should immediately report to the response contractor’s supervisor for a briefing on the response action and a tailgate health and safety meeting. The response contractor's supervisor should direct the team's activities from this point on, including setting up laydown areas and support areas.

4. The response contractor's program manager should begin mobilizing the Tier 2 and Tier 3 response contractor's teams once the Tier 1 team is enroute to the site.

   The Tier 2 response contractor's team should be capable of removing 3,000 BBL per day, should be on-site within 36 hours of notification, and may consist of the Tier 1 response contractor's team, plus:

   - 12 HAZWOPER-trained personnel,
   - 4 work boats,
   - 4,000 feet of containment boom,
   - 2 skimmers,
   - 2 vans,
   - 2 pick-up trucks,
   - 2 vacuum trucks,

- 1 skid unit (1,500 gallon capacity),
- 8 radios, and
- 24 air bottles

The Tier 3 response contractor's team should be capable of removing 6,000 BBL per day, should be on-site within 60 hours of notification, and may consist of the Tier 1 and Tier 2 response contractor's teams, plus:

- 23 HAZWOPER-trained personnel,
- 2 pick-up trucks,
- 4 vans,
- 1 supply trailer,
- 4 work boats,
- 6,000 feet of containment boom,
- 3 vacuum trucks,
- 3 skimmers,
- 12 radios, and
- 48 air bottles

5. The first task of the Tier 1 response contractor's team should be to minimize the spread of the product on the water and ground surface in order to protect the public and the vegetation and wildlife in the refuge. The team should place a containment boom / berm as close as possible to the point of origin of the spill to minimize the area of most severe contamination. The placement of the containment boom / berm will also be based on personnel safety considerations for the personnel setting up the containment boom / berm. The team may then place one or more secondary booms / berms farther away, in the path(s) of the plumes deemed by the Company Incident Commander and the response supervisor to be the most dangerous to the public or to the environment.

6. Health and Safety Plan

   Initial health and safety response actions will be in accordance with the standard operating procedure. The response contractor's Site Safety Officer will complete a Site-Specific Health and Safety Plan after the initial hazard assessment is conducted.

7. Implementation of Air Monitoring Program

   Company's Incident Commander will assign a Site Safety Officer (SSO) who will begin monitoring activities (using a PID, an LEL meter and benzene-specific detection tubes) in the area of the spill immediately on arrival, to assess the danger from fire and explosion in the work area, determine potential exposure to benzene, delineate the exclusion zone, and establish the support zone. Instruments, frequency of readings, records and responses to action levels will conform to the Health and Safety Plan. The SSO will pay particular attention to LEL readings.

As soon as possible after the SSO completes his initial air monitoring for the spill site hazard assessment and delineates the work zones, he/she will begin a perimeter air-monitoring program to confirm that the exclusion zone is properly sized and to document potential offsite migration of vapors that could impact the unprotected public or wildlife.

8. Contingency Planning

   The Company Incident Commander, the SSO and the response contractor's supervisor will identify evacuation routes of egress and procedures, safe distances and places of refuge, and emergency alerting procedures to be used in the event of an uncontrollable situation such as fire or explosion.

9. Assessment of Affected Area(s)

   The Company Incident Commander and the response contractor's supervisor will jointly review the maps provided and inspect the affected area(s) and assess:

   - The nature of the spilled liquid,
   - Source of the spill,
   - Direction(s) of spill migration,
   - Apparent or otherwise known subsurface geophysical feature that might impact the work; i.e., subsurface sand layers, water table elevation,
   - Overhead and buried utility lines, pipelines, etc.,
   - Nearby population, property or environmental features that might be affected by the contained spill, or by an uncontained spill.

   The Tiers 1, 2, and 3 response contractor's team resources in personnel, equipment and material will be assessed to determine if they are adequate to effectively perform the work.

   If the Company Incident Commander determines that additional resources are required, the response contractor's supervisor will request additional resources for the Tier 2 and 3 response contractor's teams from the response contractor's program manager. Additional equipment may include backhoes, dump trucks, watercraft, generators, light sets, bulldozers and front-end loaders. Equipment operators, laborers, and engineers may be mobilized as necessary. Additional material may include more spill booms, absorbent materials, foam and imported clay for berms.

10. Delineation of Exclusion and Support Zones

    The Site Safety Officer (SSO) will mark the limits of the exclusion zone with red plastic tape, using existing trees to support the tape where possible. The support zone will be marked with green plastic tape if in the SSO's judgment such marking is necessary to avoid confusion with a contaminated area. If the exclusion zone cannot be physically marked, the SSO will annotate a site map or layout sketch and brief all personnel on the zone layout prior to site entry.

11. Protection of Downstream Sensitive Areas

    Company's Incident Commander, the response contractor's supervisor and SSO will inspect the boom / berm system to ensure that it is effectively protecting the public and environmentally sensitive areas downstream of the spill. The response contractor's supervisor will direct placement of additional booms / berms or relocation of existing booms / berms if ongoing measures are judged to be ineffective.

Ongoing Response

1. Recovering Wildlife for Transfer to Treatment Facilities

   The response contractor will cooperate with Company and local wildlife assistance agencies to recover birds, fish, small and large animals affected by the spill, for transportation by the appropriate wildlife agencies to treatment facilities.

2. Recovery and Transfer of Free Product

   Construction of the free product temporary storage area will start after the containment booms / berms are in place and judged effective in limiting the spread of the plume. The storage will consist of frac tanks or rubber bladders. The tanks or bladders will be surrounded by a berm built up from on-site materials, or imported clay.

   The response contractor's team will recover free product with vacuum trucks, sorbent booms and pads, oil skimmers and vacuum pumps.

3. Install Siphon Dams, Etc.

   The response contractor's team may construct a siphon dam to contain the spilled product if contaminated surface water is flowing. A siphon dam is built of earth with steel or plastic pipes embedded through it at a vertical angle such that the lighter, floating product is trapped behind the dam while the water below it is permitted to flow through the pipes.

4. Debris Removal

   Debris will consist of steel, concrete, timber and vegetation contaminated by the spilled product, plus product-soaked sorbent materials and trash generated by the response contractor's team.

   Company will remove and dispose of debris or may direct the response contractor to do so. Ultimate disposal may depend on the degree of contamination and is subject to approval by the regulating agencies.

   Typically, steel and concrete will be transported to a landfill. Timber and vegetation will be either landfilled or incinerated off-site. The regulatory agencies may permit burning of timber and vegetation under some circumstances, but this is unlikely within the boundaries of the public park itself.

5. Stabilize Damaged or Affected Structures

   The response contractor will construct temporary bracing and shoring as necessary to prevent collapse of structures and foundations that might impede or endanger the response work. This may include timber shoring as temporary replacements for sleepers under a damaged pipeline section.

   Company will stabilize damaged major pipeline bridges and pipeline river crossings, if needed.

6. Initial Response and Draft Work Plan

   The response contractor will prepare a draft work plan and submit it to Company. The work plan will include:

   - A summary of initial response actions and results,
   - Subsequent planned activities,
   - Water and soil removal and treatment and/or disposal,
   - Air monitoring program,
   - Sampling and Analysis Plan,
   - Restoration and repairs, and
   - A schedule for the work.

7. Debriefing/Dissemination of Information and Data

   The Company Incident Commander will interface with the regulatory agencies and news media. The response contractor will not disseminate any information or data without approval of the Company Incident Commander. The response contractor may furnish personnel to assist the Company Incident Commander in debriefing.

8. Documentation of Cleanup Efforts and Progress

   The response contractor will prepare and maintain records, including photos and/or video, documenting the response. Records and documents will include the supervisor's daily notes, personnel time sheets, equipment usage logs, material delivery tickets, daily air monitoring logs, and soil and water analysis reports.

   The response contractor's program manager will submit to the Company Incident Commander a report summarizing the accomplishments of the preceding week, the cost status and the response activity schedule.

9. Public Relations/Agency Liaison

   The Company Incident Commander will provide all direct contact with the news media and with regulatory agencies.

Cleanup Strategies for National, State and Local Parks

1. Access on or Through National, State and Local Parks

   Response activities, particularly movement of vehicles and equipment into and out of the area may temporarily inconvenience or disrupt the public's use of the park facilities. The Company Incident Commander and the response contractor will coordinate response activity traffic control with the authorities responsible for the park.

   The response contractor will use existing roads into the spill area wherever possible and where permitted by the cognizant authorities. The response contractor will construct staging and laydown areas, in locations approved by the appropriate authorities responsible for the park, taking into consideration any ongoing use of the park, and nearby habitations if any are present. Where roads do not exist but a practical and approved route is available, the response contractor may construct temporary roads to the spill site, and staging/laydown areas. The response contractor will utilize the minimum size and number of vehicles in the response activities.

   Where the cognizant authorities approve and navigable waterways are convenient to the site, the response contractor may use workboats and/or barges to mobilize the response equipment to the site. Equipment sizes may be limited by the capacity of available boats and barges. It may be necessary to construct a temporary landing to tie up the watercraft and offload the equipment.

   If the spill occurs in a park area so rugged that land and water transportation is impractical, the response contractor may have to use helicopters to lift personnel and equipment to the site. Since heavy equipment is not readily air-transportable, most of the response work in such areas may have to be done using labor and hand tools, with a limited amount of lightweight powered equipment. Helicopter landing zones may be located, and if necessary cleared, at the direction of Company and the appropriate government agencies.

   Roads, staging areas, watercraft landings and helicopter landing zones will be restored to their pre-spill conditions as described in SITE RESTORATION below.

2. Protection of National, State and Local Parks

   Once human health and safety have been addressed, priority will be given to protecting the park features from contamination, and limiting further spread of the spilled product. Natural areas, playground equipment, swimming pools, and pavilions used for public gatherings will be given special attention. Containment booms and) berms are usually used to contain and direct the spilled product. The cognizant authority, Company Incident Commander and the first responder will identify the park features, land areas and water bodies threatened by the spill, prioritize the features to be protected, and select the boom and berm locations. The Company Incident Commander will communicate special or additional equipment and material needs to the contractor's response team.

   Where a body of water is affected or threatened by the spill, the response contractor will normally deploy containment booms as close downstream of the spill site as may be safe and practical. If the impacted area includes rough water, such as rapids and waterfalls,

the boom may have to be installed at a distance downstream, where the water is calm enough for the boom to be effective. This may increase the volume of contaminated water to be collected and treated. If use of the nearest effective deployment site is denied by the cognizant authorities, or if lack of roads, cliffs, heavy forests etc. make its use impractical, it may be necessary to deploy the boom at another site even further downstream.

Containment of an overland spill is usually done with ditches and berms. With the approval at the direction of the cognizant authorities, the response contractor will dig ditches and build berms downslope of the spill site to stop the overland flow of the spilled product. In some cases it may be possible to use this ditch/berm system to divert the product to a collection point downslope of the spill. If the soil dug from the ditches is clay, it may be used to build the berms. Sandy or gravelly soil does not make good barrier berm material. If importing clay from offsite is impractical and no clay is available onsite, the response contractor may have to use sorbent materials, i.e., sorbent booms and pads, to construct the berm.

3. Recovery of Product from Water and Treatment of Contaminated Water

Product is typically recovered from water bodies such as lakes, ponds and rivers by a combination of mechanical skimming, vacuum recovery, and sorbent materials. The preferred point of recovery is normally be as close as practical downstream of the spill site. Access for personnel and equipment will be a major factor in selecting the equipment and where it will be used.

Product spilled onto the ground is usually recovered by excavating the product-laden soils. Other methods such as by soil/vapor extraction, or pumping from recovery wells may be considered as part of the long-term plan. Porous soils, such as sands and gravels may permit the product to soak in to a depth of several feet or more, usually until it is stopped by a layer of clay, solid rock or a water table. It is expected that product-contaminated soils in playgrounds and other areas of frequent and intense human use may be excavated more completely than at spill sites in less-used areas of parks. Clay soils usually retain the product at or near the surface, and require less excavation than sandy/gravelly soils.

If space is available and if the cognizant agency permits, the response contractor may construct the water storage and treatment system in the park, near the site of the spill, at a safe distance from any feature subject to human occupation or usage. If space is not available for practical reasons, or if onsite treatment would be a continuing hazard to the public safety and health, the contained water may have to be transported offsite for treatment or disposal.

Once the contained waters have been stored, treatment options can be explored. Possible treatment options include steam or air stripping, oil/water separation, carbon adsorption, or other methodologies or combinations of methodologies.

4. Cleaning of Affected Structures

   Man-made structures can be cleaned by traditional methods that include wiping, hot water, low or high-pressure wash down, and use of surfactants, emulsifiers or other agents. Swimming pools and playground equipment will receive special attention during cleaning. Some wooden structures that cannot be adequately cleaned may have to be removed and/or replaced.

   Affected natural structures may include large rocks and boulders, which can usually be cleaned by the same methods as man-made structures. Cleaning rocky shorelines along rapids and near waterfalls, and rocky cliffs, may require special safety precautions and special equipment such as safety lines.

   Cleaning methods and materials to be used at a spill will be discussed with the appropriate authorities and used only with their concurrence.

   Washdown water and other liquids from cleaning activities should be contained by the boom or ditch/berm system, then collected and treated with the contaminated ground and surface waters.

5. Solids Handling and Removal

   Product-laden soils will be removed to the satisfaction of, and at the direction of, the appropriate authorities. The extent of excavation may be limited in some park areas, since excavation will mar their natural state. Heavy equipment, such as tracked excavators and dump trucks, will probably be used wherever their use is not prohibited by the cognizant authorities or impractical due to access restrictions.

   Sorbent materials and other solid residue will be placed in trash bags and removed from the site for disposition. The response contractor will take particular care to remove all his site-generated wastes from the area, and will conduct a final walking inspection of the entire area with the Company Incident Commander to confirm that this has been done prior to departure.

   Contaminated soils and other solids will be removed from the site unless the cognizant authorities concur with or direct other disposition. Solids may be removed by s trucks where roads are available, or by barges where navigable waterways are reasonably close. In areas so remote that the only access is by aircraft, removal of solids from the site may be impractical. In this event, the Company Incident Commander and the appropriate authorities will determine if onsite containment or disposal is acceptable, and if it is, the best methods of doing so consistent with protection of the environment and the public health and safety.

Site Restoration

1. Sampling and Analysis to Verify Cleanup

   Sampling and analysis of the remaining soils and water will be coordinated with local, State and federal agencies to verify that the cleanup meets their requirements.

2. Rebuild/Reconstruct Affected Structures/Areas

   Public Park restoration activities will vary considerably from site to site and may involve park officials. As early as possible, the Company should determine the feasibility and practicality of restoration in consultation with the appropriate authorities so that detailed, deliberate plans, specifications, and costs can be prepared.

3. Final Report

   The response contractor will prepare a Final Report for Company, summarizing the actions taken during the response activities, with particular attention to restoration and verification of cleanup.

Sec. 3.4 Protected Waterways

Environmental Response Scenario

The following scenario provides probable, effective response actions in the event of a spill to a protected waterway. Depending on the site-specific conditions, Company may choose to respond in a manner different from that described below. The manpower, equipment, and recovery rates are all dependent upon site-specific conditions and Company will respond in an appropriate manner.

Description of the Affected Area

Protected waterways are those designated by the U.S. Department of the Interior as part of the Wild and Scenic Rivers System. By their nature, they are in remote areas and/or areas of rugged terrain.

1. Public Health and Safety Concerns

   Most major protected waterways are remote from human habitation, where a spill is unlikely to have a direct effect on the public safety and health except for small numbers of tourists and hikers, white-water rafters and other sportsmen.

2. Project Personnel Safety Concerns

   The greatest safety concern for project personnel is fire and explosion. The response contractor's team personnel will conduct continuous air monitoring for flammable vapors with a combustible gas meter and will suspend operations when readings exceed 10 percent of the lower explosive limit (LEL). Response contractor's team personnel will use non-sparking equipment whenever monitoring indicates explosion/fire potential. Smoking paraphernalia, including lighters, will not be permitted in the work areas under any circumstances.

   Other safety concerns for project personnel, Company representatives and the regulatory agencies' representatives are inhalation of hydrocarbon vapors (specifically benzene vapors), skin contact with liquid hydrocarbons, heat stress and cold exposure, falling rocks, drowning, and contact with or bites from, poisonous plants, insects, snakes, rodents and large wildlife indigenous to the protected waterways.

   Air monitoring analysis will dictate the level of PPE utilized by workers in the exclusion zone. The support area, including break and eating areas, will be located in a safe area and upwind of the exclusion zone wherever possible.

3. Property and Environmental Impact

   Property impact of a spill in a protected waterway will depend on its proximity to inhabited or improved property. Major protected waterways are generally undeveloped; the primary commercial value derives from tourism. A spill is expected to have minimal impact on the commercial value of public or private property.

Environmental impact on a protected waterway can be severe. Petroleum hydrocarbons may have an adverse impact on most forms of plant and animal life, and can destroy vegetation along the banks of the protected waterway.

4. Potential Logistical Problems

   Protected waterways are frequently remote from major transportation networks and utility services. Roads into such areas may be seasonal and intermittent, and should be considered generally unreliable. There may be insufficient cleared space on which to set up support areas and lay-down areas adjacent to the protected waterway, since they are frequently in canyons and gorges or similar rough terrain, or have heavily wooded shorelines. Temporary berms or dams cannot interrupt the flow of the waterway.

   Transportation of personnel, equipment and materials into and out of the area may require specialized vehicles such as UTVs, cranes, hoists and repelling gear. The response contractor should possess, or have ready access to, the minimum required equipment.

   Temporary utilities, including potable water, fuel and electricity will probably be absent and must be brought in by the response contractor's team.

Initial Response Strategies

The deployment of containment booms may be impractical in reaches of the waterway in which the water flow is fast and turbulent. It may be necessary to deploy the booms and recover the spilled liquids some distance downstream of the spill, where water conditions are favorable. The recovery point may be downstream of the protected waterway itself.

1. The Company Incident Commander will;

   - Initiate evacuation of the public from the affected areas and from the area toward which the plume is moving,
   - Initiate appropriate actions to isolate the pipeline or any other source of the spill; i.e., turn off the nearest block valves and shut down the flow of product.
   - Order immediate deployment of the response contractor's oil containment boom (minimum 200 ft long), complete with anchors,
   - Notify the response contractor's program manager that a spill is in progress and
   - Notify the appropriate Federal, State, and local regulatory agencies. Local, State and Federal agency notification is listed in this FRP.

2. The response contractor's program manager should dispatch a response supervisor to the location of the spill by the fastest means practical. The response contractor's supervisor should be equipped with a one-day supply of PPE to include supplied air, and a radio or mobile telephone. The response contractor's supervisor should contact the Company Incident Commander immediately on arrival at the site and jointly assess the magnitude of the problem, noting any special considerations that may affect selection of resources required to complete the response action.

3. The response contractor's program manager should mobilize the Tier 1 response contractor's team while the response contractor's supervisor is en route to the site. The Tier 1 response contractor's team should be capable of removing 1,500 BBL of product per day, should be en route within 2 hours of notification, and should arrive on-site within 12 hours of notification. This team may consist of:

   - 8 HAZWOPER-trained personnel (including a supervisors and a site safety officer),
   - 2 pick-up trucks,
   - 1 one-ton box truck/associated supplies,
   - 2 vacuum trucks,
   - 1 van,
   - 2 work boats,
   - 2,000 ft of containment boom,
   - one foam trailer with applicator and foam to cover 90,000 square feet,
   - a seven (7)-day supply of PPE,
   - 12 sets of air bottles,
   - lights,
   - 2 skimmers,
   - 1 generator,
   - 1 air compressor,
   - PID/LEL,
   - detector tube specific for benzene (not affected by other hydrocarbons)
   - 4 radios, and
   - expendable supplies (absorbent booms & pads, PPE)

   The Tier 1 team should immediately report to the response contractor's supervisor for a briefing on the response action and a tailgate health and safety meeting. The response contractor's supervisor should direct the team's activities from this point on, including setting up laydown areas and support areas.

4. The response contractor's program manager should begin mobilizing the Tier 2 and Tier 3 response contractor's teams once the Tier 1 team is enroute to the site.

   The Tier 2 response contractor's team should be capable of removing 3,000 BBL per day, should be on-site within 36 hours of notification, and may consist of the Tier 1 response contractor's team, plus:

   - 12 HAZWOPER-trained personnel,
   - 4 work boats,
   - 4,000 feet of containment boom,
   - 2 skimmers,
   - 2 vans,
   - 2 pick-up trucks,
   - 2 vacuum trucks,
   - 1 skid unit (1,500 gallon capacity),
   - 8 radios, and
   - 24 air bottles

The Tier 3 response contractor's team should be capable of removing 6,000 BBL per day, should be on-site within 60 hours of notification, and may consist of the Tier 1 and Tier 2 response contractor's teams, plus:

- 23 HAZWOPER-trained personnel,
- 2 pick-up trucks,
- 4 vans,
- 1 supply trailer,
- 4 work boats,
- 6,000 feet of containment boom,
- 3 vacuum trucks,
- 3 skimmers,
- 12 radios, and
- 48 air bottles

5. The first task of the Tier 1 response contractor's team should be to minimize the spread of the product into the protected waterway. The team should place sorbent pads as close as possible to the point of origin of the spill. The team may then place one or more containment booms downstream of the spill source, if residual liquids continue to spill from the source.

6. Health and Safety Plan

   Initial health and safety response actions will be in accordance with the standard operating procedure. The response contractor's Site Safety Officer will complete a Site-Specific Health and Safety Plan after the initial hazard assessment is conducted.

7. Implementation of Air Monitoring Program

   Company's Incident Commander will assign a Site Safety Officer (SSO) who will begin monitoring activities (using a PID, an LEL meter and benzene-specific detection tubes) in the area of the spill immediately on arrival, to assess the danger from fire and explosion in the work area, determine potential exposure to benzene, delineate the exclusion zone, and establish the support zone. Instruments, frequency of readings, records and responses to action levels will conform to the Health and Safety Plan. The SSO will pay particular attention to LEL readings.

   As soon as possible after the SSO completes his initial air monitoring for the spill site hazard assessment and delineates the work zones, he/she will begin a perimeter air-monitoring program to confirm that the exclusion zone is properly sized and to document potential offsite migration of vapors that could impact the unprotected public.

8. Contingency Planning

   The Company Incident Commander, the SSO and the response contractor's supervisor will identify evacuation routes of egress and procedures, safe distances and places of refuge, and emergency alerting procedures to be used in the event of an uncontrollable situation such as fire or explosion.

9. Assessment of Affected Area(s)

   The Company Incident Commander and the response contractor's supervisor will jointly review the maps provided and inspect the affected area(s) and assess:

   - The nature of the spilled liquid,
   - Source of the spill,
   - Direction(s) of spill migration,
   - Dams, rapids or other river features downstream.
   - Apparent or otherwise known subsurface geophysical feature that might impact the work; i.e., subsurface sand layers, water table elevation,
   - Overhead and buried utility lines, pipelines, etc.,
   - Nearby population, property or environmental features that might be affected by the contained spill, or by an uncontained spill.

   The Tiers 1, 2, and 3 response contractor's team resources in personnel, equipment and material will be assessed to determine if they are adequate to effectively perform the work.

   If the Company Incident Commander determines that additional resources are required, the response contractor's supervisor will request additional resources for the Tier 2 and 3 response contractor's teams from the response contractor's program manager. Additional equipment may include backhoes, dump trucks, watercraft, generators, light sets, bulldozers and front-end loaders. Equipment operators, laborers, and engineers may be mobilized as necessary. Additional material may include more spill booms, absorbent materials and foam.

10. Delineation of Exclusion and Support Zones

    The Site Safety Officer (SSO) will mark the limits of the exclusion zone with red plastic tape, using existing trees or rocks to support the tape where possible. The support zone will be marked with green plastic tape if in the SSO's judgment such marking is necessary to avoid confusion with a contaminated area. If the exclusion zone cannot be physically marked, the SSO will annotate a site map or layout sketch and brief all personnel on the zone layout prior to site entry.

11. Protection of Downstream Sensitive Areas

    Company's Incident Commander, the response contractor's supervisor and SSO will inspect the boom system to ensure that it is effectively protecting the public and environmentally sensitive areas downstream of the spill. The response contractor's supervisor will direct placement of additional booms or relocation of existing booms if ongoing measures are judged to be ineffective.

Ongoing Response

1. Recovering Wildlife for Transfer to Treatment Facilities

   The response contractor will cooperate with Company and local wildlife assistance agencies to recover birds, fish, reptiles and mammals affected by the spill, for transportation by the wildlife agencies to treatment facilities.

2. Recovery and Transfer of Free Product

   Construction of the free product temporary storage area will start after the containment booms are in place and judged effective in limiting the spread of the plume. The storage will consist of frac tanks or rubber bladders. The tanks or bladders will be surrounded by a berm built up from on-site materials or imported clay.

   The response contractor's team will recover free product with vacuum trucks, sorbent booms and pads, oil skimmers and vacuum pumps.

3. Install Siphon Dams, Etc.

   The response contractor's team may construct a siphon dam to contain the spilled product if the contaminated water is shallow (10 feet or less) and flowing gently. A siphon dam is built of earth with steel or plastic pipes embedded through it at a vertical angle such that the lighter, floating product is trapped behind the dam while the water below it is permitted to flow through the pipe. A siphon dam will not be practiced or effective in confined waterways with rapidly moving, turbulent water.

4. Debris Removal

   Debris will consist of steel, concrete, timber and vegetation contaminated by the spilled product, plus product-soaked sorbent materials and trash generated by the response contractor's team.

   Company will remove and dispose of debris or may direct the response contractor to do so. Ultimate disposal may depend on the degree of contamination and is subject to approval by the regulating agencies.

   Typically, steel and concrete will be transported to a landfill. Timber and vegetation will be either landfilled or incinerated off-site. The regulatory agencies may permit on-site burning of timber and vegetation under some circumstances.

5. Stabilize Damaged or Affected Structures

   The response contractor will construct temporary bracing and shoring as necessary to prevent collapse of structures and foundations that might impede or endanger the response work. This may include timber shoring as temporary replacements for sleepers under a damaged pipeline section.

   Company will stabilize damaged major pipeline bridges and pipeline river crossings, if needed.

6. Initial Response and Draft Work Plan

   The response contractor will prepare a draft work plan and submit it to Company. The work plan will include:

   - A summary of initial response actions and results,
   - Subsequent planned activities,
   - Water and soil removal and treatment and/or disposal,
   - Air monitoring program,
   - Sampling and Analysis Plan,
   - Restoration and repairs, and
   - A schedule for the work.

7. Debriefing/Dissemination of Information and Data

   The Company Incident Commander will interface with the regulatory agencies and news media. The response contractor will not disseminate any information or data without approval of the Company Incident Commander. The response contractor may furnish personnel to assist the Company Incident Commander in debriefing.

8. Documentation of Cleanup Efforts and Progress

   The response contractor will prepare and maintain records, including photos and/or video, documenting the response. Records and documents will include the supervisor's daily notes, personnel time sheets, equipment usage logs, material delivery tickets, daily air monitoring logs, and soil and water analysis reports.

   The response contractor's program manager will submit to the Company Incident Commander a report summarizing the accomplishments of the preceding week, the cost status and the response activity schedule.

9. Public Relations/Agency Liaison

   The Company Incident Commander will provide all direct contact with the news media and with regulatory agencies.

Cleanup Strategies for Protected Waterways

1. Access to and on a Protected Waterway

   Getting personnel, equipment and materials to the response site will be a major problem in this scenario. Nature, as well as the cognizant authorities, may limit the sizes and weights to what can be carried by hand.

   Protected waterways are typically not navigable by any watercraft large enough to transport heavy equipment, and the cognizant authorities may restrict or prohibit the use of powered boats in the protected waterway itself. Rapids and waterfalls in some protected waterways may make water-borne transportation both difficult and dangerous. Shoreline access may be restricted in some protected waterways by high cliffs, and may in some cases be heavily wooded with no nearby roads. These conditions would severely limit the use of heavy equipment in the response.

   Where roads or railroad lines are available in the vicinity, and the heavy equipment can approach the shoreline, it may be mobilized and used. Routes and work areas will be subject to approval and onsite directions of the cognizant authorities. Construction of temporary road extensions or access road spurs may be necessary. When mobilization or use of heavy equipment is impractical, the response contractor may have to mobilize additional labor and perform the work using hand tools with a limited amount of lightweight powered equipment. In very remote areas it may be necessary for the response crew to approach the spill site on foot. It may be practical to use helicopters to deliver personnel and light equipment and materials to a remote site in rugged terrain.

   In some cases, the spill containment may actually be deployed downstream of the protected waterway, due to the impracticality of getting sufficient equipment and personnel into the immediate area of the spill. The Company Incident Commander will coordinate with the owners of the affected property downstream of the protected waterway if this becomes necessary.

2. Protection of Protected Waterways

   Once human health and safety concerns have been addressed, priority will be given to preventing contamination of the protected waterway, or to limiting further contamination if it has already occurred. This is usually accomplished primarily with containment booms and berms. The Company Incident Commander and the first responder will select the boom and berm locations. The Company Incident Commander will communicate special or additional equipment and material needs to the contractor's response team.

   The Company Incident Commander and the response contractor will attempt to contain the spilled product on land before it reaches the waterway, if it has not already done so. Time will be critical. With the approval of and at the direction of the cognizant authorities, the response contractor may dig ditches and build berms downslope of the spill site to stop the overland flow of the spilled product and prevent it from entering the protected waterway. In some cases it may be possible to use this ditch/berm system to divert the product to a collection point. If the soil dug from the ditches is clay, it may be used to build the berms. Sandy or gravelly soil does not make good barrier berm material. If importing clay from

offsite is impractical and no clay is available onsite, the response contractor may have to use sorbent materials, i.e., sorbent booms and pads, to construct the berm.

To contain the spilled product once it has contaminated the protected waterway, the response contractor will probably deploy containment booms as close downstream of the spill site as may be safe and practical. The impacted area may include rough water, such as rapids and falls, in which case the boom may have to be installed at a distance downstream, where the water is calm enough for the boom to be effective. This may increase the volume of contaminated water to be collected and treated. If use of the nearest effective deployment site is denied by the cognizant authorities, or if lack of roads, cliffs, heavy forests etc. make its use impractical, it may be necessary to deploy the boom at another site even further downstream. The location of the containment boom is critical and will require the approval of the cognizant authorities.

3. Recovery of Product from Water and Treatment of Contaminated Water.

   Product is typically recovered from the surface water by a combination of mechanical skimming, vacuum recovery, and sorbent materials. The point of recovery may be some distance downstream of the spill site, if access to closer sites is denied or is impractical. This may increase the response time, the amount of contaminated water, and the length of shoreline to be cleaned and restored. The size and capacity of skimming equipment, pumps, piping, and tankage may be limited by access restrictions, as described above.

   The methods of temporary storage of the contaminated water will be site-specific, and will be highly dependent on site access and approval by the cognizant authorities. Railroad tank cars, tank trailers or frac tanks may be used if roads/railroads are accessible or constructible. Rubber bladder tanks may be used, but require cleared, relatively smooth laydown areas.

   The decision to treat contaminated water onsite or to transport it offsite for treatment will be made by Company and the cognizant authorities with consideration of factors such as availability of utilities, suitable land area, and a comparison of the difficulties of getting the treatment equipment to the site versus the difficulties of getting the contaminated water to an offsite treatment facility. Once the contaminated waters have been stored, treatment options can be explored. Possible treatment options include steam or air stripping, oil/water separation, carbon adsorption, or other methodologies or combinations of methodologies.

4. Cleaning of Affected Structures

   Manmade structures can be cleaned by traditional methods that include wiping, hot water, low or high-pressure wash down and use of surfactants, emulsifiers or other agents.

   Affected natural structures may include large rocks and boulders, which can usually be cleaned by the same methods as man-made structures. Cleaning rocky shorelines along rapids and near waterfalls will probably be done with sorbent pads since recovery of wash-down water surfactants emulsifiers and other agents may be impractical near rough water. Cleaning activities near rough water may also require special safety precautions and equipment such as safety lines.

Cleaning methods and materials to be used at a spill will be discussed with the appropriate authorities and used only with their concurrence and at their direction.

Wash down water and other liquids from cleaning activities onshore should be contained by the ditch/berm system, then collected and treated with the contaminated ground and surface waters.

5. Solids Handling and Removal

   Removal of product-laden soils will be conducted only with the concurrence and at the direction of the appropriate authorities. Excavation may be limited to manual labor activities by the exclusion of heavy equipment due to restricted access.

   Sorbent materials and other solid residue will be placed in trash bags and removed from the site for disposition. The response contractor will take particular care to remove all his site-generated wastes from the area, and will conduct a final walking inspection of the entire area with the Company Incident Commander to confirm that this has been done prior to departure.

   Contaminated soils and other solids will be removed from the site unless the cognizant authorities direct otherwise. Solids may be removed from the site by truck where roads are available or by barges where navigable waterways are reasonably close. In areas so remote that the only access is by aircraft, removal of solids from the site may be impractical. In this event, the Company Incident Commander and the appropriate authorities will determine if onsite containment or disposal is acceptable, and if it is, the best methods of doing so consistent with protection of the environment and the public health and safety.

Site Restoration

1. Sampling and Analysis to Verify Cleanup

   Sampling and analysis of the remaining soils and water will be coordinated with local, State and federal agencies to verify that the cleanup meets their requirements.

2. Rebuild/Reconstruct Affected Structures/Areas

   Restoration activities will vary considerably from site to site. As early as possible, the Company should determine the feasibility and practicality of restoration in consultation with the appropriate authorities so that detailed, deliberate plans, specifications, and costs can be prepared.

3. Final Report

   The response contractor will prepare a Final Report for Company, summarizing the actions taken during the response activities, with particular attention to restoration and verification of cleanup.

Sec. 3.5 Recreational Sites

Environmental Response Scenario

The following scenario provides probable, effective response actions in the event of a spill to a recreational site. Depending on the site-specific conditions, Company may choose to respond in a manner different from that described below. The manpower, equipment, and recovery rates are all dependent upon site-specific conditions and Company will respond in an appropriate manner.

Description of the Affected Area

Recreational sites are areas designated by federal, State and local governments for public use. A recreational site may include any type of terrain, including beaches, streams, lakes, forests, and mountainous areas. Recreational sites may be either remote from, or close to, human habitation, and are frequently developed for residential use and commercial enterprises related to recreation activities.

Recreational sites are generally identified and marked as such on maps.

1. Public Health and Safety Concerns

   Immediate evacuation of the public, and their subsequent health and safety, are a major concern. The danger zone for the public will generally be downwind of the point of discharge and the resulting plume.

2. Project Personnel Safety Concerns

   The greatest safety concern for project personnel is fire and explosion. The response contractor's team personnel will conduct continuous air monitoring for flammable vapors with a combustible gas meter and will suspend operations when readings exceed 10 percent of the lower explosive limit (LEL). Response contractor's team personnel will use non-sparking equipment whenever monitoring indicates explosion/fire potential. Smoking paraphernalia, including lighters, will not be permitted in the work areas under any circumstances.

   Other safety concerns for project personnel, Company representatives and the regulatory agencies' representatives are inhalation of hydrocarbon vapors (specifically benzene vapors), skin contact with liquid hydrocarbons, heat stress and cold exposure, and contact with, or bites from, poisonous plants, insects, snakes, rodents and large wildlife indigenous to the recreational site.

   Air monitoring analysis will dictate the level of PPE utilized by workers in the exclusion zone. The support area, including break and eating areas, will be located in a safe area and upwind of the exclusion zone wherever possible.

3. Property and Environmental Impact

   Property impact of a spill on a recreational site will depend on the degree of private, commercial and public development in the affected area. Major recreational sites are generally well developed and have considerable commercial value; a spill may be expected to have a major impact on the commercial value of public and private property.

   Environmental impact on a recreational site can be immediate and extensive. Petroleum hydrocarbons may have an adverse impact on most forms of plant and animal life, and can destroy the exposed portion of a recreational site. Major recreational sites provide habitats and food supplies for wildlife and are sources of oxygen for the atmosphere.

4. Potential Logistical Problems

   Logistic support at recreational sites will vary from site to site, but typically includes access to major transportation networks and utility services. Roads into and through such areas may be considered generally reliable. Sufficient solid level ground or a wide enough clearing in which to set up support areas, lay-down areas, etc should be available.

   Transportation of personnel, equipment and materials into and out of some recreation sites may require specialized vehicles such as UTVs, swamp buggies, airboats or helicopters. The response contractor should possess, or have ready access to, the minimum required equipment.

   Temporary utilities, including potable water, fuel and electricity may be available at some recreation areas and absent at others. If not available, they must be brought in by the contractor's response team.

Initial Response Strategies

1. The Company Incident Commander will:

   - Initiate evacuation of the public from the immediate area of the spill and from the area toward which the plume is moving,
   - Initiate appropriate actions to isolate the pipeline or any other source of the spill; i.e., turn off the nearest block valves and shut down the flow of product.
   - Order immediate deployment of the response contractor's oil containment boom (minimum 200 ft long), complete with anchors,
   - Notify the response contractor's program manager that a spill is in progress and
   - Notify the appropriate Federal, State, and local regulatory agencies. Local, State and Federal agency notification is listed in this FRP.

2. The response contractor's program manager should dispatch a response supervisor to the location of the spill by the fastest means practical. The response contractor's supervisor should be equipped with a one-day supply of PPE to include supplied air, and a radio or mobile telephone. The response contractor's supervisor should contact the Company Incident Commander immediately on arrival at the site and jointly assess the magnitude of the

problem, noting any special considerations that may affect selection of resources required to complete the response action.

3. The response contractor's program manager should mobilize the Tier 1 response contractor's team while the response contractor's supervisor is en route to the site. The Tier 1 response contractor's team should be capable of removing 1,500 BBL of product per day, should be en route within 2 hours of notification, and should arrive on-site within 12 hours of notification. This response team may consist of:

   - 8 HAZWOPER-trained personnel (including a supervisors and a site safety officer),
   - 2 pick-up trucks,
   - 1 one-ton box truck/associated supplies,
   - 2 vacuum trucks,
   - 1 van,
   - 2 work boats,
   - 2,000 ft of containment boom,
   - one foam trailer with applicator and foam to cover 90,000 square feet,
   - a seven (7)-day supply of PPE,
   - 12 sets of air bottles,
   - lights,
   - 2 skimmers,
   - 1 generator,
   - 1 air compressor,
   - PID/LEL,
   - detector tube specific for benzene (not affected by other hydrocarbons)
   - 4 radios, and
   - expendable supplies (absorbent booms & pads, PPE)

   The Tier 1 team should immediately report to the response contractor's supervisor for a briefing on the response action and a tailgate health and safety meeting. The response contractor's supervisor should direct the team's activities from this point on, including setting up laydown areas and support areas.

4. The response contractor's program manager should begin mobilizing the Tier 2 and Tier 3 response contractor's teams once the Tier 1 team is enroute to the site.

   The Tier 2 response contractor's team should be capable of removing 3,000 BBL per day, should be on-site within 36 hours of notification, and may consist of the Tier 1 response contractor's team, plus:

   - 12 HAZWOPER-trained personnel,
   - 4 work boats,
   - 4,000 feet of containment boom,
   - 2 skimmers,
   - 2 vans,

- 2 pick-up trucks,
- 2 vacuum trucks,
- 1 skid unit (1,500 gallon capacity),
- 8 radios, and
- 24 air bottles

The Tier 3 response contractor's team should be capable of removing 6,000 BBL per day, should be on-site within 60 hours of notification, and may consist of the Tier 1 and Tier 2 response contractor's teams, plus:

- 23 HAZWOPER-trained personnel,
- 2 pick-up trucks,
- 4 vans,
- 1 supply trailer,
- 4 work boats,
- 6,000 feet of containment boom,
- 3 vacuum trucks,
- 3 skimmers,
- 12 radios, and
- 48 air bottles

5. The first task of the Tier 1 response contractor's team should be to minimize the spread of the product on the water and ground surface in order to protect the public and environmentally sensitive areas downstream of the spill. The team should place a containment boom on water or construct earthen berms on land as close as possible to the point of origin of the spill to minimize the area of most severe contamination. The placement of the containment boom / berm will also be based on personnel safety considerations for the personnel setting up the containment boom / berm. The team may then place one or more secondary booms / berms farther away, in the path(s) of the plumes deemed by the Company Incident Commander and the response contractor's supervisor to be the most dangerous to the public or to the environment.

6. Health and Safety Plan

   Initial health and safety response actions will be in accordance with the standard operating procedure. The response contractor's Site Safety Officer will complete a Site-Specific Health and Safety Plan after the initial hazard assessment is conducted.

7. Implementation of Air Monitoring Program

   Company's Incident Commander will assign a Site Safety Officer (SSO) who will begin monitoring activities (using a PID, an LEL meter and benzene-specific detection tubes) in the area of the spill immediately on arrival, to assess the danger from fire and explosion in the work area, determine potential exposure to benzene, delineate the exclusion zone, and establish the support zone. Instruments, frequency of readings, records and responses to action levels will conform to the Health and Safety Plan. The SSO will pay particular attention to LEL readings.

As soon as possible after the SSO completes his initial air monitoring for the spill site hazard assessment and delineates the work zones, he/she will begin a perimeter air-monitoring program to confirm that the exclusion zone is properly sized and to document potential offsite migration of vapors that could impact the unprotected public or wildlife.

8. Contingency Planning

   The Company Incident Commander, the SSO and the response contractor's supervisor will identify evacuation routes of egress and procedures, safe distances and places of refuge, and emergency alerting procedures to be used in the event of an uncontrollable situation such as fire or explosion.

9. Assessment of Affected Area(s)

   The Company Incident Commander and the response contractor's supervisor will jointly review the maps provided and inspect the affected area(s) and assess:

   - The nature of the spilled liquid,
   - Source of the spill,
   - Direction(s) of spill migration,
   - Apparent or otherwise known subsurface geophysical feature that might impact the work; i.e., subsurface sand layers, water table elevation,
   - Overhead and buried utility lines, pipelines, etc.,
   - Nearby population, property or environmental features that might be affected by the contained spill or by an uncontained spill.

   The Tiers 1, 2, and 3 response contractor's team resources in personnel, equipment and material will be assessed to determine if they are adequate to effectively perform the work.

   If the Company Incident Commander determines that additional resources are required, the response contractor's supervisor will request additional resources for the Tier 2 and 3 response contractor's teams from the response contractor's program manager. Additional equipment may include backhoes, dump trucks, watercraft, generators, light sets, bulldozers and front-end loaders. Equipment operators, laborers, and engineers may be mobilized as necessary. Additional material may include more spill booms, absorbent materials, foam and imported clay for berms.

10. Delineation of Exclusion and Support Zones

    The Site Safety Officer (SSO) will mark the limits of the exclusion zone with red plastic tape, using existing trees to support the tape where possible. The support zone will be marked with green plastic tape if in the SSO's judgment such marking is necessary to avoid confusion with a contaminated area. If the exclusion zone cannot be physically marked, the SSO will annotate a site map or layout sketch and brief all personnel on the zone layout prior to site entry.

11. Protection of Downstream Sensitive Areas

    Company's Incident Commander, the response contractor's supervisor and SSO will inspect the boom / berm system to ensure that it is effectively protecting the public and environmentally sensitive areas downstream of the spill. The response contractor's supervisor will direct placement of additional booms / berms or relocation of existing booms / berms if ongoing measures are judged to be ineffective.

Ongoing Response

1. Recovering Wildlife for Transfer to Treatment Facilities

   The response contractor will cooperate with Company and local wildlife assistance agencies to recover birds, fish, small and large animals affected by the spill, for transportation by the appropriate wildlife agencies to treatment facilities.

2. Recovery and Transfer of Free Product

   Construction of the free product temporary storage area will start after the containment booms / berms are in place and judged effective in limiting the spread of the plume. The storage will consist of frac tanks or rubber bladders. The tanks or bladders will be surrounded by a berm built up from on-site materials or imported clay.

   The response contractor's team will recover free product with vacuum trucks, sorbent booms and pads, oil skimmers and vacuum pumps.

3. Install Siphon Dams, Etc.

   The response contractor's team may construct a siphon dam to contain the spilled product if contaminated surface water is flowing. A siphon dam is built of earth with steel or plastic pipes embedded through it at a vertical angle such that the lighter, floating product is trapped behind the dam while the water below it is permitted to flow through the pipe.

4. Debris Removal

   Debris will consist of steel, concrete, timber and vegetation contaminated by the spilled product, plus product-soaked sorbent materials and trash generated by the response contractor's team. Contaminated lumber from marine facilities is anticipated to make up the majority of the debris.

   Company will remove and dispose of debris or may direct the response contractor to do so. Ultimate disposal may depend on the degree of contamination and is subject to approval by the regulating agencies.

   Typically, steel and concrete will be transported to a landfill. Timber and vegetation will be either landfilled or incinerated off-site. The regulatory agencies may permit on-site burning of timber and vegetation under some circumstances.

5. Stabilize Damaged or Affected Structures

   The response contractor will construct temporary bracing and shoring as necessary to prevent collapse of structures and foundations that might impede or endanger the response work. This may include timber shoring as temporary replacements for sleepers under a damaged pipeline section.

   Company will stabilize damaged major pipeline bridges and pipeline river crossings, if needed.

6. Initial Response and Draft Work Plan

   The response contractor will prepare a draft work plan and submit it to Company. The work plan will include:

   - A summary of initial response actions and results,
   - Subsequent planned activities,
   - Water and soil removal and treatment and/or disposal,
   - Air monitoring program,
   - Sampling and Analysis Plan,
   - Restoration and repairs, and
   - A schedule for the work.

7. Debriefing/Dissemination of Information and Data

   The Company Incident Commander will interface with the regulatory agencies and news media. The response contractor will not disseminate any information or data without approval of the Company Incident Commander. The response contractor may furnish personnel to assist the Company Incident Commander in debriefing.

8. Documentation of Cleanup Efforts and Progress

   The response contractor will prepare and maintain records, including photos and/or video, documenting the response. Records and documents will include the supervisor's daily notes, personnel time sheets, equipment usage logs, material delivery tickets, daily air monitoring logs, and soil and water analysis reports.

   The response contractor's program manager will submit to the Company Incident Commander a report summarizing the accomplishments of the preceding week, the cost status and the response activity schedule.

9. Public Relations/Agency Liaison

   The Company Incident Commander will provide all direct contact with the news media and with regulatory agencies.

Cleanup Strategies for Recreational Sites

1. Access on and through Recreational Sites

   Response activities, particularly movement of vehicles and equipment into and out of the area may temporarily inconvenience or disrupt the public's use of the recreational site facilities. The Company Incident Commander and the response contractor will coordinate access routes and response activity traffic control with the authorities responsible for the recreational site.

   The response contractor may use existing roads into the spill area wherever possible and where permitted by the cognizant authorities. The response contractor will construct staging and laydown areas in locations approved by the appropriate authorities responsible for the recreational site, taking into consideration all ongoing public activities, and any nearby habitations. Where roads do not exist but a practical and approved route is available, the response contractor may construct temporary roads to the spill site, and staging/laydown areas. The response contractor will utilize the minimum size and number of vehicles in the response activities.

   Where navigable waterways are convenient to the site and the cognizant authorities approve waterborne access, the response contractor may use workboats and/or barges to mobilize the response equipment to the site. Response equipment sizes may be limited by the capacity of available boats and barges. The response contractor may use existing boat landings/docks or construct a temporary landing to tie up the watercraft and offload the equipment.

   Roads, staging areas and watercraft landings will be restored to their pre-spill conditions as described in SITE RESTORATION below.

2. Protection of Recreational Sites

   One of the major concerns in this scenario is the removal of contamination to levels acceptable for the protection of the public using the park.

   Once immediate human health and safety have been addressed, priority will be given to protecting the recreational site features from contamination, and limiting further spread of the spilled product. Playground equipment, swimming pools, and pavilions used for public gatherings will be given special attention. Containment booms and berms may be used to contain and direct the spilled product. The cognizant authority, the Company Incident Commander and the first responder will identify the recreational site features, land areas and water bodies threatened by the spill, prioritize the features to be protected, and select the boom and berm locations. The Company Incident Commander will communicate special or additional equipment and material needs to the contractor's response team.

   Where a body of water is affected or threatened by the spill, the response contractor will usually deploy containment booms as the isolating/protecting mechanism. The booms will be deployed downstream of the spill if the water is moving, as in a stream or river. The boom will be deployed to surround the spill if it is on a pond or lake where the water is relatively stagnant.

Containment of an overland spill is typically done with ditches and berms. With the concurrence of and at the direction of the cognizant authority, the response contractor may dig ditches and build berms downslope of the spill site to stop the overland flow of the spilled product. In some cases it may be possible to use this ditch/berm system to divert the product to a collection point downslope of the spill. If the soil dug from the ditches is clay, it may be used to build the berms. Sandy or gravelly does not make good barrier berm material. If importing clay from offsite is impractical and no clay is available onsite, the response contractor may have to use sorbent materials, i.e., sorbent booms and pads, to construct the berm.

3. Recovery of Product from Water and Treatment of Contaminated Water

   Product is typically recovered from water bodies such as lakes, ponds and rivers by a combination of mechanical skimming, vacuum recovery, and sorbent materials. The point of recovery will be as close as practical downstream of the spill site.

   Product spilled onto the ground is usually recovered by excavating the product-laden soils. Excavation of contaminated soils will be performed only with the concurrence of and at the direction of the cognizant authorities. Other methods such as soil/vapor extraction, or pumping from recovery wells may be considered as part of the long-term plan. Porous soils, such as sands and gravels may permit the product to soak in to a depth of several feet or more, usually until it is stopped by a layer of clay, solid rock or a water table. Clay soils usually retain the product at or near the surface, and require less excavation. Collection of product for treatment or disposal will easier in clay soils than in sandy/gravelly soils.

   Selection of storage and treatment locations will depend on patterns of public use of the site, proximity of the public using the recreational site, and approvals and/or preferences of the responsible authorities. If space is available and if the cognizant agency permits, the response contractor may construct the water storage and treatment system in or adjacent to the recreational site, near the site of the spill, at a safe distance from any feature subject to human occupation or usage. If space is not available for practical reasons, or if onsite treatment would be a continuing hazard to the public safety and health, the contained water may have to be transported offsite for treatment or disposal.

   Once the contaminated waters have been stored, treatment options can be explored. Possible treatment options include steam or air stripping, oil/water separation, carbon adsorption, or other methodologies or combinations of methodologies.

4. Cleaning of Affected Structures

   Man-made structures can be cleaned by traditional methods that include wiping, hot water, low or high-pressure washdown, and use of surfactants, emulsifiers or other agents. Swimming pools, playground equipment, pavilions and similar structures will receive special attention during cleaning. Some wooden structures that cannot be adequately cleaned may have to be removed and/or replaced.

   Cleaning methods and materials to be used at a spill will be discussed with the appropriate authorities and used only with their concurrence and at their direction.

Washdown water and other liquids from cleaning activities should be contained by the boom or ditch/berm system, then collected and treated with the contaminated ground and surface waters.

5. Solids Handling and Removal

   Product-laden soils will be removed to the satisfaction of, and at the direction of, the appropriate authorities. It is expected that product-contaminated soils in playgrounds and other areas of frequent and intense human use at recreational sites will be excavated more completely than at spill sites in more remote areas. Heavy equipment, such as tracked excavators and dump trucks, may be used wherever their use is not prohibited by the cognizant authority, or is impractical due to access restrictions.

   Sorbent materials and other solid residue will be placed in trash bags and removed from the site for disposition. The response contractor will take particular care to remove all his site-generated wastes from the area, and will conduct a final walking inspection of the entire area with the Company Incident Commander to confirm that this has been done prior to departure.

   Contaminated soils and other solids will be removed from the site. Solids will be removed by trucks where roads are available, or by barges where navigable waterways are reasonably close and the volume of contaminated soils justifies their use.

Site Restoration

1. Sampling and Analysis to Verify Cleanup

   Sampling and analysis of the remaining soils and water will be coordinated with local, State and federal agencies to verify that the cleanup meets their requirements.

2. Rebuild/Reconstruct Affected Structures/Areas

   Recreational site restoration activities will vary considerably from site to site and may entail major efforts by a combination of Company and multiple regulatory and municipal, county or state agencies. As early as possible, the Company should determine the feasibility and practicality of restoration in consultation with the appropriate authorities so that detailed, deliberate plans, specifications, and costs can be prepared.

3. Final Report

   The response contractor will prepare a Final Report for Company, summarizing the actions taken during the response activities, with particular attention to restoration and verification of cleanup.

Sec. 3.6 Water Supply Intakes

Environmental Response Scenario

The following scenario provides probable, effective response actions in the event of a spill to a water supply intake. Depending on the site-specific conditions, Company may choose to respond in a manner different from that described below. The manpower, equipment, and recovery rates are all dependent upon site-specific conditions and Company will respond in an appropriate manner.

Description of the Affected Area

Water supply intakes generally include lakes, reservoirs, rivers, streams, springs, and similar bodies of water near the inhabited areas that are served by the intake.

1. Public Health and Safety Concerns

   The most serious impact on public health and safety is contamination of the drinking water, followed by danger of fire or explosion, and inhalation of toxic vapors. The danger zone for the public will generally be downwind of the point of discharge and the resulting plume.

2. Project Personnel Safety Concerns

   The greatest safety concern for project personnel is fire and explosion. The response contractor's team personnel will conduct continuous air monitoring for flammable vapors with a combustible gas meter and will suspend operations when readings exceed 10 percent of the lower explosive limit (LEL). Response contractor's team personnel will use non-sparking equipment whenever monitoring indicates explosion/fire potential. Smoking paraphernalia, including lighters, will not be permitted in the work areas under any circumstances.

   Other safety concerns for project personnel, Company representatives and the regulatory agencies' representatives are inhalation of hydrocarbon vapors (specifically benzene vapors), skin contact with liquid hydrocarbons, heat stress and cold exposure. Contact with, or bites from, poisonous plants, insects, snakes, rodents and large wildlife will be a concern in some remote parks.

   Air monitoring analysis will dictate the level of PPE utilized by workers in the exclusion zone. The support area, including break and eating areas, will be located in a safe area and upwind of the exclusion zone wherever possible.

3. Property and Environmental Impact

   Property impact of a spill on a Water Supply Intake will depend on its proximity to inhabited or improved property and whether the water purification equipment is contaminated by the spill. Major Water Supply Intakes are frequently developed as recreational areas and have considerable commercial value.

Environmental impact on vegetation and wildlife in a Water Supply Intake can be severe if not removed immediately, but this will be secondary to the potential affects on the public health and welfare.

4. Other Impacts

   The intake may be rendered unfit as a source of public drinking water for a prolonged time. It may become necessary to locate, and activate or enlarge alternate sources of drinking water. These may be artisan wells or surface water sources such as lakes or rivers not ordinarily used for drinking water. Purification facilities may be required to treat the water from such sources, to make it suitable for public use.

5. Potential Logistical Problems

   Water Supply Intakes are typically close to the population centers that they serve. Major transportation networks and utility services are usually available in the general vicinity. Roads to such areas are generally reliable, but public and/or private roads may need to be closed for the duration of the cleanup.

   Transportation of personnel, equipment and materials within the area may require specialized vehicles such as UTVs, workboats, swamp buggies, airboats or barges. The response contractor should possess, or have ready access to, the minimum required equipment.

   Temporary utilities, including potable water, fuel and electricity may be available; if not, the response contractor's team must bring them in.

Initial Response Strategies

1. The Company Incident Commander will

   - Initiate evacuation of the public from the affected areas and from the area toward which the plume is moving,
   - Alert appropriate health authorities to warn the public of possibly tainted water supply, and initiate analysis of the water for potability.
   - Initiate appropriate actions to isolate the pipeline or any other source of the spill; i.e., turn off the nearest block valves and shut down the flow of product.
   - Order immediate deployment of the response contractor's oil containment boom (minimum 200 ft long), complete with anchors,
   - Notify the response contractor's program manager that a spill is in progress and
   - Notify the appropriate Federal, State, and local regulatory agencies. Local, State and Federal agency notification is listed in this FRP.
   - Initiate measures to locate or develop temporary alternate water supply if the spill or the response activities will render the intake unusable. The temporary supply will be provided until the intake is judged by the appropriate health agency to be acceptable.

2. The response contractor's program manager should dispatch a response supervisor to the location of the spill by the fastest means practical. The response contractor's supervisor should be equipped with a one-day supply of PPE to include supplied air, and a radio or mobile telephone. The response contractor's supervisor should contact the Company Incident Commander immediately on arrival at the site and jointly assess the magnitude of the problem, noting any special considerations that may affect selection of resources required to complete the response action.

3. The response contractor's program manager should mobilize the Tier 1 response contractor's team while the response contractor's supervisor is en route to the site. The Tier 1 response contractor's team should be capable of removing 1,500 BBL of product per day, should be en route within 2 hours of notification, and should arrive on-site within 12 hours of notification. This response team may consist of:

   - 8 HAZWOPER-trained Personnel (including a supervisors and a site safety officer),
   - 2 pick-up trucks,
   - 1 one-ton box truck/associated supplies,
   - 2 vacuum trucks,
   - 1 van,
   - 2 work boats,
   - 2,000 ft of containment boom,
   - one foam trailer with applicator and foam to cover 90,000 square feet,
   - a seven (7)-day supply of PPE,
   - 12 sets of air bottles,
   - lights,
   - 2 skimmers,
   - 1 generator,
   - 1 air compressor,
   - PID/LEL,
   - detector tube specific for benzene (not affected by other hydrocarbons)
   - 4 radios, and
   - expendable supplies (absorbent booms & pads, PPE)

   The Tier 1 team should immediately report to the response contractor's supervisor for a briefing on the response action and a tailgate health and safety meeting. The response contractor's supervisor should direct the team's activities from this point on, including setting up laydown areas and support areas. One of the first tasks of the Tier 1 response contractor's team should be to double, and if possible, triple the containment boom system to minimize the possibility of boom failure or product bypassing the boom system and/or entering the intake. It may be necessary for the Tier 1 response contractor's team to work extended hours, using lights after nightfall.

4. The response contractor's program manager should begin mobilizing the Tier 2 and Tier 3 response contractor's teams once the Tier 1 team is enroute to the site.

The Tier 2 response contractor's team should be capable of removing 3,000 BBL per day, should be on-site within 36 hours of notification, and may consist of the Tier 1 response contractor's team, plus:

- 12 HAZWOPER-trained Personnel,
- 4 work boats,
- 4,000 feet of containment boom,
- 2 skimmers,
- 2 vans,
- 2 pick-up trucks,
- 2 vacuum trucks,
- 1 skid unit (1,500 gallon capacity),
- 8 radios, and
- 24 air bottles

The Tier 1 response contractor's team should work 24 hours per day, in shifts.

The Tier 3 response contractor's team should be capable of removing 6,000 BBL per day, should be on-site within 60 hours of notification, and may consist of the Tier 1 and Tier 2 response contractor's teams, plus:

- 23 HAZWOPER-trained Personnel,
- 2 pick-up trucks,
- 4 vans,
- 1 supply trailer,
- 4 work boats,
- 6,000 feet of containment boom,
- 3 vacuum trucks,
- 3 skimmers,
- 12 radios, and
- 48 air bottles

5. The first task of the Tier 1 response contractor's team should be to minimize the spread of the product on the water and ground surface in order to protect the public and environmentally sensitive areas. The team should place a containment boom as close as possible to the point of origin of the spill to minimize the area of most severe contamination. The placement of the containment boom will also be based on personnel safety considerations for the personnel setting up the containment boom. The team may then place one or more secondary booms farther away, in the path(s) of the plumes deemed by the Company Incident Commander and the response contractor's supervisor to be the most dangerous to the public or to the environment.

6. Health and Safety Plan

   Initial health and safety response actions will be in accordance with the standard operating procedure. The response contractor's Site Safety Officer will complete a Site-Specific Health and Safety Plan after the initial hazard assessment is conducted.

7. Implementation of Air Monitoring Program

   Company's Incident Commander will assign a Site Safety Officer (SSO) who will begin monitoring activities (using a PID, an LEL meter and benzene-specific detection tubes) in the area of the spill immediately on arrival, to assess the danger from fire and explosion in the work area, determine potential exposure to benzene, delineate the exclusion zone, and establish the support zone. Instruments, frequency of readings, records and responses to action levels will conform to the Health and Safety Plan. The SSO will pay particular attention to LEL readings.

   As soon as possible after the SSO completes his initial air monitoring for the spill site hazard assessment and delineates the work zones, he/she will begin a perimeter air-monitoring program to confirm that the exclusion zone is properly sized and to document potential offsite migration of vapors that could impact the unprotected public or wildlife.

8. Contingency Planning

   The Company Incident Commander, the SSO and the response contractor's supervisor will identify evacuation routes of egress and procedures, safe distances and places of refuge, and emergency alerting procedures to be used in the event of an uncontrollable situation such as fire or explosion.

9. Assessment of Affected Area(s)

   The Company Incident Commander and the response contractor's supervisor will jointly review the maps provided and inspect the affected area(s) and assess:

   - The nature of the spilled liquid,
   - Source of the spill,
   - Direction(s) of spill migration,
   - Relative position of the intake,
   - Apparent or otherwise known subsurface geophysical feature that might impact the work; i.e., subsurface sand layers, water table elevation,
   - Overhead and buried utility lines, and pipelines, etc.,
   - Nearby population, property or environmental features that might be affected by the contained spill, or by an uncontained spill.

   The Tiers 1, 2, and 3 response contractor's team resources in personnel, equipment and material will be assessed to determine if they are adequate to effectively perform the work.

If the Company Incident Commander determines that additional resources are required, the response contractor's supervisor will request additional resources for the Tier 2 and 3 response contractor's teams from the response contractor's program manager. Additional equipment may include backhoes, dump trucks, watercraft, generators, light sets, bulldozers and front-end loaders. Equipment operators, laborers, and engineers may be mobilized as necessary. Additional material may include more spill booms, absorbent materials, foam and imported clay for berms.

10. Delineation of Exclusion and Support Zones

    The Site Safety Officer (SSO) will mark the limits of the exclusion zone with red plastic tape, using existing trees to support the tape where possible. The support zone will be marked with green plastic tape if in the SSO's judgment such marking is necessary to avoid confusion with a contaminated area. If the exclusion zone cannot be physically marked, the SSO will annotate a site map or layout sketch and brief all personnel on the zone layout prior to site entry.

11. Protection of Downstream Sensitive Areas

    Company's Incident Commander, the response contractor's supervisor and SSO will inspect the boom system to ensure that it is effectively protecting the public and environmentally sensitive areas downstream of the spill. The response contractor's supervisor will direct placement of additional booms or relocation of existing booms if ongoing measures are judged to be ineffective.

Ongoing Response

1. Recovering Wildlife for Transfer to Treatment Facilities

   The response contractor will cooperate with Company and local wildlife assistance agencies to recover birds, fish, reptiles and mammals affected by the spill, for transportation by the wildlife agencies to treatment facilities.

2. Recovery and Transfer of Free Product

   Construction of the free product temporary storage area will start after the containment booms are in place and judged effective in limiting the spread of the plume. The storage will consist of frac tanks or rubber bladders. The tanks or bladders will be surrounded by a berm built up from on-site materials or imported clay.

   The response contractor's team will recover free product with vacuum trucks, sorbent booms and pads, oil skimmers and vacuum pumps.

3. Install Siphon Dams, Etc.

   The response contractor's team will construct a siphon dam to contain the spilled product if the contaminated water is flowing, and the water is shallow enough for this to be practical; i.e., if the water depth is less than 10 feet. A siphon dam is built of earth with steel or plastic pipes embedded through it at a vertical angle such that the lighter, floating product is trapped behind the dam while the water below it is permitted to flow through the pipes.

4. Debris Removal

   Debris will consist of steel, concrete, timber and vegetation contaminated by the spilled product, plus product-soaked sorbent materials and trash generated by the response contractor's team. Timber debris may result from demolition of docks, piers and similar marina structures contaminated too badly for decontamination to be practical

   Company will remove and dispose of debris or may direct the response contractor to do so. Ultimate disposal may depend on the degree of contamination and is subject to approval by the regulating agencies.

   Typically, steel and concrete will be transported to a landfill. Timber and vegetation will be either landfilled or incinerated off-site. The regulatory agencies may permit on-site burning of timber and vegetation under some circumstances.

5. Stabilize Damaged or Affected Structures

   The response contractor will construct temporary bracing and shoring as necessary to prevent collapse of structures and foundations that might impede or endanger the response work. This may include timber shoring as temporary replacements for sleepers under a damaged pipeline section.

   Company will stabilize damaged major pipeline bridges and pipeline river crossings, and public and private marine structures, if needed.

6. Initial Response and Draft Work Plan

   The response contractor will prepare a draft work plan and submit it to Company. The work plan will include:

   - A summary of initial response actions and results,
   - Subsequent planned activities,
   - Water and soil removal and treatment and/or disposal,
   - Air monitoring program,
   - Sampling and Analysis Plan,
   - Restoration and repairs, and
   - A schedule for the work.

7. Debriefing/Dissemination of Information and Data

   The Company Incident Commander will interface with the regulatory agencies and news media. The response contractor will not disseminate any information or data without approval of the Company Incident Commander. The response contractor may furnish personnel to assist the Company Incident Commander in debriefing.

8. Documentation of Cleanup Efforts and Progress

   The response contractor will prepare and maintain records, including photos and/or video, documenting the response. Records and documents will include the supervisor's daily notes, personnel time sheets, equipment usage logs, material delivery tickets, daily air monitoring logs, and soil and water analysis reports.

   The response contractor's program manager will submit to the Company Incident Commander a report summarizing the accomplishments of the preceding week, the cost status and the response activity schedule.

9. Public Relations/Agency Liaison

   The Company Incident Commander will provide all direct contact with the news media and with regulatory agencies.

Cleanup Strategies for Water Supply Intakes

1. Access to, at and on Water Supply Intakes

   Access to the site will probably be by road or navigable waterway, subject to approval and oversight by the cognizant authority. Personnel and equipment may be mobilized by truck or boat/barge. Once the floating equipment reaches the water supply intake, the booms can be deployed and moved by boat. Personnel can be landed on the shoreline as required to anchor containment booms, clean shoreside structures and excavate small volumes of contaminated soil. Tracked or wheeled heavy equipment may be used along the shoreline for major excavation where the shore can be approached from the landward side.

   The response contractor will construct temporary roads, staging and laydown areas in locations approved by the appropriate authorities responsible for the intake, taking into consideration the need to avoid interfering with the operation of the intake wherever possible.

   Where navigable waterways are convenient to the site and the cognizant authorities approve the use of waterborne equipment, the response contractor may use workboats and/or barges to mobilize the response equipment to the site. Equipment sizes may be limited by the capacity of available boats and barges. The response contractor may use existing boat landings/docks or construct a temporary landing to tie up the watercraft and offload the equipment.

Roads, staging areas, and watercraft landings will be restored to their pre-spill conditions as described in SITE RESTORATION below.

2. Protection of Water Supply Intakes

   Protection of the water supply intake from contamination by the spilled product is the crucial aspect of this scenario.

   Once human health and safety concerns have been addressed, priority will be given to protecting the intake from contamination. Whenever the release is waterborne, booms will be typically deployed as the isolating/protecting mechanism. Boats will probably be used to deploy the booms. The cognizant authority, the Company Incident Commander and the first responder should identify potential boat launch sites and communicate this to the response crew prior to their arrival.

   If the release is overland, then priority should be given to preventing the spilled product from reaching the water body. Containment of an overland spill is typically done with ditches and berms. With the approval of and at the direction of the cognizant authorities, the response contractor may dig ditches and build berms downslope of the spill site to stop the overland flow of the spilled product. In some cases it may be possible to use this ditch/berm system to divert the product to a collection point downslope of the spill. If the soil dug from the ditches is clay, it may be used to build the berms. Sandy or gravelly soil does not make good barrier berm material. If importing clay from offsite is impractical and no clay is available onsite, the response contractor may have to use sorbent materials, i.e., sorbent booms and pads, to construct the berm.

3. Recovery of Product from Water and Treatment of Contaminated Water

   Typically, product is recovered from surface water like a water supply intake by a combination of mechanical skimming, vacuum recovery, and manual application of sorbent materials. Temporary storage of recovered product may be accomplished by the use of tank trailers, small barges or other containers. All recovery and storage plans, techniques, equipment and materials will be subject to the approval and direction of the cognizant authorities.

   Prolonged storage of contaminated water in close proximity to the intake may be inadvisable due to the continued danger of leaks from the tanks and pipefittings. If the cognizant authorities concur, the storage tanks or barges may be moved offsite as soon as practical to reduce this hazard. The Company Incident Commander or the first responder will have to assess the situation quickly and communicate with the response crew in order to ensure that sufficient quantities of the correct storage and transfer equipment are deployed.

   Once the contaminated waters have been stored, treatment options can be explored. Although onsite storage and treatment is generally preferred by regulatory agencies, offsite water treatment should be considered as an alternative in order to remove the hazard of recontaminating the water body. Possible treatment options include steam or air stripping, oil/water separation, carbon adsorption, or other methodologies or combinations of methodologies.

4. Cleaning of Affected Structures

   Traditional methods of cleaning structures affected by released product include wiping, hot water, low or high-pressure washdown, and/or the use of surfactants, emulsifiers or other agents. Because improper or misapplied materials and procedures may do more harm than good, and because of the potential for irrecoverable damage to the intake structure and the water purification process system downstream of it, the method of choice for cleaning an intake structure contaminated with product will require the approval and direction of the cognizant authority. Alternative methods, including the use of detergents or emulsifiers, will be discussed with the appropriate authorities and used only with their concurrence and at their direction.

5. Solids Handling and Removal

   Product-laden soils on the shore of the water supply body will be removed to the satisfaction of, and at the direction of, the appropriate authorities. Heavy equipment, such as tracked excavators and dump trucks, will be used wherever their use is not prohibited by the cognizant authority or impractical due to access restrictions.

   Sorbent materials and other solid residue will be placed in trash bags and removed from the site for disposition. The response contractor will take particular care to remove all his site-generated wastes from the area, and will conduct a final walking inspection of the entire area with the Company Incident Commander to confirm that this has been done prior to departure.

   Contaminated soils and other solids will be removed from the site as approved by and at the direction of the cognizant authority. Trucks may remove solids where roads are available. Barges may be used for removal of large volumes of contaminated solids where navigable waterways connect to the water supply body, provided caution is exercised to avoid recontamination by spillage.

Site Restoration

1. Sampling and Analysis to Verify Cleanup

   Sampling and analysis of the remaining soils and water will be coordinated with local, State and federal agencies to verify that the cleanup meets their requirements. This effort may be prolonged in order to ensure that the public is not endangered by residual spill-related contaminants in the drinking water supply.

2. Rebuild/Reconstruct Affected Structures/Areas

   Restoration requirements will vary considerably from site to site. As early as possible, the Company should determine the feasibility and practicality of restoration in consultation with the appropriate authorities so that detailed, deliberate plans, specifications, and costs can be prepared.

3. Final Report

The response contractor will prepare a Final Report for Company, summarizing the actions taken during the response activities, with particular attention to restoration and verification of cleanup.

Sec. 3.7 Wetlands

Environmental Response Scenario

The following scenario provides probable, effective response actions in the event of a spill to wetlands. Depending on the site-specific conditions, Company may choose to respond in a manner different from that described below. The manpower, equipment, and recovery rates are all dependent upon site-specific conditions and Company will respond in an appropriate manner.

Description of the Affected Area

Wetlands are described in 40 CFR 230.3(t) as "...those areas that are inundated or saturated by surface or ground water at a frequency and 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 swamps, marshes, bogs and similar areas" Wetlands are frequently, but not always, remote from human habitation, and are generally undeveloped. Wetlands are not always identified and marked as such.

1. Public Health and Safety Concerns

   Most major wetlands are remote from human habitation, where a spill is unlikely to have a direct effect on public safety and health. However, some small wetlands may be found in or near metropolitan areas, where public safety and health will be a major and immediate concern, primarily due to danger of fire or explosion, or due to inhalation of toxic vapors. The danger zone for the public will generally be downwind of the point of discharge and the resulting plume.

2. Project Personnel Safety Concerns

   The greatest safety concern for project personnel is fire and explosion. The response team personnel will conduct continuous air monitoring for flammable vapors with a combustible gas meter and will suspend operations when readings exceed 10 percent of the lower explosive limit (LEL). Response team personnel will use non-sparking equipment whenever monitoring indicates explosion/fire potential. Smoking paraphernalia, including lighters, will not be permitted in the work areas under any circumstances.

   Other safety concerns for project personnel, Company representatives and the regulatory agencies' representatives are inhalation of hydrocarbon vapors (specifically benzene vapors), skin contact with liquid hydrocarbons, heat stress and cold exposure, and contact with, or bites from, poisonous plants, insects, snakes, rodents and large wildlife indigenous to the wetlands.

   Air monitoring analysis will dictate the level of PPE utilized by workers in the exclusion zone. The support area, including break and eating areas, will be located in a safe area, and upwind of the exclusion zone wherever possible.

3. Property and Environmental Impact

   Property impact of a spill on wetlands will depend on its proximity to inhabited or improved property. Major wetlands are generally undeveloped and have little or no commercial value; a spill is expected to have minimal property impact.

   Environmental impact on wetlands can be severe. Petroleum hydrocarbons may have an adverse impact on most forms of plant and animal life, and can destroy the exposed portion of wetlands. Wetlands perform a valuable filtering action for the waters that pass through them, removing solids and organic materials. Wetlands also provide a habitat for wildlife and are a source of oxygen for the atmosphere.

4. Potential Logistical Problems

   Wetlands are typically remote from major transportation networks and utility services. Roads into and through such areas may be seasonal, intermittent, and should be considered generally unreliable. There may be insufficient solid ground on which to set up support areas, lay-down areas, etc.

   Transportation of personnel, equipment and materials into and out of the area may require specialized vehicles such as UTVs, swamp buggies, airboats or barges. The response contractor should possess, or have ready access to, the minimum required equipment.

   Temporary utilities, including potable water, fuel and electricity will probably be absent and must be brought in by the response team.

Initial Response Strategies

1. The Company Incident Commander will

   - Initiate evacuation of the public from the affected areas and from the area in which the plume is moving,
   - Initiate appropriate actions to isolate the pipeline or any other source of the spill; i.e., turn off the nearest block valves and shut down the flow of product.
   - Order immediate deployment of the response contractor's oil containment boom (minimum 200 ft long), complete with anchors,
   - Notify the response contractor's program manager that a spill is in progress and
   - Notify the appropriate Federal, State, and local regulatory agencies. A local, State and Federal agency notification is listed in this FRP.

2. The response contractor's program manager should dispatch a response supervisor to the location of the spill by the fastest means practical. The response contractor's supervisor should be equipped with a one-day supply of PPE to include supplied air, and a radio or mobile telephone. The response contractor's supervisor should contact the Company Incident Commander immediately on arrival at the site and jointly assess the magnitude of the problem, noting any special considerations that may affect selection of resources required to complete the response action.

3. The response contractor's program manager should mobilize the Tier 1 response team while the response contractor's supervisor is en route to the site. The Tier 1 response team should be capable of removing 1,500 BBL of product per day, should be enroute within 2 hours of notification, and should arrive on-site within 12 hours of notification. This response team may consist of:

   - 8 HAZWOPER-trained personnel (including a supervisors and a site safety officer),
   - 2 pick-up trucks,
   - 1 one-ton box truck/associated supplies,
   - 2 vacuum trucks,
   - 1 van,
   - 2 work boats,
   - 2,000 ft of containment boom,
   - one foam trailer with applicator and foam to cover 90,000 square feet,
   - a seven (7)-day supply of PPE,
   - 12 sets of air bottles,
   - lights,
   - 2 skimmers,
   - 1 generator,
   - 1 air compressor,
   - PID/LEL,
   - detector tube specific for benzene (not affected by other hydrocarbons)
   - 4 radios, and
   - expendable supplies (absorbent booms & pads, PPE)

   The Tier 1 team should immediately report to the response contractor's supervisor for a briefing on the response action and a tailgate health and safety meeting. The response contractor's supervisor should direct the team's activities from this point on, including setting up laydown areas and support areas.

4. The response contractor's program manager should begin mobilizing the Tier 2 and Tier 3 response teams once the Tier 1 team is en route to the site.

   The Tier 2 response team should be capable of removing 3,000 BBL per day, should be on-site within 36 hours of notification, and may consist of the Tier 1 response team, plus:

   - 12 HAZWOPER-trained personnel,
   - 4 work boats,
   - 4,000 feet of containment boom,
   - 2 skimmers,
   - 2 vans,
   - 2 pick-up trucks,
   - 2 vacuum trucks,
   - 1 skid unit (1,500 gallon capacity),
   - 8 radios, and
   - 24 air bottles

The Tier 3 response team should be capable of removing 6,000 BBL per day, should be on-site within 60 hours of notification, and may consist of the Tier 1 and Tier 2 response teams, plus:

- 23 HAZWOPER-trained personnel,
- 2 pick-up trucks,
- 4 vans,
- 1 supply trailer,
- 4 work boats,
- 6,000 feet of containment boom,
- 3 vacuum trucks,
- 3 skimmers,
- 12 radios, and
- 48 air bottles

5. The first task of the Tier 1 response team should be to minimize the spread of the product on the water and ground surface in order to protect the public and environmentally sensitive areas. The team should place a containment boom as close as possible to the point of origin of the spill to minimize the area of most severe contamination. The placement of the containment boom will also be based on personnel safety considerations for the personnel setting up the containment boom. The team may then place one or more secondary booms farther away, in the path(s) of the plumes deemed by the Company Incident Commander and the response contractor's supervisor to be the most dangerous to the public or to the environment.

6. Health and Safety Plan

   Initial health and safety response actions will be in accordance with the standard operating procedure. The response contractor's Site Safety Officer will complete a Site-Specific Health and Safety Plan after the initial hazard assessment is conducted.

7. Implementation of Air Monitoring Program

   Company's Incident Commander will assign a Site Safety Officer (SSO) who will begin monitoring activities (using a PID, an LEL meter and benzene-specific detection tubes) in the area of the spill immediately on arrival, to assess the danger from fire and explosion in the work area, determine potential exposure to benzene, delineate the exclusion zone, and establish the support zone. Instruments, frequency of readings, records and responses to action levels will conform to the Health and Safety Plan. The SSO will pay particular attention to LEL readings.

   As soon as possible after the SSO completes his initial air monitoring for the spill site hazard assessment and delineates the work zones, he/she will begin a perimeter air-monitoring program to confirm that the exclusion zone is properly sized and to document potential offsite migration of vapors that could impact the unprotected public or wildlife.

8. Contingency Planning

   The Company Incident Commander, the SSO and the response contractor's supervisor will identify evacuation routes of egress and procedures, safe distances and places of refuge, and emergency alerting procedures to be used in the event of an uncontrollable situation such as fire or explosion.

9. Assessment of Affected Area(s)

   The Company Incident Commander and the response contractor's supervisor will jointly review the maps provided and inspect the affected area(s) and assess:

   - The nature of the spilled liquid,
   - Source of the spill,
   - Direction(s) of spill migration,
   - Apparent or otherwise known subsurface geophysical feature that might impact the work; i.e., subsurface sand layers, water table elevation,
   - Overhead and buried utility lines, pipelines, etc.,
   - Nearby population, property or environmental features that might be affected by the contained spill, or by an uncontained spill.

   The Tiers 1, 2, and 3 response team resources in personnel, equipment and material will be assessed to determine if they are adequate to effectively perform the work.
   If the Company Incident Commander determines that additional resources are required, the response contractor's supervisor will request additional resources for the Tier 2 and 3 response teams from the response contractor's program manager. Additional equipment may include backhoes, dump trucks, watercraft, generators, light sets, bulldozers and front-end loaders. Equipment operators, laborers, and engineers may be mobilized as necessary. Additional material may include more spill booms, absorbent materials, foam, and imported clay for berms.

10. Delineation of Exclusion and Support Zones

    The Site Safety Officer (SSO) will mark the limits of the exclusion zone with red plastic tape, using existing trees to support the tape where possible. The support zone will be marked with green plastic tape if in the SSO's judgment such marking is necessary to avoid confusion with a contaminated area. If the exclusion zone cannot be physically marked, the SSO will annotate a site map or layout sketch and brief all personnel on the zone layout prior to site entry.

11. Protection of Downstream Sensitive Areas

    Company's Incident Commander, the response contractor's supervisor and SSO will inspect the boom system to ensure that it is effectively protecting the public and environmentally sensitive areas downstream of the spill. The response contractor's supervisor will direct placement of additional booms or relocation of existing booms if ongoing measures are judged to be ineffective.

Ongoing Response

1. Recovering Wildlife for Transfer to Treatment Facilities

   The response contractor will cooperate with Company and local wildlife assistance agencies to recover birds, fish, reptiles and mammals affected by the spill, for transportation by the wildlife agencies to treatment facilities.

2. Recovery and Transfer of Free Product

   Construction of the free product temporary storage area will start after the containment booms are in place and judged effective in limiting the spread of the plume. The storage will consist of frac tanks or rubber bladders. The tanks or bladders will be surrounded by a berm built up from on-site materials or imported clay.

   The response team will recover free product with vacuum trucks, sorbent booms and pads, oil skimmers and vacuum pumps.

3. Install Siphon Dams, Etc.

   The response team will construct a siphon dam to contain the spilled product if the contaminated water is flowing. A siphon dam is built of earth with steel or plastic pipes embedded through it at a vertical angle such that the lighter, floating product is trapped behind the dam while the water below it is permitted to flow through the pipes.

4. Debris Removal

   Debris will consist of steel, concrete, timber and vegetation contaminated by the spilled product, plus product-soaked sorbent materials and trash generated by the response team.

   Company will remove and dispose of debris or may direct the response contractor to do so. Ultimate disposal may depend on the degree of contamination and is subject to approval by the regulating agencies.

   Typically, steel and concrete will be transported to a landfill. Timber and vegetation will be either landfilled or incinerated off-site. The regulatory agencies may permit on-site burning of timber and vegetation under some circumstances.

5. Stabilize Damaged or Affected Structures

   The response contractor will construct temporary bracing and shoring as necessary to prevent collapse of structures and foundations that might impede or endanger the response work. This may include timber shoring as temporary replacements for sleepers under a damaged pipeline section.

   Company will stabilize damaged major pipeline bridges and pipeline river crossings, if needed.

6. Initial Response and Draft Work Plan

   The response contractor will prepare a draft work plan and submit it to Company. The work plan will include:

   - A summary of initial response actions and results,
   - Subsequent planned activities,
   - Water and soil removal and treatment and/or disposal,
   - Air monitoring program,
   - Sampling and Analysis Plan,
   - Restoration and repairs, and
   - A schedule for the work.

7. Debriefing/Dissemination of Information and Data

   The Company Incident Commander will interface with the regulatory agencies and news media. The response contractor will not disseminate any information or data without approval of the Company Incident Commander. The response contractor may furnish personnel to assist the Company Incident Commander in debriefing.

8. Documentation of Cleanup Efforts and Progress

   The response contractor will prepare and maintain records, including photos and/or video, documenting the response. Records and documents will include the supervisor's daily notes, personnel time sheets, equipment usage logs, material delivery tickets, daily air monitoring logs, and soil and water analysis reports.

   The response contractor's program manager will submit to the Company Incident Commander a weekly report summarizing the accomplishments of the preceding week, the cost status and the response activity schedule.

9. Public Relations/Agency Liaison

   The Company Incident Commander will provide all direct contact with the news media and with regulatory agencies.

Cleanup Strategies for Wetlands

1. Access on and Through Wetlands

   Access on and through wetlands may probably be severely restricted by the regulatory agencies due to the severe and long-lasting damage that could result. Routes for temporary roads and laydown areas will be coordinated with the appropriate authorities with due consideration for critical and sensitive vegetation and animal habitats. The cognizant authorities will be requested to assist the Company Incident Commander and the response contractor by directing the layout of

temporary roads and work areas, and the marking of areas in which personnel and equipment are prohibited. Response personnel will be briefed on the approved and prohibited areas on their arrival and at the daily tailgate safety briefings.

Boats and/or barges may prove practical and less disruptive to the wetlands than vehicles and tracked equipment in some cases. The response contractor may have to construct a temporary landing to tie up the watercraft and offload some personnel, equipment and materials. The response contractor will minimize the size and number of heavy equipment used in the response, to the minimum necessary to do the work.

All access roads, boat landings, etc. will be restored to their pre-spill conditions as described in SITE RESTORATION below.

2. Protection of Wetlands

Once human health and safety issues have been addressed, the next priority will be given to limiting the spread of spilled product and further contamination of plant and animal life. This is usually done with containment booms and berms. The cognizant authorities, the Company Incident Commander and the first responder will identify the areas threatened by the spill, and select the boom and berm locations. The Company Incident Commander will advise the contractor's response team of special or additional equipment and material needs.

Booms typically protect swamps and ponds that are contaminated or threatened by a spill. Booms will be deployed by boat if possible, provided that the cognizant authorities approve their use. Where the water is too shallow for workboats, the response contractor may have to deploy the boom manually, by workers wading in the water or mud.

Ditches and berms typically protect a spill on solid ground. With the concurrence and at the direction of the cognizant authorities, the response contractor may dig ditches and/or build berms around the spill site to stop the overland flow of the spilled product. Tracked excavators and/or bulldozers may be used for this where there is solid enough ground to support heavy equipment and the regulatory agencies permit its use. In some cases it may be possible to use this ditch/berm system as the product collection system or to divert the product to a collection point. If the soil dug from the ditches is clay, it may be used to build the berms. Sandy or gravelly soil does not make good barrier berm material. Clay dug from other onsite areas may be used only with the approval of, and at the direction of, the cognizant authorities. If importing clay from offsite is impractical and no clay is available onsite, the response contractor may have to use sorbent materials, i.e., sorbent booms and pads, to construct the berm.

3. Recovery of Product from Water and Treatment of Contaminated Water.

Product is typically recovered from lakes, ponds and rivers associated with wetlands by a combination of mechanical skimming, vacuum recovery, and sorbent materials. Boats may be used to move personnel, booms and materials where water depth is adequate and if the cognizant authorities concur.

Product spilled onto the ground of a wetland does not normally soak very far into the soil, due to the saturated nature of the soil. The spilled product will probably collect as pools in low spots of the ground surface. Vacuum pumps and sorbent pads may be used to remove the majority of the product. Excavation of remaining contaminated soils will be done only with the concurrence and at the direction of the appropriate authorities. Other methods such as by soil/vapor extraction, or pumping from recovery wells may be considered as part of a long-term plan. Free product will probably be pumped to temporary storage, and used sorbent materials will be collected and handled as solid wastes.

The methods of temporary storage of the contaminated water will be site-specific, and will depend on suitable onsite ground space, distance to a suitable offsite storage area, and agency approvals. Barges may be practical storage containers where navigable waters are conveniently close and the cognizant authority approves their use. Tank trailers or frac tanks may be used if roads are closer than barge access to the wetlands spill site. In any case, the regulatory agencies may require that product and contaminated water be transported offsite as quickly as possible.

Once the contained waters have been stored, treatment options can be explored. Possible treatment options include steam or air stripping, oil/water separation, carbon adsorption, or other methodologies or combinations of methodologies. It is expected that the water treatment facility will be installed outside the wetlands.

4. Cleaning of Affected Structures

Wetlands typically do not include many man-made structures. However such man-made structures as are contaminated by the spilled product can be cleaned by traditional methods that include wiping, hot water, low or high-pressure wash down, and use of surfactants, emulsifiers or other agents. The use of surfactants, emulsifiers and other agents may be prohibited by the regulatory or other cognizant authorities in some areas. Cleaning methods and materials to be used at a spill will be discussed with the appropriate authorities and used only with their concurrence and at their direction.

Wash down water and other liquids from cleaning activities should be contained by the boom or ditch/berm system, then collected and treated with the contaminated ground and surface waters.

5. Solids Handling and Removal

Removal of product-laden soils will be conducted only with the concurrence and at the direction of the appropriate authorities. Heavy equipment such as excavators will be used where the cognizant authorities permit it. Otherwise contaminated soils will be excavated manually using shovels and other hand tools.

Sorbent materials and other solid residue will be placed in trash bags and removed from the site for disposition. The response contractor will take particular care to remove all his site-generated wastes from the area, and will conduct a final walking inspection of the entire area with the Company Incident Commander to confirm that this has been done prior to departure.

.

Contaminated soils and other solids will be removed from the site unless the regulatory authorities dictate that they remain onsite. Transportation plans, including routes, vehicle types and loading methods may require the approval of the cognizant authorities. Trucks may be used where roads are available. Barges may be more practical where navigable waterways are reasonably close. Where vehicle and barge use is impractical or prohibited by regulatory agencies, solids from the site may have to be removed manually.

Site Restoration

1. Sampling and Analysis to Verify Cleanup

   Sampling and analysis of the remaining soils and water will be coordinated with local, State and federal agencies to verify that the cleanup meets their requirements.

2. Rebuild/Reconstruct Affected Structures/Areas

   Wetlands restoration activities will vary considerably from site to site. As early as possible, the Company should determine the feasibility and practicality of restoration in consultation with the appropriate authorities so that detailed, deliberate plans, specifications, and costs can be prepared.

3. Final Report

   The response contractor will prepare a Final Report for Company, summarizing the actions taken during the response activities, with particular attention to restoration and verification of cleanup.

.

Sec. 3.8 Wildlife Refuges

Environmental Response Scenario

The following scenario provides probable, effective response actions in the event of a spill to a wildlife refuge. Depending on the site-specific conditions, Company may choose to respond in a manner different from that described below. The manpower, equipment, and recovery rates are all dependent upon site-specific conditions and Company will respond in an appropriate manner.

Description of the Affected Area

Wildlife refuges are areas designated by the federal government to remain in a natural or underdeveloped condition for the benefit of wild animals, particularly game species and those that are endangered. The vegetation and water supply generally support a wide variety of insects, fish, reptiles, mammals and birds, some of which may be endangered or otherwise protected by law. A wildlife refuge may include any type of terrain, including shorelines, swamps, forests, deserts, and mountainous areas. Wildlife refuges are frequently, but not always, remote from human habitation, and are generally undeveloped. Wildlife refuges are usually identified and marked as such on maps and along their boundaries.

1. Public Health and Safety Concerns

   Most major wildlife refuges are remote from human habitation, where a spill may affect the health and safety of a relatively small number of forest rangers, fish and game agents and visitors. The danger zone for the public will generally be downwind of the point of discharge and the resulting plume.

2. Project Personnel Safety Concerns

   The greatest safety concern for project personnel is fire and explosion. The response contractor's team personnel will conduct continuous air monitoring for flammable vapors with a combustible gas meter and will suspend operations when readings exceed 10 percent of the lower explosive limit (LEL). Response contractor's team personnel will use non-sparking equipment whenever monitoring indicates explosion/fire potential. Smoking paraphernalia, including lighters, will not be permitted in the work areas under any circumstances.

   Other safety concerns for project personnel, Company representatives and the regulatory agencies' representatives are inhalation of hydrocarbon vapors (specifically benzene vapors), skin contact with liquid hydrocarbons, heat stress and cold exposure, and contact with, or bites from, poisonous plants, insects, snakes, rodents and large wildlife indigenous to the wildlife refuge.

   Air monitoring analysis will dictate the level of PPE utilized by workers in the exclusion zone. The support area, including break and eating areas, will be located in a safe area, and upwind of the exclusion zone wherever possible.

3. Property and Environmental Impact

Property impact of a spill on a wildlife refuge will depend on its proximity to inhabited or improved property. Major wildlife refuges are generally undeveloped but may have potential commercial value; a spill may have serious impact on the commercial value of public or private property.

Environmental impact of a spill on a wildlife refuge can be immediate and extensive. Petroleum hydrocarbons may have an adverse impact on most forms of plant and animal life, and can destroy the exposed portion of a wildlife refuge. Wildlife refuges provide crucial habitats and food supplies for wildlife and are sources of oxygen for the atmosphere.

The more tender vegetation, such as grasses, may be destroyed by direct contact with the spilled product. Hardier vegetation such as shrubs and trees contaminated by the spilled product may be removed as part of the response activities. The loss of habitat and food supply is expected to have a serious impact on wildlife in the refuge.

Wildlife may be threatened by direct contact with the spilled product, eating product-contaminated vegetation, and hunger if large areas are cleared of contaminated vegetation during the response activities. The times of greatest danger to wildlife will be during migrations, when large numbers of birds depend on the refuges for food and safety. Even temporary loss of part of a major refuge could have a serious impact on some species. Loss of part of a key breeding ground for an endangered species could contribute to its extinction.

4. Potential Logistical Problems

Wildlife refuges differ from site to site, but typically they are remote from major transportation networks and utility services. Roads into and through such areas may be seasonal, intermittent, and should be considered generally unreliable. There may be insufficient solid level ground or a wide enough clearing in which to set up support areas, lay-down areas, etc.

Transportation of personnel, equipment and materials into and out of the area may require specialized vehicles such as UTVs, swamp buggies, airboats or helicopters. The response contractor should possess, or have ready access to, the minimum required equipment.

Temporary utilities, including potable water, fuel and electricity will probably be absent and must be brought in by the response contractor's team.

Initial Response Strategies

1. The Company Incident Commander will:

   - Initiate evacuation of the public from the affected areas and from the area toward which the plume is moving,
   - Initiate appropriate actions to isolate the pipeline or any other source of the spill; i.e., turn off the nearest block valves and shut down the flow of product.
   - Order immediate deployment of the response contractor's oil containment boom (minimum 200 ft long), complete with anchors,
   - Notify the response contractor's program manager that a spill is in progress and
   - Notify the appropriate Federal, State, and local regulatory agencies. Local, State and Federal agency notification is listed in this FRP.

2. The response contractor's program manager should dispatch a response supervisor to the location of the spill by the fastest means practical. The response contractor's supervisor should be equipped with a one-day supply of PPE to include supplied air, and a radio or mobile telephone. The response contractor's supervisor should contact the Company Incident Commander immediately on arrival at the site and jointly assess the magnitude of the problem, noting any special considerations that may affect selection of resources required to complete the response action.

3. The response contractor's program manager should mobilize the Tier 1 response contractor's team while the response contractor's supervisor is en route to the site. The Tier 1 response contractor's team should be capable of removing 1,500 BBL of product per day, should be enroute within 2 hours of notification, and should arrive on-site within 12 hours of notification. This response team may consist of:

   - 8 HAZWOPER-trained personnel (including a supervisors and a site safety officer),
   - 2 pick-up trucks,
   - 1 one-ton box truck/associated supplies,
   - 2 vacuum trucks,
   - 1 van,
   - 2 work boats,
   - 2,000 ft of containment boom,
   - one foam trailer with applicator and foam to cover 90,000 square feet,
   - a seven (7)-day supply of PPE,
   - 12 sets of air bottles,
   - lights,
   - 2 skimmers,
   - 1 generator,
   - 1 air compressor,
   - PID/LEL,
   - detector tube specific for benzene (not affected by other hydrocarbons)
   - 4 radios, and
   - expendable supplies (absorbent booms & pads, PPE)

The Tier 1 response contractor's team should immediately report to the response contractor's supervisor for a briefing on the response action and a tailgate health and safety meeting. The response contractor's supervisor should direct the team's activities from this point on, including setting up laydown areas and support areas.

4. The response contractor's program manager should begin mobilizing the Tier 2 and Tier 3 response contractor's teams once the Tier 1 team is enroute to the site.

   The Tier 2 response contractor's team should be capable of removing 3,000 BBL per day, should be on-site within 36 hours of notification, and may consist of the Tier 1 response contractor's team, plus:

   - 12 HAZWOPER-trained personnel,
   - 4 work boats,
   - 4,000 feet of containment boom,
   - 2 skimmers,
   - 2 vans,
   - 2 pick-up trucks,
   - 2 vacuum trucks,
   - 1 skid unit (1,500 gallon capacity),
   - 8 radios, and
   - 24 air bottles

   The Tier 3 response contractor's team should be capable of removing 6,000 BBL per day, should be on-site within 60 hours of notification, and may consist of the Tier 1 and Tier 2 response contractor's teams, plus:

   - 23 HAZWOPER-trained personnel,
   - 2 pick-up trucks,
   - 4 vans,
   - 1 supply trailer,
   - 4 work boats,
   - 6,000 feet of containment boom,
   - 3 vacuum trucks,
   - 3 skimmers,
   - 12 radios, and
   - 48 air bottles

5. The first task of the Tier 1 response contractor's team should be to minimize the spread of the product on the water and ground surface in order to protect the public and the vegetation and wildlife in the refuge. The team should place a containment boom as close as possible to the point of origin of the spill to minimize the area of most severe contamination. The placement of the containment boom will also be based on personnel safety considerations for the personnel setting up the containment boom. The team may then place one or more secondary booms farther away, in the path(s) of the plumes deemed by the Company Incident Commander and the response contractor's supervisor to be the most dangerous to the public or to the environment.

6. Health and Safety Plan

   Initial health and safety response actions will be in accordance with the standard operating procedure. The response contractor's Site Safety Officer will complete a Site-Specific Health and Safety Plan after the initial hazard assessment is conducted.

7. Implementation of Air Monitoring Program

   Company's Incident Commander will assign a Site Safety Officer (SSO) who will begin monitoring activities (using a PID, an LEL meter and benzene-specific detection tubes) in the area of the spill immediately on arrival, to assess the danger from fire and explosion in the work area, determine potential exposure to benzene, delineate the exclusion zone, and establish the support zone. Instruments, frequency of readings, records and responses to action levels will conform to the Health and Safety Plan. The SSO will pay particular attention to LEL readings.

   As soon as possible after the SSO completes his initial air monitoring for the spill site hazard assessment and delineates the work zones, he/she will begin a perimeter air-monitoring program to confirm that the exclusion zone is properly sized and to document potential offsite migration of vapors that could impact the unprotected public or wildlife.

8. Contingency Planning

   The Company Incident Commander, the SSO and the response contractor's supervisor will identify evacuation routes of egress and procedures, safe distances and places of refuge, and emergency alerting procedures to be used in the event of an uncontrollable situation such as fire or explosion.

9. Assessment of Affected Area(s)

   The Company Incident Commander and the response contractor's supervisor will jointly review the maps provided and inspect the affected area(s) and assess:

   - The nature of the spilled liquid,
   - Source of the spill,
   - Direction(s) of spill migration,
   - Apparent or otherwise known subsurface geophysical feature that might impact the work; i.e., subsurface sand layers, water table elevation,
   - Overhead and buried utility lines, pipelines, etc.,
   - Nearby population, property or environmental features that might be affected by the contained spill, or by an uncontained spill.
   - Closest concentration of wildlife and breeding areas

   The Tiers 1, 2, and 3 response team resources in personnel, equipment and material will be assessed to determine if they are adequate to effectively perform the work.

If the Company Incident Commander determines that additional resources are required, the response contractor's supervisor will request additional resources for the Tier 2 and 3 response teams from the response contractor's program manager. Additional equipment may include backhoes, dump trucks, watercraft, generators, light sets, bulldozers and front-end loaders. Equipment operators, laborers, and engineers may be mobilized as necessary. Additional material may include more spill booms, absorbent materials, foam and imported clay for berms.

10. Delineation of Exclusion and Support Zones

    The Site Safety Officer (SSO) will mark the limits of the exclusion zone with red plastic tape, using existing trees to support the tape where possible. The support zone will be marked with green plastic tape if in the SSO's judgment such marking is necessary to avoid confusion with a contaminated area. If the exclusion zone cannot be physically marked, the SSO will annotate a site map or layout sketch and brief all personnel on the zone layout prior to site entry.

11. Protection of Downstream Sensitive Areas

    Company's Incident Commander, the response contractor's supervisor and SSO will inspect the boom system to ensure that it is effectively protecting the public and environmentally sensitive areas downstream of the spill. The response contractor's supervisor will direct placement of additional booms or relocation of existing booms if ongoing measures are judged to be ineffective.

Ongoing Response

1. Recovering Wildlife for Transfer to Treatment Facilities

   The response contractor will cooperate with Company and local wildlife assistance agencies to recover birds, fish, small and large animals affected by the spill, for transportation by the appropriate wildlife agencies to treatment facilities. The response contractor will take extreme care to minimize the disruption or displacement of wildlife, with particular attention to the breeding areas of protected species.

2. Recovery and Transfer of Free Product

   Construction of the free product temporary storage area will start after the containment booms are in place and judged effective in limiting the spread of the plume. The storage will consist of frac tanks or rubber bladders. The tanks or bladders will be surrounded by a berm built up from on-site materials or imported clay.

   The response contractor's team will recover free product with vacuum trucks, sorbent booms and pads, oil skimmers and vacuum pumps.

3. Install Siphon Dams, Etc.

   The response contractor's team may construct a siphon dam to contain the spilled product if the contaminated water is flowing. A siphon dam is built of earth with steel or plastic pipes embedded through it at a vertical angle such that the lighter, floating product is trapped behind the dam while the water below it is permitted to flow through the pipes.

4. Debris Removal

   Debris will consist of steel, concrete, timber and vegetation contaminated by the spilled product, plus product-soaked sorbent materials and trash generated by the response contractor's team. Contaminated vegetation is anticipated to make up the majority of the debris.

   Company will remove and dispose of debris or may direct the response contractor to do so. Ultimate disposal may depend on the degree of contamination and is subject to approval by the regulating agencies.

   Typically, steel and concrete will be transported to a landfill. Timber and vegetation will be either landfilled or incinerated off-site. The regulatory agencies may permit on-site burning of timber and vegetation under some circumstances, but this is unlikely within the boundaries of the wildlife refuge itself.

5. Stabilize Damaged or Affected Structures

   The response contractor will construct temporary bracing and shoring as necessary to prevent collapse of structures and foundations that might impede or endanger the response work. This may include timber shoring as temporary replacements for sleepers under a damaged pipeline section.

   Company will stabilize damaged major pipeline bridges and pipeline river crossings, if needed.

6. Initial Response and Draft Work Plan

   The response contractor will prepare a draft work plan and submit it to Company. The work plan will include:

   - A summary of initial response actions and results,
   - Subsequent planned activities,
   - Water and soil removal and treatment and/or disposal,
   - Air monitoring program,
   - Sampling and Analysis Plan,
   - Restoration and repairs, and
   - A schedule for the work.

7. Debriefing/Dissemination of Information and Data

   The Company Incident Commander will interface with the regulatory agencies and news media. The response contractor will not disseminate any information or data without approval of the Company Incident Commander. The response contractor may furnish personnel to assist the Company Incident Commander in debriefing.

8. Documentation of Cleanup Efforts and Progress

   The response contractor will prepare and maintain records, including photos and/or video, documenting the response. Records and documents will include the supervisor's daily notes, personnel time sheets, equipment usage logs, material delivery tickets, daily air monitoring logs, and soil and water analysis reports.

   The response contractor's program manager will submit to the Company Incident Commander a report summarizing the accomplishments of the preceding week, the cost status and the response activity schedule.

9. Public Relations/Agency Liaison

   The Company Incident Commander will provide all direct contact with the news media and with regulatory agencies.

Cleanup Strategies for Wildlife Refuges

1. Access on and Through Wildlife Refuges

   Access on and through wildlife refuges may be severely restricted by the regulatory agencies during the mating /nesting seasons of some animal species. The regulatory agencies are expected to judge whether the response activities may cause more harm than good, or they may elect to postpone some or all of the response activities to a later time. Routes for temporary roads and laydown areas should be established by the appropriate authorities with due consideration to critical and sensitive vegetation and animal habitats. Boats and/or barges may prove practical and less disruptive to the wildlife than vehicles and tracked equipment in some cases. The response contractor may have to construct a temporary landing to tie up the watercraft and offload personnel, equipment and materials. The response contractor will minimize the size and number of heavy equipment used in the response. In all cases the cognizant authorities will participate in and approve all plans, routes, equipment, materials, and methods.

   All work areas, to include access roads, laydown areas, boat landings, etc. will be restored to their pre-spill conditions as described in SITE RESTORATION below.

2. Protection of Wildlife Refuges

Once human health and safety issues have been addressed, the next priority will be given to limiting the spread of spilled product and further contamination of plant and animal life. This is typically done with containment booms and earthen berms. The cognizant authorities, Company Incident Commander and the first responder will have to quickly identify the areas threatened by the spill, and select the boom and berm locations. The Company Incident Commander will communicate special or additional equipment and material needs to the contractor's response team.

Where a body of water is affected or threatened by the spill, the response contractor will normally deploy containment booms as close downstream of, or around, the spill site as may be safe and practical. If the impacted area includes rough water, such as rapids and falls, the boom may have to be installed at a distance downstream, where the water is calm enough for the boom to be effective. This may increase the volume of contaminated water to be collected and treated. If use of the nearest effective deployment site is denied by the cognizant authorities, or if lack of roads, cliffs, heavy forests etc. make its use impractical, it may be necessary to deploy the boom at another site even further downstream.

Containment of an overland spill is typically done with ditches and berms. With the approval of, and at the direction of, the cognizant authorities, the response contractor may dig ditches and/or build berms downslope of, or around, the spill site to stop the overland flow of the spilled product. In some cases it may be possible to use this ditch/berm system to divert the product to a collection point. If the soil dug from the ditches is clay, it may be used to build the berms. The cognizant authority may prefer that clay for berms be obtained at an alternative clay source, offsite. Sandy and gravelly soils are not good barrier berm materials. If importing clay from offsite is impractical and no clay is available onsite, the response contractor may have to use sorbent materials, i.e., sorbent booms and pads, to construct the berm.

The Company Incident Commander and the response contractor will cooperate with the cognizant authorities to assist in the recovery of animals affected by the spilled product. The refuge staff, park rangers and/or wildlife rescue specialists will probably handle the animals, with some transportation provided by Company and the response contractor.

3. Recovery of Product from Water and Treatment of Contaminated Water.

Product is typically recovered from water bodies such as lakes, ponds and rivers by a combination of mechanical skimming, vacuum recovery, and sorbent materials. The point of recovery may be some distance downstream of the spill site, if access to closer sites is denied or is impractical. This may increase the response time, the amount of contaminated water, and the length of shoreline to be cleaned and restored. The size and capacity of skimming equipment, pumps, piping, and tankage may be limited by access restrictions, as described above.

Excavation of soil to recover product spilled onto the ground may be strictly controlled by the cognizant authorities, or even prohibited altogether. Other methods such as by soil/vapor extraction, or pumping from recovery wells may be considered as part of the long-term plan for some refuges, but these may be judged to be too intrusive for others.

The methods of temporary storage of the contaminated water will be dependent on site access and approval by the cognizant authorities. Barges may be practical where navigable waters are nearby. Tank trailers or frac tanks may be used if roads are accessible or constructible. Rubber bladder tanks may be used, but require cleared, relatively smooth laydown areas. It may be necessary to pump the contaminated water/product a considerable distance to a storage area outside the refuge itself. The response contractor should be sensitive to noise control and to leaks from fittings and pumps in the transfer system.

Once the contained waters have been stored, treatment options can be explored. Possible treatment options include steam or air stripping, oil/water separation, carbon adsorption, or other methodologies or combinations of methodologies. It is expected that the water treatment facility may be installed outside the refuge. Planning for the treatment technology and the location of the equipment will require approval of the cognizant authority.

4. Cleaning of Affected Structures

Wildlife refuges typically do not include many man-made structures. However, there may be visitor centers, viewing platforms and water-control equipment at some refuges. These structures contaminated by the spilled product may be cleaned by traditional methods that include wiping, hot water, low or high-pressure washdown, and use of surfactants, emulsifiers or other agents. The use of surfactants, emulsifiers and other chemical agents may be prohibited by the regulatory or other cognizant authorities in some areas of the wildlife refuge. Cleaning methods and materials to be used at a spill will be discussed with the appropriate authorities and used only with their concurrence and at their direction. Some wooden structures that cannot be adequately cleaned may have to be removed and/or replaced.

Washdown water and other liquids from cleaning activities should be contained by the boom or ditch/berm system, then collected and treated with the contaminated ground and surface waters.

5. Solids Handling and Removal

Removal of product-laden soils will be conducted only with the concurrence of, and at the direction of, the appropriate authorities. Where the noise and exhaust fumes from heavy equipment such as tracked excavators may disturb mating or nesting animals such equipment will be used only if the cognizant authorities permit it. Otherwise contaminated soils may have to be excavated manually using shovels and other hand tools.

Sorbent materials and other solid residue will be placed in trash bags and removed from the site for disposition. The response contractor will take particular care to remove all his site-generated wastes from the area, and will conduct a final walking inspection of the entire area with the Company Incident Commander to confirm that this has been done prior to departure.

Excavated contaminated soils and other solids will be removed from the site unless the regulatory authorities dictate that they remain onsite. Trucks may be used where roads are available. Barges may be more practical where navigable waterways are reasonably close. Where vehicle and barge use is impractical or prohibited by regulatory agencies, solids from the site may have to be removed manually.

Site Restoration

1. Sampling and Analysis to Verify Cleanup

   Sampling and analysis of the remaining soils and water will be coordinated with local, State and federal agencies to verify that the cleanup meets their requirements.

2. Rebuild/Reconstruct Affected Structures/Areas

   Wildlife refuge restoration activities will vary considerably from site to site and may entail major efforts by a combination of Company and multiple regulatory and wildlife agencies. As early as possible, the Company should determine the feasibility and practicality of restoration in consultation with the appropriate authorities so that detailed, deliberate plans, specifications, and costs can be prepared.

3. Final Report

   The response contractor will prepare a Final Report for Company, summarizing the actions taken during the response activities, with particular attention to restoration and verification of cleanup.

Sec. 3.9 Natural Resource Damage Assessments

Under the provision of CERCLA, the Oil Pollution Act of 1990 (OPA '90), and numerous state statutes, cost recovery can be obtained from industry for natural resource damage caused by the release of oil or hazardous substances to the environment. Natural resources are defined as land, air, biota, groundwater and surface water. A federal or state government entity, an Indian tribe or another nation acting as a public trustee of a natural resource may file claims for damages to natural resources.

A Natural Resource Damage Assessment (NRDA) is used to determine the damages owed to a public Trustee for residual natural resource injuries. This assessment is often conducted by the public Trustee, the potential responsible party or both. During the NRDA study, the injured natural resources are identified, the extent of the injury is quantified and the extent of the economic damage resulting from the loss of services provided by the resources is determined. In addition, the assessment also determines the cost of restoration or replacement of the injured natural resource.

A NRDA study is not conducted in all cases. HSE will work closely with the Trustees on a case-by-case basis to determine if a NRDA study is required. Company may choose to conduct a parallel study if the trustee determines that a NRDA will be conducted. The Environmental Coordinator should be contacted immediately if a Trustee contacts any member of the Company response team. HSE will provide assistance in conducting NRDA studies.

If a spill occurs that could potentially result in a NRDA, steps should be taken to assist the Trustees and to help protect Company interests throughout the assessment process. The following sampling procedures describe the steps that might be taken if the spill enters a stream. Sampling events would be modified appropriately if the spill only impacts land. To fully characterize the impact of the spill, several sampling events may be required. The initial round of samples should be collected as soon as possible following the spill event. Follow up sampling events will be scheduled to document the site restoration.

1. Formulate a sampling plan. Observe the site conditions and determine the best locations to collect samples. Contact a local lab and obtain the proper sampling containers, sampling equipment and documentation. The sample collection may be delegated to the lab or to response contractor personnel.

2. Contact the State Environmental Representative and inform them that samples are to be collected and offer to split the samples. If the State representative is not immediately available, do not wait, go ahead and collect the samples and inform them later. Time is a critical factor.

3. In any spill event, data collection and documentation are key factors to minimizing adverse financial and public perception impact to Company. The increased use of NRDA and lawsuits by local, county and state agencies following a spill, regardless of the efficiency of the response, requires an increased awareness and documentation of our response actions. Any sample collection event and all types of documentation may be utilized in a legal setting, therefore utilizing proper data collection techniques and detailed documentation are important.

.

a. Photo Documentation: Photograph and/or Video Tape the event as thoroughly as possible. A photo record of the event should be maintained. All major events and response efforts should be photographed to establish a record of the events as they occur.

b. Written Documentation: A written log should be maintained that outlines the following information: 1) Major response events (i.e. time of the spill, time of the response, when valves were shut in, estimated volume of product. etc.) most of this information is documented on the Release Report Form in this FRP; 2) instructions or guidance provided to Company by State or Trustee representatives; 3) amount of product recovered; 4) amount of hazardous waste or special wastes generated as a result of the spill; 5) a sample collection location map that outlines the date, time, and type of samples collected, and; 6) date of project completion.

4. Sample Parameters/Collection: In the event of a product spill, review the State cleanup criteria for the individual state and sample accordingly, your Environmental Coordinator can assist in determining the proper sampling methodology and clean-up standards. If this information is not readily available instruct the lab to analyze for the following parameters: BTEX, (EPA Test Method 8020), and PAH (EPA Test Method 8270). BTEX analysis requires three 40 ml vials for liquid and one 4 oz glass jar for solids. PAH analysis requires a l liter glass jar for liquids, and one 8 oz. glass jar for solids. Properly labeling and chain of custody must be employed when collecting samples. All sample containers should be laboratory quality, glass containers. Use clean stainless steel or Teflon sample spoons and use proper decontamination techniques between samples. All samples should be placed in an ice chest, cooled and transported to the lab as soon as possible. You may choose to delegate the sampling duties to the lab or to the response contractor. Consult your Environmental Coordinator if you have questions concerning proper sample containers or equipment.

   Sample Location #1: Background Samples
   1 Sediment Sample -- BTEX, PAH
   1 Water Sample -- BTEX, PAH

   As soon as possible following the spill event, collect a background sample. This sample should be upstream of the spill event in an area that has not been impacted by the spill.

   Sample #2: Spilled Product Sample

   Collect a sample of the product that has been spilled. This sample is not to be analyzed but should be stored on ice for the next few weeks. The material may be useful in the future in the event that fingerprint analysis is required. Collect approximately 2 quarts of the material if possible.

   Sample Location #3: Midpoint Sample
   1 Water Sample -- BTEX, PAH
   1 Sediment Sample -- BTEX, PAH

Collect a sample of the water and sediment in the area that has been impacted by the release event. This sample will help determine the impact of the spill on the environment.

Sample Location #4: Downstream Sample
1 Water Sample -- BTEX, PAH
1 Sediment Sample -- BTEX, PAH

Collect a sample downstream of the area that has been impacted. This should be downstream of the last containment dike or boom. If the release has not been contained attempt to get ahead of the plume to collect the samples.

5. Air Samples Surveys should be conducted near the release site. Initially, a simple benzene draeger tube may be used. Your Environmental Coordinator will assist in establishing a sampling program if more sophisticated air sampling is required. Follow the same basic approach that is applied to the water sampling. Collect at least one air sample from an upwind location and two samples from a downwind location. Always take precautions collecting the samples and do not put yourself at risk when collecting the samples.

Sampling Procedures

1. Always wear latex or rubber gloves when taking samples. This protects the sample from your hands and your hands from the sample.

2. It is best to use a clean, clear glass jar for sampling. Four- or six-ounce jars are sufficient. Dip or lower the jar (using string if necessary) into the oil or oily water at about a 30° angle. This may allow more oil and less water to flow over the lip of the jar. Do not fill the jar more than 2/3 full.

3. If sampling a small amount of light oil, such as a sheen, the oil can be collected more easily using a Teflon strip or sorbent pad that is transferred to a sample jar. Do not use anything containing organic fibers such as rag, cotton, cheesecloth, etc.; these may contaminate the sample, thus, giving improper analysis results.

4. Decanting the water may be necessary to get enough oil for analysis. To decant, fasten the lid on securely and turn the jar over allowing the water to settle towards the lid. Then unscrew the lid just enough to allow the excess water to slowly escape.

5. Fasten the lid after lining it with aluminum foil or Teflon to obtain a good seal.

6. Affix the documentation label to the jar after wiping it clean and dry for the label to adhere. The label should identify the following information:

    - Date and time of sampling
    - Source/location of sample (be specific)
    - Name of person who took the sample
    - Sample designation using a sequential numbering or lettering system

a. Samples should be delivered to a laboratory immediately for analysis. If samples cannot be delivered immediately, they should be temporarily stored in a refrigerator or a cool dark place since exposure to heat and light could affect the analysis. Samples should be transported in waterproof containers or wrapped in enough sorbent material to soak up the entire contents of the jar in case of leakage or breakage.

Annex 4 – Table of Contents

Sec. 4.0 DOT 49 CFR 192

49 CFR 192.615 Emergency Plans for Natural and Other Gas		
	Brief Description	**Location**
(a)	Each operator shall establish written procedures to minimize the hazard resulting from a gas pipeline emergency. At a minimum, the procedures must provide for the following:	--
(a)(1)	Receiving, identifying, and classifying notices of events which require immediate response by the operator.	Sec. 2, Annex 1
(a)(2)	Establishing and maintaining adequate means of communication with appropriate fire, police, and other public officials.	Sec. II
(a)(3)	Prompt and effective response to a notice of each type of emergency, including the following:	--
(a)(3)(i)	Gas detected inside or near a building.	Sec. II, Annex 1
(a)(3)(ii)	Fire located near or directly involving a pipeline facility.	Sec. II
(a)(3)(iii)	Explosion occurring near or directly involving a pipeline facility.	Sec. II
(a)(3)(iv)	Natural disaster.	Sec. II
(a)(4)	The availability of personnel, equipment, tools, and materials, as needed at the scene of an emergency.	Sec. II, Annex 1
(a)(5)	Actions directed toward protecting people first and then property.	Sec. II, Annex 1
(a)(6)	Emergency shutdown and pressure reduction in any section of the operator's pipeline system necessary to minimize hazards to life or property.	Sec. II, Annex 1
(a)(7)	Making safe any actual or potential hazard to life or property.	Sec. II, Annex 1
(a)(8)	Notifying appropriate fire, police, and other public officials of gas pipeline emergencies and coordinating with them both planned responses and actual responses during an emergency.	Sec. II, Annex 2
(a)(9)	Safely restoring any service outage.	Sec. II
(a)(10)	Beginning action under §192.617, if applicable, as soon after the end of the emergency as possible.	Sec. II, Annex 2
(b)	Each operator shall:	--
(b)(1)	Furnish its supervisors who are responsible for emergency action a copy of that portion of the latest edition of the emergency procedures established under paragraph (a) of this section as necessary for compliance with those procedures.	Sec. I, Annex 2
(b)(2)	Train the appropriate operating personnel to assure that they are knowledgeable of the emergency procedures and verify that the training is effective.	Sec. III
(b)(3)	Review employee activities to determine whether the procedures were effectively followed in each emergency.	Sec. II
(c)	Each operator shall establish and maintain liaison with appropriate fire, police, and other public officials to:	--

Sec. 4.0 DOT 49 CFR 192 (Cont'd)

49 CFR 192.615 Emergency Plans for Natural and Other Gas		
	Brief Description	**Location**
(c)	Learn the responsibility and resources of each government organization that may respond to a gas pipeline emergency;	Sec. I
	Acquaint the officials with the operator's ability in responding to a gas pipeline emergency;	Sec. I & III
	Identify the types of gas pipeline emergencies of which the operator notifies the officials; and	Sec. II, Annex 2
	Plan how the operator and officials can engage in mutual assistance to minimize hazards to life or property.	Total Plan

Sec. 4.1 DOT 49 CFR 194

DOT/PHMSA 49 CFR PART 194 CROSS REFERENCE		
§ 194.105	**Brief Description**	**Location**
(a)	Each operator shall determine the worst case discharge for each of its response zones and provide the methodology, including calculations, used to arrive at the volume.	Annex 1
(b)	The worst case discharge is the largest volume, in barrels, of the following:	Annex 1
(b)(1)	The pipeline's maximum release time in hours, plus the maximum shutdown response time in hours (based on historic discharge data or in the absence of such historic data, the operator's best estimate), multiplied by the maximum flow rate expressed in barrels per hour (based on the maximum daily capacity of the pipeline), plus the largest line drainage volume after shutdown of the line section(s) in the response zone expressed in barrels; or	Annex 1
(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 preventive action taken; or	Annex 1
(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.	Annex 1
(b)(4)	Operators may claim prevention credits for breakout tank secondary containment and other specific spill prevention measures as follows:	Annex 1
§ 194.107	**Brief Description**	
(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.	Annex 2
(b)	An operator must certify in the response plan that it reviewed the NCP and each applicable ACP and that its response plan is consistent with the NCP and each applicable ACP as follows:	
(b)(1)	As a minimum to be consistent with the NCP as a facility response plan must:	Sec. I
(b)(1)(i)	Demonstrate an operator's clear understanding of the function of the Federal response structure, including procedures to notify the National Response Center reflecting the relationship between the operator's response organization's role and the Federal On Scene Coordinator's role in pollution response;	Sec. I
(b)(1)(ii)	Establish provisions to ensure the protection of safety at the response site; and	Sec. II
(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 as provided for in the applicable ACPs; and	Sec. II
(b)(2)	At 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;	Sec. II
(b)(2)(ii)	Identify environmentally and economically sensitive areas;	Annex 3
(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	Sec. II
(b)(2)(iv)	Establish the procedures for obtaining an expedited decision on use of dispersants or other chemicals.	Sec. II

Sec. 4.1 DOT 49 CFR 194 (Cont'd)

DOT/PHMSA 49 CFR PART 194 CROSS REFERENCE		
§ 194.107	**Brief Description**	**Location**
(c)	Each response plan must include:	--
(c)(1)	A core plan consisting of --	--
(c)(1)(i)	An information summary as required in § 194.113,	Annex 1
(c)(1)(ii)	Immediate notification procedures,	Sec. II, Annex 2
(c)(1)(iii)	Spill detection and mitigation procedures,	Sec. II
(c)(1)(iv)	The name, address, and telephone number of the oil spill response organization, if appropriate,	Annex 2
(c)(1)(v)	Response activities and response resources,	Sec. II, Annex 2
(c)(1)(vi)	Names and telephone numbers of Federal, state, and local agencies which the operator expects to have pollution control responsibilities or support,	Annex 2, ERAP
(c)(1)(vii)	Training procedures,	Sec. III
(c)(1)(viii)	Equipment testing,	Sec. III
(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.	Sec. III
(c)(1)(x)	Plan review and update procedures;	Annex 5
(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.	Annex 1
(c)(3)	A description of the operator's response management system including the functional areas of finance, logistics, operations, planning, and command. The plan must demonstrate that the operator's response management system uses common terminology and has a manageable span of control, a clearly defined chain of command, and sufficient trained personnel to fill each position.	Sec. I & II
§ 194.111	**Brief Description**	
(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.	Sec. I

Sec. 4.1 DOT 49 CFR 194 (Cont'd)

DOT/PHMSA 49 CFR PART 194 CROSS REFERENCE		
§ 194.113	**Brief Description**	
(a)	The information summary for the core plan, required by § 194.107, must include:	--
(a)(1)	The name and address of the operator.	Sec. I, Annex 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).	Annex 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.	Sec. I, ERAP
(b)(2)	The names or titles and 24-hour telephone numbers of the qualified individual(s) and at least one alternate qualified individual(s);	Annex 2
(b)(3)	The description of the response zone, including county(s) and state(s), for those zones in which a worst case discharge could cause substantial harm to the environment.	Annex 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.	Annex 1
§ 194.115	**Brief Description**	
(b)(5)	The basis for the operator's determination of significant and substantial harm.	Sec. I
(b)(6)	The type of oil and volume of the worst case discharge.	Annex 1
(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.	Annex 2
(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.	Sec. II, Annex 2

Sec. 4.1 DOT 49 CFR 194 (Cont'd)

DOT/PHMSA 49 CFR PART 194 CROSS REFERENCE		
§ 194.117	**BRIEF DESCRIPTION**	
(a)	Each operator shall conduct training to ensure that:	--
(a)(1)	All personnel know --	--
(a)(1)(I)	Their responsibilities under the response plan	Sec. II, Annex 2
(a)(1)(ii)	The name and address of, and the procedure for contacting, the operator on a 24-hour basis	Annex 2, ERAP
(a)(1)(iii)	The name of, and procedures for contacting, the qualified individual on a 24-hour basis	Annex 2, ERAP
(a)(2)	Reporting personnel know --	
(a)(2)(I)	The content of the information summary of the response plan.	Sec. II, Annex 2
(a)(2)(ii)	The toll-free telephone number of the National Response Center	Sec. II, Annex 2
(a)(2)(iii)	The notification process	Sec. II, Annex 2
(a)(3)	Personnel engaged in response activities know --	--
(a)(3)(I)	The characteristics and hazards of the oil discharged	Annex 1
(a)(3)(ii)	The conditions that are likely to worsen emergencies, including the consequences of facility malfunctions or failures, and the appropriate corrective actions.	Sec. II, Annex 1
(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	Sec. II, Annex 1
(a)(3)(iv)	The proper firefighting procedures and use of equipment, fire suits, and breathing apparatus	Sec. II, Annex 1
(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	Sec. III
(b)(1)	Records for operator personnel must be maintained at the operator's headquarters	Sec. III
(b)(2)	Records for personnel engaged in response, other than operator personnel, shall be maintained as determined by the operator.	Sec. III
(c)	Nothing in this section relieves an operator from the responsibility to ensure that all response personnel are trained to meet the OSHA standards for emergency response operations in 29 CFR 1910.120 ...	Sec. III

Sec. 4.2 DOT 49 CFR 195

DOT/PHMSA 49 CFR PART 195.402 & .403 CROSS REFERENCE		
49 CFR 195.402	**Brief Description**	**Location**
(c)	*Maintenance and Normal Operations:* The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:	Annex 1
(c)(4)	Determining which pipeline facilities are located in areas that would required an immediate response by the operator to prevent hazards to the public if the facilities failed or malfunctioned.	Annex 1
(c)(5)	Analyzing pipeline accidents to determine their causes.	Sec. II, Annex 1
(c)(6)	Minimizing the potential for hazards identified under paragraph (c)(4) of this section and the possibility of recurrence of accidents analyzed under paragraph (c)(5) of this section.	Annex 1
(c)(9)	In the case of facilities not equipped to fail safe that are identified under paragraph 195.402 (c)(4) or that control receipt an delivery of the hazardous liquid or carbon dioxide, detecting abnormal operating conditions by monitoring pressure, temperature, flow or other appropriate operational data and transmitting this data to an attended location.	Sec. II
(c)(12)	Establish and Maintain Liaison with Public Officials	Sec. I & III
(e)	Emergencies	Sec. II
(e)(1)	Receive, Identify, and Classify Notices of Events	Sec. II
(e)(2)	Procedures for Prompt and Effective Response	Sec. II
(e)(3)	Availability of Response Personnel and Resources	Sec. II, Annex 1 & 2
(e)(4)	Emergency Shutdown and Pressure Reduction Procedures	Sec. II
(e)(5)	Control and Minimization of Released Hazardous Liquid	Sec. II
(e)(6)	Evacuation, Traffic, and Security Control	Sec. II
(e)(7)	Notification of Emergency Officials	Sec. II, Annex 2
(e)(8)	Assessment of HVL Clouds	N/A
(e)(9)	Post Incident Critique	Annex 1

Sec. 4.2 DOT 49 CFR 195 (Cont'd)

DOT/PHMSA 49 CFR PART 195.402 & .403 CROSS REFERENCE		
49 CFR 195.403	**Brief Description**	**Location**
(a)	Operator Personnel Training	Sec. III-
(a)(1)	Carry Out 195.402 Emergency Procedures	Sec. II
(a)(2)	Characteristics and Hazards of Liquids and HVLs	Annex 1
(a)(3)	Recognition of Emergency Causes and Preventative Actions	Sec. II, Annex 1
(a)(4)	Steps to Control and Minimize Effects of Accidental Release	Sec. II
(a)(5)	Firefighting Procedures and Equipment	Sec II, Annex 1
(b)	Operator's Training Program	Sec. III
(b)(1)	Review and Evaluate Response Personnel Performance	Annex 1
(b)(2)	Implement Training Program Changes Where Appropriate	Sec. III
(c)	Supervise Knowledge of Applicable Response Procedures	Sec III

4.3 OSHA 29 CFR 1910.120

OSHA Emergency Response Plan Requirements (29 CFR 1910.120(p)(8)(ii))	
Brief Description	**Location**
Pre-emergency planning and coordination with outside parties	Sec II
Personnel roles, lines of authority and communication	Sec. II, Annex 2
Emergency recognition and prevention	Sec. II, Annex 1
Safe distances and places of refuge	Sec. II, Annex 1
Site security and control	Sec. II
Evacuation routes and procedures	Sec. II, Annex 1
Decontamination procedures	Sec. II
Emergency medical treatment and first aid	Sec. II
Emergency alerting and response procedures	Sec. II, Annex 1
Critique of response and follow-up	Sec. II, Annex 1
PPE and emergency equipment	Sec. II

Annex 5 – Table of Contents

Sec. 5.0 Distribution List

Recipient	Address	Plan Type Held	
		Hard Copy	CD
DOT / PHMSA	Melanie Barber Room E22-210, East Building; 1200 New Jersey Avenue, S. E Washington, D. C. 20590 Office: 202-366-4560	**0**	**2**
Lake Charles Pipeline Area – Technical Supervisor	Matt Stevenson 1851 Clifton Ridge Road Sulphur, LA 70665	**1**	**1**
Louisiana Gathering System Area – CFR	Mr. Marvin Fontenot 456 Aymond Street Eunice, LA 70535	**1**	**1**
Emergency Preparedness, Response & Security Director	Mr. Rob Yarbrough EPR&S Coordinator 600 North Dairy Ashford, TR-2002 Houston, TX 77079	**1**	**1**
Louisiana Area Pipelines Office - Maint. Coordinator	Greg Ragle 1723 Pak Tank Road Sulphur, LA 70665	**1**	**1**
Lake Charles Coke Terminal - Area Supevisor	Shannon Castille 3351 Bayou D'Inde Road Westlake, LA 70669	**1**	**1**
Westlake Products Terminal – Operator	Frank Webb 1980 Old Spanish Trail Westlake, LA 70669	**1**	**1**
Lake Charles Area – Area Supervisor	Mark Dardeau 2115 Davison Rd. Sulphur, LA 70665	**1**	**1**
Lake Charles Refinery Safety Manager	2200 Old Spanish Trail Westlake, LA 70669	**0**	**1**

5.1 Record of Revisions

REVISION DATE	Sections		REASON FOR REVISION
	REMOVED	INSERTED	
May 2012	Entire Plan	Entire Plan	New plan implemented

Update Notice

Louisiana Response Zone
Integrated Contingency Plan (ICP)

To all holders of the ICP

Date: May 2012
Revision: Initial Version

Attached are the revised pages of the ICP that has been assigned to you. Please update your copy with these revisions:

Section/Annex	Remove Pages	Replacement Pages
Entire Plan	Entire Old Plan	New Plan
Louisiana ERP CD	Destroy all previously dated Louisiana CDs.	New Louisiana ERP Dated 5/12
Update Notice	Replace the Revision Log at the beginning of the "Administration" Section and Insert this Update Notice at the end of the "Record of Revisions" Section.	

Maps have been redacted in accordance with the FOIA Exemption 7(F).