INTEGRATED CONTINGENCY PLAN

TEXAS PIPELINE RESPONSE ZONE

PHMSA Sequence Number 75

Owner/Operator:

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Volume 1 of 1

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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

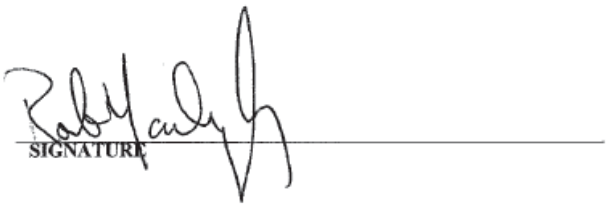
This plan is approved for implementation as herein described. Manpower, equipment and materials will be provided in accordance with all applicable regulatory requirements. The Company is dedicated to protection of the environment and commits to implement the necessary measures, as specified in this Plan,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

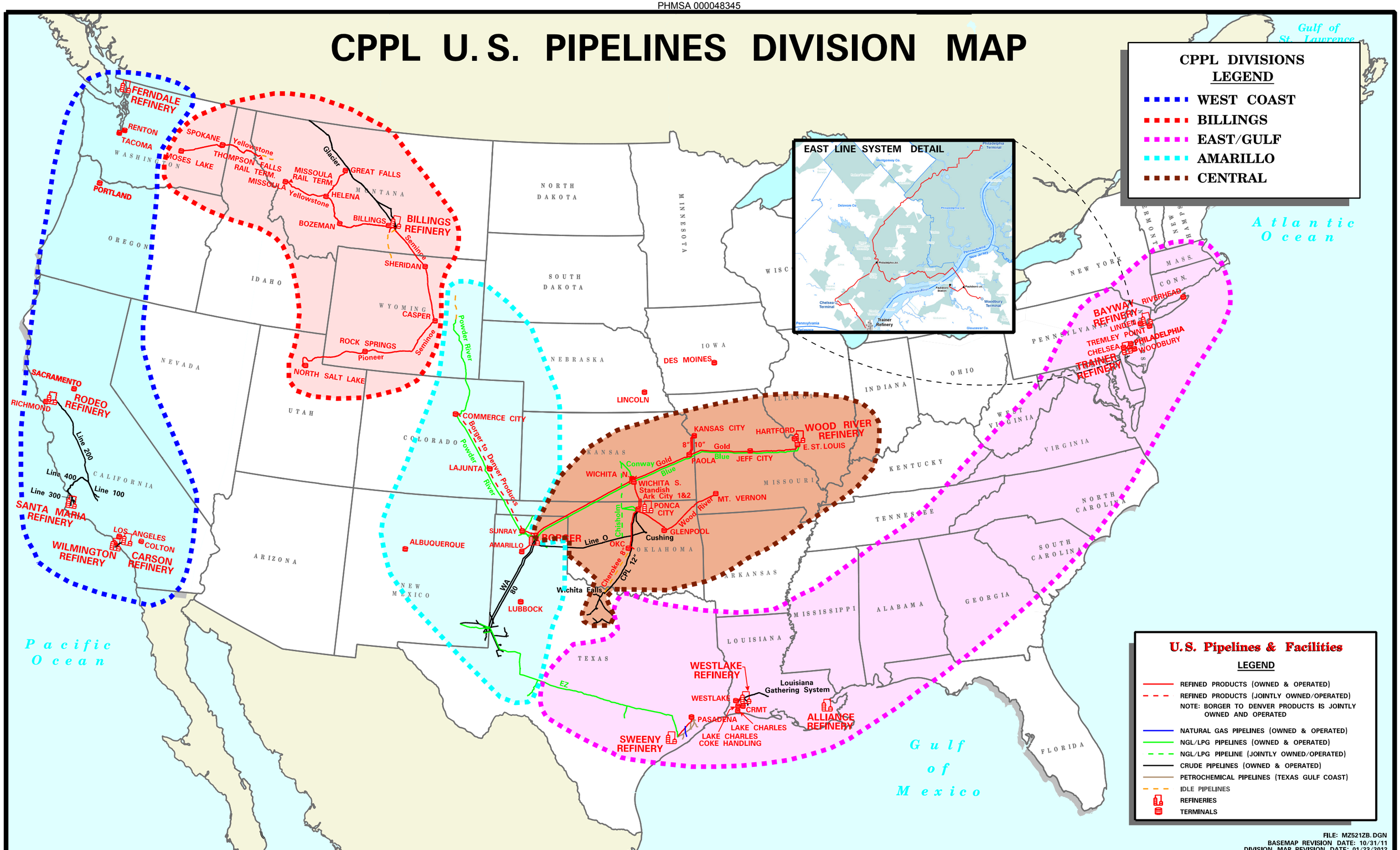
Sec. I-5 Consistency with NCP and ACPs

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



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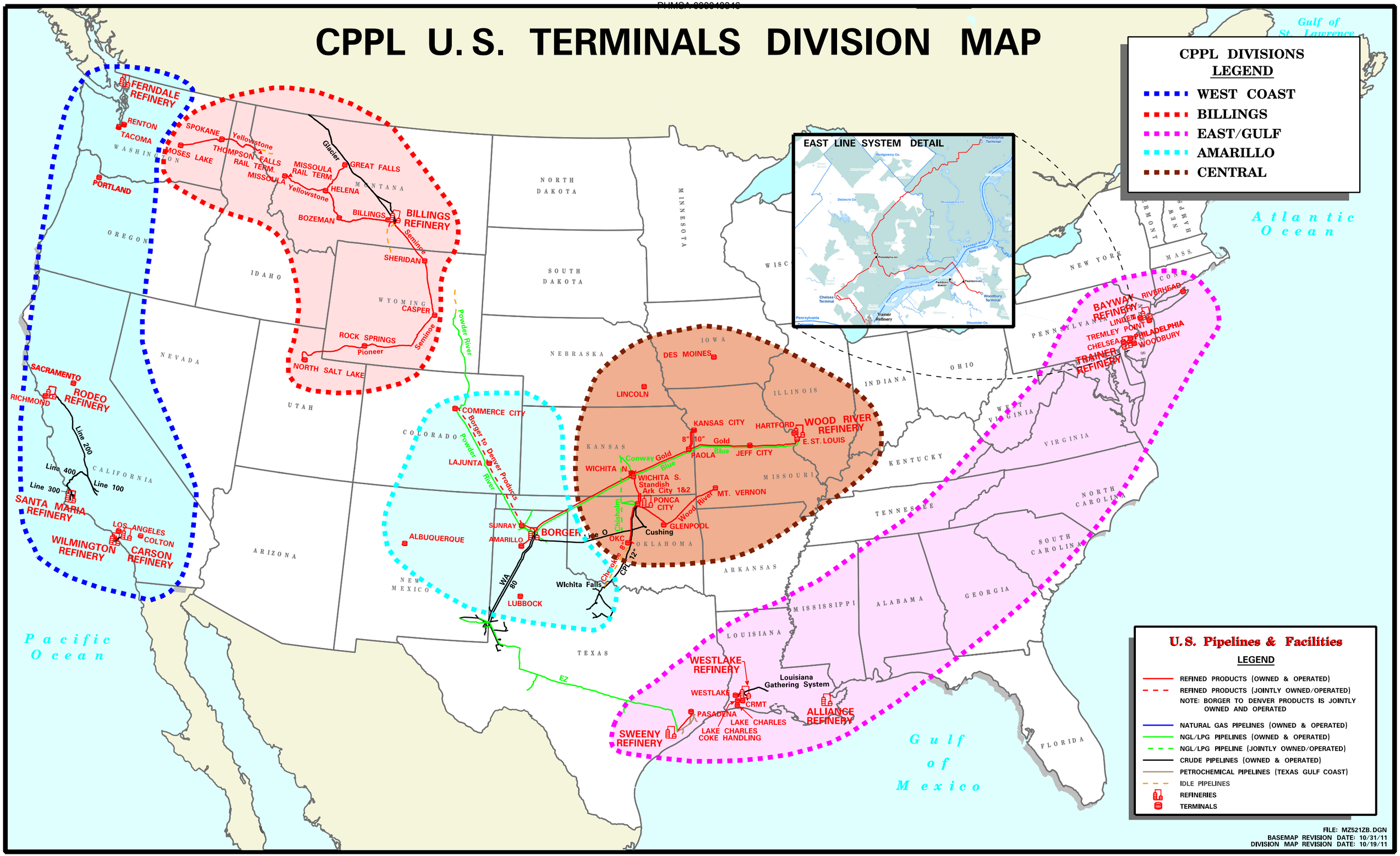
CPPL U.S. TERMINALS DIVISION MAP



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

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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.

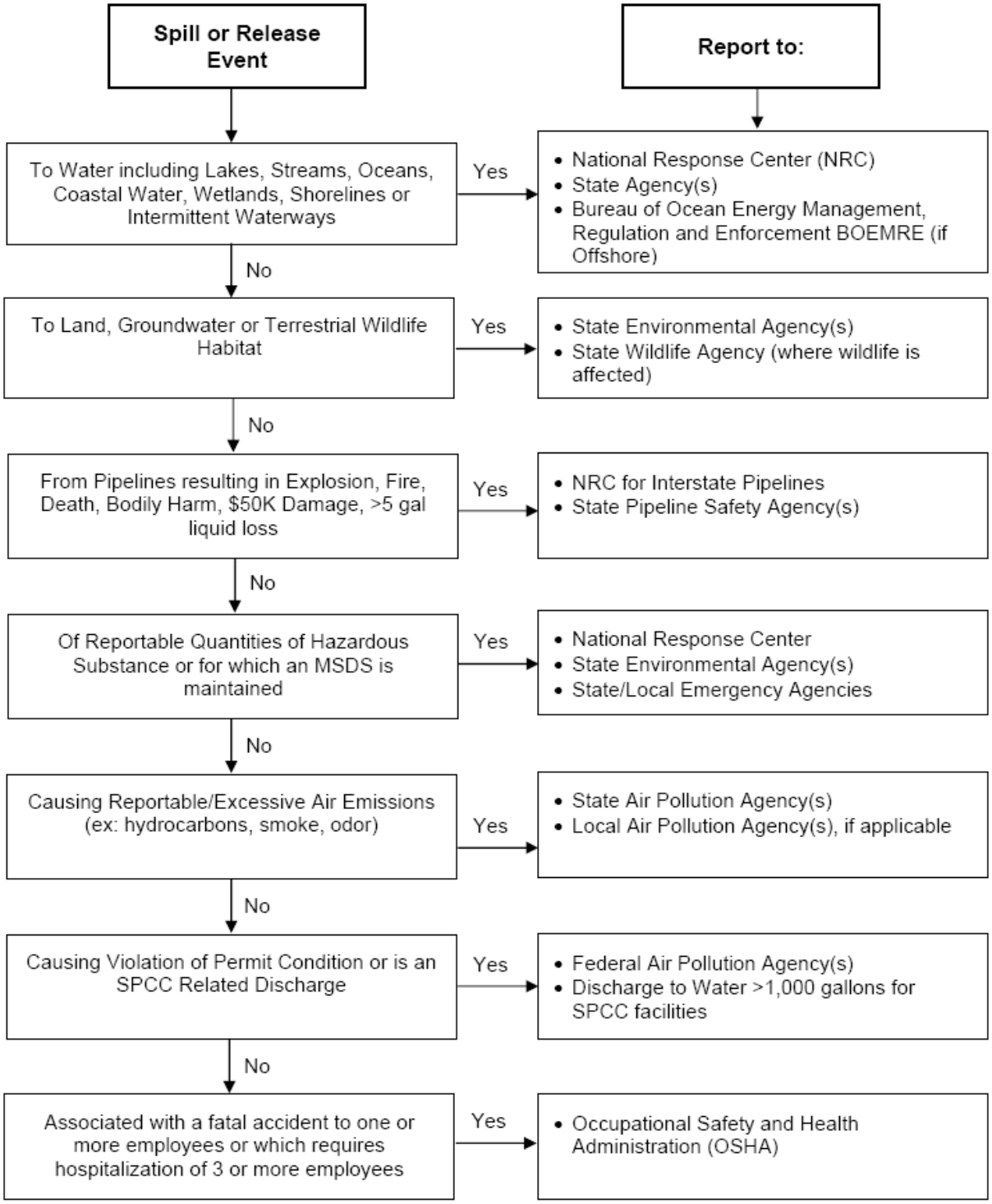
• Public Relation/Actual or Potential Impact	
✓	Serious transportation issues such as derailments involving our products and spills or releases resulting in traffic stoppage or evacuations.
✓	Acts of terrorism (e.g. bomb threats, sabotage, kidnapping, employee violence, etc.).
✓	That attracts, or could 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

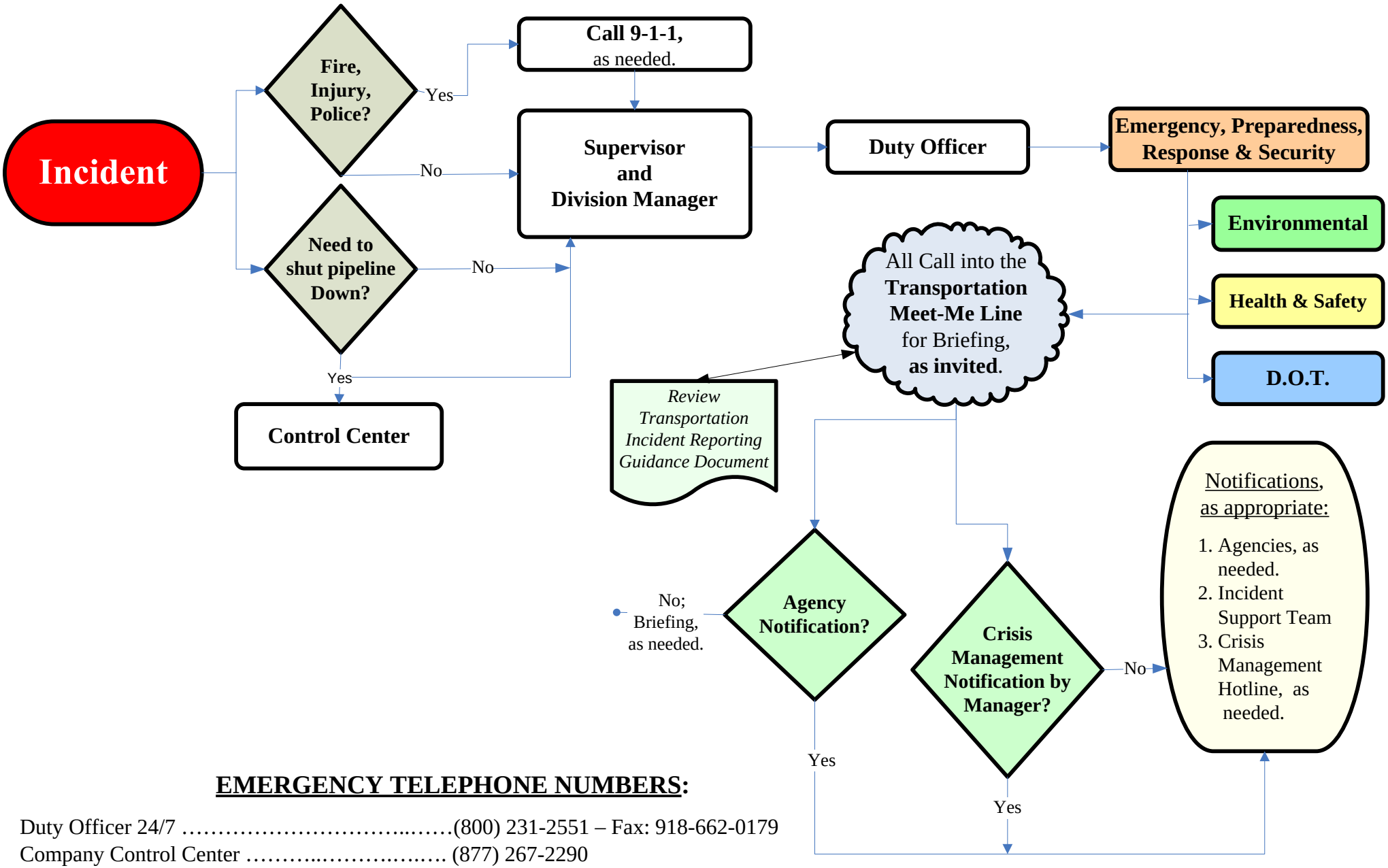
Subject Matter Expert (SME) – Primary Company Representative	
Contacts in the following areas provide support for internal and external notifications; assist with supporting plans, assessment and documentation:	
✓	Environmental Director
✓	Health & Safety Director
✓	DOT Regulatory Compliance Manager
✓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

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).

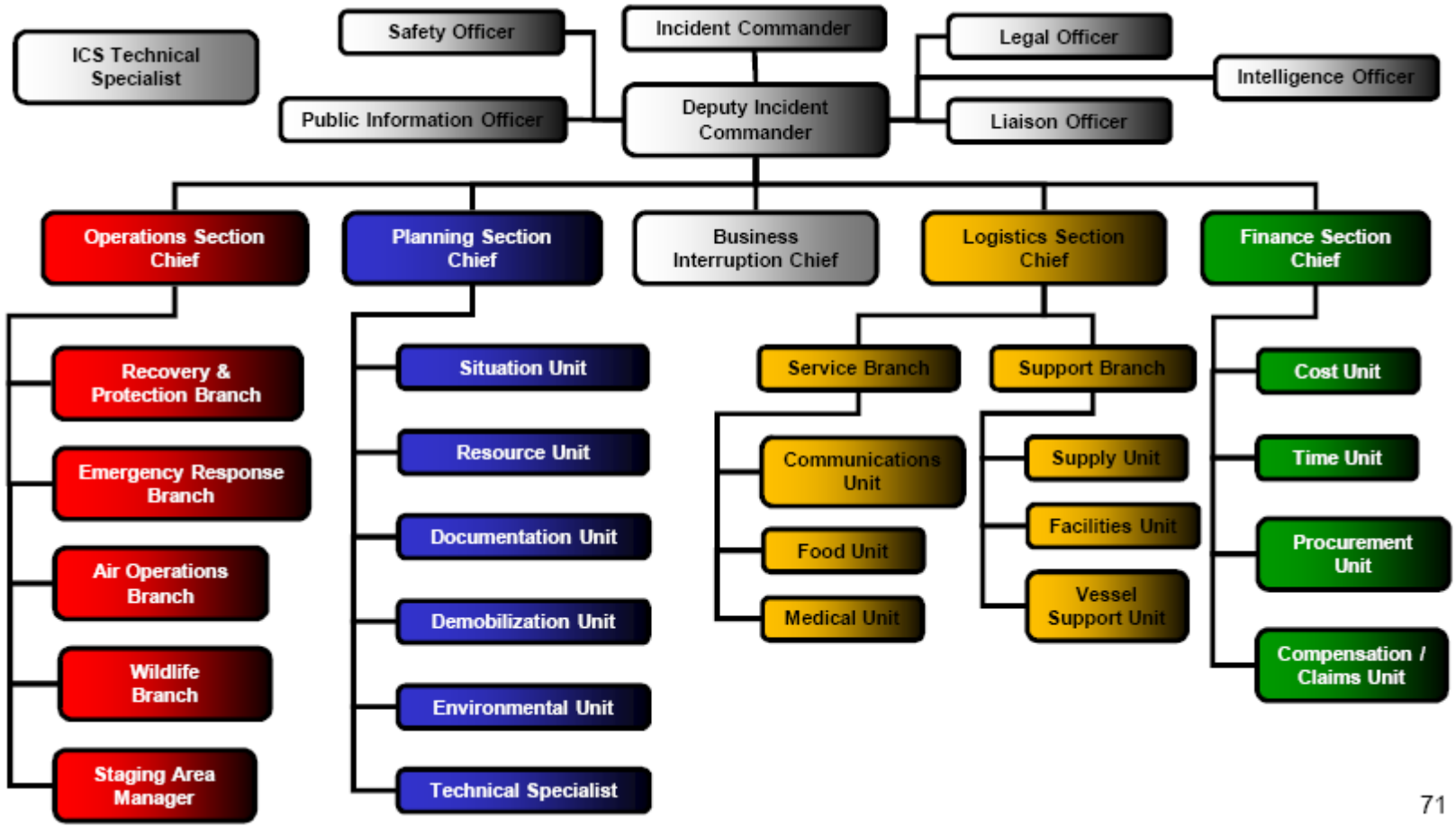
Partners	
Several types of agencies could be in the ICS/UCS, and work together or in combinations depending on the situation.	
✓	Fire
✓	Law enforcement
✓	Public health
✓	Public works/ Emergency services
✓	State Agencies
✓	Tribal Representatives
Other participants may include private individuals, companies, 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

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)

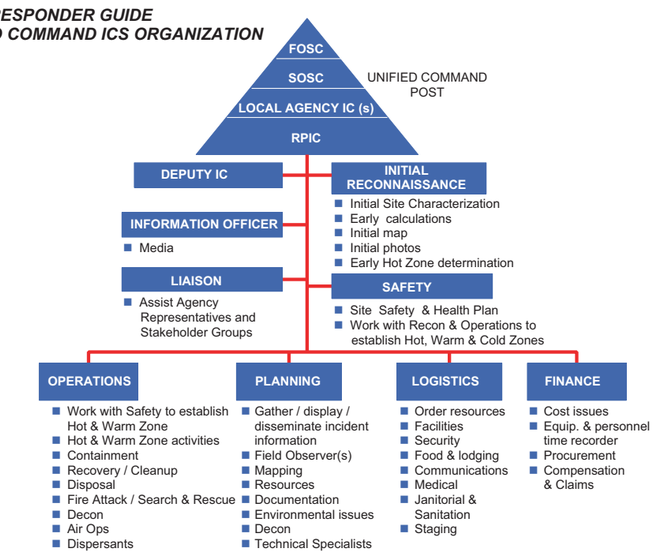
2

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

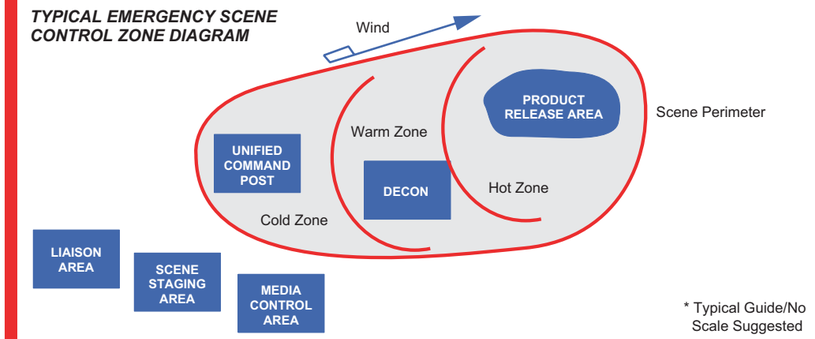
4

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 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)

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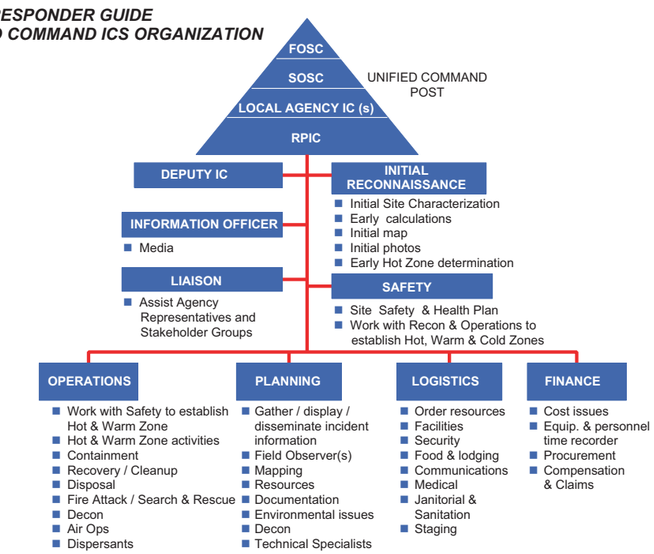
- Continue to evaluate the hot zone and adjust accordingly
- Continue to monitor evacuation activities
- Ensure safe Recon to determine extent of impact on water, air, soil, plant life & wildlife

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
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PROTECTIVE ACTIONS
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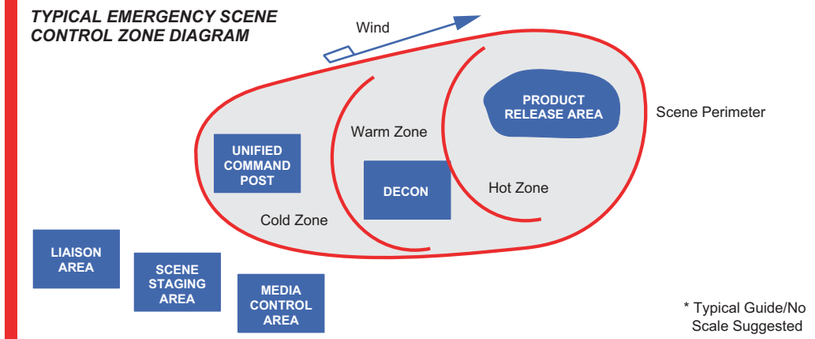

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SAFETY FIRST

FACILITY MITIGATION/PROTECTION ACTIONS
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- Notify Supervisor or designee
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- 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

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
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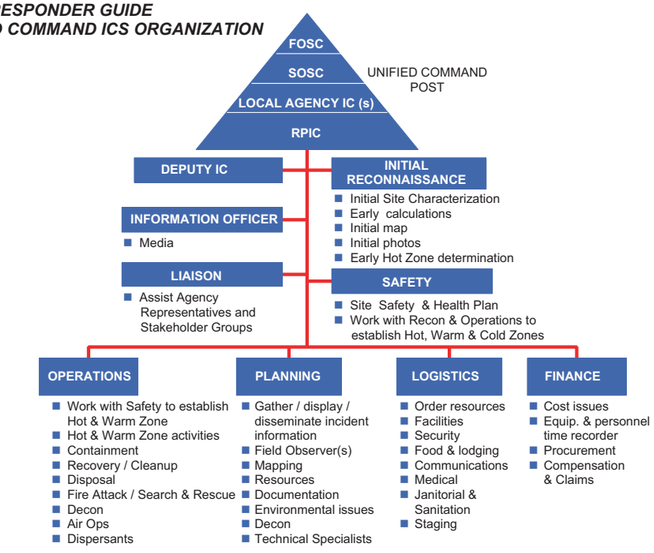
- Begin assigning ICS positions as necessary
- Meet, greet & brief responding Agencies as they arrive at the Unified Command Post
- Ensure Safety Officer begins and completes a Site Safety Plan

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
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- Ensure proper retention of all incident related documents
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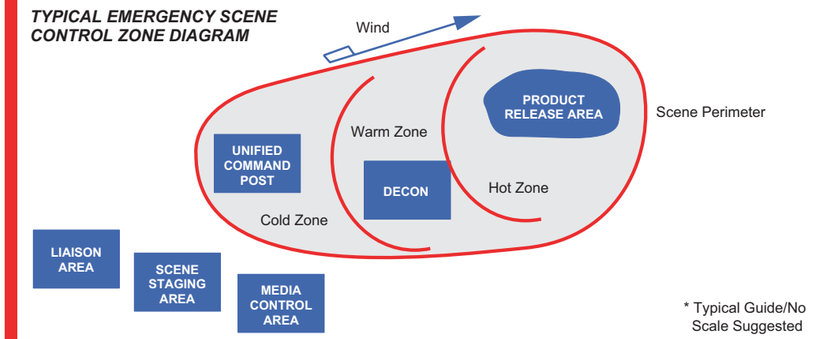
TYPICAL EMERGENCY SCENE CONTROL ZONE DIAGRAM



* 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

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- 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)

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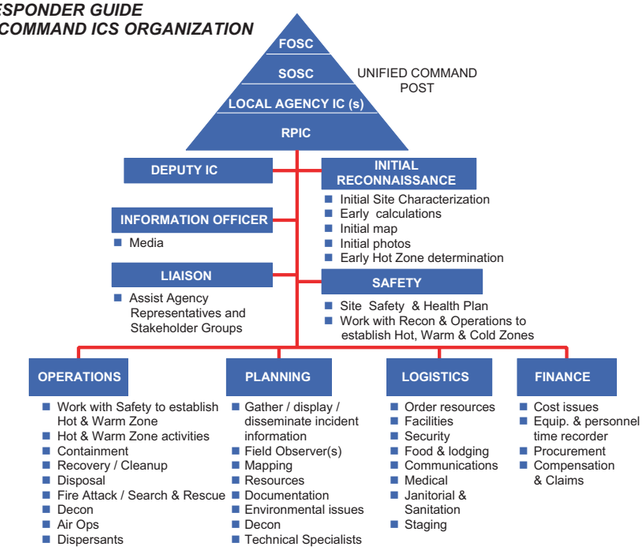
FIRST RESPONDER GUIDE
UNIFIED COMMAND ICS ORGANIZATION



3

PROTECTIVE EQUIPMENT
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DECONTAMINATION / CLEANUP
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- 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
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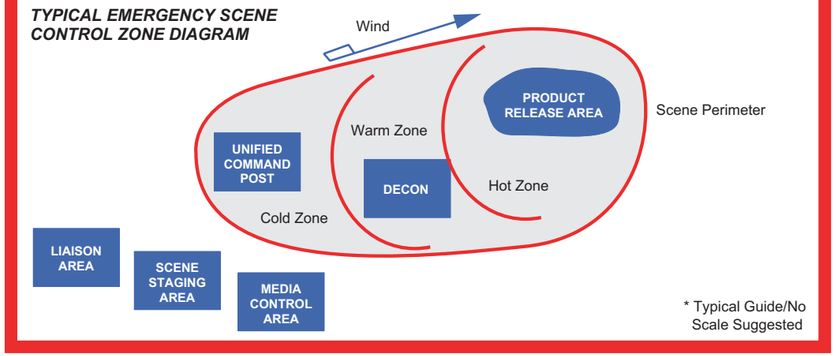
- Ensure proper retention of all incident related documents
- Ensure timely incident critique & record lessons learned

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

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)

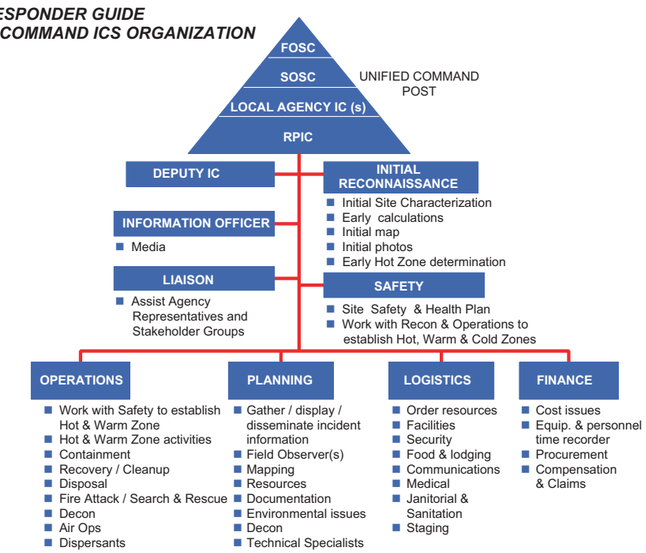
2

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

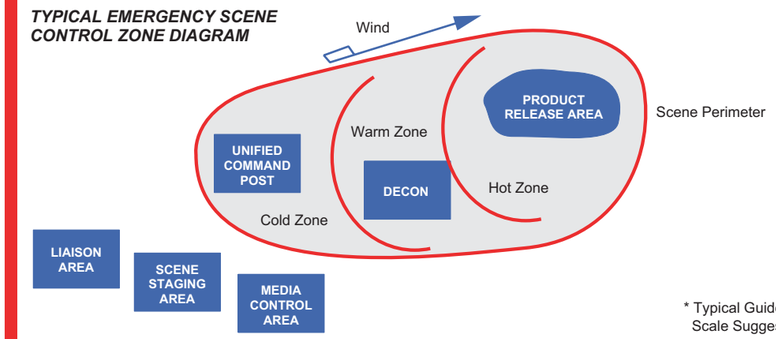
4

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 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
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- Follow Notifications Procedures (Notifications Section of this Plan)

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COMMAND MANAGEMENT
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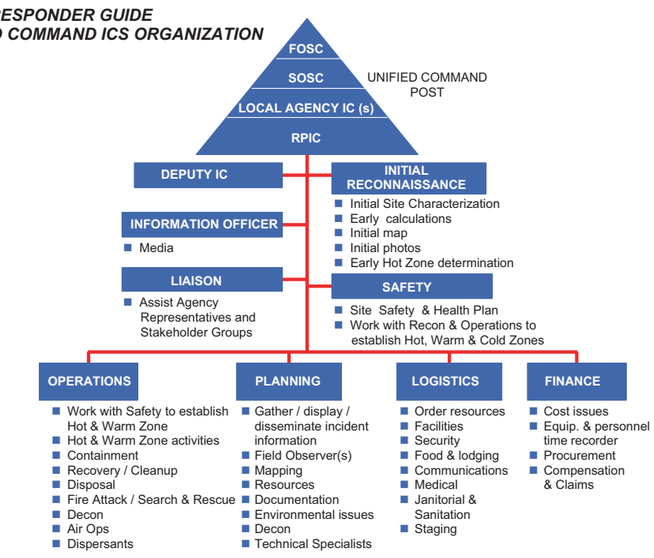
- Meet, greet & brief responding Agencies as they arrive at the Unified Command Post
- Ensure Safety Officer begins and completes a Site Safety Plan

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
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PROTECTIVE ACTIONS
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- Protective action tactical deployment should be part of the Unified IAP

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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
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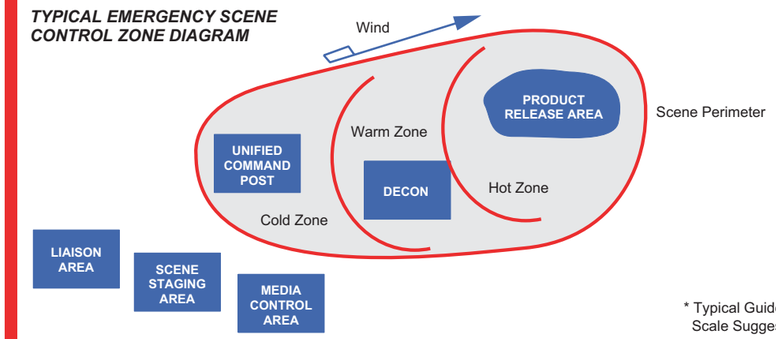
- Ensure proper retention of all incident related documents
- Ensure timely incident critique & record lessons learned

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)

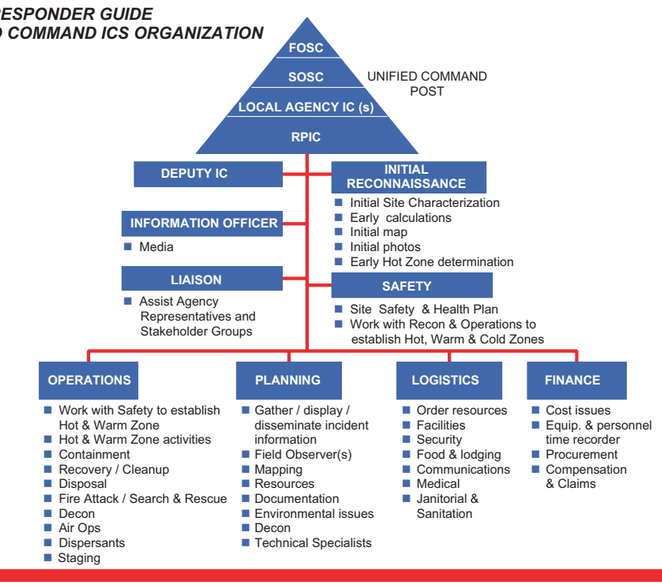
2

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

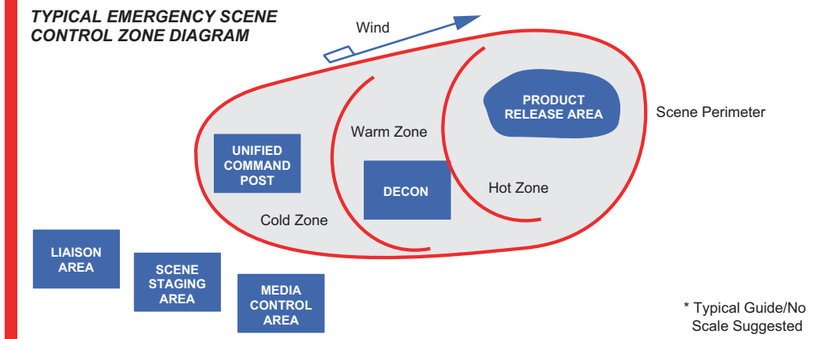
4

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)

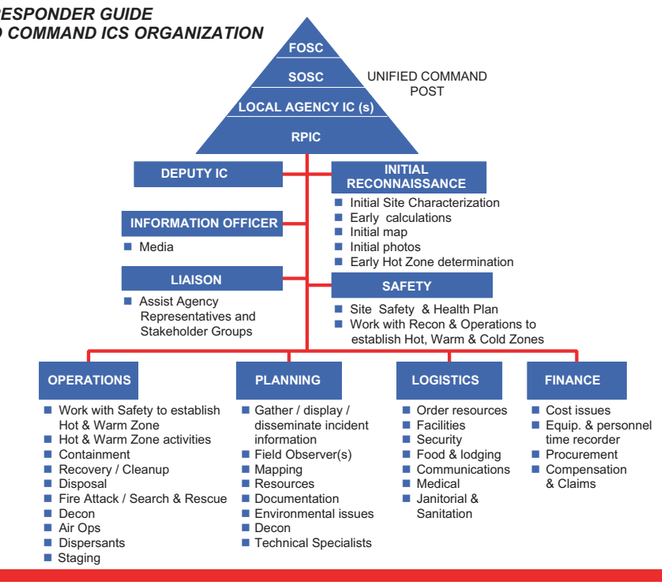
2

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

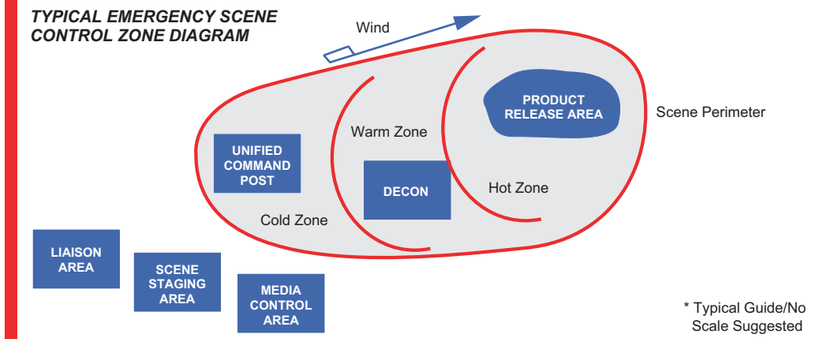
4

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

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)

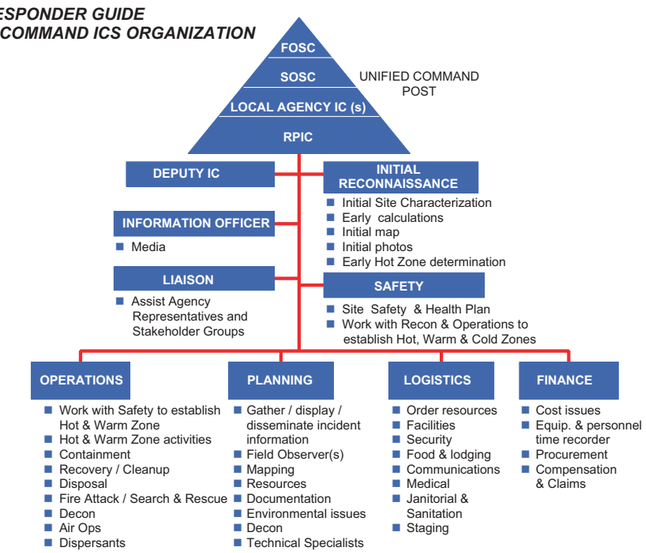
2

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 strategies

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
- 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
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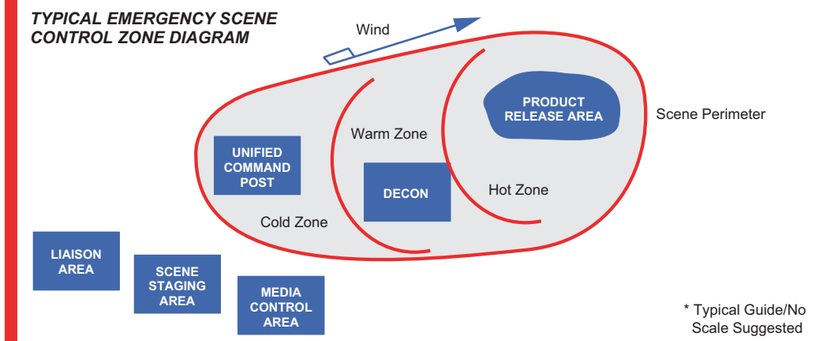
TYPICAL EMERGENCY SCENE
CONTROL ZONE DIAGRAM



* 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

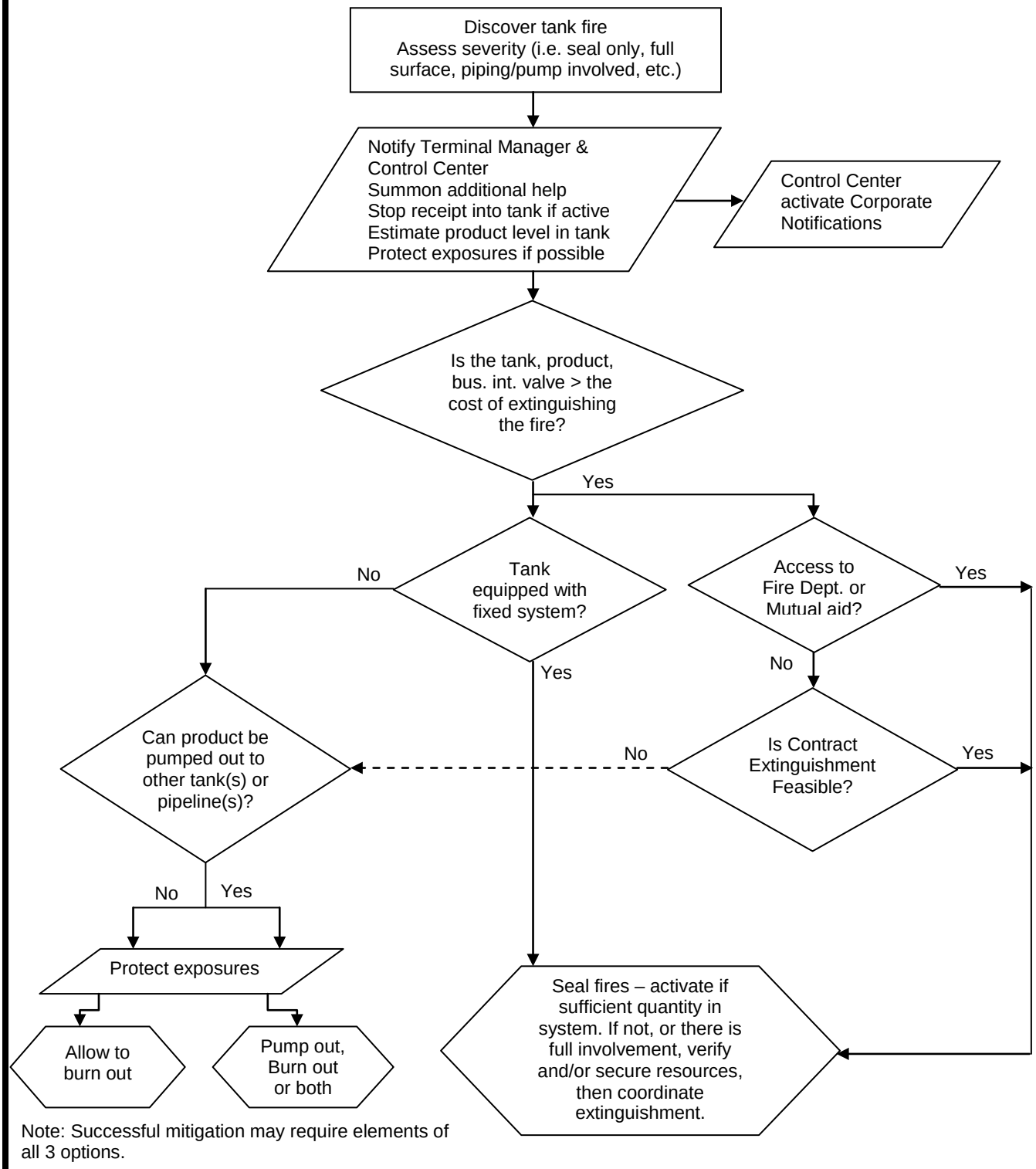
Pipeline Station or Manifold Fire		
Procedures	✓	Date/Time
Bear in mind it is better to take plenty of time in an emergency than to rush in and sustain personal injury.	☐	__/__/__ ____:____
Personnel should immediately evacuate hazardous area.	☐	__/__/__ ____:____
Extinguish fire at once, if possible, 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..		__/__/__ ____:____

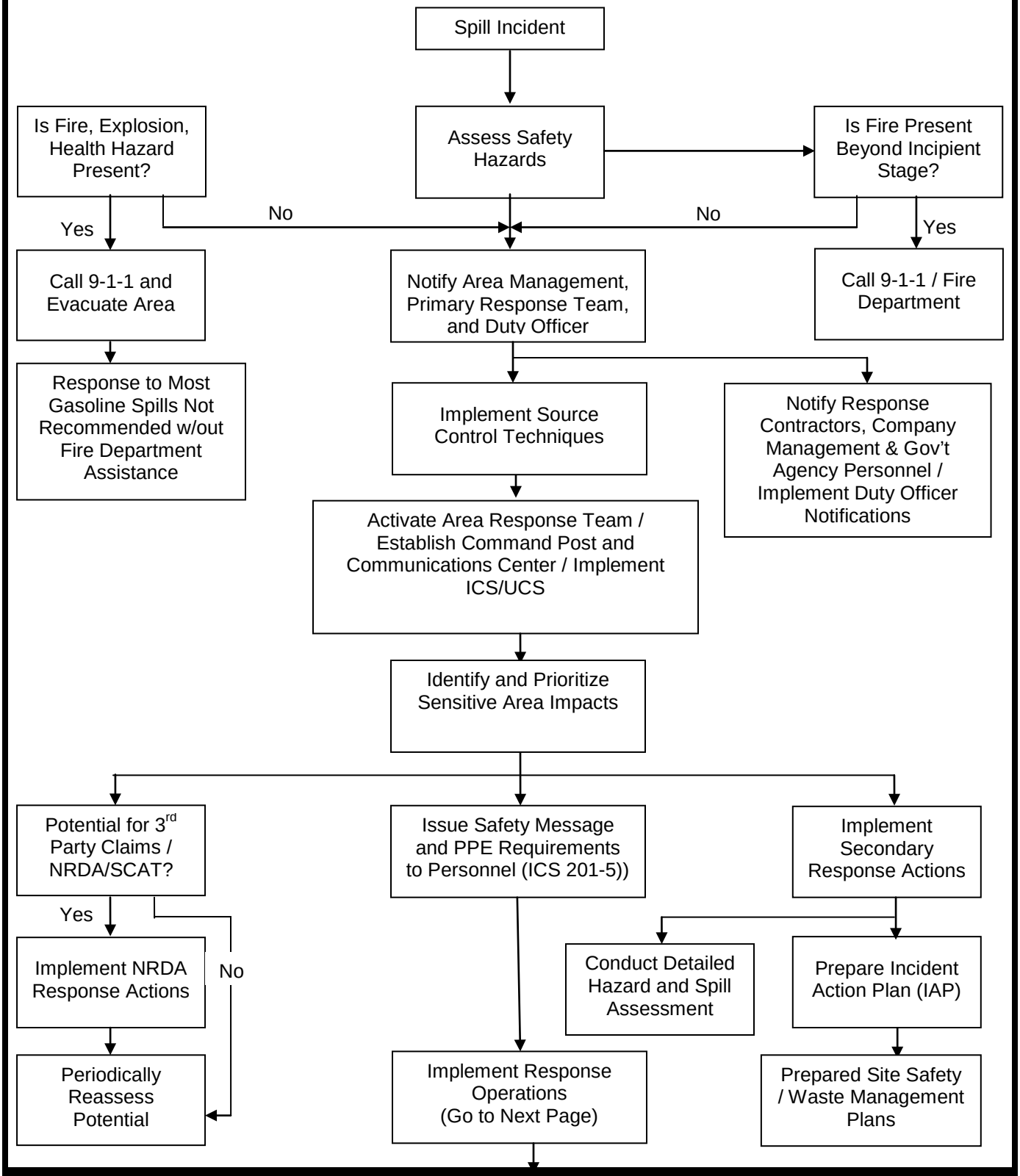
Sec. II-5.17 Tank Fire Pre-Plan / Flowchart

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.

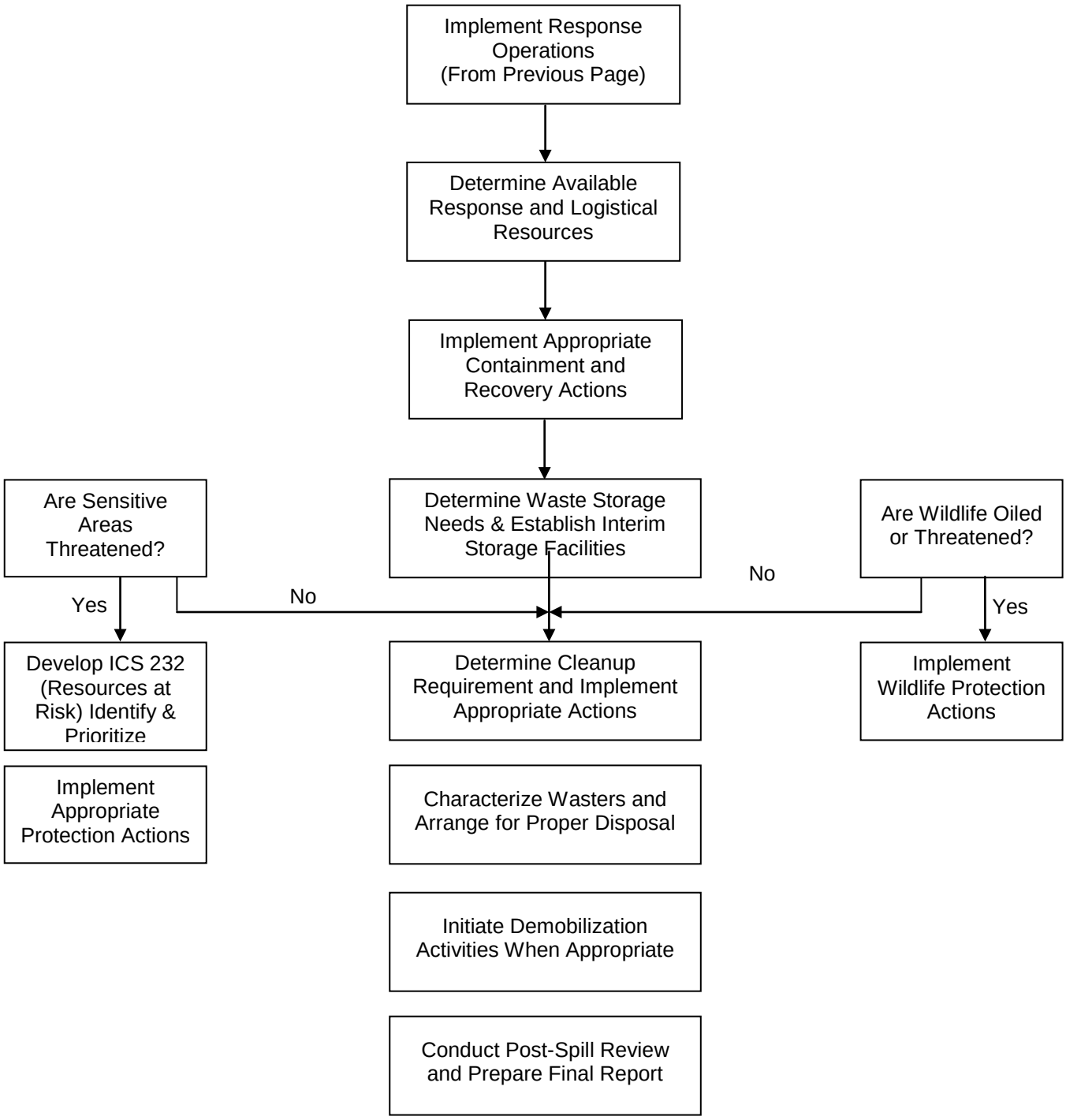


Note: Successful mitigation may require elements of all 3 options.

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.

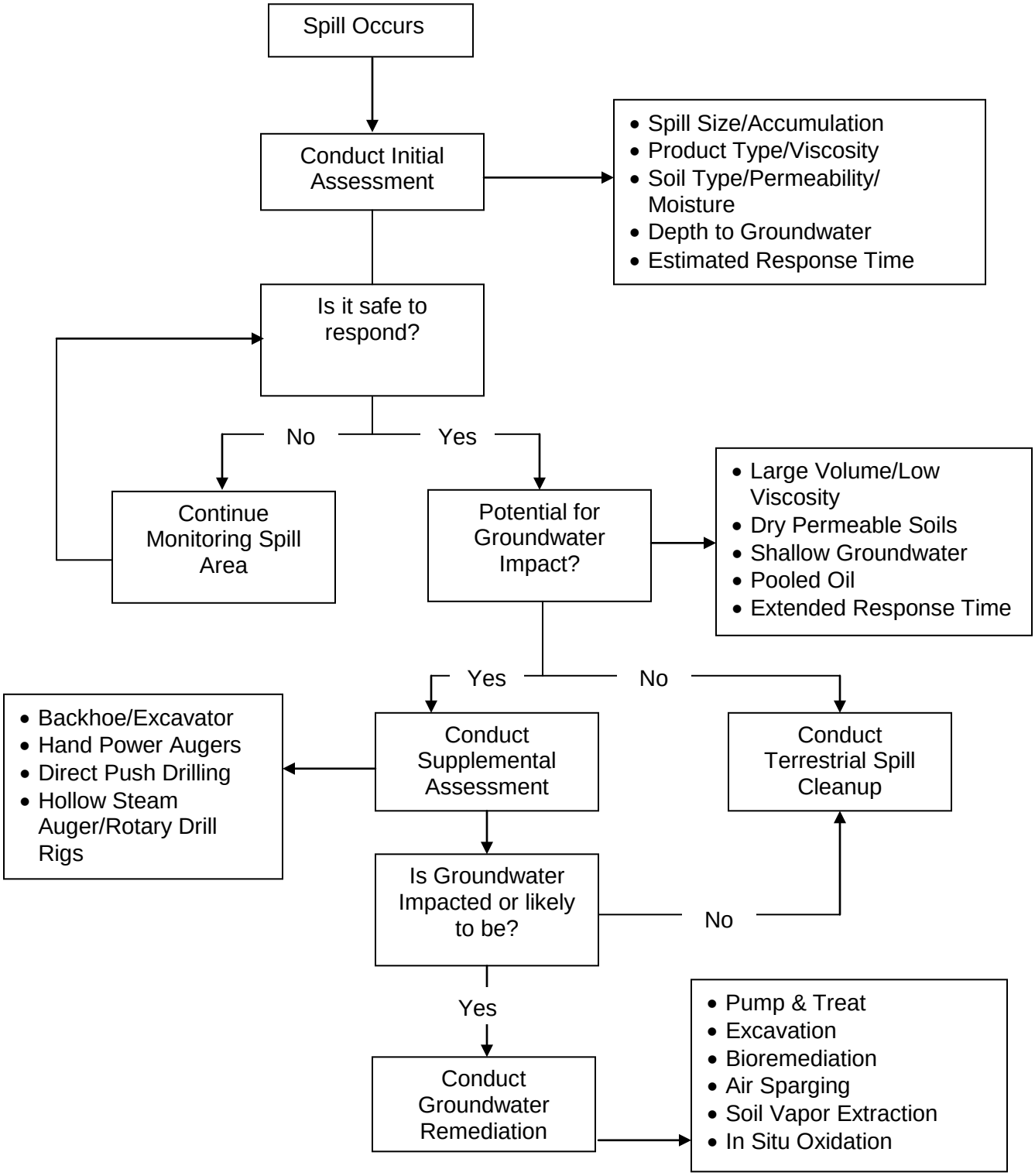
Sec. II-5.21.6 Recover/Remediation

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]

Company operators have been trained to respond to abnormal pipeline/facility operations. Source control will be maintained with the following systems and procedures:	
•	Company facilities are equipped with Emergency Support Systems (i.e., sumps, safety control valves, emergency shutdowns, etc.). The systems can alarm pipeline operators and shut down individual valves or the entire pipeline.
•	In the event the incident does not allow automatic control, the operator has the flexibility to control a release by manually activating shutdown devices or closing valves, etc. provided that the personnel are not exposed to the released substances.
•	In the event the source cannot be controlled by the pipeline operator or remotely with a safety system, the Company will activate this Plan and assemble a team to respond to the situation.
•	All pipelines within Company System are monitored on a regular and routine basis. All product pipelines and many crude lines are connected to the SCADA (Supervisory Control and Data Acquisition) System. Company personnel monitor and control line pressures, temperature 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.

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.

Lines that are not connected to the SCADA System are generally smaller crude gathering pipelines. 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.

Sec. II-6.16 High Level Alarms

High level alarms on storage tanks are inspected routinely to simulate actual operating conditions to ensure that overfill during tank filling operations are adequately detected. Results of high-level alarm inspections are recorded in the SPCC plan once every six months.

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

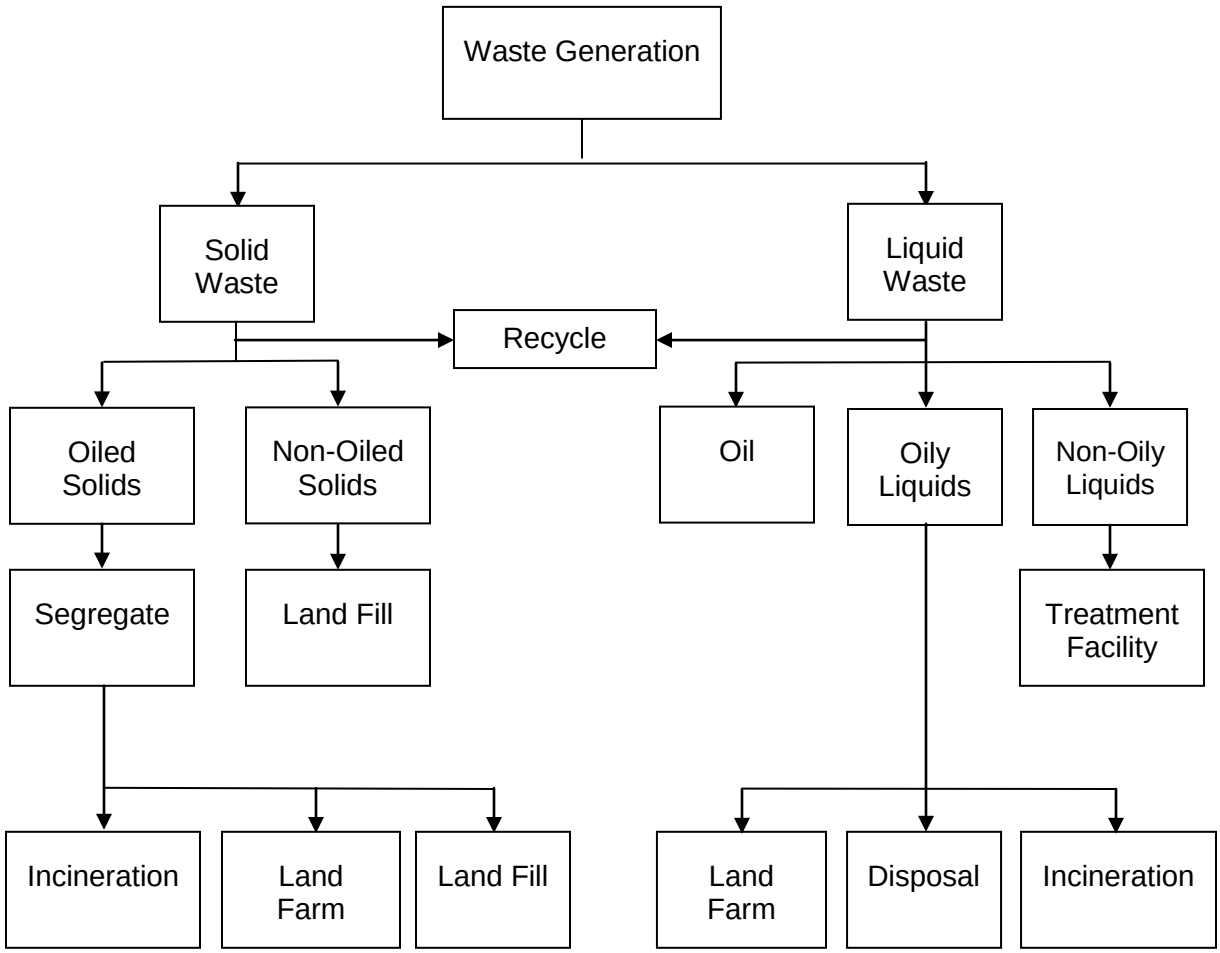


Figure II-8.2 – General Waste Containment and Disposal Checklist

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]

Levels of Leak Detection	
The Company currently uses the following three types of leak detection systems:	
•	Level I – Volume Balance
•	Level II – Flow Rate and Pressure Deviation
•	Level III – Pressure and Equipment Status Change

In determining the proper level to assign to a given pipeline system, a system analysis is required. In making such an analysis, consideration should be given to:	
•	Material characteristics
•	System physical condition
•	System size, throughput, and operating conditions
•	Existing controls
•	Evaluation of leak/hazard/response scenarios
•	Public safety
•	Environmental pollution exposure
•	Potential property losses
•	Cost/benefit

Sec. II-13.5 Leak Detection Systems, Devices, Equipment, or Procedures

Sec. II-13.5.1 Leak Detection and System Shutdown

The primary consideration in selecting the leak detection system is public safety. Environmental pollution and property losses are important considerations, but since restoration and compensation means are available, these effects should be considered secondary to public safety.

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[redacted]

Sec. II-13.6 Leak Detection Systems, Devices, Equipment, or Procedures

(b) (7)(F)

[redacted]

Sec. II-13.7 Leak Detection Systems, Devices, Equipment, or Procedures

Sec. II-13.7.1 Leak Detection and System Shutdown

(b) (7)(F)

[redacted]

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)

[redacted]

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 Control – 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

III-1 Overall Training

III-2 Response Training

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

III-4 Response Exercise Program

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

IV-1 Company Forms

IV-2 Industry Forms

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
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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:** _____

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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.				

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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.				

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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.				

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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.).				

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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.				

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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.				

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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.				

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1	Facility and Locality Information
2	Notification Procedures
3	Environmental Sensitive Area Information
4	Regulatory Cross Reference
5	Administration

Annex 1 – Table of Contents

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1.1	Purpose of Plan
1.2	Scope of Plan
1.3	Objectives
1.4	Management Certification
1.5	Qualified Individual Delegation of Authority
1.6	Alvin Area
1.6.1	Area Information Summary
1.6.2	Response Zone Description
1.6.3	Certification of Significant and Substantial Harm
1.6.4	Pipeline Description
1.6.5	Worst Case Discharge
1.7	Austin Area
1.7.1	Area Information Summary
1.7.2	Response Zone Description
1.7.3	Certification of Significant and Substantial Harm
1.7.4	Spill Response Equipment
1.7.5	Pipeline Information

Annex 1 – Table of Contents

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	1.8.1	**Borger Area Maintenance Information Summary**
	1.8.2	**Borger Area Products Terminal and Sunray Information Summary**
	1.8.3	**Certification of Significant and Substantial Harm Borger Maintenance Group**
	1.8.4	**Certification of Significant and Substantial Harm Borger Products Terminal**
	1.8.5	**Certification of Significant and Substantial Harm Borger Crude Terminal**
	1.8.7	**Tank Data – Borger Crude Terminal**
	1.8.8	**Spill History Borger Crude Terminal**
	1.8.9	**Sunray Terminal**
	1.8.10	**Pipelines**
	1.8.11	**Worst Case Discharge Calculation Formula**
	1.8.12	**Worst Case Discharge and Calculations**
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	1.9.1	**Area Information Summary**
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	1.9.3	**Certification of Significant and Substantial Harm Odessa Mainline**
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	1.9.5	**Certification of Significant and Substantial Harm Drew, Goldsmith & University Gathering**
	1.9.6	**Line Sections within the Response Zone**
	1.9.7	**Main Crude Oil Lines & Gathering System Trunk Lines**
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1.10	**Wichita Falls Area**	
	1.10.1	**Response Zone Description**
	1.10.2	**Worst Case Discharge**
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	1.10.4	**Determination of Significant and Substantial Harm**
	1.10.5	**Maximum Release Calculation Table**
	1.10.6	**Worst Case Discharge**
	1.10.7	**Significant and Substantial Harm Determination**
	1.10.8	**Spill Response Equipment**
	1.10.9	**Temporary Waste Storage Capabilities**
1.11	**Sweeny Refinery Petrochemical Pipeline System Maintenance Area**	
	1.11.1	**Area Information Summary**
	1.11.2	**Response Zone Description**
	1.11.3	**Potential Significant and Substantial Harm Line Sections**
	1.11.4	**Pipeline Description**
	1.11.5	**Worst Case Discharge from Pipeline Segment**
	1.11.6	**Certification of Significant and Substantial Harm Sweeny Refinery Petrochemical Pipeline System**
	1.11.7	**Spill Response Equipment**
	1.11.8	**Evacuation**

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 Texas 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 Texas 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

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

Melanie M. C. Barber
Environmental Planning Officer

1.6 Alvin Area

Sec. 1.6.1 Area Information Summary

Maintenance Group Name	Alvin Maintenance				
Response Zone Location	Sweeny-Pasadena, Brookshire to Sweeny (Line EZ), Webster-Clemens (HVL), Sweeny-Mont Belvieu (HVL), Clemens-Pasadena (HVL) and Shell-HCC (HVL)				
County	Brazoria, Harris, Fort Bend, Waller, Galveston, Chambers				
Telephone (day/night)	Refer to Annex 2, Contact List located in this plan for day/night QI/IC information.				
Address	7110 County Road 170, Alvin, TX 77511				
County	Brazoria				
Owner	Phillips 66 Company				
Owner Location (street)	600 North Dairy Ashford, 2136 Tarkington Building				
Emergency Telephone	800-231-2551 or 877-267-2290				
City	Houston	State	Texas	Zip	77079
County	Harris	Telephone	281-293-3891		

Sec. 1.6.2 Response Zone Description

Description of the Response Plan Zone in which a worst case discharge could cause significant and substantial harm to the environment.

Counties: Brazoria, Harris, Fort Bend, Waller, Galveston, Chambers
State: Texas
Mile Posts: See below

Listing of Line Sections within the Response Zone

Line Sections	Mile Posts	Counties
Line "EZ" - 10"	(b) (7)(F) [redacted]	Waller, Fort Bend, Brazoria
Webster-Clemens (HVL) - 4" & 6"		Brazoria, Galveston
Sweeny-Pasadena 18" & 12"		Harris, Brazoria
Sweeny-Mt Belvieu (HVL) - 8"		Brazoria, Harris, Chambers
Clemens-Pasadena (HVL) - 8"		Brazoria, Galveston, Harris
Shell to HCC (HVL) 4"		Harris

Sec. 1.6.3 Certification of Significant and Substantial Harm

Maintenance Group Name: **Alvin Maintenance Group**

Maintenance Group Address: **Brad Mitchell**

7110 CR 170

Alvin, Texas 77511

1. Is the pipeline greater than 6 and 5/8 inches in outside nominal diameter?

   YES x NO _____

2. Is the pipeline greater than 10 miles in length?

   YES x NO _____

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

   YES _____ NO x

4. Has the line section experienced at least two reportable releases, as defined in Part 195.50, within the previous five years?

   YES _____ NO x

5. Does the line contain any electric resistance-welded pipe, manufactured prior to 1970, operates at a maximum operating pressure established under Part 195.406 that corresponds to a stress level greater than 50 percent of the specified minimum yield strength of the pipe as defined in Rule 40 CFR 194?

   YES _____ NO x

6. Is the line section located within a five-mile radius of potentially affected public drinking water intakes and could reasonably be expected to reach public drinking water intakes?

   YES x* NO _____

***San Bernard River, Brazos River and Chocolate Bayou**

7. Is the line section located within a one-mile radius of potentially affected environmentally sensitive areas, and could reasonably be expected to reach these areas.

   YES x NO _____

CERTIFICATION

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.

Signature

Rob Yarbrough / Director, Emergency Preparedness, Response & Security 05/2012

Printed Name/Title Date

The Company has determined that the pipelines within the zone meet the "significant and substantial" harm criteria based on the line size and length. In addition, the Sweeny-Pasadena line crosses rivers (San Bernard & Brazos) and streams (Chocolate Bayou).

Type of Oil and Volume of Worst Case Discharge

Oil Type: Diesel, Gasoline, Kerosene and Jet Fuel

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

Sec. 1.6.4 Pipeline Description

The Alvin Maintenance Group has maintenance responsibilities for the pipeline corridor between the Sweeny Refinery and Brookshire Station, as well as all pipelines in the Houston area. The line sections and block valve locations are detailed below.

Line Section	Total Length
Brookshire-Sweeny Line “EZ”	51.37 Miles
Choc. Bayou-Webster, HVL	14.58 Miles
Sweeny-Pasadena	60.20 Miles
Pasadena-Mont Belvieu, HVL	24.68 Miles
Choc. Bayou-Clear Creek	25.99 Miles
Clemens-Anchor Jct.	14.62 Miles
Shell-PPC	2.5 Miles

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

Line Section	
Brookshire-Sweeny Line "EZ"	
Webster-Clemens, HVL	
Sweeny-Pasadena	
Sweeny-Mont Belvieu, HVL	
Clemens-Pasadena, HVL	
Shell-PPC, HVL	

Number	Size	Type of Line
1	10”	NGL (Brookshire-Sweeny Line "EZ")
1	4” & 6”	Crude Butadiene (Webster-Clemens)
1	18”	Products (Sweeny-Pasadena)
1	12”	Products (Sweeny-Pasadena)
1	8”	Ethane-Propane (Sweeny-Mont Belvieu)
1	8”	Propane (Clemens-Pasadena)
1	4”	Butadiene (Shell-PPC)

Block Valve Location for Each Line

Block Valve Location for Each Line	(b) (7)(F)
Brookshire-to Sweeny Line "EZ"	[redacted]
Webster-Clemens	[redacted]
Sweeny-Pasadena, 18"	[redacted]
Sweeny-Pasadena, 12	[redacted]
Sweeny-Mont Belvieu	[redacted]
Clemens-Pasadena	[redacted]
Greatest Distance Between Block Valves (Sweeny-Pasadena 12”) Brookshire to Sweeny Line EZ	[redacted]

Sec.1.6.5 Worst Case Discharge

Worst Case Discharge Formula

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 zone. 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 zone 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 zone, as per 40 CFR 194 guidelines, have been included in this section.

(b) (7)(F)

[redacted]

Maps and figures have been redacted in accordance with the FOIA Exemption 7(F).

1.7 Austin Area

Sec. 1.7.1 Area Information Summary

Maintenance Group Name	Austin Maintenance				
Response Zone Location	Barnhart, TX to Brookshire, TX				
Line Section	Line-EZ				
County	Crockett, Schleicher, Menard, Kimble, Mason, Gillespie, Blanco, Hays, Travis, Bastrop, Fayette, Colorado, Austin				
State	Texas				
Phone (Day/Evening)	Refer to the Notifications, Contact List for day/evening contact information for the QI/IC.				
Address	7700 Elroy Rd.				
City	Del Valle	State	TX	Zip	78617
Operator	ConocoPhillips Company				
Operator Location (street)	600 N. Dairy Ashford, 2136 Tarkington Bldg.				
Emergency Telephone	800-231-2551				
City	Houston	State	TX	Zip	77079
County	Harris	Telephone	281-293-3891		

Sec. 1.7.2 Response Zone Description

Counties: Crockett, Schleicher, Menard, Kimble, Mason, Gillespie, Blanco, Hays, Travis, Bastrop, Fayette Colorado, Austin

State: Texas

Mile Posts: See below

Listing of Line Sections within the Response Zone

Line Sections	Mile Posts	Counties
EZ (Barnhart to Brookshire)	(b) (7)(F) [redacted]	Crockett, Schleicher, Menard, Kimble, Mason, Gillespie, Blanco, Hays, Travis, Bastrop, Fayette, Colorado, Austin

Type of Oil and Volume of Worst Case Discharge

Oil Type
WCD Volume

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

Sec. 1.7.3 Certification of Significant and Substantial Harm

Maintenance Group Name: **Austin Maintenance Group**

Maintenance Group Address: **Todd Masterson**

7700 Elroy Road

Del Valle, TX 78617

1. Is the pipeline greater than 6 and 5/8 inches in outside nominal diameter?

   YES x NO

2. Is the pipeline greater than 10 miles in length?

   YES x NO

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

   YES NO x

4. Has the line section experienced at least two reportable releases, as defined in Part 195.50, within the previous five years?

   YES NO x

5. Does the line contain any electric resistance-welded pipe, manufactured prior to 1970, operates at a maximum operating pressure established under Part 195.406 that corresponds to a stress level greater than 50 percent of the specified minimum yield strength of the pipe as defined in Rule 40 CFR 194?

   YES NO x

6. Is the line section located within a five-mile radius of potentially affected public drinking water intakes and could reasonably be expected to reach public drinking water intakes?

   YES x NO

7. Is the line section located within a one-mile radius of potentially affected environmentally sensitive areas, and could reasonably be expected to reach these areas.

   YES x NO

Certification

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.

Signature

Rob Yarbrough / Director, Emergency Response Preparedness & Security — 05/2012

Printed Name/Title — Date

Sec. 1.7.4 Spill Response Equipment

The maintenance group does not have spill response equipment. Emergency response contractors and general contactors and their equipment will be utilized during a release, if necessary. See the Oil Spill Removal Organizations Section In Annex 2 for contract agreements.

Sec. 1.7.5 Pipeline Information

The Austin Maintenance Group has maintenance responsibilities for the EZ pipeline corridor between Barnhart, TX and Brookshire, TX.

Pipeline Information	
Total Length	325.57 miles
Facility Mile Post Range	(b) (7)(F) [redacted]
Number, Size, Type of Lines	1, 10” HVL Line
Block Valve Location for Each Line	(b) (7)(F) [redacted]
Greatest Distance Between Block Valves (Products Line)	[redacted]

1.8 Borger Area

Sec. 1.8.1 Borger Area Maintenance Information Summary

Maintenance Group Name	Borger Maintenance				
Response Zone Location	Borger-Sunray, Borger-Amarillo Line, OK State Line-Borger Borger-Odessa Line from Borger to Canyon				
Line Section	See above				
County	Hutchinson, Carson, Potter, Randall, Swisher, Hansford (+COT), Ochiltree, Beaver, Texas, Oklahoma, Sherman, Moore, Roberts (COT), Gray, Wheller				
Telephone (Day/Evening)	Refer to the Notifications, Contact List for Information.				
Address	9095 W. Wilson Street or 3 miles W. of Borger off Hwy 136				
City	Borger	State	TX	Zip	79007
Operator	Phillips 66				
Operator Location (street)	600 N. Dairy Ashford, 2136 Tarkington Bldg.				
Emergency Telephone	800-231-2551				
City	Houston	State	TX	Zip	77079
County	Harris	Telephone	281-293-3891		

Sec. 1.8.2 Borger Area Products Terminal and Sunray Information Summary

Facility Name	Borger Products Terminal				
City	Borger	State	TX	Zip	79008
Telephone (Day/Evening)	Refer to the Notifications, Contact List for information./				
Address	P.O. Box 3336 or 3 miles west of Borger off Hwy 136				
City	Borger	State	TX	Zip	79008
Owner	Phillips 66 Company				
Owner Location (street)	600 N. Dairy Ashford, 2136 Tarkington Bldg.				
Emergency Telephone	800-231-2551				
City	Houston	State	TX	Zip	77079
County	Harris	Telephone	281-293-3891		

Borger Area Products Terminal and Sunray Information Summary Contd.

Facility Name	Borger Crude Terminal				
Telephone (Day/Night)	Refer to the Notifications, Contact List for information.				
Address	P.O. Box 5068 or 3 miles west of Borger off Hwy 136				
City	Borger	State	Texas	Zip	79007
Owner	ConocoPhillips Company				
Owner Location (street)	600 N. Dairy Ashford, 2136 Tarkington Bldg.				
Emergency Telephone	800-231-2551				
City	Houston	State	TX	Zip	77079
County	Harris	Telephone	281-293-3891		

Sec. 1.8.3 Certification of Significant and Substantial Harm Borger Maintenance Group

MAINTENANCE GROUP NAME: **Borger Maintenance Group**

MAINTENENCE GROUP ADDRESS: **Don Schomp**
Box 5068
Borger, Texas 79007

1. Is the pipeline greater than 6 and 5/8 inches in outside nominal diameter?
   YES_____ NO_____X_____

2. Is the pipeline greater than 10 miles in length?
   YES_____ NO_____X_____

3. Has the line section experienced a release greater than 1,000 barrels within the previous five years?
   YES_____ NO_____X_____

4. Has the line section experienced at least two reportable releases, as defined in Part 195.50, within the previous five years?
   YES_____ NO_____X_____

5. Does the line contain any electric resistance-welded pipe, manufactured prior to 1970, operates at a maximum operating pressure established under Part 195.406 that corresponds to a stress level greater than 50 percent of the specified minimum yield strength of the pipe as defined in Rule 40 CFR 194?
   YES_____ NO_____X_____

6. Is the line section located within a five-mile radius of potentially affected public drinking water intakes and could reasonably be expected to reach public drinking water intakes?
   YES_____ NO_____X_____

7. Is the line section located within a one-mile radius of potentially affected environmentally sensitive areas, and could reasonably be expected to reach these areas.
   YES_____X_____ NO_____

CERTIFICATION

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.

Signature

Rob Yarbrough, Director, Emergency Preparedness Response & Security 05/2012
Printed Name/Title Date

Sec. 1.8.4 Certification of Significant and Substantial Harm Borger Products Terminal

MAINTENANCE GROUP NAME: **Borger Products Terminal**

MAINTENANCE GROUP ADDRESS: **Richard Little**

Box 3336 or 3 miles west of Borger on Hwy 136

Borger, Texas 79008

1. Is the pipeline greater than 6 and 5/8 inches in outside nominal diameter?
   YES_____X_____ NO_____

2. Is the pipeline greater than 10 miles in length?
   YES_____ NO_____X_____

3. Has the line section experienced a release greater than 1,000 barrels within the previous five years?
   YES_____ NO_____X_____

4. Has the line section experienced at least two reportable releases, as defined in Part 195.50, within the previous five years?
   YES_____ NO_____X_____

5. Does the line contain any electric resistance-welded pipe, manufactured prior to 1970, operates at a maximum operating pressure established under Part 195.406 that corresponds to a stress level greater than 50 percent of the specified minimum yield strength of the pipe as defined in Rule 40 CFR 194?
   YES_____X_____ NO_____

6. Is the line section located within a five-mile radius of potentially affected public drinking water intakes and could reasonably be expected to reach public drinking water intakes?
   YES_____ NO_____X_____

7. Is the line section located within a one-mile radius of potentially affected environmentally sensitive areas, and could reasonably be expected to reach these areas.
   YES_____X_____ NO_____

CERTIFICATION

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.

Signature

Rob Yarbrough, Director, Emergency Preparedness, Response and Security 05/2012

Printed Name/Title Date

Sec. 1.8.5 Certification of Significant and Substantial Harm Borger Crude Terminal

FACILITY NAME: **Borger Crude Terminal**

FACILITY ADDRESS: **Rebekah Thimmig**

Box 5068 or 1 mile north of Borger Crude Terminal Rd

Borger, Texas 79007

1. Is the pipeline greater than 6 and 5/8 inches in outside nominal diameter?
   YES_____ NO___x___

2. Is the pipeline greater than 10 miles in length?
   YES_____ NO___x___

3. Has the line section experienced a release greater than 1,000 barrels within the previous five years?
   YES_____ NO___x___

4. Has the line section experienced at least two reportable releases, as defined in Part 195.50, within the previous five years?
   YES_____ NO___x___

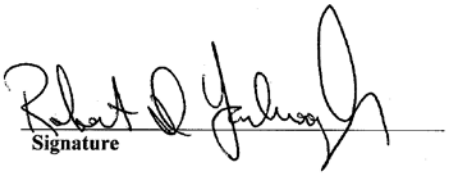
5. Does the line contain any electric resistance-welded pipe, manufactured prior to 1970, operates at a maximum operating pressure established under Part 195.406 that corresponds to a stress level greater than 50 percent of the specified minimum yield strength of the pipe as defined in Rule 40 CFR 194?
   YES_____ NO___x___

6. Is the line section located within a five-mile radius of potentially affected public drinking water intakes and could reasonably be expected to reach public drinking water intakes?
   YES___x___ NO_____

7. Is the line section located within a one-mile radius of potentially affected environmentally sensitive areas, and could reasonably be expected to reach these areas.
   YES___x___ NO_____

CERTIFICATION

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.



Signature

Rob Yarbrough, Director, Emergency Preparedness, Response and Security 05/2012

Printed Name/Title Date

Response Area Description

Description of the Response Plan Zone in which a worst case discharge could cause substantial harm to the environment.

County:	**Hutchinson**
State:	**Texas**
Latitude/ Longitude:	(b) (7)(F) [redacted]

Type of oil and Volume of Worst Case Discharge

Oil Type	**Group 2 (Diesel)**
WCD Volume	(b) (7)(F) [redacted]

Borger Crude Terminal

Listed below is a description of the Response Plan Zone in which a worst case discharge could cause significant and substantial harm to the environment.

State:	Texas
County:	Hutchinson
(b) (7)(F) [redacted]	
Oil Type:	Group 2 (Crude)
(b) (7)(F) [redacted]	

Sec. 1.8.6 Tank Data – Borger Crude Terminal

Tank[1] Number	Substance Stored	Type[2]	Year	Quantity Stored (Gallons)	Maximum Capacity (Gallons)
Aboveground Oil Storage Tanks Located in Main Tank Farm					
1501	Crude	EFR	1989	(b) (7)(F) [redacted]	
1502	Crude	EFR	1989	[redacted]	
1503	Crude	IFR	1991	[redacted]	
1504	Crude	EFR	1992	[redacted]	
2867	Crude	EFR	1975	[redacted]	
300	Leak tank		1977	[redacted]	
301	Leak tank		1977	[redacted]	

[1] Tank is any container that stores oil.

[2] EFR = External Floating Roof tank; IFR = Internal Floating Roof.

Potential failure may be caused by tank overflow, water drains, corrosion, rupture, leakage, loading rack valve failure, tank car rupture, and marine transfer cargo hose failure.

Bulk storage container installations are constructed to provide a means of secondary containment sufficient to contain the capacity of the largest container and freeboard to contain precipitation.

There are no additive tanks at this facility.

Sec. 1.8.7 Spill History Borger Crude Terminal

Date	Material	Volume	Description
9-26-1995	Transmix	80 bbls	Overfilled wastewater tank with hydrostatic test water.
11-3-2002	Crude Oil	280 bbls	Sump overflow, dike drain left open.
12-04-2006	Crude Oil	15,599	Mixer pin failure, Tank 1504

Description of the Response Plan Zone in which a worst case discharge could cause significant and substantial harm to the environment.

Sec. 1.8.8 Sunray Terminal

County:	Moore
State:	Texas

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

Type of Oil and Volume of Worst Case Discharge from breakout tanks.

Oil Type	Group 2 (Diesel)

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

Sec. 1.8.9 Pipelines

County:	See Facility Information in this Annex
State:	Texas, Oklahoma
Mile Posts:	See Below

Listing of Pipeline Sections within the Response Zone

<u>Line Sections</u>

"LRW-11" (Borger-Amarillo) (b) (7)(F) [redacted] Hutchinson, Carson, Potter Counties, Texas

"WA" (Canyon-Borger) (b) (7)(F) [redacted] Hutchinson, Carson, Potter, Randall, Swisher Counties, Texas

Mex-Tex (Goldsmith-Borger) (b) (7)(F) [redacted] same as above

"BT" (aka 'O' Line) M.P. - Hutchinson, Carson, Gray and Wheeler Counties, Texas includes 14.87 to A4.60 Borger Crude Terminal to Burnett Junction

"BS" (Borger-Skellytown) (b) (7)(F) [redacted] Hutchinson, Carson Counties, Texas

G-199 - Rock Creek System - Hutchinson County, Texas

G-203 - Sherhan System - Texas Counties, Moore, Sherman, Hansford

G-203 & G-22-6 - Dumas/Sneed System - Texas Counties, Hutchinson and Moore

Type of Oil and Volume of Worst Case Discharge from a pipeline.

Oil Type **Group 1**

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

"BA" line 1050-barrel leak, March 30, 1990 contains pre-1970 ERW Pipe.

The basis on which the operators have determined that the zone meets the "significant and substantial" harm criteria:

Sunray Terminal Tank Information

Tank 251
Tank 3001
Tank 3002
Tank 5501
Tank 5002

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

Total Length

Borger - Amarillo	46.68 miles
Borger - Odessa	78.62 miles
Goldsmith - Borger	78.83 miles
Buxton - Borger	19.47 miles
Borger - Skellytown	15.44 miles

Facility Mile Post Range

Borger - Amarillo
Borger - Odessa
Goldsmith - Borger
Buxton - Borger
Borger - Skellytown

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

Number, Size, Type of Lines

Borger - Amarillo	1, 8” Products line 1, 10" Products line
Borger - Odessa (Line WA)	1, 12" Crude line (includes ≈ 46 miles of 14”)
Goldsmith - Borger (Line 80)	1, 8" Crude line (includes ≈15 miles of 12”)
Buxton - Borger (Line O)	1, 10" Crude line
Borger - Skellytown (Line BS)	1, 10" HVL line

(b) (7)(F)

[redacted]

Greatest Distance Between Block Valves

Borger-Amarillo 8" Products	(b) (7)(F) [redacted]
Borger-Amarillo 10" Products	
Borger - Odessa 12" Crude	
Goldsmith - Borger 8" Crude	
Borger - Skellytown 10" HVL Bloc	
Buxton - Borger 10" Crude	

Sec. 1.8.10 Worst Case Discharge Calculation Formula

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 volume of the following:

- The largest foreseeable discharge in adverse weather conditions that a pipeline could discharge in a response zone. The worst-case discharge is based on the comparison of several factors. OR
- The largest single breakout tank or battery of tanks within a single secondary containment system.

Worst-Case Discharge from breakout tanks = largest tank volume

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Worst-Case Discharge from a pipeline =

(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

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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.

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 zone 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 have 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 zone, as per 40 CFR 194 guidelines, have been included in this section.

Sec. 1.8.11 Worst Case Discharge and Calculations

Worst Case Discharge Borger Maintenance Area

(b) (7)(F)

[redacted]

(b) (7)(F)

[redacted]

(b) (7)(F)

[redacted]

(b) (7)(F)

[redacted]

(b) (7)(F)

[redacted]

Planning Volume Worksheet Borger Products

Response Resources for Worst-Case Discharge

PART I: BACKGROUND INFORMATION

Step A) Calculate Worst-Case Discharge in Barrels (Part A or Part B) _____ (b) (7)(F)

Step B) Oil Group** 1

Step C) Geographic Area *(choose one)* Nearshore/Inland ____ River x

Step D) Percentages of Oil:

1. % Lost to natural dissipation 80%
2. % Recovered floating oil..... 10%
3. % Oil on shore..... 1

Step E) 1. On-water Recovery [(Step D2. x Step A)/100] ..... _____ (b) (7)(F) [redacted]

2. Onshore Recovery [(Step D3. x Step A)/100]..... _____

Step F) Emulsification Factor 1.0

Step G) On-water Oil Recovery Resource Mobilization Factor

1. Tier 1 ..... 0.30
2. Tier 2 ..... 0.40
3. Tier 3 ..... 0.60

PART II. ON-WATER RECOVERY CAPACITY (barrels/day)

1. Tier 1 [Step E1. x Step F x Step G1.] ..... _____ (b) (7)(F) [redacted]
2. Tier 2 [Step E1. x Step F x Step G2.] ..... _____
3. Tier 3 [Step E1. x Step F x Step G3.] ..... _____

PART III. SHORELINE CLEANUP VOLUME (barrels/day)

Step E2. x Step F..... _____

PART IV. RESPONSE CAPACITY BY GEOGRAPHIC AREA

(Amount needed to be contracted for in advance, barrels/day)

1. Tier 1 81
2. Tier 2 108
3. Tier 3 162

PART V. AMOUNT TO BE IDENTIFIED BUT NOT CONTRACTED FOR IN ADVANCE (barrels/day)

1. Tier 1 [Part II 1. - Part IV 1.]..... 0
2. Tier 2 [Part II 2. - Part IV 2.] 0
3. Tier 3 [Part II 3. - Part IV 3.] 0

NOTE: To convert to gallons/day, multiply Part II - Part V by 42.

** *Facilities storing multiple groups of oil should prepare a separate worksheet for each group.*

Contractor Storage Capacities must meet the following temporary storage volumes:

Tier 1 162 bbls Tier 2: 54 bbls Tier 3: 108 bbls

Non-contract responders must meet the following temporary storage volumes:

Tier 1: Tier 2: Tier 3: 271 bbls

Worst-Case Discharge Calculation Borger Crude Terminal

Onshore Storage Facilities

Part A of this worksheet is to be completed by owners or operators of SPCC-regulated facilities (excluding oil production facilities) if it is determined that the facility could cause substantial harm to the environment by self-selection or RA determination.

If you are the owner or operator or a production facility, please proceed to Part B.

A1. Single-Tank Facilities
For facilities containing only one aboveground storage tank, the final worst-case volume equals the capacity of the storage tank.

Final Worst-Case Volume:_____ gallons
Do not proceed further.

A2. Secondary Containment - Multiple-Tank Facilities
Are **all** aboveground storage tanks or groups of aboveground storage tanks at the facility **without** adequate secondary containment?[2] Yes_____ No X

a) If the answer is YES, the final worst-case volume equals the total aboveground oil storage capacity at the facility.

Final Worst-Case Volume:_____ gallons
Do not proceed further.

b) If the answer is NO, calculate the total aboveground capacity of tanks without adequate secondary containment. If **all** aboveground storage tanks or groups of aboveground storage tanks of the facility have adequate secondary containment, enter "0" (zero):_____ 0 gallons

Proceed to question A3.

A3. Distance to Navigable Waters
a) Is the nearest distance between an opportunity for discharge (i.e., storage tank, piping, or flowline) adjacent to a navigable water? Yes x No____

b) If the answer is YES, calculate 110% of the capacity of the largest single aboveground storage tank within a secondary containment area or 110% of the combined capacity of a group of aboveground storage tanks permanently manifolded together, whichever is greater, **plus the volume determined in question A2.b).**

Final Worst-Case Volume:_____ gallons
Do not proceed further.

c) If the answer is NO, calculate the capacity of the largest single aboveground storage tank within a secondary containment area or the combined capacity of a group of aboveground storage tanks permanently manifolded together, whichever is greater, **plus the volume determined in question A2.b).**

Final Worst-Case Volume:_____ (b) (7)(F) [redacted]

[1] "Storage facilities" represent all facilities subject to this part, excluding oil production facilities.
[2] Secondary containment is defined in □112.7(e)(2) of the current rule. Acceptable methods and structures for containment are given in □112.7(c)(1) of the current rule.
[3] Navigable waters are defined in □112.2(b) of the proposed Phase One rule.
[4] For one or more independent aboveground storage tanks within a secondary containment area, this amount is simply 110% of the capacity of the largest tank. For a group of aboveground storage tanks that are permanently manifolded together within the same secondary containment area, this amount is 110% of the combined storage capacity of all manifolded aboveground storage tanks. In this case, the correct volume for planning purposes would be either 110% of the largest independent tank or 110% of the total capacity of all permanently manifolded storage tanks, whichever is greater.

Planning Volume Worksheet Borger Crude Terminal

Response Resources for Worst-Case Discharge

PART I: BACKGROUND INFORMATION

Step A) Calculate Worst-Case Discharge in Barrels (Part A or Part B) _____ (b) (7)

Step B) Oil Group** 3

Step C) Geographic Area *(choose one)* Nearshore/Inland _____ River x

Step D) Percentages of Oil:
1. % Lost to natural dissipation 20%
2. % Recovered floating oil 15%
3. % Oil on shore 65%

Step E) 1. On-water Recovery [(Step D2. x Step A)/100] ..... _____ (b) (7)(F)
2. Onshore Recovery [(Step D3. x Step A)/100] ..... _____

Step F) Emulsification Factor 2.0

Step G) On-water Oil Recovery Resource Mobilization Factor
1. Tier 1 ..... 0.30
2. Tier 2 ..... 0.40
3. Tier 3 ..... 0.60

PART II. ON-WATER RECOVERY CAPACITY (barrels/day) (b) (7)(F)
1. Tier 1 [Step E1. x Step F x Step G1.] ..... _____
2. Tier 2 [Step E1. x Step F x Step G2.] ..... _____
3. Tier 3 [Step E1. x Step F x Step G3.] ..... _____

PART III. SHORELINE CLEANUP VOLUME (barrels/day)
Step E2. x Step F ..... _____

PART IV. RESPONSE CAPACITY BY GEOGRAPHIC AREA
(Amount needed to be contracted for in advance, barrels/day)
1. Tier 1 12,500
2. Tier 2 18,000
3. Tier 3 27,000

PART V. AMOUNT TO BE IDENTIFIED BUT NOT CONTRACTED FOR IN ADVANCE *(barrels/day)*
1. Tier 1 [Part II 1. - Part IV 1.] 1,000
2. Tier 2 [Part II 2. - Part IV 2.] ..... _____
3. Tier 3 [Part II 3. - Part IV 3.] ..... _____

NOTE: To convert to gallons/day, multiply Part II - Part V by 42.
** *Facilities storing multiple groups of oil should prepare a separate worksheet for each group.*

Contractor Storage Capacities must meet the following temporary storage volumes:
Tier 1: 25,000 bbls Tier 2: 11,000 bbls Tier 3: 18,000 bbls

Non-contract responders must meet the following temporary storage volumes:
Tier 1: 2,000 bbls Tier 2: bbls Tier 3: 195,000 bbls

Sec. 1.8.12 Spill Response Equipment

The following facility owned response equipment is inspected on an annual basis. Equipment found to be defective will be repaired or replaced.

FACILITY OWNED EQUIPMENT INSPECTION LOG		
Equipment Location:		
Inspected By:		
Inspection Date:		
Recovery Capacity:		Ex: 7,645 bpd = 20% daily recovery rate of 1,529 bpd (bpd capacity based on 20% efficiency)

Equipment Type	Description (Model, Style, Size, Capacity)	Qty.	Operational Status	Last Deployment Date
Boom	5” X 10’ Sorbent Booms	20		
Boom	Containment Boom Section with 12” Skirt: 6”x50’	2		
Boom	Containment Boom Section with 12” Skirt: 6”x100’	8		
Boom	Containment Boom Section with 6” Skirt: 4”x25’	3		
Boom	Containment Boom Section with 6” Skirt: 4”x50’	2		
Boom	Containment Boom Section with 4” Skirt: 2’- ½”x25’	4		
Coupler	Universal Quick-latch Couplers for 6” Boom	4		
Connects	Snap Ring Quick Connects	6		
Rope	Rope Section: ¼”x1,000’	1		
Rope	Rope Section: ½”x1,000’	1		
Rope	Rope Section: ⅜”x1,000’	1		
Sorbent	Sorbent Pad: 17”x19”x⅜” bales	8		
Blower	Backpack Blower	2		
Boat	16’ Jon-Boat	1		
Motor	25 h.p. Boat Motor	1		
Paddles	Boat Paddles	5		
Anchor	22-lb. Anchor	4		
Buoys	12” Mooring Buoy	4		
Safety	Life Jackets	6		

Retention:	5 Years		**Frequency**:	Annual

1.9 Odessa Area

Sec. 1.9.1 Area Information Summary

Owner/Operator

Owner	Phillips 66 Company				
Owner Location (street)	600 North Dairy Ashford, 2136 Tarkington Building				
Contact (Day/Night):	Refer to the Notifications Contact List for information.				
Emergency Telephone	800-231-2551				
City	Houston	State	TX	Zip	77079
County	Harris	Telephone	281-293-3891		

Odessa –North

Maintenance Group Name	Odessa -North
Response Zone Location	MX 20 NGL Line (Gaines to Odessa), Line WT 10 (Odessa to Canyon, Crude Oil), Crude Oil Truck Stations Un-Manned Stations: Airport, Andrews Truck, Butler, Coyote Truck, Drew, Ector, Goldsmith, Harper Truck, Martin Truck, Odessa Truck, Swinney Truck, University and University Truck
Line Section	Refer to the “Listing of Line Sections” Within The Response Zone in this section.

Odessa Area – South

Maintenance Group Name	Odessa - South
Response Zone Location	University Gathering System to Drew Station, Goldsmith Gathering System (Drew Station to Sprayberry), Benedum Station, Crude Trucking, EZ 01Pipeline (Benedum to Barnhart Station), EZ 10, and EZ 11 Manned Station: Benedum
Address	10301 FM 1555 Midkiff, TX 79755 Un-Manned Stations: Barnhart, Biglake, McCamey, Ozona, Pembrook, and Spraberry.
Line Section	Refer to the “Listing of Line Sections” Within The Response Zone in this section.

Levelland

Maintenance Group Name	Levelland
Response Zone Location	Un-Manned Stations: Wasson Truck, Dimmit, Olton, Pep, Pep Truck, Slaughter, Smyer, Weems, Weems Truck, Whiteface and Whiteface Truck..
Line Section	Refer to the "Listing of Line Sections" Within The Response Zone in this section.

Gaines/Hobbs

Maintenance Group Name	Gaines/Hobbs
Response Zone Location	Line WT 10 MP 36 to MP 72; Gaines Station to Artesia (4" to 6" to 4" MX 10 Line)/East Vac (3" MX 11 Line) (New Mexico Gathering, and MexTex System NGL), Linam Ranch (MX 01 8") Eunice Plant NGL 6" MX 21 Line and Line MX 20 Gaines to Drew Station Manned Station: Gaines Un-Manned Stations: Jal Truck, Anderson Ranch, Buckeye, Buckeye Truck, Eunice Truck, Gaines Truck, Maljamar Truck, Loco Hills Truck and Seminole Truck.
Line Section	Refer to the "Listing of Line Sections" Within The Response Zone in this section.

Sec. 1.9.2 Response Zone Description

Odessa - Mainline

The Odessa Area Mainline runs from MP 210 to Barnhart Station and consists of WA Pipeline, Line 80 and EZ Pipeline in this response area.

Additional area information is located in the Information Summary in this section.

Description of the Response Plan Zone in which a worst case discharge could cause significant and substantial harm to the environment:

Texas Counties: Andrews, Gaines, Yoakum, Cochran, Hockley, Lamb, Castro, Swisher, Randall, Upton, Reagan, Ector, Midland and Crockett
New Mexico Counties: Eddy, Lea

Mile Posts: Refer to the Information Summary this Section

The Company has determined that the pipelines within this maintenance zone meet the "significant and substantial" harm criteria based on the line size and length and the presence of ERW pipe.

Worst Case Discharge Type and Volume

Oil Type: Group 2 (Crude) Group 2 (Crude)
(b) (7)(F) [redacted]

Odessa Pump Station

Description of the Response Plan Zone in which a worst case discharge could cause significant and substantial harm to the environment:

County: Ector
State: Texas
Latitude/ Longitude: (b) (7)(E) [redacted]

Worst Case Discharge Type and Volume

Oil Type Group 2 (Crude)
(b) (7)(F) [redacted]

Sec. 1.9.3 Certification of Substantial Harm Odessa Mainline

MAINTENANCE GROUP NAME: **Odessa Mainline**

MAINTENANCE GROUP ADDRESS: **Kirby Shipp**

2200 W. 34th Street

Odessa, Texas 79764

1. Is the pipeline greater than 6 and 5/8 inches in outside nominal diameter?

   YES x NO

2. Is the pipeline greater than 10 miles in length?

   YES x NO

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

   YES NO x

4. Has the line section experienced at least two reportable releases, as defined in Part 195.50, within the previous five years?

   YES NO x

5. Does the line contain any electric resistance-welded pipe, manufactured prior to 1970, operates at a maximum operating pressure established under Part 195.406 that corresponds to a stress level greater than 50 percent of the specified minimum yield strength of the pipe as defined in Rule 40 CFR 194?

   YES x NO

6. Is the line section located within a five-mile radius of potentially affected public drinking water intakes and could reasonably be expected to reach public drinking water intakes?

   YES x NO

7. Is the line section located within a one-mile radius of potentially affected environmentally sensitive areas, and could reasonably be expected to reach these areas.

   YES x NO

CERTIFICATION

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.

Signature

Rob Yarbrough / Director, Emergency Preparedness, Response & Security 04/01/09

Printed Name/Title Date

Sec. 1.9.4 Certification of Substantial Harm Odessa Pump Station

FACILITY NAME: **Odessa Pump Station**

FACILITY ADDRESS: **Bill Neal**

HC-31, Box 15

Goldsmith, Texas 79741

1. Is the pipeline greater than 6 and 5/8 inches in outside nominal diameter?

   YES _____ NO ___X___

2. Is the pipeline greater than 10 miles in length?

   YES _____ NO ___X___

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

   YES _____ NO ___X___

4. Has the line section experienced at least two reportable releases, as defined in Part 195.50, within the previous five years?

   YES _____ NO ___X___

5. Does the line contain any electric resistance-welded pipe, manufactured prior to 1970, operates at a maximum operating pressure established under Part 195.406 that corresponds to a stress level greater than 50 percent of the specified minimum yield strength of the pipe as defined in Rule 40 CFR 194?

   YES _____ NO ___X___

6. Is the line section located within a five-mile radius of potentially affected public drinking water intakes and could reasonably be expected to reach public drinking water intakes?

   YES _____ NO ___X___

7. Is the line section located within a one-mile radius of potentially affected environmentally sensitive areas, and could reasonably be expected to reach these areas.

   YES ___X___ NO

CERTIFICATION

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.

Signature

Rob Yarbrough / Director, Emergency Preparedness, Response & Security — 04/01/09

Printed Name/Title — Date

Description of the Response Plan Zone in which a worst case discharge could cause significant and substantial to the environment:

Counties:	**Andrews, Ector, Gaines, Winkler, East Midland (COT)**
State:	**Texas**
Mile Posts:	**NA - 250 miles total**

Listing of Line Sections within the Response Zone

- Odessa Gathering
- Goldsmith Gathering
- Drew Gathering
- University Gathering
- Drew Station

The Company has determined that the pipelines within this maintenance zone meet the "significant and substantial" harm criteria based on line size and length.

Worst Case Discharge Type and Volume

Oil Type Group 2 (Crude)

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

Sec. 1.9.5 Certification of Significant and Substantial Harm Drew, Goldsmith & University Gathering

MAINTENANCE GROUP NAME: **Drew, Goldsmith & University Gathering**

MAINTENANCE GROUP ADDRESS: **Bill Neal**

HC-31, Box 14

Goldsmith, Texas 79741

1. Is the pipeline greater than 6 and 5/8 inches in outside nominal diameter?
   YES____x____ NO_____

2. Is the pipeline greater than 10 miles in length?
   YES____x____ NO_____

3. Has the line section experienced a release greater than 1,000 barrels within the previous five years?
   YES_____ NO_____x_____

4. Has the line section experienced at least two reportable releases, as defined in Part 195.50, within the previous five years? YES_____ NO_____x_____

5. Does the line contain any electric resistance-welded pipe, manufactured prior to 1970, operates at a maximum operating pressure established under Part 195.406 that corresponds to a stress level greater than 50 percent of the specified minimum yield strength of the pipe as defined in Rule 40 CFR 194?
   YES____x____ NO_____

6. Is the line section located within a five-mile radius of potentially affected public drinking water intakes and could reasonably be expected to reach public drinking water intakes?
   YES_____ NO_____x_____

7. Is the line section located within a one-mile radius of potentially affected environmentally sensitive areas, and could reasonably be expected to reach these areas.
   YES_____ NO_____x_____

CERTIFICATION

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.

Signature

Rob Yarbrough / Director, Emergency, Preparedness, Response & Security _____05/2012_____
Printed Name/Title Date

Sec. 1.9.6 Line Sections within the Response Zone

Main NGL Lines

Listing of Lines Operated by the Odessa Area			
Line EZ and MexTex System (NGL)			
LINE SECTIONS		**MILES (Mileposts)**	**Counties**
Line MX 30	Goldsmith – Benedum		Ector, Midland, Upton, Reagan
Line EZ 01	Benedum – Barnhart	57	Upton, Reagan, Crockett
MX 30 Loop	Sprayberry – 1.5 Sta 6" Loop (Spraberry – Pembrook)	8.077	Upton
MX 30 Loop 2	MP 64 – 70, 10"	6.033	Upton
MX 30 Loop	Pembrook – Benedum	7.389	Upton
EZ-10	Texaco Ozona – Barnhart		Crockett
EZ-11	Union Pacific SW – Texaco Ozona	24.27	Crockett
MX 20	Goldsmith – Drew	36.503	Ector, Andrews
MX 20 Loop	On MX 20 (MP 13)	2.678	Andrews
MX 20	Drew – Gaines	21.481	Andrews, Gaines
MX 20	Hobbs – Gaines	7.062	Lea, Gaines
MX 22	Fullerton – Drew	5.252	Andrews
MX 32	Line 80-1-6 – Headlee – Huntsman	6.25	Ector
MX 21	Eunice Plant – Line 80-1	17.73	Lea, NM
MX 21	Eunice Plant tie-over	7.16	Lea, NM
MX 31	Goldsmith – Koch	6.625	Ector
MX 11	East Vac. Unit – Line MX 11	0.299	Lea, NM
MX 11	Line MX 11 – Line MX 11	17.335	Lea, NM
MX 11	Line MX 11 – MX 10	1.041	Lea, NM
MX 10	Jayhawk Junct. – Gaines		Lea & Gaines, NM
MX 11	West Hobbs Junct. – Jayhawk Junct. (80-10 – 10-12)	2.042	Lea, NM
MX 10	Artesia Plant – Lusk (Line 80-12)	25.0	Eddy & Lea, NM
MX 10	Lusk – Gaines (Lusk – Mescalero – Pearl Queen – Gaines)	44.592	Lea & Gaines, NM
MX 01	Linam Ranch Plant – Gaines	13.751	Lea & Gaines, NM
MX 02	Mapco – Gaines	10	Gaines, NM
Gaines Cavern	Gains Station	Out of Service	Gaines, NM
Benedum Cavern	Benedum Station	N/A	Upton

Sec. 1.9.7 Main Crude Oil Lines and Main Gathering System Trunk Lines

Line WT 80, Odessa to Canyon, Crude Oil			
LINE SECTIONS		**MILES (Mileposts)**	**Counties**
WT 80	MP 57.37 – MP 210	153	Gaines, Yoakum, Cochran, Hockley, Lamb, Castro, Swisher
Pep-Olton Loop		2.967	Lamb
Line WT 10, Odessa to Canyon, Crude Oil			
WT 10	MP 0 – MP 210	210	Ector, Andrews, Gaines, Yoakum, Cochran, Hockley, Lamb, Castro, Swisher
Line WT 50, Crude Oil (West Texas Crude Oil Trunk Systems)			
WT 16	Navajo Russell – Weems	10.883	Gaines, NM
WT 50	Wasson – Weems	10.88	Yoakum
West Texas – New Mexico Crude Oil Trunk Systems)			
WA-4	Trunk Line		Ector, Andrews
WA-11	Trunk Line		Andrews
WB-16	Trunk Line		Andrews
WB-21	Trunk Line		Andrews
WB & Loop	Trunk Line		Ector, Andrews
WC-4	Trunk (Foster Station – Odessa Station)	9.08	Ector
WC-5	Trunk Line		Ector
WC-5-4-2	Trunk Line		Ector
WD	Trunk Line		Ector
WG	Trunk Line		Ector
WH	Trunk Line		Ector
WE-4	Trunk Line		Andrews
WE-6	Trunk Line		Andrews
WJ	Trunk (Amerada Hess – Seminole)		Gaines
New Mexico Crude Oil Truck Systems			
NM-1-Ext.2	Buckeye – West Hobbs Jct. – Gaines		Lea & Gaines, NM
NM-1	West Hobbs Jct. – Gaines		Lea & Gaines, NM
NM-1 Ext.	West Hobbs Jct. – Gaines		Lea & Gaines, NM
NM-1-2	Jal/Eunice – Gaines		Lea & Gaines, NM
NM-1-4-1	Oxy NIB – Gaines		Lea & Gaines, NM
NM-1-4	Oxy CIB – Gaines		Lea & Gaines, NM
NM-1-5	Oxy WIB – Gaines		Lea & Gaines, NM
NM-3	Mac – Lea Plant		Eddy, Lea
NM-3-Loop/ NM-16	Marbob – Buckeye		Eddy, Leah
NM-11	Buckeye – WIB tie-in (Idle)		Lea
NM-1-1	Eunice plant – Gaines (Idle)		Lea
Gaines – Arco	(Idle)		Gaines

Sec. 1.9.8 Off-Phillips 66 Line Crude Oil Trucking Stations

Off-Phillips 66 Line Crude Oil Trucking Stations	County, State
Anderson Ranch	Lea, NM
Andrews	Andrews, TX
Buckeye	Lea, NM
Coyote	Andrews, TX
Eunice	Lea, NM
Gaines	Gaines, TX
Harper	Ector, TX
Jal	Lea, NM
Loco Hills	Eddy, NM
Maljamar	Lea, NM
Martin	Andrews, TX
McCamey	Upton, TX
Odessa	Ector, TX
Pep	Cochran, TX
Plains	Yoakum, TX
Seminole	Gaines, NM
Smyer	Hockley, TX
Sweeny	Ector, TX
Tarz	Andrews, TX
University	Andrews, TX
Wasson	Yoakum, TX
Weems	Yoakum, TX
Whiteface	Cochran, TX

Sec. 1.9.9 Worst Case Discharge and 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 volume of the following:

- The largest foreseeable discharge in adverse weather conditions that a pipeline could discharge in a response zone. The worst-case discharge is based on the comparison of several factors. OR
- The largest single breakout tank or battery of tanks within a single secondary containment system.

Worst-Case Discharge from breakout tanks = largest tank volume

---

Worst-Case Discharge from a pipeline =

(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

---

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 pipe line, plus the drainage volume after shutdown of the pipe line.

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 zone 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 have 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 zone, as per 40 CFR 194 guidelines, have been included in this section.

(b) (7)(F)

[redacted]

(b) (7)(F)

[redacted]

(b) (7)(F)

[redacted]

Sec. 1.9.10 Benedum Pump Station and Cavern

Description

The Benedum Pump Station serves as the mainline pump station on Line EZ for Natural Gas Liquids (NGL) from Benedum Station to the Big Lake Pump Station. Line EZ is a common carrier pipeline for transportation of NGL from the Benedum Station to the ConocoPhillips Sweeney Refinery.

The Benedum Cavern primarily provides as NGL storage for NGL delivered to Benedum from the MexTex NGL System that is destined for delivery to Line EZ. NGL will pressure to the cavern as the Benedum EZ rate is reduced and will pressure from the cavern to supplement EZ deliveries as the Benedum EZ rate in increased. It can also be used to receive NGL from Line EZ during times of extended EZ downtime.

The underground NGL storage cavern is capable of storing (b) (7)(F) [redacted] to be used at a later date. This cavern is brine driven. The cavern pressure is 375 to 675 psi.

Refer to the Hazard Identification - Tanks table, Benedum Plot Plan, Benedum Cavern Schematic Diagram, Emergency Exit Map, and Benedum Station Fire Extinguisher Maps in this section.

Travel Directions

Travel 44.5 miles south of 1-20 on Hwy 349. to Hwy. 1555 then 9.5 miles East on 1555, from Odessa, TX. Benedum Station is on the North side of the road (N 3121.63; W 10147.00)

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

Sec. 1.9.12 Spill Response Equipment

This facility does not have spill response equipment. Emergency Response Contractors and their equipment will be utilized during a release if necessary. Refer to Annex 2 for oil Spill Removal Organizations and evidence of Service Contracts.

Approved Commercial Waste Management Facilities

Approved Waste management Facilities can be located on the Company web site.

Sec. 1.9.13 Truck Station Tank Data

UNLOAD STATION	CRUDE TYPE	STATION LATITUDE	STATION LONGITUDE	TANK MFR DATE	TANK STRAP BBLS	TANK SN/ID
Anderson Ranch	NMI	(b) (7)(F) [redacted]		2000	(b) (7)(F) [redacted]	29885
	NMI			2001		31828
Andrews	WTS			1999		29246
	WTS			1999		29247
Buckeye	NMS			2000		29884
	NMS			2000		29883
Crossroads (Mobil)	NMI			1999		02A566-0201
	NMI			1999		02A566-0101
Gaines	WTS			1997		09909 01 01
Jal	NMS			1999		29612
				2000		29489
Loco Hills	NMS			1999		29115
	NMS			1999		29114
	NMS			2000		29688
Maljamar	NMS			2002		32067
Plains	WTS			2002		32375
	WTS			2002		32376
Seminole	WTS			1998		28653
Smyer	WTS			1999		29248
	WTS			1999		29266
Wasson	WTS			2000		29931
Weems	WTS			1999		29245
Whiteface	WTS			1999		29249
	WTS			1999		29244

I = Intermediate S = Sour	**Tank Type:** Cone Roof (Atmospheric)	**Dike Design:** Earthen with rock Layer

Sec. 1.9.14 Crude Storage Tanks

STATION	TANK NO.	YEAR	TYPE	HEIGHT	DIAMETER	QTY. STORED (BBLS)	MAX. CAPACITY (BBLS)
Benedum	4009	1956	EFR	40’	85’	(b) (7)(F) [redacted]	
	4010	1956	EFR	40’	60’		
Buckeye	2812	1995	IFR	40’	45’		
	2811	1995	IFR	40’	45’		
Drew	2786	1954	EFR	40’	60’		
	4076	1974	IFR	41’	42’		
Gaines	2810	1981	IFR	48’	40’		
Odessa	2715	1948	EFR	56’	100’		
	2716	1949	EFR	56’	100’		
	2717	1949	EFR	56’	100’		
	2742	1952	EFR	33’	107’		
	4008	1956	EFR	42’’	117’		
	4022	1956	EFR	42’	117’		
	4064	1964	EFR	48’	110’		
	4074	1974	EFR	48’	110’		
University	2595	1996	IFR	48’	40’		
	4072	1972	CR	32’	47’		
Weems	0475	1974	IFR	49’	30’		
	2820	1954	EFR	40’	60’		
Whiteface	2710	1987	IFR	40;	44’		

Failure/Cause = loss of tank
Secondary Containment: Earthen with rock covering

EFR = External Floating Roof
IFR = Internal Floating Roof
CR = Cone Roof

Sec. 1.9.15 Cavern Storage

STATION	PRODUCT	CAPACITY (bbls)	PRESSURE (psi)
Benedum	Natural Gas Liquids (NGL)	(b) (7)(F) [redacted]	
Gaines	Natural Gas Liquids (NGL)		
Goldsmith	Natural Gas Liquids (NGL)		

1.10 Wichita Falls Area

Sec. 1.10.1 Response Zone Description

Pipelines

The system in Wichita Falls area consists of the following pipeline facilities:

- North Texas gathering systems, all
- 8" Products line, Red River to Wichita Falls Terminal
- 12" Crude line, Red River to Wichita Falls Terminal
- Wichita Falls Terminal and various crude gathering breakout tanks
- 16” Connection Product Line

This zone lies wholly within the Osage Plains section of the Central Lowland province of the Interior Plains, an area generally described as "Old scarped plains beveling slightly inclined strata; main streams entrenched." Most of the system is in an area of gently rolling hills and broad, flat plains overlying sandstone formations. Natural vegetation consists of riverine forests extending along permanent streams and grasslands with forested areas of mixed oak and cedar.

The pipeline system in this zone meets the definition for "Significant and Substantial Harm" and as a result is included in this response plan.

Wichita Falls Terminal

The facility is a crude and products terminal located on the north side of Wichita Falls and within the city limits. (b) (7)(F) [redacted] Facility tankage has secondary containment. Discharge from the site would flow into Plum Creek, thence meandering easterly approximately 1 mile to the Wichita River, thence following the meanders of the Wichita River northeasterly towards the Red River and intersecting at approximately 48.5 miles downstream.

Sec. 1.10.2 Worst Case Discharge

Wichita Falls Area is comprised of the Wichita Falls Terminal and the following pipelines or pipeline segments:

Pipeline	Segment in Response Area	Products Carried
North Texas Gathering System	4," 6" and 8" Trunk Lines to Wichita Falls	Crude Oil
8" Products Line	Red River to Wichita Falls	Gasoline, Diesel, Jet A, Drip Gas, and LPG's
12" Crude Line	Red River to Wichita Falls	Crude Oil

Note: This crude oil is Group 2 oil.

Worst-case discharge is the largest of either the capacity of the largest breakout tank or battery of tanks adjusted for the size of the secondary containment system. However, RSPA's policy only allows a maximum reduction of 50% of the breakout tank capacity. Therefore, the Worst Case Discharge calculated for the breakout tankage within this Response Zone is (b) (7)(F) [redacted].

Sec. 1.10.3 Secondary Containment Summary - Wichita Falls, TX Terminal

Tank No.	Nominal Tank Size (Bbls.)	Tank Capacity (Bbls.)	Secondary Containment Capacity (Bbls.)	Secondary Containment Minus Tank	Worst Case Discharge
24	(b) (7)(F) [redacted]				
36					
40					
68 69 5 (H_2O)					

* Denotes largest tank within a single dike area.

Note: Single line separates tanks having separate secondary containment.

Secondary Containment Summary – Breakout Tankage

Facility	Tank Number	Nominal Tank Size (Bbls.)	Tank Capacity (Bbls.)	Secondary Containment Capacity (Bbls.)	Secondary Containment Minus Tank Capacity (Bbls.)	Worst Case Discharge (Bbls.)
Archer City	1139 1294	(b) (7)(F) [redacted]				
Bennett Point (AKA Jacksboro)	62208 62209					
Bethel Station	1684 1685					
Boyd	77561 77562					
Carson #1	709 736					
Cisco	n/a					
Clearfork	1267					
Coffee Flats	79572 79573 79574					
Crystal Falls	79819 79820 79821 79822 79823					
Deer Creek	730 (oos) 728					
Elbert	734					
Ellis	43372 43373					
Graham	1279					
Deer Creek	84014 84015					
KMA	1276 1277 1278					
Markley	71254					
Oak Creek Station	62109 62110					
Olney	41711 41712					
Predo	1274					
Twin Butte	1315					
Wichita Falls	1283 1263					

* Denotes largest tank within a single dike area.
Note: Single line separates tanks having separate secondary containment.

Largest foreseeable discharge based on the maximum historic discharge, adjusted for any subsequent corrective or preventive action taken.

There have been no reportable discharges in this response zone.

Pipeline's maximum release calculated using the formula below:

[(Maximum time to discover a leak) + (Maximum response shutdown time)] X (Maximum flow rate) + (Maximum line section drain up after shutdown)

All of the main line sections in this response zone are monitored by a SCADA system in the Control Center.

Note: Time considerations for the effects of adverse weather conditions were included in the maximum time to discover leak and maximum response shutdown time.

Sec. 1.10.4 Determination of Significant/Substantial Harm

Line Sect. No.	From		To		County	State	Sig/ Sub (y/n)
	Block Valve No.	Milepost No.	Block Valve No.	Milepost No.			
North Texas Gathering System – 6"/8" Lines to Wichita Falls Terminal							
1	Elbert	(b) (7)(F) [redacted]			Archer	TX	Y
2	Graham				Young	TX	Y
3	Olney				Young, Archer	TX	Y
4	Twin Butte				Archer	TX	Y
5	Carson				Wichita	TX	Y
6	Clearfork				Stephens	TX	Y
7	Southbend				Young	TX	Y
8	Graham				Young	TX	Y
9	Grayford					TX	N
10	Bowie P.S.				Jack, Montague	TX	Y
11	Jacksboro				Jack	TX	Y
12	Predo					TX	N
13	Deer Creek				Clay	TX	Y
8" Products Line – Red River to Wichita Falls Terminal, Clay and Wichita Counties, Texas							
14	WF-10	(b) (7)(F) [redacted]			Clay, Wichita	TX	N
12" Crude Line – Red River to Wichita Falls Terminal, Clay and Wichita Counties, Texas							
15	Terminal	(b) (7)(F) [redacted]			Wichita, Clay	TX	Y
16	O-314				Clay, Cotton	TX, OK	N

Legend

B	Business	RC	Recreational Area	W	Wetlands or Other Sensitive Environment
FW	Fish and Wildlife Sensitive Environment	S	School	WI	Water Intake and Public Water Supply
MF	Medical Facility	T&E	Endangered Flora and Fauna	WP	Wellhead Protection Area
O	Other Area of Economic Importance	TR	Transportation Route (Air, Land and Water)	WR	Water Resource / Lake or Stream
R	Residential Area	U	Utility		

(XX) Numbers in parentheses (i.e., (42)) indicate a 1:100,000 map reference number.

1. **Is the facility within 0.5 miles of navigable water?** Yes
2. **What is the elevation at the point where a spill would exit the facility?** 940 feet MSL
3. **Are there existing storm drains or other drainage structures which would impact oil spill runoff**? No
4. **What is the soil type and porosity?** Red Clay/Sand/Silt
5. **Is there fish/wildlife sensitive habitat or public drinking water intake within 20 miles downstream from the facility?** Yes
6. **How many miles from the facility?** 1.1 Miles Downstream
7. **What is the stream elevation at that point?** 920 feet MSL
8. **If no such occurrence within 20 miles, what is the stream elevation at the 20-mile point**? N/A

Worksheet MW-1

Water Condition: "MOVING WATER"

Calculation of Planning Distance in Determination of "Substantial Harm Designation"

Facility Name: Wichita Falls Crude and Products Terminal
Date of Calculation: January 1995

Intermediate Calculations	Site Determination
$\alpha = \Delta$ elevation (in feet) $\Rightarrow$ [stream elevation @ facility] - [stream elevation @ receptor (or 20-mile point)]	α = 20 feet
β = Horizontal distance from facility to receptor (or 20-mile point) in miles.	β = 1.1 miles
s = Average stream slope $\rightarrow$ $s = \frac{\alpha}{\beta / 5{,}280}$	s = 0.0034
r = Hydraulic radium (in feet) $\Rightarrow$ average)) mid channel depth x 0.667	r = 2.67
n = Manning's roughness coefficient	n = 0.05
To calculate stream velocity (in ft./sec.), use: $v=1.5/n \times r^{-} \times s^{1/2}$	v = 3.46

30.00 x 1.92 x 0.06

Calculation of Planning Distance

d= Calculated planning distance (miles)	v = 3.46 ft./sec.
v= Chezy-Manning based stream velocity (ft./sec.)	t = 27 HRS
c= 0.68 (sec-mile/hr-ft conversion factor)	c = 0.68
d= v x t x c $\Rightarrow$ planning distance equation	d = 63.5 MI.

Mannings Roughness Coefficient for Various Natural Stream Types

Minor Streams (Top Width < 100')	
Clean:	
Straight	.03
Winding	.04
Sluggish (Weedy, Deep Pools):	
No Trees / Brush	.06
Trees and/or Brush	.10
Major Streams (Top Width > 100')	
Regular Section:	
No Boulders / Brush	.035
Irregular Section:	
Brush	.05

Sec. 1.10.5 Maximum Release Calculation Table

Pipeline Line Segment No. / From Block Valve to Block Valve	Discovery Time (Min.)	Shutdown Time (Min.)	Flow Rate (BPH)	Pipe Dia. (In.)	Segment Length (Mile)	Drain up (Bbls.)	Maximum Discharge (Bbls.)
North Texas Gathering System - 6" and 8" Lines to Wichita Falls Terminal: Wichita, Archer, Throckmorton, Stephens, Palo Pinto, Jack, Montague and Clay Co., Texas							
1. Elbert: Twin Butte P.S.	15	(b) (7)(F) [redacted]	120	4 & 6	18.5	(b) (7)(F) [redacted]	
2. Olney: Twin Butte P.S.	15		80	4	7.0		
3. Twin Butte: Carson P.S.	15		400	6	30.0		
4. Carson: Wichita Falls	15		900	6	14.0		
5. Clearfork: Southbend P.S.	15		100	6	6.0		
6. Southbend: Graham P.S.	15		200	6	9.0		
7. Graham: Graford	15		400	6	21.4		
8. Grayford: Jacksboro	15		400	8	15.6		
9. Bowie P.S.: Jacksboro	15		200	8	32.7		
10. Jacksboro: Predo P.S.	15		450	8	28.0		
11. Predo: Carson P.S.	15		575	8	33.0		
12. Deer Creek: Wichita Falls	15		262	4-6-7	30.0		
8" Products Line - Red River to Wichita Falls Terminal, Clay and Wichita Counties, Texas							
13. WF-9: WF-10	15	(b) (7)(F) [redacted]	1,150	8	2.0	(b) (7)(F) [redacted]	
14. WF-10: WF-11, 12, 13	15		1,150	8	16.5		
12" Crude Line - Red River to Wichita Falls Terminal, Clay and Wichita Counties, Texas							
15. O-314	15	(b) (7)(F) [redacted]	3,000	12	18.0	(b) (7)(F) [redacted]	
16. O-314: O-313	15		3,000	12	2.0		
16" Product Line – Mobil tie in to Wichita Falls Terminal, Clay and Wichita Counties, Texas							
17. 100: 1	15			16	4.0		

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

Sec. 1.10.6 Worst Case Discharge

(b) (7)(F)

[redacted]

Sec. 1.10.7 Significant and Substantial Harm Determination

According to interim final regulations (January 5, 1993, 58 FR 255) proposed by the Research and Special Programs Administration (RSPA) of the Department of Transportation (DOT), a pipeline may cause "significant and substantial harm" if it is greater than 6 ⅝ inches in diameter, greater than 10 miles in length, and the line section meets one of the following criteria:

- Has experienced a release greater than 1,000 barrels within the previous five years,
- Has experienced two or more reportable releases, as defined in proposed regulation 49 CFR § 195.50, within the previous five years,
- Containing any electric resistance welded pipe, manufactured prior to 1970, operates at a maximum operating pressure established under proposed regulation 49 CFR § 195.406 that corresponds to a stress level greater than 50 percent of the specified minimum yield strength of the pipe,
- Is located within a five-mile radius of potentially affected public drinking water intakes and could reasonably be expected to reach public drinking water intakes, or
- Is located within a one-mile radius of potentially affected environmentally sensitive areas, and could reasonably be expected to reach these areas.

Note: Environmentally sensitive areas are not defined in the rule but are stated in the preamble to be "areas of environmental importance which are in or are adjacent to navigable waters" and which possibly include "wetlands, national parks, wilderness and recreational areas, wildlife refuges, marine sanctuaries, and conservation areas" (58 FR 248).

Every line segment in all 8 response zones were evaluated to determine which met one or more of the above criteria. A summary of these determinations is as follows:

Description of Pipelines

- 6" and 8" Crude gathering system in North Texas for the Wichita Terminal
- 8" Products line, Red River to Wichita Falls Terminal
- 12" Crude line, Red River to Wichita Falls Terminal

Significant and Substantial Harm to Pipeline? Yes

Sec. 1.10.8 Spill Response Equipment

Wichita Falls, Texas

- 300 ft. of 8” round containment boom with 8” skirt, located in spill trailer
- 1 drum skimmer rated at 20 BPH
- 100 ft. Absorbent Boom
- Assorted Absorbent Pads
- Flat Bottom Aluminum Boat
- 5 Hp Boat Motor

Graham, Texas

- 300 ft. of 8” round containment boom with 8” skirt, located in spill trailer
- 1 drum skimmer rated at 20 BPH
- 1 16 ft. boat with 25 HP motor

Sec. 1.10.9 Temporary Waste Storage Capabilities

	Equipment	Capacity	Total Capacity
Eagle-Eastland	Portable Storage		
	Vacuum Systems		
Eagle-Fort Worth	Portable Storage		
	Vacuum Systems		
		Total Storage Capacity	

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

(b) (7)

Vulnerability Analysis and Sensitive Area Information

A Vulnerability Analysis (VA) as defined by DOT CFR 194 and EPA CFR Part 112 was performed for the Wichita Falls area. The VA addresses the potential effects to human health, property and the environment of an oil spill. The analysis identified 14 sensitive areas which exist within 5 miles on either side of the pipeline. The analysis was performed over the entire pipeline area (approximately 1,100 miles). All the information and sensitive area compilations can be found in Annex 3 of this plan.

1.11 Sweeny Refinery Petrochemical Pipeline System Maintenance Area

Sec. 1.11.1 Area Information Summary

Maintenance Group Name	**Sweeny Refinery Petrochemical Pipeline System Maintenance**				
Response Zone Location	**Southeastern Brazoria County, Texas**				
Line Sections					
SR-01 (Freeport II to Freeport I 30” Crude Line)		SR-02 (Freeport I to Sweeny 24” Crude Line)			
SR-03 (Sweeny to/from Freeport I 12” Crude Line)		SR-07 (Clemens to Sweeny 4” Nitrogen Line)			
SR-10 (Sweeny to San Bernard 5” LCO Line-IDLED)		SR-15 (Air Liquide to Clemens 4” Nitrogen Line)			
SR-13 (Sweeny to/from San Bernard Gas Oil Line)		SR-27 (Sweeny to/from Clemens 8” Isopentane Line)			
SR-26 (Sweeny to/from Clemens 8” BB Mix Line)		SR-29 (Sweeny to San Bernard 4” Xylene Line)			
SR-28 (Sweeny to/from Clemens 8” Hydrogen Line)		SR-31 (Sweeny to San Bernard 4” Toluene Line)			
SR-30 (Sweeny to San Bernard 4” N-Hexane Line)		SR-40 (Air Liquide to Seagas 8” Hydrogen Line)			
SR-32 (Sweeny to San Bernard 8” Fuel Gas Line)		SR-42 (Sweeny to Freeport 6” Xylene Line)			
SR-41 (San Bernard to Sweeny 8” Raffinate Line)		SR-50 (Sweeny to/from Freeport I 6” Cyclohexane)			
SR-43 (Sweeny to Brazos River 24” Water Line)		SR-52 (Sweeny to/from Freeport I 8” Product Line)			
SR-51 (Sweeny to/from Freeport I Benzene Line)		SR-54 (Brazos River to Clute 6” Cyclohexane Line)			
SR-53 (San Bernard to Sweeny 10” Brine Line)		SR-56 (Sweeny PUGCO 16” Fuel Gas Line)			
SR-55 (Sweeny to/from Clemens 10” Fuel Gas Line)		CP-02 (Sweeny to Clemens Crude Butadiene Line)			
SR-57 (Sweeny PUGCO 30” Fuel Gas Line)					
Total Pipeline Length:	~309 miles				
County/State	Brazoria County, Texas				
Address	1008 East Ashley-Wilson				
City	Sweeny	State	TX	Zip	77480
Operator	Phillips 66 Company				
Operator Location (street)	600 N. Dairy Ashford				
Emergency Telephone	800-231-2566 or 877-267-2290				
City	Houston	State	TX	Zip	77079
County	Harris	Telephone	800-231-2566		

Sec. 1.11.2 Response Zone Description

The Company owns and operates a series of terminals and inter-terminal pipelines in conjunction with its Sweeny Refinery Complex. These terminals and inter-terminal pipelines are in a well defined geographic area and are contained within Brazoria County in southeastern Texas. As reflected on the pipeline system map contained in this section, the terminals and inter-terminal pipeline system are in a generally east, southeast alignment between the communities of Sweeny and Freeport. The inter-terminal pipeline system connects the following:

- Freeport Terminal,
- Jones Creek Terminal,
- San Bernard Terminal,
- Sweeny Refinery Complex and
- Clemens Terminal (CPChem-Owner)

The assets addressed by this plan are similar in nature and operations. They are all located within a small geographic area (i.e., located within the same county in southeast Texas) that is topographically similar (e.g., flat, numerous hydrologic features, coastland terrain, etc.) climatologically similar, and in areas with fairly dispersed rural populations. Also, personnel and equipment used for the planning and deployment of spill response activities within these assets are drawn from the same common pool of resources. For these reasons, the Company is designating only one response zone for this plan, which covers all assets within the terminals and inter-terminal pipeline system.

The inter-terminal pipeline system contains numerous pipelines carrying both oil and non-oil materials between the terminals and the Sweeny Refinery Complex. As described in 49 CFR 194.103, line sections carrying oil can be expected to cause significant and substantial harm to the environment in the event of an oil discharge if the pipeline is greater than 6 5/8 inches in outside nominal diameter, greater than ten miles in length and the line section:

- Has experienced a release greater than 1,000 barrels within the previous five years;
- Has experienced two or more reportable releases within the previous five years;
- Contains any pre-1970 electric resistance welded pipe operating at > 50% minimum yield strength;
- Is located within a five-mile radius of and could reach public water intakes; or
- Is located within one mile radius of and could reach potentially affected environmentally sensitive areas.

Within the inter-terminal pipeline system, there are five line sections (pipelines (3) SR-52, (4) SR-03, (24) SR-02, (27) SR-27, and (42) SR-42) that meet the above criteria for significant and substantial harm line sections. Refer to the Certification of Substantial Harm for the primary bases for the Company determination that these five pipelines meet the criteria for significant and substantial harm.

A map of environmentally sensitive areas within the response zone is provided for in Annex 3. The Company is categorizing in accordance with 40 CFR 194.103 the five pipelines reflected in the Table below as significant and substantial harm line sections. The Table provides the following information on the five significant and substantial harm line sections:

- Operator designation of the line section;
- Type of oil product managed;
- Inside diameter of the piping;
- Shell thickness of the piping;
- Length of major runs within the line section;
- Capacity of major runs; and
- Designation points for major runs.

Sec. 1.11.3 Potential Significant and Substantial Harm Line Sections

Pipeline (Line Section)	Product	ID (inches)	Shell (inch)	Length (feet)	Capacity (bbls)	From	To
(3) SR-52	Gasoline/ Distillates	8	0.188	37,887	(b) (7)(F) [redacted]		
		8	0.188	40,673			
		8	0.188	1,523			
		8	0.188	45,816			
		8	0.188	14,721			
		8	0.188	668			
		8	0.188	16,010			
(4) SR-03	Crude oil	12	0.250	16,010			
		12	0.250	668			
		12	0.250	70,570			
		12	0.250	462			
		12	0.250	55,387			
(24) SR-02	Crude oil	24	0.250	13,750			
		24	0.250	2,165			
		24	0.250	14,721			
		24	0.250	54,871			
		24	0.250	636			
		24	0.250	56,729			
(27) SR-27	Iso-Pentane	8	0.344	1,650			
		8	0.188	60,395			
		8	0.219	13,215			
		8	0.250	99			
		8	0.344	14			
		8	0.344	350			
(42) SR-42	Xylene	8	0.280	5,218			
		8	0.188	152,589			
		8	0.280	2,462			

Additional Line Sections

Pipeline (Line Section)	Product	ID (inches)	Shell (inch)	Length (feet)	Capacity (bbls)	From	To
(1) SR-50	Cyclohexane	3	0.216	670	(b) (7)(F) [redacted]		
		4	0.237	1,740			
		6	0.250	670			
		4	0.148	2,000			
		6	0.280	2,800			
		6	0.280	63,840			
		4	0.237	922			
		6	0.203	48,493			
		6	0.250	33,400			
		6	0.500	925			
		6	0.280	728			
(2) SR-51	Benzene	4	0.237	650			
		4	0.237	2,000			
		4	0.237	530			
		5	0.148	2,500			
		5	0.148	47,549			
		4	0.142	15,920			
		4	0.188	82,924			
		4	0.237	1,100			
(13) SR-13	Gas oil	12	0.250	600			
		8	0.250	930			
		12	0.250	19,974			
		15	0.238	3,263			
(29) SR-29	Xylene	4	0.188	11,113			
		4	0.156	14,668			
(30) SR-30	n-Hexane	4	0.188	11,061			
		4	0.156	14,637			
(31) SR-31	Toluene	4	0.188	11,113			
		4	0.156	14,668			

Pipeline (Line Section)	Product	ID (inches)	Shell (inch)	Length (feet)	Capacity (bbls)	From	To
(32) SR-32	Fuel oil	8	0.188	16,878	(b) (7)(F) [redacted]		
		8	0.250	1,006			
		8	0.322	144			
		8	0.406	3,214			
		8	0.500	118			
		8	0.322	8,292			
(41) SR-41	Alkylate/ Naphtha/ Raffinate	12	0.250	800			
		8	0.186	520			
		8	0.186	21,946			

As detailed in 49 CFR 194.103(b), if an operator expects a line section in a response zone to cause significant and substantial harm, then the entire response zone must be treated as though it would cause significant and substantial harm. As such, additional pipelines must be included in the response plan even though these pipelines are less than 6-5/8 inches in outside nominal diameter and/or less than ten miles in length. Accordingly, there are nine additional pipelines within the inter-terminal pipeline system included in this plan. The nine pipelines are reflected in the Tables above which contains the same type of information about each line section.

Sec. 1.11.4 Pipeline Description

There are about thirty-five pipelines connecting Sweeny Refinery for supply and distribution of feedstock, products, Intermediates and utilities currently operated by CPChem (CPC).

- ~12 lines owned by CPChem (approx 200 miles)
- ~23 lines owned by COP (approx 300 miles)

There are approximately 500 miles of pipelines in 4 corridors covering 63 miles of Right-of-Way (ROW). Pipe sizes range from 4” to 30” in diameter. One Control Center operated by the Company is located at Sweeny Refinery. Materials moved in Company lines include, crude oil, refined products, natural gas, crude butadiene, cyclohexane, benzene, isopentane, toluene, raffinate, hydrogen, xylene, nitrogen, and boiler feed water.

- ~21 lines are Texas Railroad Commission regulated; 195 Liquids
- Lines are connected to active tanks
- ~4 lines are Texas Railroad Commission regulated; 192 Gas
- Several Receipt or Delivery points (Federal Trade Zone)

- Sweeny Refinery, Clemens Terminal, Freeport I Marine Terminal, Freeport II Marine Terminal (Operated by Teppco for Seaway), San Bernard Marine Terminal, and Jones Creek (Breakout) Terminal
- Multiple other pipeline connection points

Maintenance of Company owned pipelines within the Sweeny-San Bernard-Clemens-Freeport has transitioned from CPC to ConocoPhillips Pipe Line Company. The Sweeny Refinery Petrochemical Pipeline System Maintenance Group has maintenance responsibilities for field maintenance and pipeline integrity support for the following areas:

- Company owned pipelines within the Sweeny-San Bernard-Clemens-Freeport areas.
- The CPC Crude Butadiene pipeline CP-02

Pipeline operation monitoring and scheduling support does not change and will continue to be managed for Sweeny product, feedstock, intermediates, crude oil, fuel gas and water. All Terminal facilities will continue to be operated and maintained by Sweeny Refinery.

The basis on which the operator determined that the zone meets the criteria for “Significant and Substantial Harm”: Company has determined that the pipelines within this maintenance zone meet the “Significant and Substantial Harm” criteria based on the line size and length only.

Sec. 1.11.5 Worst Case Discharge from Pipeline Segment

Worst Case Discharge (WCD) from a pipeline in the inter-terminal pipeline system has been conservatively calculated to be (b) (7)(F) [redacted]l. The worst case discharge is assumed to occur under simultaneous worst case conditions associated with pipeline (24) SR-02, which is a twenty-four-inch diameter pipeline running from Freeport Terminal to the Sweeny Refinery Complex. The worst case discharge is based on the following methodology:

- Maximum release detection time is estimated to be one hour and is based on a release that results from a maximum pipeline rupture diameter such that it does not trigger an automatic shutdown of the pumps (i.e., insufficient pressure drop to trigger the valve) and results in the maximum release volume. The one hour is based on failure of electronic reconciliation of volume pumped versus volume received and detection occurs through hourly communications between the terminals to “square up” volumes (i.e., amount pumped versus amount received).
- Maximum shutdown response time is estimated to be thirty-nine minutes and is based on five minutes for communication time, twenty-four minutes for travel time (distance of eight miles with average travel speed of twenty mph) from the Freeport Terminal to the pipeline segment during adverse weather conditions (i.e., night time, high winds, and severe rain), and ten minutes to manually shut down the pumping system.
- Maximum flow rate of the line section is 8,000 bbls/hr and is based on the maximum pumping capacity of pipeline (24) SR-02.
- Largest drain volume after shutdown of the line section is (b) (7)(F) [redacted] is based on drainage of the largest segment in pipeline (24) SR-02, which is from the low point at the Jones Creek Valve to a high point near the State Prison Farm. Table 6-3 reflects the drain volumes of each portion of the line section. This maximum drain volume assumes that the pipeline rupture is on the bottom section of the pipe such that a maximum amount of oil is drained.

Largest Line Drainage Volume

(b) (7)(F)

Feet	Pipe Wt
2441	0.25
59	0.312
3,708	0.25
57	0.312
3,963	0.25
174	0.312
1,430	0.25
118	0.312
2,825	0.25
59	0.312
5,454	0.25
118	0.312
1,003	0.25
116	0.312
2,766	0.25
60	0.312
7,255	0.25
171	0.312
8,782	0.25
57	0.312
	Total

Using the above methodology yields the following:

(b) (7)(F)

Sec. 1.11.6 Certification of Significant and Substantial Harm Sweeny Refinery Petrochemical Pipeline System

Maintenance Group Name: Sweeny Refinery Petrochemical Pipeline System

Maintenance Group Address: Jamey Davis
1008 Ashley-Wilson; Sweeny, TX 77480
Sweeny, TX 77480

1. Is the pipeline greater than 6 and 5/8 inches in outside nominal diameter? ☒ Yes ☐ No
2. Is the pipeline greater than 10 miles in length? ☒ Yes ☐ No
3. Has the line section experienced a release greater than 1,000 barrels within the previous five years? ☐ Yes ☒ No
4. Has the line section experienced at least two reportable releases, as defined in Part 195.50, within the previous five years? ☐ Yes ☒ No
5. Does the line contain any electric resistance-welded pipe, manufactured prior to 1970, operates at a maximum operating pressure established under Part 195.406 that corresponds to a stress level greater than 50 % of the specified minimum yield strength of the pipe as defined in Rule 40 CFR 194? ☐ Yes ☒ No
6. Is the line section located within a five-mile radius of potentially affected public drinking water intakes and could reasonably be expected to reach public drinking water intakes? ☒ Yes ☐ No
7. Is the line section located within a one-mile radius of potentially affected environmentally sensitive areas, and could reasonably be expected to reach these areas. ☒ Yes ☐ No

Certification:

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.

Signature

Rob Yarbrough / Director, Emergency Preparedness, Response & Security — 05/2012

Printed Name/Title — **Date**

Sec. 1.11.7 Spill Response Equipment

The maintenance group does not have spill response equipment. Emergency response contractors, general contactors and their equipment will be utilized during a release, if necessary. Refer to Annex 2 for the Oil Spill Removal Organizations Section of this plan for contract agreements.

Sec. 1.11.8 Evacuation

Alarm systems for notifying all employees in case of an emergency are:

Action to be taken	Alarm System
Fire Alarm; follow Evacuation Route to exit the building to the assembly area	Short alarm series
Evacuation; follow Evacuation Route to exit the building to the assembly area	Long alarm series

Annex 2 – Table of Contents

2.0	Notifications Overview
2.1	Incident Reporting
2.2	Emergency Notification Responsibilities
2.3	Notifications
2.4	Contractors

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 Texas 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
							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 Texas 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

ALVIN 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 Brad Mitchell, Area Supervisor	(281) 824-3052	(b) (6)	(281) 831-3489	1 hr
Office: 7110 County Rd 170, Alvin, TX 77511		(b) (6)		
Alt. QI/IC Ronnie Gonzalez, Maintenance Leadman	(281) 824-3053	(b) (6)	(281) 831-9795	1 hr
Office: 7110 County Rd 170, Alvin, TX 77511		**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
Cantrel, Kyle - Technician	(979) 647-4491	(b) (6)	(281) 831-9822	1 hr
Cauthen, Ron L. - Technician	(281) 576-2400		(281) 831-9799	1 hr
Denison, Darrell - Maintenance Coordinator	(281) 824-3063		(281) 831-9823	1 hr
Lesco, Jeff - Technician	(281) 824-3057		(281) 831-9807	1 hr
Salinas, Joe - Maintenance Leadman	(281) 824-3058		(281) 831-9844	1 hr
Schulte, Arthur - Senior Pipeliner	(281) 824-3059		(281) 831-9796	1 hr
Turner, Kevin K. - Senior Pipeliner	(281) 824-3061		(281) 831-9821	1 hr

Emergency Response Contractors

Name	Phone	Alt. Phone	Resp. Time
Contract			
MSRC & STAR Contractors	(800) 645-7745	(800) 259-6772	1 hr
Other			
SWS Environmental - Houston, TX	(281) 867-9131	(800) 336-0909	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
National Weather Service - NOAA	www.weather.gov	(206) 526-6317
U.S. Coast Guard Marine Safety Office, Alvin Area	(314) 539-3091 (24-hr)	
U.S. Fish & Wildlife Service (Alvin, TX)	(281) 286-8282	(281) 480-4718
State		
Railroad Commission of TX, Dist. 03	(713) 869-5001 (24-hr)	
State Police	(281) 990-0599	
TCEQ Region 12 (Houston) Emergency Coordinator	(713) 767-3500	M-F 8am to 5pm
TX General Land Office	(800) 832-8224	
TX Park & Wildlife, Region 6	(806) 761-4930	
TX Spill-Reporting Hotline & SERC	(800) 832-8224	
TX State Fire Marshal	(800) 578-4677	(512) 305-7900
Wildlife Rehab & Education - Pasadena	(281) 332-8319	
Local		
Fire Dept.: Alvin, TX	911	(281) 331-7688
Ambulance	911	
Hospital: Angelton Danbury	(979) 849-7721	
Police Dept.; Alvin, TX	911	(281) 388-4370
Sheriff, Brazoria County, TX	911	(979) 849-2441
Sheriff, Ft. Bend County, TX	911	(281) 341-4665
Hospital: Alvin Community	(281) 388-3445	
Hospital: Angelton Danbury	(979) 849-7721	
Hospital: Polly Ryan Memorial	(281) 342-2811	
Hospital: Sweeny County	(979) 548-3111	
Media: KODA FM 99.1	(713) 212-8000	
Media: KPRC TV 2	(713) 778-4910	
CAER: Pasadena, TX	(281) 476-2237	
CAER: Sweeny, TX	(979) 491-2237	
Railroad: BN/SF (Houston,TX)	(713) 921-3516	
Railroad: Port Terminal	(713) 393-6700	(713) 393-6701
Railroad: Union Pacific (Houston,TX)	(281) 471-9426	(281) 986-4777

AUSTIN (DEL VALLE) 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 Todd Masterson, Area Supervisor	(636) 946-9648	(b) (6)	(314) 800-4424	1 hr
Office: 7700 El Roy Rd, Del Valle, TX 78617		(b) (6)		
Alt. QI/IC Brad Mitchell, Area Supervisor	(281) 824-3052	(b) (6)	(281) 831-3489	4 hrs
Office: 7110 County Rd 170, Alvin, TX 77511		(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
Guerra, Pat - Maintenance Leadman	(512) 651-3081	(b) (6)	(512) 970-2128	1 hr
Johnson, Jerry W. - Technician	(512) 651-3085		(512) 633-2356	1 hr
Fowler, Joe - Technician	(512) 651-3089		(512) 739-9572	1 hr
Collins, Martha - Technician	(512) 651-3084		(512) 439-9080	1 hr
Bevis, Brian K. - Senior Pipeliner	(512) 247-2402		(512) 289-3501	1 hr
Havens, Robert N. - Senior Pipeliner	(512) 247-2404		(512) 289-2230	1 hr

Emergency Response Contractors

Name	Phone	Alt. Phone	Resp. Time
Contract			
TAS Environmental Services	(888) 654-0111		2 hrs
Other			
SWS Environmental	(254) 442-1553	254-442-1533	4 hrs

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
National Weather Service - NOAA	www.weather.gov	(206) 526-6317
U.S. Fish & Wildlife Service (Pasadena, TX)	(281) 286-8282	(281) 480-4718
State		
Highway Patrol	(512) 444-4178	
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 Division of Emergency Manag	(512) 424-2138	
TX General Land Office	(800) 832-8224	
TX Parks & Wildlife	(412) 389-4848	(512) 505-9807
TX Spill-Reporting Hotline & SERC	(800) 832-8224	
Wildlife Rehab & Education - Pasadena	(281) 332-8319	
Local		
Fire: SE Travis County	911	(512) 243-3353
Fire: Travis County Marshall	(512) 854-4621	
Ambulance: Heart Beat	911	(512) 247-2433
Police Dept.: Austin, TX	911	(512) 328-1900
Sheriff: Travis County	911	(512) 854-9770
Hospital: St. David's S. Austi	(512) 816-7160	
Media: 93.3 KGSR Radio Austin	(512) 832-4000	
Media: KVUE ABC TV	(512) 459-9442	

BORGER CRUDE PIPELINE STATION

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 Derrell Pierce, Maintenance Coordinator	(806) 275-2553	(b) (6) [redacted]	(806) 663-0950	1 hr
Office: Spur 119 West & Crude Terminal Road, Borger, TX 79007		**Home:** (b) (6) [redacted]		
Alt. QI/IC Cinch Yake, Operations Supervisor	(806) 275-2532	(b) (6) [redacted]	(806) 595-0474	1 hr
Office: 100 Rocky Rd (1-Mi N of Borger Refinery), Borger, TX 79008		**Home:**		

Incident Support Team

Position	Name	Office Phone	Home Phone	Mobile Phone
EPR&S Contact	Rob Yarbrough	(281) 293-3891	(b) (6) [redacted]	(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	Rodger Lewis	(806) 318-9259		(806) 283-1277
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	Don Schomp	(806) 275-5366		(806) 898-0074

Transportation Tier 1 Responders

Name	Office Phone	Home Phone	Mobile Number	Resp. Time
Day, Rodney - Supervisor	(806) 275-2569	(b) (6) [redacted]		1 hr
Salinas, Sammy S. - Main Line Engineer	(806) 275-2557		(806) 898-8418	1 hr
Taylor, Robert - Mechanic				1 hr
Ferrell, Randy J. - Technician	(806) 275-2563		(806) 886-3267	1 hr
Brooks, Jr., Kenny E. - Main Line Engineer	(806) 275-2557		(806) 898-8417	1 hr
Warminski, Alan A. - Main Line Engineer	(806) 275-2557		(806) 898-8416	1 hr

Emergency Response Contractors

Name	Phone	Alt. Phone	Resp. Time
Contract			
TAS Environmental Services	(888) 654-0111		4 hrs
Other			
SWS Environmental	(254) 442-1553	254-442-1533	4 hrs

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
National Weather Service - NOAA	www.weather.gov	(206) 526-6317
U.S. Coast Guard Marine Safety Office	(314) 269-2463	
U.S. Fish & Wildlife Service (USFWS)	(206)764-3463	
State		
General Land Office	(800) 832-8224	
Highway Patrol: Borger, TX	(806) 273-2448	
Railroad Commission of TX, Dist. 10	(806) 665-1653	
TCEQ Region 12 (Houston) Emergency Coordinator	(713) 767-3500	M-F 8am to 5pm
TX Commission on Environmental Quality (TCEQ)	(512) 463-7727	(512) 239-1000
TX Parks & Wildlife	(412) 389-4848	(512) 505-9807
Wildlife Rehab & Education - Pasadena	(281) 332-8319	
Local		
Fire: Borger, TX	911	(806) 273-0948
Fire: COP Borger Refinery	911	(806) 275-1414
Ambulance: Borger Refinery	911	(806) 275-1414
COP Borger Refinery EOC	(806) 2730999	
COP Borger Refinery ER	(806) 275-1212	
Police: Borger, TX	911	(806) 273-0930
Sheriff: Borger, TX	911	(806) 274-6343
Sheriff: COP Borger Refinery	911	(806) 275-2550
Hospital: Golden Plains	(806) 273-1100	
Media: KQTY 106.7 FM/1490 AM R	(806) 273-5889	
Neighbors		
Panhandle/Anadarko Emergency	(866) 213-3189	

BORGER ROCKY PRODUCT PUMP STATION

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 Cinch Yake, Operations Supervisor	(806) 275-2532	(b) (6) [redacted]	(806) 595-0474	1 hr
Office: 100 Rocky Rd (1-Mi N of Borger Refinery), Borger, TX 7900		**Home:**		
Alt. QI/IC Kyle Kindy, Operations Supervisor	(806) 275-2532	((b) (6) [redacted]	(806) 595-0148	1 hr
Office: 100 Rocky Rd (1-Mi N of Borger Refinery), Borger, TX 7900		(b) (6) [redacted]		

Incident Support Team

Position	Name	Office Phone	Home Phone	Mobile Phone
EPR&S Contact	Rob Yarbrough	(281) 293-3891	(b) (6) [redacted]	(281) 627-3177
Environmental Contact	Jim Phelan	(281) 293-3715	[redacted]	(580) 761-3233
DOT Contact	Todd Tullio	(832) 379-6255	[redacted]	(405) 371-1477
Health & Safety Contact	Brad A. Hendrix	(918) 661-0140	[redacted]	(918) 977-0137
Manager, Division	Rodger Lewis	(806) 318-9259	[redacted]	(806) 283-1277
Manager, HSE	Travis J. Wilke	(281) 293-2515	[redacted]	(580) 401-0047
Manager, Engineering & Projects	Dave J Barney	(281) 293-4385	[redacted]	(281) 467-4732
Manager, Logistics	Doug B. Sauer	(918) 661-0271	[redacted]	(832) 274-8478

Transportation Tier 1 Responders

Name	Office Phone	Home Phone	Mobile Number	Resp. Time
Cox, Mike R. - Operator	(806) 275-2561	(b) (6) [redacted]	(806) 440-4936	1 hr
Jarvis, Steve G. - Yardman	(806) 275-2561	[redacted]		1 hr
Bryan, Rusty D. -		[redacted]		1 hr
Kaslon, Jeremiah R. - Yardman	(806) 275-2561	[redacted]	(806) 282-3536	1 hr
Rosser, Justin D. -		[redacted]		<Unknown>
Whatley, J W - Yardman	(806) 275-2561	[redacted]	(806) 595-0148	1 hr
Rodriguez, Chris N. - Yardman	(806) 275-2561	[redacted]	(___) ___-____	1 hr

Emergency Response Contractors

Name	Phone	Alt. Phone	Resp. Time
Contract			
TAS Environmental Services	(888) 654-0111		4 hrs
Other			
SWS Environmental	(254) 442-1553	254-442-1533	4 hrs

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
National Weather Service - NOAA	www.weather.gov	(206) 526-6317
U.S. Coast Guard Marine Safety Office	(314) 269-2463	
State		
General Land Office	(800) 832-8224	
Highway Patrol; Borger, TX	(806) 273-2448	
Railroad Commission of TX, Dist. 10	(806) 665-1653	
TCEQ Region 12 (Houston) Emergency Coordinator	(713) 767-3500	M-F 8am to 5pm
TX Commission on Environmental Quality (TCEQ)	(512) 463-7727	(512) 239-1000
TX Parks & Wildlife	(412) 389-4848	(512) 505-9807
Wildlife Rehab & Education - Pasadena	(281) 332-8319	
Local		
Fire: Borger	911	(806) 273-0948
Fire: COP Borger Refinery	911	(806) 275-1414
Ambulance: Borger Refinery	(806) 275-1414	
COP Borger Refinery EOC	(806) 273-0999	
COP Borger Refinery ER	(806) 275-1212	
Police: Borger, TX	911	(806) 273-0930
Sheriff: Borger, TX	911	(806) 274-6343
Sheriff: COP Borger Refinery	911	(806) 275-2550
Hospital: Golden Plains (Borge	(806) 273-1100	
Media: KQTY 106.7 FM/1490 AM R	(806) 273-5889	
Neighbors		
Panhandle/Anadarko Emergency Number	(866) 213-3189	

BORGER PIPELINE MAINTENANCE

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 Don Schomp, Area Supervisor	(806) 275-5366	(b) (6) [redacted]	(806) 898-0074	1 hr
Office: 3 Mi. W. of Borger on Hwy 136, Borger, TX 79007		**Home:** (b) (6) [redacted]		
Alt. QI/IC Cinch Yake, Operations Supervisor	(806) 275-2532	(b) (6) [redacted]	(806) 595-0474	1 hr
Office: 100 Rocky Rd (1-Mi N of Borger Refinery), Borger, TX 79008		**Home:**		

Incident Support Team

Position	Name	Office Phone	Home Phone	Mobile Phone
EPR&S Contact	Rob Yarbrough	(281) 293-3891	(b) (6) [redacted]	(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	Rodger Lewis	(806) 318-9259		(806) 283-1277
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
Ball, Dylan B. - Senior Pipeliner	(806) 275-5395	(b) (6) [redacted]	(806) 898-8416	1 hr
Sims, Shawn - Gang Leadman	(806) 275-5397		(806) 898-1043	1 hr
Trout, J.B. (Jim Bob) - Gang Leadman	(806) 275-5389		(806) 898-0030	1 hr
Reining, Keith L. - Gang Leadman	(806) 275-5390		(806) 886-3777	1 hr
Stover, Nick A. - Truck Driver	(806) 886-2063		(806) 231-8295	1 hr
Asencio, Raymond - Senior Pipeliner	(806) 275-5369		(806) 898-8417	1 hr
Bechtel, Josh A. - Senior Pipeliner	(806) 275-5395		(806) 231-2105	1 hr

Emergency Response Contractors

Name	Phone	Alt. Phone	Resp. Time
Contract			
TAS Environmental Services	(888) 654-0111		2 hrs
Other			
Pate Trucking Co. Inc. (Odessa, TX)	(800) 657-9353	Response Service	1 hr
Paul Musslewhite Trucking Co, LTD (Odess	(806) 894-3151	Response Service	1 hr
SWS Environmental	(254) 442-1553	254-442-1533	4 hrs

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
National Weather Service - NOAA	www.weather.gov	(206) 526-6317
U.S. Coast Guard Marine Safety Office	(314) 269-2463	
State		
Highway Patrol	(806) 273-2448	
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 Park & Wildlife, Region 6	(806) 761-4930	
TX State Fire Marshal	(800) 578-4677	(512) 305-7900
Local		
Fire: Borger Refinery	1007/ (806) 275-1414	
Fire: Borger, TX	911	(806) 273-0948
Fire: Tanglewwod, TX	(806) 206-4684	
Ambulance: Borger Refinery	2550/ (806) 275-1414	
Ambulance: Borger, TX	911	
Emergency Ops Mgr-Tanglewood	(806) 282-4278	
Police: Borger, TX	911	(806) 273-0930
Police: Tanglewood, TX	911	(806) 622-8711
Sheriff: Borger, TX	(806) 273-6343	
Hospital: Golden Plains-Borger	(806) 467-5700	
Media: KQTY AM/FM Radio	(806) 273-7533	
Hutchinson County, TX LEPC	(806) 273-0948	
LEPC: Beaver County, OK	(580) 651-9166	
LEPC: Carson County, TX	(806) 537-3511	
LEPC: Gray County, TX	(806) 669-8022	
LEPC: Hansford County, TX	(806) 659-4140	
LEPC: Moore County, TX	(806) 935-4145	Fax: 806-935-0730
LEPC: Ochiltree County, TX	(806) 435-8000	
LEPC: Potter/Randall, TX	(806) 378-9377	
LEPC: Roberts County, TX	(806) 868-3121	
LEPC: Sherman County, TX	(806) 366-5551	Fax: 806-366-2168
LEPC: Swisher County, TX	(806) 995-3326	
LEPC: Wheeler County, TX	(806) 826-5537	

ODESSA AREA - NORTH

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 Bill W. Neal, Area Supervisor	(432) 827-5042	(b) (6) [redacted]	(432) 556-9035	1 hr
Office: 3000 Hwy. 866, Goldsmith, TX 79741		(b) (6) [redacted]		
Alt. QI/IC Tom N. Haechten, Operations Supervisor, Goldsmith	(432) 827-5062	(b) (6) [redacted]	(432) 438-5894	1 hr
Office: 3000 Hwy. 866, Goldsmith, TX 79741		(b) (6) [redacted]		

Incident Support Team

Position	Name	Office Phone	Home Phone	Mobile Phone
EPR&S Contact	Rob Yarbrough	(281) 293-3891	(b) (6) [redacted]	(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	Rodger Lewis	(806) 318-9259		(806) 283-1277
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
Arcides, Jr., Adan H. - Scraper Runner, Goldsmith	(432) 827-5046	(b) (6) [redacted]	(432) 566-9145	1 hr
Marin, Michael - Maintenance Leadman, Goldsmit	(432) 827-3934		(432) 556-9037	1 hr
Baker, Mark A. - Main Line Engineer, Goldsmith	(432) 827-5064		(432) 631-0693	1 hr
Oglesby, Shaun M. - Mechanic, Odessa	(432) 368-6512		(432) 556-8260	1 hr
Thompson, Curtis J. - Mechanic, Odessa	(432) 368-6511		(432) 556-9011	1 hr
Guerrero, Chris P. - Truck Driver, Goldsmith	(432) 827-3964		(432) 556-9036	1 hr
Gonzales, Larry A. - Technician, Odessa	(432) 368-6524		(432) 556-9024	1 hr
Cooper, Scott - Main Line Engineer, Goldsmith	(432) 827-5064		(432) 661-0693	1 hr
Fowler, Ray L. - Gauger, Goldsmith	(432) 827-5095		(432) 556-2620	1 hr
Weaver, David G. - Gauger, Andrews	(432) 557-5506		(432) 557-5506	1 hr

Emergency Response Contractors

Name	Phone	Alt. Phone	Resp. Time
Contract			
TAS Environmental Services	(888) 654-0111		4 hrs
Other			
Pate Trucking Co. Inc. (Odessa, TX)	(800) 657-9353	Response Service	1 hr
Paul Musslewhite Trucking Co, LTD (Odess	(806) 894-3151	Response Service	1 hr
SWS Environmental	(254) 442-1553	254-442-1533	4 hrs

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
National Weather Service - NOAA	www.weather.gov	(206) 526-6317
U.S. Coast Guard Marine Safety Office	(314) 269-2463	
U.S. Fish & Wildlife Service (Pasadena, TX)	(281) 286-8282	(281) 480-4718
State		
Highway Patrol	(432) 332-6100	
New Mexico Environment Dept. Spill Hotline	(505) 827-9329; 24-hr.	
Railroad Commission of TX, Dist. 08 & 8A	(432) 684-5581	
Railroad Commission of TX, Dist. 10 (Pampa MP 180.9-210)	(806) 665-1653	
Railroad Commission of TX, Dist. 7C (Benedum)	(325) 657-7450	
TCEQ Region 1 (Amarillo) Emergency Coordinator	(806) 353-9251	M-F 8am to 5pm
TCEQ Region 2 (Lubbock) Emergency Coordinator	(806) 796-7092	M-F 8am to 5pm
TCEQ Region 7 (Midland) Emergency Coordinator	(432) 570-1359	M-F 8an to 5pm
TCEQ Region 8 (San Angelo) Emergency Coordinator	(325) 655-9479	M-F 8am to 5pm
TX Commission on Environmental Quality (TCEQ)	(512) 463-7727	(512) 239-1000
TX Dept. of Public Safety	(432) 758-9871	
TX Emergency Services & Disaster Agency (Odessa, TX)	(512) 458-7419	
TX Parks & Wildlife Regions 1 & 2 (Ector & Andrews Counties	(800) 792-1112	
TX Spill-Reporting Hotline & SERC	(800) 832-8224	
Local		
Fire Dept.: Goldsmith, TX	911	(432) 827-3445
Fire Dept.: Odessa, TX	911	(432) 335-4650
Ambulance: Goldsmith	911	(432) 335-3318
Ambulance: Permian Basin Inc.	(432) 550-9410	
Police Dept, Odessa, TX	911	(432) 333-3641
Hospital:Odessa Medical Center	(432) 640-4000	
Media: Kent AM/FM Radio	(432) 580-5352	
Media: KMID ABC-2 TV	(432) 563-2222	
Media: KPEJ Fox-24 TV	(432) 580-0024	

ODESSA AREA - SOUTH

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 Kirby M. Shipp, Area Supervisor	(432) 368-6540	(b) (6)	(432) 661-3438	1 hr
Office: 2200 West 34th Street, Odessa, TX 79764		(b) (6)		
Alt. QI/IC Steve R. Lopez, Operations Supervisor	(432) 368-6585	(b) (6)	(432) 272-9647	1 hr
Office: 2200 West 34th Street, Odessa, TX 79764		**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	Rodger Lewis	(806) 318-9259		(806) 283-1277
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	Melinda K. Templeton	(432) 693-2106		(432) 556-9026

Transportation Tier 1 Responders

Name	Office Phone	Home Phone	Mobile Number	Resp. Time
Maddox, Jimmy W. - Pipeliner	(432) 368-6541	(b) (6)	(432) 238-4391	1 hr
Barrandey, Miley A. - Senior Pipeliner	(432) 827-5064		(432) 556-6249	1 hr
Kennedy, Rick D. - Senior Pipeliner	(432) 368-6532		(432) 557-3273	1 hr
Neal, Glenn - Gang Leadman	(432) 368-6542		(432) 556-9042	1 hr
Brown, Brandon M. - Main Line Engineer	(432) 693-2106		(432) 556-9028	1 hr
Palmer, Ron W. - Gauger	(806) 592-2533		(432) 556-9041	1 hr
Moore, Bryan D. - Pipeliner	(432) 368-9032		(432) 530-3504	1 hr

Emergency Response Contractors

Name	Phone	Alt. Phone	Resp. Time
Contract			
TAS Environmental Services	(888) 654-0111		4 hrs
Other			
Elkhorn Construction	(303) 349-9431		2 hrs
Pate Trucking Co. Inc. (Odessa, TX)	(800) 657-9353	Response Service	1 hr
Paul Musslewhite Trucking Co, LTD (Odess	(806) 894-3151	Response Service	1 hr
SWS Environmental	(254) 442-1553	254-442-1533	4 hrs

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
National Weather Service - NOAA	www.weather.gov	(206) 526-6317
U.S. Coast Guard Marine Safety Office	(314) 269-2463	
U.S. Fish & Wildlife Service (Pasadena, TX)	(281) 286-8282	(281) 480-4718
State		
Dept. of Public Safety, Odessa TX	(432) 758-9871	
Highway Patrol, Texas	(432) 332-6100	
New Mexico Environment Dept. Spill Hotline	(505) 827-9329; 24-hr.	
Railroad Commission of TX, Dist. 08 & 8A	(432) 684-5581	
Railroad Commission of TX, Dist. 10 (Pampa MP 180.9-210)	(806) 665-1653	
Railroad Commission of TX, Dist. 7C (Benedum)	(325) 657-7450	
TCEQ Region 1 (Amarillo) Emergency Coordinator	(806) 353-9251	M-F 8am to 5pm
TCEQ Region 2 (Lubbock) Emergency Coordinator	(806) 796-7092	M-F 8am to 5pm
TCEQ Region 7 (Midland) Emergency Coordinator	(432) 570-1359	M-F 8an to 5pm
TCEQ Region 8 (San Angelo) Emergency Coordinator	(325) 655-9479	M-F 8am to 5pm
TX Commission on Environmental Quality (TCEQ)	(512) 463-7727	(512) 239-1000
TX Emergency Services & Disaster Agency (Odessa, TX)	(512) 458-7419	
TX Parks & Wildlife Regions 1 & 2 (Ector & Andrews Counties	(800) 792-1112	
TX Spill-Reporting Hotline & SERC	(800) 832-8224	
Local		
Fire Dept.: Odessa, TX	911	(432) 335-4650
Ambulance: Permian Basin Inc.	911	(432) 550-9410
Police Dept.: Odessa, TX	911	(432) 333-3641
Hospital: Odessa Medical Cente	(432) 640-4000	
Media: Kent AM/FM Radio	(432) 580-5352	
Media: KMID ABC-2 TV	(432) 563-2222	
Media: KPEJ Fox-24 TV	(432) 580-0024	

BENEDUM PUMP STATION AND NGL CAVERN

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 Kirby M. Shipp, Area Supervisor	(432) 368-6540	(b) (6)	(432) 661-3438	2 hrs
Office: 2200 West 34th Street, Odessa, TX 79764		**Home:** (b) (6)		
Alt. QI/IC Melinda K. Templeton, Operations Team Leader, Benedum	(432) 693-2106	(b) (6)	(432) 556-9026	1 hr
Office: 10301 FM 1555, Midkiff, TX 79755		**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		(281) 685-3646
Health & Safety Contact	Brad A. Hendrix	(918) 661-0140		(918) 977-0137
Manager, Division	Rodger Lewis	(806) 318-9259		(806) 283-1277
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	Steve R. Lopez	(432) 368-6585		(432) 272-9647

Transportation Tier 1 Responders

Name	Office Phone	Home Phone	Mobile Number	Resp. Time
Maddox, Jimmy W. - Pipeliner	(432) 368-6541	(b) (6)	(432) 238-4391	1 hr
Barrandey, Miley A. - Senior Pipeliner	(432) 827-5064		(432) 556-6249	1 hr
Kennedy, Rick D. - Senior Pipeliner	(432) 368-6532		(432) 557-3273	1 hr
Neal, Glenn - Gang Leadman	(432) 368-6542		(432) 556-9042	1 hr
Brown, Brandon M. - Main Line Engineer	(432) 693-2106		(432) 556-9028	1 hr
Moore, Bryan D. - Pipeliner	(432) 368-9032		(432) 530-3504	1 hr

Emergency Response Contractors

Name	Phone	Alt. Phone	Resp. Time
Contract			
TAS Environmental Services	(888) 654-0111		4 hrs
Other			
Elkhorn Construction	(303) 349-9431		2 hrs
Pate Trucking Co. Inc. (Odessa, TX)	(800) 657-9353	Response Service	1 hr
Paul Musslewhite Trucking Co, LTD (Odess	(806) 894-3151	Response Service	1 hr
SWS Environmental	(254) 442-1553	254-442-1533	4 hrs

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
National Weather Service - NOAA	www.weather.gov	(206) 526-6317
U.S. Coast Guard Marine Safety Office	(314) 269-2463	
U.S. Fish & Wildlife Service (Pasadena, TX)	(281) 286-8282	(281) 480-4718
State		
Dept. of Public Safety, Odessa TX	(432) 758-9871	
Highway Patrol, Odessa, TX	(432) 332-6100	
Railroad Commission of TX, Dist. 08 & 8A	(432) 684-5581	
Railroad Commission of TX, Dist. 10 (Pampa MP 180.9-210)	(806) 665-1653	
Railroad Commission of TX, Dist. 7C (Benedum)	(325) 657-7450	
State Police, New Mexico	(575) 622-7200	
TCEQ Region 1 (Amarillo) Emergency Coordinator	(806) 353-9251	M-F 8am to 5pm
TCEQ Region 2 (Lubbock) Emergency Coordinator	(806) 796-7092	M-F 8am to 5pm
TCEQ Region 7 (Midland) Emergency Coordinator	(432) 570-1359	M-F 8an to 5pm
TCEQ Region 8 (San Angelo) Emergency Coordinator	(325) 655-9479	M-F 8am to 5pm
TX Commission on Environmental Quality (TCEQ)	(512) 463-7727	(512) 239-1000
TX Emergency Services & Disaster Agency (Odessa, TX)	(512) 458-7419	
TX Parks & Wildlife Regions 1 & 2 (Ector & Andrews Counties	(800) 792-1112	
TX Spill-Reporting Hotline & SERC	(800) 832-8224	
Local		
Fire Dept.: Martin County; Sta	911	(432) 756-3333
Fire Dept.: Mc Camey, TX	911	(432) 652-8232
Ambulance: Permian Basin Inc.	911	(432) 550-9410
Sheriff: Upton County	911	(432) 693-2422
Hospital: Rankin County, TX	(432) 693-2443	
Hospital:Odessa Medical Center	(432) 640-4000	
Media: KMID ABC-2 TV	(432) 563-2222	
Media: KPEJ Fox-24 TV	(432) 580-0024	
Media; Kent AM/FM Radio	(432) 580-5352	

LEVELLAND, TX (ODESSA 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 Julian Ybarra, Area Supervisor	(806) 897-0155	(b) (6) [redacted]	(806) 893-2700	1 hr
Office: Highway 125 West, Levelland, TX 79336		(b) (6) [redacted]		
Alt. QI/IC Greg DePaul, Area Supervisor	(575) 391-8262	(___) ___-____	(575) 390-6863	1 hr
Office: Gaines Station - 826 East Bender, Hobbs, NM 88240		**Home:**		

Incident Support Team

Position	Name	Office Phone	Home Phone	Mobile Phone
EPR&S Contact	Rob Yarbrough	(281) 293-3891	(b) (6) [redacted]	(281) 627-3177
Environmental Contact	Jim Phelan	(281) 293-3715		(580) 761-3233
DOT Contact	Todd Tullio	(832) 379-6255		(281) 685-3646
Health & Safety Contact	Brad A. Hendrix	(918) 661-0140		(918) 977-0137
Manager, Division	Rodger Lewis	(806) 318-9259		(806) 283-1277
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
Phillips, Don W. - Main Line Engineer	(806) 897-0171	(b) (6) [redacted]	(806) 893-1227	1 hr
Palmer, Ron W. - Gauger	(806) 592-2533		(432) 556-9041	1 hr
Hernandez, Roy - Main Line Engineer	(806) 897-0179		(806) 893-4162	1 hr
Nowell, Zach L. - Pipeliner	(806) 897-0501		(806) 893-9299	1 hr
Dyck, Abraham B. - Technician	(806) 592-2533		(806) 215-0555	1 hr
Rohler, Richard C. - Technician	(806) 897-0184		(806) 893-4397	1 hr

Emergency Response Contractors

Name	Phone	Alt. Phone	Resp. Time
Contract			
TAS Environmental Services	(888) 654-0111		4 hrs
Other			
Pate Trucking Co. Inc. (Odessa, TX)	(800) 657-9353	Response Service	1 hr
Paul Musslewhite Trucking Co, LTD (Odess	(806) 894-3151	Response Service	1 hr
SWS Environmental	(254) 442-1553	254-442-1533	4 hrs

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
National Weather Service - NOAA	www.weather.gov	(206) 526-6317
U.S. Coast Guard Marine Safety Office	(314) 269-2463	
U.S. Fish & Wildlife Service (Pasadena, TX)	(281) 286-8282	(281) 480-4718
State		
Dept. of Public Safety, Odessa TX	(432) 758-9871	
Highway Patrol: Midland, TX	(432) 498-2100	
Highway Patrol: Odessa, TX	(432) 332-6100	
Railroad Commission of TX, Dist. 08 & 8A	(432) 684-5581	
Railroad Commission of TX, Dist. 10 (Pampa MP 180.9-210)	(806) 665-1653	
Railroad Commission of TX, Dist. 7C (Benedum)	(325) 657-7450	
State Police, New Mexico	(575) 622-7200	
TCEQ Region 1 (Amarillo) Emergency Coordinator	(806) 353-9251	M-F 8am to 5pm
TCEQ Region 2 (Lubbock) Emergency Coordinator	(806) 796-7092	M-F 8am to 5pm
TCEQ Region 7 (Midland) Emergency Coordinator	(432) 570-1359	M-F 8an to 5pm
TCEQ Region 8 (San Angelo) Emergency Coordinator	(325) 655-9479	M-F 8am to 5pm
TX Commission on Environmental Quality (TCEQ)	(512) 463-7727	(512) 239-1000
TX Emergency Services & Disaster Agency (Odessa, TX)	(512) 458-7419	
TX Parks & Wildlife Regions 1 & 2 (Ector & Andrews Counties	(800) 792-1112	
TX Spill-Reporting Hotline & SERC	(800) 832-8224	
Local		
Fire Dept.: Levelland, TX	911	(806) 894-3154
Ambulance: Levelland EMS	911	(806) 894-8855
Police Dept.: Levelland, TX	911	(806) 894-6164
Sheriff: Hockley County, TX	911	(806) 894-3126
Hospital: Leveland Covenant	(806) 894-4963	
Media: CBS TV-7	(432) 580-5672	
Media: KLVT AM-1230 Radio	(806) 894-1055	
Media: Radio KCUB FM 98.5 & 10	(254) 968-4776	

GAINES/HOBBS, NM (ODESSA 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 Greg DePaul, Area Supervisor	(575) 391-8262	(___) ___-____	(575) 390-6863	1 hr
Office: Gaines Station - 826 East Bender, Hobbs, NM 88240		**Home:**		
Alt. QI/IC Julian Ybarra, Area Supervisor	(806) 897-0155	(b) (6) [redacted]	(806) 893-2700	1 hr
Office: Highway 125 West, Levelland, TX 79336		(b) (6) [redacted]		

Incident Support Team

Position	Name	Office Phone	Home Phone	Mobile Phone
EPR&S Contact	Rob Yarbrough	(281) 293-3891	(b) (6) [redacted]	(281) 627-3177
Environmental Contact	Jim Phelan	(281) 293-3715		(580) 761-3233
DOT Contact	Todd Tullio	(832) 379-6255		(281) 685-3646
Health & Safety Contact	Brad A. Hendrix	(918) 661-0140		(918) 977-0137
Manager, Division	Rodger Lewis	(806) 318-9259		(806) 283-1277
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
Aranda, Mark - Gauger	(575) 391-8262	(b) (6) [redacted]	(575) 370-2158	1 hr
Garcia, Jr., Billy G. - Gauger	(575) 391-8262		(432) 556-9046	1 hr
Buckle, John F. - Mechanical Craftsperson	(806) 592-2533		(432) 556-9012	1 hr
Ocheskey, Mike M. - Mechanical Craftsperson	(806) 592-2533		(432) 556-9034	1 hr
Montoya, Javier P. - Mechanical Craftsperson	(575) 391-8262		(432) 556-4887	1 hr
Lopez, John C. - Senior Pipeliner	(575) 391-8262		(432) 614-7025	1 hr
Gallegos II, Robert G. - Technician	(806) 592-9413		(432) 556-2211	1 hr
Wilkey, Cecil G. - Technician	(806) 592-9413		(806) 215-1198	1 hr

Emergency Response Contractors

Name	Phone	Alt. Phone	Resp. Time
Contract			
TAS Environmental Services	(888) 654-0111		4 hrs
Other			
Pate Trucking Co. Inc. (Odessa, TX)	(800) 657-9353	Response Service	1 hr
Paul Musslewhite Trucking Co, LTD (Odess	(806) 894-3151	Response Service	1 hr
SWS Environmental	(254) 442-1553	254-442-1533	4 hrs

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
National Weather Service - NOAA	www.weather.gov	(206) 526-6317
U.S. Coast Guard Marine Safety Office	(314) 269-2463	
U.S. Fish & Wildlife Service (Pasadena, TX)	(281) 286-8282	(281) 480-4718
State		
Dept. of Public Safety, Odessa TX	(432) 758-9871	
Highway Patrol: Texas	(432) 332-6100	
Railroad Commission of TX, Dist. 08 & 8A	(432) 684-5581	
Railroad Commission of TX, Dist. 10 (Pampa MP 180.9-210)	(806) 665-1653	
Railroad Commission of TX, Dist. 7C (Benedum)	(325) 657-7450	
State Police: Hobbs, NM	(575) 392-558	
TCEQ Region 1 (Amarillo) Emergency Coordinator	(806) 353-9251	M-F 8am to 5pm
TCEQ Region 2 (Lubbock) Emergency Coordinator	(806) 796-7092	M-F 8am to 5pm
TCEQ Region 7 (Midland) Emergency Coordinator	(432) 570-1359	M-F 8an to 5pm
TCEQ Region 8 (San Angelo) Emergency Coordinator	(325) 655-9479	M-F 8am to 5pm
TX Commission on Environmental Quality (TCEQ)	(512) 463-7727	(512) 239-1000
TX Emergency Services & Disaster Agency (Odessa, TX)	(512) 458-7419	
TX Parks & Wildlife Regions 1 & 2 (Ector & Andrews Counties	(800) 792-1112	
TX Spill-Reporting Hotline & SERC	(800) 832-8224	
Local		
Fire Dept: Hobbs, NM	911	(575) 397-9308
Ambulance: Hobbs, NM	911	(575) 397-9272
Police Dept: Hobbs, NM	911	(575) 397-9265
Hospital: Lea Regional Medical	(575) 492-5000	
Media: KPEJ Fox-24 TV	(432) 580-0024	
Media: KPER 95.7 Radio	(575) 393-1551	
Media: KYKK FM-100.9 Radio	(575) 393-1551	

WICHITA FALLS 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 Derick Gipson, Area Supervisor	(940) 720-4325	(b) (6) [redacted]	(940) 631-0272	1 hr
Office: 1214 N. MLK Jr. Blvd, Wichita Falls, TX 76306		**Home:**		
Alt. QI/IC Allen R. Brown, Engineer	(940) 720-4327	(b) (6) [redacted]	(580) 304-4243	1 hr
Office: 1214 N. MLK Jr. Blvd., Wichita Falls, TX 76306		**Home:**		

Incident Support Team

Position	Name	Office Phone	Home Phone	Mobile Phone
EPR&S Contact	Rob Yarbrough	(281) 293-3891	(b) (6) [redacted]	(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	Manny Cortez	(918) 661-0595		(580) 401-0224
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
Daws, Keith L. - Pipeliner	(940) 720-4371	(b) (6) [redacted]	(940) 636-1453	1 hr
Le Jeune, Warren - Technician	(940) 720-4346		(940) 631-0276	1 hr
Willis, Bernard L. - Operator	(940) 720-4330		(940) 636-0515	1 hr
Rasor, D. Scott - Operations Supervisor	(940) 720-4335		(940) 631-3989	1 hr
Davidson, Corey C. - Pipeliner	(940) 567-1175		(940) 567-1175	1 hr
Lowack Jr., Vinson W. - Gauger	(940) 631-0765		(940) 631-0765	1 hr
Moore, Bobby L. - Pipeliner	(940) 720-4367		(940) 631-6831	1 hr
Nester, Don H. - Pipeliner	(940) 720-4328		(940) 631-2893	1 hr
Robson, Clint N. - Pipeliner	(940) 720-4319		(940) 631-0274	1 hr
Demel, John H. - Technician	(940) 720-4326		(940) 733-1722	1 hr

Emergency Response Contractors

Name	Phone	Alt. Phone	Resp. Time
Contract			
SET Environmental Inc.	(800) 544-1313	(972) 910-0441	4 hrs
TAS Environmental Services	(888) 654-0111		4 hrs
Other			
Conestoga-Rovers & Associates	(866) 812-9565 (24-hr)	918-828-2424;713-734-3090	2 hrs
SWS Environmental	(254) 442-1553	254-442-1533	4 hrs

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
National Weather Service - NOAA	www.weather.gov	(206) 526-6317
U.S. Coast Guard Marine Safety Office	(314) 269-2463	
State		
Highway Patrol, OK	(405) 425-2424	
Highway Patrol, TX	(940) 851-5520	
Railroad Commission of TX, Dist. 09	(940) 723-2153	
Railroad Commission of TX, Dist. 7B	(325) 677-3545	
TCEQ Region 3 (Abilene) Emergency Coordinator	(325) 692-5869	M-F 8am to 5pm
TX Commission on Environmental Quality (TCEQ)	(512) 463-7727	(512) 239-1000
TX General Land Office	(800) 832-8224	
Local		
Fire Dept: Lakeside City Vol.	(940) 692-4157	
Fire Dept: Wichita Falls, TX	911	(940) 761-7901
Fire: Walters, OK	(580) 875-2060	
Ambulance: Life Line EMS	911	(940) 322-1506
Ambulance: Trans Star	911	(940) 696-6400
Police Dept: Walters, OK	(580) 875-3343	
Police Dept: Wichita Falls	911	(940) 720-5000
Sheriff's Dept: Wichita County	911	(940) 766-8170
Hospital: Kell West Regional	(940) 692-5888	
Hospital: Red River	(940) 322-3171	
Media: 104.7 FM KYYI Radio	(940) 691-1047	
Media: KAUZ TV-6	(940) 322-6957	
Media: KDFX TV-3	(940) 691-0003	
Weather Service (Wichita Falls)	(940) 692-9999	

SWEENY REFINERY PETROCHEMICAL PIPELINE SYSTEM

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 Jamey W. Davis, Area Supervisor	(979) 491-2580	(b) (6) [redacted]	(979) 583-8197	1 hr
Office: 1008 Ashley-Wilson, Sweeny, TX 77480		(b) (6) [redacted]		
Alt. QI/IC Rocky D. Hicks, Maintenance Coordinator	(979) 491-2585	((b) (6) [redacted]	(281) 455-8701	1 hr
Office: 1008 Ashley-Wilson, Sweeny, TX 77480		**Home:** TX		

Incident Support Team

Position	Name	Office Phone	Home Phone	Mobile Phone
EPR&S Contact	Rob Yarbrough	(281) 293-3891	(b) (6) [redacted]	(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
Foster, Joe P. - Technician	(979) 491-2586	(b) (6) [redacted]	(979) 557-4248	1 hr
Hawkins, Kevin - Pipeliner	(979) 491-2583		(979) 479-5667	1 hr
Macallister, Sean L. - Pipeliner	(979) 491-2584		(979) 557-3074	1 hr

Emergency Response Contractors

Name	Phone	Alt. Phone	Resp. Time
Contract			
Garner Environmental Services	(713) 920-1300		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 - Houston, TX Office	(713) 693-5000	
National Weather Service - NOAA	www.weather.gov	(206) 526-6317
USCG - Sector Galveston	(713) 671-5113	(713) 671-5100
State		
Brazoria County DPS	(979) 849-2441	
Highway Patrol, Sweeny	(979) 245-9200	
Railroad Commission of TX, Dist. 03	(713) 869-5001 (24-hr)	
TCEQ Gas		
TCEQ Region 12 (Houston) Emergency Coordinator	(713) 767-3500	M-F 8am to 5pm
TX General Land Office	(800) 832-8224	
TX Park & Wildlife, Region 6	(806) 761-4930	
TX Spill-Reporting Hotline & SERC	(800) 832-8224	
TX State Fire Marshal	(800) 578-4677	(512) 305-7900
Wildlife Rehab & Education - Pasadena	(281) 332-8319	
Local		
Fire Dept: Brazoria County	911	(979) 798-2277
Fire Dept: Sweeny	911	(979) 548-3320
Police Dept: Sweeny Dispatch	(979) 548-3111	
Ambulance: Sweeny EMS	(979) 548-1564	
Fire & Hazard Control; William	(281) 999-0276	
HazMat: Houston Fire Dept	(713) 228-5726	
Sheriff Dept: Brazoria County	911	(979) 548-3111
Sheriff Dept: Matagorda County	(979) 245-5526	
Sheriff Dept: Wharton County	(979) 532-1550	
Hospital: Sweeny Community	(979) 548-1500	
Media: Brazosport Facts	(979) 345-3428	
Media: KTRH 740 AM Radio	(713) 630-3600	
Railroad: BN/SF (Houston,TX)	(713) 921-3516	
Railroad: Port Terminal	(713) 393-6700	(713) 393-6701
Railroad: Union Pacific (Houston,TX)	(281) 471-9426	(281) 986-4777
Sweeny Refinery Stock Dispatch	(979) 491-2206	(979) 647-4988

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 Texas Response Zone. The contract service agreements follow:

2.4.1 MSRC

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. 16MPA 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. Valles [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
Marine Spill Response Corporation

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

2.4.2 Eagle Construction & Environmental Services, Inc

Eagle Construction & Environmental Services, Inc.

EAGLE CONSTRUCTION & ENVIRONMENTAL SERVICES, INC.

Joe L. Walraven
President

May 29, 1998

Mr. Jack E. Williams
Phillips Pipe Line Company
354 Adams Building
Bartlesville, Oklahoma 74004

Re: Master Services Agreement

Dear Mr. Williams:

This letter acknowledges that we have a valid contract between Eagle Construction and Environmental Services, Inc. and Phillips Pipe Line Company.

If you have any questions or need additional information, please call me at (254) 629-1718.

Sincerely,

Joe L. Walraven
President

mj03phillips.jw

P.O. Box 872
9701 I-20 East
Eastland, Texas 76448
PHONE (254)629-1718
FAX (254)629-8625
e-mail: ecesi@eastland.net

MASTER SERVICE AGREEMENT
Revised: 19 January 2006 (General, U.S. Operations) **Agreement No. 13778.0-MSA-PT**

This Agreement is made on this 8th day of August 2005 by and between ConocoPhillips Pipe Line Company And ConocoPhillips Company, (hereinafter called "Company") and EAGLE CONSTRUCTION & ENVIRONMENTALSERVICES LP (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	EAGLE CONSTRUCTION & ENVIRONMENTALSERVICES LP
Signature: Gary D. Jennings	Signature:
Name: Gary D. Jennings	Name: Marc W Walraven
Title: Contract Specialist	Title: VP
Date: 8/29/05	Date: 8-30-05

2.4.3 Haz-Mat Response, Inc.

Haz-Mat Response, Inc.

343560-SA-PT

Services Agreement

SERVICE AGREEMENT

Between

ConocoPhillips Pipe Line Company And ConocoPhillips Company

and

HAZMAT RESPONSE INC

Effective 08/25/2008

SERVICE AGREEMENT

Agreement Number 34059.0-GA-PT

This Agreement is effective on 08/25/2006 (mm, dd, yyyy), by and between ConocoPhillips Pipe Line Company And ConocoPhillips Company, (hereinafter called "Company") and HAZMAT RESPONSE INC(hereinafter called "Contractor").

WHEREAS, Company desires that Contractor 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 such work and/or provision of items of equipment, machinery, materials or supplies.

NOW, THEREFORE, in consideration of the mutual promises contained herein, the parties agree as follows:

SECTION I – SCOPE 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 Pipe Line Company And ConocoPhillips Company	HAZMAT RESPONSE INC
Signature: Cary D. Jennings	Signature: John W. Stockdale
Name: Cary D. Jennings	Name: John W. Stockdale
Title: Contract Specialist	Title: President
Date: 8/25/06	Date: 8-23-06

Unless otherwise specifically provided, all notices and other communications provided for in this Services Order shall be in writing and shall be effective upon receipt. Such notices and communications shall be given either: (i) by hand delivery to an authorized representative of the party to whom directed, or (ii) by United States mail, postage prepaid, or (iii) by courier service guaranteeing delivery within two days or less, charges prepaid, or (iv) by facsimile to the following addresses for matters relating to this Agreement:

	Company	Contractor
Name	ConocoPhillips Pipe Line Company And ConocoPhillips Company	Haz-Mat Response, Inc.
Address	1000 S. Pine	1203 C South Parker Street
	PO Box 1267	Olathe, KS 66061
	Ponca City, OK 74602	
Attention:	Gary Jennings	Jeff Donovan
Telephone No:	580-767-6493	913-782-5151
Facsimile No:	918-662-3353	913-782-6206
Email:	gary.d.jennings@conocophillips.com	

Any notice, other than a force majeure notice under Article 14, 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.

6. TERMINATION OF AGREEMENT AND CONTRACTS

This Agreement shall continue in full force and effect until 08/25/2009unless terminated by Company at any time during the term of this Agreement by thirty (30) days written notice to Contractor.

If Company terminates this Agreement 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 Exhibit "B". 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 Exhibit "B" 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.

If work or deliveries hereunder are to be effected on or for an offshore facility, and if that offshore facility becomes an actual, constructive, arranged or compromised total loss, this Agreement shall terminate 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 Exhibit "B".

The releases and indemnities contained in this Agreement shall survive the termination of this Agreement.

2.4.4 TAS Environmental Services L.P.

TAS Environmental Services L.P.

Fort Worth
817.535.7222

San Antonio
210.496.5310

Dallas
972.638.9700

Austin
512.394.4017

August 16, 2005

Conoco Phillips Co.
Attn: Lynnette Lanlois
600 N. Dairy Ashford TA 2138
Houston, TX 77079

RE: Letter of Intent to Respond

Lynnette Lanlois,

TAS Environmental Services L.P. (TAS) is pleased to offer our emergency response resources to Conoco Phillips Co., in the event of an environmental emergency.

TAS can respond with the necessary resources within the time-frame intended by OPA 1990. TAS resources will be provided based upon availability at the time of notification. All of our facilities are manned with 40-hour trained Hazwoper trained personnel that are capable of responding to oil and chemical spills.

Should you have any questions or comments regarding these provisions, please feel free to contact me at 817.535.7222.

Very truly yours,

J Salzer
President of the G.P.

3929 California Parkway E.
Fort Worth, TX 76119

MASTER SERVICE AGREEMENT
Revised: 19 January 2005 (General, U.S. Operations) **Agreement No.**
16296.0-MSA-PT

This Agreement is made on this 22nd day of September 2005 by and between ConocoPhillips Pipe Line Company And ConocoPhillips Company, (hereinafter called "Company") and TAS ENVIRONMENTAL SERVICES LP (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
Signature: Lynda Beavers
Name: Lynda Beavers
Title: Contract Specialist
Date: 10-05-05

TAS ENVIRONMENTAL SERVICES LP
Signature: Larry Putman Jr J Solyer
Name: LARRY PUTMAN
Title: BUSINESS DEVELOPMENT
Date: 9/29/05

7. NOTICES

Unless otherwise specifically provided, all notices and other communications provided for in this Services Order shall be in writing and shall be effective upon receipt. Such notices and communications shall be given either: (i) by hand delivery to an authorized representative of the party to whom directed, or (ii) by United States mail, postage prepaid, or (iii) by courier service guaranteeing delivery within two days or less, charges prepaid, or (iv) by facsimile to the following addresses for matters relating to this Agreement:

	Company	Contractor
Name	ConocoPhillips Pipe Line Company And ConocoPhillips Company	TAS Environmental Services, L.P.
Address	1000 S. Pine	3929 California Parkway E.
	PO Box 1267	Fort Worth, TX 76119
	Ponca City, OK 74602	
Attention:	Lynda Beavers	J Salzer
Telephone No:	580-767-6651	817-535-7222
Facsimile No:	580-767-5348	817-535-8187
Email:	lynda.d.beavers@conocophillips.com	

Any notice, other than a force majeure notice under Article 14, 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.

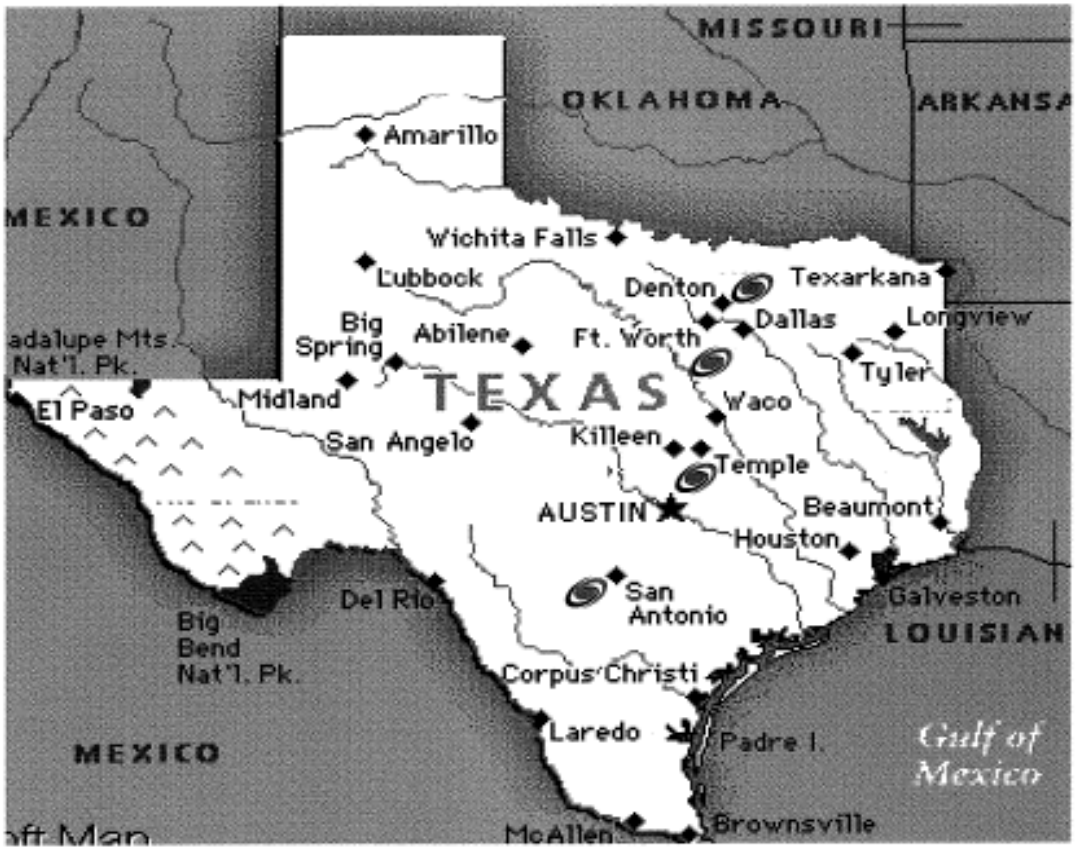
8. TERMINATION OF AGREEMENT AND CONTRACTS

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 terminate with respect to contracts which have not yet been completed or paid for.

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.

TAS ENVIRONMENTAL

Locations



- 3929 E California Parkway
  Fort Worth, TX 76119
  Office: 817-535-7222
  Fax: 817-535-8187

- 13551 Floyd Circle
  Dallas, TX 75243
  Office: 972-638-9700
  Fax: 972-638-9702

- 14350 Lookout Road
  San Antonio, TX 78233
  Office: 210-496-5310
  Fax: 210-496-5312

- 9301 Hwy 290 West, Suite 106
  Austin, TX 78736
  Office: 512-394-4017
  Fax: 512-394-4005

1-888-654-0111

24 Hour Emergency Response

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

Commander
National Strike Force Coordination Ctr.

1461 North Road Street
Elizabeth City, NC 27909
Staff Symbol:
Phone: 252-331-6000
FAX: 252-331-6012

16465

AUG 18 2005

TAS Environmental Services, LP
Attn: Jeremmy McEntire
3929 California Parkway East
Fort Worth, TX 76119

Dear Mr. McEntire,

Your application for classification as an Oil Spill Removal Organization (OSRO) has been reviewed and processed as outlined in the Coast Guard OSRO Classification Guidelines dated 27 April 2001. You have received the following classification(s):

Zone: **Captain of the Port (COTP) Corpus Christi (High Volume Port)**		
Environment	Facility	Vessel
Inland	**WCD2 & WCD3**	**MMPD, WCD1-WCD3**
River/Canal	**WCD1-WCD3**	**MMPD, WCD1-WCD3**
Nearshore	**WCD2**	**WCD2**

Enclosure (1) is a disk containing your classification information. On the disk, you will find a summary of your classifications by environment and COTP zone and a summary of the resource totals for boom, Temporary Storage Capacity (TSC), and Effective Daily Recovery Capacity (EDRC) used to determine these classifications. Our files will be updated to reflect your current status; please inform your clients of the same. Your classifications will also be listed on the OSRO Classification Matrix available on the Internet at:

http://www.uscg.mil/hq/nsfweb/nsfcc/ops/OSRO/links/osroinfoonclssifiedosro.html

During this review, it was noted that the majority of your resources are available for your use by contract or other means. Be advised that this may negatively impact your ability to respond if the resources are not available at the time when you need them.

The Coast Guard is transitioning to a Sector organization which consolidates field operational and marine safety functions. What used to be known as MSO Corpus Christi is now known as Sector Corpus Christi. The Captain of the Port (COTP) function remains at the Sector. Boundary changes for the COTP have occurred but have not been updated in the RRI. If there is a change in your classification as a result of these boundary changes, you will be notified prior to any information being publicly posted on the internet.

If you have any questions or would like more information regarding your classifications, please contact any of the Response Resource Assessment (RRA) Branch or Response Resource Inventory (RRI) Branch staff. Our contact information can be found in Enclosure (2). Thank you for your participation in the OSRO program; your efforts to strengthen our national response capabilities are greatly appreciated.

Sincerely,

B. N. MIDKIFF, LCDR

B. N. MIDKIFF
Chief, Response Resource Assessment Branch
U.S. Coast Guard
By direction

2 Enclosures

Copy: Commandant, U. S. Coast Guard (G-MOR-2) w/o Enclosure 1
Commandant, U. S. Coast Guard (G-MOR-3) w/o Enclosure 1
Commander, Eighth Coast Guard District (m) w/o Enclosure 1
Commander, Coast Guard Sector Corpus Christi w/o Enclosure 1
EPA Region 6 w/o Enclosure 1
Pipeline and Hazardous Materials Safety Administration (PHMSA) w/o Enclosure 1

National Strike Force Coordination Center (NSFCC)
Response Resource Assessment (RRA) Branch and
Response Resource Inventory (RRI) Branch Staff

Phone: (252) 331-6000

Chief, RRA Branch:

LCDR Barbara Midkiff	**X3034**	BMidkiff@nsfcc.uscg.mil

RRA Program Staff:

LTJG Tom Warren	**X3004**	TWarren@nsfcc.uscg.mil
SKCS Todd Meekins	**X3029**	TMeekins@nsfcc.uscg.mil
MST1 Todd Legutki	**X3057**	TLegutki@nsfcc.uscg.mil

RRI Database Manager:

Ms. Jorice Williams	**X3036**	JCWilliams@nsfcc.uscg.mil

Chief, Logistics/Inventory Division:

Mr. A. Mike Crickard	**X3031**	ACrickard@nsfcc.uscg.mil

Alphabetical OSRO Classifications by Company

0157 TAS Environmental Services LP

COTP: CORPUS CHRISTI

☑ High Volume Port

Alternate City:

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

GARNER
ENVIRONMENTAL SERVICES, INC.
HOUSTON, TEXAS

1717 W. 13TH STREET, DEER PARK, TX 77536 • 281-930-1200 • 800-424-1716

August 16, 2005

EMERGENCY RESPONSE

PLANT SERVICE

WASTE MANAGEMENT

REMEDIATION

HEALTH/SAFETY TRAINING

EQUIPMENT SALES

TRANSPORTATION

INDUSTRIAL DISMANTLING

ASBESTOS/LEAD ABATEMENT

Conoco Phillips
Attn: Lynnette Lanlois
600 N. Dairy Ashford, TX 2138
Houston, TX 77079

Dear Lynnette Lanlois

We would like to thank you for your business over the past years. Garner Environmental Services, Inc. has focused on providing quality environmental services throughout Texas for the past 23 years, and it has been fortunate to have your company as one of its customers.

Since 1997, J Salzer has managed the Garner offices in Dallas, Fort Worth, Austin and San Antonio.

In order to allow J to acquire an ownership interest in these operations, we have formed a new company - TAS Environmental Services L.P. The owners of Garner will remain the same and own an interest in the new company with J participating as a co-owner.

You may continue to use the same telephone numbers, fax numbers, email, addresses, etc. to contact the companies. If you normally contact Deer Park, Fort Worth, or another office, please continue to do so, as your call will be handled in the same manner as in the past. Your initial contact with any of our offices will be the only contact needed for the Garner / TAS group to provide a timely response.

We both look forward to working with you in the future and encourage you to call either of us if you have any questions regarding this change. Our goal continues to be providing quality services on a timely basis, and the operations of the two companies will be conducted in a manner that accomplishes this objective without any interruption to your business.

Sincerely,

L. D Garner, Jr.
Garner Environmental Services, Inc.
Phone: 281-930-1200

J Salzer
TAS Environmental Services L.P
817-535-7222

Pt. Arthur, TX • LaMarque, TX • New Orleans, LA • Dallas/Ft. Worth • San Antonio, TX
409-983-5646 409-935-0308 504-254-2444 817-535-7222 210-496-5310

3929 California Parkway E.
Fort Worth, TX 76119
(817) 535.7222 or (888) 654.0111
f(817) 535.8187

RESPONSE RATE SCHEDULE
DOMESTIC

TAS ENVIRONMENTAL	**Response Rate Schedule Domestic**	**Schedule**
		Rev. September 2004

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TAS ENVIRONMENTAL	**Response Rate Schedule Domestic**	**Schedule**
		Rev. September 2004

SPILL PERSONNEL PHONE LIST

	PAGER	MOBILE
FORT WORTH		
Phone: (817) 535-7222 / (888) 654-0111	**Fax: (817) 535-8187**	
Kevin Brant	(888) 856-8397	(817) 614-5983
Robert Briggs		(817) 825.9583
J Salzer		(817) 614-2823
DALLAS		
Phone: (972) 638-9700	**Fax: (972) 638-9702**	
Jeremy McEntire	(888) 308-2880	(214) 226-1164
Shane Thompson		(817) 825.9581
SAN ANTONIO		
Phone: (210) 496-5310 / (888) 818-5310	**Fax: (210) 496-5312**	
Glynn Schmidt	(888) 250-8680	(210) 219-7348
David Edwards	(888) 278.3197	(210) 710.7227
AUSTIN		
Phone: (512) 496-3975	**Fax: (512) 394.4005**	
Damon Woodcock		(512) 496.3975
David Roberts		(512) 496.3974

TAS ENVIRONMENTAL	**Response Rate Schedule Domestic**	**Schedule**
		Rev. September 2004

Automotive Equipment

Automotive Equipment Hourly Rates charges are portal to portal. A four (4) hour minimum time will be charged on all call-outs. A mileage charge of $0.37 will be added for all automotive equipment automobiles and pick-up trucks.

Equipment Decontamination / Washout

Time and Material charges are portal to portal and will continue through decontamination and/or washout of any and all equipment used on the job.

Haz-Mat Rates

Haz-Mat rates will be charged when the material being dealt with has a hazard rating of two or greater on the NFPA 704 labeling system or hazardous material identifying system, or if a job requires the use of respiratory protection.

Insurance

The rates in this RATE SCHEDULE include insurance coverage for Worker's Compensation, General Liability, Pollution and Automobile Liability. A Certificate of Insurance will be forwarded upon request. These rates do not include work performed under the U.S. Longshoremen's and Harbor Workers Act (33 USC ss 901-950). For work performed under this statute, an additional 69% surcharge per $100.00 of wages will be assessed on labor **only**.

Personnel

Experienced consulting, supervisory, technical instructor and equipment operating personnel are available for complete emergency spill response and spill cleanup operations and vacuum service, 24 hours a day, 7 days a week. Normal hours of operation are from 0730 (7:30 a.m.) through 1600 (4:00 p.m.) daily, Monday through Friday.

All labor charges will be in accordance with TAS Environmental Services, LP service receipts. Charges for personnel are portal-to-portal. TAS Environmental Services, LP will invoice for personnel and the time required to mobilize, service, repair, and restock all vehicles and equipment used in the performance of the services for customer. Overtime for personnel will be charged at time and a half between 1600 (4:00 pm) through 0730 (7:30 am) Monday through Thursday; weekends from 1600 (4:00 p.m.) Friday through 0730 (7:30 am) Monday. **DOUBLE TIME RATES** will be charged for all National Holidays. **4-Hour Minimum Service Charge On All Labor Call-Outs.**

In the event TAS Environmental Services, LP responds to a request from Customer and/or on behalf of Customer for record gathering and/or litigation support services, Customer will pay for personnel provided and/or requested in the amount corresponding to the personnel designation in the rate sheet.

Replacement of Damaged or Contaminated Equipment

If, during performance of a service and/or services for a customer, equipment and/or material sustain damage which renders the equipment and/or material beyond repair or renders decontamination impossible, said equipment and/or material will be subject to a replacement charge at TAS Environmental Services, LP's cost plus 20% unless said damage was sustained as a result of misuse by TAS Environmental Services, LP personnel.

Roll-Off Boxes

Roll-Off Box delivery and pickup charges vary according to the distance from the site location. The cost for roll-off box liners is $50.00 each. Box Liners are not mandatory, but if the Roll-Off Box requires cleaning at the end of the rental period, the customer will incur the cleaning charges.

TAS ENVIRONMENTAL	**Response Rate Schedule Domestic**	**Schedule**
		Rev. September 2004

Stand-By Rates

Stand-By Rates will be equal to the daily rates in this schedule unless otherwise agreed to in writing on a case-by-case basis. Full rates will apply for personnel and per diem.

Subcontract Services / Third-Party Services

When TAS Environmental Services, LP's equipment is available, TAS Environmental Services, LP will use and bill Customer for said equipment at rates published in the rate schedule. For any item that is identified on TAS Environmental Services, LP's rate sheet and which TAS acquires through or from a third party vendor or supplier, Customer will pay to TAS Environmental Services, LP the higher of TAS Environmental Services, LP's rate or TAS Environmental Services, LP's cost plus a 20% handling charge.

A 20% handling charge will apply and be invoiced for all shipping and transportation of equipment, materials and goods regardless of whether such equipment, materials and goods appear on TAS Environmental Services, LP's rate schedule. In addition, for all items not listed on TAS Environmental Services, LP's rate schedule, including but not limited to personnel, equipment, materials and goods, laboratory services, testing services, damage waivers and/or other services, said items will be billed at TAS Environmental Services, LP's cost plus a 20% handling charge.

Cost, as used herein, is defined as the amount invoiced to TAS Environmental Services, LP by a third-party supplier of material and/or goods and/or material and/or labor and/or equipment and/or services.

Taxes

All domestic federal, state and municipal taxes, except income taxes and ad-valorem taxes, now and hereinafter imposed with respect to services rendered, to rental equipment, to the processing, manufacture, repair, and to the delivery and transportation of equipment and supplies will be added to and become part of the total price payable by the Customer. If a Customer claims an exemption from payment of Texas Sales and Use Tax, the Customer will be required to render an Exemption Certificate or a Resale Certificate to TAS Environmental Services, LP for said exemption to apply to the services rendered. If for any reason the services rendered result in the assessment of foreign income taxes, excise taxes, or other fees alleged as owing to a foreign state or government, the Customer will pay directly the amount of any assessment or fee. In the event Company pays any such foreign tax or fee directly, Customer will promptly reimburse Company for same.

Terms

The term of payment for all invoices is *Net Payment Due Immediately Upon Receipt of invoice in United States Dollars (US $).* The balance of any invoice not timely paid will accrue a finance charge computed at the periodic rate of one and one-half percent (1.5%) per month (18% per annum) beginning on the first day of the first month following any delinquency. Customer is obligated to make payment to TAS Environmental Services, LP at its principal office at 3929 California Parkway E., Fort Worth, TX 76119, in Tarrant County, Texas.

Place of Performance

The procurement of TAS Environmental Services, LP's services may not be in the same county as the work site area. Customer is obligated to make payment to TAS Environmental Services, LP in Tarrant County, Texas for services provided. Because this agreement has been procured in Tarrant County, Texas and is being managed and administered from TAS Environmental Services, LP's central office in Tarrant County, Texas, this agreement is being performed in Tarrant County, Texas. The validity, interpretation and performance of the services and payment and the contents herein are to be interpreted and enforced pursuant to the laws of the State of Texas and any suit in connection herewith will be filed in Tarrant County, Texas.

Travel, Lodging and Per Diem

For all employees who do not reside in the local commuting area for the work site, TAS Environmental Services, LP will be reimbursed for costs incurred for employee travel to and from the work site on the basis of TAS Environmental Services, LP's incurred costs plus 20% for all commercial transportation. A minimum Per Diem charge of $90.00 per day for all employees who do not reside in the local commuting area of the work site will be due for each day that such employee is present in the locale of the work site.

TAS ENVIRONMENTAL	**Response Rate Schedule Domestic**	**Schedule**
		Rev. September 2004

FORT WORTH – SAN ANTONIO – DALLAS – AUSTIN

PERSONNEL

		Hourly Rate Regular	Hourly Rate Overtime
PERS-1001	Project/Operations Manager	125.00	187.50
PERS-1002	Health & Safety Manager	100.00	150.00
PERS-1003	Site Manager/Superintendent	70.00	105.00
PERS-1004	Site Safety Officer	55.00	82.50
PERS-1005	Supervisor	50.00	75.00
PERS-1005-HM	Supervisor, Haz-Mat	75.00	112.50
PERS-1006	EMT / Paramedics	45.00	67.50
PERS-1007	Foreman	40.00	60.00
PERS-1007-HM	Foreman, Haz-Mat	55.00	82.50
PERS-1008	Industrial Hygiene Supervisor	55.00	82.50
PERS-1009	Industrial Hygiene Technician	45.00	67.50
PERS-1010	Mechanic	40.00	60.00
PERS-1011	Rescue Supervisor	55.00	82.50
PERS-1012	Rescue Technician	50.00	75.00
PERS-1018	Rescue Attendant	45.00	67.50
PERS-1013	Resource Coordinator	40.00	60.00
PERS-1014	Operator, Heavy Equipment	40.00	60.00
PERS-1014-HM	Operator, Heavy Equipment, Haz-Mat	55.00	82.50
PERS-1015	Operator, Response Equipment	35.00	52.50
PERS-1015-HM	Operator, Response Equipment, Haz-Mat	50.00	75.00
PERS-1016	Technician	27.00	40.50
PERS-1016-HM	Technician, Haz-Mat	45.00	67.50
PERS-1016-TO	Technician/Operator	35.00	52.50
PERS-1016-TS	Technician, Sampling	45.00	67.50
PERS-1017	Field Clerk	30.00	45.00
PERS-1019	Disposal Coordinator	35.00	52.50
PERS-1020	Project Accountant	65.00	97.50

EQUIPMENT

Automotive Equipment

		Hourly Rate
AUTO-1001	Super Sucker, 80 bbl Capacity (See Note)	125.00
AUTO-1002	Cyclone Unit	50.00
AUTO-1003	Vacuum Truck, 80 bbl Capacity, Stainless Steel Unit (See Note)	95.00
AUTO-1004	Vacuum Truck, 80 bbl Capacity (See Note)	70.00
AUTO-1005	Vacuum Truck, 130 bbl Capacity (See Note)	85.00
AUTO-1006	Vacuum Truck, Liquid Ring (See Note)	150.00
AUTO-1007	Roll-Off Truck (See Note)	75.00
AUTO-1008	Meyers Unit, Truck Mounted (See Note)	60.00
AUTO-1009	Mini Roll-Off Unit (See Note) (**Note**: Operator Included)	60.00
AUTO-1027	Safety-Vac	60.00

All rates listed in this schedule are subject to change without notice.

TAS ENVIRONMENTAL	Response Rate Schedule Domestic	Schedule Rev. September 2004

Automotive Equipment

		Daily Rate
AUTO-1010	ATV, 4-Wheel	225.00
AUTO-1011	ATV Utility Trailer	75.00
AUTO-1012	Automobile	75.00
AUTO-1013	Backhoe	425.00
AUTO-1017	Meyers Unit, Trailer Mounted	350.00
AUTO-1018	Pick-Up Truck, 1 ton or smaller	115.00
AUTO-1019	Pick-Up Truck, 1 ton, Haz-Mat Quick-Response Unit	200.00
AUTO-1020	Pick-Up Truck, 1 ton, w/liftgate	130.00
AUTO-1023	Pick-Up Truck, 1 ton, 4x4	220.00
AUTO-1024	Skid-Steer Loader	350.00
AUTO-1028	Tractor/Trailer, Haz-Mat Response Unit, 32'	750.00
AUTO-1025	Trailer, Boom, 20 foot	75.00
AUTO-1026	Trailer, Equipment Hauler, Gooseneck, 24 foot	75.00
AUTO-1029	Trailer, Haz-Mat Response, 24'	350.00
AUTO-1033	Trailer, Haz-Mat Transfer	500.00
AUTO-1035	Trailer, Rescue/Emergency Response	150.00
AUTO-1030	Trailer, Response, Gooseneck, 32' Oil Response	300.00
AUTO-1021	Trailer, Response, 18'	200.00
AUTO-1031	Trailer, Transfer, Ship to Shore	125.00
AUTO-1032	Trailer, Utility	75.00
AUTO-1034	Truck, Bobtail	300.00

Communications Equipment

		Daily Rate
COMM-1001	Cellular Telephone (Each)	25.00
COMM-1002	Computer, Laptop/Desktop w/Printer	125.00
COMM-1003	Fax Machine	25.00
COMM-1004	GPS, Hand Held	25.00
COMM-1005	ICOM Aircraft Radio, Hand Held	25.00
COMM-1006	MCC #1 Mobile Command & Control Trailer + Fuel	1,700.00
	(NOTE: Any items not returned to the Command Unit upon completion of work will be charged back to the customer at cost plus 20%.)	
COMM-1007	Radio Portable	25.00
COMM-1008	VHF Marine Radio, Hand Held	25.00
COMM-1009	VHF Mobile Radio Marine Radio w/8' Antenna	30.00
COMM-1010	Command Trailer, 48'	1,800.00

Containment Boom

		Daily Rate
CBM-1001	Containment Boom, 48" Offshore	6.00 ft/day
CBM-1002	Containment Boom, 42" Offshore	6.00 ft/day
CBM-1003	Containment Boom, 36"	3.00 ft/day
CBM-1004	Containment Boom, 18"	1.40 ft/day
CBM-1006	Containment Boom, 12"	1.00 ft/day
CBM-1005	Mini-Boom	.75 ft/day
CBMA-100	Boom Anchor, 100 lb.	100.00/day
CBMA-18	Boom Anchor, 18 lb.	18.00/day
CBMA-22	Boom Anchor, 22 lb.	22.00/day
CBMA-40	Boom Anchor, 40 lb.	40.00/day
CBMA-75	Boom Anchor, 75 lb.	75.00/day

All rates listed in this schedule are subject to change without notice.

TAS ENVIRONMENTAL	Response Rate Schedule Domestic	Schedule Rev. September 2004

Haz-Mat Equipment

		Daily Rate
MSE-1005	Betz Emergency Off-Loading Valve	500.00/day
HMS-1003	Chlorine Emergency Kit “A”	500.00/day
HMS-1004	Chlorine Emergency Kit “B”	750.00/day
HMS-1005	Chlorine Emergency Kit “C”	1,000.00/day
MSE-1010	Compressor, Corken, 2"	1,500.00/day
MSE-1025	Railcar Transfer Equipment	500.00/day
HME-1005	Vacuum Cleaner, Stainless Steel, Mercury, HEPA	250.00/day
HMS-1001	Cylinder Refill, Nitrogen, Each	50.00
MSE-1018	Decontamination Kit (Personnel, Pool, Brush, Bucket, Soap), Each	50.00

Marine Equipment

		Daily Rate
MAR-1001	Airboat	500.00
MAR-1002	Deck Barge, 30', w/twin 150hp engines, radar	800.00
MAR-1003	Fast Response Boat, 30', w/twin 200hp engines, radar, 14 bbl store cap	800.00
MAR-1004	Flat Boat, w/o motor	115.00
MAR-1005	Flat Boat, 14' to 16' w/motor	225.00
MAR-1006	Piroque	30.00
MAR-1007	Fast Response Boat, 17' to 23'	250.00
MAR-1008	Work Boat, 24', 150 hp Twin Engine	500.00

Miscellaneous Equipment

		Daily Rate
MSE-1004	Back-Pack Blower	30.00
MSE-1006	Camera, Digital	50.00
MSE-1006-1	Photo-Processing, Digital Camera, Each Frame	2.50
MSE-1007	Camera, Video, Event Recording	250.00
MSE-1008	Cargo Lights	12.50
MSE-1009	Chain Saw	75.00
MSE-1049	Compressor, Air, 11.8 cfm, 90 psi output	185.00
MSE-1011	Compressor, Hydraulic, 2"	200.00
MSE-1012	Confined Space Rescue Kit	50.00
MSE-1045	Coppus Blower	50.00
MSE-1048	Drum Crusher	250.00
MSE-1013	Drum Dolly	25.00
MSE-1014	Drum Grabber	25.00
MSE-1015	Drum Gripper, Forklift	100.00
MSE-1016	Drum Pump, Poly	25.00
MSE-1017	Drum Sling	25.00
MSE-1050	Eye Wash Station	25.00
MSE-1019	Generator w/work lights	110.00
MSE-1020	Generator, 4 kw	100.00
MSE-1046	Hand Tool (Pitch Fork, Rake, Shovel, Squeegee, etc)	17.00
MSE-1047	Hose, ADS, 6" (Foot)	1.75
MSE-1023	Power Pack, Hydraulic, 50 hp or less	500.00
MSE-1024	Pressure Washer, 3,000 psi or less	250.00
MSE-1026	Saw, Air Powered	75.00
MSE-1027	Saw, Portable	75.00

All rates listed in this schedule are subject to change without notice.

TAS ENVIRONMENTAL	Response Rate Schedule Domestic	Schedule Rev. September 2004

Miscellaneous Equipment (Cont.)

		Daily Rate
MSE-1028	Scare Cannon plus Fuel	60.00
MSE-1029	Sewer Plug	100.00
MSE-1030	Sprayer, Pump, Hand-Held	30.00
MSE-1001	Stainless Steel Stinger, 2"	50.00
MSE-1031	Steam Cleaner (3,000 psi or less)	250.00
MSE-1032	Vacuum Cleaner, Wet/Dry	50.00
MSE-1033	Vapor Lights, High Intensity	65.00
MSE-1034	Weed Eater	75.00
MSE-1035	Wheelbarrow	25.00

Monitoring Equipment

		Daily Rate
MTE-1014	3M 3500 Passive VOC Monitoring Badges	35.00
MTE-1021	25mm Particulate Sampling Cassette	4.00
MTE-1022	37mm Three Piece HEPA Particulate Sampling Cassette	5.00
MTE-1001	4-Gas Meters	95.00
MTE-1004	Anemometer / Mass Air Sensor	75.00
MTE-1005	Audio Dosimeter	75.00
MTE-1006	Black Light, Mercury Detection	40.00
MTE-1007	Crowcon Monitor, 5 gas	150.00
MTE-1008	Drager CMS Unit	300.00
MTE-1015	Drager Pump	30.00
MTE-1034	FID Detector, Handheld	200.00
ST-1012	Gas Chromatograph / Mass Spectrometer w/computer, Portable	1,500.00
MTE-1026	Gas Chromatograph / Mass Spectrometer Carrier Gas	147.45
MTE-1035	Gas Chromatograph / Mass Spectrometer Internal Gas Standard	140.00
ST-1005	Head Space Analyzer for GC / MS	300.00
MTE-1009	Infrared Sensor	25.00
MTE-1020	Intrinsically Safe Thermometer	15.00
MTE-1003	Jerome Mercury Vapor Analyzer	175.00
MTE-1011	ph Meter	30.00
MTE-1012	Photoionization Detector (PID), MiniRae	75.00
MTE-1036	Photoionization Detector, Ultra (PID), Ultra MiniRae	100.00
MTE-1010	Radiation Monitor	75.00
MTE-1018	Sensodyne Pump	30.00
MTE-1013	Wibget – Portable Heat Stress Monitor	100.00

		Unit Rate
MTE-1023	Chemsticks / Chemstrips	10.00
MSE-1024	Coconut Charcoal VOC Sampling Tubes	5.00
MTE-1037	FID Detector Hydrogen Refill	35.00
MTE-1029	Head Space 40ml Teflon Septa Vials	4.00
MTE-1030	Pentane Calibration Gas – One (1) Calibration	20.00
MTE-1031	Quad Gas Calibration Gas – One (1) Calibration	25.00
MTE-1032	Tedlar Bag w/Stainless Fittings – 1 Liter	26.00
MTE-1033	Tedlar Bag w/Stainless Fittings – 5 Liter	40.00

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Personal Protective Equipment

		Daily Rate
PPE-1005	Bunker Gear (Pants, Coat, Gloves, Helmet, Boots)	150.00
PPE-1006	Chest Waders	35.00
PPE-1007	Cool Vest	50.00
PPE-1020	Harness, Safety, w/lanyard	25.00
PPE-1030	Safety Lifeline	15.00

		Unit Rate
PPE-1001	Apron, Tyvek, Each	1.50
PPE-1008	Coveralls, Poly-Coated Tyvek Hood and Boots, Each	16.00
PPE-1010	Coveralls, Tyvek, Each	10.00
PPE-1021	Level A, Responder, Each	900.00
PPE-1022	Level B, Fully-Encapsulated (CPF 4), Each	225.00
PPE-1023	Level B, Encapsulated (CPF 3), Each	90.00
PPE-1024	Level C, Hood, Boot, Splash Guard (CPF 2), Each, (Tape Seam)	75.00
PPE-1026	Level C, Hood, Boot (CPF 2), Each, (Sewn Seam)	45.00
PPE-1027	Level C, Hood, Boot (CPF 1), Each	20.00
PPE-1034	Level D, PPE, Each	35.00
PPE-1033	Slicker Suit, Rain, Each	25.00

Boots

		Unit Rate
PPE-1002	Boot, Chemical, NFPA Approved, Pair	90.00
PPE-1003	Boot, Rubber, Steel-toe, Pair	45.00
PPE-1004	Booties, Latex, Pair	7.00

Gloves

		Unit Rate
PPE-1011	Glove, Latex, Sample, Pair	1.00
PPE-1012	Glove, Leather, Pair	5.95
PPE-1013	Glove, Neoprene, Pair	5.95
PPE-1029	Glove, Nitrile, Inner, Pair	1.00
PPE-1015	Glove, Nitrile, Outer, Pair	3.75
PPE-1016	Glove, Petroflex, Pair	3.50
PPE-1018	Glove, *"Silver Shield"*, Pair	8.00
PPE-1019	Glove Liner, Cotton, Pair	1.00

Respiratory Protection

		Unit Rate
HME-1001	Air Regulator	50.00/day
HME-1002	Breathing Air Cylinder	10.00/day
HME-1013	Breathing Air Compressor	500.00/day
HME-1012	Breathing Air Compressor Cool Pack	50.00/day
HME-1011	Breathing Air Hose, 50' Section	12.00/day
HME-1003	Escape Mask	25.00/day
HME-1004	Escape Pack	125.00/day
HME-1007	Full-Face Respirator	25.00/day

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TAS ENVIRONMENTAL	Response Rate Schedule Domestic	Schedule Rev. September 2004

Respiratory Protection (Cont)

		Unit Rate
HME-1009	Self-Contained Breathing Apparatus (SCBA)	125.00/day
HME-1008	Half-Face Respirator (Organic Mask, Disposable), Each	25.00
HME-1010	Half-Face Respirator w/o cartridges, Each	12.50
PPE-1028	Respirator Cartridge, HEPA, Each	7.50
PPE-1031	Respirator Cartridge, HEPA/OV/AG, Pair	24.00
PPE-1032	Respirator Cartridge, Mercury Vapor, Pair	30.00

Pumps and Hoses

		Daily Rate
PUMP-1001	Pump, 1"	100.00
PUMP-1004	Pump, 2"	90.00
PUMP-1007	Pump, 2" Acme Mdl 39-G4 Floating Wash Pump	150.00
PUMP-1002	Pump, 2" Blackmere Vane, (Hydraulic)	200.00
PUMP-1003	Pump, 2" Diaphragm	90.00
PUMP-1006	Pump, 2" Stainless Steel Diaphragm	250.00
PUMP-1010	Pump, 3"	100.00
PUMP-1009	Pump, 3" Diaphragm	100.00
PUMP-1011	Rebuild Kit, Diaphragm Pump	350.00

		Unit Rate
MSE-1038	Hose, Chemical Resistant, 3" x 20'	20.00
MSE-1039	Hose, Chemical Resistant, Hard Gum Rubber, 6" x 25'	28.00
MSE-1040	Hose, Fire, 50' section	50.00
MSE-1041	Hose, Metal, Flex, 6" x 25'	25.00
MSE-1042	Hose, Solid Metal, Joint Pipe, 6" x 12'	22.00
MSE-1043	Hose, Suction/Discharge, 2" x 25'	8.00
MSE-1044	Hose, Suction/Discharge, 3" x 20'	8.00

Sampling and Testing Equipment and Supplies

		Unit Rate
ST-1003	Drum Thief Sampling Tubes	16.00
ST-1004	Haz-Cat Sampling Kit, per test	35.00
ST-1017	Hydrocarbon Test Kit	47.65
ST-1007	Mercury Test Kit	225.00
ST-1008	PCB Wipe Test Kit	30.00
ST-1009	Personnel Sampling Pump	50.00
ST-1010	Pipettes, Glass	2.00
ST-1011	pH Paper (Roll or Box)	20.00
PPE-1035	HazMat Smart Strip Chemical ID	35.00
ST-1013	Sample Bomb	120.00
ST-1014	Sample Jars	5.00
ST-1015	Sample Storage	15.00
ST-1016	Soil Sampling Kit	35.00

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TAS ENVIRONMENTAL	Response Rate Schedule Domestic	Schedule Rev. September 2004

Skimmers

		Daily Rate
SKIM-1001	DiscOil Skimmer, w/Power Pack	2,250.00
SKIM-1002-70	Drum Skimmer, 70 gpm	600.00
SKIM-NO-1003-20	Drum Skimmer, 20 gpm	450.00
SKIM-1005	Skimmer, Acme Mdl 39-TG4, Gasoline Powered	200.00
SKIM-1006	Skimmer, Acme Mdl 39-T, Vacuum / or Douglas Engineering Skim Pak	150.00
SKIM-1007	Skimmer, Desmi	5,000.00
SKIM-1008	Skimmer, Marco, "*Harbor 28*"	5,000.00
SKIM-1009	Skimmer, Marco, "*Sidewinder 14*"	4,200.00

Storage

		Daily Rate
STR-1008	Frac Tank, 10,000 gl (Company Owned)	25.00
STR-1003	Roll-Off Box, Open Top	15.00
STR-1004	Roll-Off Box, Roll Top	30.00
STR-1005	Roll-Off Box, Vacuum Box	50.00
STR-1006	Storage Tank, Poly, 500 gl capacity	30.00
STR-1007	Tarp, Roll-Off Box	8.00
STR-1009	Tote, Poly, 250 gl	15.00

MATERIAL

Chemicals

		Unit Rate
GES-BA50	Boric Acid, 5%, 50 lb bag	96.55
GES-BRAT-A+	A+ Microbes, 1 lb	57.50
GES-BRAT-B	B Microbes, 1 lb	57.50
GES-CAUSOD55DRY	Caustic Soda, Pearls, 50 lb bag	50.15
GES-CITRIC50B	Citric Acid, 50%, Grade B, 575 lb drum	1,048.40
GES-DGR1	Degreaser/Solvent, 1 gl container	46.35
GES-DRYBSTR	Dry Booster, 1 lb	57.50
GES-FW-MRED	Degreaser, *"Mighty Red", 1 gl*	9.20
GES-MAGOXI-50	Magnesium Oxide (50 lb bag)	45.00
GES-MBELSC1	Micro-Blaze, Emergency Liquid Spill Control, 1 gl	26.50
GES-MBELSC250	Micro-Blaze, Emergency Liquid Spill Control, 250 gl tote	10,758.50
GES-MBOL5	Micro-Blaze Out, Firefighting Agent, 5 gl pail	215.15
GES-BCC#1-250	Petro-Clean, Spill Control Liquid, 250 gl tote	9,375.00
GES-BCC#1-1	Petro-Clean, Spill Control Liquid, 1 gl pail	37.50
GES-BCC#1-5	Petro-Clean, Spill Control Liquid, 5 gl pail	200.62
GES-BCC1-55	Petro-Clean, Spill Control Liquid, 55 gl drum	2,062.50
GES-SEABRAT-5	Seabrat, Spill Control Liquid, 5 gl pail	328.12
GES-SA50D	Soda Ash, Dense, 50 lb bag	22.80
GES-SB50	Sodium Bicarbonate, 50 lb bag	36.20
GES-FW-SODHCH	Sodium Hypochlorite, Liquid, 1 gl	2.10

All rates listed in this schedule are subject to change without notice.

TAS ENVIRONMENTAL	Response Rate Schedule Domestic	Schedule Rev. September 2004

Miscellaneous Material

		Unit Rate
MSM-1001	Diesel Fuel	Current Price
MSM-1002	Gasoline	Current Price
MSS-1002	Barricade Tape	23.10
MSS-1008	Box Liner, Roll-Off Box	50.00
GES-DLPB55-6	Drum Liner, Plastic Bag, 55 gl x 6 ml, 50 per roll	53.50
GES-DLPB55-6-EA	Drum Liner, Plastic Bag, 55 gl x 6 ml, each	1.05
GES-LP5	Drum, Poly, 5 gl, w/lid	16.10
GES-PD30	Drum, Poly, 30 gl, w/lid	45.00
GES-PDOH25	Drum, Poly, O/H, R/C, Nestable, 25 gl	58.30
GES-PDOH55	Drum, Poly, O/H, R/C, w/fittings, 55 gl	55.00
GES-PDOHN30	Drum, Poly, O/H, R/C, Nestable, w/fittings, 30 gl	65.00
GES-PDOHN55	Drum, Poly, O/H, R/C, Nestable, w/fittings, 55 gl	55.00
GES-PDTH55	Drum, Poly, T/H, w/bungs, 55 gl	55.00
GES-OP95	Drum, Poly, Overpack, 95 gl	200.00
GES-OP95M	Drum, Poly, Overpack, 95 gl, Metric	327.50
GES-OP110	Drum, Poly, Overpack, 110 gl	350.00
GES-CTSD55	Drum, Steel, T/H, 55 gl	59.00
GES-OTSD55	Drum, Steel, O/H, R/C, 55 gl	55.00
GES-SOP85	Drum, Steel, Overpack, 85 gl	175.00
GES-SOP110	Drum, Steel, Overpack, 110 gl	670.30
MSS-1001	Duct Tape, 2" x 60 yd	7.60
MSS-1009	Epoxy Stick, Sealant	9.45
MSS-1010	Heat Stress Supplies	10.00
MSS-1003	Rags/Wipes, Colored, 50 lb box	52.50
GES-CR25	Rope, Cotton, 1/4" x 100'	14.32
MSS-1006	Rope, Polypro, 1/2" x 600'	75.00
MSS-1007	Rope, Polypro, 1/4" x 600'	26.25
GES-PC1	Pollution Can, 20 gl, Each	20.10
MSS-1005	Visquine Sheeting, 20' x 100' x 6 ml	65.00

Sorbent Material

		Unit Rate
GES-BMC	BMC Absorb-N-Dry Absorbent	8.00
GES-B510	Boom, Sorbent, 5" x 10', 4 boom bale	102.05
GES-B510SN	Boom, Sorbent, Anti-Shed, Sock Net, 5"x 10'	100.00
GES-B810	Boom, Sorbent, 8" x 10', 4 boom bale	180.50
GES-B810SN	Boom, Sorbent, Anti-Shed, Sock Net, 8" x 10'	155.00
GES-UB510	Boom, Sorbent, Universal, 5" x 10', 4 boom bale	134.05
GES-UB810	Boom, Sorbent, Universal, 8" x 10', 4 boom bale	201.10
GES-GS-25	Cell-U-Sorb, 20 lb bag	31.00
GES-EX-SORB	Peat Moss Sorbent, 2 cf x 20 lb bag	39.25
GES-GS-22	Floor Gator, Granular, 50 lb bag	26.95
GES-IR300	Industrial Rug, Sorbent, 36” x 300’	278.27
GES-GATOR030	Oil Gator, 30 lb bag	45.05
GES-OSGP30	Oil Sponge GP, General Purpose, 30 lb bag	28.75
GES-P100	Pad, Sorbent, 17" x 19" x 3/8”, 100 pad bale	72.00
GES-P200	Pad, Sorbent, 17" x 19" x $^{3}/_{16}$", 200 pad bale	76.00
GES-Q100-P	Pad, Sorbent, Perforated, 17" x 19" x 3/8"	62.50
GES-Q70	Pad, Sorbent, Blue, 17" x 19" x 3/16"	79.50
GES-UQ100	Pad, Sorbent, Universal, Gray, 17" x 19" x 3/8”, 100 pad bale	104.60

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TAS ENVIRONMENTAL	Response Rate Schedule Domestic	Schedule Rev. September 2004

Sorbent Material (Cont.)

		Unit Rate
GES-HAZPIL10	Pillow, Haz-Mat, Universal, 3" x 18" x 24", 10 pillow bale	120.65
GES-HAZPIL17	Pillow, Haz-Mat, Universal, 3" x 11" x 17", 17 pillow bale	134.05
GES-PIL10	Pillow, Sorbent, 14" x 25", 10 pillow bale	101.90
GES-R144	Roll, Sorbent, 38" x 144' x 3/8", 1 roll bale	144.30
GES-OS15	Snare, Viscous Oil, 30 count	60.00
GES-OSB50	Snare Boom, Viscous Oil, 50'	73.75
GES-OSB100	Snare Boom, Viscous Oil, 100'	186.50
GES-OD40	Sorbent, All-Purpose, Oil-Dry	12.90
GES-SPHAGSORB2	Sphag Sorb, 2 cf x 24 lb bag	42.25
GES-SW100	Sweep, Sorbent, 17" x 100', 1 sweep bale	110.60
GES-2950	Zorbent, Absorbent Material	62.50

EQUIPMENT, MATERIAL AND SUPPLIES AT COST PLUS

		Unit Rate
MTE-1002	5-Gas Meters	Cost +20%
MSE-1002	Air Compressor, 375 cfm, + fuel	Cost +20%
MSE-1003	Air Compressor, 185 cfm, + fuel	Cost +20%
AUTO-1013-R	Backhoe, (3rd Party Rental, Mobilization & Demobilization	Cost +20%
AUTO-1015	Breathing Air Trailer	Cost +20%
HME-1002-RF	Breathing Air Cylinder Refill, 4500 psi	Cost +20%
ST-1002	Concrete Coring Device	Cost +20%
AUTO-1014	Crane (Rental, Mobilization & Demobilization)	Cost +20%
MTE-1025	Drager PID Chips, Test Specific	Cost +20%
MTE-1016	Drager Colorimetric Tubes	Cost +20%
MTE-1027	Drager Haz-Cat Identification Kit	Cost +20%
HME-1006	Filters and Decontamination, HEPA Mercury Vacuum Cleaner	Cost +20%
STR-1001	Frac Tank	Cost +20%
STR-1002	Frac Tank Mobilization, Decontamination and Demobilization	Cost +20%
ST-1001	Gas Detection Tubes	Cost +20%
MTE-1028	Glassware, Additional	Cost +20%
ST-1006	Lab Analysis, Accredited Third Party	Cost +20%
SKIM-1010	Oleophilic Pad Replacement, *Marco Skimmer*	Cost +20%
MTE-1017	Passive Badges, Other	Cost +20%
GES-REAGENT	Reagent, Miscellaneous	Cost +20%
MTE-1019	Sensodyne Tubes	Cost +20%
AUTO-1024-R	Skid-Steer Loader, (3rd Party Rental, Mobilization & Demobilization	Cost +20%

All rates listed in this schedule are subject to change without notice.

2.4.5 SET Environmental, Inc

USA Downstream Master Service Agreement

Between

ConocoPhillips Company

And

SET Environmental Inc

Contract Number: 88735.0-ENV-GPS

USA DOWNSTREAM MASTER SERVICE AGREEMENT

15thThis Master Services Agreement (Contract Number 88735.0-ENV-GPS) (the "Agreement"), effective as of the 15thday of June, 2010 (the "Effective Date") is entered into by and between ConocoPhillips Company, a Delaware corporation having offices at 600 North Dairy Ashford, Houston, Texas 77079, (hereinafter referred to as "Company") and SET Environmental Inc, a Illinios corporation having offices at 450 SUMAC RD, WHEELING, IL, 60090, US(hereinafter referred to as "Contractor").

WHEREAS, Company and/or its Affiliates (as hereinafter defined) may, from time to time, desire Contractor and/or its Affiliates to perform work and/or provide items of equipment, machinery, materials, goods or supplies in support of downstream operations or projects of Company and/or its Affiliates in the United States of America; and

WHEREAS, Company and Contractor are each committed to safety and the protection of the environment in all aspects of performance and operations as a core principle and philosophy; and

WHEREAS, Company and Contractor desire to establish certain terms and conditions which shall be incorporated into and shall apply to each Service-Order (as hereinafter defined) entered into between Company or its Affiliates and Contractor or its Affiliates pursuant to this Agreement;

NOW, THEREFORE, in consideration of the foregoing express premises and the mutual covenants hereinafter set forth, Company and Contractor hereby agree as follows:

1. DEFINITIONS

When used in this Agreement and/or in any Service Order, the following capitalized terms shall have the meanings specified in this Article 1.

"Affiliate" shall mean any entity, including but not limited to corporations, limited liability companies, partnerships and joint ventures, controlled by, under common control with, or controlling a party, with "control" being defined as owning, directly or indirectly, fifty percent (50%) or more of the assets or the outstanding shares having voting rights, or otherwise having the right, either by contract or otherwise, to control the operation, management or policy of such entity.

"Agreement" shall have the meaning provided in the first paragraph above.

"Change Order" shall mean a written order issued by Company to Contractor after the execution of a Service Order that authorizes an addition to, deletion from or other modification or adjustment to the requirements of the Service Order.

"Claims" shall mean causes of action, claims, suits, losses, liabilities, fines, penalties, costs, damages, judgments, awards and expenses, including, but not limited to, court costs and attorneys' fees.

"Company" shall have the meaning provided in the first paragraph of this Agreement where the term is used in relation to this Agreement and/ not to a specific Service Order. Where the term is used with regard to responsibilities, rights and obligations under an individual Service Order, "Company" shall mean the entity identified as "Company" in that Service Order.

"Company Equipment" shall have the meaning provided in Article 5.

construction;

23.1.3. All Work and components thereof shall be in full compliance with all applicable laws, rules and regulations;

23.1.4. All materials incorporated into the Work shall be new (unless otherwise specifically agreed between Company and Contractor in the applicable Service Order), of merchantable quality and fit for their intended purpose; and

23.1.5. All Work shall be performed in accordance with the specifications and drawings approved by Company and incorporated into the Service Order.

23.2. If any of the Work or materials is found to be defective or not in conformance with these warranties during the period beginning at the commencement of Work under the applicable Service Order and ending twelve (12) months following completion and acceptance of the Work under the applicable Service Order, Contractor shall, on an expedited basis, repair or replace any defective or nonconforming Work, materials or workmanship at its own cost. Contractor shall also be responsible, at its own cost, for the removal of and replacement of any portion of the facilities necessary to locate, remove, repair or replace any such defective or nonconforming Work or materials, as well as for the repair or replacement of any parts of Company's facilities damaged by such access, repair or replacement and for the removal from the Site and disposal of all scrap, trash and debris generated by such repair or replacement. Notwithstanding the foregoing, in the event the applicable Service Order is solely for the supply of goods or equipment (with or without the performance of incidental services related thereto), the warranty period with respect to such Service Order shall end at the later of twelve (12) months after installation of the goods or equipment or twenty-four (24) months after Contractor's delivery of the goods or equipment in accordance with the terms of the Service Order and Company's acceptance of such delivery.

23.3. Any Work or materials that is repaired or replaced pursuant to Article 23.2 above shall be subject to the warranties provided in Article 23.1 and the remedies set forth in Article 23.2 for the remainder of the warranty period provided in Article 23.2 above or for a period of twelve (12) months from Company's acceptance of the repaired or replaced Work or materials, whichever period expires later.

23.4. Should Contractor refuse or fail to commence repair or replacement of any such defective or nonconforming Work within twenty-four (24) hours, if the defective or nonconforming Work is discovered prior to completion and acceptance of the Work under the applicable Service Order, or within three (3) days, if the defective or nonconforming Work is discovered after completion and acceptance of the Work under the applicable Service Order, Company shall have the right to perform the repair or replacement itself or to have the repair or replacement performed by a third party on an expedited basis. Contractor shall be responsible for all costs of such repair or replacement, including but not limited to any amounts payable to third parties, third-party certifications and testing, and Company's internal costs, and Company may collect such amount directly from Contractor or by offset against performance security, if any, or by deduction from other amounts due Contractor.

23.5. Contractor shall obtain warranties from subcontractors and suppliers that meet or exceed the requirements of this Article 23. Such subcontractor or supplier warranties shall (i) be for the express benefit of Company and Contractor; (ii) shall be fully assignable to Company and shall be assigned to Company upon expiration of the warranty period described in Article 23.2 above; and (iii) shall be in addition to (and not in limitation of) the warranties of Contractor described in this Article 23.

24. TERM AND TERMINATION OF AGREEMENT AND SERVICE ORDERS

24.1. This Agreement shall continue in full force and effect for a term of five (5) years from the Effective Date (unless earlier terminated in accordance with this Article 24). Termination or expiration of this Agreement shall not terminate Service Orders that are in place as of the effective date of such termination.

24.2. Company may terminate this Agreement for cause, notwithstanding the term of the Agreement provided in Article 24.1 above if Contractor breaches any material obligation in this Agreement or if Contractor establishes a pattern, in the reasonable opinion of Company, of noncompliance with obligations related to safety (including the obligations provided in Article 6 hereof). For the avoidance of doubt, and not by way of limitation, all of Contractor's obligations under Articles 15 and 16 shall be considered material.

24.3. Company may terminate a Service Order for cause if Contractor fails to make any

payments to subcontractors or suppliers for Work under that Service Order when due, fails to diligently perform the Work under that Service Order, or otherwise fails to perform or fulfill any material obligation under the Service Order, and fails to correct any such failure within ten (10) days of notice from Company. Notwithstanding the foregoing, Company may immediately terminate the Service Order for cause if (i) Contractor commits any material safety violations in the performance of the Work; (ii) Contractor violates any of the obligations contained in Articles 15 or 16; or (iii) Contractor becomes insolvent, has a receiver appointed, makes a general assignment or filing for the benefit of creditors or files for bankruptcy protection. In the event of a termination under this Article 24.3, Company shall make no further payments until the Work is completed by Company or by another contractor on behalf of Company. Once the Work is completed, Company shall pay Contractor the remaining amount due Contractor for Work completed prior to the effective date of termination, less any costs of completing the Work in excess of the amount that would have been paid to Contractor for completion of the Work had Contractor not been in default and any administrative, legal and other expenses incurred by Company in connection with Contractor's default and Company's termination of the Service Order. The termination and deduction of costs and expenses shall be without prejudice to any other legal or equitable remedies available to Company.

24.4. In addition to the foregoing, Company may terminate a Service Order at any time for its convenience by providing written notice of such termination to Contractor. Company shall pay Contractor for all Work performed up to the effective date of such termination plus costs to terminate subcontracts and purchase orders as directed by Company (provided that the cost of such termination is approved in advance by Company), the reasonable costs of protecting and securing the Work and components thereof as provided in Article 24.5 below, and reasonable demobilization costs actually incurred by Contractor as a direct result of such termination.

24.5. In the event of a termination of a Service-Order pursuant to Articles 24.3 or 24.4 above, Contractor shall cease performance of the Work to the extent directed by Company and shall cooperate with Company to assign to Company subcontracts and purchase orders required by Company, to terminate, on terms favorable to Company, subcontracts and purchase orders not assigned to Company, and to transfer the Work and any components thereof as directed by Company. Additionally, Contractor shall take reasonable steps to secure and protect the Work and any components thereof until Company or its designee has taken possession.

24.6. In no event shall Company be liable for, nor shall Contractor be entitled to make, any claim for lost or anticipated profits, unearned bonuses or any similar damages for Work terminated or not performed by Contractor.

24.7. In the event Company terminates the Work under a Service Order pursuant to Articles 24.3 or 24.4 above, Company shall have the unrestricted right to contract with any person for the performance of such Work. Company shall have no liability whatsoever to Contractor arising out of such contracting, and Contractor shall not be entitled to any compensation or recompense arising out of Company's decision to contract for performance of such Work with another person.

25. SUSPENSION

Company may, for any reason, at any time and from time to time, suspend the carrying out of the Work under a Service Order or any part thereof. Upon receipt of such notice of suspension from Company, Contractor shall suspend the carrying out of such suspended Work for such time or times and in such manner as set forth in such notice and shall take reasonable steps to minimize any costs associated with such suspension. Except where such suspension ordered by Company is the result of or due to the fault or negligence of Contractor or any of its subcontractor or due to Force Majeure, Contractor shall be entitled to the reasonable costs caused by such suspension, including demobilization and remobilization costs, if applicable, provided Contractor provides Company with appropriate supporting documentation to evidence such costs, and an appropriate time extension to any guaranteed completion dates if and to the extent permitted under Article 22. Upon receipt of notice to resume suspended Work, Contractor shall immediately resume performance of the Work to the extent required in the notice. In no event shall Contractor be entitled to any additional profits or damages due to such suspension.

26. CONFIDENTIALITY

26.1. For a period of fifteen (15) years after expiration or termination of this Agreement, Contractor shall treat as confidential and shall not, without Company's prior written consent, divulge to any third party, or, except to the extent necessary for performance hereunder, make any use of any information about or shared in conjunction with performance under any Service

determined to be unenforceable or in contravention of any applicable law, such provision shall be deemed modified to the minimum extent required to bring such provision into compliance with said statute or case law. **NOTHING CONTAINED HEREIN SHOULD BE CONSTRUED AS CONTRAVENING THE EXPRESS INTENTION OF THE PARTIES THAT THE LAWS OF THE STATE OF TEXAS SHALL APPLY IN ALL RESPECTS.**

31. DISPUTE RESOLUTION

The parties agree that they will use the procedures outlined in Exhibit "F" ("Dispute Resolution"), attached hereto and made a part hereof, to resolve any dispute which may arise between them under this Agreement or under any Service Order.

32. NOTICES

Unless otherwise specifically provided, all notices and other communications provided for or required by this Agreement shall be in writing and shall be effective upon receipt. Such notices and communications shall be given either: (i) by hand delivery to an authorized representative of the party to whom directed; (ii) by United States registered mail return receipt requested, postage prepaid; (iii) by courier service, charges prepaid; or (iv) by facsimile to the address of the party shown below.

Company:

ConocoPhillips Company
411 S. Keeler

12 14 Phillips Building
Attn: Steve Heldorn
Facsimile No: 918-661-5664
Email: Steve.G.Heldorn@conocophillips.com

Contractor:

SET Environmental INC.
450 Sumac road
Wheeling IL 60090

Attn: M. O'Dwyer CFO
Facsimile No: _____
Email: _____

Either party may, at any time, change its notice address and details by written notice to the other party in accordance with this Article 32.

33. RULES OF INTERPRETATION AND GENERAL PROVISIONS

33.1. Any provisions in this Agreement or in any Service Order that expressly apply to the Contractor's subcontractors shall be interpreted, unless otherwise expressly stated, to mean that they apply to subcontractors of any tier.

33.2. The captions and headings used in this Agreement are for convenience only and shall not be used for purposes of construction or interpretation.

33.3. No waiver by either party of any one or more defaults by the other party in the performance of this Agreement or a Service Order shall operate or be construed as a waiver of any future default or defaults by the same party, whether of a like or different character.

33.4. Each party hereto agrees that it has had the opportunity to be represented by counsel in connection with the drafting and negotiation of this Agreement, and the parties agree that this

Agreement and the terms hereof shall not be construed more severely against one of the parties than the other. Specifically, but not by limitation, the parties agree that no term of this Agreement shall be construed more severely against the party deemed to be the drafter of such term than against the other party.

33.5. The use of any INCOTERMS or any delivery terms or similar terms in this Agreement or any Service Order are used solely for the purpose of expressing the duties to be performed by each party and is not intended and shall not be used to define or specify the point at which title or risk of loss will transfer from one party to the other.

33.6. It is intended that if any provision of this Agreement is determined to be unenforceable or void for any reason, such provision shall be adjusted, if possible, in order to achieve the intent of the parties. In any event, all other provisions of the Agreement shall be deemed valid, binding and enforceable.

33.7. Notwithstanding any provision of this Agreement to the contrary, the expiration or termination of this Agreement or any Service Order shall not relieve the parties of any obligations that, by their nature, survive such expiration or termination, including without limitation any Claims arising out of the Work or the performance of the Work, warranties, indemnities, insurance requirements, audit rights, dispute resolution procedures, and obligations with respect to confidential information.

33.8. Any terms or conditions contained in any of Contractor's purchase orders, price lists, invoices, tickets or other documents presented to Company related to any Work performed under an individual Service Order shall be null and void, regardless of whether signed by an employee of Company.

33.9. This Agreement reflects the entire agreement between the parties with respect to its subject matter. Except for specific confidentiality agreements described in Article 28, all other oral or written agreements, contracts, understandings, conditions, warranties or representations with respect to the subject matter of this Agreement are superseded by this Agreement.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their respective duly authorized representatives, effective as of the Effective Date.

ConocoPhillips Company

Signature: Debbie Phillips

By: Debbie Phillips

Title: Contract Specialist

Date: 7/20/2010

SET Environmental Inc

Signature: Michael O'Dwyer

By: Michael O'Dwyer

Title: CFO

Date: 6-17-10

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SET ENVIRONMENTAL INC.

Southern Division

EMERGENCY RESPONSE UNIT RATE SCHEDULE

PERSONNEL

Rates Per Hour

Senior Gas Cylinder Specialist
Senior Project Manager
Gas Cylinder Specialist
High Hazard Specialist
Project Manager
Site Safety Officer
Field Supervisor
Chemist
Transportation/Disposal Coordinator
Equipment Operator
Technician

NOTE:

1. *Straight time is the first 8 consecutive hours between 6:00 a.m. – 5:00 p.m. Monday through Friday.*
2. *Holiday pay is charged at overtime rates +25%*
3. *Time is charged in ½ hour increments.*

PERSONAL PROTECTIVE EQUIPMENT

Rates Per Person, Per Shift

Level A
Level B with Tychem 10,000 suit
Level B with Acid Suit
Level B with Saranex Suit
Level C
Level D Modified w/Poly-Coated Tyvek
Level D (Hard Hat, Safety Glasses, Uniforms, Work Gloves, Work Boots)
Turn Out Gear
Aluminized Kevlar Suit w/Flat Jacket per day
Nomex Coveralls

NOTE:

1. *Additional PPE and/or change-outs will be billed per the rate schedule.*
2. *For Level A, the fee represents only one change out. Re-use of the disposable suits is not permitted.*

EQUIPMENT

Vehicles and Trailers

Automobile
Truck, Rapid Response (1/2 Ton 4X4)
Truck, Crew Cab 1 Ton
Truck, Pickup (4 x 4)
Truck, Bobtail Roll-Off
Truck, Box (12' or 24')
Truck, Semi with Trailer
Truck, 3150 Gallon Vacuum Truck
Truck, 5000 Gallon Mild-Steel Vacuum Tanker
Truck, 5000 Gallon Stainless Vacuum Tanker
Truck, Semi w/ Roll-Off Box Trailer

EQUIPMENT (Continued)

Trailer, Equipment
Trailer, Gooseneck Flat Bed
Trailer, Tongue Pull Flat Bed
Roll-off Box Rental
Roll-off Box Liners
Vacuum Box Rental

Heavy Equipment

Backhoe, Case 590
Bobcat
Bobcat Sweeper Attachment
Forklift (5000 lbs.)

NOTE:

1. *Fuel for equipment will be charged at cost plus 20%.*

Hoses & Pumps

Hose, Air, 50', for Breathing
Hose, Air for the Compressor (50')
Hose, Chemical, 20' Sections
Hose, Discharge (Soft), 2" x 50'
Pump, 2" Stainless Steel Double Diaphragm
Pump, 2" Aluminum Double Diaphragm
Pump, 2" Centrifugal
Pump, 1 ½ " Poly
Pump, Barrel (Disposable)

Other Equipment

Air Compressor, 185cfm
Barricade ("Horse")
Blower, Electric, IS rated
Boat, 2 Man
Boom, Containment 18", 25' Sections
Breathing Air Bottles, 45 Minutes
Breathing Air Cylinder (300cf)
Chain Saw
Chest Waders w/Suspenders
Cold Tapping Equipment
Confined Space Entry Gear (Retrieval System)
Cylinder, Sampling Manifold (w/ Vacuum Pump)
Cylinder, Unknown Sample Cylinders
Cylinder, Salvage HP (Large)
Cylinder, Salvage HP15 (X-Large)
Cylinder, Low Pressure Salvage Vessel
Cylinder, LP15 (X-Large) Salvage Vessel
Cylinder, Lecture-pack Salvage Vessel
Drum Puncturing Device – Remote
Generator, 5KW
Generator, 6.5KW
Hand Tools
Hudson Sprayer
Hydro-Blaster Unit (10,000 psi)
Hydro-Blaster Unit w/ Line Cleaning Assembly
(Includes 100' ext.; $100.00 / additional / 50' section)
Industrial Heater

Revised 06-2008

Other Equipment (Continued)

Ladder
Light, Drop Type, Explosive Proof
Lights, on Portable Stands
Mop Buckets
Negative Air Machine
Portable Ventilation Fan
Pressure Washer 3,000 psi, w/ tank
Pressure Washer 3,000 psi, Hot w/ tank
Radio, Portable, 2 Channel Hand-held
Safety Cone
Saw, Circular or Reciprocating (w/o blades)
Saw; Cut Off (without blades)
Subsurface Core Sampler (Stainless Steel)
Subsurface Sample Tubes
SCBA, 45 Minute Complete Unit
SCBA, 5 or 10 Minute Escape Unit
Spark Proof Tools
Torch (Oxy-Acetylene)
Tank, 1600 Gallon Portable Poly
Tank, 2200 Gallon Portable Poly
Tank, 3000 Gallon Portable Poly
Vacuum – Drum (pneumatic)
Vacuum (Mercury)
Vacuum (Electric)
Weed Eater/ Brush Cutter

Testing and Analysis Equipment

Draeger Testing Unit
Geiger Counter
Eye Wash Unit (Portable)
HAZ-CAT Identification / classification
LEL/OZ/CO/H2S
Mercury Vapor Analyzer (Jarome)
Nippon EMP-1 Mercury Analyzer
pH Meter
Photo-ionization Detector (Hnu or Microtip)
Phosgene Thermo-Tester
Pump, Air (Bendix, Draeger)
Tubes, Draeger or Bendix
Unknown Chemical Identification
Anthrax Confirmation Test

MATERIALS

Materials

Absorbent Boom (5" section, 10' diameter)
Absorbent Boom (8"X10')
Absorbent Pads (oil or universal) 15"X19"
Absorbent Roll 38" x 100'
Absorbent Boom (universal) 8" x 96" (4/bail)
Alconox, Non Phosphonated Solution
Bailers (disposable), poly 1.5"X36"
Box, Rags
Emulsification Agents (Bio-Solve, Micro-Blaze)
Bio-Decon Agent (CSI-1)
Booties, Latex (pair)
Boots, Haz Mat (Beta replacement)
Boots PVC Overboots
Boxes, DOT (Sample shipment containers)
Brushes, Boot Wash
Cartridge, Mercury P-100
Cartridge, P-100
Cartridge, OV/OA P-100
Cartridge, OV/OA
Duct Tape (roll)
Dust Mask, N95 (20 / box)
Gloves, Butyl

MATERIALS (Continued)

Gloves, Jersey
Gloves, Latex 5mil (powder-free)
Gloves, Leather
Gloves, Nitrile 15-mil
Gloves, Silver Shield (4-H)
Gloves, PVC
Labels (all)
LEL Vapor Suppressant (SCS-100)
Less Than 10 (PCB Soap)
Lime (50 lb. bag)
Mercury Soap
Nitrogen Cylinder
Oil Pickup Absorbent (25 lb. Bag)
pH Strips
Poly Sheeting, 6 mil 20' x 100'
Simple Green
Sodium Bicarbonate (50 lb. bag)
Suits, Rain, 2-Piece PVC
Suits, Saranax
Suits, Tychem 10,000
Suits, Tyvek
Suits, Tyvek (Poly coated)
Soda Ash (50 lb. bag)
Tape – Caution Tape
Tape – Hazardous Materials Tape
Thieving Sample Rods (Regular – 3')
Thieving Sample Rods (Long – 10')
Vermiculite (4 cubic feet)

NOTE

1. *Due to the nature of hazardous chemical cleanup, it may be necessary to dispose of equipment and/or protective clothing due to corrosion or wear. If necessary, the above rates will be charged plus replacement at cost plus 20%*
2. *Materials and supplies required for support of testing and or analysis equipment will be an additional charge.*

CONTAINERS

Containers

Box, Cubic Yard
Box, PIH
Drum Liner
Drums, 5 Gallon, Poly (OH)
Drums, 14 Gallon, Poly (OH)
Drums, 30 Gallon, Poly (OH)
Drums, 30 Gallon, Poly (TH)
Drums, 55 Gallon, Poly (TH)
Drums, 55 Gallon, Steel (OH)
Drums, 55 Gallon, Steel (TH)
Drums, 55 Gallon, Steel (OH) with 25 mil liner
Drums, 85 Gallon, Poly Overpack
Drums, 85 Gallon, Steel Overpack
Super Sack

Revised 06/2008

SET ENVIRONMENTAL INC.

Southern Region

FIELD SERVICES UNIT RATE SCHEDULE

PERSONNEL

Rates Per Hour

Senior Gas Cylinder Specialist
Senior Project Manager
Gas Cylinder Specialist
High Hazard Specialist
Project Manager
Site Safety Officer
Field Supervisor
Chemist
Transportation/Disposal Coordinator
Equipment Operator
Technician

NOTE:

1. *Straight time is the first 8 consecutive hours between 8:00 a.m. – 5:00 p.m. Monday through Friday.*
2. *Holiday pay is charged at overtime rates +25%*
3. *Time is charged in ½ hour increments.*

PERSONAL PROTECTIVE EQUIPMENT

Rates Per Person, Per Shift

Level A
Level B with Tychem 10,000 suit
Level B with Acid Suit
Level B with Saranax Suit
Level C
Level D Modified w/Poly-Coated Tyvek
Level D (Hard Hat, Safety Glasses, Uniforms, Work Gloves, Work Boots)
Turn Out Gear
Aluminized Kevlar Suit w/Flat Jacket per day
Nomex Coveralls

NOTE:

1. *Additional PPE and/or change-outs will be billed per the rate schedule.*
2. *For Level A, the fee represents only one change out. Re-use of the disposable suits is not permitted.*

EQUIPMENT

Vehicles and Trailers

Automobile
Truck, Rapid Response (1/2 Ton 4X4)
Truck, Crew Cab 1 Ton
Truck, Pickup (4 x 4)
Truck, Bobtail Roll-Off
Truck, Box (12' or 24')
Truck, Semi with Trailer
Truck, 3150 Gallon Vacuum Truck
Truck, 5000 Gallon Mild-Steel Vacuum Tanker
Truck, 5000 Gallon Stainless Vacuum Tanker
Truck, Semi w/ Roll-Off Box Trailer

EQUIPMENT (Continued)

Trailer, Equipment
Trailer, Goosneck Flat Bed
Trailer, Tongue Pull Flat Bed
Roll-off Box Rental
Roll-off Box Liners
Vacuum Box Rental

Heavy Equipment

Backhoe, Case 580
Bobcat
Bobcat Sweeper Attachment
Forklift (5000 lbs.)

NOTE:

1. *Fuel for equipment will be charged at cost plus 20%.*

Hoses & Pumps

Hose, Air, 50', for Breathing
Hose, Air for the Compressor (50')
Hose, Chemical, 20' Sections
Hose, Discharge (Soft), 2" x 50'
Pump, 2" Stainless Steel Double Diaphragm
Pump, 2" Aluminum Double Diaphragm
Pump, 2" Centrifugal
Pump, 1 ½ " Poly
Pump, Barrel (Disposable)

Other Equipment

Air Compressor, 185cfm
Barricade ("Horse")
Blower, Electric, IS rated
Boat, 2 Man
Boom, Containment 18", 25' Sections
Breathing Air Bottles, 45 Minutes
Breathing Air Cylinder (300cf)
Chain Saw
Chest Waders w/Suspenders
Cold Tapping Equipment
Confined Space Entry Gear (Retrieval System)
Cylinder, Sampling Manifold (w/ Vacuum Pump)
Cylinder, Unknown Sample Cylinders
Cylinder, Salvage HP (Large)
Cylinder, Salvage HP15 (X-Large)
Cylinder, Low Pressure Salvage Vessel
Cylinder, LP15 (X-Large) Salvage Vessel
Cylinder, Lecture-pack Salvage Vessel
Drum Puncturing Device – Remote
Generator, 5KW
Generator, 6.5KW
Hand Tools
Hudson Sprayer
Hydro-Blaster Unit (10,000 psi)
Hydro-Blaster Unit w/ Line Cleaning Assembly
(includes 100' ext.; $100.00 / additional / 50' section)
Industrial Heater

Revised 03-2008

Other Equipment (Continued)

Ladder
Light, Drop Type, Explosive Proof
Lights, on Portable Stands
Mop Buckets
Negative Air Machine
Portable Ventilation Fan
Pressure Washer 3,000 psi, w/ tank
Pressure Washer 3,000 psi, Hot w/ tank
Radio, Portable, 2 Channel Hand-held
Safety Cone
Saw, Circular or Reciprocating (w/o blades)
Saw; Cut Off (without blades)
Subsurface Core Sampler (Stainless Steel)
Subsurface Sample Tubes
SCBA, 45 Minute Complete Unit
SCBA, 5 or 10 Minute Escape Unit
Spark Proof Tools
Torch (Oxy-Acetylene)
Tank, 1600 Gallon Portable Poly
Tank, 2200 Gallon Portable Poly
Tank, 3000 Gallon Portable Poly
Vacuum – Drum (pneumatic)
Vacuum (Mercury)
Vacuum (Electric)
Weed Eater/ Brush Cutter

Testing and Analysis Equipment

Draeger Testing Unit
Geiger Counter
Eye Wash Unit (Portable)
HAZ-CAT Identification / classification
LEL/O2/CO/H2S
Mercury Vapor Analyzer (Jerome)
Nippon EMP-1 Mercury Analyzer
pH Meter
Photo-Ionization Detector (Hnu or Microtip)
Phosgene Thermo-Tester
Pump, Air (Bendix, Draeger)
Tubes, Draeger or Bendix
Unknown Chemical Identification
Anthrax Confirmation Test

MATERIALS

Materials

Absorbent Boom (5" section, 10' diameter)
Absorbent Boom (8"X10')
Absorbent Pads (oil or universal) 15"X19"
Absorbent Roll 38" x 100'
Absorbent Boom (universal) 8" x 66' (4/bail)
Alconox, Non Phosphonated Solution
Bailers (disposable), poly 1.5"X36"
Box, Rags
Emulsification Agents (Bio-Solve, Micro-Blaze)
Bio-Decon Agent (CSI-1)
Booties, Latex (pair)
Boots, Haz Mat (Beta replacement)
Boots PVC Overboots
Boxes, DOT (Sample shipment containers)
Brushes, Boot Wash
Cartridge, Mercury P-100
Cartridge, P-100
Cartridge, OV/OA P-100
Cartridge, OV/OA
Duct Tape (roll)
Dust Mask, N95 (20 / box)
Gloves, Butyl

MATERIALS (Continued)

Gloves, Jersey
Gloves, Latex 5mil (powder-free)
Gloves, Leather
Gloves, Nitrile 15-mil
Gloves, Silver Shield (4-H)
Gloves, PVC
Labels (all)
LEL Vapor Suppressant (SCS-100)
Less Than 10 (PCB Soap)
Lime (50 lb. bag)
Mercury Soap
Nitrogen Cylinder
Oil Pickup Absorbent (25 lb. Bag)
pH Strips
Poly Sheeting, 6 mil 20' x 100'
Simple Green
Sodium Bicarbonate (50 lb. bag)
Suits, Rain, 2-Piece PVC
Suits, Saranax
Suits, Tychem 10,000
Suits, Tyvek
Suits, Tyvek (Poly coated)
Soda Ash (50 lb. bag)
Tape – Caution Tape
Tape – Hazardous Materials Tape
Thieving Sample Rods (Regular – 3')
Thieving Sample Rods (Long – 10')
Vermiculite (4 cubic feet)

NOTE

1. *Due to the nature of hazardous chemical cleanup, it may be necessary to dispose of equipment and/or protective clothing due to corrosion or wear. If necessary, the above rates will be charged plus replacement at cost plus 20%*
2. *Materials and supplies required for support of testing and or analysis equipment will be an additional charge.*

CONTAINERS

Containers

Box, Cubic Yard
Box, PIH
Drum Liner
Drums, 5 Gallon, Poly (OH)
Drums, 14 Gallon, Poly (OH)
Drums, 30 Gallon, Poly (OH)
Drums, 30 Gallon, Poly (TH)
Drums, 55 Gallon, Poly (TH)
Drums, 55 Gallon, Steel (OH)
Drums, 55 Gallon, Steel (TH)
Drums, 55 Gallon, Steel (OH) with 25 mil liner
Drums, 85 Gallon, Poly Overpack
Drums, 85 Gallon, Steel Overpack
Super Sack

Revised 03/2008

2.4.6 Advanced Environmental Solutions, Inc.

Master Services Agreement

Master Service Agreement

Between

ConocoPhillips Pipe Line Company And ConocoPhillips Company

And

ADVANCED ENVIRONMENTAL SOLUTIONS INC

Effective 08/10/2008

MASTER SERVICE AGREEMENT
Revised: 19 January 2005 (General, U.S. Operations) **Agreement No.**
14161.0-MSA-PT

This Agreement is made on this 10th day of August 2005 by and between ConocoPhillips Pipe Line Company And ConocoPhillips Company, (hereinafter called "Company") and ADVANCED ENVIRONMENTAL SOLUTIONSINC (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	ADVANCED ENVIRONMENTAL SOLUTIONSINC
Signature: Lynda Beaders	Signature:
Name: Lynda Beaders	Name: Robert J. Chmez
Title: Contract Specialist	Title: President
Date: 10-31-05	Date: 8/12/05

7. NOTICES

Unless otherwise specifically provided, all notices and other communications provided for in this Services Order shall be in writing and shall be effective upon receipt. Such notices and communications shall be given either: (i) by hand delivery to an authorized representative of the party to whom directed, or (ii) by United States mail, postage prepaid, or (iii) by courier service guaranteeing delivery within two days or less, charges prepaid, or (iv) by facsimile to the following addresses for matters relating to this Agreement:

	Company	Contractor
Name	ConocoPhillips Pipe Line Company And ConocoPhillips Company	Advanced Environmental Solutions, Inc.
Address	1000 S. Pine	2318 Roldan Drive
	PO Box 1267	Belen, NM 87002
	Ponca City, OK 74602	
Attention:	Lynda Beavers	Andy Salz
Telephone No:	580-767-6651	505-861-1700
Facsimile No:	580-767-5348	505-864-1710
Email:	lynda.d.beavers@conocophillips.com	

Any notice, other than a force majeure notice under Article 14, 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

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 terminate with respect to contracts which have not yet been completed or paid for.

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.

Response Equipment List

Unit	Description
Regular Time Labor (Monday thru Friday, 8:00am - 5:00pm)	
Hour	Project Manager, Haz Mat
Hour	Chemist, Haz Mat
Hour	HazMat Tech – Heavy Equipment Operator
Hour	HazMat Tech - Lead
Hour	HazMat Technician
Hour	Clerical
Overtime Labor (Monday thru Friday, 5:01pm - 7:59am)	
Hour	Project Manager, Haz Mat
Hour	Chemist, Haz Mat
Hour	HazMat Tech – Heavy Equipment Operator
Hour	HazMat Tech - Lead
Hour	HazMat Technician
Hour	Clerical
Premium Time Labor (Saturday and Sunday)	
Hour	Project Manager, Haz Mat
Hour	Chemist, Haz Mat
Hour	HazMat Tech – Heavy Equipment Operator
Hour	HazMat Tech - Lead
Hour	HazMat Technician
Hour	Clerical
Holiday Labor (Federal Holidays and Associated Weekends)	
Hour	Project Manager, Haz Mat
Hour	Chemist, Haz Mat
Hour	HazMat Tech – Heavy Equipment Operator
Hour	HazMat Tech - Lead
Hour	HazMat Technician
Hour	Clerical
Expenses	
Copy	Bound Report
Each	Delivery of Heavy Equipment w/in 75 mi radius of Belen
Each	Pickup of Heavy Equipment w/in a 75 mi. radius of Belen
Mile	Delivery of Heavy Equipment outside a 75 mi radius of Albuquerque
Mile	Pickup of Heavy Equipment outside a 75 mi. radius of Albuquerque
Gallon	Fuel Charge for Heavy Equipment

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Response Equipment List

Each	Per Diem – Hotel/Motel (Per Person/Per Night)
Each	Per Diem - Meal (Per Meal/Per Person)
Day	Phone/Fax Usage (incl. cell phone use)
Roll	Photographs & Developing
Each	SCBA Refill
Mile	Mileage, HazMat Truck and/or Trailer
Mile	Mileage, Support Vehicle (per vehicle)
Cooler	Sample Shipping Freight
Each	24 - 36 Hour RUSH Turnaround (100% Surcharge)
Personal Protection Equipment	
Pair	Boot Covers
Pair	Gloves, Cotton
Pair	Gloves, Leather
Pair	Gloves, PVC
Pair	Gloves, Surgical
Set	Cartridges, Ammonia
Set	Cartridges, Mercury Vapor
Set	Cartridges, Organic Vapor
Set	Cartridges, Combos
Each	Level 'B' - SCBA, Semi-Encap. Suit, Gloves, Boties (Per man/Per day)
Each	Level 'C' - Respirator, Tyvek, Gloves, Bootics (Doesn't incl. cartridges)
Each	Level 'D' PPE, Yellow - Yellow Tyvek, Gloves, Booties, Safety Glasses
Each	Level 'D' PPE, White - White Tyvek, Gloves, Booties, Safety Glasses
Each	Level "D" PPE - Acic - Acid Suit - Gloves, Booties, Safety Glasses
Each	Tyvek, White
Each	Tyvek, Yellow
Each	Tyvek, Acid
Containers	
Each	Cubic Yard Bag
Each	Cubic Yard Box
Each	Drum Liner
Each	Fiber Drum, 12g, OH/TH
Each	Fiber Drum, 20g, OH/TH
Each	Fiber Drum, 30g, OH/TH
Each	Fiber Drum, 55g, OH/TH
Each	Metal Drum, 5g, OH/TH
Each	Metal Drum, 30, OH/TH

Response Equipment List

Containers (Cont)	
Each	Metal Drum, 55g, OH/TH
Each	Metal Drum, 85g, OH (Overpack)
Each	Poly Drum, 5g, OH/TH
Each	Poly Drum, 14g, OH/TH
Each	Poly Drum, 20g, OH/TH
Each	Poly Drum, 30g, OH/TH
Each	Poly Drum, 55g, OH/TH
Each	Poly Drum, 95g, OH (Overpack)
Materials	
Each	Absorbent Booms (8" x 10")
Each	Absorbent Pads (24" x 24")
Each	Absorbent Pillows
Bag	Floor Dry
Bag	Cement
CY	Clean Backfill (Delivered)
Roll	Caution Tape
Roll	Duct Tape
Bag	Vermiculite
Each	Poly Bag, 4ml
Roll	Poly Sheeting, 4ml, 100' x 20'
Roll	Poly Sheeting, 6ml, 100' x 20'
Roll	Poly Sheeting, 10ml, 100' x 20'
Equipment	
Unit/Day	Backhoe (Delivery/Pickup & Fuel Charges Additional)
Unit/Day	Forklift, Warehouse (Delivery/Pickup & Fuel Charges Additional)
Unit/Day	Front End Loader (Delivery/Pickup & Fuel Charges Additional)
Unit/Day	Skid Steer (Delivery/Pickup & Fuel Charges Additional)
Unit/Day	Street Sweeper (Delivery/Pickup & Fuel Charges Additional)
Unit/Day	Forklift, Construction (Delivery/Pickup & Fuel Charges Additional)
Unit/Day	Extend - a - Fork
Unit/Day	Trackhoe
Unit/Day	Light Tower, Portable
Each	Broom (All Types) - Only charged if ruined due to nature of material
Each	Shovel, Metal - Only charged if ruined due to the nature of material
Each	Shovel, Plastic - Only charged if ruined due to the nature of material
Each	Squeegee - Only charged of ruin due to the nature of material
Each	Collwasa

Response Equipment List

Equipment (Cont)	
Unit/Day	Meter, 3-Way
Unit/Day	Meter, Jerome (Mercury)
Unit/Day	Meter, PID
Unit/Day	Confined Space Equipment
Unit/Day	Manhole Blower
Unit/Day	Trailer, Dual Axel
Unit/Day	Generator (5000 - 6500 watt)
Unit/Day	Steam Pressure Washer
Unit/Day	Vacuum, HEPA
Unit/Day	Vacuum, Mercury
Unit/Day	Compressor, 100CFM
Unit/Day	Compressor, 185 CFM
Unit/Day	Steam Pressure Washer, Self Contained
Unit/Day	Compressor, 385 CFM
Unit/Day	Pump, Hoses, and Fittings (per unit/per day)
Unit/Day	Truck, HazMat and/or Trailer
Unit/Day	Truck, Stakebed w/Dump
Unit/Day	Truck, Van w/Liftgate
Hour	Truck, Vacuum, Wet
Hour	Truck, Vacuum, Dry
Unit/Day	Truck, Support
Unit/Day	Truck, Dump, 12 yard
Disposal (Does not include transportation)	
Each	Disposal, Empty Drum (>5g)
Each	Disposal, Empty Drum (<=5g)
55g drm	Disposal, Flammable Liquids (< 6" of solids)
Foot	Disposal, Fluorescent Bulbs, Straight - Pickup Required ($150.00 min)
Foot	Disposal, Fluorescent Bulbs, Straight - Drop Off
Lb.	Disposal, Lab Pack, Non-Reactive ($90.00 Minimum)
5g cont.	Disposal, Lab Pack, Unknowns (Packaged to TSDF guidelines)
Lb.	Disposal, Lab Pack, Reactive ($90.00 Minimum)
55g drm	Disposal, NM Special Waste - 55g drum
CY Box	Disposal, NM Special Waste - CY Box
CY	Disposal, NM Special Waste - Bulk
55g drm	Disposal, TPH Soil - 55g drum
CY	Disposal, TPH Soil - Bulk
55g drm	Disposal, Used Antifreeze, Non-EPA Hazardous

Response Equipment List

Disposal (Cont.)	
55g drm	Disposal, Used Machine Coolant, Non-EPA Hazardous
55g drm	Disposal, Used Oil, Non-EPA Hazardous
55g drm	Disposal, Used Oily Water, Non-EPA Hazardous
Transportation	
Hour	Transportation, End Dump, Non-Hazardous Materials
Container	Transportation, Drum Rate, Non-Hazardous Materials
Container	Transportation, Drum Rate, Hazardous Materials
Lab Analysis (Analysis, Sample Prep)	
Each	BTEX
Each	Hydrocarbon Characterization
Each	PCB's
Each	Semi-Volatiles
Each	TPH
Each	Volatiles
Each	Corrosivity
Each	Cyanide
Each	Flashpoint
Each	Ignitability
Each	Metals, Total, RCRA
Each	Metals, Total, Single Analyte
Each	Paint Filter
Each	pH
Each	Reactivity (Cyanide/Sulfide)
Each	TOX
Each	Chlorine Field Test
Each	Chlor-D-Tect Field Test
Each	HazCat Field Test
Each	PCB Field Test
Each	Profile, Waste Stream
Each	Profile, Lab Pack
Each	TCLP, Full
Each	TCLP, Full less Pest/Herb
Each	TCLP, RCRA Metals
Each	TCLP, Single Metal
Each	TCLP, RCRA Volatiles

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2.4.7 Conestoga-Rovers & Associates

Master Service Agreement

No. 52183.0-MSA-GPS

Between

CONOCOPHILLIPS COMPANY

and

CONESTOGA-ROVERS & ASSOCIATES

Effective

October 21, 2007

MASTER SERVICE AGREEMENT

This Agreement is effective on October 1, 2007, by and between ConocoPhillips Company, (hereinafter called "Company") and Conestoga-Rovers & Associates (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

Signature: William A Kitchen

Name: William A. Kitchen

Title: Manager, Risk Management & Remediation

Date: 10/8/07

Conestoga-Rovers & Associates

Signature: Ted E. Dove

Name: Ted E. Dove

Title: Vice President

Date: 10/01/07

9.3. to return same to Company at conclusion of use, or earlier if requested by Company, in as good of condition as when received by Contractor, ordinary wear and tear excepted; and

9.4. that, notwithstanding anything to the contrary contained in Section III, Article 10, Risk Structure, Contractor shall be liable to Company for any damage or loss thereof while such vehicles, equipment, materials, tools, or other property are within Contractor's care, custody and control.

10. MINORITY-OWNED AND WOMEN-OWNED SUPPLIERS

Contractor's selection processes for procurement of third party goods, equipment and services utilized on behalf of Company shall include minority-owned and women-owned businesses for consideration and where possible Contractor shall provide maximum use of minority-owned and women-owned subcontractors and suppliers in performance of the work. A minority-owned business is defined as one that is at least 51% owned by a minority or group of minorities and has its management and daily business controlled by one or more such individuals. Minorities shall include, but are not limited to, Black Americans, Hispanic Americans, Native Americans, Asian-Pacific Americans, and Asian-Indian Americans (hereinafter referred to singularly as an "MBE" or in a group as "MBEs"). 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.

11. 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
411 Keeler
Bartlesville, OK 74004
Attn: Debbie Phillips
Phone No.:918-661-7214
Facsimile No.:918-661-1537
e-mail: debbie.a.phillips@conocophillips.com

CONTRACTOR:

_____
_____
Attn: _____
Phone No.: _____
Facsimile No.: _____
e-mail: _____

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.

12. TERMINATION OF AGREEMENT AND CONTRACTS

This Agreement shall continue in full force and effect for an initial term of three (3) years 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.

13. 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.

14. GENERAL PROVISIONS

14.1. The captions and headings used in this Agreement are intended for convenience only and shall not be used for purposes of construction or interpretation.

14.2. 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.

14.3. 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

compensation payable. Co-Parties shall make all reasonable efforts to minimize their liability to pay and to recover from ConocoPhillips any value added taxes or sales and use taxes, which may be assessed on compensation or payments under this Agreement, and Co-Parties shall cooperate fully with ConocoPhillips in any reasonable and lawful effort by ConocoPhillips to reduce or eliminate any such value added or sales and use taxes for which ConocoPhillips is liable under this Agreement.

NOTICES

Any and all notices or demands permitted or required to be made under this Agreement shall be sent to the following, and shall be delivered personally, telecopied or sent by certified mail or overnight nationally to the locations as follows:

If to ConocoPhillips:

ConocoPhillips Company
1346 Phillips Building
Bartlesville, OK 74004
Attn: Manager, Risk Management & Remediation
918.661.3116 (p)
918.662.3378 (f)

If to EnviroCap/TPA:

EnviroCap, LLC
2111 Swann Avenue, Suite 200
Tampa, FL 33606
813.341.3650 (p)
813.341.3651 (f)

If to Contractor:

Contractor Name: Conestoga-Rovers & Associates
Address: 209 Gothic Court, Suite 109, Franklin, TN 37067
Phone: (615) 778-2535
Fax: (615) 778-2533
Attn: Brian D. Webster, Vice President

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of the day and year first above written.

ConocoPhillips Company

William A Kitchen

Name: William A. Kitchen
Manager, Risk Management & Remediation

EnviroCap LLC

Robert K Beard

Name: Robert K. Beard
Title: President

Conestoga-Rovers & Associates

Ted E Dove

Name: Ted E. Dove
Title: Vice President

Section 3 – Table of Contents

3.0	Sensitive Area General Response Strategies
3.1	Historical/Archaelogical Sites
3.2	Natural Areas
3.3	National, State and Local Parks
3.4	Protected Waterways
3.5	Recreational Sites
3.6	Water Supply Intakes
3.7	Wetlands
3.8	Wildlife Refuges
3.9	Natural Resource Damage Assesments

Sec. 3.0 Sensitive Area General Response Strategies

The 14 sensitive areas are:

- Water Intakes/Public Water Supplies
- Schools
- Medical Facilities
- Residential Areas
- Businesses
- Wetlands/Other Sensitive Environments
- Fish and Wildlife Sensitive Environments
- Water Resources/Lakes and Streams
- Endangered Flora and Fauna
- Recreational Areas
- Transportation Routes (Air, Land, and Water)
- Utilities
- Other Areas of Economic Importance
- Wellhead Protection Areas

3.0.1 Wichita Falls Terminal

The facility is a crude and products terminal located on the north side of Wichita Falls and within the city limits. The office is at latitude (b) (7)(F) [redacted]. Facility tankage has secondary containment. Discharge from the site would flow into Plum Creek, thence meandering easterly approximately 1 mile to the Wichita River, thence following the meanders of the Wichita River northeasterly towards the Red River and intersecting at approximately 48.5 miles downstream.

Water Intakes and Public Water Supplies

There are 10 water supplies within the response zone corridor. These include 4 filtration plants, 2 dams, and ponds and lakes.

Schools

There are about 52 schools within the response zone corridor. These include both urban and rural schools through high school. Per USGS maps, Fanning School is located approximately 2,000 feet south and Travis about 4,000 feet south-southeast. Huey School is located approximately 5,000 feet southwest of terminal.

Medical Facilities

There are 6 medical facilities, apparently all hospitals within the response zone corridor. USGS maps show medical facilities approximately 9,000 feet southwest of the terminal. There are no medical facilities along or adjacent to the river.

Residential Areas

There are about 16 residential clusters within the response zone corridor. Included are named towns or named developments within towns and numerous individual unnamed groups of residences within the response zone corridor that were not mapped. There are residential areas along the south and east sides of the terminal. Other scattered residences are located along Plum Creek and the river for the first 2 to 3 miles downstream.

Businesses

Numerous business and industrial concerns do exist in the terminal area. Any businesses on Plum Creek and the river seem to be very limited. Located about 1.5 miles north of the terminal are Sheppard Air Force Base and its facilities and Wichita Falls Municipal Airport. It is expected that businesses would receive notification of pipeline spills over public communications media in the same way as metropolitan and urban areas.

Terrain

The Seaway Pipeline originates at the ConocoPhillips Pasadena Terminal and runs through floodplain, wooded areas, and farm and ranch land. The Seaway pipeline profile elevations range from 20 feet below sea level at the Houston Ship Channel to a high of approximately 1370 feet between Weatherford and Jacksboro stations to approximately 900 feet at Cushing Station.

Wetlands

There are numerous wetlands, as defined in 40 CFR Part 230.3, in this response zone. Facility managers in each response zone will keep wetlands inventory information.

Fish and Wildlife

Information on endangered fish and wildlife species in Texas was obtained from Federal and State agencies.

Other Areas of Economic Importance

No other specific areas of economic importance were apparent other than those noted under other categories herein.

Wellhead Protection Areas

No designated wellhead protection areas were discovered encompassing the facility during vulnerability investigation.

Water Resources/Lakes and Streams

Plum Creek, Wichita River, and the Red River would be directly affected. Downstream it was noted from the maps that private irrigation systems and wells do exist and may be of some concern. Numerous small lakes created by the old river channel do exist along the Wichita River.

Endangered Flora and Fauna

Written requests have been filed with the U.S. Fish and Wildlife Service and the Texas Parks and Wildlife Department requesting information on Endangered Flora and Fauna. The agency response time allowed is 2 months. Updated information received will be included in future revisions of this document.

Recreational Areas

There are about 43 identified recreational areas within the response zone corridor. These include city parks, golf courses, country clubs, developments associated with lakes, etc.

Transportation Routes (Air, Land, and Water)

The following items would be somewhat effected in the area of the terminal and within the study area. West of the facility is the Missouri, Kansas, and Texas Railroad with a spur into the facility and the Fort Worth and Denver Railroad. State Highways 171, 1740, 2393, 810, and 79 all cross Plum Creek, Wichita River, or the Red River within the downstream study area. West of facility within a mile is State Highway 240, U.S. Business Route 287, and Interstate 44 (U.S. 277 and 281). Numerous city streets and county roads fall within the study area.

Utilities

There are about 50 utility-related facilities within the response zone corridor. These included sewage lagoons and other treatment facilities, a power plant, a gas plant, and a CH lateral. Numerous pipeline crossings were noted on the maps within the downstream study area. No major power lines were noted.

Other Areas of Economic Importance

No other specific areas of economic importance were apparent other than those noted under other categories herein.

Summary

In summary, the downstream drainage study area potentially implicates the following sensitivities:

- Residential and commercial areas adjacent to downstream drainage
- Proximity of schools and businesses to the terminal
- Railroad and highway structures in the area and downstream
- Potential wetlands existing along drainage areas
- Endangered and threatened species existing in downstream areas

3.0.2 Seaway Products System

TERRAIN

The Seaway Pipeline originates at the Phillips 66 Pasadena Terminal and runs through floodplain, wooded areas, and farm and ranch land. The Seaway pipeline profile elevations range from 20 feet below sea level at the Houston Ship Channel to a high of approximately 1370 feet between Weatherford and Jacksboro stations to approximately 900 feet at Cushing Station.

River & Stream Crossings

The Seaway Products System crosses several major streams, smaller streams, and drainage ditches. They are listed below by mile post (MP), elevation and nearest town.

Willis Response Area

Line from Phillips 66 Pasadena Terminal to Galena Park Pump Station

MP	Elevation (feet)	River/Stream	Nearest Town
.08		Ditch	Pasadena
.13		Ditch	Pasadena
.18		Drain	Pasadena
.21		Drain	Pasadena
.26		Ditch	Pasadena
.27		Ditch	Pasadena
.34		Ditch	Pasadena
.46		Ditch	Pasadena
.84		Ditch	Pasadena
.87		Ditch	Pasadena
1.23		Ditch	Pasadena
1.75		Ditch	Pasadena/Junior College
1.94		Ditch	Pasadena
1.95		Ditch	Pasadena
2.73-2.89	-95.90 Pipeline -60.00 Bottom of Channel	Houston Ship Channel*	Pasadena
3.08		Ditch	Pasadena
3.31		Ditch	Pasadena
3.38		Ditch	Pasadena
3.56		Ditch	Pasadena
4.47		Ditch	Galena Park Station

Line from Galena Park Station to Teague Station

MP	Elevation (feet)	River/Stream	Nearest Town
0.0	25	Span	Pasadena
	30	Span	Pasadena
	-12	Greens Bayou	Pasadena
	50	Span	Houston Metro
	50	Garner's Bayou-Span	Houston Metro
	65	Span	Houston Metro
	80	1960-Turkey Creek	Houston Airport
	65	Cypress Creek	Houston Airport
	80	Spring Creek	Shenandoah
	120	Lake Creek	Conroe
	205	Lake Conroe –Shore	Conroe
	180	Lake Conroe *	Montgomery
	190	Bedias Creek	Madisonville
	170	Bedias Creek-county line	Madisonville
	220	Pooles Creek	Madisonville
	260	Tenmile Creek	Leona
	330	Mustang Creek	Leona
	260	Bayou Creek	Centerville
	290	Cedar Creek	Centerville
	320	Curtis Spring	Centerville
	380	Span	Centerville
	315	Keechi Creek	Jewett
	400	Span	Buffalo/Jewett
	400	Span	Buffalo/Jewett
	410	Aban Creek	Buffalo/Jewett
	410	Cindero Creek	Buffalo/Jewett
	480	Span	Jewett
	490	Span	Jewett
	470	Span	Jewett
	470	Span	Jewett
	470	Span	Jewett
	440	Span	Jewett
	405	Span	Jewett
	410	Span	Jewett
	340	Slough	Jewett
	440	Span	Teague
	430	Span	Teague
	375	Buffalo Creek	Teague
	400	Span	Teague
	410	Span	Teague
	430	Span	Teague
156.3	475	Teague Pump Station	Teague

Aledo Response Area

Line from Teague Station to Jacksboro Station

MP	Elevation (feet)	River/Stream	Nearest Town
152.0	475	Teague Pump Station	
149.7	424	White Rock Creek and Span	Teague
148.0	461	Span	Teague
141.5	472	Elm Creek	Mexia
132.1	527	Span	Mexia
112.1	488	Span	Corsicana
112.0	485	Span	Corsicana
97.7		Mustang Creek	Fort Worth
94.5	731	Creek	Hillsboro
91.3	720	Span	Cleburne
91.0	738	Span	Cleburne
89.0	624	Weakly Creek	Cleburne
77.9		Lake Alvarado (South West of line)	Alvarado/Cleburne
30.5	990	Span	Weatherford
24.8	1107	Span	Weatherford
17.8	1190	Cottonwood Creek/Span	Weatherford
13.9	1093	Moreland Creek/Span	Weatherford
11.1	1183	Span	Jacksboro
10.9	1171	Span	Jacksboro
0.00	1200	Jacksboro Station	

Line from Jacksboro Station to Ringling Station

MP	Elevation (feet)	River/Stream	Nearest Town
0.00	1200	Jacksboro Station	
1.5		Carrol Creek	Jacksboro
3.2		Creek	Jacksboro
10.3		West Fork Trinity River	Jacksboro
17.5		Martins Creek	Jacksboro
24.0		Herring Branch	Bowie
27.2		Big Sandy Creek	Bowie
28.4		Prairie Creek	Bowie
38.4		Victoria Creek	Bowie
47.8		Barrel Spring Creek	Bowie
50.2		Salt Creek	Bowie
55.4		Panther Creek	Bowie
59.7		Lake Nocona is to the East of the line in this area.	Nocona
65.2		Village Creek	Nocona
67.8		Beginning of the bore under the Red River	
		Red River Crossing	
81.7		Ringling Station	Ringling

Oklahoma City, OK Response Area

Line from Ringling Station to Panova Station

MP	Elevation (feet)	River/Stream	Nearest Town
.04	800	Post Oak Creek	Healdton
14.8	865	Caddo Creek	Healdton
18.1	940	Bear Creek	Healdton
26.0	870	8 Mile Creek	Healdton
28.3	800	Wildhorse Creek	Pauls Valley
28.8	880	Rock Creek	Pauls Valley
31.2	918	Sandy Creek	Pauls Valley
44.5	880	CL River Bed	Pauls Valley
45.2	885	Washita River	Pauls Valley
56.0	1030	Tomike Creek	Pauls Valley
57.9	970	Canadian River	Pauls Valley
69.0	970	CL Creek	Pauls Valley
75.2	930	Little River	Tecumseh
80.3	1000	Dance Creek	Tecumseh
88.2	Panova Station		

Buxton/Cushing, OK Response Area

Line from Panova Station to Cushing Station

MP	Elevation (feet)	River/Stream	Nearest Town
0.00	Panova Station		
.46	980	North Canadian River	Shawnee
5.0	982	Rock Creek	Shawnee
11.6	870	South Quawpaw Creek	Meeker/Shawnee
13.8	853	Quawpaw-Wildhorse Creek	Meeker/Shawnee
17.9		Spring Creek	Meeker/Shawnee
22.9	800	Deep Fork Canadian River	Chandler
31.4	816	Dry Creek	Chandler
42.9	819	Wildhorse Creek	Cushing
44.5	901	Cushing Station	

Line from Pasadena Terminal to Galena Park Pump Station

MP	Elevation (feet)	River/Stream	Nearest Town
.08		Ditch	Pasadena
.13		Ditch	Pasadena
.18		Drain	Pasadena
.21		Drain	Pasadena
.26		Ditch	Pasadena
.27		Ditch	Pasadena
.34		Ditch	Pasadena
.46		Ditch	Pasadena
.84		Ditch	Pasadena
.87		Ditch	Pasadena
1.23		Ditch	Pasadena
1.75		Ditch	Pasadena/Junior College
1.94		Ditch	Pasadena
1.95		Ditch	Pasadena
2.73-2.89	-95.90 Pipeline -60.00 Bottom of Channel	Houston Ship Channel*	Pasadena
3.08		Ditch	Pasadena
3.31		Ditch	Pasadena
3.38		Ditch	Pasadena
3.56		Ditch	Pasadena
4.47		Ditch	Galena Park Station

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.

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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.

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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.

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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

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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.	Entire 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		
(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		
(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**	**Location**
(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		
(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**	**Location**
(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

4.4 OSHA 29 CFR 1910.120

OSHA EMERGENCY ACTION PLANS 29 CFR PART 1910		
1910.38	**Brief Description**	**Location**
(c)	Minimum elements of an emergency action plan. An emergency action plan must include at a minimum:	--
(c)(1)	Procedures for reporting a fire or other emergency;	Sec. II, Annex 2
(c)(2)	Procedures for emergency evacuation, including type of evacuation and exit route assignments;	Sec. II, Annex 1
(c)(3)	Procedures to be followed by employees who remain to operate critical plant operations before they evacuate;	Sec. II, Annex 1
(c)(4)	Procedures to account for all employees after evacuation;	Sec. II, Annex 1
(c)(5)	Procedures to be followed by employees performing rescue or medical duties; and	Sec. II, Annex 1
(c)(6)	The name or job title of every employee who may be contacted by employees who need more information about the plan or an explanation of their duties under the plan.	Sec. I & II, Annex 2
(d)	Employee alarm system. An employer must have and maintain an employee alarm system. The employee alarm system must use a distinctive signal for each purpose and comply with the requirements in §1910.165.	Annex 1
(e)	Training. An employer must designate and train employees to assist in a safe and orderly evacuation of other employees.	Sec. III
(f)	Review of emergency action plan. An employer must review the emergency action plan with each employee covered by the plan: (1) When the plan is developed or the employee is assigned initially to a job; (2) When the employee's responsibilities under the plan change; and (3) When the plan is changed.	Sec. II
1910.39		
(c)	Fire Prevention Plans - Minimum elements of a fire prevention plan. A fire prevention plan must include:	--
(c)(1)	A list of all major fire hazards, proper handling and storage procedures for hazardous materials, potential ignition sources and their control, and the type of fire protection equipment necessary to control each major hazard;	Sec. II, Annex 1
(c)(2)	Procedures to control accumulations of flammable and combustible waste materials;	Sec. II, Annex 1
(c)(3)	Procedures for regular maintenance of safeguards installed on heat-producing equipment to prevent the accidental ignition of combustible materials;	Sec. II, Annex 1
(c)(4)	The name or job title of employees responsible for maintaining equipment to prevent of control sources of ignition of fires; and	Sec. II, Annex 1
(c)(5)	The name or job title of employees responsible for the control of fuel source hazards.	Sec. II, Annex 1

4.4 OSHA 29 CFR 1910.120 (Cont'd)

OSHA EMERGENCY ACTION PLANS 29 CFR PART 1910		
1910.120 (q)	**Brief Description**	**Location**
(1)	Emergency response plan	Entire Plan
(2)	Elements of an emergency response plan:	--
(i)	Pre-emergency planning and coordination with outside parties	Sec. III
(ii)	Personnel roles, lines of authority, training, and communication	Sec. II
(iii)	Emergency recognition and prevention	Sec. II, Annex 1
(iv)	Safe distances and places of refuge	Sec. II, Annex 1
(v)	Site security and control	Sec. II, Annex 1
(vi)	Evacuation routes and procedures	Sec. II, Annex 1
(vii)	Decontamination procedures	Sec. II, Annex 1
(viii)	Emergency medical treatment and response procedures	Sec. II, Annex 1
(ix)	Emergency alerting and response procedures	Sec. II, Annex 1
(x)	Critique of response and follow-up	Sec. II, Annex 1
(xi)	PPE and emergency equipment	Sec. II, Annex 1
(xii)	Emergency response plan coordination and integration	Sec. I & III
(3)	Procedures for handling emergency response:	Sec. II, Annex 1
(i)	The senior emergency response official responding to an emergency shall become the individual in charge of a site-specific Incident Command System (ICS).	Sec. I & II
(ii)	The individual in charge of the ICS shall identify, to the extent possible, all hazardous substances or conditions, present and shall address as appropriate site analysis, use of engineering controls, maximum exposure limits, hazardous substance handling procedures, and use of any new technologies.	Sec. I & II
(iii)	Implementation of appropriate emergency operations and use of PPE.	Sec. II
(iv)	Employees engaged in emergency response and exposed to hazardous substances presenting an inhalation hazard or potential inhalation hazard shall wear positive pressure self-contained breathing apparatus while engaged in emergency response.	Sec. II
(v)	The individual in charge of the ICS shall limit the number of emergency response personnel at the emergency site, in those areas of potential or actual exposure to incident or site hazards, to those who are actively performing emergency operations.	Sec. II
(vi)	Backup personnel shall stand by with equipment ready to provide assistance or rescue.	Sec. II
(vii)	The individual in charge of the ICS shall designate a safety official, who is knowledgeable in the operations being implemented at the emergency response site.	Sec. I & II

4.4 OSHA 29 CFR 1910.120 (Cont'd)

OSHA EMERGENCY ACTION PLANS 29 CFR PART 1910		
1910.120(q)	**Brief Description**	**Location**
(viii)	When activities are judged by the safety official to be an IDLH condition and/or to involve an imminent danger condition, the safety official shall have authority to alter, suspend, or terminate those activities.	Sec. I & II
(ix)	After emergency operations have terminated, the individual in charge of the ICS shall implement appropriate decontamination procedures.	Sec. I & II
(x)	When deemed necessary for meeting the tasks at hand, approved self-contained compressed air breathing apparatus may be used with approved cylinders from other approved self-contained compressed air breathing apparatus provided that such cylinders are of the same capacity and pressure rating.	Sec. I & II
(4)	Skilled support personnel	Sec. II
(5)	Specialist employees	Sec. II
(6)	Training	Sec. II
(7)	Trainers	Sec. II
(8)	Refresher training	Sec. II
(9)	Medical surveillance and consultation	Sec. II
(10)	Chemical protective clothing	Sec. II
(11)	Post-emergency response operations	Sec. II

4.4 OSHA 29 CFR 1910.120 (Cont'd)

OSHA EMERGENCY ACTION PLANS 29 CFR PART 1910		
1910.165	**Brief Description**	**Location**
(b)	**Employee alarm systems:** General requirements.	
(b)(1)	The employee alarm system shall provide warning for necessary emergency action as called for in the emergency action plan, or for reaction time for safe escape of employees from the workplace or the immediate work area, or both.	Sec. II, Annex 1
(b)(2)	The employee alarm shall be capable of being perceived above ambient noise or light levels by all employees in the affected portions of the workplace. Tactile devices may be used to alert those employees who would not otherwise be able to recognize the audible or visual alarm.	Sec. II, Annex 1
(b)(3)	The employee alarm shall be distinctive and recognizable as a signal to evacuate the work area or to perform actions designated under the emergency action plan.	Sec. II, Annex 1
(b)(4)	The employer shall explain to each employee the preferred means of reporting emergencies, such as manual pull box alarms, public address systems, radio or telephones. The employer shall post emergency telephone numbers near telephones, or employee notice boards, and other conspicuous locations when telephones serve as a means of reporting emergencies. Where a communication system also serves as the employee alarm system, all emergency messages shall have priority over all non-emergency messages.	Sec. III, Annex2
(b)(5)	The employer shall establish procedures for sounding emergency alarms in the workplace. For those employers with 10 or fewer employees in a particular workplace, direct voice communication is an acceptable procedure for sounding the alarm provided all employees can hear the alarm. Such workplaces need not have a back-up system.	Sec. II, Annex 1
(c)	Installation and restoration.	--
(c)(1)	The employer shall assure that all devices, components, combinations of devices or systems constructed and installed to comply with this standard are approved.	
(c)(2)	The employer shall assure that all employee alarm systems are restored to normal operating conditions as promptly as possible after each test or alarm. Spare alarm devices and components subject to wear or destruction shall be available in sufficient quantities and locations for prompt restoration of the system.	Sec. II
(d)	Maintenance and Testing	--
(d)(1)	The employer shall assure that all employee alarm systems are maintained in operating condition except when undergoing repairs or maintenance.	Sec. II, Annex 1
(d)(2)	The employer shall assure that a test of the reliability and adequacy of non-supervised employee alarm systems is made every two months.	Sec. II, Annex 1
(d)(3)	The employer shall maintain or replace power supplies as often as is necessary to assure a fully operational condition. Back-up means of alarm…shall be provided when systems are out of service.	Sec. II, Annex 1
(d)(4)	The employer shall assure that employee alarm circuitry installed after January 1, 1981, which is capable of being supervised is supervised and that it will provide positive notification to assigned personnel whenever a deficiency exists in the system. The employer shall assure that all supervised employee alarm systems are tested at least annually for reliability and adequacy.	Sec. II, Annex 1

4.4 OSHA 29 CFR 1910.120 (Cont'd)

OSHA EMERGENCY ACTION PLANS 29 CFR PART 1910		
1910.165	**Brief Description**	**Location**
(d)(5)	The employer shall assure that the servicing, maintenance and testing of employee alarms are done by persons trained in the designed operation and functions necessary for reliable and safe operation of the system.	Sec. II, Annex 1
(e)	Manual operation. The employer shall assure that manually operated actuation devices for use in conjunction with employee alarms are unobstructed, conspicuous and readily accessible.	Sec. II, Annex 1

Annex 5 – Table of Contents

5.0 Distribution List

5.1 Record of Revisions

Sec. 5.0 Distribution List

PLAN HOLDER/RECIPIENT	ADDRESS	PLAN ASSIGNED					
		Hard Copy					CD
			SPCC		Mapping		
		Core and RZ App	Wichita Falls	Odessa Area	Borger	Alvin, Austin and Odessa	Core, RZ App & SPCC Plan
U.S. DOT - PHMSA	Attn.: Melanie Barber 1200 New Jersey Avenue, SE East Building - Room E22-210 Washington, D. C. 20590	**0**	**0**	**0**	**0**	**0**	**2**
Texas Commission on Environmental Quality	Gas Services Section 12100 Park 35 Circle Austin, TX 78753	**1**	**0**	**0**	**0**	**0**	**1**
Railroad Commission of Texas; Safety Division	Attn: Ms. Mary McDaniel, PE 1701 N. Congress Austin, TX 78701	**1**	**0**	**0**	**0**	**0**	**1**
Alvin Area - Area Supervisor	Brad Mitchell 7110 County Road 170 Alvin, TX 77512	**1**	**0**	**0**	**0**	**1**	**1**
Division Engineer	Bill Alexander 233 North Phillips Road Pasadena, TX 77506	**1**	**0**	**0**	**0**	**1**	**1**
Austin Area - Area Supervisor	Todd Masterson 7700 Elroy Road Del Valle, TX 78617	**1**	**0**	**0**	**0**	**1**	**1**
Borger Area, Crude Terminal Area Supervisor	Derrell Pierce Spur 119 West (1 mile North, Borger Crude Terminal Road) Borger, TX 79007	**1**	**0**	**0**	**1**	**0**	**1**
Borger Area Pipeline – Area Supervisor	Don Schomp 9095 W. Willison Borger, TX 79007	**1**	**0**	**0**	**1**	**0**	**1**
Wichita Falls Area, Crude Pipeline - Area Supervisor	Derick Gipson 1214 W. Martin Luther King Blvd. Wichita Falls, TX 76304	**1**	**1**	**0**	**0**	**0**	**1**
Borger Area, Products Terminal - Area Supervisor	Cinch Yake 100 Rocky Road Borger, TX 79008	**1**	**0**	**0**	**1**	**0**	**1**

PLAN HOLDER/RECIPIENT	ADDRESS	PLAN ASSIGNED					
		Hard Copy					CD
			SPCC		Mapping		
		Core and RZ App	Wichita Falls	Odessa Area	Borger	Alvin, Austin and Odessa	Core, RZ App & SPCC Plan
Wichita Falls Area, Graham Station - Area Supervisor	Derick Gipson, c/o Pipeliner 125 Conoco Road Graham, TX 76450	**0**	**0**	**0**	**0**	**0**	**1**
Sweeny Refinery Petrochemical Pipeline System; Area Supervisor	Jamey Davis 1008 Ashley Wilson Sweeny, TX 77480	**1**	**0**	**0**	**0**	**0**	**1**
Sweeny Refinery; Safety Representative	Attn: Bret A. Boren Main Office Building, Room 109 Hwy. 35 & FM 524 Old Ocean, TX 77463	**2**	**0**	**0**	**0**	**0**	**2**
Friendswood City Emergency Management Coordinator	Attn.: Fire Marshall 910 South Friendswood Drive Friendswood, TX 77546	**0**	**0**	**0**	**0**	**0**	**1**
Odessa Area – Levelland Area Supervisor	Julian Ybarra Hwy 125 West Levelland, TX 79336	**1**	**0**	**1**	**0**	**1**	**1**
Odessa Area - South Area Supervisor	Bill Neal 2 mile S. of Goldsmith, TX on Hwy 866 Odessa, TX 79741	**1**	**0**	**1**	**0**	**1**	**1**
Odessa Area - Gains/Hobbs Area Supervisor	Victor C. Barrera 826 East Bender Hobbs, NM 88240	**1**	**0**	**1**	**0**	**1**	**1**
Odessa Area - North Area Supervisor	Kirby Shipp 2200 West 34th Street Odessa, TX 79762	**1**	**0**	**1**	**0**	**1**	**1**
Odessa Area, South - Benedum Area Supervisor	c/o Melinda Templeton 10301 FM 1555 Midkiff, TX 79755	**1**	**0**	**1**	**0**	**1**	**1**
Director Emergency Preparedness, Response & Security Director	Rob Yarbrough c/o EPR&S Coordinator 600 North Dairy Ashford, TR-2002 Houston, TX 77079	**1**	**1**	**1**	**1**	**1**	**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

Texas 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
Texas **ERP CD**	Destroy all previously dated Texas CDs.	New Texas 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.	