



INTEGRATED CONTINGENCY PLAN

OKLAHOMA PIPELINE RESPONSE ZONE

PHMSA Sequence Number 547

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**

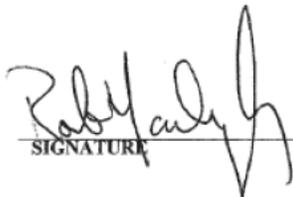
This plan is approved for implementation as herein described. Manpower, equipment and materials will be provided in accordance with all applicable regulatory requirements. The Company is dedicated to protection of the environment and commits to implement the necessary measures, as specified in this Plan,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

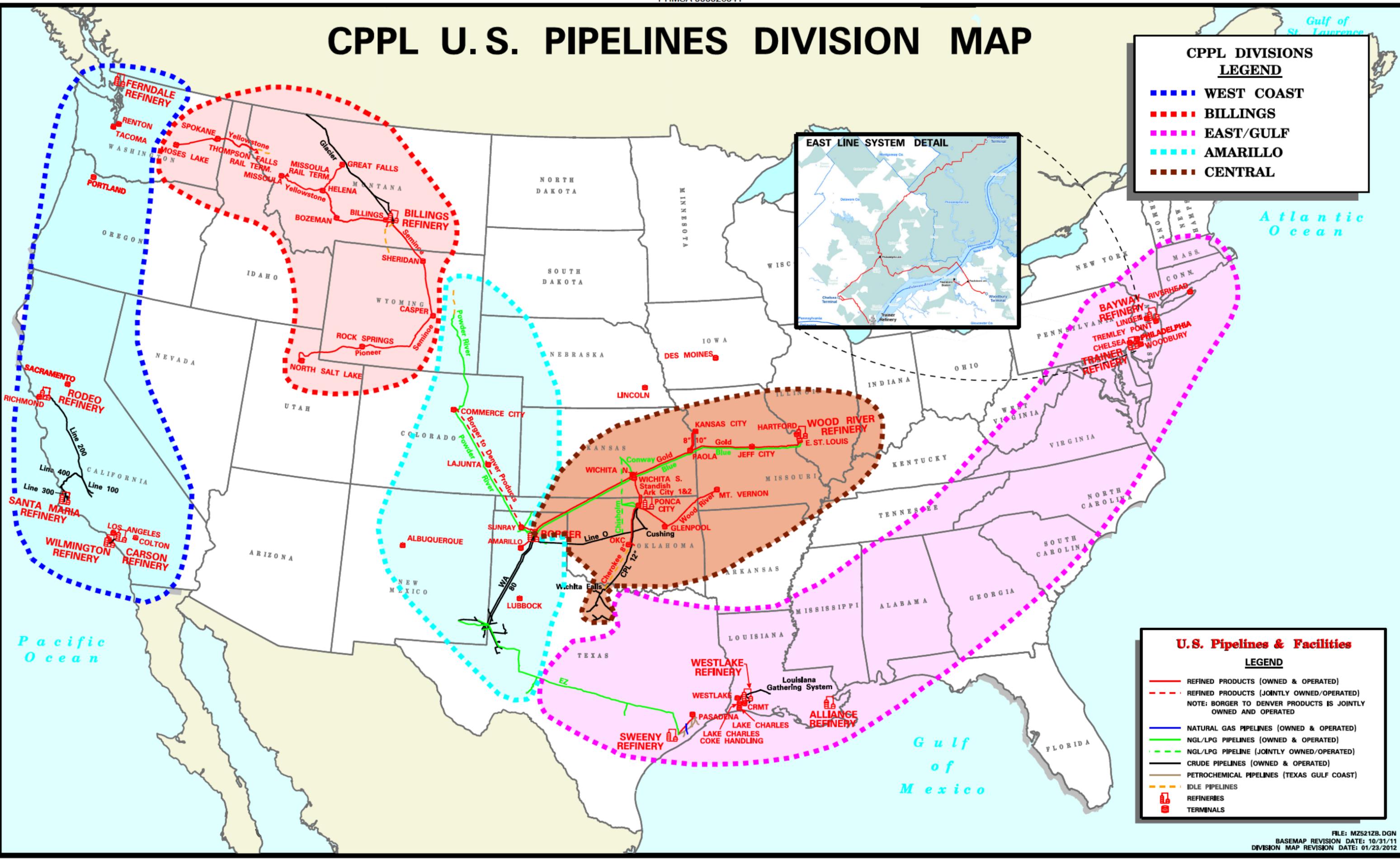
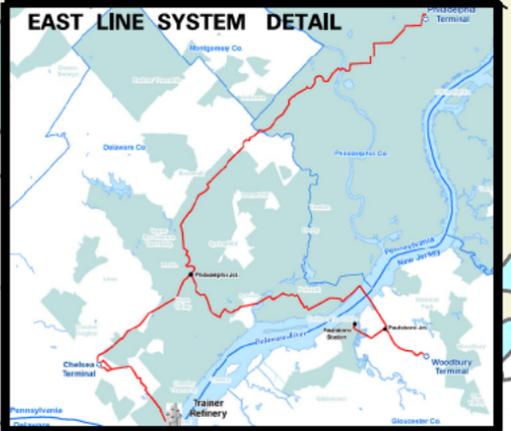
•	Identification of environmentally and economically sensitive areas potentially impacted by a spill
•	Descriptions of Company's response strategies and responsibilities
•	Integration of Company's response efforts with those of the federal, state and local agencies

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

CPPL DIVISIONS LEGEND

- WEST COAST
- BILLINGS
- EAST/GULF
- AMARILLO
- CENTRAL



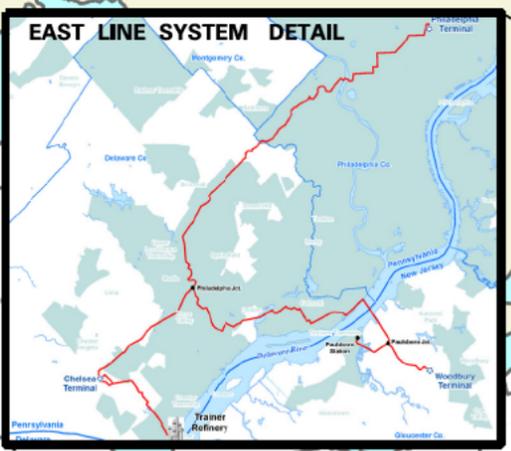
U.S. Pipelines & Facilities LEGEND

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

CPPL U.S. TERMINALS DIVISION MAP

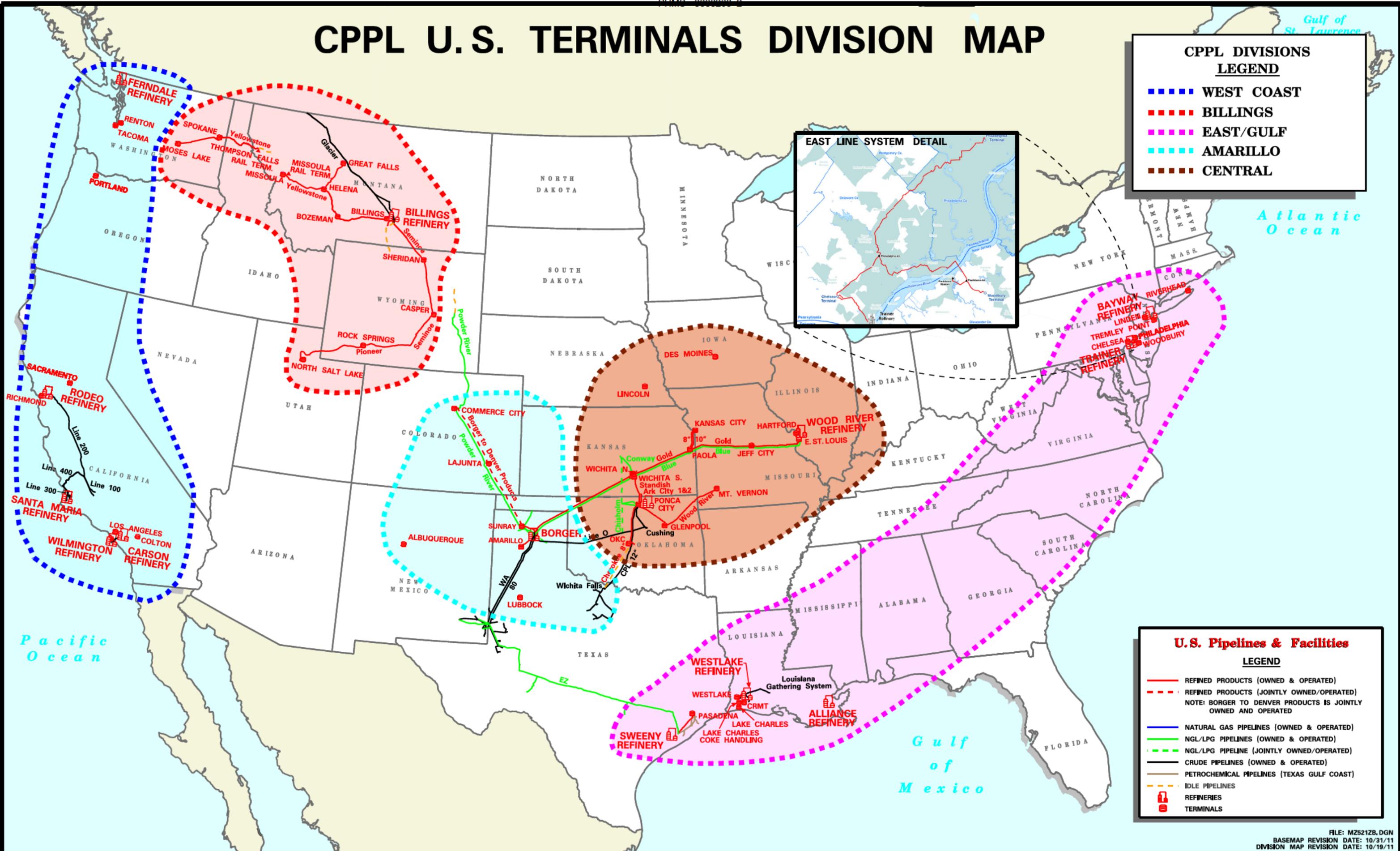
CPPL DIVISIONS LEGEND

- ■ ■ ■ WEST COAST
- ■ ■ ■ BILLINGS
- ■ ■ ■ EAST/GULF
- ■ ■ ■ AMARILLO
- ■ ■ ■ CENTRAL



U.S. Pipelines & Facilities LEGEND

- REFINED PRODUCTS (OWNED & OPERATED)
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- CRUDE PIPELINES (OWNED & OPERATED)
- - - PETROCHEMICAL PIPELINES (TEXAS GULF COAST)
- - - IDLE PIPELINES
- REFINERIES
- TERMINALS



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	<ol style="list-style-type: none"> 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: <ol style="list-style-type: none"> 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: <ol style="list-style-type: none"> 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: <ul style="list-style-type: none"> • 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 provide 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: <ul style="list-style-type: none"> • 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	
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- | | |
|---|--|
| ✓ | 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	
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|---|---|
| ✓ | 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	
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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:

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|---|--|
| ✓ | An incident involving an employee or contractor OSHA recordable injury or illness. |
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Sec II-3.9 Notification and Support Teams

Subject Matter Expert (SME) – Primary Company Representative	
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Contacts in the following areas provide support for internal and external notifications; assist with supporting plans, assessment and documentation:

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|---|--|
| ✓ | 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.
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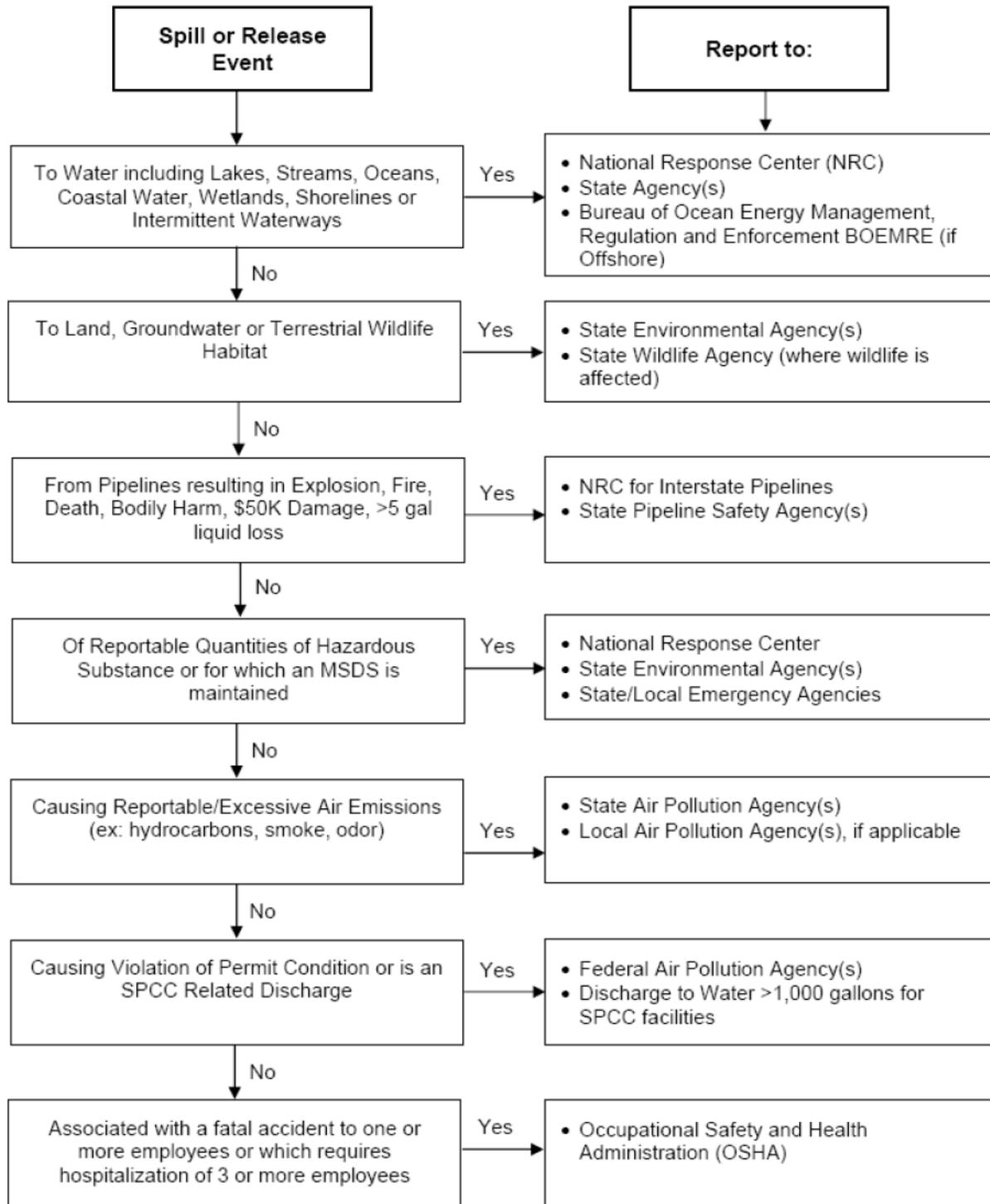
Tier 2 Response

✓	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).
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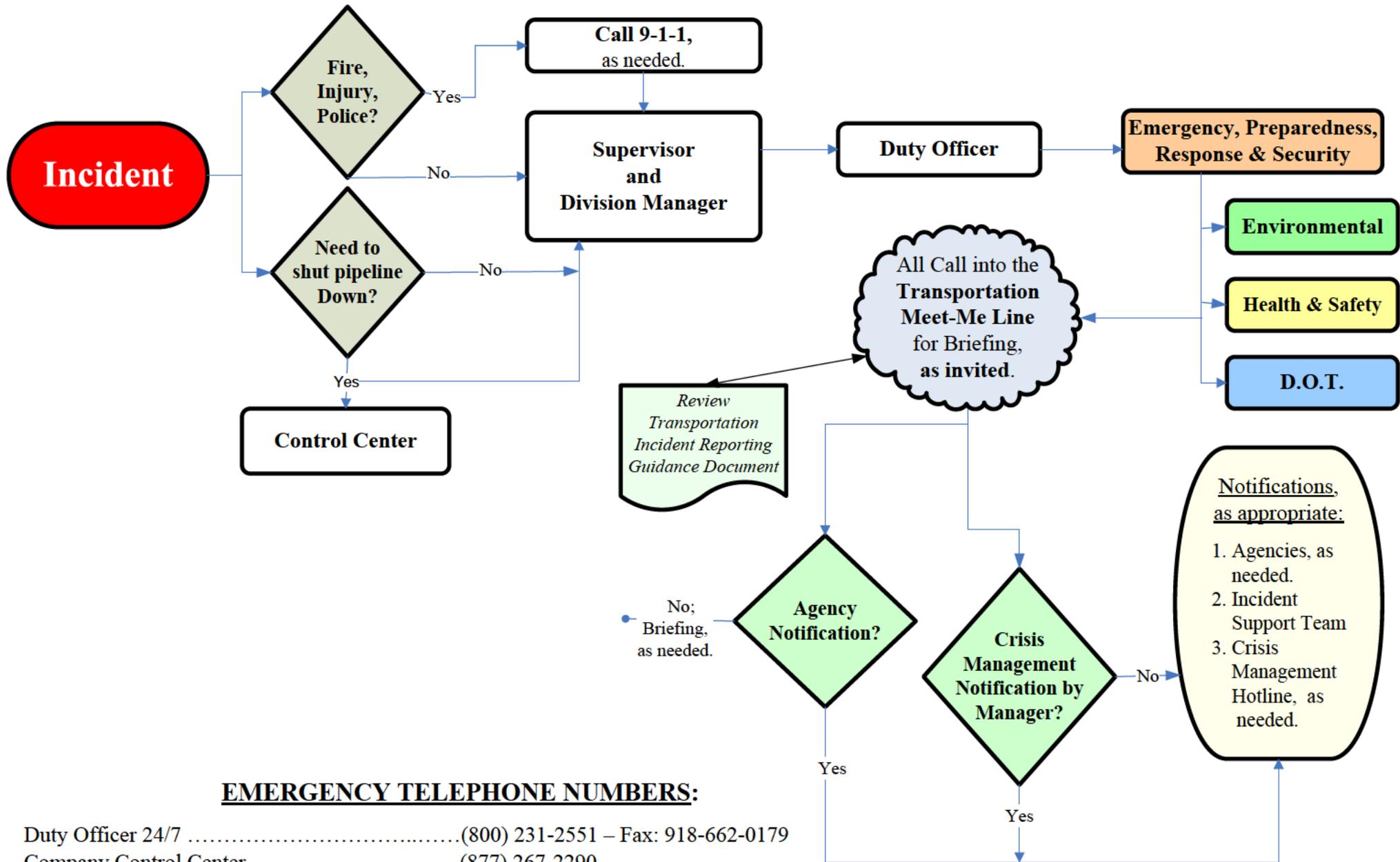
Tier 3 Response

✓	Any response that requires the activation of the Crisis Management Support Team (CMST) to assist with the management of the response.
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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	
<input type="checkbox"/> Type	All spills that impact or threaten navigable water or adjoining shorelines
<input type="checkbox"/> Verbal:	Within 1 Hour of release
<input type="checkbox"/> 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:	
<input type="checkbox"/>	Caused a death or a personal injury requiring hospitalization.
<input type="checkbox"/>	Explosion or fire not intentionally set by the operator.
<input type="checkbox"/>	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.
<input type="checkbox"/>	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.
<input type="checkbox"/>	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 <i>Occupational Safety & Health Administration</i>	
Refer to Annex 2 Notifications.	
Reporting Requirements	
<input type="checkbox"/>	<p>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.</p> <p>In accordance with 29 CFR 1904.39 the following information is to be supplied to OSHA when reporting an incident:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Company name; <input type="checkbox"/> Location of the Incident; <input type="checkbox"/> Time of Incident; <input type="checkbox"/> Number of fatalities or hospitalized employees; <input type="checkbox"/> Names of any injured employees; <input type="checkbox"/> Contact person and his/her phone number; <input type="checkbox"/> 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:

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| ✓ | 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:

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| ✓ | 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:

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| ✓ | 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:

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| ✓ | 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.

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| ✓ | 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.

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| ✓ | 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

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| ✓ | 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.

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| ✓ | 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:

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| ✓ | 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:

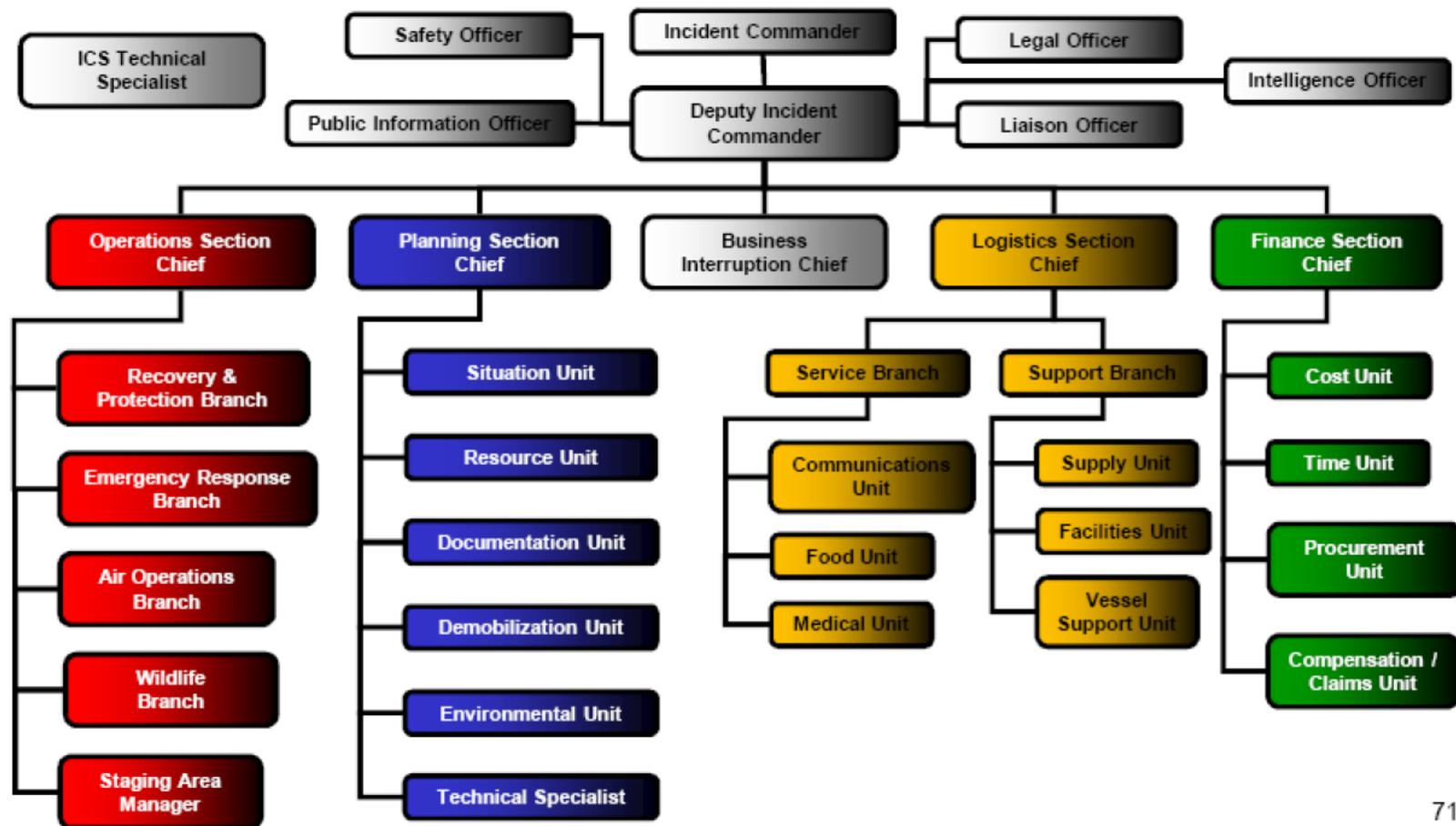
- | | |
|---|--|
| ✓ | A method to accommodate jurisdictional boundaries. |
| ✓ | An approach that is strictly functional in nature. |
| ✓ | A mix of functional and geographical approaches. |

Branches

Establish branches in ICS/UCS for reasons such as:

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| ✓ | 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:	
<input type="checkbox"/>	Job assignment (e.g., Strike Team designation, position, etc.).
<input type="checkbox"/>	Brief overview of type and magnitude of incident.
<input type="checkbox"/>	Resource order number and request number.
<input type="checkbox"/>	Reporting location & time.
<input type="checkbox"/>	Travel instructions.
<input type="checkbox"/>	Any special communications instructions (e.g., travel, radio frequency).
<input type="checkbox"/>	Monitor incident related information from media, internet, etc., if available.
<input type="checkbox"/>	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.
<input type="checkbox"/>	Inform others as to where you are going and how to contact you.
<input type="checkbox"/>	Review Incident Management Handbook.
<input type="checkbox"/>	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:	
<input type="checkbox"/>	Incident Command Post (CP), Base/Camps, Staging Areas, and Helibases.
<input type="checkbox"/>	If you are instructed to report directly to a line assignment, check-in with the Division/Group Supervisor.
<input type="checkbox"/>	Receive briefing from immediate supervisor.
<input type="checkbox"/>	Agency Representatives from assisting or cooperating agencies report to the Liaison Officer (LNO) at the CP after check-in.
<input type="checkbox"/>	Acquire work materials.
<input type="checkbox"/>	Abide by organizational code of ethics.
<input type="checkbox"/>	Participate in IMT meetings and briefings as appropriate.
<input type="checkbox"/>	Ensure compliance with all safety practices and procedures. Report unsafe conditions to the Safety Officer.
<input type="checkbox"/>	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.
<input type="checkbox"/>	Organize and brief subordinates.
<input type="checkbox"/>	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
<input type="checkbox"/>	Know your assigned communication methods and procedures for your area of responsibility and ensure that communication equipment is operating properly.
<input type="checkbox"/>	Use clear text and ICS/UCS terminology (no codes) in all radio communications.
<input type="checkbox"/>	Complete forms and reports required of the assigned position and ensure proper disposition of incident documentation as directed by the Documentation Unit.
<input type="checkbox"/>	Ensure all equipment is operational prior to each work period.
<input type="checkbox"/>	Report any signs/symptoms of extended incident stress, injury, fatigue or illness for yourself or coworkers to your supervisor.

Common Responsibilities Checklist (Cont'd)	
<input type="checkbox"/>	Respond to demobilization orders and brief subordinates regarding Demobilization.
<input type="checkbox"/>	Prepare personal belongings for demobilization.
<input type="checkbox"/>	Return all assigned equipment to appropriate location.
<input type="checkbox"/>	Complete Demobilization Check-out process before returning to home base.
<input type="checkbox"/>	Participate in After-Action activities as directed.
<input type="checkbox"/>	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	
<input type="checkbox"/>	Review common responsibilities.
<input type="checkbox"/>	Obtain a briefing from the prior IC (201 Briefing).
<input type="checkbox"/>	Determine incident objectives & general direction for managing the incident.
<input type="checkbox"/>	Establish the immediate priorities.
<input type="checkbox"/>	Establish a CP.
<input type="checkbox"/>	Brief Command Staff and General Staff.
<input type="checkbox"/>	Establish an appropriate organization.
<input type="checkbox"/>	Ensure planning meetings are scheduled as required.
<input type="checkbox"/>	Approve and authorize the implementation of an IAP.
<input type="checkbox"/>	Ensure that adequate safety measures are in place.
<input type="checkbox"/>	Coordinate activity for all Command and General Staff.
<input type="checkbox"/>	Coordinate with key people and officials.
<input type="checkbox"/>	Approve requests for additional resources or for the release of resources.
<input type="checkbox"/>	Keep internal and external stakeholders informed.
<input type="checkbox"/>	Evaluate/Approve the use of trainees, volunteers, and auxiliary personnel.
<input type="checkbox"/>	Authorize release of information to the news media.
<input type="checkbox"/>	Ensure ICS 209 is completed and forwarded to appropriate higher authority.
<input type="checkbox"/>	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 assess 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	
<input type="checkbox"/>	Review Common Responsibilities.
<input type="checkbox"/>	Identify hazardous situations associated with the incident.
<input type="checkbox"/>	Complete the initial incident action plan site safety and control analysis (ICS Form 201-5)
<input type="checkbox"/>	Participate in tactics and planning meetings, and other meetings and briefings as required.
<input type="checkbox"/>	Review the IAP for safety implications.
<input type="checkbox"/>	Provide safety advice in the IAP for assigned responders.
<input type="checkbox"/>	Exercise emergency authority to stop and prevent unsafe acts.
<input type="checkbox"/>	Investigate accidents that have occurred within the incident area.
<input type="checkbox"/>	Assign assistants, as needed.
<input type="checkbox"/>	Review and approve the medical plan (ICS Form 206).
<input type="checkbox"/>	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	
<input type="checkbox"/>	Review Common Responsibilities.
<input type="checkbox"/>	Determine from the IC/UC if there are any limits on information release.
<input type="checkbox"/>	Develop material for use in media briefings.
<input type="checkbox"/>	Obtain IC/UC approval of media releases.
<input type="checkbox"/>	Inform media and conduct media briefings.
<input type="checkbox"/>	Arrange for tours and other interviews or briefings that may be required.
<input type="checkbox"/>	Manage a Joint Information Center (JIC) if established.
<input type="checkbox"/>	Obtain media information that may be useful to incident planning.
<input type="checkbox"/>	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	
<input type="checkbox"/>	Review common responsibilities.
<input type="checkbox"/>	Be a contact point for agency representatives.
<input type="checkbox"/>	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.
<input type="checkbox"/>	Assist in establishing and coordinating interagency contacts.
<input type="checkbox"/>	Keep agencies supporting the incident aware of incident status.
<input type="checkbox"/>	Monitor incident operations to identify current or potential inter-organizational problems.
<input type="checkbox"/>	Participate in planning meetings, providing current resource status, including limitations and capability of assisting agency resources.
<input type="checkbox"/>	Coordinate response resource needs for Natural Resource Damage Assessment and Restoration (NRDAR) activities with the Operations Section Chief during oil and HAZMAT responses.
<input type="checkbox"/>	Coordinate response resource needs for incident investigation activities with the Operations Section Chief.
<input type="checkbox"/>	Ensure that all required agency forms, reports and documents are completed prior to demobilization.
<input type="checkbox"/>	Brief IC/UC on agency issues and concerns.
<input type="checkbox"/>	Have debriefing session with the IC/UC prior to departure.
<input type="checkbox"/>	Coordinate activities of visiting dignitaries.

<input type="checkbox"/>	Review common responsibilities.
<input type="checkbox"/>	Be a contact point for agency representatives.
<input type="checkbox"/>	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.
<input type="checkbox"/>	Assist in establishing and coordinating interagency contacts.
<input type="checkbox"/>	Keep agencies supporting the incident aware of incident status.
<input type="checkbox"/>	Monitor incident operations to identify current or potential inter-organizational problems.
<input type="checkbox"/>	Participate in planning meetings, providing current resource status, including limitations and capability of assisting agency resources.
<input type="checkbox"/>	Coordinate response resource needs for Natural Resource Damage Assessment and Restoration (NRDAR) activities with the Operations Section Chief during oil and HAZMAT responses.
<input type="checkbox"/>	Coordinate response resource needs for incident investigation activities with the Operations Section Chief.
<input type="checkbox"/>	Ensure that all required agency forms, reports and documents are completed prior to demobilization.
<input type="checkbox"/>	Brief IC/UC on agency issues and concerns.
<input type="checkbox"/>	Have debriefing session with the IC/UC prior to departure.
<input type="checkbox"/>	Coordinate activities of visiting dignitaries.

Sec. II.4.4.5 ICS/UCS Technical Specialist

ICS/UCS Technical Specialist Checklist	
<input type="checkbox"/>	Review common responsibilities.
<input type="checkbox"/>	Determine site specific training requirements and need for a training program.
<input type="checkbox"/>	Develop site specific training program and implement as necessary.
<input type="checkbox"/>	Determine the feasibility of using trainees in the response.
<input type="checkbox"/>	Review trainee assignments and modify if appropriate.
<input type="checkbox"/>	Coordinate the assignments of trainees to incident positions with the Resources Unit.
<input type="checkbox"/>	Keep the Safety Officer apprised of status of compliance with training requirements.
<input type="checkbox"/>	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.
<input type="checkbox"/>	Monitor operational procedures and evaluate training needs.
<input type="checkbox"/>	Respond to requests for information concerning training activities.
<input type="checkbox"/>	Give the Training Specialist records and logs to the Documentation Unit at the end of each operational period.
<input type="checkbox"/>	Maintain Unit Log (ICS 214).

Sec. II.4.4.6 Legal Officer

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

Sec. II.4.4.7 Intelligence/Security Officer

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

<input type="checkbox"/>	Review common responsibilities.
<input type="checkbox"/>	Obtain briefing from IC/UC.
<input type="checkbox"/>	Request sufficient section supervisory staffing for both ops & planning activities.
<input type="checkbox"/>	Convert operational incident objectives into strategic and tactical options through a work analysis matrix.
<input type="checkbox"/>	Coordinate and consult with the PSC, SOFR, technical specialists, modeling scenarios, trajectories on selection of appropriate strategies and tactics to accomplish objectives.
<input type="checkbox"/>	Identify kind and number of resources required to support selected strategies.
<input type="checkbox"/>	Subdivide work areas into manageable units.
<input type="checkbox"/>	Develop work assignments and allocate tactical resources based on strategy requirements.
<input type="checkbox"/>	Coordinate planned activities with the SOFR to ensure compliance with safety practices.
<input type="checkbox"/>	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.
<input type="checkbox"/>	Participate in the planning process and the development of the tactical portions (ICS 204 and ICS 220) of the IAP.
<input type="checkbox"/>	Assist with development of long-range strategic, contingency, and demobilization plans.
<input type="checkbox"/>	Supervise Operations Section personnel.
<input type="checkbox"/>	Monitor need for and request additional resources to support operations as necessary.
<input type="checkbox"/>	Coordinate with the LOFR and AREP's to ensure compliance with approved safety practices.
<input type="checkbox"/>	Evaluate and monitor current situation for use in next operational period planning.
<input type="checkbox"/>	Interact and coordinate with Command on achievements, issues, problems, significant changes special activities, events, and occurrences.
<input type="checkbox"/>	Troubleshoot operational problems with other IMT members.
<input type="checkbox"/>	Supervise and adjust operations organization and tactics as necessary.
<input type="checkbox"/>	Participate in operational briefings to IMT members as well as briefings to media, and visiting dignitaries.
<input type="checkbox"/>	Develop recommended list of Section resources to be demobilized and initiate recommendation for release when appropriate.
<input type="checkbox"/>	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	
<input type="checkbox"/>	Review Common Responsibilities.
<input type="checkbox"/>	Collect, process, and display incident information.
<input type="checkbox"/>	Assist OSC in the development of response strategies.
<input type="checkbox"/>	Supervise preparation of the IAP.
<input type="checkbox"/>	Facilitate planning meetings and briefings.
<input type="checkbox"/>	Assign personnel already on-site to ICS/UCS organizational positions as appropriate.
<input type="checkbox"/>	Establish information requirements and reporting schedules for Planning Section Units (e.g., Resources, Situation).
<input type="checkbox"/>	Determine the need for any specialized resources in support of the incident.
<input type="checkbox"/>	Establish special information collection activities as necessary (e.g., weather, environmental, toxics, etc.).
<input type="checkbox"/>	Assemble information on alternative strategies.
<input type="checkbox"/>	Provide periodic predictions on incident potential.
<input type="checkbox"/>	Keep IMT apprised of any significant changes in incident status.
<input type="checkbox"/>	Compile and display incident status information.
<input type="checkbox"/>	Oversee preparation and implementation of the Incident Demobilization Plan.
<input type="checkbox"/>	Incorporate plans (e.g., Traffic, Medical, Communications, and Site Safety) into the IAP.
<input type="checkbox"/>	Develop other incident supporting plans (e.g., salvage, transition, security).
<input type="checkbox"/>	Assist Operations with development of the ICS 234 Work Analysis Matrix.
<input type="checkbox"/>	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

<input type="checkbox"/>	Review Common Responsibilities.
<input type="checkbox"/>	Plan the organization of the Logistics Section.
<input type="checkbox"/>	Assign work locations and preliminary work tasks to Section personnel.
<input type="checkbox"/>	Notify the Resources Unit of the Logistics Section Units activated, including names and locations of assigned personnel.
<input type="checkbox"/>	Assemble and brief Logistics Branch Directors and Unit Leaders.
<input type="checkbox"/>	Determine and supply immediate incident resource and facility needs.
<input type="checkbox"/>	In conjunction with Command, develop and advise all Sections of the IMT resource approval and requesting process.
<input type="checkbox"/>	Review proposed tactics for upcoming operational period for ability to provide resources and logistical support.
<input type="checkbox"/>	Identify long-term service and support requirements for planned and expected operations.
<input type="checkbox"/>	Advise Command and other Section Chiefs on resource availability to support incident needs.
<input type="checkbox"/>	Provide input to and review the Communications Plan, Medical Plan and Traffic Plan.
<input type="checkbox"/>	Identify resource needs for incident contingencies.
<input type="checkbox"/>	Coordinate and process requests for additional resources.
<input type="checkbox"/>	Track resource effectiveness and make necessary adjustments.
<input type="checkbox"/>	Advise on current service and support capabilities.
<input type="checkbox"/>	Develop recommended list of Section resources to be demobilized and initiate recommendation for release when appropriate.
<input type="checkbox"/>	Receive and implement applicable portions of the Incident Demobilization Plan.
<input type="checkbox"/>	Ensure the general welfare and safety of Logistics Section personnel.
<input type="checkbox"/>	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	
<input type="checkbox"/>	Review Common Responsibilities.
<input type="checkbox"/>	Participate in incident planning meetings and briefings as required.
<input type="checkbox"/>	Review operational plans and provide alternatives where financially appropriate.
<input type="checkbox"/>	Manage all financial aspects of an incident.
<input type="checkbox"/>	Provide financial and cost analysis information as requested.
<input type="checkbox"/>	Gather pertinent information from briefings with responsible agencies.
<input type="checkbox"/>	Develop an operating plan for the Finance/Admin Section; fill supply and support needs.
<input type="checkbox"/>	Determine the need to set up and operate an incident commissary.
<input type="checkbox"/>	Meet with Assisting and Cooperating Agency Representatives, as needed.
<input type="checkbox"/>	Maintain daily contact with agency(s) administrative headquarters on Finance/Admin matters.
<input type="checkbox"/>	Ensure that all personnel time records are accurately completed and transmitted to home agencies, according to policy.
<input type="checkbox"/>	Provide financial input to demobilization planning.
<input type="checkbox"/>	Ensure that all obligation documents initiated at the incident are properly prepared and completed.
<input type="checkbox"/>	Brief agency administrative personnel on all incident-related financial issues needing attention or follow-up prior to leaving incident.
<input type="checkbox"/>	Develop recommended list of Section resources to be demobilized and initial recommendation for release when appropriate.
<input type="checkbox"/>	Receive and implement applicable portions of the Incident Demobilization Plan.
<input type="checkbox"/>	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
<input type="checkbox"/>	Secure the source.	Act quickly to shut-in source, close valves, etc. (IF SAFE TO DO SO, PROPERLY TRAINED & HAVE PROPER PPE).
<input type="checkbox"/>	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.
<input type="checkbox"/>	Shut off ignition sources.	Motors, open flames, electrical circuits.
<input type="checkbox"/>	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.
<input type="checkbox"/>	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.
<input type="checkbox"/>	Initiate containment if necessary and safe to do so.	Contact OSROs as necessary.
<input type="checkbox"/>	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.
<input type="checkbox"/>	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: <ol style="list-style-type: none"> 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: |
| • | <ul style="list-style-type: none"> 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. <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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: <input type="checkbox"/> Call 911 to arrange for ground or air ambulance support. Provide the 911 dispatch the following information: <input type="checkbox"/> Your name and location <input type="checkbox"/> Type of medical emergency <input type="checkbox"/> Name and location of the injured <input type="checkbox"/> Condition of injured <input type="checkbox"/> Contact phone number <input type="checkbox"/> Transport injured to a local hospital or physician.	<input type="checkbox"/>	/ / : - -
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.	<input type="checkbox"/>	___/___/___ :___:___
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.	<input type="checkbox"/>	___/___/___ :___:___
Isolate line segment	<input type="checkbox"/>	___/___/___ :___:___
Start internal and external notification procedures.	<input type="checkbox"/>	___/___/___ :___:___
Mobilize response and repair personnel.	<input type="checkbox"/>	___/___/___ :___:___

Sec. II-5.8 Pipeline Leak or Rupture

Pipeline Leak or Rupture Checklist

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

Emergency Response Guide First Responder

Piping Leak

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)

1

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

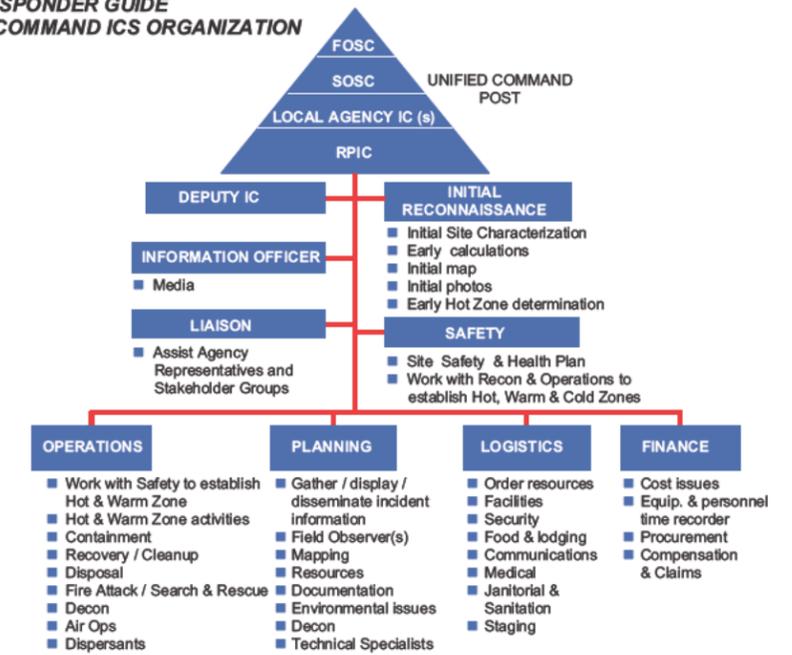
- Continue to evaluate the hot zone and adjust accordingly
- Continue to monitor evacuation activities
- Ensure safe Recon to determine extent of impact on water, air, soil, plant life & wildlife

ACTION PLANNING

- Complete an ICS Form 201 and Incident Action Plan

2

FIRST RESPONDER GUIDE UNIFIED COMMAND ICS ORGANIZATION



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

3

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

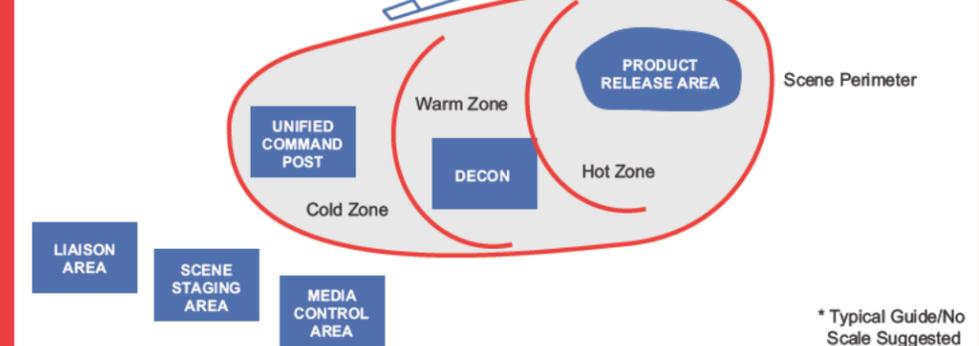
- Ensure early notification of HES
- Consult Waste Management Section of this Plan

DOCUMENTATION

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

4

TYPICAL EMERGENCY SCENE CONTROL ZONE DIAGRAM



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 suction 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 Briefing, 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°F	171
LPG	119
Natural Gas	115

Emergency Response Guide First Responder

Piping Rupture

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)

1

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

2

FIRST RESPONDER GUIDE UNIFIED COMMAND ICS ORGANIZATION



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

3

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

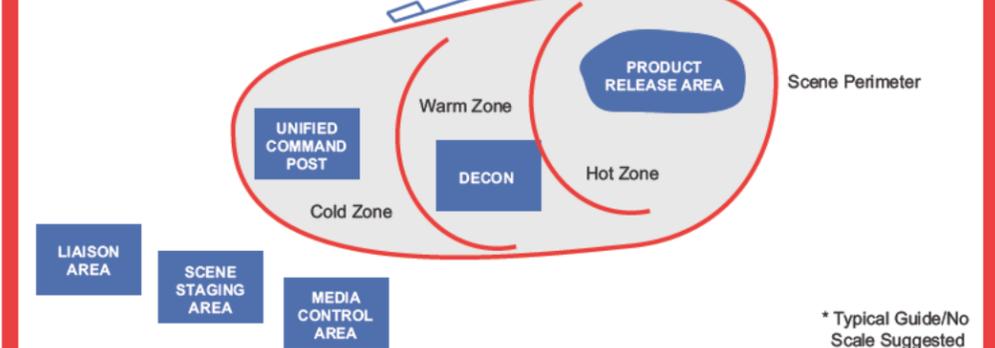
- Ensure early notification of HES
- Consult Waste Management Section of this Plan

DOCUMENTATION

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

4

TYPICAL EMERGENCY SCENE CONTROL ZONE DIAGRAM



SAFETY FIRST

FACILITY MITIGATION/PROTECTION ACTIONS

- Shut-off flow
- Isolate leaking section of piping
- Notify Supervisor or designee
- Place a container under the leak and attempt to temporarily plug the hole
- Initiate spill containment (if outside containment area)
- Evacuate contents of line with suction 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 Briefing, 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°F	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.	<input type="checkbox"/>	___/___/___ :
Shut off transfer pumps. Close header and tank valves.	<input type="checkbox"/>	___/___/___ :
Notify Terminal Operations Manager and the Vessel PIC. (Marine Terminal)	<input type="checkbox"/>	___/___/___ :
Drain remaining contents of dike to vessel tanks.	<input type="checkbox"/>	___/___/___ :
Secure the area.	<input type="checkbox"/>	___/___/___ :
Initiate oil spill cleanup response actions.	<input type="checkbox"/>	___/___/___ :

Emergency Response Guide First Responder

Failure of Transfer Equip

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)

1

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

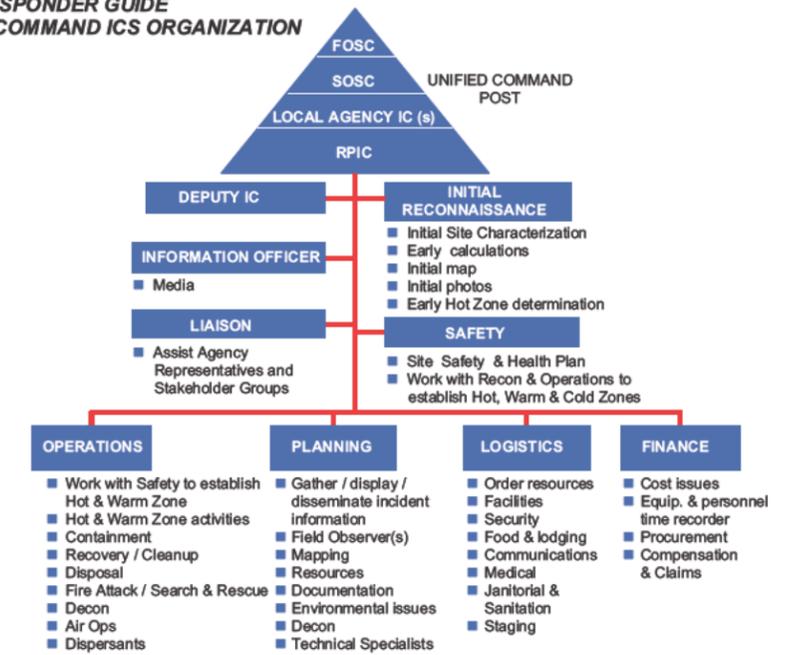
- Continue to evaluate the hot zone and adjust accordingly
- Continue to monitor evacuation activities
- Ensure safe Recon to determine extent of impact on water, air, soil, plant life & wildlife

ACTION PLANNING

- Complete an ICS Form 201 and Incident Action Plan

2

FIRST RESPONDER GUIDE UNIFIED COMMAND ICS ORGANIZATION



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

3

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

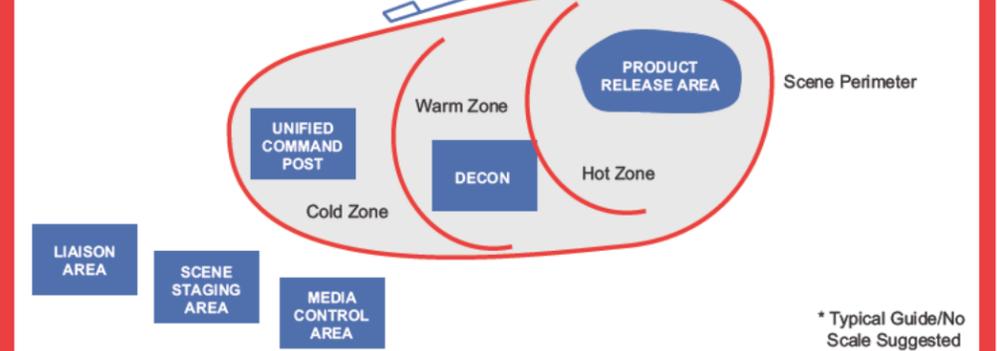
- Ensure early notification of HES
- Consult Waste Management Section of this Plan

DOCUMENTATION

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

4

TYPICAL EMERGENCY SCENE CONTROL ZONE DIAGRAM



SAFETY FIRST

FACILITY MITIGATION/PROTECTION ACTIONS

- Shut off transfer 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 Briefing)
- 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

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

1

ISOLATE AND DENY ENTRY

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

NOTIFICATIONS

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

COMMAND MANAGEMENT

- 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

2

IDENTIFICATION AND ASSESSMENT

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

ACTION PLANNING

- Complete an ICS Form 201 and Incident Action Plan

FIRST RESPONDER GUIDE UNIFIED COMMAND ICS ORGANIZATION



PROTECTIVE EQUIPMENT

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

3

CONTAINMENT & CONTROL

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

PROTECTIVE ACTIONS

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

DECONTAMINATION / CLEANUP

- 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

4

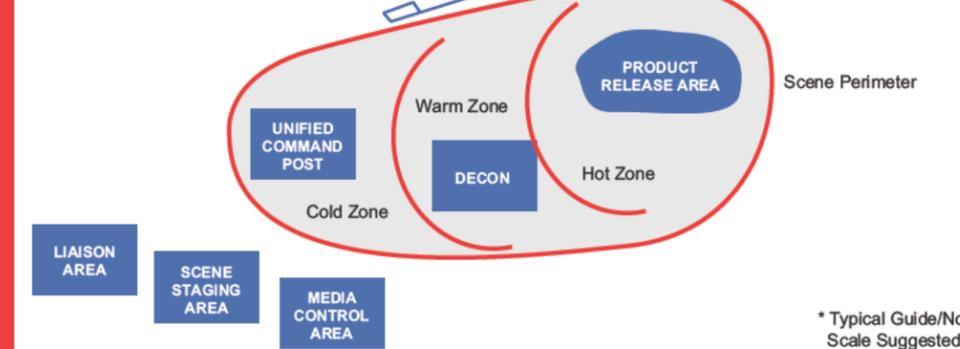
DISPOSAL

- 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



INITIAL ICS/NOTIFICATION FORMS THAT MAY BE UTILIZED

- Notification Fax
- ICS Form 201 (Incident Briefing)
- 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°F	171

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 available tankage

Sec. II-5.10 Tank Overfill

Tank Overfill Response Checklist

Procedures	✓	Date/Time
Immediately stop work activities.	<input type="checkbox"/>	___/___/___
Shut off flow to tank.	<input type="checkbox"/>	___/___/___
If safe, ensure dike drains are closed (if applicable).	<input type="checkbox"/>	___/___/___
Initiate oil spill response actions.	<input type="checkbox"/>	___/___/___
Secure the area.	<input type="checkbox"/>	___/___/___
Notify terminal supervisor.	<input type="checkbox"/>	___/___/___
Begin transfer of contents to other tankage.	<input type="checkbox"/>	___/___/___

Sec. II-5.11 Tank Failure

Tank Failure Response Checklist

Procedures	✓	Date/Time
Immediately stop work activities.	<input type="checkbox"/>	___/___/___
Shut off flow to tank.	<input type="checkbox"/>	___/___/___
If safe, ensure dike drains are closed (if applicable).	<input type="checkbox"/>	___/___/___
Initiate oil spill response actions.	<input type="checkbox"/>	___/___/___
Secure the area.	<input type="checkbox"/>	___/___/___
Notify terminal supervisor.	<input type="checkbox"/>	___/___/___
Begin transfer of contents to other tankage.	<input type="checkbox"/>	___/___/___

Emergency Response Guide First Responder

Tank Overfill

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)

1

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

2

FIRST RESPONDER GUIDE UNIFIED COMMAND ICS ORGANIZATION



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

3

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

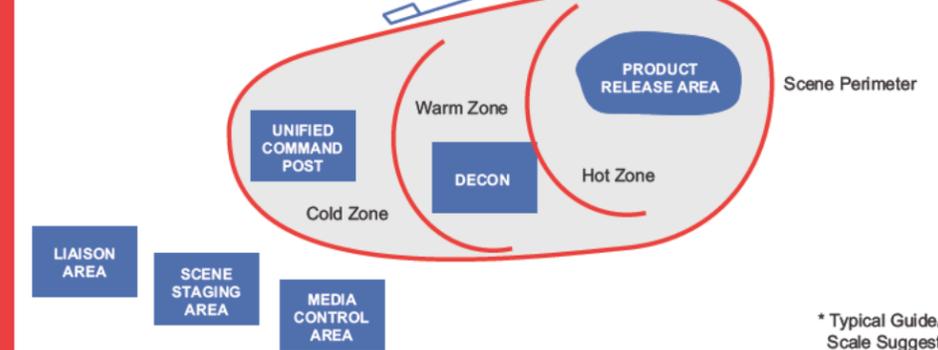
- Ensure early notification of HES
- Consult Waste Management Section of this Plan

DOCUMENTATION

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

4

TYPICAL EMERGENCY SCENE CONTROL ZONE DIAGRAM



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 Superintendent
- Secure area
- Initiate response actions

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 (SSHP)
- ICS Form 232 (Resources at Risk Summary)

DOT EMERGENCY RESPONSE GUIDEBOOK QUICK REFERENCE PAGES

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

Emergency Response Guide First Responder

Tank Failure

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

1

ISOLATE AND DENY ENTRY

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

NOTIFICATIONS

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

COMMAND MANAGEMENT

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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

2

IDENTIFICATION AND ASSESSMENT

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

ACTION PLANNING

- Complete an ICS Form 201 and Incident Action Plan

FIRST RESPONDER GUIDE UNIFIED COMMAND ICS ORGANIZATION



PROTECTIVE EQUIPMENT

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

3

CONTAINMENT & CONTROL

- Containment & control strategies should be developed within the Unified IAP process/follow ACP
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PROTECTIVE ACTIONS

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

DECONTAMINATION / CLEANUP

- 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
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4

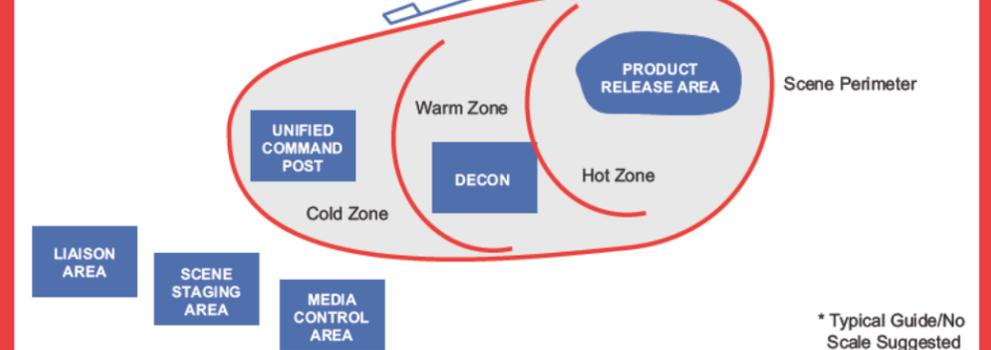
DISPOSAL

- 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



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 (SSHP)
- ICS Form 232 (Resources at Risk Summary)

DOT EMERGENCY RESPONSE GUIDEBOOK QUICK REFERENCE PAGES

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

FACILITY MITIGATION/PROTECTION ACTIONS

- If safe, ensure dike drains are closed
- Notify Terminal Superintendent or designee
- Secure area
- Initiate response actions

SAFETY FIRST

Sec. II-5.12 Natural and Other Gas Leaks

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

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.	<input type="checkbox"/>	___/___/___ :
Protect public first, then facilities.	<input type="checkbox"/>	___/___/___ :
Safely evacuate building if gas is detected inside building.	<input type="checkbox"/>	___/___/___ :
Always look and listen for any signs of escaped gas.	<input type="checkbox"/>	___/___/___ :
All open flames are to be extinguished.	<input type="checkbox"/>	___/___/___ :
Determine leak severity.	<input type="checkbox"/>	___/___/___ :
Do not enter building with audible leaking gas.	<input type="checkbox"/>	___/___/___ :
Test the environment to determine safe entry.	<input type="checkbox"/>	___/___/___ :
Evacuate people from adjacent buildings.	<input type="checkbox"/>	___/___/___ :
Shut off electrical power to building.	<input type="checkbox"/>	___/___/___ :
Eliminate all other potential sources of ignition.	<input type="checkbox"/>	___/___/___ :
Isolate the building from gas sources of ignition.	<input type="checkbox"/>	___/___/___ :
Close necessary inlet and outlet block valves and open blowdown valves.	<input type="checkbox"/>	___/___/___ :
After gas sources are shut off, utilize portable combustible gas indicator/detector to determine safe environment.	<input type="checkbox"/>	___/___/___ :

Emergency Response Guide First Responder

Natural and Other Gas Leaks

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)

1

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)

2

FIRST RESPONDER GUIDE UNIFIED COMMAND ICS ORGANIZATION



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

3

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

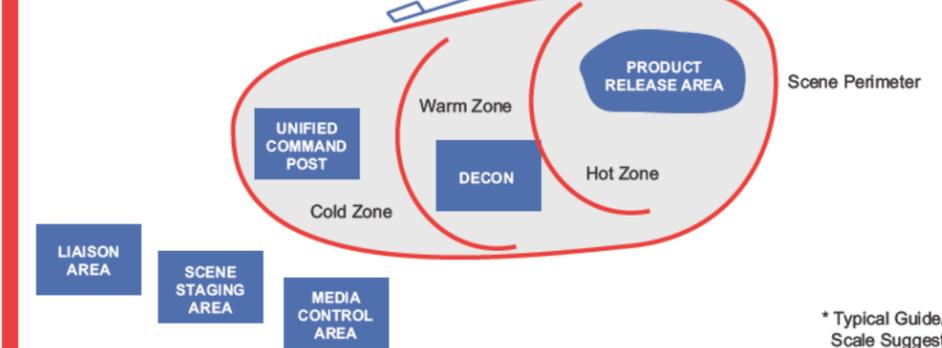
- Minimal disposal issues

DOCUMENTATION

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

4

TYPICAL EMERGENCY SCENE CONTROL ZONE DIAGRAM



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

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)

1

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)

2

FIRST RESPONDER GUIDE UNIFIED COMMAND ICS ORGANIZATION



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

3

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

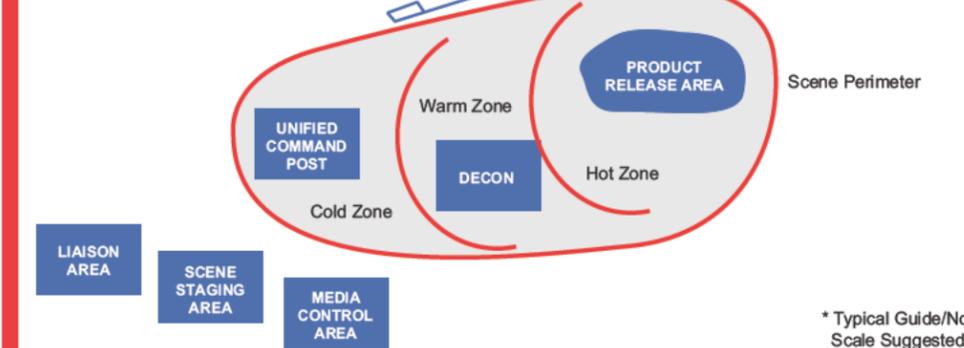
- Minimal disposal issues

DOCUMENTATION

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

4

TYPICAL EMERGENCY SCENE CONTROL ZONE DIAGRAM



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.	<input type="checkbox"/>	___/___/___
Eliminate all ignition sources.	<input type="checkbox"/>	___/___/___
Begin Emergency Shut Down if necessary.	<input type="checkbox"/>	___/___/___
If person(s) down, refer to Medical Emergency Checklist	<input type="checkbox"/>	___/___/___
When fire is noticed at any facility, secure the source if safe to do so.	<input type="checkbox"/>	___/___/___
Account for all personnel in the unit or area where the fire occurred.	<input type="checkbox"/>	___/___/___
Evacuate all non-essential personnel, if necessary.	<input type="checkbox"/>	___/___/___
Establish communications. Contact PIC.	<input type="checkbox"/>	___/___/___
Search for and rescue missing or injured personnel as required.	<input type="checkbox"/>	___/___/___
Use the buddy system.	<input type="checkbox"/>	___/___/___
Ensure the Facility Operators control the process.	<input type="checkbox"/>	___/___/___
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.)	<input type="checkbox"/>	___/___/___
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.	<input type="checkbox"/>	___/___/___
Evacuate nearby residents if required.	<input type="checkbox"/>	___/___/___

Emergency Response Guide First Responder

Fire or Explosion

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)

1

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

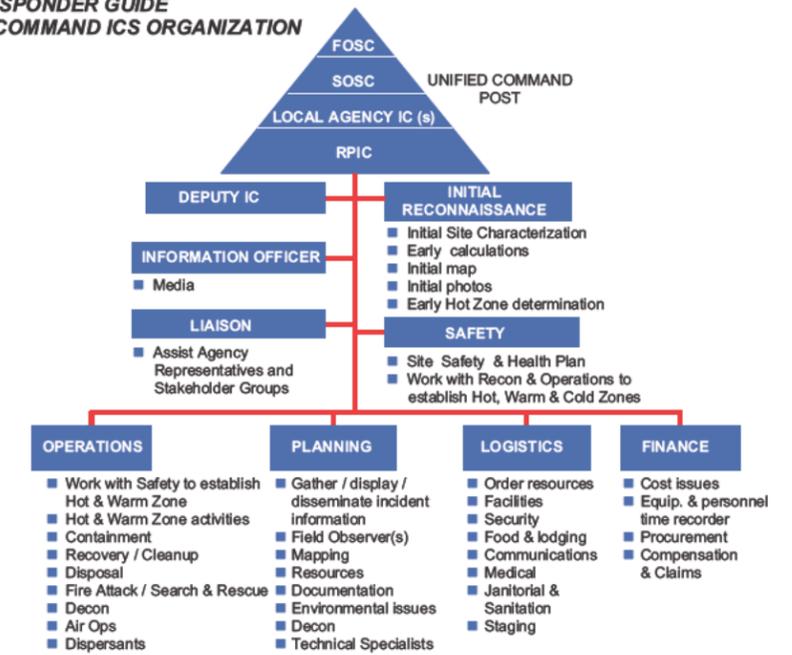
- Continue to evaluate the hot zone and adjust accordingly
- Continue to monitor evacuation activities
- Ensure safe Recon to determine extent of impact on water, air, soil, plant life & wildlife

ACTION PLANNING

- Complete an ICS Form 201 and Incident Action Plan

2

FIRST RESPONDER GUIDE UNIFIED COMMAND ICS ORGANIZATION



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

3

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

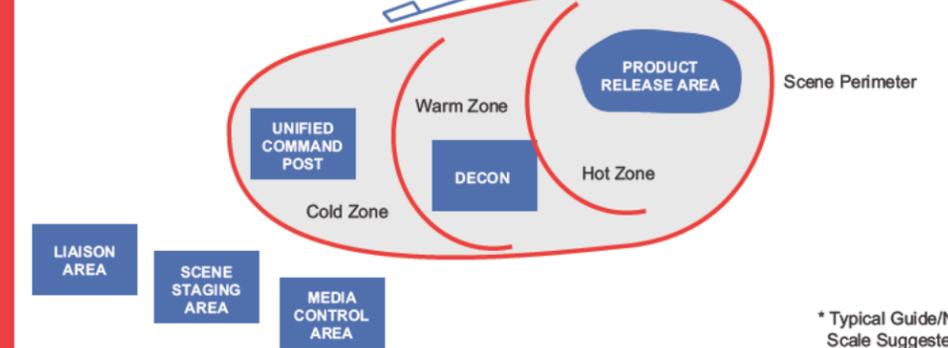
- Ensure early notification of HES
- Consult Waste Management Section of this Plan

DOCUMENTATION

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

4

TYPICAL EMERGENCY SCENE CONTROL ZONE DIAGRAM



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°F	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

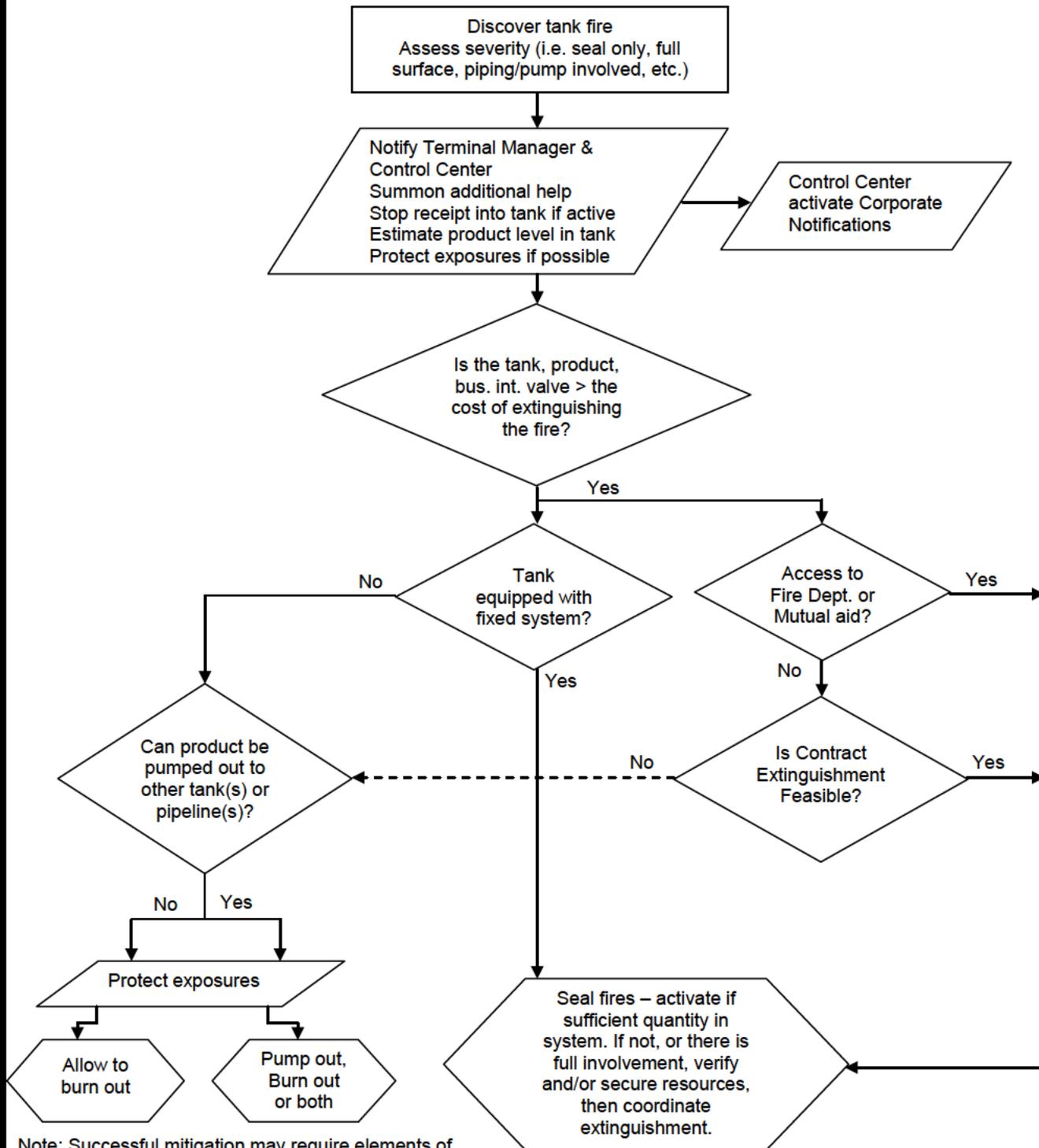
Pipeline Station or Manifold Fire		
Procedures	✓	Date/Time
Bear in mind it is better to take plenty of time in an emergency than to rush in and sustain personal injury.	<input type="checkbox"/>	___/___/___ :___
Personnel should immediately evacuate hazardous area.	<input type="checkbox"/>	___/___/___ :___
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.	<input type="checkbox"/>	___/___/___ :___
If telephone is not in hazardous area, notify Supervisor and Control Center and proceed to shut down as outlined in Section II.	<input type="checkbox"/>	___/___/___ :___
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.	<input type="checkbox"/>	___/___/___ :___
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.	<input type="checkbox"/>	___/___/___ :___
Notify Terminal Supervisor, Operations Supervisor, and TPTN Duty Officer. Notify all off-site personnel of Facility Emergency Incident.	<input type="checkbox"/>	___/___/___ :___
If foam is needed, contact necessary resources for assistance.	<input type="checkbox"/>	___/___/___ :___
Post guards at gates or roadways. Call for any help deemed necessary: ambulance, sheriff (to barricade roads, etc.).	<input type="checkbox"/>	___/___/___ :___
Isolate the fire as much as possible and control spreading to other properties by wetting with water.	<input type="checkbox"/>	___/___/___ :___
After the fire has been extinguished or controlled, permit only authorized personnel to go near the location.	<input type="checkbox"/>	___/___/___ :___
Public Relations: Contact EPR&S Group to request media support as needed.	<input type="checkbox"/>	___/___/___ :___

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.	<input type="checkbox"/>	___/___/___ :___
Stop all loading on rack. Trip emergency shutdown switch – close valves on loading riser.	<input type="checkbox"/>	___/___/___ :___
Attempt to put out or control fire with dry chemical extinguisher. Prompt action can extinguish a small fire.	<input type="checkbox"/>	___/___/___ :___
Notify Fire Department	<input type="checkbox"/>	___/___/___ :___
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.	<input type="checkbox"/>	___/___/___ :___
Advise Supervisor and/or other employees on duty of the fire.	<input type="checkbox"/>	___/___/___ :___
If anyone is injured or burned, remove from area.	<input type="checkbox"/>	___/___/___ :___
Summon help as needed: ambulance, sheriff, etc.	<input type="checkbox"/>	___/___/___ :___
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.	<input type="checkbox"/>	___/___/___ :___
Water should be applied to lines, equipment and tanks in the fire and surrounding area.	<input type="checkbox"/>	___/___/___ :___
Good judgment is essential as to position of personnel because of potential hazard of heat-induced failure of piping and tanks.	<input type="checkbox"/>	___/___/___ :___
Turn off switches on electrical service in fire area.	<input type="checkbox"/>	___/___/___ :___
Close gates, post guards to keep spectators away, use sheriff or police to assist.	<input type="checkbox"/>	___/___/___ :___
Public Relations: Contact EPR&S Group to request media support as needed..		___/___/___ :___

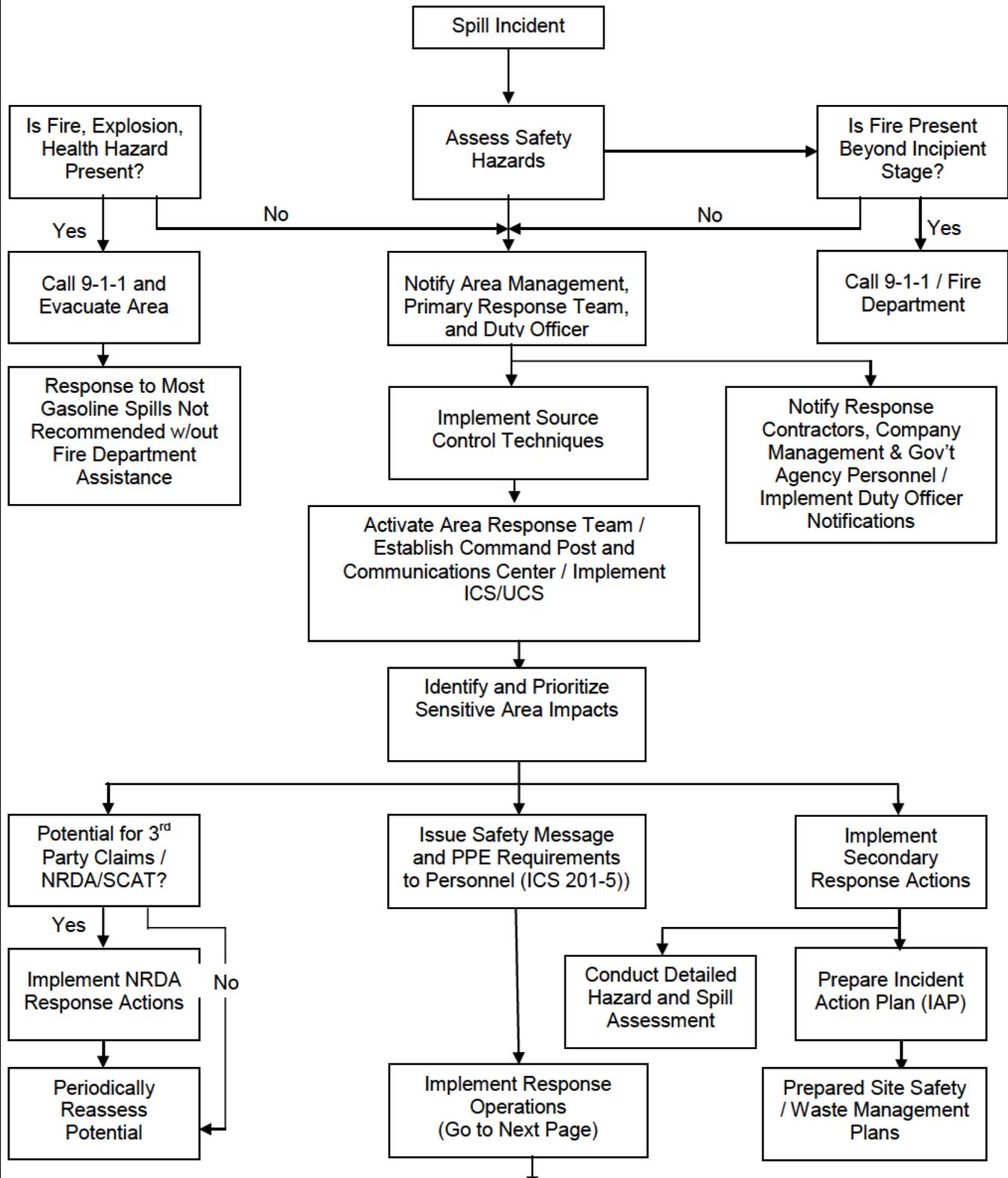
Sec. II-5.17 Tank Fire Pre-Plan / Flowchart

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.

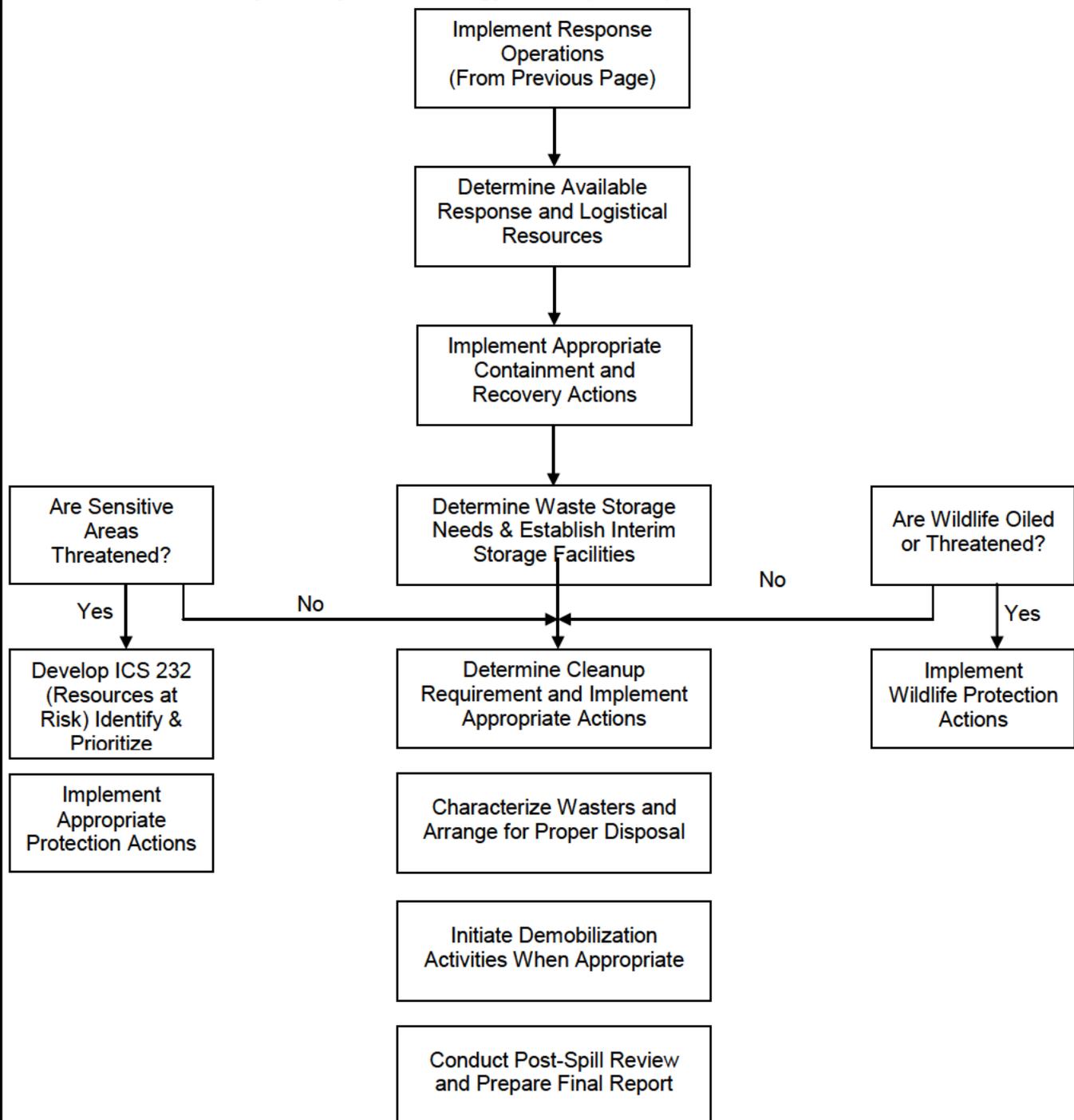


Note: Successful mitigation may require elements of all 3 options.

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.	<input type="checkbox"/>	___/___/___ :___:___
Shut off ignition sources.	<input type="checkbox"/>	___/___/___ :___:___
Stop the flow of spilled product.	<input type="checkbox"/>	___/___/___ :___:___
Coordinate rescue and medical response actions.	<input type="checkbox"/>	___/___/___ :___:___
Identify release and assess possible hazards to human health and the environment.	<input type="checkbox"/>	___/___/___ :___:___
Report all spills to Supervisor and Management.	<input type="checkbox"/>	___/___/___ :___:___

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 <input type="checkbox"/>		Partly Cloudy <input type="checkbox"/>			Cloudy <input type="checkbox"/>	
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

- | | |
|---|---|
| • | <p>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:</p> <ul style="list-style-type: none"> • 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 |
| • | <p>Land:</p> <ul style="list-style-type: none"> • 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

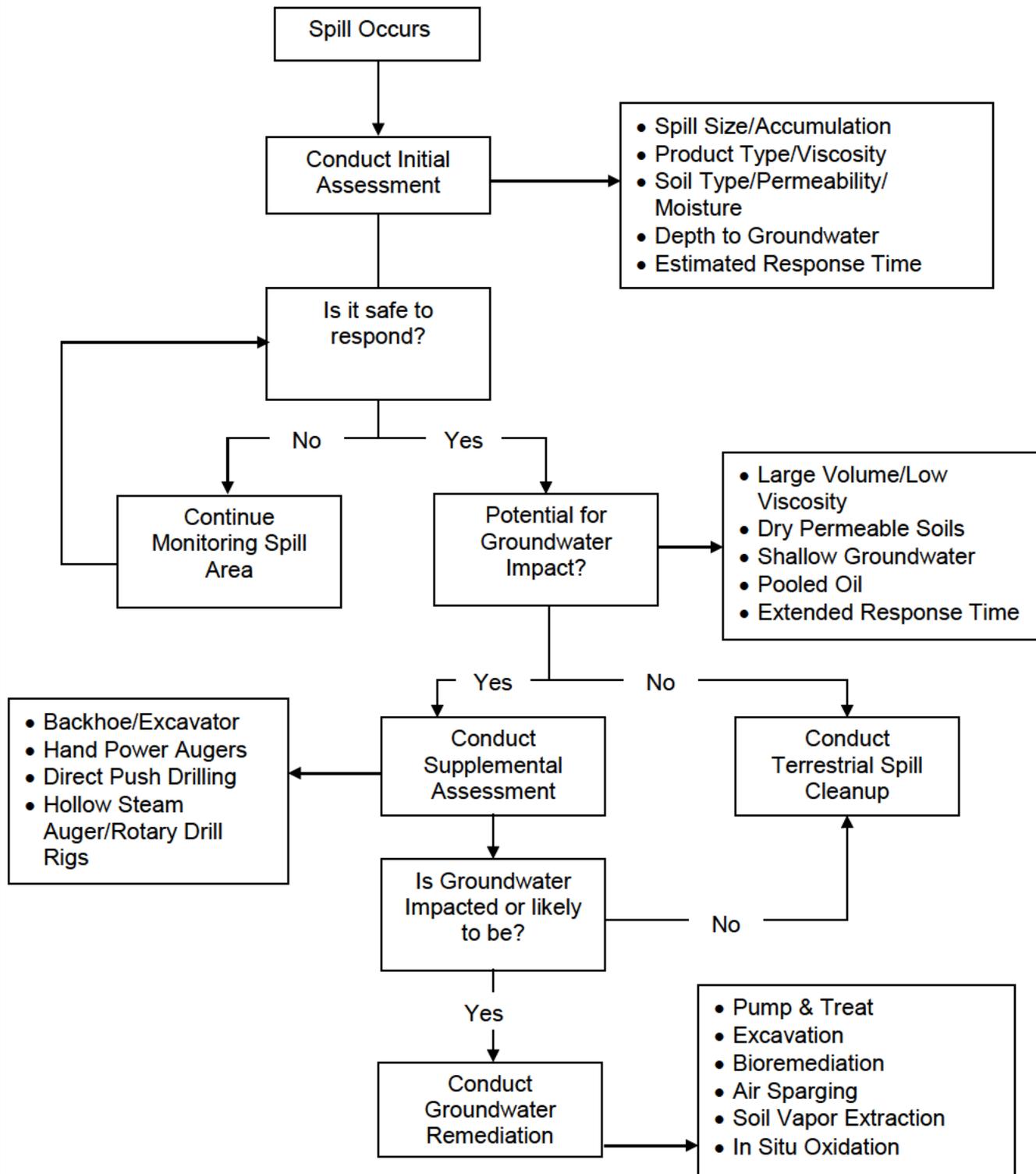
In the event a spill does reach groundwater or the threat of reaching groundwater remains, recovery or remediation activities will need to be conducted to mitigate the impacts. The impacts could be limited to low concentrations of hydrocarbons that have dissolved into the groundwater or, for larger spills, 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.	<input type="checkbox"/>	—/—/— [00:00]
Upon notification by weather monitoring of impending severe weather conditions, notify the initial Incident Commander or the appropriate office of the situation.	<input type="checkbox"/>	—/—/— [00:00]
Personnel will be instructed to shut down all nonessential activities and take shelter where available until the storm has passed.	<input type="checkbox"/>	—/—/— [00:00]
Immediately bring personnel off vessels, tanks, pipe racks, and other elevated work areas. Suspend product loading operations and close all tank openings.	<input type="checkbox"/>	—/—/— [00:00]
Take shelter until the storm has passed.	<input type="checkbox"/>	—/—/— [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.	<input type="checkbox"/>	—/—/— [00:00]
Sound the alarm.	<input type="checkbox"/>	—/—/— [00:00]
Have location personnel report to the designated area.	<input type="checkbox"/>	—/—/— [00:00]
Avoid all windows and proceed to an interior room on the lowest floor or tornado shelter, if available. <ul style="list-style-type: none"> Interior stairwells will be one of the best shelters, if available. 	<input type="checkbox"/>	—/—/— [00:00]
Seek shelter under a sturdy/heavy piece of furniture.	<input type="checkbox"/>	—/—/— [00:00]
Use your arms to protect the back of your head and neck.	<input type="checkbox"/>	—/—/— [00:00]
Once the all clear has sounded:		
Account for all Personnel	<input type="checkbox"/>	—/—/— [00:00]
Begin search and rescue if any personnel is missing	<input type="checkbox"/>	—/—/— [00:00]

Earthquake

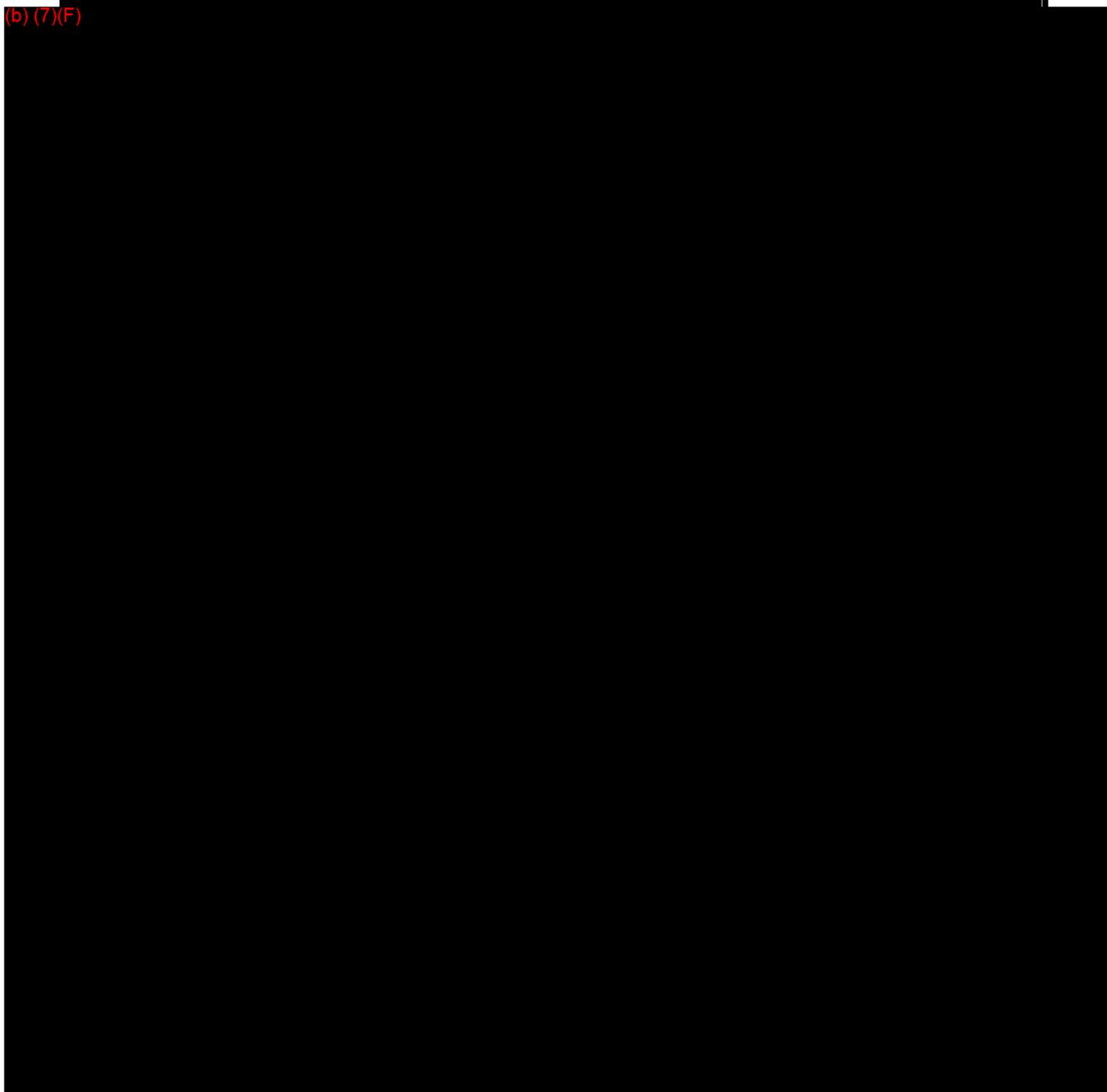
Procedures	✓	Date/Time
Assess situation and exercise caution.	<input type="checkbox"/>	—/—/— [00:00]
Emergency Shut Down, if necessary. Notify Control Center as needed.	<input type="checkbox"/>	—/—/— [00:00]
If damage has occurred, close the nearest block valves on either side of the damaged location.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

River Flood, Severe Storm, Freeze Protection Preparedness Checklist

Procedures	✓	Date/Time
Refer to applicable Flood, Hurricane, and Freeze Protection Preparedness Plan	<input type="checkbox"/>	—/—/— [00:00]

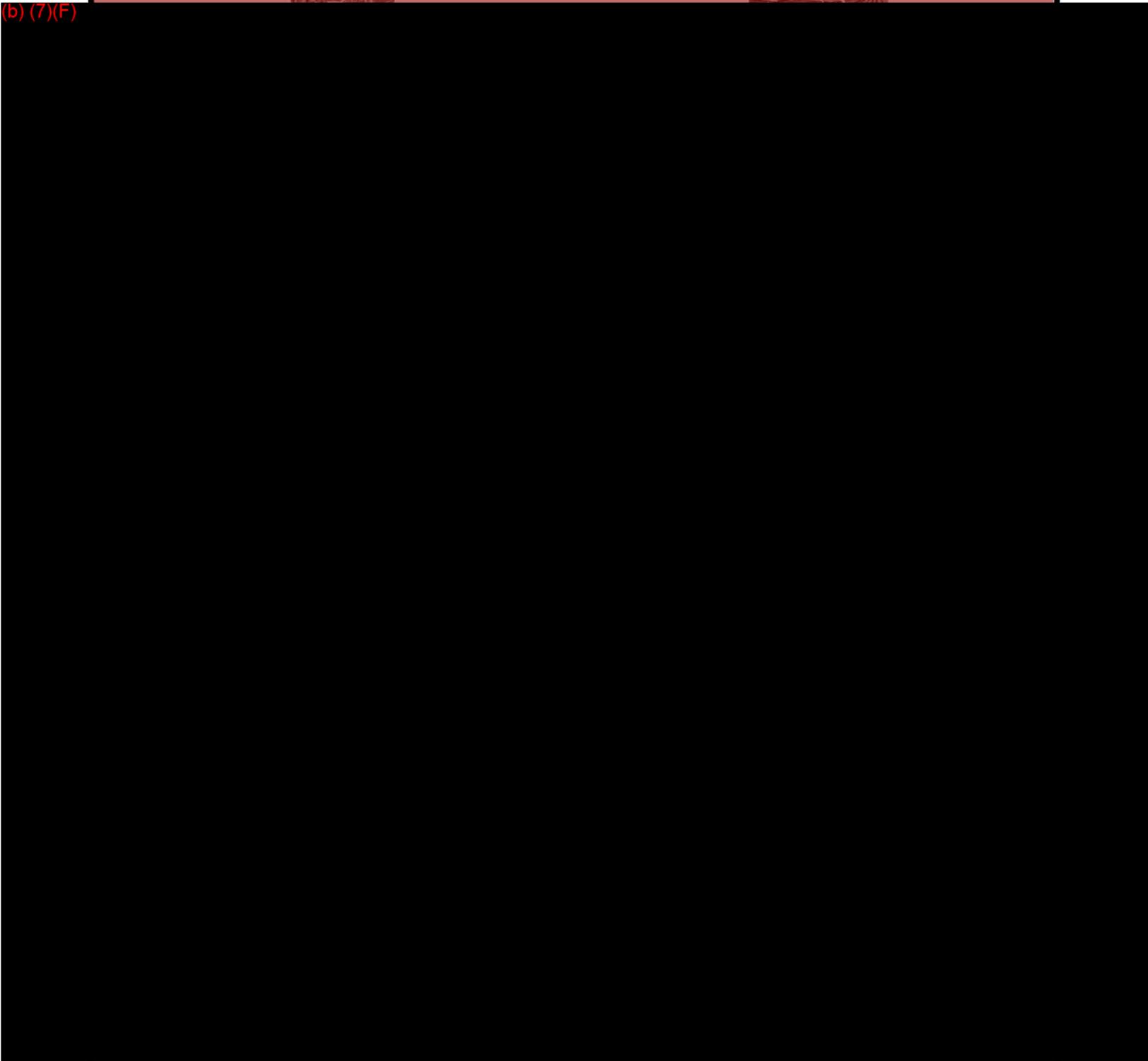


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Integrated
Contingency
Plan

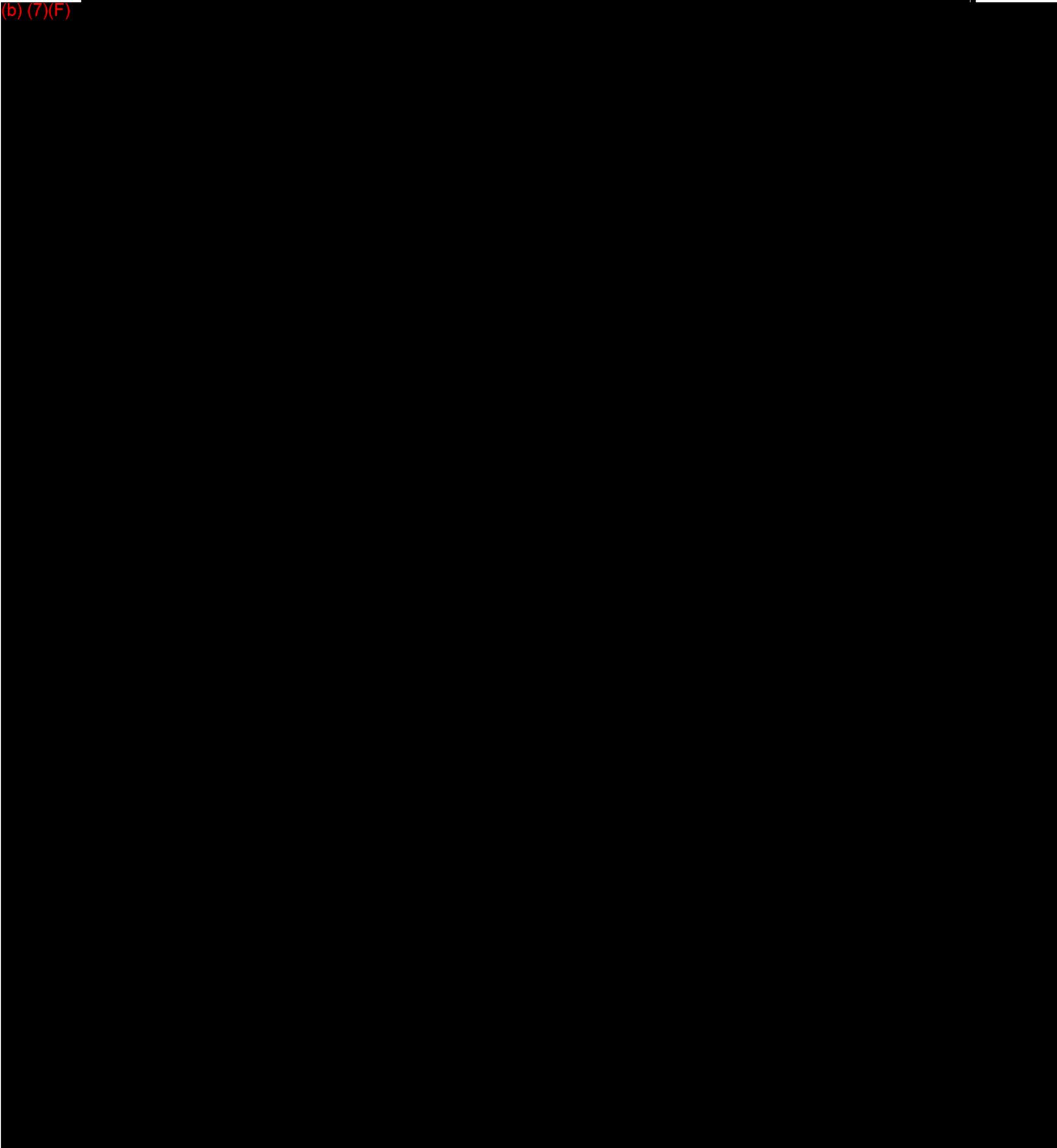


Core Plan



Section II:
Core Plan
Elements

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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.	<input type="checkbox"/>	___/___/___ [00:00]
The supervisor will request a field inspection of the pipeline in question to identify the source of the suspected leak.	<input type="checkbox"/>	___/___/___ [00:00]
In the event an oil leak is discovered along the pipeline, this Plan will be activated.	<input type="checkbox"/>	___/___/___ [00:00]
In the event a leak is not found, an investigation into the cause of the pressure change will continue until determined.	<input type="checkbox"/>	___/___/___ [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.

Sec. II-6.3.5 High Level Alarms

All tanks are equipped with high level alarms. High level alarms are indicated by an audible signal that can be heard anywhere on the complex as well as visual indication in the Control Room. A signal is also sent to the Control Center and requires immediate contact with the facility operator. Alarms are tested periodically in accordance with company preventive maintenance procedures.

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).

Sec. II-6.4 Automated Discharge Detection

The terminal is equipped with high level alarms, which sound an alarm locally at the terminal. Control Center also receives an alarm if this "high level" is reached. When the Company receives these alarms, immediate contact with the facility operator on duty is established. The high level alarm is set below the tank overfill height to ensure enough time to shut down the line before overfilling occurs.

The loading rack is equipped with (b) (7)(F) to shut down pumps to prevent overfilling of truck transports. All trucks must have sensors, which are compatible with our equipment. Should sensors fail, the loading rack has automatic shutdown switches (red button emergency shutdown) that the transport driver or the terminal operator may utilize to shut down transfer pumps.

Sec. II-6.5 Source Control

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 |

(b) (7)(F)

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 overflow 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

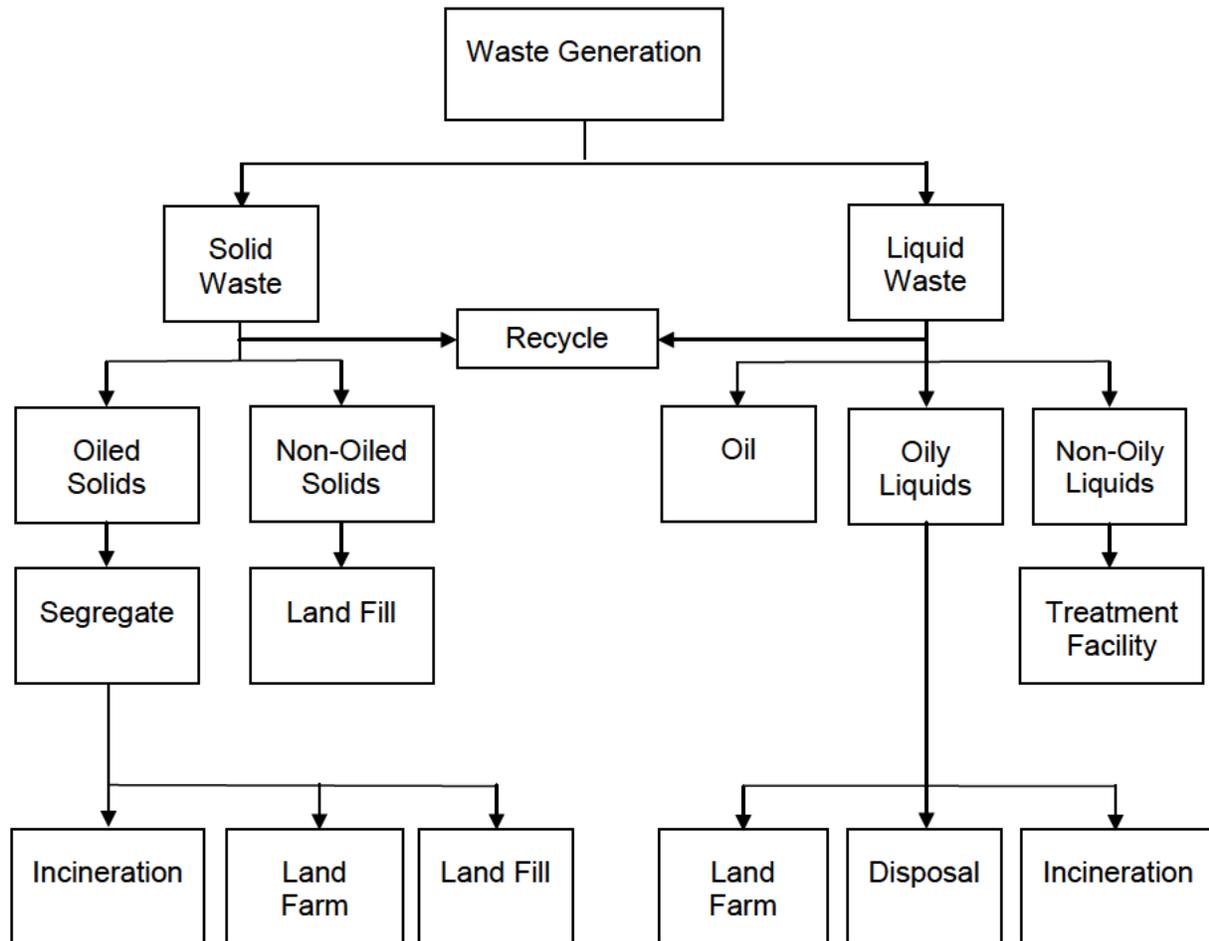


Figure II-8.2 – General Waste Containment and Disposal Checklist

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

Containment	PRODUCT						Capacity
	OIL	OIL/WATER	OIL/SOIL	OIL/DEBRIS (Small)	OIL/DEBRIS (Medium)	OIL/DEBRIS (Large)	
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/Variations 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.	<u>Equipment*</u> 1 backhoe, bulldozer, front-end loader, or set of hand tools <u>Personnel</u> 4-8 Workers	<ul style="list-style-type: none"> Steep Slopes Porous substrate 	<ul style="list-style-type: none"> 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.	<u>Equipment*</u> Misc. hand tools, 1 board, plastic sheet, mat, etc. <u>Personnel</u> 1-2 Workers	<ul style="list-style-type: none"> May be advantageous for oil to enter drain Heavy precipitation 	<ul style="list-style-type: none"> 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.	<u>Equipment*</u> 1 backhoe, bulldozer, front-end loader, or set of hand tools, 1 plastic sheeting roll <u>Personnel</u> 4-6 Workers	<ul style="list-style-type: none"> Upstream storage capacity Flowing water 	<ul style="list-style-type: none"> Increased oil penetration
D. Culvert Blocking	Block culvert opening with plywood, sediments, sandbags, etc. to prevent oil from entering culvert	<u>Equipment*</u> Misc. hand tools, misc. plywood, sandbags, etc <u>Personnel</u> 3-4 Workers	<ul style="list-style-type: none"> Upstream storage capacity Flowing water 	<ul style="list-style-type: none"> Increased oil penetration
E. Interception Trench	Excavate ahead of advancing surface/ near-surface spill to contain oil. Cover bottom and downgradient side with plastic.	<u>Equipment*</u> 1 backhoe or set of hand, tools, misc. plastic sheeting <u>Personnel</u> 3-6 Workers	<ul style="list-style-type: none"> Slope Depth to near-surface flow 	<ul style="list-style-type: none"> 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.	<u>Equipment*</u> 1 boat, 3 anchor systems (min), 100 feet boom (min) <u>Personnel</u> 3 workers plus boat crew	<ul style="list-style-type: none"> • Currents >2-3 kts • Waves > 1-2 ft • Water depth >50 feet (anchoring) • Sensitive shorelines 	<ul style="list-style-type: none"> • 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.	<u>Equipment*</u> 1 boat, vehicle, or winch; 1-2 booms (1.2 x channel width each); 2-10 anchor systems <u>Personnel</u> 2-3 Workers	<ul style="list-style-type: none"> • Currents >2-3 kts • Water depth >50 feet (anchoring) • Sensitive shorelines 	<ul style="list-style-type: none"> • 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.	<u>Equipment*</u> (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. <u>Personnel</u> 2-3 Workers	<ul style="list-style-type: none"> • Water depths >5-10 feet • Currents >0.5 kts • Soft substrate 	<ul style="list-style-type: none"> • 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.	<u>Equipment*</u> (per 500 ft of boom): 1 boat, 6 anchor systems, 750 ft boom (min) <u>Personnel</u> 3 workers plus boat crew	<ul style="list-style-type: none"> • Currents >1-2 kts • Waves >1-2 feet • Water depth >50 feet (anchoring) 	<ul style="list-style-type: none"> • 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.	<u>Equipment*</u> 1 boat, 5 anchor systems, boom (200 feet) <u>Personnel</u> 3 workers plus boat crew	<ul style="list-style-type: none"> • Currents >2-3 kts • Waves >1-2 feet • Water depth >50 feet (anchoring) • Onshore winds 	<ul style="list-style-type: none"> • 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.	<u>Equipment*</u> 1 backhoe, bulldozer, front-end loader, or set of hand tools, 1 plastic sheeting roll <u>Personnel</u> 2-6 workers	<ul style="list-style-type: none"> • Water outflow • Inlet depth >5 feet • Excessive inlet width 	<ul style="list-style-type: none"> • 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	<u>Equipment*</u> (per 100 ft of barrier): misc. hand tools, 1 boat, 10 fence posts, 100 feet cyclone fence, misc fasteners, support lines, etc. <u>Personnel</u> 2-3 workers	<ul style="list-style-type: none"> • Water depth >5-10 feet • Currents >3-4 kts • Soft substrate 	<ul style="list-style-type: none"> • 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

- | | |
|---|---|
| • | 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.	<input type="checkbox"/>	___/___/___ [00:00]
The supervisor will request a field inspection of the pipeline ROW in question to identify the source of the suspected leak.	<input type="checkbox"/>	___/___/___ [00:00]
In the event an oil leak is discovered along the pipeline, this Plan will be activated.	<input type="checkbox"/>	___/___/___ [00:00]
In the event a leak is not found, an investigation into the cause of the pressure change will continue until determined.	<input type="checkbox"/>	___/___/___ [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.

Sec. II-13.3 Automated Discharge Detection

(b) (7)(F)

Sec. II-13.4 Leak Detection Systems, Devices, Equipment, or Procedures**Sec. II-13.4.1 Leak Detection and System Shutdown**

The Company's leak detection and response guidelines cover those facilities, controls, and actions required to detect a leak or spillage from the pipeline and to minimize the extent of such leak or spillage and its effect on public safety, the environment, and property.

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.

(b) (7)(F)

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

(b) (7)(F)



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

(b) (7)(F)

General Pipeline Leak Response Actions

Travel to Suspected Site of Leak

- A means of locating the leak site is necessary for minimum travel time. The general location of the leak may be known from reports.
- If precise directions are not available for finding the site, air surveillance and assistance from a helicopter or other aircraft may be necessary. Areas should maintain a list of companies with aircraft for charter.

Find Leak

- If oil continues to escape from the line, the leak may be detected visually.
- If underwater, the leak can be found by having a diver survey the line. The line may have to be pressured up to force gas or oil out of the leak to aid in locating the leak.

Determine Extent of Damage

- In determining the extent of damage, three basic conditions of the line must be determined:
 - Degree of damage to the line
 - Length of damaged line
 - Misalignment angle if an underwater pipeline

Report to Area Supervisor

- Once the extent of damage has been determined, the following information should be reported:

<ul style="list-style-type: none"> • Location of leak • Size of the Line • Type of coating • Length of damaged section 	<ul style="list-style-type: none"> • 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.

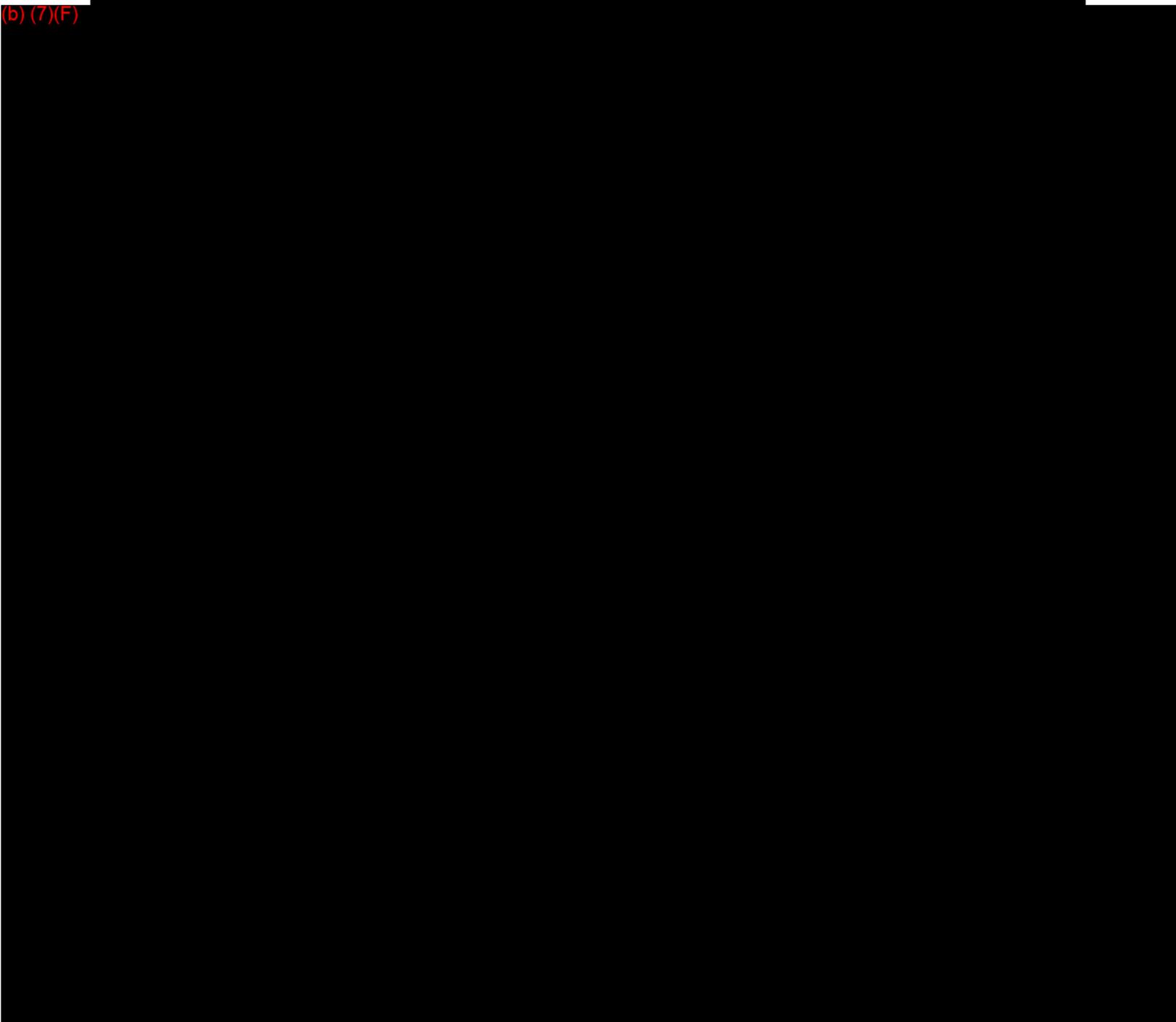
- **Community** - In the unlikely event that evacuation plans were required beyond the boundary of the facility, the Emergency Response Coordinator or designee would communicate further directives. These plans will include guidance of where to move potentially affected parties to minimize threats to 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.	<input type="checkbox"/>	___/___/___ [00:00]
Check the wind direction.	<input type="checkbox"/>	___/___/___ [00:00]
Move upwind or cross wind.	<input type="checkbox"/>	___/___/___ [00:00]
Check the wind again.	<input type="checkbox"/>	___/___/___ [00:00]
Initial Incident Commander will conduct a head count to account for all personnel known to be at the facility.	<input type="checkbox"/>	___/___/___ [00:00]
Initial Incident Commander will assist in alerting and escorting personnel, including visitors and contractors to the appropriate evacuation point.	<input type="checkbox"/>	___/___/___ [00:00]
Initial Incident Commander will notify the TPTN Duty Officer.	<input type="checkbox"/>	___/___/___ [00:00]
Initial Incident Commander will assist in hazard control activities as requested.	<input type="checkbox"/>	___/___/___ [00:00]
Initial Incident Commander will initiate search and rescue of missing persons. Injured personnel will be transported to the nearest emergency medical facility.	<input type="checkbox"/>	___/___/___ [00:00]
All other personnel will remain at the evacuation point until the "All Clear" signal is given.	<input type="checkbox"/>	___/___/___ [00:00]
Note: Evacuation should be carried out in an orderly manner. Personnel should WALK, not run or panic.		

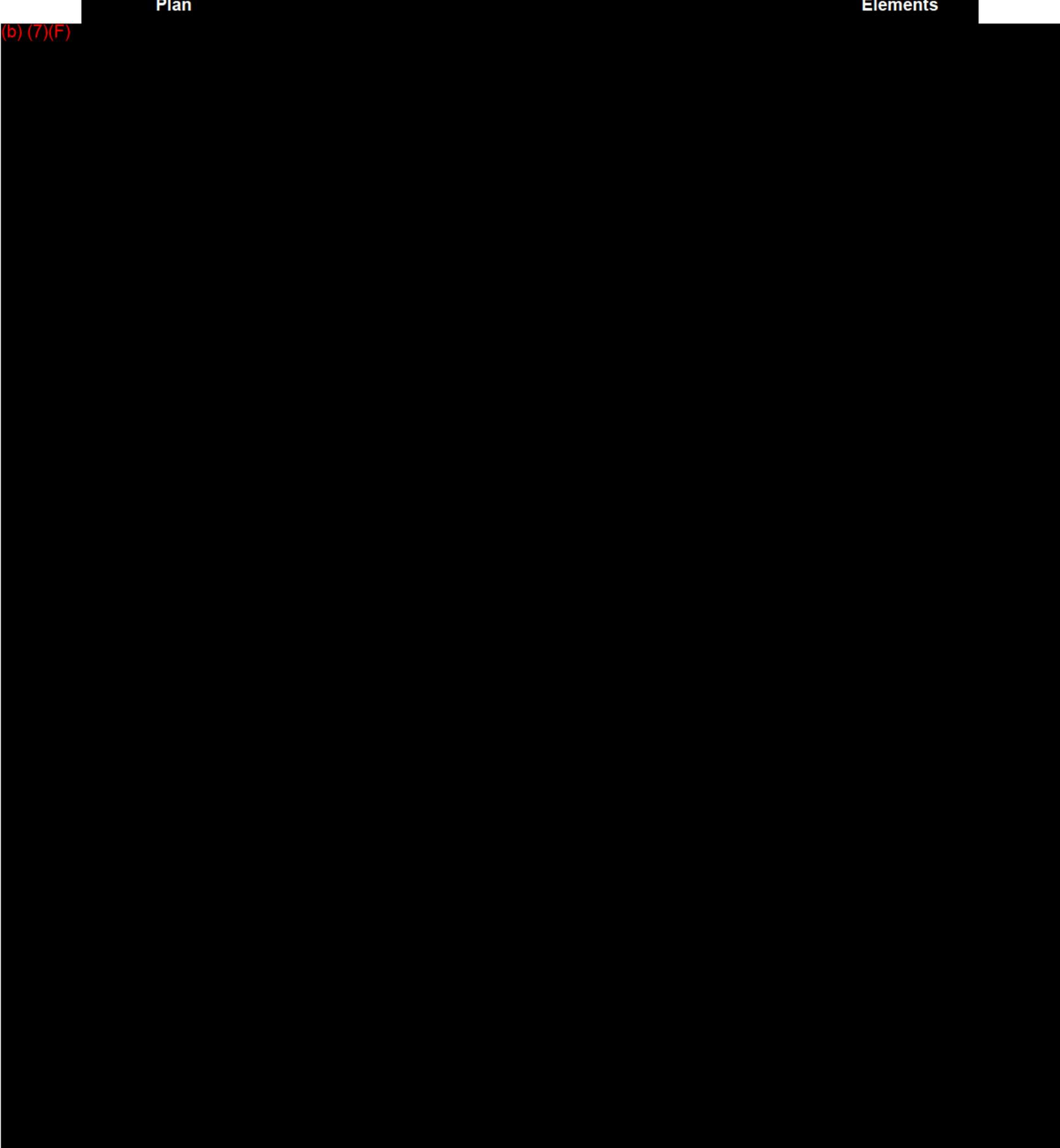


(b) (7)(F)





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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 manager, 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:**

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

Site Characterization and Analysis:

<input type="checkbox"/>	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:

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

Risk Identification [1910.120(c)(7):

<input type="checkbox"/>	Employees on site are informed of identified risks	<input type="checkbox"/>	All information concerning chemical, physical and toxicological properties of each substance available to the employer are made available to the responders
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Detailed Evaluation [1910.120(c)(2):

<input type="checkbox"/>	Immediately after preliminary evaluation, a detailed evaluation is conducted to determine safety controls and protection needed.
--------------------------	--

Monitoring [1910.120(h):

<input type="checkbox"/>	Monitoring performed during initial entry	<input type="checkbox"/>	Monitoring performed periodically
<input type="checkbox"/>	Personnel monitoring performed		

Illumination Requirements [1910.120(m)]

<input type="checkbox"/>	Areas accessible to employees are lighted to levels not less than the intensities outlined in Table H-120.1
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Sanitation Requirements [1910.120(n):

<input type="checkbox"/>	Potable(n)(1) / Non-potable water(n)(2)	<input type="checkbox"/>	Toilet facilities (n)(3)
<input type="checkbox"/>	Washing facilities (n)(6)	<input type="checkbox"/>	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: <ul style="list-style-type: none"> <input type="checkbox"/> During initial site entry and characterization; <input type="checkbox"/> If a new potential inhalation hazard is introduced into the work area; <input type="checkbox"/> During cleanup activities, on each work shift; <input type="checkbox"/> 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: <ul style="list-style-type: none"> <input type="checkbox"/> Oxygen (O₂) deficiency using a direct reading oxygen meter; <input type="checkbox"/> Flammable atmospheres (%LEL) using a combustible gas indicator; <input type="checkbox"/> Benzene, hydrogen sulfide, hydrocarbons, and combustion by-products (SO₂, 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:										
<u>Location Description</u>	<u>Time</u>	<u>PID / FID</u>	<u>H₂S</u>	<u>SO₂</u>	<u>CO</u>	<u>LEL</u>	<u>O₂</u>	<u>Benzene</u>	<u>Other</u>	<u>Comments</u>
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 H₂S 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.	<input type="checkbox"/>
Inform responders exactly what hazardous materials they were (possibly) exposed to and the signs and symptoms.	<input type="checkbox"/>
Identify equipment damage and unsafe conditions requiring immediate attention or isolation for further evaluation	<input type="checkbox"/>
Assign information-gathering responsibilities for a Post-Incident Analysis and critique.	<input type="checkbox"/>
Summarize the activities performed by each sector, including topics for follow-up.	<input type="checkbox"/>
Reinforce the positive aspects of the response.	<input type="checkbox"/>
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 H₂S 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**

- | | |
|--------------------------|--|
| <input type="checkbox"/> | 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. |
| <input type="checkbox"/> | Inform responders exactly what hazardous materials they were (possibly) exposed to and the signs and symptoms. |
| <input type="checkbox"/> | Identify equipment damage and unsafe conditions requiring immediate attention or isolation for further evaluation. |
| <input type="checkbox"/> | Assign information-gathering responsibilities for a Post-Incident Analysis (PIA) and critique. |
| <input type="checkbox"/> | 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: <i>Command and Control, Tactical Operations, Resources and Support Services.</i>
	<i>Command and Control</i> – 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?
	<i>Tactical Operations</i> – Were the tactical options ordered by the IC and implemented by emergency response personnel effective? What worked? What did not?
	<i>Resources</i> – Were the resources adequate for the job? Are improvements needed to apparatus and/or equipment? Were personnel trained to do the job effectively?
	<i>Support Services</i> – 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:

- | | |
|--------------------------|--|
| <input type="checkbox"/> | Control the critique. Introduce the players and procedures. Keep it moving and end on schedule. |
| <input type="checkbox"/> | Ensure that specific questions receive detailed answers. |
| <input type="checkbox"/> | Ensure that all participants follow the critique rules. |
| <input type="checkbox"/> | Ensure that each operational group presents their observations. |
| <input type="checkbox"/> | Keep notes of important points. |
| <input type="checkbox"/> | Sum up the lessons learned. |
| <input type="checkbox"/> | Follow up. |
| <input type="checkbox"/> | Following the critique, forward the written comments to management. They should highlight suggestions for improving response capabilities and alternative solutions. |
| <input type="checkbox"/> | 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:

- 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
- 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 hours¹ 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.

¹Annually, 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 PrinciplesInternal 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	<p>Exercise the spill management team in a review of'</p> <ul style="list-style-type: none"> • 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. <p>At least one spill management team tabletop exercise in a triennial cycle would involve simulation of a <u>worst-case discharge</u> scenario.</p>
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	<p>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.</p> <p>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.</p>
Objectives	<p>Demonstrate ability of facility personnel to deploy and operate equipment.</p> <p>Ensure equipment is in proper working order.</p>
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	<p>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."</p> <p>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.</p> <p>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).</p>
Objectives	<p>Demonstrate the ability of the personnel to deploy and operate response equipment.</p> <p>Ensure the response equipment is in proper working order.</p>
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	<p>Unannounced exercises are limited to a maximum of 10% of response plan holders per EPA region per year.</p> <p>Exercises are limited to approximately 4 hours in duration.</p> <p>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.)</p> <p>Exercise would involve deployment of response equipment identified in the facility response plan to respond to spill scenario.</p> <p>PHMSA and MMS will cover unannounced exercises for pipelines and offshore facilities <u>not a part of a complex</u> in their exercise programs.</p>
Objectives	<p>Conduct proper notifications to respond to unannounced scenario of a small discharge.</p> <p>Demonstrate that the response is:</p> <ul style="list-style-type: none"> • 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	<p>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.</p> <p>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.</p>

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.
Particip. 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	<p>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.</p> <p>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.</p> <p>The facility should ensure that spill mitigation procedures for all contingencies at the facility are addressed at some time.</p>
Certification	Self-certification.
Verification	U.S. Coast Guard
Records	
Retention	3 years
Location	Records to be kept at the facility.
Evaluation	Self-evaluation
Credit	<p>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.</p> <p>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.</p> <p>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.</p>

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	<p>Exercise the spill management team in a review of:</p> <ul style="list-style-type: none"> • 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 <u>a worst-case discharge scenario</u>.
Certification	Self-certification.
Verification	U.S. Coast Guard
Records	
Retention	3 years
Location	Records to be kept at the facility.
Evaluation	Self-evaluation
Credit	<p>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.</p> <p>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.</p>

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
Particip. Elements	Facility personnel
Scope	<p>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, <u>whichever is less.</u></p> <p>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.</p>
Objectives	<p>Demonstrate ability of facility personnel to deploy and operate equipment.</p> <p>Ensure equipment is in proper working order. Deployment should also include testing ACP containment, protection and diversion strategies.</p>
Certification	Self-certification.
Verification	U.S. Coast Guard
Records	
Retention	3 years
Location	Records to be kept at the facility.
Evaluation	Self-evaluation
Credit	<p>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.</p> <p>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.</p>

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	<p>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."</p> <p>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.</p> <p>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.</p>
Objectives	<p>Demonstrate ability of personnel to deploy and operate equipment.</p> <p>Ensure the response equipment is in proper working order.</p> <p>Whenever feasible, equipment deployment should also include ACP containment, protection and diversion strategies.</p>
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 <u>not part of a complex</u> in their exercise program.
Objectives	Conduct proper notifications to response to unannounced scenario of an average most probable discharge. Demonstrate response is: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • 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**

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:

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

TANK APPURTENANCES (ATMOSPHERIC STORAGE)

- 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)?
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

- 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)?
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:
(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.

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

5. CAPACITY:

FILL IN ITEMS 29 THRU 31 FOR LIFTER ROOF TANKS ONLY

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

- 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

- 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 he 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

- 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:

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

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

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

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

- | | |
|--|--|
| <input type="checkbox"/> Hazwoper, 4-hr Refresher / TPTERHAZWOPER4 | <input type="checkbox"/> HAZWOPER QI-IC / TPTHSE000212 |
| <input type="checkbox"/> Hazwoper, 8-hr Refresher (WA ONLY) / TPTERHAZWOPER8 | <input type="checkbox"/> HAZWOPER Supervisor Certification / TPTER000024 |
| <input type="checkbox"/> Certification-24 Hour HAZWOPER Technician Level / TPTER000003 | <input type="checkbox"/> Other: _____ |

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

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

LIST OF ATTENDEES TRAINED / COMPLETED SUCCESSFULLY

(* = Did not complete)

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

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

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

END TIME: _____

LOCATION: _____

COMPANY CONTACT: _____ **PHONE:** _____

15.			
16.			
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43.			
44.			

TRANSPORTATION – HEALTH & SAFETY
EPR&S PREP - DRILL DOCUMENTATION

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:** _____

TRANSPORTATION – HEALTH & SAFETY
EPR&S PREP - DRILL DOCUMENTATION

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:

- | | |
|--|---|
| <input type="checkbox"/> Notifications | <input type="checkbox"/> Disposal of recovered material & contaminated debris |
| <input type="checkbox"/> Staff mobilization | <input type="checkbox"/> Communications |
| <input type="checkbox"/> Operate within Response Management System | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Discharge control | <input type="checkbox"/> Personnel support |
| <input type="checkbox"/> Assessment of discharge | <input type="checkbox"/> Equipment maintenance & support |
| <input type="checkbox"/> Containment of discharge | <input type="checkbox"/> Procurement |
| <input type="checkbox"/> Recovery of spilled material | <input type="checkbox"/> Documentation |
| <input type="checkbox"/> Protection of sensitive areas | |

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: _____

**TRANSPORTATION – HEALTH & SAFETY
EPR&S PREP - DRILL DOCUMENTATION**

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: _____

**TRANSPORTATION – HEALTH & SAFETY
EPR&S PREP - DRILL DOCUMENTATION**

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:

- | | |
|--|---|
| <input type="checkbox"/> Notifications | <input type="checkbox"/> Disposal of recovered material & contaminated debris |
| <input type="checkbox"/> Staff mobilization | <input type="checkbox"/> Communications |
| <input type="checkbox"/> Operate within Response Management System | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Discharge control | <input type="checkbox"/> Personnel support |
| <input type="checkbox"/> Assessment of discharge | <input type="checkbox"/> Equipment maintenance & support |
| <input type="checkbox"/> Containment of discharge | <input type="checkbox"/> Procurement |
| <input type="checkbox"/> Recovery of spilled material | <input type="checkbox"/> Documentation |
| <input type="checkbox"/> Protection of sensitive areas | |

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.				

NATIONAL PREPAREDNESS FOR RESPONSE EXERCISE PROGRAM (PREP)

15 PREP COMPONENTS EVALUATION WORKSHEET (Cont'd)

8) Protection of sensitive areas (Cont'd)

Components	ICS/UCS Position Responsible	Completed (Y/N)	Date/Time Completed	Comments
8.4 Population Protection (Protect Public Health and Safety): Demonstrate the ability to quickly identify health hazards associated with the discharged product and the population at risk from these hazards, and to implement the proper protection procedures from the Area Contingency Plan or develop a plan for use.				

9) Disposal of recovered material and contaminated debris

Components	ICS/UCS Position Responsible	Completed (Y/N)	Date/Time Completed	Comments
9. Demonstrate the ability of the spill response organization to dispose of the recovered material and contaminated debris.				

10) Communications

Components	ICS/UCS Position Responsible	Completed (Y/N)	Date/Time Completed	Comments
10. Demonstrate the ability to establish an effective communications system for the spill response organization.				
10.1 Internal Communications: Demonstrate the ability to establish an intra-organization communications system. This encompasses communications at the command post and between the command post and deployed resources.				
10.2 External Communications: Demonstrate the ability to establish communications both within the response organization and other entities (e.g., RRT, claimants, media, regional or HQ agency offices, non-governmental organizations, etc.).				

NATIONAL PREPAREDNESS FOR RESPONSE EXERCISE PROGRAM (PREP)

15 PREP COMPONENTS EVALUATION WORKSHEET (Cont'd)

11) Transportation

Components	ICS/UCS Position Responsible	Completed (Y/N)	Date/Time Completed	Comments
11. Demonstrate the ability to provide effective multi-mode transportation both for execution of the discharge and support functions.				
11.1 Land Transportation: Demonstrate the ability to provide effective land transportation for all elements of the response.				
11.2 Waterborne Transportation: Demonstrate the ability to provide effective waterborne transportation for all elements of the response.				
11.3 Airborne Transportation: Demonstrate the ability to provide the necessary support of all personnel associated with the response.				

12) Personnel support

Components	ICS Position Responsible	Completed (Y/N)	Date/Time Completed	Comments
12. Demonstrate the ability to provide the necessary support of all personnel associated with the response.				
12.1 Management: Demonstrate the ability to provide administrative management of all personnel involved in the response. This requirement includes the ability to move personnel into or out of the response organization with established procedures.				
12.2 Berthing: Demonstrate the ability to provide overnight accommodations on a continuing basis for a sustained response.				
12.3 Messing: Demonstrate the ability to provide suitable feeding arrangements for personnel involved with the management of the response.				
12.4 Operational and Administrative Spaces: Demonstrate the ability to provide suitable operational and administrative spaces for personnel involved with the management of the response.				

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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.				

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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Annex – Table of Contents

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	Response Zone – Buxton/Cushing Area
1.6.1	Area Information Summary
1.6.2	Pipeline Information
1.6.3	Spill Response Equipment
1.6.4	Significant and Substantial Harm Certification
1.6.5	Worst Case Discharge Calculations
1.6.6	Secondary Containment Summary – Breakout Tankage
1.6.7	Maximum Release Calculation Table
1.6.8	Significant and Substantial Harm Determination
1.7	Response Zone – Glenpool Area
1.7.1	Area Information Summary

Annex 1 – Table of Contents

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1.1 Owner & Operator

The Owner and Operator of these pipelines is:

OWNER /OPERATOR ADDRESS	Phillips 66 Company 600 North Dairy Ashford, TA-2136 Houston, TX 77079
------------------------------------	--

PIPELINE MAINTENANCE FACILITY ADDRESS	See each specific area in this Annex
--	--------------------------------------

1.2 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 Oklahoma 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

1.3 Scope of Plan

This plan applies to emergency response operations carried out by the Emergency Response Team. This plan applies to any type or size of incident that may occur within the Oklahoma 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.

1.4 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 CFR 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. |

1.5 Management Certification

MANAGEMENT APPROVAL, MANPOWER AUTHORIZATION AND CERTIFICATION

NATIONAL CONTINGENCY PLAN CONSISTENCE

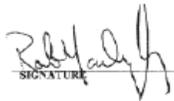
The Company has reviewed the National Contingency Plan and the applicable Regional Integrated Contingency Plan (RCIP), formerly known as the Area Contingency Plan (ACP). The Company certifies to the best of its knowledge and belief and in accordance with 40 CFR 112.21(G)-(I)(g)(2) and 49 CFR 194.121(a) that the following Emergency Response Plan is consistent with the applicable EPA Regional RICP and the NCP.

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 specific in the Plan, as necessary in a spill response emergency.

PERSONNEL AND EQUIPMENT CERTIFICATION

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.

CERTIFICATION SIGNATURE:



SIGNATURE

Rob Yarbrough
PRINTED NAME

Director, Emergency Preparedness, Response & Security
TITLE

April 1, 2009
DATE

1.6 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:

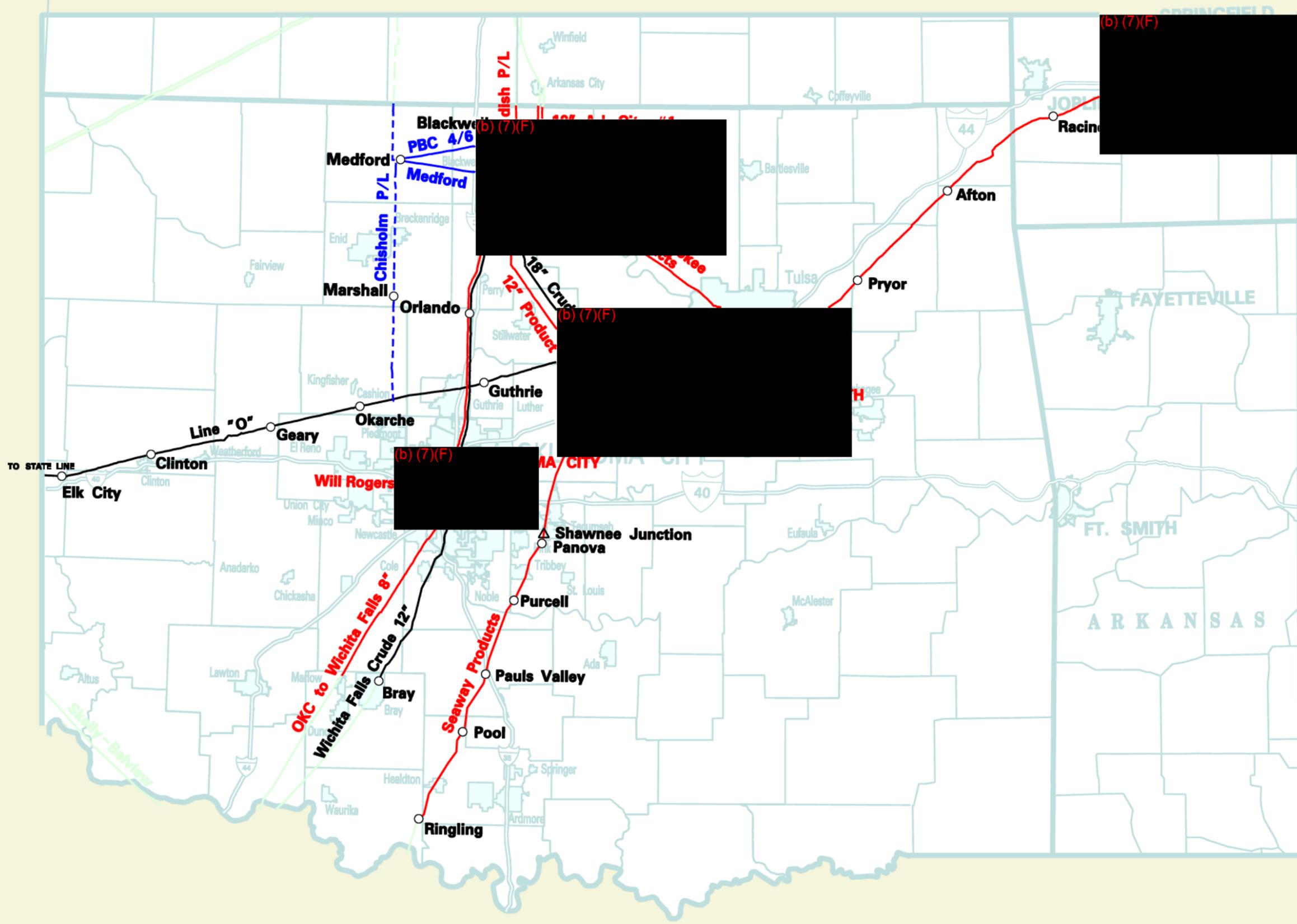
- Activate internal alarms and hazard communication systems,
- Activate personnel and equipment maintained by the operator,
- Identify character, exact source, amount, and extent of the release,
- Notify and provide information to appropriate Federal, State and Local authorities,
- Assess interaction 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



LEGEND

- REFINED PRODUCTS
- - - NGL PIPELINES (JOINTLY OWNED)
- NGL PIPELINES
- CRUDE PIPELINES
- PIPELINES NOT INCLUDED IN NORTHERN DISTRICT
- TERMINALS
- REFINERIES
- PUMP STATION



**ConocoPhillips
Pipe Line Company**

***Pipelines & Terminals
Northern Oklahoma District
Central Region***

FILE: MZ500ZM.DGN
REVISION DATE: 01/09/2007

1.6 Response Zone – Buxton/Cushing Area**Sec. 1.6.1 Area Information Summary**

Area Information			
Maintenance Group Name	Buxton/Cushing Area		
Response Area Location	TX/OK State Line to Cushing, OK Kingfisher, OK to OK/KS State Line Cushing, OK to OK/KS State Line		
Line Section	Line O – TX/OK State Line to Cushing, Chisholm 8" HVL – Kingfisher, OK to Medford, OK Cushing 18" Crude – Cushing to Marland Station Standish 12" Products – Buxton to Marland Junction 12" Wood River Ponca City to MP 59 Seaway 18" Products – Chandler to Cushing		
Telephone (day/night)	918-225-3422 ext. 12 / 918-223-5095		
Address	3006 S. Linwood Cushing, OK 74023		
County	Payne		
Owner	Phillips 66		
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 Pipeline Information**Pipeline Description****Maintenance Group Facility Description**

The Buxton Maintenance Group has maintenance responsibilities for the Line "O" pipeline corridor between the Oklahoma/Texas state line and the Buxton Terminal, the Chisholm pipeline corridor from Kingfisher, Oklahoma to the South fence of Medford Station, the Standish pipeline corridor from Buxton Terminal to the South fence of Marland (b) (7)(F)

Total Length

190.87 miles (Line "O")
67.8 miles (Chisholm Pipeline)
59.6 miles (Standish Pipeline)
62.0 miles (Cush-Po Pipeline)
16.9 miles (Seaway Pipeline)
57.3 miles (Wood River)

Facility Mile Post Range

81.31 to 272.18 (Line "O")
0.00 to 67.8 (Chisholm)
0.00 to 59.6 (Standish)
0.00 to 62.0 (Cush-Po)
27.7 to 44.4 (Seaway)
0.00 to 57.3 (Wood River)

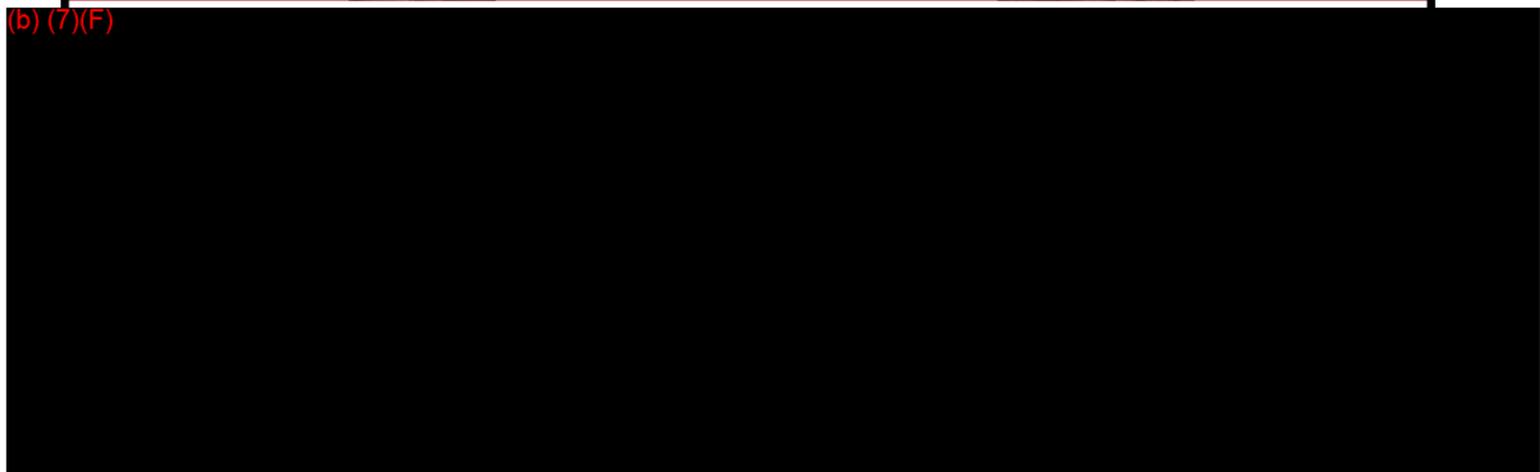
Number, Size, Type of Lines

1, 10" Crude Oil (Line "O")
1, 8" HVL (Chisholm)
1, 12" Products (Standish)
1, 18" Crude (Cush Po)
1, 18" Products (Seaway)

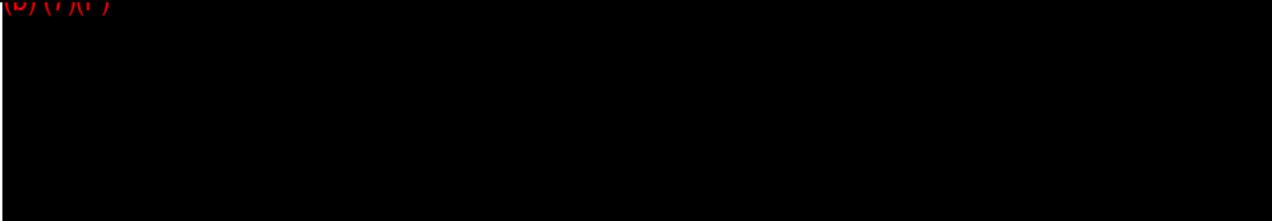
(b) (7)(F)



(b) (7)(F)



(b) (7)(F)



Sec. 1.6.3 Spill Response Equipment**Spill Response Equipment List and Location**

Items located in spill response trailer:

20' 11500 LB GVWR Express Wagon (7' 6" Wide X 6' 6" High (interior)	1
16' Aluminum welded flat bottom boat	1
25HP Mariner outboard motor	1
ACME 6" diameter containment boom - 1000'	1
ACME Super Mini-Boom 2 1/2" diameter - 300'	2
17" x 19" x 3/8" 3M Pads	2 Bales
17" x 100" x 3/8" 3M Sweep	1 Bale
5" x 14" x 25" 3m Pillows	1 Bale
10' x 5" diameter SPC 510 Booms	2 Bales
20' x 5" diameter SPC 520 Booms	2 Bales
32 Gal polyethylene trash can	6
6 mil Polyethylene (12' x 100')	1 Roll
6 mil Polyethylene (20' x 100')	1 Roll
6 mil 40 gal poly trash bags	1 Case
5 Gallon DOT approved gas dispensing can	2
Rope, 1/2" diameter	1000 ft
Rope 1/4" diameter	1000 ft
Mooring Buoy, Taylor 12" diameter	2
Hose Floats (ACME)	8
Anchor, 22# Danforth type	2
ACME 3 point tow hitch (boat to boom)	1
2" Suction Hose	200 ft
1 1/2" Suction Hose	40 ft
Spray nozzle with 1 1/2" quick coupler	2
Life Jackets Type V	5
Various hose fittings	

Sec. 1.6.4 Significant and Substantial Harm Certification**Applicability of Significant and Substantial Harm – DOT / PHMSA
All Relevant Pipelines as Listed below in this Section**

Pipeline Name: Buxton/Cushing

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

YES NO

Has the line section experienced a release greater than 1,000 barrels within the past five (5) years,

YES NO

Has any line section experienced two or more reportable releases, as defined in 49 CFR 195.5, within the past five (5) years, or

YES NO

Does any line section contain any electric resistance welded pipe, manufactured prior to 1970 and operates at a maximum operating pressure established under 40 CFR 195.406 that corresponds to a stress level greater than 50 percent of the specified minimum yield strength of the pipe, or

YES NO

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

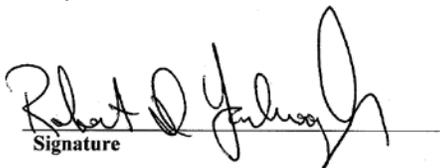
YES NO

Is any link located within a 1-mile (1.6 km) radius of potentially affected environmentally sensitive areas and could reasonably be expected to reach these areas?

YES NO Based on the DOT/PHMSA criteria above, **ALL** of the Company Pipelines are considered to be a system of Significant and Substantial Harm.

The Company certifies to the Pipeline and Hazardous Materials Safety Administration of the Department of Transportation that we have obtained, by contract or other approved means, the necessary private personnel and equipment to respond, to the maximum extent practicable, to a worst case discharge.

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining information, I believe that the submitted information is true, accurate and complete.



Signature

Robert Yarbrough
Name

May 2012
Date

Sec. 1.6.5 Worst Case Discharge Calculations

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

Counties:	Roger Mills, Beckham, Washita, Custer, Blaine, Canadien, Kingfisher, Logan Lincoln, Payne, Noble, Kay
State	Oklahoma
Mile Posts (Okla)	80.8 – 272.2 (Line "O") 0.0 – 55.9 (Standish 12") 0.0 – 67.8 (Chisholm) 0.0 – 62.0 (CushPo 18") 0.0 – 57.3 (Wood River Products) 27.7 – 44.4 (Seaway Products)

Line Sections within the Response Zone

Chisolm Pipeline System	8" HVL – 67.8 miles
Line "O"	10" – 190.87 miles
ARCO Receipt Lines	12" - .4 mile
Amsey Receipt System	12" - .075 mile
Standish Pipeline	12" – 83.2 miles
Basin Receipt Line	22" - .5 mile
Seaway Receipt Line	24" - .5 mile
Cushpo Pipeline	18" – 62 miles
Wood River Products	12" – 57 miles
Seaway Products	18" – 17 miles

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

(b) (7)(F)

Note: Breakout tank WCD is located on page 8 of this Section.

* The Cushing to Marland Junction 12" line is a gasoline and diesel line which is now called the Standish 12".

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

Worst-Case Discharge =

$$\begin{aligned} & \text{(Line flow H SCADA response)} \\ & \quad + \\ & \text{(Gravity flow H manual response)} \\ & \quad + \\ & \text{(Volume between manual block valves)} \end{aligned}$$

SCADA = Supervisory Control and Data Acquisition System

Manual Response = Total time to physically turnoff manual valves nearest spill location

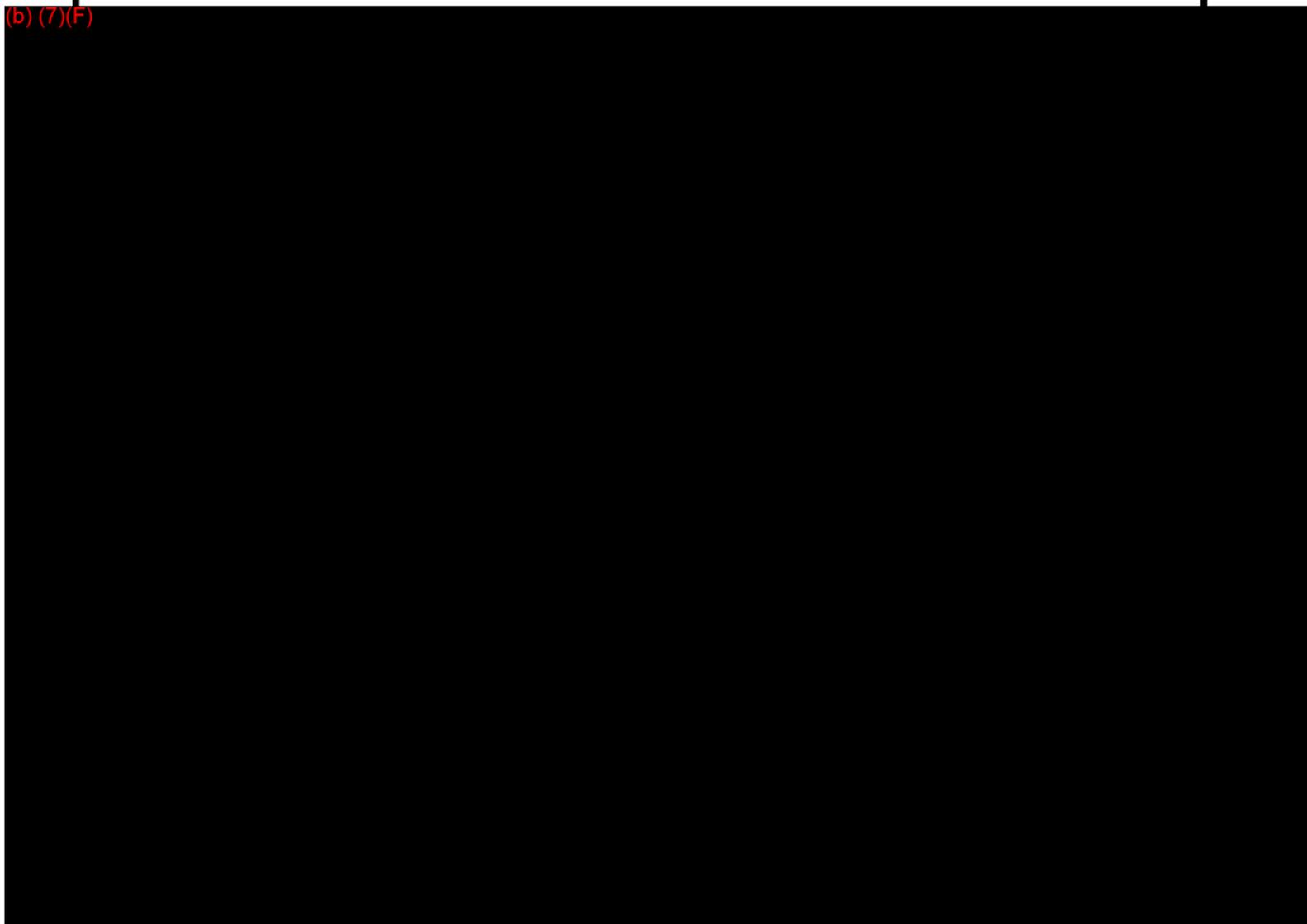
Second, the worst-case discharge could be a foreseeable discharge for a line section based on the maximum historic discharge.

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.

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 Company' case. The calculations for this response zone, as per 40 CFR 194 guidelines, have been included in this section.



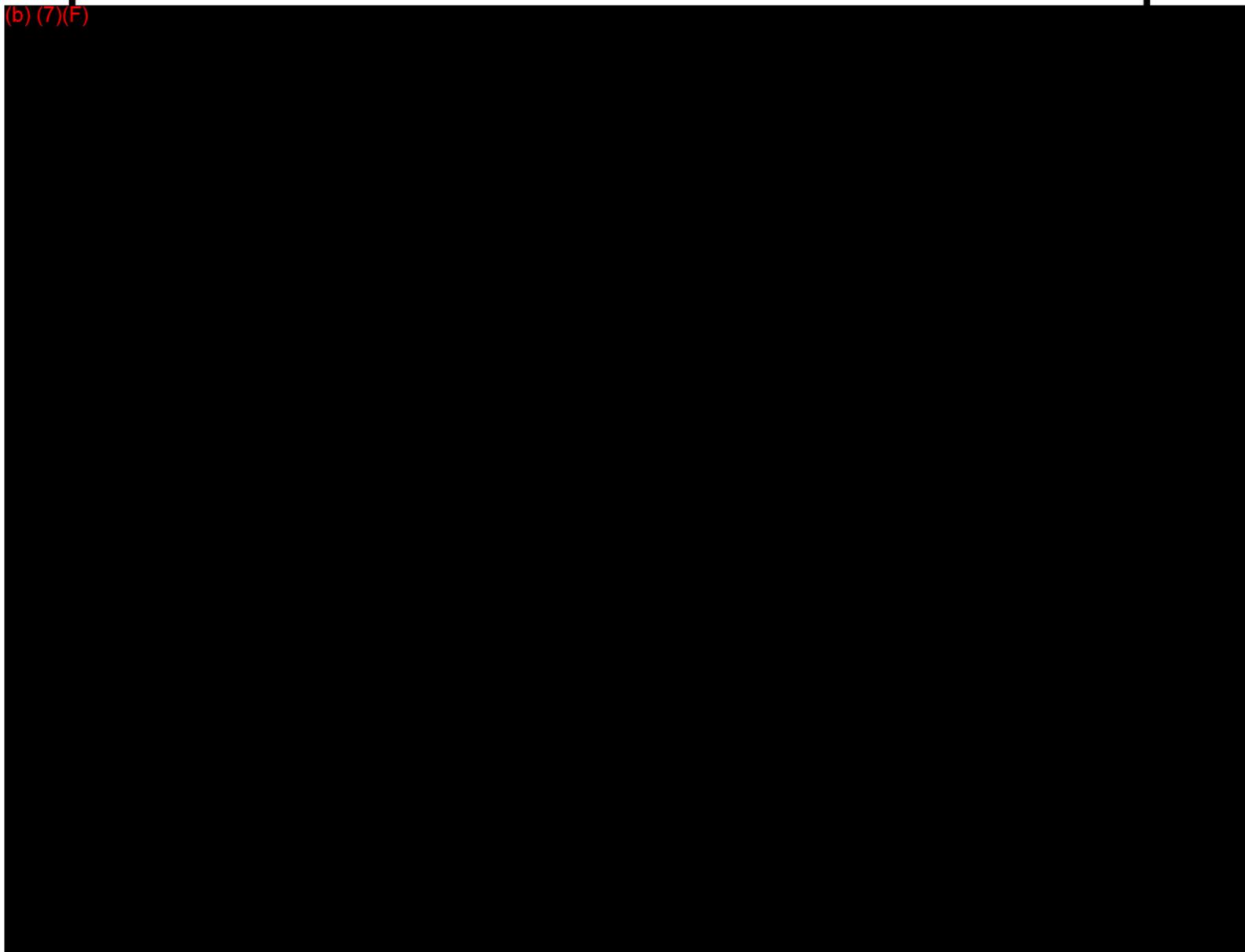
(b) (7)(F)





Cushpo Pipeline

(b) (7)(F)



Sec. 1.6.6 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.)
Cushing	1151	(b) (7)(F)				
	824					
	1252					
	1501					
	2501					

Sec. 1.6.7 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.)
12" Buxton Products line - Cushing Pump Station to Ponca City, Payne, Noble and Kay Counties, Oklahoma							
(b) (7)(F)	15	4	3,300	12	7.0	(b) (7)(F)	(b) (7)(F)
(b) (7)(F)	15	4	3,300	12	1.0	(b) (7)(F)	(b) (7)(F)
(b) (7)(F)	15	4	3,300	12	0.2	(b) (7)(F)	(b) (7)(F)
(b) (7)(F)	15	4	3,300	12	13.8	(b) (7)(F)	(b) (7)(F)
(b) (7)(F)	15	4	3,300	12	8.0	(b) (7)(F)	(b) (7)(F)
(b) (7)(F)	15	4	3,300	12	0.6	(b) (7)(F)	(b) (7)(F)
(b) (7)(F)	15	4	3,300	12	5.5	(b) (7)(F)	(b) (7)(F)
(b) (7)(F)	15	4	3,300	12	9.25	(b) (7)(F)	(b) (7)(F)
(b) (7)(F)	15	4	3,300	12	9.25	(b) (7)(F)	(b) (7)(F)
(b) (7)(F)	15	4	3,300	12	1.0	(b) (7)(F)	(b) (7)(F)
(b) (7)(F)	15	4	3,300	12	4.0	(b) (7)(F)	(b) (7)(F)
Woodriver Products Line - Hwy 60 to MP 57.3 - Kay County, Oklahoma							
(b) (7)(F)	15	7	4,000	12	3.0	(b) (7)(F)	(b) (7)(F)
(b) (7)(F)	15	7	4,000	12	1.0	(b) (7)(F)	(b) (7)(F)
(b) (7)(F)	15	7	4,000	12	20.0	(b) (7)(F)	(b) (7)(F)
(b) (7)(F)	15	7	4,000	12	16.0	(b) (7)(F)	(b) (7)(F)
(b) (7)(F)	15	7	4,000	12	12.0	(b) (7)(F)	(b) (7)(F)
(b) (7)(F)	15	7	4,000	12	0.3	(b) (7)(F)	(b) (7)(F)

Sec. 1.6.8 Significant and Substantial Harm Determination

Line Sect. No.	From		To		County	State	Sig/ Sub (Y/N)	Reason
	Block Valve No.	Milepost No.	Block Valve No.	Milepost No.				
...g Pump Station to Marland Junction								
1	(b) (7)(F)				Payne	OK	Y	2WI3 8.
2					Payne	OK	N	
3					Payne	OK	N	
4					Payne, Noble	OK	Y	2WI1 3.
5					Noble	OK	N	
6					Noble	OK	N	
7					Noble	OK	N	
8					Noble, Kay	OK	N	
9					Kay	OK	N	
10					Kay	OK	N	
11					Kay	OK	N	
...60 to MP 57.3 - Kay County, Oklahoma								
29					Kay	OK	N	
30					Kay, Osage	OK	N	
31					Osage	OK	N	
32					Osage	OK	N	
33					Osage	OK	Y	1W14 25.
34					Osage	OK	N	

1.7 Response Zone - Glenpool

Sec. 1.7.1 Area Information Summary

Glenpool South Terminal

This facility is a product terminal located approximately one mile north of Glenpool, Oklahoma in the SW/4 SE/4 of Section 2, Township 17 North, Range 12 East, Tulsa County, Oklahoma. The facility has secondary containment for its tankage. In case of a discharge, it would drain through Explorer Pipeline property into Coal Creek. Thence following the meanders of Coal Creek north northeasterly approximately 3.8 miles to the intersection of Polecat Creek. Thence following the meanders of Polecat Creek northerly and then southeasterly approximately 4.3 miles to the intersection of the west bank of the Arkansas River. The Arkansas River flow is controlled by the discharge rate from Keystone Lake Dam located approximately 25 miles upstream of the mouth of Polecat Creek at the Arkansas River.

Sec. 1.7.2 Facility and Locality Specifics

Glenpool Area is comprised of the Glenpool South Terminal and the following pipelines or pipeline segments:

The system in Glenpool Area consists of the Glenpool South Terminal and the following pipeline facilities:

- Wood River 12" products line, MP 59 to Glenpool Pump Station
- Wood River 12" products line from Glenpool Pump Station to MP 115A (12" Tulsa reroute Glenpool Products Line)
- Wood River #1 10" products line, MP 105 to Afton Pump Station to OK/MO state line
- Glenpool South 12" products line, Glenpool Pump Station to Glenpool South (≈ 3 miles)
- Glenpool Terminal and Glenpool South Facility

This area 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 the Claremore Cuesta Plains, and area of limestone and resistant sandstone hills overlooking broad shale plains. The northeast part of the line is in the Neosho Lowland, which consists mainly of gently rolling shale plains with a few buttes and long, low cliffs. Riverine forests border rivers and permanent streams throughout the area. Away from the rivers, vegetation alternates between grasslands and Post oak-Blackjack oak forest.

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

Sec. 1.7.3 Pipeline Information

Pipeline	Glenpool Area Segment	Products Carried
Wood River 12" Products Line	MP59 to Glenpool Pump Station	Gasoline, Diesel, Jet A, Drip Gas and LPGs
12" Wood River Tulsa Reroute Glenpool Products Line	Glenpool Pump Station to MP 155A	Gasoline, Diesel, Jet A, Drip Gas and LPGs
#1 Wood River 10" Products Line	MP 105 to Afton Pump Station to OK/MO state line.	Gasoline, Diesel, Jet A, Drip Gas and LPGs
Glenpool South 12" Products Line	Glenpool Pump Station to Glenpool South	Gasoline and Diesel
Wood River 10" Crude Line	Glenpool Pump Station to Afton	Out of Service

Note: All products carried in this area are considered Group 1 oils.

Sec. 1.7.4 Worst Case Discharge Calculations

Glenpool Area is comprised of the Glenpool South Terminal and the following pipelines or pipeline segments:

Pipeline	Glenpool Area Segment	Products Carried
Wood River 12" Products Line	MP59 to Glenpool Pump Station	Gasoline, Diesel, Jet A, Drip Gas and LPGs
Wood River 10" Products Lines	Glenpool Pump Station to Afton Pump Station	Gasoline, Diesel, Jet A, Drip Gas and LPGs
Glenpool South 12" Products Line	Glenpool Pump Station to Glenpool South	Gasoline, Diesel and Jet A
Tulsa Reroute 12" Glenpool Products Line	Glenpool Pump Station to MP 115A	Gasoline, Diesel, Jet, Drip Gas and LPGs

Note: All products carried in this area are considered Group 1 oils

Sec. 1.7.5 Secondary Containment Summary – Glenpool South Facility

Tank No.	Nominal Tank Size (Bbls.)	Tank Capacity (Bbls.)	Secondary Containment Capacity (Bbls.)	Secondary Containment Minus Tank Capacity (Bbls.)	Worst Case Discharge (Bbls.)
7	(b) (7)(F)				
8					
9					
12					

- Denotes largest tank within a single dike area.

All breakout tank(s) in this area have secondary containment equal to or greater than 100% of the capacity of the largest tank. 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 Area is (b) (7)(F) rels.

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 area.

Pipeline's maximum release calculated using the following formula:

$[(\text{Maximum time to discover a leak}) + (\text{Maximum response shutdown time})] \times$

$(\text{Maximum flow rate}) + (\text{Maximum line section drain up after shutdown})$

All of the main line sections in this area are monitored by a SCADA system in the Company 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. 1.7.6 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.)
River 12" Products Line – Hominy Pump Station to Glenpool Pump Station Osage and Tulsa County, OK							
(b) (7)(F)	15	7	4,000	12	0.3	(b) (7)(F)	(b) (7)(F)
	15	7	4,000	12	0.4		
	15	7	4,000	12	6.1		
	15	7	4,000	12	5.9		
	15	7	4,000	12	3.0		
	15	7	4,000	12	3.0		
	15	7	4,000	12	8.0		
	15	7	4,000	12	0.1		
Route (Replacing the #2 Wood River Twin 10" Product Line – Glenpool Pump Station), Tulsa, Wagoner, Mayes, Craig and Delaware Counties, OK							
	15	7	4,000	12	8		
	15	7	4,000	12	2		
	15	7	4,000	12	8		
	15	7	4,000	12	6.2		
	15	7	4,000	12	6.8		
in 10" Products Lines (#1 & #2) - Glenpool Pump Station to Aft Tulsa, Wagoner, Mayes, Craig and Delaware Counties, OK (NOTE: Wood River Twin 10" Products Line #2 is Out Of Service)							
	15	7	2,000	10	1.5		
	15	7	2,000	10	0.5		
	15	7	2,000	10	6.3		
	15	7	2,000	10	5.7		
	15	7	2,000	10	7.0		
	15	7	2,000	10	3.0		
	15	7	2,000	10	14.0		
	15	7	2,000	10	0.3		
	15	7	2,000	10	7.0		
	15	7	2,000	10	8.0		
	15	7	2,000	10	3.0		
	15	7	2,000	10	13.0		
	15	4	1,575	8	13.0		

The maximum pipeline release occurs in (b) (7)(F)

Sec. 1.7.7 Worst Case Discharge

(b) (7)(F) #7

Sec. 1.7.8 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 6-5/8 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).

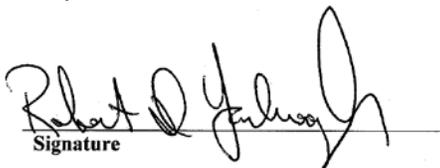
Every line segment in Ponca City Area was evaluated to determine which met one or more of the above criteria. A summary of these determinations is as follows:

Description of Pipelines:

- Wood River 12" products line from Hominy Pump Station to Glenpool Pump Station
- Wood River 10" product lines from Glenpool Pump Station to Afton Pump Station
- Glenpool South 12" products line from Glenpool Pump Station to Glenpool South

Significant and Substantial Harm to Pipeline? Yes

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

Robert Yarbrough
Name

May 2012
Date

Significant and Substantial Harm Determination Contd.

Line Sect. No.	From		To		County	State	Sig/ Sub (Y/N)	Reason
	Block Valve No.	Milepost No.	Block Valve No.	Milepost No.				
	(b) (7)(F)				Glenpool Pump Station to Glenpool Pump Station			
1.					Osage	OK	Y	5WI4
2.					Osage	OK	Y	5WI4
3.					Osage	OK	Y	5WI2
4.					Osage, Tulsa	OK	N	
5.					Tulsa	OK	N	
6.					Tulsa	OK	N	
7.					Tulsa	OK	Y	5RC6, 5RC7
8.					Tulsa	OK	N	
12" Tu	(b) (7)(F)				10" Product Line - Glenpool Pump Station to Afton Pump Station			
9.					Tulsa	OK	N	5WI
10.					Tulsa	OK	N	5WI
11.					Tulsa	OK	N	5RC9
12.					Tulsa, Wagner	OK	N	
13.					Wagner	OK	N	
	(b) (7)(F)				Glenpool Pump Station to Afton Pump Station and Glenpool Pump Station to Afton Pump Station			

Line Sect. No.	From		To		County	State	Sig/ Sub (Y/N)	Reason
	Block Valve No.	Milepost No.	Block Valve No.	Milepost No.				

#1 Wood River Twin 10" Product Line – Glenpool Pump Station to Afton Pump Station and #2 Wood River Twin 10" Product Line – Glenpool Pump Station to Afton Pump Station								
	(b) (7)(F)							
14.					Tulsa*	OK*	Y*	5WI*
15.					Tulsa*	OK*	Y*	5WI*
16.					Tulsa*	OK*	Y*	5RC9*
17.					Tulsa*, Wagner*	OK*	N*	
18.					Wagner	OK	N	
19.					Wagner	OK	Y	5W5
20.					Wagner, Rogers, Mates	OK	Y	4W13
21.					Mayes	OK	N	
22.					Mayes	OK	Y	5WI2
23.					Mayes	OK	Y	5WI7, 5WI4
24.					Mayes, Craig	OK	N	
25.					Craig, Delaware	OK	Y	5WI16, 5WI17, 5WI18, 5WI14, 5WI15

Out

Legend (for determination of significant and substantial harm table, above)

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		

Sec. 1.7.9 Planning Distance Calculations**Pipeline:** Ponca City to Glenpool 12" Products Line**Lake Crossing:** Keystone Lake**Location of Crossing:** Section 33 - T21N - R10E, Mile Post 59.5**Flow Conditions:** Still water or negligible velocity.

Spread of oil on still water; from formula: $A_1 = 10^5 \times V^{3/4} \times C$	Site Value
<p>A_1 = surface area in square feet covered by an oil spill on still water V = volume of oil spilled (worst case discharge) $V = (\text{Max. time to discover a leak} + \text{Max. shutdown time}) \times$ $(\text{Max. flow rate}) + (\text{Max. line section drain up after shutdown})$</p> <p>Maximum time to discover leak = 15 min. Maximum time to shutdown = 7 min. Maximum flow rate - 4000 bbls/hour Pumpage = (22 min.)/(60 min./hr.) x 4000 bbls/hr = <u>1466.67</u> <u>bbls.</u></p>	

(b) (7)(F)

Pipeline: Ponca City to Glenpool 12" Products Line
River Crossing: Arkansas River
Location of Crossing: Section 8 - T19N - R12E, Mile Post 73
Flow Conditions: Top of bank or flood stage

Stream Velocity Determination From:	Site Value
U.S. Geological Survey, Water Resources Division, Oklahoma City Office Velocity data provided from U.S.G.S. surface-water discharge station records. Closest gauging station (Station #07164500) is located approximately 3 miles downstream of the river crossing in Tulsa, Oklahoma.	v = 9.22 ft. / sec.
Planning Distance from Formula $d = v \times t \times c$; where d = Calculated planning distance (miles) v = velocity of the river (ft./sec.) as determined above t = spill response time, use 27 hours (a conservative est.) c = conversion factor 0.68 (3600 sec./hr. ÷ 5280 ft./mi.)	d = 169.3 mi. v = 9.22 ft./sec. t = 27 hrs. c = 0.68

Pipeline: Glenpool to Wood River 10" Lines and 12" Tulsa Reroute Line
River Crossing: Arkansas River
Location of Crossing: Section 29 - T18N - R13E, Mile Post 88.0
Flow Conditions: Top of bank or flood stage

Stream Velocity Determination From:	Site Value
U.S. Geological Survey, Water Resources Division, Oklahoma City Office Velocity data provided from U.S.G.S. surface-water discharge station records. Closest gauging station (Station #07164500) is located approximately 12 miles upstream of the river crossing in Tulsa, Oklahoma.	v = 9.22 ft. / sec.
Planning Distance from Formula $d = v \times t \times c$; where d = Calculated planning distance (miles) v = velocity of the river (ft./sec.) as determined above t = spill response time, use 27 hours (a conservative est.) c = conversion factor 0.68 (3600 sec./hr. ÷ 5280 ft./mi.)	d = 169.3 mi. v = 9.22 ft./sec. t = 27 hrs. c = 0.68

Pipeline: Glenpool to Wood River 10" Lines and 12" Tulsa Reroute Line

River Crossing: Verdigris River

Location of Crossing: Section 9 - T19N - R16E, Mile Post 109.0

Flow Conditions: Top of bank or flood stage

Stream Velocity Determination From:	Site Value
U.S. Geological Survey, Water Resources Division, Oklahoma City Office Velocity data provided from U.S.G.S. surface-water discharge station records. Closest gauging station (Station #07176000) is located approximately 27 miles upstream near Claremore, Oklahoma.	v = 5.07 ft. / sec.
Planning Distance from Formula $d = v \times t \times c$; where d = Calculated planning distance (miles) v = velocity of the river (ft./sec.) as determined above t = spill response time, use 27 hours (a conservative est.) c = conversion factor 0.68 (3600 sec./hr. ÷ 5280 ft./mi.)	d = 93.1 mi. v = 5.07 ft./sec. t = 27 hrs. c = 0.68

Pipeline: Glenpool to Wood River 10" Lines and 12" Tulsa Reroute Line

River Crossing: Lake Fort Gibson (Crosses inlet stream)

Location of Crossing: Section 9 - T21N - R18E, Mile Post 127.0

Flow Conditions: Still water or negligible velocity. Assume travel time from where pipeline crosses the inlet stream to the lake is negligible (a conservative assumption).

Spread of oil on still water; from formula: $A_1 = 10^5 \times V^{3/4} \times C$	Site Value
<p>A_1 = surface area in square feet covered by an oil spill on still water</p> <p>V = volume of oil spilled (worst case discharge)</p> <p>V = (Max. time to discover a leak + Max. shutdown time) x (Max. flow rate) + (Max. line section drain up after shutdown)</p> <p>Maximum time to discover leak = 15 min. Maximum time to shutdown = 7 min. Maximum flow rate = 2000 bbls/hour Pumpage = (22 min.)/(60 min./hr.) x 2000 bbls/hr = <u>733.33</u> <u>bbls.</u></p> <p>Pipeline crosses inlet stream to lake at MP 127.</p>	

(b) (7)(F)

Pipeline: Glenpool to Wood River 10" Lines and 12" Tulsa Reroute Line

River Crossing: Pryor Creek

Location of Crossing: Section 20 - T22N - R19E, Mile Post 133

Flow Conditions: Top of bank or flood stage.

Stream Velocity Determination From:	Site Value
U.S. Geological Survey, Water Resources Division, Oklahoma City Office Velocity data provided from U.S.G.S. surface-water discharge station records. Closest gauging station (Station #07192000) is located approximately 8 miles downstream of the river near Prior, Oklahoma.	v = 1.64 ft. / sec.
Planning Distance from Formula $d = v \times t \times c$; where d = Calculated planning distance (miles) v = velocity of the river (ft./sec.) as determined above t = spill response time, use 27 hours (a conservative est.) c = conversion factor 0.68 (3600 sec./hr. ÷ 5280 ft./mi.)	d = 30.1 mi. v = 1.64 ft./sec. t = 27 hrs. c = 0.68

Pipeline: Glenpool to Wood River 10" Lines and 12" Tulsa Reroute Line

River Crossing: Lake Hudson (Crosses inlet stream)

Location of Crossing: Section 30 - T23N - R20E, Mile Post 141

Flow Conditions: Still water or negligible velocity. Assume travel time from where pipeline crosses the inlet stream to the lake is negligible (a conservative assumption).

Spread of oil on still water; from formula: $A_1 = 10^5 \times V^{3/4} \times C$	Site Value
<p>A_1 = surface area in square feet covered by an oil spill on still water</p> <p>V = volume of oil spilled (worst case discharge)</p> <p>V = (Max. time to discover a leak + Max. shutdown time) x (Max. flow rate) + (Max. line section drain up after shutdown)</p> <p>Maximum time to discover leak = 15 min. Maximum time to shutdown = 7 min. Maximum flow rate = 2000 bbls/hour Pumpage = (22 min.)/(60 min./hr.) x 2000 bbls/hr = <u>733.33</u> bbls.</p>	

(b) (7)(F)

Worksheet MW-1

Water Condition: "MOVING WATER"

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

Facility Name: Glenpool 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)] $\alpha = 20$ feet $\beta =$ Horizontal distance from facility to receptor (or 20-mile point) in miles. $\beta = 4.3$ miles $s =$ Average stream slope $\rightarrow s = \frac{\alpha}{5,280}$ $s = 0.0009$ $r =$ Hydraulic radius (in feet \Rightarrow average) mid channel depth x 0.667 $r = 2.67$ $n =$ Manning's roughness coefficient from Table B $n = 0.04$ To calculate stream velocity (in ft./sec.), use: $v = 1.48/n \times r^{2/3} \times s^{1/2}$ $v = 2.17$

$$37.5 \times 1.929 \times 0.03$$

Calculation of Planning Distance $d =$ Calculated planning distance (miles) $v = 2.17$ ft./sec. $v =$ Chezy-Manning based stream velocity (ft./sec.) $t = 27$ HRS $c = 0.68$ (sec-mile/hr-ft conversion factor) $c = 0.68$ $d = v \times t \times c \Rightarrow$ planning distance equation $d = 39.8$ MI.

Site Investigation

From USGS Quad/Topo Sheets:

- Delineate watershed area and down gradient receptor streams for runoff/release. Determine whether navigable water is within 0.5 miles of facility (or would be in worst-case storm/runoff scenario).

From Facility:

- Identify alternate drainage pathways to navigable waters; namely storm drainage systems/piping.
- Establish list of soil or other factors effecting transport of oil over land.

From Maps, Local/State Authorities or Investigation:

- Identify fish/wildlife sensitive habitats in down gradient areas along with public drinking water intake locations.
- Determine stream pool elevations at facility and at receptor points or at 20 miles downstream (maximum) for more distant receptors.
- Characterize stream properties for accurate determination of roughness coefficient (n) and average mid-channel depth or hydraulic radius (r).

Documentation of Findings

- Is the facility within 0.5 miles of navigable water? Yes
What is the elevation at the point where a spill would exit the facility? 620 feet MSL
- Are there existing storm drains or other drainage structures which would impact oil spill runoff? No
- What is the soil type and porosity? Sandy loam
- Is there fish/wildlife sensitive habitat or public drinking water intake within 20 miles downstream from the facility? Yes

How many miles from the facility? 4.3 Miles Downstream

What is the stream elevation at that point? 600 feet MSL

If no such occurrence within 20 miles, what is the stream elevation at the 20-mile point? N/A

Mannings Roughness Coefficient for Various Natural Stream Types Table

Table B - Mannings Roughness Coefficient for Various Natural Stream Types(n)	
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

Worksheet MW-1

Water Condition: "MOVING WATER"

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

Facility Name: Glenpool South

Date of Calculation: January 1995

Intermediate Calculations

Site Determination

 $\alpha = \Delta \text{ elevation (in feet)} \Rightarrow [\text{stream elevation @ facility}] - [\text{stream elevation @ receptor (or 20-mile point)}]$
 $\alpha = 80 \text{ feet}$
 $\beta = \text{Horizontal distance from facility to receptor (or 20-mile point) in miles.}$
 $\beta = 7.9 \text{ miles}$
 $s = \text{Average stream slope} \rightarrow s = \frac{\alpha}{\beta} = \frac{80}{5,280}$
 $s = 0.0019$
 $r = \text{Hydraulic radius (in feet)} \Rightarrow \text{average)) mid channel depth} \times 0.667$
 $r = 1.33$
 $n = \text{Manning's roughness coefficient from Table B}$
 $n = 0.10$ To calculate stream velocity (in ft./sec.), use: $v = 1.49/n \times r^{2/3} \times s^{1/2} = 0.73$ $v = 0.73$

$$15.00 \times 1.21 \times 0.04$$

Calculation of Planning Distance

 $d = \text{Calculated planning distance (miles)}$
 $v = 0.73 \text{ ft./sec.}$
 $v = \text{Chezy-Manning based stream velocity (ft./sec.)}$
 $t = 27 \text{ HRS}$
 $c = 0.68 \text{ (sec-mile/hr-ft conversion factor)}$
 $c = 0.68$
 $d = v \times t \times c \Rightarrow \text{planning distance equation}$
 $d = 13.4 \text{ MI.}$

Documentation of Findings

- Is the facility within 0.5 miles of navigable water? Yes
What is the elevation at the point where a spill would exit the facility? 680 feet MSL
- Are there existing storm drains or other drainage structures which would impact oil spill runoff? Yes
- What is the soil type and porosity? Clay/Rocky
- Is there fish/wildlife sensitive habitat or public drinking water intake within 20 miles downstream from the facility? Yes

How many miles from the facility? 7.9 Miles Downstream
What is the stream elevation at that point? 600 feet MSL

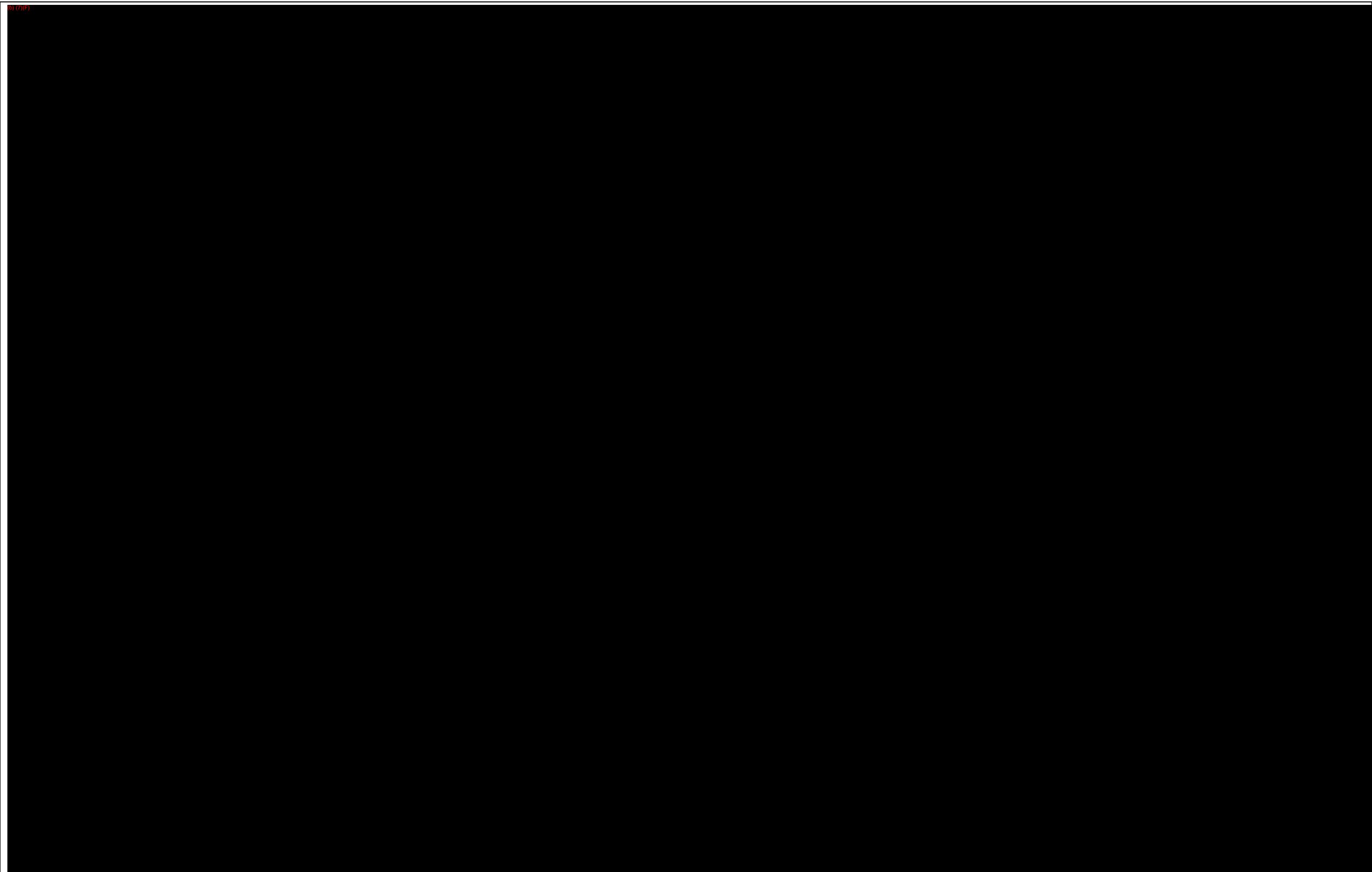
If no such occurrence within 20 miles, what is the stream elevation at the 20-mile point? N/A

1.8 Response Zone - Medford

Sec. 1.8.1 Area Information Summary

The Medford Terminal is a NGL, underground storage cavern facility. Liquid product is received via pipeline and transport trucks and stored in the underground caverns. Liquid products ship from the caverns via transport truck and pipeline. Liquid products handled include propane, normal butane, isobutene, and propane/propylene mix.

Area Information				
Maintenance Group Name	Medford Terminal			
Response Area Location	Medford Area			
Telephone (day/night)				
Address	3 mi. South of Medford on Hwy 81 Medford, OK 73759			
Legal Address	SE Qtr. Section 32 – T27N – R5W			
County	Grant			
Owner	Phillips 66			
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. 1.8.2 Medford Facility Caverns

Medford Facility Caverns			
	CAPACITY	USABLE CAP.	
CAVERN NAME	WHEN FULL	(90% OF FULL)	Well Numbers
	BBLs	BBLs	
C3 PL Out Of Service	(b) (7)(F)		1,2,4,5,6,
C3 #1			35,36,37,38,39,40,41
C3 #2 Out Of Service			45,46,47,
PP #1			11,12,
PP #2			9,10,14
Isobutane / Cavern B			42,43,44
NC4 PL / Cavern C			15,16,19
NC4 #1 / Cavern A Out of Service			25,26,27,32,33
NG (Plugged)			23,24
PB Rerun / Mix			56,57

Medford Facility Caverns Contd.

Date 8-25-05		MAX		SET			
EQUIP #	SERVICE	INVENTORY		PSI	ID	Lenth	Head
		(BBLs)	PSV #			S/S	Type
	TANKS / VESSELS						
		(b) (7)(F)					
D-0011	Dry Propane Storage Bullet	(b) (7)(F)	22	240	120"	70'	60" seg hemi
D-0019	Wet Propane Storage Bullet	(b) (7)(F)	15	228	120"	53'-9"	60" seg hemi
D-0013	Out of Service	(b) (7)(F)	7	75	120"	47'-8"	60" seg hemi
D-0014	Out of Service	(b) (7)(F)	12	75	120"	47'-8"	60" seg hemi
D-0015	Out of Service	(b) (7)(F)	9	30	120"	40'	60" seg hemi
D-0016	Out of Service	(b) (7)(F)	13	30	120"	40'	60" seg hemi
D-0018	Out of Service	(b) (7)(F)	10	145	120"	47'	2:1 Ellip
D-0208	Iso-Butane East Storage Bullet	(b) (7)(F)	11	145	120"	47'	2:1 Ellip
D-0206A	West PBC Storage Tank (Propane)	(b) (7)(F)	6	200	9'-10.3"	32.8'	2:1 Ellip
D-0206B	East PBC Storage Tank (Propane)	(b) (7)(F)	5	200	9'-10.25"	32.8'	2:1 Ellip
D-0012	Mixed Butane (OOS)	(b) (7)(F)	8	70	107	43.6	
D-0017	Flash Tank (OOS)	(b) (7)(F)	16	100	119	35	

Emergency Evacuation Alarm

The Medford facility has an emergency siren activated by the pushing the main ESD button. The Emergency Evacuation Alarm is a high-pitched siren resembling a police siren and REMAINS CONSTANT.

The “*All Clear*” is four short blasts of the horn

Process Alarms

These alarms are PULSATING, ON AND OFF, mid-range pitches and are not of an urgent nature.

Sec. 1.8.3 Emergency Shutdown Procedures**Purpose of the Loading Rack ESD System**

The purpose of the loading rack ESD system is to safely shut down the loading rack pumps and the loading rack. Upon activation of the loading rack ESD system, the loading rack pumps will shut down and the suction to the pumps is isolated at each bullet.

(b) (7)(F)

Emergency Procedures

Refer to the Company Emergency Response Core Plan.

Detection and Assessment of the Emergency**1. Emergency Detection**

The Medford facility is manned 24 hours per day, 7 days per week. During weekends and holidays, the operator is the only personnel on site for 24 hours. Because of the operator's proximity to the array of warning alarms available, he or she is generally in the best position to initially detect an emergency situation.

If an emergency occurs during non-business hours (3:30 p.m. to 7:00 a.m., Monday through Friday or on weekends or holidays), the operator will have the primary responsibility of carrying out the emergency procedures outlined in this section. The operator will assess the nature of the emergency and take the appropriate action consistent with the severity of the situation.

If the emergency occurs during business hours the facility personnel will have the primary responsibility for assessing the nature and extent of the emergency and taking whatever steps are necessary to reduce or eliminate the problem. However, detection of an emergency situation or of any potentially dangerous condition is the responsibility of all employees and immediate corrective action should be taken.

2. Emergency Assessment

Determining the proper response to an emergency situation will necessarily depend on the nature and severity of the emergency. Responses may differ if the emergency involves a fire or a leak, whether a leak is flammable or toxic or both, or whether the fire or leak can be contained with company personnel and equipment or will require outside assistance. The person responsible for assessing the emergency will, therefore, have to make the decision on how best to respond to the situation.

All personnel shall be designated to assess an emergency situation during business hours and the operator during non business hours. However, it is recognized that these individuals may not always be available or that the situation could be so critical as to require immediate response on the part of the person(s) who detects the emergency. Therefore, the official policy of the Medford facility will be as follows:

ANY COMPANY EMPLOYEE HAS THE RESPONSIBILITY AND AUTHORIZATION TO DECLARE THAT AN EMERGENCY SITUATION EXISTS AND TO INITIATE AN ESD AND/OR EVACUATION WHEN HE/SHE DEEMS THE SITUATION CRITICAL ENOUGH TO ENDANGER THE SAFETY OF TERMINAL PERSONNEL AND/OR AREA RESIDENTS. (REFER TO THE NOTIFICATIONS LIST FOR CONTACT INFORMATION.)

Sec. 1.8.4 Evacuation Procedures and Routes

Alternative Evacuation

Taking shelter in place, in the control room, office building, or other buildings and structures should always be considered as an alternative to evacuation. Once the decision has been made by the person responsible for assessing the emergency to take shelter it is important to remain inside until the all clear is given. Taking shelter in place will never be an option during a major emergency situation when an evacuation is required.

Evacuation Initiative

While it is desirable to have the highest rank supervisor in the facility to give the order to evacuate, it is recognized that such persons may not always be available or in a position to make such a decision. The situation may also be so critical as to require the immediate response on the part of the person detecting the emergency. Therefore the same policy that applies to assessing an emergency situation will apply to calling for a terminal evacuation:

Evacuation

The evacuation order will usually be given by sounding the *Emergency Evacuation Alarm*. However, the order it may also be given by oral commands, radio or telephone. Facility personnel, contractors and visitors will utilize the established evacuation routes and Assembly Areas. Company personnel with visitors are responsible for escorting visitor(s) to the assembly areas. As appropriate, *Emergency Evacuation* notifications to Area Companies and residents should be made by telephone. Refer to the Notifications List for Area Companies and residents contact information.

In-Facility Traffic

When an emergency alarm is activated all in facility traffic shall stop and shut down, and remain that way until the all clear is given or until ordered to move by the Incident Commander.

Facility Visitor

Facility visitors are the responsibility of the person they are visiting. During an evacuation they should be escorted from the facility utilizing designated routes and assembly areas as soon as it can be safely accomplished.

Selection of an Evacuation Route and Assembly Point

In the event of a major leak of flammable gas or liquid the main factor in selecting an assembly point will be wind **direction**. **Always go in** the direction, which is **CROSSWIND OR UPWIND** of the direction in which the wind is blowing. All personnel, contractors, and visitors should be instructed in how to judge the wind direction by observing the windsock located northeast of the loading rack. Also the flag on the flagpole can be observed. All personnel, contractors, and visitors are to be instructed to proceed to an assembly site upwind of the leak. Alternate assembly sites are used when the primary site is downwind or too close to the emergency.

CAUTION: DO NOT ENTER A HAZARDOUS AREA TO GET TO THE ASSEMBLY POINT!

Evacuation Routes

Hand Gate located at the south end of the office building (*Personnel Hand Gate*)

Hand Gate located on the southeast side of the Terminal.

Hand Gate located in the north fence directly north of the warehouse.

Evacuation Assembly Points

Primary: Just outside the Southeast overhead gate.

Alternate 1: Southwest of facility across tracks on Highway 81.

Alternate 2: County road intersection east of main gate (Medford Chisholm Station).

Alternate 3: Outside north *Emergency Personnel* hand gate.

Accounting for Personnel in an Emergency Evacuation

It is imperative that all persons in the terminal and offices be accounted for in an emergency evacuation.

1. **Terminal Personnel:** During business hours, the Incident Commander will account for each person. A count will be given to the Personnel Accounting Officer.
2. **Visitors and Contractors:** The Personnel Accounting Officer will retrieve the visitor sign-in log book, located in the front office, the magnetic board, located in the break room, used for Medford personnel sign in and out, and bring them to the assembly point. Using this information, the Personnel Accounting Officer will account for all personnel and immediately notify the Incident Commander of any persons who cannot be accounted for.

CAUTION: DO NOT LEAVE THE ASSEMBLY POINT! IT IS IMPORTANT THAT A HEAD COUNT BE TAKEN AS SOON AS POSSIBLE IN ORDER TO ASSURE THAT ALL PERSONNEL HAVE BEEN ACCOUNTED FOR.

Rescue of Injured Personnel

In addition to the evacuation of non-essential personnel, the rescue and medical treatment of injured persons must be given high priority. The Incident Commander will have the primary responsibility for coordinating rescue efforts of injured personnel.

Trained professionals with the proper equipment only should attempt rescue of injured personnel.

All Clear Notification and Requirements

The Incident Commander will notify the employees when it is safe to return to their normal duties.

Hot Work

All hot work permits are voided during and after an emergency or evacuation. They must be reissued after the all clear has been given.

Sec. 1.8.5 Post Emergency Procedures**Survey Conditions of Facility**

A team consisting of the facility personnel will survey the affected area to determine if the fire is out, escaping product is cleared and that there are no environmental problems.

This team will determine if the area is safe to return to limited or normal operations.

A 24-hour fire watch should be established to monitor the affected area. Communication should be maintained with the control room in case any further emergency should arise.

Follow Up

Following any emergency, it is important that an Incident Review is conducted. It can be anticipated that further questions from the news media will be received and that statements to them will have to be made. In these cases, it is important that the basic facts and other details of an emergency be accurate and that they be made as soon as possible.

Also, it must be recognized that following any releases that have threatened the general public, numerous public inquiries for information will be received. In all cases, these will be handled by the Incident Commander or alternate. Assistance in dealing with these inquiries from "experts" in medical treatment, pollution, legal and public relations will be requested through the Incident Commander.

Sec. 1.8.6 Potential Release Sources

Release Source	<p>Normal Butane Product Piping & Vessels Normal Butane Product Pumps Normal Butane Storage Wells</p> <p>Propane Product Piping & Vessels Propane Product Pumps Propane Storage Wells</p> <p>Isobutane Product Piping & Vessels Isobutane Product Pumps Isobutane Storage Wells</p> <p>Propane/Propylene mix Product Piping & Vessels Propane/Propylene mix Product Pumps Propane/Propylene mix Storage Wells</p>
Ignition Source	<p>Static Electricity Non-Classified Electrical Switch Gear Office and Shop Buildings Traffic on Highway 81 Adjacent Facilities</p>
Type of Incident	Flash Fire
Areas of Risk	<p>Immediate Area Adjacent Facilities Traffic on Highway 81</p>
Primary/Secondary Containment	<p>Pressure Relief Valves on Piping & Vessels Pump Seals Hydrocarbon Vapor Detectors</p>
Type of Hazard	U.N. Class #3 Flammable Liquid
Proper Maintenance Electrical/Mechanical Equipment	<p>Ultrasonic Testing of Piping & Vessels Routine Testing of PSVs Pump Maintenance</p>
Reference: Facility MSDS Data Sheets	

1.9 Response Zone – Oklahoma City

Sec. 1.9.1 Area Information Summary

Area Information					
Maintenance Group Name	Oklahoma City Area				
Response Area Location					
Telephone (day/night)					
Address	4700 N. E. 10 th Street, Oklahoma City, OK 73117				
County	Oklahoma				
Owner	Phillips 66				
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. 1.9.2 Facility and Locality Specifics

The system in Oklahoma City Area consists of the following pipeline facilities:

- Will Rogers Airport line, all
- Tinker Air Force Base line, all
- 8" OKC Products Line: Oklahoma City Terminal to OK/TX State Line
- 12" WF Crude Line: Orlando Pump Station to Oklahoma City Pump Station to the OK/TX State Line
- Injection System, all (Parks, Bray, Oklahoma City, Guthrie, Lindsay Stations)

This area 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." The system crosses the Central Redbed Plains, an area of gently rolling hills and broad, flat plains overlying shale and sandstone formations. Natural vegetation consists of riverine forests extending along permanent streams and grasslands in most other areas.

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

Sec. 1.9.3 Pipeline Description

The Oklahoma City Area is comprised of the following pipelines or pipeline segments:

Pipeline	Segment	Product Carried
Will Rogers Airport 4"	OKC Terminal to Will Rogers Airport	Jet A
Tinker AFB 4"	OKC Terminal to Tinker AFB	Jet A
8" Products Line	Oklahoma City to OK/TX State Line	Out of Service
12" Crude Line	Oklahoma City to OK/TX State Line	Crude Oil

NOTE: Gasoline, Jet A and Diesel are Group 1 oils and Crude Oil is Group 2 oil.

Vulnerability Analysis and Sensitive Area

See Annex 3

Sec. 1.9.4 Worst Case Discharge Calculations

Oklahoma City Area is comprised of the following pipelines or pipeline segments:

Pipeline	Segment	Products Carried
Will Rogers Airport 4"	OKC Terminal to Will Rogers Airport	Jet A
Tinker AFB 4"	OKC Terminal to Tinker AFB	Jet A
8" OKC Products Line	Oklahoma City Pump Station to OK/TX State Line	Out of Service
12" WF Crude Line	Oklahoma City to OK/TX State Line	Crude Oil

Note: Gasoline, Jet A and Diesel are Group 1 oils and 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.

Sec. 1.9.5 Secondary Containment Summary – Breakout Tankage

Facility	Tank Number	Nominal Tank Size	Tank Capacity	Secondary Containment Minus Tank Capacity	Worst Case Discharge
Orlando	29303	(b) (7)(F)			
	29200				
	29141				
	28252				

Sec. 1.9.6 Secondary Containment Summary

Mile Post (MP)	Facility	Tank #	Year	Tank Type	Product Stored	Tank Capacity (bbls)	Secondary Containment Capacity*	Max bbls	Additional Containment Available*
(b) (7)(F)	Bray Station	T-45735	1980	Fixed/Cone Roof	Crude	(b) (7)(F)			
	Bray Station	T-45736	1980	Fixed/Cone Roof	Crude				
	Bray Station	T-67883	1978	Fixed/Cone Roof	Crude				
	Bray Station	T-1303		Fixed/Cone Roof	Crude				
	Goldsby NW	T-66278	1980	Fixed/Cone Roof	Crude				
	Goldsby SW	T-66279	1980	Fixed/Cone Roof	Crude				
	Goldsby NE	T-71449	1985	Fixed/Cone Roof	Crude				
	Goldsby SE	T-71450	1985	Fixed/Cone Roof	Crude				
	Goldsby Station	T-14939		Fixed/Cone Roof	Crude				
	Lindsay Station	T-51171		Fixed/Cone Roof	Crude				
	Lindsay Station	T-71452		Fixed/Cone Roof	Crude				
	Lindsay Station	T-71453		Fixed/Cone Roof	Crude				
	Lindsay Station	T-18531		Fixed/Cone Roof	Crude				
	Lindsay Station	T-18532		Fixed/Cone Roof	Crude				
	Parks Station	T-51172	1985	Fixed/Cone Roof	Crude				
	Parks Station	T-59016	1985	Fixed/Cone Roof	Crude				
	Parks Station	T-59017	1985	Fixed/Cone Roof	Crude				
	Oklahoma City	75730	2007	Fixed/Cone Roof	Crude				
	Oklahoma City	75731	2007	Fixed/Cone Roof	Crude				
Oklahoma City Terminal	Oklahoma City	117	1930	Geodesic Dome/ IFR	Crude				

* Denotes largest tank within a single dike area.

Note: Single line separates tanks having separate secondary containment.

The Worst Case Discharge calculated for the tankage within this Area is (b) (7)(F)

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

Sec. 1.9.7 Maximum Historic Discharge (February 1988 to Present)

Pipeline	Date	Location	Barrels Released	Barrels Recovered	Product
12" WF Crude Line	12-12-90	Oklahoma County	1,370	1,125	Crude

Pipeline's maximum release calculated using the formula below:

$[(\text{Maximum time to discover a leak}) + (\text{Maximum response shutdown time})] \times$
 $(\text{Maximum flow rate}) + (\text{Maximum line section drain up after shutdown})$

(b) (7)(F)

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

Sec. 1.9.8 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.)
(b) (7)(F)							(b) (7)(F)
Rogers Airport 4" - OKC to Will Rogers Airport, Oklahoma County, OK							
-	4	4	170	4	6.3		
-	4	4	170	4	3.2		
-	4	4	170	4	3.7		
-	4	4	170	4	0.25		
Tinker AFB 4" - OKC Terminal to Tinker AFB, Oklahoma County, OK							
-	4	4	260	4	5.5		
OC Products Line - OKC Terminal to OK/TX State Line (OUT OF SERVICE) Oklahoma, Cleveland, McClain, Grady, Stephens & Cotton Counties, Oklahoma							
15	4	4	1,150	8	10.8		
15	4	4	1,150	8	16.0		
15	4	4	1,150	8	2.0		
15	4	4	1,150	8	24.0		
15	4	4	1,150	8	1.4		
15	4	4	1,150	8	22.6		
15	4	4	1,150	8	22.0		
15	4	4	1,150	8	10.0		
15	4	4	1,150	8	2.0		
Wichita Falls Crude Line - Oklahoma City Pump Station to OK/TX State Line Oklahoma, Cleveland, McClain, Grady, Stephens, and Cotton Counties							
15	1	1	3,000	12	2.0		
15	1	1	3,000	12	12.4		
15	1	1	3,000	12	2.6		
15	1	1	3,000	12	11.0		
15	1	1	3,000	12	15.0		
15	1	1	3,000	12	1.0		
15	1	1	3,000	12	16.0		
15	1	1	3,000	12	5.0		
15	1	1	3,000	12	23.0		
15	1	1	3,000	12	2.3		
15	1	1	3,000	12	7.7		
15	1	1	3,000	12	12.0		
15	1	1	3,000	12	0.1		
Will Rogers Airport - OKC to Will Rogers Airport, Oklahoma County, OK							
15	1	1	1,260	8	0.4		

(b) (7)(F)

Sec. 1.9.9 Worst Case Discharge

(b) (7)(F)

Sec. 1.9.10 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 6-5/8 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).

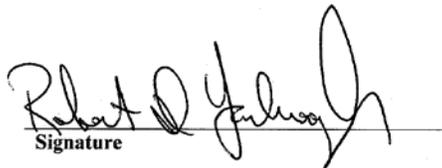
Every line segment in Oklahoma City Area was evaluated to determine which met one or more of the above criteria. A summary of these determinations is as follows:

Description of Pipelines

- 4" Products line from OKC Terminal to Will Rogers Airport
- 4" Products line from OKC Terminal to Tinker AFB
- 8" OKC Products line: OKC Terminal to OK/TX State Line
- 12" WF Crude line: OKC to OK/TX State Line

Significant and Substantial Harm Pipeline? Yes

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

Robert Yarbrough
Name

May 2012
Date

Determination of Significant/Substantial Harm

Line sect. No.	From		To		County	State	Sig/ sub (y/n)	Reason
	Block Valve No.	Milepost No.	Block Valve No.	Milepost No.				
Will Rogers 4" Airport - OKC Terminal to Will Rogers Airport								
1	(b) (7)(F)				Oklahoma	OK	N	
2	(b) (7)(F)				Oklahoma	OK	N	
3	(b) (7)(F)				Oklahoma	OK	N	
4	(b) (7)(F)				Oklahoma	OK	N	
Terminal to Tinker AFB								
5	(b) (7)(F)				Oklahoma	OK	N	
C Terminal to Red River								
16	(b) (7)(F)				Oklahoma, Cleveland	OK	Y	3WP2, 3WP3, 3WI9 12
17	(b) (7)(F)				Cleveland	OK	Y	3WP4
18	(b) (7)(F)				Cleveland, McClain	OK	N	
19	(b) (7)(F)				McClain, Grady	OK	N	
20	(b) (7)(F)				Grady	OK	N	
21	(b) (7)(F)				Grady, Stephens	OK	Y	3WI13 17
22	(b) (7)(F)				Stephens, Cotton	OK	Y	3WI17 20
23	(b) (7)(F)				Cotton	OK	N	
24	(b) (7)(F)				Cotton, Clay	OK, TX	N	
25	(b) (7)(F)				Cotton, Jefferson, Stephens	OK	Y	3WI17 20.
26	(b) (7)(F)				Stephens	OK	Y	3WI17 20.
27	(b) (7)(F)				Stephens	OK	Y	3WI17 20.
28	(b) (7)(F)				Stephens	OK	Y	3RC11
29	(b) (7)(F)				Stephens	OK	N	
30	(b) (7)(F)				Stephens, Grady	OK	Y	3WI12 16.
31	(b) (7)(F)				Grady, Garvin, McClain	OK	N	
32	(b) (7)(F)				McClain	OK	Y	3W3, 3W2
33	(b) (7)(F)				McClain, Cleveland	OK	N	
34	(b) (7)(F)				Cleveland	OK	Y	3WP4
35	(b) (7)(F)				Cleveland, Oklahoma	OK	Y	3WP4, 3WI9, 3WP3, 3WP2 12.

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		

Sec. 1.9.11 Planning Distance Calculations

Pipeline: Oklahoma City to OK/TX State Line, 12" Crude Line and 8" Products Line

River Crossing: Canadian River

Location of Crossing: Crude Line: Section 1 - T8N - R3W, Mile Post 109

Products Line: Section 30 - T9N - R3W, Mile Post 117

Flow Conditions: Top of bank or flood stage

Stream Velocity Determination From:	Site Value
U.S. Geological Survey, Water Resources Division, Oklahoma City Office Velocity data provided from U.S.G.S. surface-water discharge station records. Closest gauging station (Station #07229100) is located approximately 11 miles downstream of the river crossing near Noble, Oklahoma.	v = 5.45 ft. / sec.
Planning Distance from Formula $d = v \times t \times c$; where	
d = Calculated planning distance (miles)	d = 100.1 mi.
v = velocity of the river (ft./sec.) as determined above	v = 5.45 ft./sec.
t = spill response time, use 27 hours (a conservative est.)	t = 27 hrs.
c = conversion factor 0.68 (3600 sec./hr. \div 5280 ft./mi.)	c = 0.68

Pipeline: Oklahoma City to OK/TX State Line, 12" Crude Line and 8" Products Line

River Crossing: Washita River

Location of Crossing: Crude Line: Section 7 - T4N - R4W, Mile Post 138

Products Line: Section 1 - T5N - R6W, Mile Post 143

Flow Conditions: Top of bank or flood stage

Stream Velocity Determination From:	Site Value
U.S. Geological Survey, Water Resources Division, Oklahoma City Office Velocity data provided from U.S.G.S. surface-water discharge station records. Closest gauging station (Station #07328100) is located approximately ¼ mile downstream of the Products line river crossing near Alex, Oklahoma.	v = 5.35 ft. / sec.
Planning Distance from Formula $d = v \times t \times c$; where	
d = Calculated planning distance (miles)	d = 98.2 mi.
v = velocity of the river (ft./sec.) as determined above	v = 5.35 ft./sec.
t = spill response time, use 27 hours (a conservative est.)	t = 27 hrs.
c = conversion factor 0.68 (3600 sec./hr. \div 5280 ft./mi.)	c = 0.68

Pipeline: Oklahoma City to OK/TX State Line, 12" Crude Line and 8" Products Line
 River Crossing: Red River
 Location of Crossing: Crude Line: Section 8 - T5S - R10W, Mile Post 198
 Products Line: Section 3 - T5S - R11W, Mile Post 199
 Flow Conditions: Top of bank or flood stage

Stream Velocity Determination From:	Site Value
U.S. Geological Survey, Water Resources Division, Oklahoma City Office Velocity data provided from U.S.G.S. surface-water discharge station records. Closest gauging station (Station #07308500) is located approximately 16 miles upstream of the Products line river crossing near Burkburnett, Texas.	v = 4.34 ft. / sec.
Planning Distance from Formula $d = v \times t \times c$; where	
d = Calculated planning distance (miles)	d = 79.7 mi.
v = velocity of the river (ft./sec.) as determined above	v = 4.34 ft./sec.
t = spill response time, use 27 hours (a conservative est.)	t = 27 hrs.
c = conversion factor 0.68 (3600 sec./hr. ÷ 5280 ft./mi.)	c = 0.68

Pipeline: OKC Airport Pipeline
 River Crossing: North Canadian River
 Location of Crossing: Section 5 - T11N - R3W
 Flow Conditions: Top of bank or flood stage

Stream Velocity Determination From:	Site Value
U.S. Geological Survey, Water Resources Division, Oklahoma City Office Velocity data provided from U.S.G.S. surface-water discharge station records. Closest gauging station (Station #07241000) is located approximately 7 miles upstream of the point at which the pipeline runs parallel, in close proximity to the river.	v = 4.23 ft. / sec.
Planning Distance from Formula $d = v \times t \times c$; where	
d = Calculated planning distance (miles)	d = 77.7 mi.
v = velocity of the river (ft./sec.) as determined above	v = 4.23 ft./sec.
t = spill response time, use 27 hours (a conservative est.)	t = 27 hrs.
c = conversion factor 0.68 (3600 sec./hr. ÷ 5280 ft./mi.)	c = 0.68

Worksheet MW-1

Water Condition: "MOVING WATER"

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

Facility Name: Oklahoma City Terminal

Date of Calculation: January 1995

Intermediate Calculations

Site Determination

 $\alpha = \Delta \text{ elevation (in feet)} \Rightarrow [\text{stream elevation @ facility}] - [\text{stream elevation @ receptor (or 20-mile point)}]$
 $\alpha = 77 \text{ feet}$
 $\beta = \text{Horizontal distance from facility to receptor (or 20-mile point) in miles.}$
 $\beta = 80 \text{ miles}$
 $s = \text{Average stream slope} \rightarrow s = \frac{\alpha}{\beta} = \frac{77}{5,280} = 0.0007$
 $s = 0.0007$
 $r = \text{Hydraulic radius (in feet)} \Rightarrow \text{average)) mid channel depth} \times 0.667$
 $r = 3.33$
 $n = \text{Manning's roughness coefficient from Table B}$
 $n = 0.035$
 $\text{To calculate stream velocity (in ft./sec.), use: } v = 1.48/n \times r^{2/3} \times s^{1/2} = 2.53$
 $v = 2.53$

$$42.8571 \times 2.2308 \times 0.0265$$

Calculation of Planning Distance

 $d = \text{Calculated planning distance (miles)}$
 $v = 2.53$
 $v = \text{Chezy-Manning based stream velocity (ft./sec.) } t = 27 \text{ HRS}$
 $c = 0.68 \text{ (sec-mile/hr-ft conversion factor)}$
 $c = 0.68$
 $d = v \times t \times c \Rightarrow \text{planning distance equation}$
 $d = 46.5 \text{ MI.}$

Site Investigation

From USGS Quad/Topo Sheets:

- Delineate watershed area and down gradient receptor streams for runoff/release. Determine whether navigable water is within 0.5 miles of facility (or would be in worst-case storm/runoff scenario).

From Facility:

- Identify alternate drainage pathways to navigable waters; namely storm drainage systems/piping.
- Establish list of soil or other factors effecting transport of oil over land.

From Maps, Local/State Authorities or Investigation:

- Identify fish/wildlife sensitive habitats in down gradient areas along with public drinking water intake locations.
- Determine stream pool elevations at facility and at receptor points or at 20 miles downstream (maximum) for more distant receptors.
- Characterize stream properties for accurate determination of roughness coefficient (n) and average mid-channel depth or hydraulic radius (r).

Documentation of Findings

- Is the facility within 0.5 miles of navigable water? Yes

What is the elevation at the point where a spill would exit the facility? 1,160 feet MSL

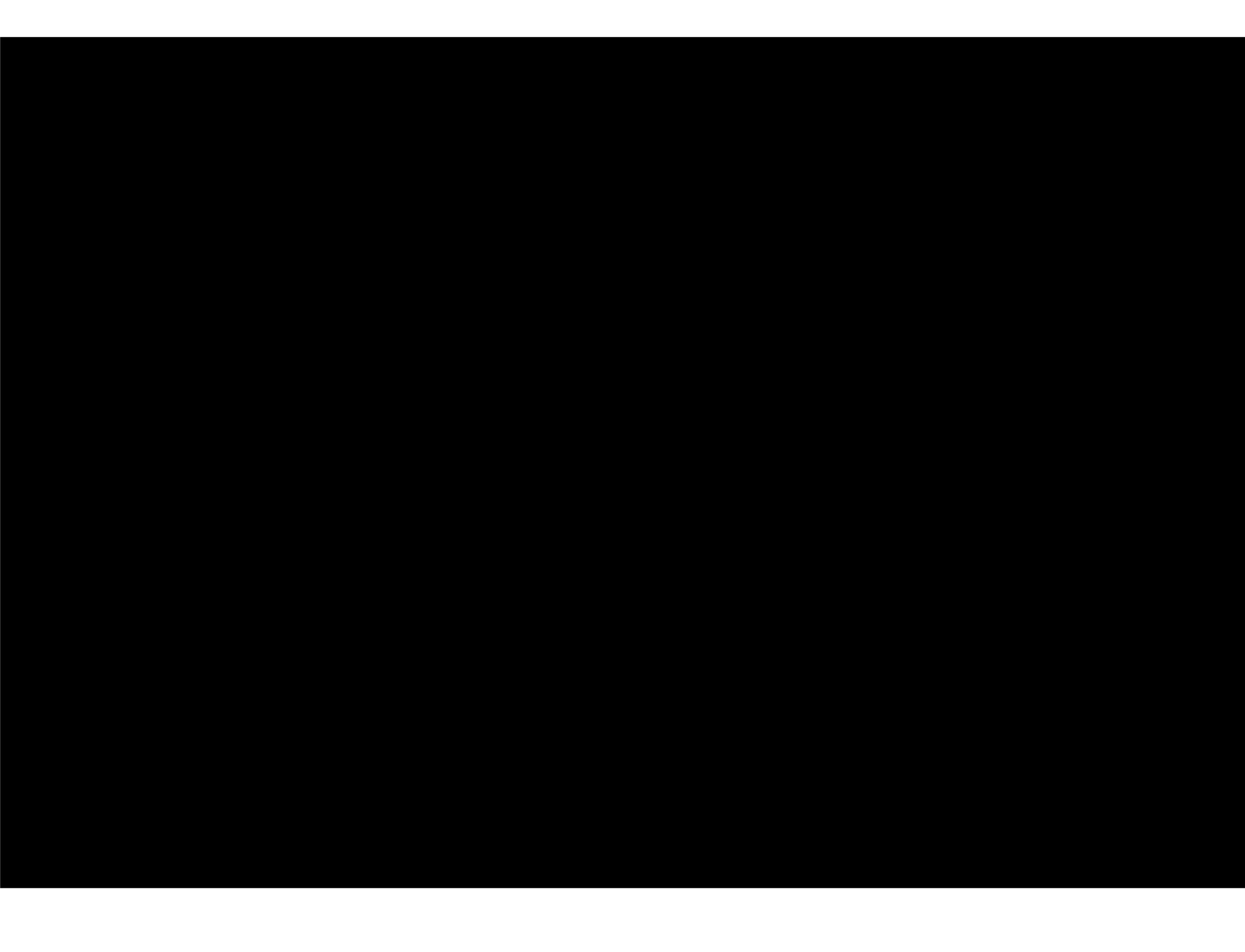
- Are there existing storm drains or other drainage structures which would impact oil spill runoff? Yes
- What is the soil type and porosity? Sandy
- Is there fish/wildlife sensitive habitat or public drinking water intake within 20 miles downstream from the facility? No

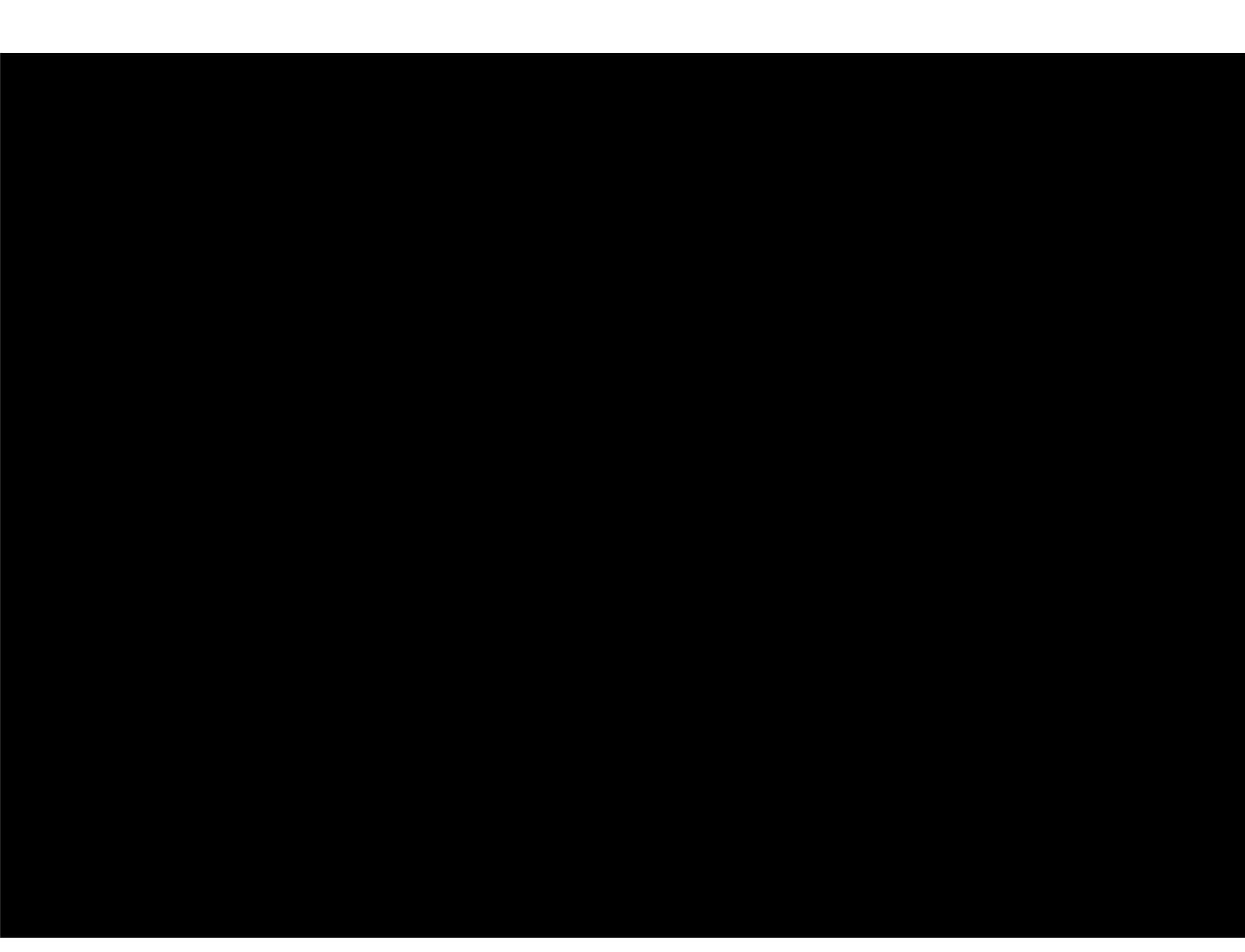
How many miles from the facility? N/A

What is the stream elevation at that point? N/A

If no such occurrence within 20 miles, what is the stream elevation at the 20-mile point? 1,083 feet MSL

Mannings Roughness Coefficient for Various Natural Stream Types (n)	
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







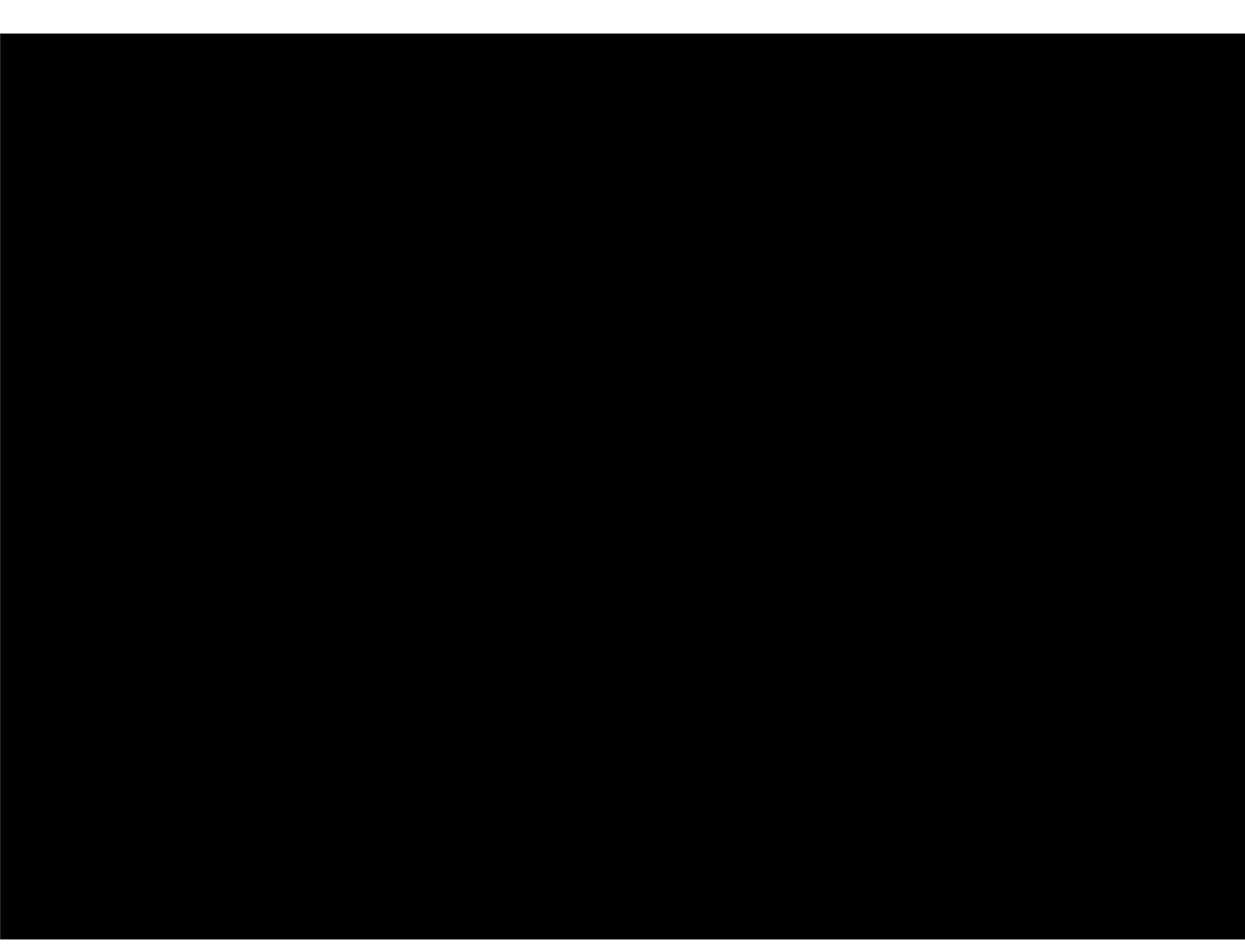














1.10 Response Zone – Ponca City Area**Sec. 1.10.1 Area Information Summary**

Area Information			
Maintenance Group Name	Ponca City Area		
Response Area Location	Pipelines or pipeline segments, Cherokee Pump Station, Ponca City Truck Rack and Ponca City South Tank Farm (STF)		
Line Section	Refer to table of pipeline and pipeline segments in this section		
Telephone (day/night)	580-395-2363/ 580-763-2572		
Address	CPPL-Medford; RR 2 Box 147; Medford, OK 73759 or 3-mi. South of Medford on Hwy. 81; Medford, OK 73759		
County	Grant		
Telephone (day/night)	580-767-2679 / 580-761-5804		
Address	Cherokee Pump Station and Ponca City Truck Rack PO Box 1267, Ponca City, OK 74602-1267 or Old Hwy 60 (North side of Highway) Ponca City, OK		
County	Kay		
Telephone (day/night)	580-767-2382/ 580-401-0890		
Address	Ponca City South Tank Farm (STF) - P.O. Box 1267; Ponca City, OK 74602-1267 or Old Hwy 60 & Waverly Street (East side of intersection); Ponca City, OK 74602-1267		
County	Kay		
Owner	Phillips 66		
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. 1.10.2 Facility and Locality Specifics

The Ponca City Area consists of the following pipeline system:

- 12" Wichita Falls Crude line, Ponca City South Tank Farm (STF) to MP42
- 8" OKC Products line, Cherokee Pump Station to MP42
- 12" Woodriver Products Line, Cherokee Pump Station to Hwy. 60, MP 2.
- Ponca City STF and various crude gathering breakout tanks
- 2-10" Ark City #1 & #2 Product Pipelines from Cherokee Pump Station to the OK/KS State Line, MP 25
- 6" LPG Pipeline from Cherokee Pump Station to Blackwell Station; then continues as the 4" LPG Pipeline to Medford Terminal
- (b) (7)(F)
- 10" Chisolm HVL Pipeline from the Medford/Chisolm Pump Station to the OK/KS State Line
- 12" Standish Products Pipeline from Cherokee Pump Station to Marland Junction that continues as the 18" Standish Products Pipeline from Marland Junction to OK/KS State Line, MP 83.2
- 18" CushPo crude oil pipeline from Marland Stations to Ponca City South Tank Farm. (Refer to the Buxton/Cushing - Information Summary & Facility Information for details and WCD for this pipeline section.)

This area 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." Around Ponca City, the line is in the Central Redbed Plains, an area of gently rolling hills and broad, flat plains overlying shale and sandstone strata. Natural vegetation consists of riverine forests extending along permanent streams and grasslands in most other areas. South of Ponca City, the pipeline enters the Northern Limestone Cuesta Plains where steeper, limestone-capped hills overlook broad shale plains. The dominant vegetation shifts from grasslands to Post Oak- Blackjack Oak forest.

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

Sec. 1.10.3 Pipeline Information**Pipeline Description**

The Ponca City Area is comprised of the following pipelines or pipeline segments.

Pipeline	Ponca City Area Segments	Products Carried
12" Wichita Falls (WF) Crude Line	Ponca City STF to MP42	Crude Oil
8" OKC Products Line	Cherokee Pump Station to MP42	Gasoline, Diesel and Jet A
12" Wood River Products Line	Medford to Cherokee Pump Station	LPG
12"/18" Standish Products Line	12" Cherokee Pump Station to Marland Junction; then continues as 18" to the OK/KS State Line	Gasoline and Diesel
2-10" Ark City #1 & #2 Product Lines	Cherokee Pump Station to the OK/KS State Line	Gasoline, Diesel and Jet A
4" / 6" LPG Product Pipeline	6" Cherokee Pump Station to Blackwell; then continues as 4" to Medford Terminal	LPG
10" Chisholm Pipeline	Medford/Chisholm Pump Station to the OK/KS State Line	HVL
6" Osage Crude Pipeline	Ponca City STF to Thatt Creek	Crude Oil
OGG	Crude oil injection point into the Wichita Falls 12" Crude Pipeline (Only receives trucked Bbls.)	Crude Oil
18" CushPo Crude Pipeline	Buxton Terminal to Ponca City South Tank Farm to Marland Station	Crude Oil

Sec. 1.10.4 Worst Case Discharge Calculations

The Ponca City area is comprised of the following pipelines or pipeline segments:

Pipeline	Ponca City/Cushing Area Segment	Products Carried
12" WF Crude Line	Ponca City STF to Oklahoma City	Crude Oil
8" OKC Products Line	Cherokee Pump Station to Oklahoma City	Gasoline, Diesel and Jet A
12" Woodriver Products Line	Medford to Hwy. 60	Gasoline, Diesel, Jet A, and LPG

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.

Sec. 1.10.5 Secondary Containment Summary – Breakout Tankage

Facility	Tank Number	Nominal Tank Size (Bbls.)	Tank Capacity (Bbls.)	Secondary Containment Capacity (Bbls.)	Secondary Containment Minus Tank	Worst Case Discharge (Bbls.)
Ponca City South Tank Farm (STF)	609	(b) (7)(F)				
	610					
	613					
	614					
	615					
	616					
	617					
	618					
	620					
	621					
	625					
	626					
	627					
	629					
	630					
	631					
	71605					
	71606					
Guthrie Station	791					
OGG	1314					

(b) (7)(F)

is.

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 area.

Sec. 1.10.6 Maximum Historic Discharge

Maximum Historic Discharge (February 1988 to Present)					
Pipeline	Date	Location	Barrels Released	Barrels Recovered	Product
8" OKC Products Line	01-18-97	Logan County	1,600	1,590	Diesel

Pipeline's maximum release calculated using the formula below:

$[(\text{Maximum time to discover a leak}) + (\text{Maximum response shutdown time})] \times \text{Maximum flow rate} + \text{Maximum line section drain up after shutdown}$

All of the line sections in this response area are monitored by a SCADA system in the Company 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. 1.10.7 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.)
Line – Ponca City STF to OKC – Kay, Logan Noble and Oklahoma							
(b) (7)(F)	15	4	3,900	12	1.0	(b) (7)(F)	(b) (7)(F)
	15	4	3,900	12	7.0		
	15	4	3,900	12	3.7		
	15	4	3,900	12	6.3		
	15	4	3,900	12	13.0		
	15	4	3,900	12	4.0		
	15	4	3,900	12	1.0		
	15	4	3,900	12	9.9		
	15	4	3,900	12	0.2		
	15	4	3,900	12	0.2		
	15	4	3,900	12	0.1		
	15	4	3,900	12	11.8		
	15	4	3,900	12	8.0		
	15	4	3,900	12	11.5		
	15	4	3,900	12	2.2		
	15	4	3,900	12	1.0		
	15	4	3,900	12	8.3		
Line – Cherokee Pump Station to OKC – Kay, Logan, Noble and Oklahoma							
	15	4	1,575	8	0.5		
	15	4	1,575	8	7.8		
	15	4	1,575	8	3.2		
	15	4	1,575	8	11.5		
	15	4	1,575	8	8.0		
	15	4	1,575	8	0.4		
	15	4	1,575	8	2.0		
	15	4	1,575	8	10.0		
	15	4	1,575	8	10.0		
	15	4	1,575	8	1.0		
	15	4	1,575	8	5.0		
	15	4	1,575	8	0.7		
	15	4	1,575	8	13.0		
	15	4	1,575	8	5.3		
	15	4	1,575	8	3.7		
	15	4	1,575	8	5.0		
	15	4	1,575	8	2.0		
	15	4	1,575	8	1.2		

Maximum Release Calculation Table Contd.

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.)
12" Standish – Cherokee Pump Station to Marland Junction; 18" on to the OK/KS State Line Kay, Logan, Noble and Oklahoma Counties, OK							
(b) (7)(F)	15	4	3500	12	1.0	(b) (7)(F)	(b) (7)(F)
	15	4	3500	12	3.0		
	15	4	3500	18	1.0		
	15	4	3500	18	19.0		
– 10" Ark City #1 & 2 – Cherokee Pump Station to OK/KS State Kay, Logan, Noble and Oklahoma Counties, OK							
	15	4	1800	10	1.0		
	15	4	1800	10	3.6		
	15	4	1800	10	9.7		
	15	4	1000	10	1.6		
	15	4	1000	10	3.0		
	15	4	1000	10	9.7		
" Wood River Products Line – Medford to Hwy 60 – Kay County							
	15	7	4,000	12	0.3		
age Crude Line – Ponca City STF to Thatt Creek – Osage Cou							
	15	4	200	6	6.0		

Sec. 1.10.8 Worst Case Discharge

(b) (7)(F)

Sec. 1.10.9 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 6-5/8 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 Ponca City Area was evaluated to determine which met one or more of the above criteria. A summary of these determinations is as follows:

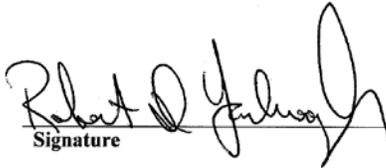
Description of Pipelines:

12" WF Crude line from Ponca City to Oklahoma City
 8" OKC Products line from Ponca City to Oklahoma City
 12" Woodriver Products line from Medford to Hwy 60
 2, 10" Ark City #1 & #2 Product Pipelines from Ponca City to the OK/KS State Line
 4"/6" LPG Pipeline from Ponca City to Medford
 6" Osage Crude Pipeline from Ponca City to That Creek
 10" Chisolm HVL Pipeline from the Medford/Chisolm Pump Station to the OK/KS State Line
 12" Standish Products Pipeline from Ponca City to Marland Junction that continues as the
 18" Standish Products Pipeline from Marland Junction to OK/KS State Line

Significant and Substantial Harm to Pipeline? Yes



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

Robert Yarbrough
Name

May 2012
Date



Significant and Substantial Harm Determination Contd.

Line Sect. No.	From		To		County	State	Sig/ Sub (Y/N)	Reason
	Block Valve No.	Milepost No.	Block Valve No.	Milepost No.				
	(b) (7)(F)				City STF to Oklahoma City			
12					Payne	OK	Y	3WI2 4.
13					Payne	OK	Y	3WI2 4.
14					Payne, Noble	OK	Y	2WI2, 3WI2 3.
15					Noble	OK	Y	2WI2 3.
16					Noble	OK	N	
17					Noble	OK	N	
18					Noble	OK	N	
19					Noble	OK	N	
					Pump Station to Oklahoma City			
20					Kay	OK	N	
21					Kay	OK	N	
22					Kay	OK	N	
23					Kay, Noble	OK	N	
24					Kay	OK	N	
25					Noble	OK	N	
26					Noble	OK	N	
27					Noble, Payne	OK	Y	3WI1, 3WI2 3., 4.
6					Logan	OK	Y	3WI2 4.
7					Logan	OK	N	
8					Logan	OK	N	
9					Logan	OK	N	
10					Logan	OK	Y	3WI3, 3WI5, 3WI6, 3WI7 9., 10.
11					Oklahoma	OK	Y	Crude Spill (1,370 Bbls) 12-12-90
12					Oklahoma	OK	Y	Crude Spill (1,370 Bbls) 12-12-90
13					Oklahoma	OK	Y	3WI8 11.
14					Oklahoma	OK	N	
15					Oklahoma	OK	Y	3WP2
36					Oklahoma	OK	N	
37					Oklahoma	OK	N	
38					Oklahoma	OK	Y	3WI8 11.
39					Oklahoma	OK	Y	3WI8 11.
40					Oklahoma, Logan	OK	N	
41					Logan	OK	Y	3WI7, 3WI5, 3WI6, 3WI3 10.
42					Logan	OK	N	
43					Logan	OK	N	
44					Logan	OK	Y	3WI2 4.
45					Logan	OK	Y	3WI2 4.
					- Medford to Hwy 60			
28					Kay	OK	N	

Legend (for determination of significant and substantial harm table, above)

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		

Sec. 1.10.10 Planning Distance Calculations

Pipeline: Medford to Glenpool 12" Products Line

River Crossing: Salt Creek

Location of Crossing: Section 25 - T24N - R5E, Mile Post 28

Flow Conditions: Top of bank or flood stage

Stream Velocity Determination From:	Site Value
U.S. Geological Survey, Water Resources Division, Oklahoma City Office Velocity data provided from U.S.G.S. surface water discharge station records. Closest gauging station (Station #07152500) is located approximately 2 miles downstream of the river crossing in Ralston, Oklahoma. Crossing on Salt Creek is about 1 mile upstream from the confluence of Salt Creek and the Arkansas River. Velocity data for the Arkansas River is thus used in this determination (a conservative assumption).	$v = 5.68 \text{ ft. / sec.}$
Planning Distance from Formula $d = v \times t \times c$; where $d =$ Calculated planning distance (miles)	$d = 104.30 \text{ mi.}$
$v =$ velocity of the river (ft./sec.) as determined above	$v = 5.68 \text{ ft./sec.}$
$t =$ spill response time, use 27 hours (a conservative est.)	$t = 27 \text{ hrs.}$
$c =$ conversion factor $0.68 (3600 \text{ sec./hr.} \div 5280 \text{ ft./mi.})$	$c = 0.68$

Pipeline: Ponca City to Wichita Falls, 12" Crude Line and 8" Products Line

River Crossing: Salt Fork of the Arkansas River

Location of Crossing: Section 29 - T25N - R1E, Mile Post 9

Flow Conditions: Top of bank or flood stage

Stream Velocity Determination From:	Site Value
U.S. Geological Survey, Water Resources Division, Oklahoma City Office Velocity data provided from U.S.G.S. surface-water discharge station records. Closest gauging station (Station #07151000) is located approximately 8 miles upstream of the river crossing near Tonkawa, Oklahoma.	v = 2.92 ft. / sec.
Planning Distance from Formula $d = v \times t \times c$; where d = Calculated planning distance (miles)	d = 53.6 mi.
v = velocity of the river (ft./sec.) as determined above	v = 2.92 ft./sec.
t = spill response time, use 27 hours (a conservative est.)	t = 27 hrs.
c = conversion factor 0.68 (3600 sec./hr. ÷ 5280 ft./mi.)	c = 0.68

Pipeline: Ponca City to OK/TX State Line, 12" Crude Line and 8" Products Line

River Crossing: Cimarron River

Location of Crossing: Section 36 - T18N - R2W, Mile Post 54

Flow Conditions: Top of bank or flood stage

Stream Velocity Determination From:	Site Value
U.S. Geological Survey, Water Resources Division, Oklahoma City Office Velocity data provided from U.S.G.S. surface-water discharge station records. Closest gauging station (Station #07160000) is located approximately 24 miles downstream of the river crossing near Perkins, Oklahoma.	v = 3.59 ft. / sec.
Planning Distance from Formula $d = v \times t \times c$; where d = Calculated planning distance (miles)	d = 65.9 mi.
v = velocity of the river (ft./sec.) as determined above	v = 3.59 ft./sec.
t = spill response time, use 27 hours (a conservative est.)	t = 27 hrs.
c = conversion factor 0.68 (3600 sec./hr. ÷ 5280 ft./mi.)	c = 0.68

Pipeline: Ponca City to OK/TX State Line, 12" Crude Line and 8" Products Line
 River Crossing: North Canadian River
 Location of Crossing: Section 29 - T12N - R2W, Mile Post 88
 Flow Conditions: Top of bank or flood stage

Stream Velocity Determination From:	Site Value
U.S. Geological Survey, Water Resources Division, Oklahoma City Office Velocity data provided from U.S.G.S. surface-water discharge station records. Closest gauging station (Station #07241520) is located approximately 8 miles downstream of the river crossing in Oklahoma City, Oklahoma.	v = 3.94 ft. / sec.
Planning Distance from Formula $d = v \times t \times c$; where	
d = Calculated planning distance (miles)	d = 72.3 mi.
v = velocity of the river (ft./sec.) as determined above	v = 3.94 ft./sec.
t = spill response time, use 27 hours (a conservative est.)	t = 27 hrs.
c = conversion factor 0.68 (3600 sec./hr. ÷ 5280 ft./mi.)	c = 0.68

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 Oklahoma 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.) _____

TRANSPORTATION – HEALTH & SAFETY

EPR&S PREP - INCIDENT REPORT FORM

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: <input type="checkbox"/> Yes <input type="checkbox"/> No
							Follow-Up: <input type="checkbox"/> Yes <input type="checkbox"/> No
							Follow-Up: <input type="checkbox"/> Yes <input type="checkbox"/> No
							Follow-Up: <input type="checkbox"/> Yes <input type="checkbox"/> No
							Follow-Up: <input type="checkbox"/> Yes <input type="checkbox"/> No
							Follow-Up: <input type="checkbox"/> Yes <input type="checkbox"/> No
							Follow-Up: <input type="checkbox"/> Yes <input type="checkbox"/> No
							Follow-Up: <input type="checkbox"/> Yes <input type="checkbox"/> No
							Follow-Up: <input type="checkbox"/> Yes <input type="checkbox"/> No
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							Follow-Up: <input type="checkbox"/> Yes <input type="checkbox"/> No
							Follow-Up: <input type="checkbox"/> Yes <input type="checkbox"/> No
							Follow-Up: <input type="checkbox"/> Yes <input type="checkbox"/> No
							Follow-Up: <input type="checkbox"/> Yes <input type="checkbox"/> No
							Follow-Up: <input type="checkbox"/> Yes <input type="checkbox"/> No
							Follow-Up: <input type="checkbox"/> Yes <input type="checkbox"/> No

Blank Form Retention:

ADM090/ MAX 12Y

Blank Form Location:

Livelihood; TPTN-H/S-LibPolProc-Frm/Temp-EPR/PREP-IRF

Effective Date: Jan 31,2012

Completed Form Retention:

HSE975/5Y

Completed Form Location:

Livelihood; Facility files

PREP-IRF Page 2 of 3

TRANSPORTATION – HEALTH & SAFETY

EPR&S PREP - INCIDENT REPORT FORM

Agency/Person Contacted	Notified By	Office Phone	Cell Phone	Other Phone	Date & Time Notified	Log #	Comments
							Follow-Up: <input type="checkbox"/> Yes <input type="checkbox"/> No
							Follow-Up: <input type="checkbox"/> Yes <input type="checkbox"/> No
							Follow-Up: <input type="checkbox"/> Yes <input type="checkbox"/> No
							Follow-Up: <input type="checkbox"/> Yes <input type="checkbox"/> No
							Follow-Up: <input type="checkbox"/> Yes <input type="checkbox"/> No
							Follow-Up: <input type="checkbox"/> Yes <input type="checkbox"/> No
							Follow-Up: <input type="checkbox"/> Yes <input type="checkbox"/> No
							Follow-Up: <input type="checkbox"/> Yes <input type="checkbox"/> No
							Follow-Up: <input type="checkbox"/> Yes <input type="checkbox"/> No
							Follow-Up: <input type="checkbox"/> Yes <input type="checkbox"/> 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	
•	<i>For emergencies reported to or observed.</i> Notify the Oklahoma 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: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • Initial company response personnel • Response resources (if not already done so) • Applicable regulatory agencies

BUXTON/CUSHING CRUDE PUMP STATIONS**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 Butch McGarry, Area Supervisor	(918) 225-3422	(b) (6)	(918) 223-5095	1 hr
Office: 3006 South Linwood Avenue, Cushing, OK 74023		OK 74023		
Alt. QI/IC Chris Parcell, Area Supervisor	(405) 670-0812	(b) (6)	(405) 246-8724	1 hr
Office: 4700 NE 10th St, Oklahoma City, OK 73117		(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	(b) (6)	(580) 761-3233
DOT Contact	Todd Tullio	(832) 379-6255	(b) (6)	(405) 371-1477
Health & Safety Contact	Brad A. Hendrix	(918) 661-0140	(b) (6)	(918) 977-0137
Manager, Division	Manny Cortez	(918) 661-0595	(b) (6)	(580) 401-0224
Manager, HSE	Travis J. Wilke	(281) 293-2515	(b) (6)	(580) 401-0047
Manager, Engineering & Projects	Dave J Barney	(281) 293-4385	(b) (6)	(281) 467-4732
Manager, Logistics	Doug B. Sauer	(918) 661-0271	(b) (6)	(832) 274-8478

Transportation Tier 1 Responders

Name	Office Phone	Home Phone	Mobile Number	Resp. Time
Redding, Ned E. - Truck Driver	(918) 225-0566	(b) (6)	(918) 285-0862	1 hr
Bogle, Ron B. - Gang Leadman	(918) 225-0566	(b) (6)	(918) 285-0864	1 hr
Brandon, Tommy T. - Senior Pipeliner	(918) 225-0566	(b) (6)	(918) 399-0533	1 hr
Fielding, Gary D. - Senior Pipeliner	(918) 225-0566	(b) (6)	(918) 285-0863	1 hr

Emergency Response Contractors

Name	Phone	Alt. Phone	Resp. Time
Contract			
Acme Products Co.	(918) 836-7184		1 hr
Basin Environmental & Safety Technologies	(888) 320-2378	(405) 232-5737	1 hr
Environmental Specialists, Inc.	(816) 523-6878 (24-hr)	(913) 327-8458	12+ hrs
Haz-Mat Response, Inc. - Olathe, KS	(800) 229-5252	(913) 782-5151	12+ hrs
Other			
Brentco Air (Line Flyer)	(918) 625-0057		<Unknown>
SWS Environmental	(254) 442-1553	254-442-1533	12+ 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		
National Weather Service, OK	(918) 832-4115	(202) 267-2675
OK Corporation Commission, District 1	(918) 367-3396	Fax: 918-367-3564
OK Corporation Commission, District 2	(405) 375-5570	(405) 514-8892
OK Corporation Commission, District 3	(580) 255-0103	Fax: 580-255-0154
OK Dept. of Emergency Management	(405) 521-2481	
OK DEQ	(800) 522-0206	Fax: 405-702-1001
OK Emergency Services & Disaster Agency	(405) 271-4468	
OK Fire Marshal	(405) 522-5005	
OK Highway Control	(580) 336-9880	
Local		
Fire, Cushing	911	(918) 225-3361
Ambulance, Cushing	911	(918) 225-1790
Sheriff/Police, Cushing	911	(918) 225-1212
Hospital, Cushing Regional	(918) 225-2915	
Media: KTUL TV 8	(918) 455-8888	
Media: KUSH AM Radio	(918) 225-0922	
Media: KWTW TV 9	(866) 562-2566	
Emergency Services & Disaster Agency, Cushing	(918) 225-3361	
LEPC: Beckham County, OK	(580) 928-2121	
LEPC: Blaine County, OK	(580) 623-5111	Fax: 580-623-7290
LEPC: Canadian County, OK	(405) 262-3434	Fax: 405-422-2405
LEPC: Custer County, OK	(580) 323-1616	Fax: 580-331-1133
LEPC: Kay County, OK	(580) 362-2517	Fax: 580-767-0374
LEPC: Kingfisher County, OK	(405) 375-5662	Fax: 405-375-6033
LEPC: Lincoln County, OK	(405) 258-1285	Fax: 405-258-1135
LEPC: Logan County, OK	(405) 282-8510	Fax: 405-282-8533
LEPC: Noble County, OK	(580) 336-3517	Fax: 580-723-4392
LEPC: Payne County, OK	(405) 372-0497	Fax: 405-747-8050
LEPC: Roger Mills County, OK	(580) 497-2417	Fax: 580-497-3488
LEPC: Washita County, OK	(580) 832-2334	

GLENPOOL 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 Gary Bowen, Area Supervisor	(580) 395-2363	(b) (6)	(580) 763-2572	1 hr
Office: 3 Mi S. of Medford on Hwy 81, Medford, OK 73759			(b) (6)	
Alt. QI/IC R. David Walker, Terminal Supervisor	(918) 296-2006	(b) (6)	(918) 630-1271	1 hr
Office: 10600 South Elwood Ave, Jenks, OK 74037			(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	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
Sheppard, Verle - Maintenance Supervisor	(918) 296-2004	(b) (6)	(918) 640-1273	1 hr
Holt, Tommy - Operator	(918) 299-2911		(918) 691-1272	1 hr
Clabaugh, Travis - Operator	(918) 296-2007		(918) 740-1277	1 hr
Humphries, Rick - Technician	(918) 296-2002		(918) 633-1271	1 hr
Overton, David - Operator	(918) 296-2016		(918) 740-1274	1 hr
Masquelier, Robert E. - Pipeliner	(918) 296-2001		(918) 630-5151	1 hr

Emergency Response Contractors

Name	Phone	Alt. Phone	Resp. Time
Contract			
Acme Products Co.	(918) 836-7184		1 hr
Basin Environmental & Safety Technologies	(888) 320-2378	(405) 232-5737	1 hr
Haz-Mat Response, Inc.	(913) 782-5151		1 hr
Other			
Brentco Air (Line Flyer)	(918) 625-0057		<Unknown>
SWS Environmental	(254) 442-1553	254-442-1533	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	(314) 269-2463	
State		
Highway patrol	(918) 627-0440	
OK Corporation Commission, District 1	(918) 367-3396	Fax: 918-367-3564
OK Dept. of Emergency Management	(405) 521-2481	
OK Dept. of Wildlife Conservation	(405) 521-4601	
OK Emergency Services & Disaster Agency	(405) 271-4468	
OK Fire Marshal	(405) 522-5005	
Local		
Fire	911	(918) 299-2727
Ambulance; EMSA Tulsa	911	(918) 596-3100
Police/Sheriff: Gelpool	(918) 322-8110	
Police: Jenks	911	(918) 299-6311
Sheriff: Tulsa	(918) 596-5601	
Hospital: Hillcrest, Tulsa	(918) 579-1000	
Hospital: St. Francis, Tulsa	(918) 494-2200	
Hospital: St. John's, Tulsa	(918) 744-2345	
Media: Fox TV-23	(918) 491-0023	
Media: KTUL TV-8	(918) 445-8888	
Media: KUSH FM Radio	(918) 225-0922	
LEPC: Craig County, OK	(918) 256-6466	Fax: 918-256-1966
LEPC: Delaware County, OK	(918) 787-4357	Fax: 918-786-3157
LEPC: Mayes County, OK	(918) 825-3535	Fax: 918-785-4599
LEPC: Ottawa County, OK	(918) 542-2806	Fax: 918-542-7133
LEPC: Rogers County, OK	(918) 341-2060	Fax: 918-341-4611
LEPC: Tulsa County, OK	(918) 628-0651	website: http://tulsalepc
LEPC: Wagoner County, OK	(918) 485-2132	Fax: 918-485-5836
Office of Emergency Management; Mayes County, OK	(405) 760-4806	
Rual Water District #2; Creek County, OK	(918) 299-4448	
Weather Service; Glenpool OK	(918) 832-4115	

MEDFORD TERMINAL**Emergency Notification Contact List****Emergency Response Numbers**

Group/Function	Telephone	Other Telephone/Fax
Duty Officer	800-231-2551	Fax: 918-662-0179
Control Center Emergency Hotline	877-267-2290	800-231-2566
Company "Meet Me" Number	866-836-3169	Pass Code: 157528
Employee Hotline (Natural Disaster)	866-397-3822	
Axiom Medical Monitoring	281-419-7063	

Qualified Individual / Incident Commander (QI / IC) Contact List

Name / Job Title	Office Phone	Home Phone	Cell Phone	Resp. Time
QI/IC Keith Tebow, Facility Supervisor	(580) 395-2363	(b) (6)	(580) 716-1565	1 hr
Office: 3 Mi S. of Medford on Hwy 81, Medford, OK 73759			(b) (6)	
Alt. QI/IC Gary Bowen, Area Supervisor	(580) 395-2363		(580) 763-2572	1 hr
Office: 3 Mi S. of Medford on Hwy 81, Medford, OK 73759			(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	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
Buckner, Dale L. - CFR	(580) 395-2363	(b) (6)	(580) 716-2200	1 hr
Biggerstaff, Danny - Lead Operator	(580) 395-2363		(580) 761-9120	1 hr
Drees, Mark - Pipeliner	(580) 395-2363		(580) 761-4279	1 hr
McNaughton, Mace - Technician	(580) 395-2363		(580) 741-1038	1 hr
Reimer, Rex A. - Operator	(580) 395-2363		(580) 761-8406	1 hr
Solorio, Joe - Operator	(580) 395-2363		(580) 761-4279	1 hr
Ebert, Justin T. - Operator	(580) 395-2889		(580) 747-8173	1 hr
Kaupke, Greg A. - Operator	(580) 395-2363		(580) 747-5502	1 hr
Perkins, Curtis E. - Technician	(580) 395-2363		(580) 763-1858	1 hr
Carter, Eric W. - Operator	(580) 395-2363		(580) 250-8338	1 hr

Emergency Response Contractors

Name	Phone	Alt. Phone	Resp. Time
Contract			
Acme Products Co.	(918) 836-7184		1 hr
Basin Environmental & Safety Technologies	(888) 320-2378	(405) 232-5737	1 hr
Haz-Mat Response, Inc.	(913) 782-5151		12+ hrs
Other			
Brentco Air (Line Flyer)	(918) 625-0057		1 hr
Conestoga-Rovers & Associates	(866) 812-9565 (24-hr)	918-828-2424;713-734-3090	3 hrs
Construction, Little B's	(580) 395-2381		1 hr
Line Flyer: Brentco Aerial	(970) 259-4098	(405) 209-8506	1 hr
SWS Environmental	(254) 442-1553	254-442-1533	12+ 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
EPA Regional Office (OK)	(918) 367-3396	
U.S. Coast Guard Marine Safety Office	(314) 269-2463	
State		
Highway Patrol (Enid, OK)	(580) 234-6147	
National Weather Service, OK	(918) 832-4115	(202) 267-2675
OK Corporation Commission, District 2	(405) 375-5570	(405) 514-8892
OK Dept. of Emergency Management	(405) 521-2481	
OK Emergency Services & Disaster Agency	(405) 271-4468	
OK Fire Marshal	(405) 522-5005	
OK Gas & Electric	(800) 522-6870	
OK Natural Gas	(800) 664-5463	
Local		
*COP-Control Center: Console 1	(918) 661-8751	
*COP-PC Refinery ER: J.Hilbert	580-767-4820/7614873	
*COP-PC Refinery Fire	(580) 767-5866	
*COP-PTRRC (Pat Hopkins)	580-767-3324/7164580	
Fire Dept: (VAFB) Alert	(580) 237-1235	
Fire Dept: Medford, OK	911	(580) 395-2356
Ambulance: Medford, OK	911	(580) 395-2356
Police Dept., Medford	911	(580) 395-2356
Sheriff, Grant County	911	(580) 395-2356
Hospital: Bass Integris; Enid	(580) 233-2300	
Hospital: Medical Clinic	(580) 395-2319	
Hospital: St. Mary's, Enid	(580) 233-6100	
Media: KCRC AM Radio 1390	(580) 237-1390	
Media: KGWA AM Radio	(580) 234-4230	
Media: KWTW TV 9	(866) 562-2566	
LEPC: Grant County, OK	(580) 554-8950	Fax: 580-395-2972
Railroad: Union Pacific	(800) 877-7267	
Neighbors		
Airport, Medford, OK	(580) 395-3176	
Bushnell, Mark	(580) 395-2408	
Dewey, Larry Don	(580) 532-4994	
Kretchmar Grasshopper	(580) 395-3886	
Kretchmar, Danny	(580) 395-2175	
Kretchmar, Randy	(580) 395-2624	
Kretchmar, Tayler	(580) 395-2884	
Oneok Company (Medford Fractionator)	(580) 395-6227	
Oneok Company (Pipeline)	(800) 666-9043	
Priest, Don	(580) 395-2476	
Schoneweis, Duane	(580) 395-2402	

OKLAHOMA CITY 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 Chris Parcell, Area Supervisor	(405) 670-0812	(b) (6)	(405) 246-8724	1 hr
Office: 4700 NE 10th St, Oklahoma City, OK 73117			(b) (6)	
Alt. QI/IC Steven W. Derk, Facility Supervisor	(405) 670-0804		(405) 550-8667	1 hr
Office: 4700 NE 10th St, Oklahoma City, OK 73117			(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	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
QI/IC	Derick Gipson	(940) 720-4325		(940) 631-0272
Alt QI/IC	Robert (Bob) Calvert	(405) 238-5111		(405) 650-2193
Alt. QI/IC	Kirk Styles	(940) 720-4327		(940) 733-0315

Transportation Tier 1 Responders

Name	Office Phone	Home Phone	Mobile Number	Resp. Time
Dennis, Darrell - Operator	(405) 670-0831	(b) (6)	(405) 640-2345	1 hr
Perry, Paul - Pipeliner	(405) 670-0810		(405) 496-4750	1 hr
Welch, Shannon - Pipeliner	(405) 275-1642		(405) 401-7242	1 hr
Fulmer, Dave D. - Pipeliner	(405) 670-0815		(405) 642-4650	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
Purdy, Neal - Operator	(405) 670-0837		(405) 520-0109	1 hr
Jorgenson, Tim - Technician	(405) 275-0808		(405) 831-7666	1 hr
Lingle, Randy - Operator	(405) 767-0835		(405) 550-2733	1 hr
Willhite, Curtis R. - Technician	(405) 670-0822		(405) 550-7928	1 hr
Mc Millan, Kelly M. - Technician	(405) 275-1642		(405) 650-2193	1 hr

Emergency Response Contractors

Name	Phone	Alt. Phone	Resp. Time
Contract			
Acme Products Co.	(918) 836-7184		1 hr
Basin Environmental & Safety Technologies	(405) 232-5737		1 hr
Haz-Mat Response, Inc.	(913) 782-5151		12+ hrs
Other			
SWS Environmental	(254) 442-1553	254-442-1533	12+ 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		
DEQ, Oklahoma (SERC)	(800) 522-0206	(405) 702-1000
OK Corporation Commission, District 3	(580) 255-0103	Fax: 580-255-0154
OK Corporation Commission, District 4	(580) 332-3441	Fax: 580-332-3564
OK Dept. of Emergency Management	(405) 521-2481	
OK Emergency Services & Disaster Agency	(405) 271-4468	
OK Fire Marshal	(405) 522-5005	
OK State Highway Patrol	(405) 425-2323	
Local		
Fire Dept. (Del City)	911	(405) 677-3344
Fire Dept. (Oklahoma City)	911	(405) 297-3314
Ambulance: Del City	911	(405) 677-2443
Ambulance: EMSA	911	
Police Dept. (Del City)	911	(405) 677-2443
Police Dept. (Oklahoma City)	911	
Sheriff (Oklahoma City)	911	(405) 236-1717
Hospital: Midwest Regional Med	(405) 610-8800	
Media: FKOR TV 4-NBC	(405) 478-6397	
Media: KKNR FM Radio 93.3	(405) 616-5505	
Media: KWTU TV 9-CBS	(405) 841-9989	
Corp. of Engineers, Oklahoma City	(405) 396-8026	
LEPC: Oklahoma County, OK	(405) 739-1386	
Railroad: Burlington Northern	(800) 832-5452	
Railroad: Burlington Northern & Santa Fe (BNSF)	(800) 832-5452	(406) 791-3335
Railroad: Union Pacific	(800) 877-7267	
Water Supply, Del City	(405) 671-2875	(405) 671-2871
Weather Service, Oklahoma City	(405) 360-5928	
Neighbors		
Plains Pipeline	(405) 386-6757	
Transmontaigne	(405) 672-1335	

PONCA PRODUCT 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 Gary Bowen, Area Supervisor	(580) 395-2363	(b) (6)	(580) 763-2572	1 hr
Office: 3 Mi S. of Medford on Hwy 81, Medford, OK 73759			(b) (6)	
Alt. QI/IC Edgar Gallegos, Facility Supervisor	(580) 767-2456		(580) 399-0237	1 hr
Office: 2500 S. Waverly, Ponca City, OK 74602				

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	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
Buckner, Dale L. - CFR	(580) 395-2363	(b) (6)	(580) 716-2200	1 hr
Drees, Mark - Pipeliner	(580) 395-2363		(580) 761-4279	1 hr
Anderson, Brandon J. - Operator	(580) 767-6347		(580) 304-6171	1 hr
Furnas, Charley W. - Operator	(580) 767-7218		(580) 763-4225	1 hr
Angle, Eric J. - Operator	(580) 767-3077		(580) 716-6441	1 hr
Goodno, Cory D. - Pipeliner	(580) 767-6124		(580) 401-0518	1 hr
Haller, David D. - Operations Engineer	(918) 661-0986		(580) 304-6807	1 hr
Hudgens, Marshall - Technician	(580) 767-2986		(580) 716-5005	1 hr
Mills, Don D. - Technician	(580) 767-3877		(580) 716-0275	1 hr
Morris, Cody M. - Technician	(580) 767-2952		(580) 309-2267	1 hr
Rhoten, John Z. - Operator	(580) 767-3500		(580) 761-5839	1 hr

Emergency Response Contractors

Name	Phone	Alt. Phone	Resp. Time
Contract			
Acme Products Co.	(918) 836-7184		1 hr
Basin Environmental & Safety Technologies	(888) 320-2378	(405) 232-5737	1 hr
Haz-Mat Response, Inc.	(913) 782-5151		1 hr
Other			
Brentco Air (Line Flyer)	(918) 625-0057		<Unknown>
SWS Environmental	(254) 442-1553	254-442-1533	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
U.S. Coast Guard Marine Safety Office	(314) 269-2463	
State		
DEQ, Oklahoma (SERC)	(800) 522-0206	(405) 702-1000
Highway Patrol	(580) 767-5866	
National Weather Service, OK	(918) 832-4115	(202) 267-2675
OK Corporation Commission, District 1	(918) 367-3396	Fax: 918-367-3564
OK Corporation Commission, District 2	(405) 375-5570	(405) 514-8892
OK Dept. of Emergency Management	(405) 521-2481	
OK Emergency Services & Disaster Agency	(405) 271-4468	
Local		
Fire, Ponca City	911	(580) 767-0368
Fire, Ponca City Refinery	(580) 767-5866	
Ambulance/Police	911	(580) 767-0370
Sheriff, Newkirk	(580) 362-2517	
Hospital: Ponca City Medical C	(580) 765-3321	
Media: KSPI FM Radio	(405) 372-7800	
Media: KTUL TV 8	(918) 445-8888	
Media: KWTW TV 9	(866) 562-2566	

PONCA CITY PRODUCT TERMINAL (TRUCK RACK)**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 R. David Walker, Terminal Supervisor	(918) 296-2006	(b) (6)	(918) 630-1271	3 hrs
Office: 10600 South Elwood Ave, Jenks, OK 74037		(b) (6)		
Alt. QI/IC Charley W. Furnas, Operator	(580) 767-7218		(580) 763-4225	1 hr
Office: Hwy 60, Ponca City, OK 74601				

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	Bill Shepherd	(918) 661-1762		(281) 839-5671
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
Mills, Don D. - Technician	(580) 767-3877	(b) (6)	(580) 716-0275	1 hr
Banister, Larry D. - Operator	(580) 767-2561		(580) 716-9575	1 hr

Emergency Response Contractors

Name	Phone	Alt. Phone	Resp. Time
Contract			
Acme Products Co.	(918) 836-7184		1 hr
Basin Environmental & Safety Technologies	(888) 320-2378	(405) 232-5737	1 hr
Haz-Mat Response, Inc.	(913) 782-5151		12+ hrs
Other			
Brentco Air (Line Flyer)	(918) 625-0057		<Unknown>
SWS Environmental	(254) 442-1553	254-442-1533	12+ 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
U.S. Coast Guard Marine Safety Office	(314) 269-2463	
State		
DEQ, Oklahoma (SERC)	(800) 522-0206	(405) 702-1000
Highway Patrol	(580) 336-9880	
National Weather Service, OK	(918) 832-4115	(202) 267-2675
OK Corporation Commission, District 1	(918) 367-3396	Fax: 918-367-3564
OK Corporation Commission, District 2	(405) 375-5570	(405) 514-8892
OK Emergency Services & Disaster Agency	(405) 271-4468	
Local		
Fire, Ponca City	911	(580) 767-0368
Fire, Ponca City Refinery	(580) 767-5866	
Ambulance/Police	911	(580) 767-0370
Police, Ponca City	911	
Sheriff, Newkirk	(580) 362-2517	
Hospital, Ponca City Medical C	(580) 765-3321	
Media: KSPI FM Radio	(405) 372-7800	
Media: KTUL TV 8	(918) 445-8888	
Media: KWTW TV 9	(866) 562-2566	

PONCA CITY SOUTH CRUDE TANK FARM**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 Edgar Gallegos, Facility Supervisor	(580) 767-2456	(b) (6)	(580) 399-0237	1 hr
Office: 2500 S. Waverly, Ponca City, OK 74602				
Alt. QI/IC Gary Bowen, Area Supervisor	(580) 395-2363	(b) (6)	(580) 763-2572	1 hr
Office: 3 Mi S. of Medford on Hwy 81, Medford, OK 73759			(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	(b) (6)	(580) 761-3233
DOT Contact	Todd Tullio	(832) 379-6255	(b) (6)	(405) 371-1477
Health & Safety Contact	Brad A. Hendrix	(918) 661-0140	(b) (6)	(918) 977-0137
Manager, Division	Manny Cortez	(918) 661-0595	(b) (6)	(580) 401-0224
Manager, HSE	Travis J. Wilke	(281) 293-2515	(b) (6)	(580) 401-0047
Manager, Engineering & Projects	Dave J Barney	(281) 293-4385	(b) (6)	(281) 467-4732
Manager, Logistics	Doug B. Sauer	(918) 661-0271	(b) (6)	(832) 274-8478

Transportation Tier 1 Responders

Name	Office Phone	Home Phone	Mobile Number	Resp. Time
Buckner, Dale L. - CFR	(580) 395-2363	(b) (6)	(580) 716-2200	1 hr
Drees, Mark - Pipeliner	(580) 395-2363	(b) (6)	(580) 761-4279	1 hr
Anderson, Brandon J. - Operator	(580) 767-6347	(b) (6)	(580) 304-6171	1 hr
Furnas, Charley W. - Operator	(580) 767-7218	(b) (6)	(580) 763-4225	1 hr
Angle, Eric J. - Operator	(580) 767-3077	(b) (6)	(580) 716-6441	1 hr
Goodno, Cory D. - Pipeliner	(580) 767-6124	(b) (6)	(580) 401-0518	1 hr
Haller, David D. - Operations Engineer	(918) 661-0986	(b) (6)	(580) 304-6807	1 hr
Hudgens, Marshall - Technician	(580) 767-2986	(b) (6)	(580) 716-5005	1 hr
Mills, Don D. - Technician	(580) 767-3877	(b) (6)	(580) 716-0275	1 hr
Morris, Cody M. - Technician	(580) 767-2952	(b) (6)	(580) 309-2267	1 hr
Rhoten, John Z. - Operator	(580) 767-3500	(b) (6)	(580) 761-5839	1 hr

Emergency Response Contractors

Name	Phone	Alt. Phone	Resp. Time
Contract			
Acme Products Co.	(918) 836-7184		1 hr
Basin Environmental & Safety Technologies	(888) 320-2378	(405) 232-5737	1 hr
Haz-Mat Response, Inc.	(913) 782-5151		12+ hrs
Other			
Brentco Air (Line Flyer)	(918) 625-0057		<Unknown>
SWS Environmental	(254) 442-1553	254-442-1533	12+ 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
U.S. Coast Guard Marine Safety Office	(314) 269-2463	
State		
DEQ, Oklahoma (SERC)	(800) 522-0206	(405) 702-1000
Highway Patrol	(580) 767-5866	
National Weather Service, OK	(918) 832-4115	(202) 267-2675
OK Corporation Commission, District 1	(918) 367-3396	Fax: 918-367-3564
OK Corporation Commission, District 2	(405) 375-5570	(405) 514-8892
OK Emergency Services & Disaster Agency	(405) 271-4468	
Local		
Fire, Ponca City	911	(580) 767-0368
Fire, Ponca City Refinery	(580) 767-5866	
Ambulance/Police	911	(580) 767-0370
Police, Ponca City	911	
Sheriff, Newkirk	(580) 362-2517	
Hospital: Ponca City Medical	(580) 765-3321	
Media: KSPI FM Radio	(405) 372-7800	
Media: KTUL TV 8	(918) 445-8888	
Media: KWTW TV 9	(866) 562-2566	

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 Oklahoma Response Zone. The contract service agreements follow:

2.4.1 Marine Spill Response Corporation (MSRC)

MARINE SPILL RESPONSE CORPORATION
SERVICE AGREEMENT

EXECUTION INSTRUMENT

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

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. 6MPA 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. 16, 2005.

ConocoPhillips et al. [COMPANY]

By: [Signature] [signature]

ANTONIO J. VILLAS [print name]

Title: GENERAL MANAGER

Address: 600 North Dairy
Ashford, Houston TX 77079

Telephone: 281-293-1000 Fax: _____

MARINE SPILL RESPONSE CORPORATION:

By: Judith R. Norell
Judith R. Norell
Marketing & Customer Service Manager
220 Spring Street, Suite 500
Herndon, VA 20170
(703) 326-5617; Fax: (703) 326-5660



MSRC 24-HOUR EMERGENCY 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.

13778.0-MSA-PT

MASTER SERVICE AGREEMENTRevised: 19 January 2005 (General, U.S. Operations)
13778.0-MSA-PT

Agreement No.

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:

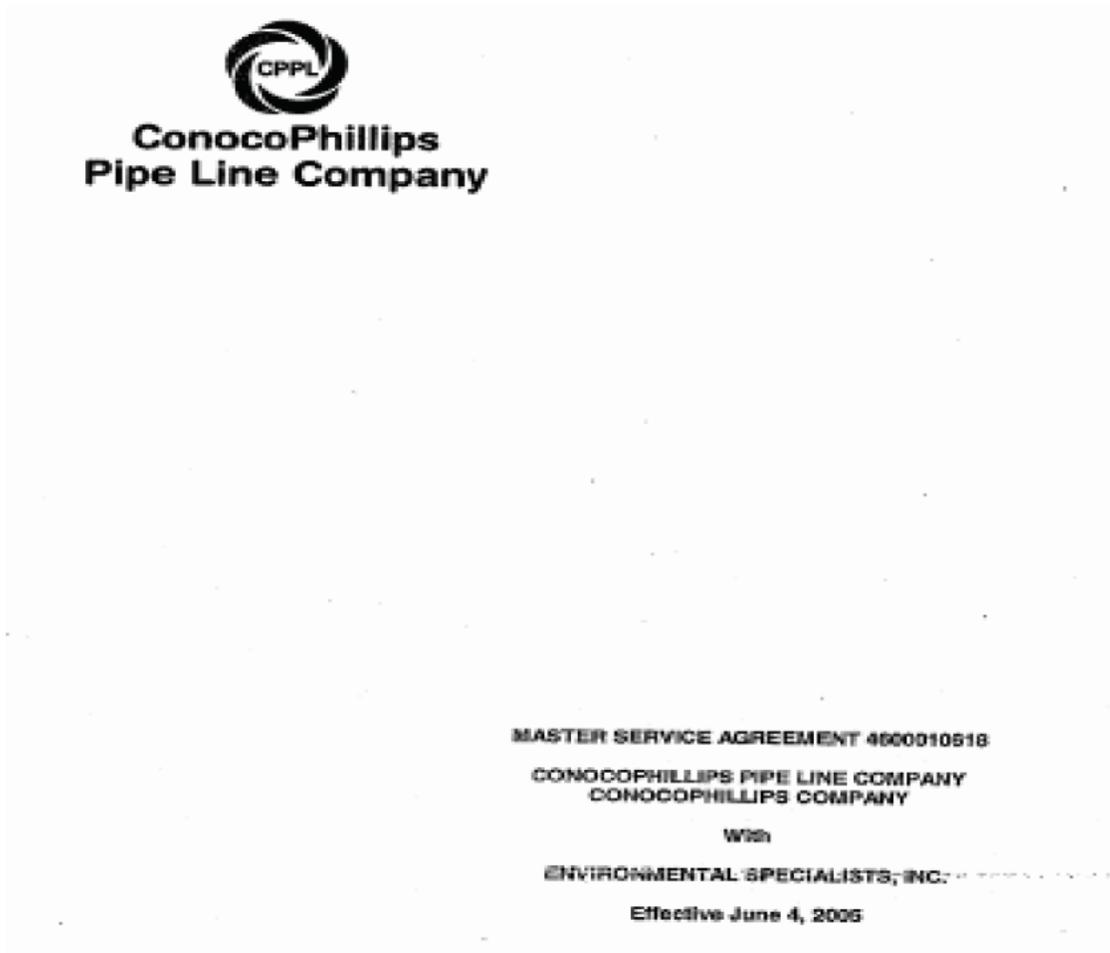
ConocoPhillips Company

Signature: *Cary D. Jennings*Name: *Cary D. Jennings*Title: *Contact Specialist*Date: *8/29/05*EAGLE CONSTRUCTION &
ENVIRONMENTALSERVICES LPSignature: *Marc W. Walraven*Name: *Marc W. Walraven*Title: *VP*Date: *8-20-05*

13778.0-MSA-PT

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2.4.3 Environmental Specialties, Inc.



**MASTER SERVICE AGREEMENT
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MASTER SERVICE AGREEMENT

Revised: 18 February 2005 (General, U.S. Operations)

Agreement Number: 4600010618

This Agreement is made on this 4th day of June, 2005, by and between ConocoPhillips Pipe Line Company, ConocoPhillips Company, (hereinafter called "Company") and Environmental Specialists, Inc. (hereinafter called "Contractor").

WHEREAS, Company may from time to time desire Contractor to perform work and/or provide items of equipment, machinery, materials or supplies in the conduct of Company's operations; and

WHEREAS, Company and Contractor desire to establish certain general terms and conditions, which shall apply to and become part of each and every contract, whether written or oral, entered into between the parties.

NOW, THEREFORE, in consideration of the mutual promises contained herein, the parties agree that this Agreement shall consist of this signature document and the following Sections attached hereto and made a part hereof:

SECTION I	STATEMENT OF WORK
SECTION II	COMPENSATION, INVOICING AND PAYMENTS
SECTION III	TERMS AND CONDITIONS, PART 1
SECTION IV	TERMS AND CONDITIONS, PART 2
SECTION V	EXHIBITS

ENTIRE AGREEMENT AND OTHER CONDITIONS

This Agreement reflects the entire agreement between the parties with respect to its subject matter. Except for any secrecy or other nondisclosure agreements between the parties, all other oral or written agreements, contracts, understandings, conditions, or representations with respect to the subject matter of this Agreement are superseded by this Agreement.

General or special conditions in any of Contractor's price lists, invoices, tickets, receipts or other documents presented to Company relating to the work hereunder are null and void, regardless of whether signed by an employee of Company.

SIGNATURES

CONOCOPHILLIPS PIPE LINE COMPANY

Yvonne Y. Craib
Signature

Yvonne Y. Craib
Printed Name

Contract Specialist, Procurement, Pipelines & Terminals
Title

9-27-05
Date

ENVIRONMENTAL SPECIALISTS, INC.

Al E. Wickett
Signature

Al E. Wickett
Printed Name

GM U.P.
Title

9-27-05
Date

CONOCOPHILLIPS COMPANY

Yvonne Y. Craib
Signature

Yvonne Y. Craib
Printed Name

Contract Specialist, Procurement, Pipelines & Terminals
Title

9-27-05
Date

6. WARRANTY

Contractor warrants and represents that it shall (1) perform the work with competent and skilled personnel in a good and workmanlike manner consistent with applicable industry standards and practices; (2) use sound engineering and/or technical principles where applicable; (3) perform the work in compliance with specifications provided or approved by Company; (4) use or furnish materials and equipment that are fit and new; and (5) where mutually agreed, use or furnish fit used material and equipment. To the extent assignable, all rights and remedies available to Contractor or its subcontractors shall be passed directly to Company. Company shall also have the rights and remedies provided by the Uniform Commercial Code. At no cost to Company, Contractor shall remedy nonconforming workmanship or replace nonconforming material and equipment, including removal of facilities as may be necessary to (1) reveal and (2) repair or replace nonconforming work, and reinstallation of such facilities removed in connection therewith. If Contractor does not remedy nonconforming work immediately, Company may do so at Contractor's expense. If Contractor fails to pay this expense, Company may deduct all expenses from any proceeds due to Contractor. At no cost to Company, Contractor shall diligently and promptly remedy nonconforming workmanship, material and equipment appearing (a) within one (1) year from the date of final acceptance or (b) within such longer period of time as provided by manufacturer's warranty; provided however, with respect to latent defects in downhole equipment and material installed by Contractor hereunder such period shall be (a) within such time as Company discovers or should have discovered such latent defects under the circumstances but in no event less than one (1) year from installation or (b) within such longer period of time as provided by manufacturer's warranty.

6. 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 supplies 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 should 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.

7. NOTICES

Unless otherwise specifically provided, all notices and other communications provided for in this Agreement or any contract hereunder shall be in writing and shall be effective upon receipt. Such notices and communications shall be given either: (a) by hand delivery to an authorized representative of the party to whom directed, or (b) by United States mail, postage prepaid, or (c) by courier service 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

Name: ConocoPhillips Pipe Line
Company
Address: 1000 South Pine
P. O. Box 1287
Ponca City, OK 74602-1287
Contact Person: Yvonne Y. Crabs
Telephone: (580) 767-6251
Fax: (918) 662-3416

CONTRACTOR

Environmental Specialists, Inc.
3001 East 83rd St.
Kansas City, MO 64132
Paul Webster *Also E. Wolfe*
(816) 523-6878
(816) 523-0183

Any notice, other than a force majeure notice under Section III Article 9, delivered after normal business hours at the receiving party's place of business shall not be deemed delivered until the receiving party's following business day. Either party may at any time change its address, facsimile number or attention recipient upon written notice to the other party.

8. TERMINATION OF AGREEMENT AND CONTRACTS

8.1 This Agreement shall continue in full force and effect for a term of one (1) year from the date this Agreement is made and from month to month thereafter unless terminated at any time during the term of this Agreement 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 completed or paid for.

8.2 Company may terminate any contract entered into under this Agreement immediately upon notice with or without cause. If Company terminates such a contract in the absence of a material breach by 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

2.4.4 Hazmat Response Inc.

34356.0-SA-PT

Services Agreement**SERVICE AGREEMENT****Between****ConocoPhillips Pipe Line Company And ConocoPhillips Company
and****HAZMAT RESPONSE INC****Effective 08/25/2008**

34358.0-SA-PT

SERVICE AGREEMENT

Agreement Number 34358.0-SA-PT

This Agreement is effective on 06/25/2006 (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.

SIGNATURESConocoPhillips 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*

34358.0-SA-PT

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34358.0-SA-PT

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 PO Box 1267 Ponca City, OK 74602	1203 C South Parker Street Olathe, KS 66061
Attention:	Cary Jennings	Jeff Donovan
Telephone No:	580-767-6483	913-782-5151
Facsimile No:	918-662-3353	913-782-6206
Email:	cary.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.

8. TERMINATION OF AGREEMENT AND CONTRACTS

This Agreement shall continue in full force and effect until 08/25/2009 unless 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.

34358.0-SA-PT

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2.4.5 Heritage Environmental Services, Inc.



ConocoPhillips Company
1000 South Pine - B820 CB
P. O. Box 1287
Ponca City, OK 74602-1267
Yvonne Y. Crabs
Contracts Specialist
Pipelines & Terminals
(580) 767-6251

January 7, 2005

Barry Legg
Heritage Environmental Services, LLC
P. O. Box 308
Winoka, IL 60447

Subject: Letter of Modification Master Service Agreement WRB2273 A/O 7

This letter will modify the subject document, dated the 30th day of June 2004, between ConocoPhillips Company, ("Company") and Heritage Environmental Services, LLC ("Contractor").

Effective immediately please delete the first paragraph in its entirety and replace it with the following:

"This Agreement is made on this 30th day of June 2004, by and between ConocoPhillips Company, Conoco Pipe Line Company, (hereinafter called "Company") and Heritage Environmental Services, LLC. (hereinafter called "Contractor")."

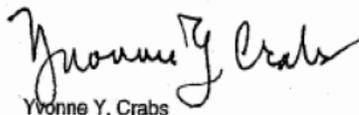
Effective immediately, the attached Exhibit B-CPPL, Compensation,, dated September 1, 2003, shall govern all work performed under this agreement for ConocoPhillips Pipe Line Company..

All other terms and conditions of the subject document shall remain unchanged.

Please indicate your agreement to the foregoing by signing in the space provided below. Retain one original for your files and return the other original, so signed, to me at the above address.

If you have any questions, please contact me at (580) 767-6251.

Very truly yours,


Yvonne Y. Crabs

ACCEPTED AND AGREED:

Heritage Environmental Services, LLC


Signature

Corporate Accounts Manager
Title

January 12, 2005
Date

28. 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.

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

29. DISPUTE RESOLUTION

The parties agree that they will use the procedures outlined in "Dispute Resolution" (Exhibit "F", attached hereto and made a part hereof), to resolve any dispute which may arise between them under this Agreement; provided, however, that this Article 29 and Exhibit "F" shall not apply to disputes arising under Articles 12, 13, 20, and 21 or to any dispute relating in any manner to indemnity, insurance, or release obligations and shall not be construed to modify or affect the remedies set forth in Articles 10, 11, 18, and 30. It is further provided, notwithstanding the provisions of Exhibit "F", that either party may seek a restraining order, temporary injunction, or other provisional judicial or equitable relief if the party in its sole judgment believes that such action is necessary to avoid irreparable injury or to preserve the status quo. Parties will continue to participate in good faith in the procedures despite any request for provisional relief.

30. GENERAL PROVISIONS

- (a) The captions and headings used in this Agreement are intended for convenience only and shall not be used for purposes of construction or interpretation.
- (b) 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.
- (c) It is intended that if any provision of this Agreement is unenforceable for any reason, it shall be adjusted rather than voided, if possible, in order to achieve the intent of the parties. In any event, all other provisions of this Agreement shall be deemed valid, binding, and still enforceable.
- (d) In the event that either party commits any material breach of this Agreement including, without limitation, any breach of any indemnity obligation, in addition to any other remedy that the aggrieved party may have at law or in equity, it shall be entitled to recover all costs, including court costs and attorney's fees, incurred in any proceeding wherein the aggrieved party seeks redress for such breach.
- (e) Neither this Agreement nor any contract hereunder shall be considered an exclusive contract. Company shall have the right to hire others to perform the same or similar work.
- (f) Exhibits "A" through "H" attached hereto are incorporated and made a part of this Agreement. Company reserves the right to revise such exhibits from time to time, which revisions shall be binding as to work performed subsequent to receipt of the revision by Contractor.

31. SIGNATURES:

CONOCOPHLLIPS COMPANY

(Company)

Mary A. White
(Signature) (Date)

GARY A. WHITE
(Printed Name)

Strategic Buyer
(Title)

Heritage Environmental Services, LLC

(Contractor)

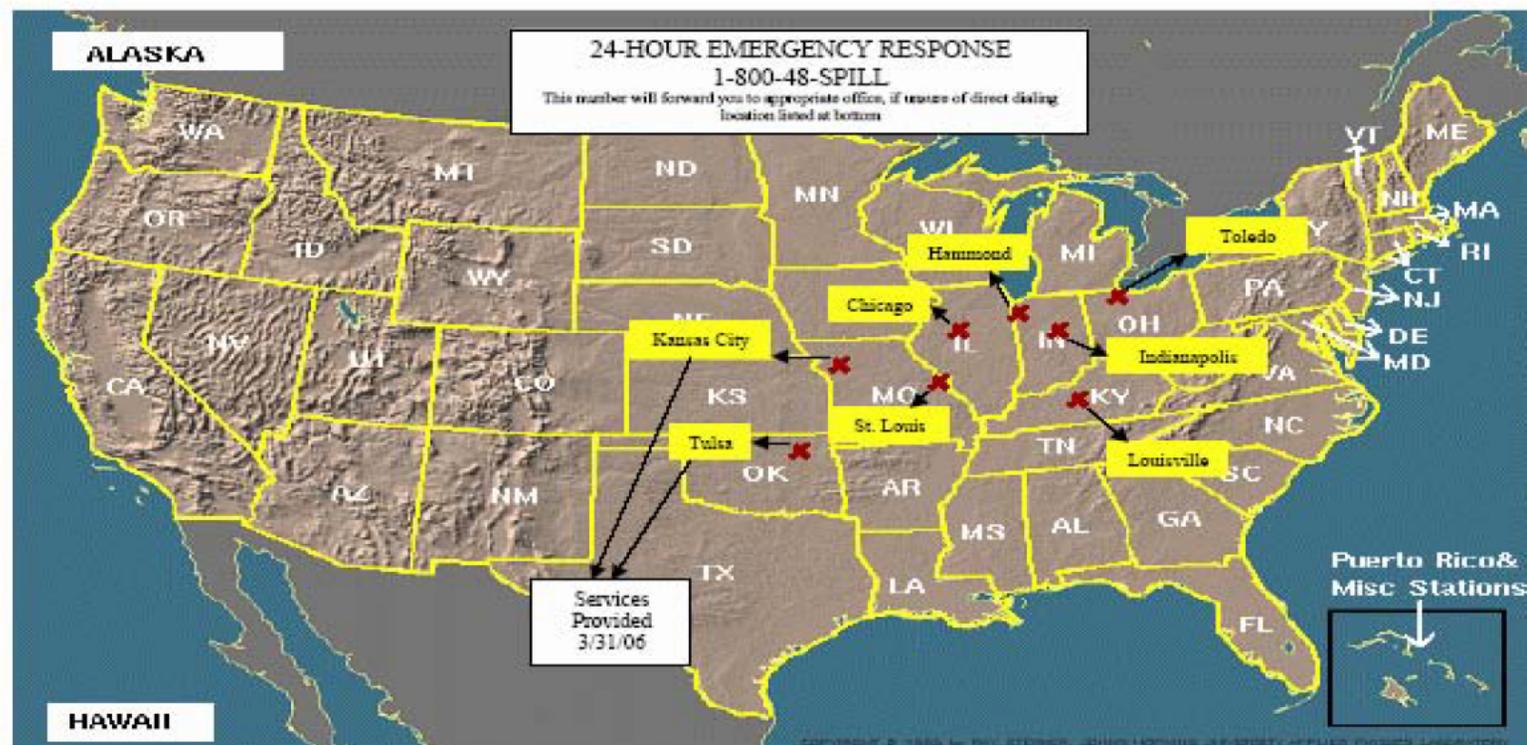
Holly M. Ganage 8-4-04
(Signature) (Date)

Holly M. Ganage
(Printed Name)

Vice President Growth & Development
(Title)

Page 13

(Title)



HAMMOND DIVISION
111 142ND ST.
HAMMOND, IN 46327
(219) 852-1600
FAX (219) 852-1700

INDIANAPOLIS DIVISION
7901 W. MORRIS ST.
INDIANAPOLIS, IN 46231
(317) 243-0911
FAX (317) 486-5085

CHICAGO DIVISION
15330 CANAL BANK RD.
LEMONT, IL 60439
(630) 739-1151
FAX (630) 739-9491

ST. LOUIS DIVISION
1188 PERSHALL RD.
ST. LOUIS, MO 63137
(314) 388-3500
FAX (314) 388-3430

TOLEDO DIVISION
5451 ENTERPRISE BLVD.
TOLEDO, OH 43612
(419) 729-1321
FAX (419) 729-1325

LOUISVILLE DIVISION
4925 HELLER ST.
LOUISVILLE, KY 40218
(502) 473-0638
FAX (502) 459-4988

KANSAS CITY DIVISION
8525 NE 38TH ST.
KANSAS CITY, MO 64161
(816) 453-4321
FAX (816) 453-0180

TULSA DIVISION
1840 N. 105TH E. AVE.
TULSA, OK 74116
(918) 627-2671
FAX (918) 627-2108



2.4.6 ACME Products Company

Master Service Agreement No. 4600007316

MASTER SERVICE AGREEMENT NO. 4600007316

Between

**CONOCOPHILLIPS COMPANY,
CONOCO PIPE LINE COMPANY,
PHILLIPS PIPE LINE COMPANY**

and

ACME PRODUCTS COMPANY

Effective September 10, 2004



Master Service Agreement No. 4500007316

MASTER SERVICE AGREEMENT
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"A"	ORDER
"B"	COMPENSATION
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"D"	POLLUTION/WASTE DISPOSAL AND CLEANUP OF WORKSITE
"E"	HAZARD COMMUNICATION PROGRAM
"F"	DISPUTE RESOLUTION
"G"	COVERAGE OF LOUISIANA WORKERS COMPENSATION LAW
"H"	CONTRACTOR'S STATEMENT OF LIENABLE CLAIMS

Master Service Agreement No. 460007316

26. **DISPUTE RESOLUTION**

The parties agree that they will use the procedures outlined in "Dispute Resolution" (Exhibit "F", attached hereto and made a part hereof), to resolve any dispute which may arise between them under this Agreement; provided, however, that this Article 26 and Exhibit "F" shall not apply to disputes arising under Articles 10, 11, 18, and 19 or to any dispute relating in any manner to indemnity, insurance, or release obligations and shall not be construed to modify or affect the remedies set forth in Articles 8, 9, 14, and 27. It is further provided, notwithstanding the provisions of Exhibit "F", that either party may seek a restraining order, temporary injunction, or other provisional judicial or equitable relief if the party in its sole judgment believes that such action is necessary to avoid irreparable injury or to preserve the status quo. Parties will continue to participate in good faith in the procedures despite any request for provisional relief.

27. **GENERAL PROVISIONS**

- (a) The captions and headings used in this Agreement are intended for convenience only and shall not be used for purposes of construction or interpretation.
- (b) 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.
- (c) It is intended that if any provision of this Agreement is unenforceable for any reason, it shall be adjusted rather than voided, if possible, in order to achieve the intent of the parties. In any event, all other provisions of this Agreement shall be deemed valid, binding, and still enforceable.
- (d) In the event that either party commits any material breach of this Agreement including, without limitation, any breach of any indemnity obligation, in addition to any other remedy that the aggrieved party may have at law or in equity, it shall be entitled to recover all costs, including court costs and attorney's fees, incurred in any proceeding wherein the aggrieved party seeks redress for such breach.
- (e) Neither this Agreement nor any contract hereunder shall be considered an exclusive contract. Company shall have the right to hire others to perform the same or similar work.
- (f) Exhibits "A" through "H" attached hereto are incorporated and made a part of this Agreement. Company reserves the right to revise such exhibits from time to time, which revisions shall be binding as to work performed subsequent to receipt of the revision by Contractor.

28. **SIGNATURES:**

CONOCOPHILLIPS COMPANY
CONOCO PIPE LINE COMPANY
PHILLIPS PIPE LINE COMPANY

ACME PRODUCTS CO.

(Company)
Cary D. Jennings 9/14/04
(Signature) (Date)

(Contractor)
Brian Stanfield 9-13-04
(Signature) (Date)

Cary D. Jennings
(Printed Name)

Brian Stanfield
(Printed Name)

Contract Specialist
(Title)

Exec VP
(Title)

2.4.7 Basin Environmental and Safety Technologies, L.L.C.

90985.0-MSA-PT

USA Downstream Master Service Agreement

Between

ConocoPhillips Company

And

Basin Environmental and Safety Technologies, LLC

Contract Number: 90985.0-MSA-PT

90985.0-MSA-PT

USA DOWNSTREAM MASTER SERVICE AGREEMENT

This Master Services Agreement (Contract Number 90985.0-MSA-PT) (the "Agreement"), effective as of the 2nd day of September, 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 BASIN ENVIRONMENTAL AND

~~SAFETY, TECHNOLOGIES, LLC HAVING OFFICES AT 325 N. FIRELAND, OKLAHOMA CITY, OK 73107, US (HEREINAFTER REFERRED TO AS "CONTRACTOR").~~ *(Signature)*

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.

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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

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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 Order or the operations to which that performance pertains.

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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 Ave.
AB-08-888-04
Bartlesville, OK 74004
Attn: Lynda Beavers
Facsimile No: 918-662-3591
Email: lynda.d.beavers@conocophillips.com

Cc: ConocoPhillips Company
Legal Department
600 North Dairy Ashford
Houston, TX 77079

Attn: Legal Corporate Leverage Services

Contractor:
Basin Environmental & Safety Technologies
325 North Portland Ave.
Oklahoma City, OK 73107

Attn: Craig Felber
Phone No: 405-232-5737
Email: amy.owens@basinenvironmental.com

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.

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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 26, 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: *Lynda Beavers*By: *Lynda Beavers*Title: *Contract Specialist*Date: *11/5/2010*

BASIN ENVIRONMENTAL AND SAFETY

Signature: *Craig Felber*By: *CRAIG FELBER*Title: *OFFICE ADMINISTRATIVE MANAGER*Date: *11-4-10*

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BASIN

ENVIRONMENTAL & SAFETY TECHNOLOGIES

Personnel

Professional Engineer
 Emergency Response Manager
 Certified Industrial Hygienist (CIH)
 Certified Safety Professional (CSP)
 Environmental Scientist
 Project Manager
 EHS Consultant
 Equipment Operator
 Site Safety Officer
 Remediation Supervisor
 Remediation Technician /Driver
 Traffic Control Personnel
 Clerical

Equipment

Tractor
 5000 gallon Transport vac truck (plus driver)
 3200 gallon Bobtail vac truck (plus driver)
 Roll off truck & trailer (plus driver)
 Skidsteer with attachment (sweeper, jackhammer, etc)
 Skidsteer with bucket
 Mini Excavator 50 HP
 Pickup truck 4 wheel drive
 Forklift (5000 lbs)
 ATV 4-Wheeler

Equipment

Emergency response trailer
 Utility/Haul Trailer
 Roll off box rental

Traffic Control

Traffic Control (cones, signs, flashing lights, signal flags)
 (0.25 to 1 mile of lane closure)
 Traffic Wand LED Light
 Individual cones, signs, sign lights, signal flags, etc (each)



BASIN

ENVIRONMENTAL & SAFETY TECHNOLOGIES

Personnel Protective Equipment

Level D Protection
Level C Protection
Level C HEPA filters
Level C Air purifying respirators
Level C PAPR
Level C Mercury/Chlorine filter
w/ PE coated Tyvek (B/C) add
Level B Protection
w/Saranex (B or C) add
Level A Protection
Nomex Coveralls w/ Hood
Respirator full face (APR)
Half-Face Respirator (Organic Mask, Disposable) each
Respirator cartridge (HEPA, Organic Vapor, Acid Gas) per pair
Chest waders
Life jackets
SCBA p/d
Confined space kit
Supplied air line system
Blower fresh air
Harnesses/lifelines
O2/LEL/Toxic Gas Detector
Ph Meter

Absorbent Products / Chemicals

5" Sorbent boom 10 ft. 4/bale
8" Sorbent boom 10 ft. 4/bale
Absorbent pads-oil (18"X18") 100 per bag
Absorbent pads-chemical (18"X18") 100 per bag
Oil booms (8"X96") 4/bale
Chemical booms (8"X96") 4/bale
Colliwasa tubes
Decon shower
Oil Dry (Per Bag)
Oil Gator (Per Bag)
Cell U Sorb (Per Bag)
Floor Gator (Per Bag)
Acid Gator (Per Bag)
Containment boom (18 inch/10 foot)
Gator Wash (55 Gallons)
Gator Wash (5 Gallons)
Nale-It (55 Gallons)
Nale-It (5 Gallons)
Cut-Up (55 Gallons)
Cut-Up (5 Gallons)





BASIN

ENVIRONMENTAL & SAFETY TECHNOLOGIES

Pumps, Hoses, & Tanks

Centrifugal pump-2 in

Diaphragm pump

Barrel pump-disposable

Steam cleaner, trailer mounted

Discharge hose 3" per foot

Discharge hose 2" per foot

Suction hose 4" per foot

Suction hose 3" per foot

Suction hose 2" per foot

3" trash pump p/d

2" trash pump p/d

Other Equipment/Supplies

Generator (65 watts)

Flood lights

Handheld radio (Intrinsically Safe) per radio

Chainsaw

Blower-gas powered

Cutting torch rig

Jon boat

Rev. January 2010



Section 3 – Table of Contents**3.0 Sensitive Area General Response Strategies****3.1 Historical/Archaeological 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 Assessments**

Sec. 3.0 Sensitive Area General Response Strategies

Sec. 3.0.1 Glenpool Area Vulnerability Analysis

This section of the plan includes the Vulnerability Analysis (VA), as defined by DOT CFR Part 194 and EPA CFR Part 112. This VA addresses the potential effects to human health, property and the environment of an oil spill, and has been prepared to discuss vulnerability of the following 14 sensitive areas, which exist within 5 miles on either side of the subject Company pipeline. 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

In order to perform the data analysis required for the VA, the complete route of the Company Pipe Line facility (approximately 1,100 miles) was analyzed for impacts to the 14 sensitive areas listed. Information used for this VA included Company maps of the pipeline routes, USGS Quadrangle Maps, EPA Area Contingency Plans, EPA National Contingency Plan, information from U.S. Fish and Wildlife Service, information from State Wildlife Parks Departments, information from State School Board Offices, and information from State, county, and city governments.

(b) (7)(F)

Residential Areas

There are about 16 residential clusters within the area corridor. Included are named towns or named developments within towns and individual unnamed groups of residences within the area corridor that were not mapped.

Businesses

Numerous business concerns exist within the area corridor.

Businesses and business areas are shown as symbols on the maps along the routing of the pipeline. Because of the large number of businesses in the various metropolitan and urban areas along the pipeline route and lack of up-to-date location, and contact listings for these businesses, businesses are not listed on the Sensitive Area Contact List. It is expected that businesses would receive notification of pipeline spills over public communications media in the same way as metropolitan and urban areas.

Wetlands/Other Sensitive Environments

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

Fish and Wildlife Sensitive Environments

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

Water Resources/Lakes and Streams

There are 4 identifications of water resources, all of which are lakes, within the area corridor.

Endangered Flora and Fauna

Written requests have been filed with the U.S. Fish and Wildlife Service, the Oklahoma Wildlife Conservation Commission, and the Oklahoma Natural Heritage Inventory requesting information on Fish and Wildlife Sensitive Environments. The agency response time allowed is 2 months. Updated information received will be included in future revisions of this document.

Recreational Areas

There are approximately 16 identified recreational areas within the area corridor. These include city parks, golf courses, country clubs, developments associated with lakes, etc.

Transportation Routes (Air, Water and Land)

No specific areas were identified from the maps within the study area.

(b) (7)(F)

Other Areas of Economic Importance

There are about 33 other areas of importance within the area corridor. Included are gravel pits, strip mines, quarries, an Indian Reservation and the Osage Hills Country Club.

Wellhead Protection Area

There is 1 wellhead protection area within the study area.

Sec. 3.0.2 Glenpool South Terminal Vulnerability Analysis

This facility is a product terminal located approximately one mile north of Glenpool, Oklahoma, in the SW/4 SE/4 of Section 2, Township 17 North, Range 12 East, Tulsa County, Oklahoma. The facility has secondary containment for its tankage. In case of a discharge, it would drain through Explorer Pipeline property into Coal Creek. Thence following the meanders of Coal Creek north northeasterly approximately 3.8 miles to the intersection of Polecat Creek. Thence following the meanders of Polecat Creek northerly and then southeasterly approximately 4.3 miles to the intersection of the west bank of the Arkansas River. The Arkansas River flow is controlled by the discharge rate from Keystone Lake Dam located approximately 25 miles upstream of the mouth of Polecat Creek at the Arkansas River.

(b) (7)(F)

Residential Areas

Numerous residents and residential areas to surrounding towns and cities do exist throughout the study area, but are outside the normal flood plain.

Businesses

Numerous businesses exist throughout the study area but are outside the normal flood plain.

Businesses and business areas are shown as symbols on the maps along the routing of the pipeline. Because of the large number of businesses in the various metropolitan and urban areas along the pipeline route and lack of up-to-date location and contact listings for these businesses, businesses are not listed on the Sensitive Area Contact List. It is expected that businesses would receive notification of pipeline spills over public communications media in the same way as metropolitan and urban areas.

Wetlands or Other Sensitive Environments

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

Fish and Wildlife

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

Water Resources/Lakes and Streams

Coal Creek, Polecat Creek, and the Arkansas River would be directly affected, but no downstream lakes were found within the study area.

Endangered Flora and Fauna

See information above.

Recreational Areas

Parks do exist along the banks of the Arkansas River within the study area, but are outside the normal flood plain.

Transportation Routes (Air, Land and Water)

Transportation facilities downstream, which would be slightly effected, are U.S. Highway 64 and State Highway 72. Also, Jenks city streets and county roads along Coal and Polecat Creeks. Adjacent to the Arkansas River and outside the normal flood plain would be the city streets of Tulsa and Bixby, Oklahoma. Maps indicate a Missouri Pacific Railroad crossing at Polecat Creek near the Arkansas River, which then parallels the river throughout the study area.

(b) (7)(F)



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 wellhead protection areas were identified within the study area.

Summary

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

- Adjacent petroleum facility (Explorer Pipe Line facilities/tankage)
- Residential areas
- Wetlands
- Threatened and endangered wildlife species
- Power generation facilities
- Parks
- Wastewater treatment plants
- Populated community areas adjacent to the creeks and the Arkansas River

Information Sources

- USGS Maps as follows:
- Tulsa, Oklahoma, 1:100,000, 1985
- Muskogee, Oklahoma, 1:100,000, 1978
- Sapulpa South, Oklahoma, 1:24,000, 1983
- Sapulpa North, Oklahoma, 1:24,000, 1983
- Bixby, Oklahoma, 1:24,000, 1993
- Jenks, Oklahoma, 1:24,000, 1982

Sec. 3.0.3 Oklahoma City Area Vulnerability Analysis

This section of the plan includes the Vulnerability Analysis (VA), as defined by DOT CFR Part 194 and EPA CFR Part 112. This VA addresses the potential effects to human health, property and the environment of an oil spill, and has been prepared to discuss vulnerability of the following 14 sensitive areas, which exist within 5 miles on either side of the subject Company pipeline. 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

In order to perform the data analysis required for the VA, the complete route of the Company Pipe Line facility (approximately 1,100 miles) was analyzed for impacts to the 14 sensitive areas listed. Information used for this VA included Company maps of the pipeline routes, USGS Quadrangle Maps, EPA Area Contingency Plans, EPA National Contingency Plan, information from U.S. Fish and Wildlife Service, information from State Wildlife Parks Departments, information from State School Board Offices, and information from State, county, and city governments.

(b) (7)(F)

Residential Areas

There are about 90 residential clusters within the area corridor. Included are named towns or named developments within towns and individual unnamed groups of residences within the area corridor that were not mapped.

Businesses

Numerous business and industrial concerns exist in the terminal area.

Businesses and business areas are shown as symbols on the maps along the routing of the pipeline. Because of the large number of businesses in the various metropolitan and urban areas along the pipeline route and lack of up-to-date location, and contact listings for these businesses, businesses are not listed on the Sensitive Area Contact List. It is expected that businesses would receive notification of pipeline spills over public communications media in the same way as metropolitan and urban areas.

Wetlands/Other Sensitive Environments

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

Fish and Wildlife Sensitive Environments

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

Water Resources/Lakes and Streams

There are 21 identifications of water resources, specifically lakes, within the area corridor. Additionally, there are water wells, water tanks, the Waurika Aqueduct, and a river gauging station.

Endangered Flora and Fauna

Written requests have been filed with the U.S. Fish and Wildlife Service, the Oklahoma Wildlife Conservation Commission, and the Oklahoma Natural Heritage Inventory requesting information on Fish and Wildlife Sensitive Environments. The agency response time allowed is 2 months. Updated information received will be included in future revisions of this document.

Recreational Areas

There are approximately 21 identified recreational areas within the area corridor. These include city parks, golf courses, country clubs, developments associated with lakes, etc.

Transportation Routes (Air, Water and Land)

No specific areas were identified from the maps within the study area.



(b) (7)(F)

Other Areas of Economic Importance

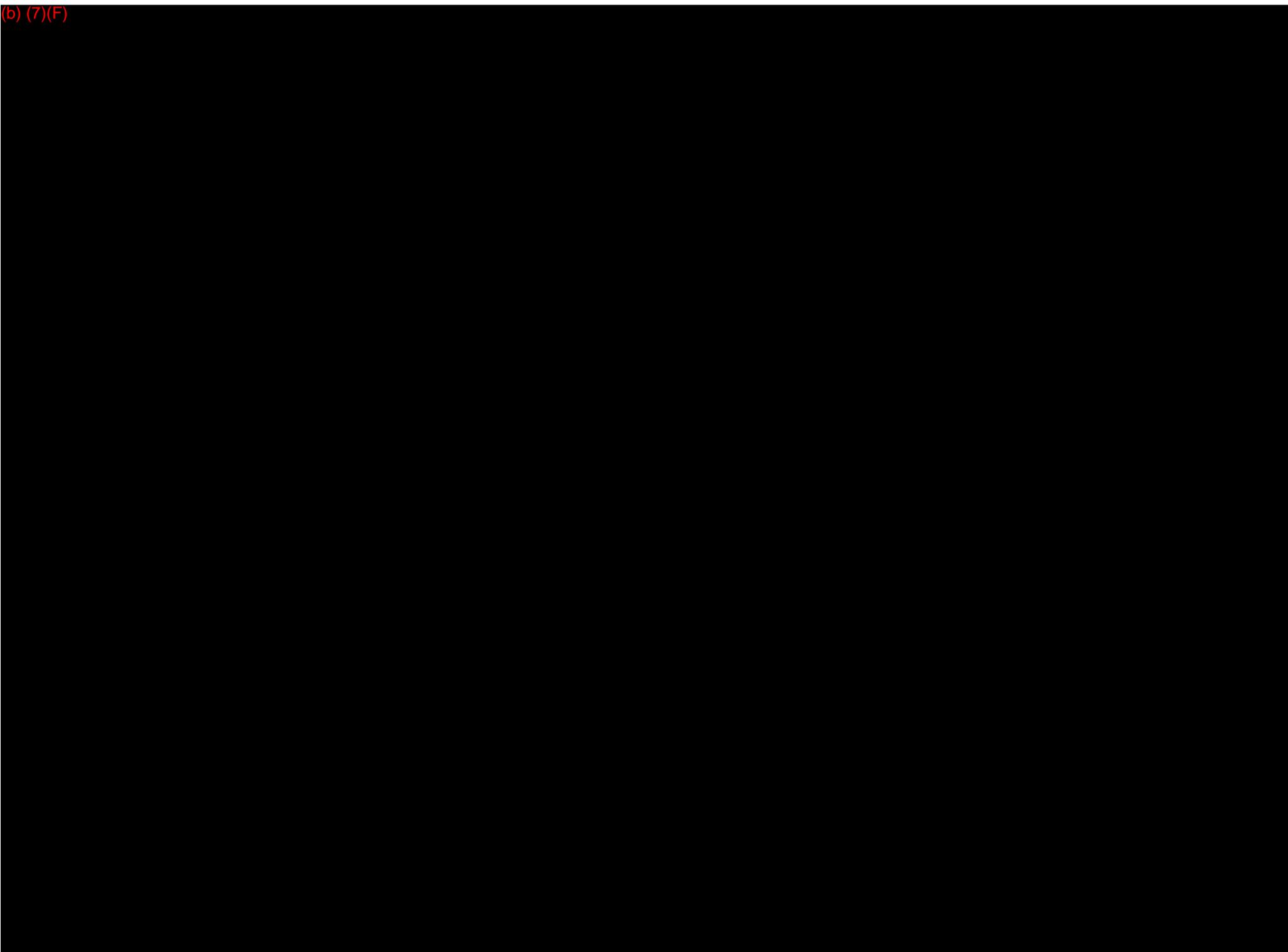
There are about 50 other areas of importance within the area corridor. Included are oil tanks, sand and gravel pits, and a gas processing plant.

Wellhead Protection Area

There are 4 wellhead protection areas within the study area.



(b) (7)(F)



Sec. 3.0.4 Ponca City Area Vulnerability Analysis

This section of the plan includes the Vulnerability Analysis (VA), as defined by DOT CFR Part 194 and EPA CFR Part 112. This VA addresses the potential effects to human health, property and the environment of an oil spill, and has been prepared to discuss vulnerability of the following 14 sensitive areas, which exist within 5 miles on either side of the subject Company pipeline. 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

In order to perform the data analysis required for the VA, the complete route of the Company Pipe Line facility (approximately 1,100 miles) was analyzed for impacts to the 14 sensitive areas listed. Information used for this VA included Company maps of the pipeline routes, USGS Quadrangle Maps, EPA Area Contingency Plans, EPA National Contingency Plan, information from U.S. Fish and Wildlife Service, information from State Wildlife Parks Departments, information from State School Board Offices, and information from State, county, and city governments.

(b) (7)(F)

Residential Areas

There are about 5 residential clusters within the response area corridor. Additionally, there are numerous individual residences within the response area corridor that were not mapped.

Businesses

No businesses were recorded on maps of the response area corridor.

Businesses and business areas are shown as symbols on the maps along the routing of the pipeline. Because of the large number of businesses in the various metropolitan and urban areas along the pipeline route and lack of up-to-date location, and contact listings for these businesses, businesses are not listed on the sensitive area contact list. It is expected that businesses would receive notification of pipeline spills over public communications media in the same way as metropolitan and urban areas.

Wetlands/Other Sensitive Environments

There are numerous wetlands, as defined in 40 CFR Part 230.3, in this response area. Wetlands inventory information will be kept by facility managers in each response area.

Fish and Wildlife Sensitive Environments

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

Water Resources/Lakes and Streams

There are 73 identifications of water resources, all of which are lakes, within the response area corridor. Included are 40 lakes and ponds, 30 rivers and streams and 3 indeterminate listings.

Endangered Flora and Fauna

Written requests have been filed with the U.S. Fish and Wildlife Service, the Oklahoma Wildlife Conservation Commission, and the Oklahoma Natural Heritage Inventory requesting information on Fish and Wildlife Sensitive Environments. The agency response time allowed is 2 months. Updated information received will be included in future revisions of this document.

Recreational Areas

There are approximately 7 recreational areas within the response area corridor including 1 golf course and 6 parks.

Transportation Routes (Air, Water and Land)

No specific air or water based transportation areas were identified from the maps within the study area.

Land based transportation directly effected would be as follows:

- Interstate 35
- AT & SF Railroad
- U. S. Highway 77

Utilities

No city waste treatment systems or major utilities were noted on the maps.

Other Areas of Economic Importance

There is one (1) tree orchard within the response area corridor.

Wellhead Protection Area

There is not a wellhead protection area within the study area.



(b) (7)(F)



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 significant 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 / archeological 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 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 be easier in clay soils than in sandy/gravelly soils.

Selection of storage and treatment locations will depend on patterns of public use of the site, proximity of the public using the recreational site, and approvals and/or preferences of the responsible authorities. If space is available and if the cognizant agency permits, the response contractor may construct the water storage and treatment system in or adjacent to the recreational site, near the site of the spill, at a safe distance from any feature subject to human occupation or usage. If space is not available for practical reasons, or if onsite treatment would be a continuing hazard to the public safety and health, the contained water may have to be transported offsite for treatment or disposal.

Once the contaminated waters have been stored, treatment options can be explored. Possible treatment options include steam or air stripping, oil/water separation, carbon adsorption, or other methodologies or combinations of methodologies.

4. Cleaning of Affected Structures

Man-made structures can be cleaned by traditional methods that include wiping, hot water, low or high-pressure washdown, and use of surfactants, emulsifiers or other agents. Swimming pools, playground equipment, pavilions and similar structures will receive special attention during cleaning. Some wooden structures that cannot be adequately cleaned may have to be removed and/or replaced.

Cleaning methods and materials to be used at a spill will be discussed with the appropriate authorities and used only with their concurrence and at their direction.

Washdown water and other liquids from cleaning activities should be contained by the boom or ditch/berm system, then collected and treated with the contaminated ground and surface waters.

5. Solids Handling and Removal

Product-laden soils will be removed to the satisfaction of, and at the direction of, the appropriate authorities. It is expected that product-contaminated soils in playgrounds and other areas of frequent and intense human use at recreational sites will be excavated more completely than at spill sites in more remote areas. Heavy equipment, such as tracked excavators and dump trucks, may be used wherever their use is not prohibited by the cognizant authority, or is impractical due to access restrictions.

Sorbent materials and other solid residue will be placed in trash bags and removed from the site for disposition. The response contractor will take particular care to remove all his site-generated wastes from the area, and will conduct a final walking inspection of the entire area with the Company Incident Commander to confirm that this has been done prior to departure.

Contaminated soils and other solids will be removed from the site. Solids will be removed by trucks where roads are available, or by barges where navigable waterways are reasonably close and the volume of contaminated soils justifies their use.

Site Restoration

1. Sampling and Analysis to Verify Cleanup

Sampling and analysis of the remaining soils and water will be coordinated with local, State and federal agencies to verify that the cleanup meets their requirements.

2. Rebuild/Reconstruct Affected Structures/Areas

Recreational site restoration activities will vary considerably from site to site and may entail major efforts by a combination of Company and multiple regulatory and municipal, county or state agencies. As early as possible, the Company should determine the feasibility and practicality of restoration in consultation with the appropriate authorities so that detailed, deliberate plans, specifications, and costs can be prepared.

3. Final Report

The response contractor will prepare a Final Report for Company, summarizing the actions taken during the response activities, with particular attention to restoration and verification of cleanup.

Sec. 3.6 Water Supply Intakes

Environmental Response Scenario

The following scenario provides probable, effective response actions in the event of a spill to a water supply intake. Depending on the site-specific conditions, Company may choose to respond in a manner different from that described below. The manpower, equipment, and recovery rates are all dependent upon site-specific conditions and Company will respond in an appropriate manner.

Description of the Affected Area

Water supply intakes generally include lakes, reservoirs, rivers, streams, springs, and similar bodies of water near the inhabited areas that are served by the intake.

1. Public Health and Safety Concerns

The most serious impact on public health and safety is contamination of the drinking water, followed by danger of fire or explosion, and inhalation of toxic vapors. The danger zone for the public will generally be downwind of the point of discharge and the resulting plume.

2. Project Personnel Safety Concerns

The greatest safety concern for project personnel is fire and explosion. The response contractor's team personnel will conduct continuous air monitoring for flammable vapors with a combustible gas meter and will suspend operations when readings exceed 10 percent of the lower explosive limit (LEL). Response contractor's team personnel will use non-sparking equipment whenever monitoring indicates explosion/fire potential. Smoking paraphernalia, including lighters, will not be permitted in the work areas under any circumstances.

Other safety concerns for project personnel, Company representatives and the regulatory agencies' representatives are inhalation of hydrocarbon vapors (specifically benzene vapors), skin contact with liquid hydrocarbons, heat stress and cold exposure. Contact with, or bites from, poisonous plants, insects, snakes, rodents and large wildlife will be a concern in some remote parks.

Air monitoring analysis will dictate the level of PPE utilized by workers in the exclusion zone. The support area, including break and eating areas, will be located in a safe area and upwind of the exclusion zone wherever possible.

3. Property and Environmental Impact

Property impact of a spill on a Water Supply Intake will depend on its proximity to inhabited or improved property and whether the water purification equipment is contaminated by the spill. Major Water Supply Intakes are frequently developed as recreational areas and have considerable commercial value.

Environmental impact on vegetation and wildlife in a Water Supply Intake can be severe if not removed immediately, but this will be secondary to the potential affects on the public health and welfare.

4. Other Impacts

The intake may be rendered unfit as a source of public drinking water for a prolonged time. It may become necessary to locate, and activate or enlarge alternate sources of drinking water. These may be artisan wells or surface water sources such as lakes or rivers not ordinarily used for drinking water. Purification facilities may be required to treat the water from such sources, to make it suitable for public use.

5. Potential Logistical Problems

Water Supply Intakes are typically close to the population centers that they serve. Major transportation networks and utility services are usually available in the general vicinity. Roads to such areas are generally reliable, but public and/or private roads may need to be closed for the duration of the cleanup.

Transportation of personnel, equipment and materials within the area may require specialized vehicles such as UTVs, workboats, swamp buggies, airboats or barges. The response contractor should possess, or have ready access to, the minimum required equipment.

Temporary utilities, including potable water, fuel and electricity may be available; if not, the response contractor's team must bring them in.

Initial Response Strategies

1. The Company Incident Commander will

- Initiate evacuation of the public from the affected areas and from the area toward which the plume is moving,
- Alert appropriate health authorities to warn the public of possibly tainted water supply, and initiate analysis of the water for potability.
- Initiate appropriate actions to isolate the pipeline or any other source of the spill; i.e., turn off the nearest block valves and shut down the flow of product.
- Order immediate deployment of the response contractor's oil containment boom (minimum 200 ft long), complete with anchors,
- Notify the response contractor's program manager that a spill is in progress and
- Notify the appropriate Federal, State, and local regulatory agencies. Local, State and Federal agency notification is listed in this FRP.
- Initiate measures to locate or develop temporary alternate water supply if the spill or the response activities will render the intake unusable. The temporary supply will be provided until the intake is judged by the appropriate health agency to be acceptable.

2. The response contractor's program manager should dispatch a response supervisor to the location of the spill by the fastest means practical. The response contractor's supervisor should be equipped with a one-day supply of PPE to include supplied air, and a radio or mobile telephone. The response contractor's supervisor should contact the Company Incident Commander immediately on arrival at the site and jointly assess the magnitude of the problem, noting any special considerations that may affect selection of resources required to complete the response action.

3. The response contractor's program manager should mobilize the Tier 1 response contractor's team while the response contractor's supervisor is en route to the site. The Tier 1 response contractor's team should be capable of removing 1,500 BBL of product per day, should be en route within 2 hours of notification, and should arrive on-site within 12 hours of notification. This response team may consist of:
 - 8 HAZWOPER-trained Personnel (including a supervisors and a site safety officer),
 - 2 pick-up trucks,
 - 1 one-ton box truck/associated supplies,
 - 2 vacuum trucks,
 - 1 van,
 - 2 work boats,
 - 2,000 ft of containment boom,
 - one foam trailer with applicator and foam to cover 90,000 square feet,
 - a seven (7)-day supply of PPE,
 - 12 sets of air bottles,
 - lights,
 - 2 skimmers,
 - 1 generator,
 - 1 air compressor,
 - PID/LEL,
 - detector tube specific for benzene (not affected by other hydrocarbons)
 - 4 radios, and
 - expendable supplies (absorbent booms & pads, PPE)

The Tier 1 team should immediately report to the response contractor's supervisor for a briefing on the response action and a tailgate health and safety meeting. The response contractor's supervisor should direct the team's activities from this point on, including setting up laydown areas and support areas. One of the first tasks of the Tier 1 response contractor's team should be to double, and if possible, triple the containment boom system to minimize the possibility of boom failure or product bypassing the boom system and/or entering the intake. It may be necessary for the Tier 1 response contractor's team to work extended hours, using lights after nightfall.

4. The response contractor's program manager should begin mobilizing the Tier 2 and Tier 3 response contractor's teams once the Tier 1 team is enroute to the site.

The Tier 2 response contractor's team should be capable of removing 3,000 BBL per day, should be on-site within 36 hours of notification, and may consist of the Tier 1 response contractor's team, plus:

- 12 HAZWOPER-trained Personnel,
- 4 work boats,
- 4,000 feet of containment boom,
- 2 skimmers,
- 2 vans,
- 2 pick-up trucks,
- 2 vacuum trucks,
- 1 skid unit (1,500 gallon capacity),
- 8 radios, and
- 24 air bottles

The Tier 1 response contractor's team should work 24 hours per day, in shifts.

The Tier 3 response contractor's team should be capable of removing 6,000 BBL per day, should be on-site within 60 hours of notification, and may consist of the Tier 1 and Tier 2 response contractor's teams, plus:

- 23 HAZWOPER-trained Personnel,
- 2 pick-up trucks,
- 4 vans,
- 1 supply trailer,
- 4 work boats,
- 6,000 feet of containment boom,
- 3 vacuum trucks,
- 3 skimmers,
- 12 radios, and
- 48 air bottles

5. The first task of the Tier 1 response contractor's team should be to minimize the spread of the product on the water and ground surface in order to protect the public and environmentally sensitive areas. The team should place a containment boom as close as possible to the point of origin of the spill to minimize the area of most severe contamination. The placement of the containment boom will also be based on personnel safety considerations for the personnel setting up the containment boom. The team may then place one or more secondary booms farther away, in the path(s) of the plumes deemed by the Company Incident Commander and the response contractor's supervisor to be the most dangerous to the public or to the environment.

6. Health and Safety Plan

Initial health and safety response actions will be in accordance with the standard operating procedure. The response contractor's Site Safety Officer will complete a Site-Specific Health and Safety Plan after the initial hazard assessment is conducted.

7. Implementation of Air Monitoring Program

Company's Incident Commander will assign a Site Safety Officer (SSO) who will begin monitoring activities (using a PID, an LEL meter and benzene-specific detection tubes) in the area of the spill immediately on arrival, to assess the danger from fire and explosion in the work area, determine potential exposure to benzene, delineate the exclusion zone, and establish the support zone. Instruments, frequency of readings, records and responses to action levels will conform to the Health and Safety Plan. The SSO will pay particular attention to LEL readings.

As soon as possible after the SSO completes his initial air monitoring for the spill site hazard assessment and delineates the work zones, he/she will begin a perimeter air-monitoring program to confirm that the exclusion zone is properly sized and to document potential offsite migration of vapors that could impact the unprotected public or wildlife.

8. Contingency Planning

The Company Incident Commander, the SSO and the response contractor's supervisor will identify evacuation routes of egress and procedures, safe distances and places of refuge, and emergency alerting procedures to be used in the event of an uncontrollable situation such as fire or explosion.

9. Assessment of Affected Area(s)

The Company Incident Commander and the response contractor's supervisor will jointly review the maps provided and inspect the affected area(s) and assess:

- The nature of the spilled liquid,
- Source of the spill,
- Direction(s) of spill migration,
- Relative position of the intake,
- Apparent or otherwise known subsurface geophysical feature that might impact the work; i.e., subsurface sand layers, water table elevation,
- Overhead and buried utility lines, and pipelines, etc.,
- Nearby population, property or environmental features that might be affected by the contained spill, or by an uncontained spill.

The Tiers 1, 2, and 3 response contractor's team resources in personnel, equipment and material will be assessed to determine if they are adequate to effectively perform the work.

If the Company Incident Commander determines that additional resources are required, the response contractor's supervisor will request additional resources for the Tier 2 and 3 response contractor's teams from the response contractor's program manager. Additional equipment may include backhoes, dump trucks, watercraft, generators, light sets, bulldozers and front-end loaders. Equipment operators, laborers, and engineers may be mobilized as necessary. Additional material may include more spill booms, absorbent materials, foam and imported clay for berms.

10. Delineation of Exclusion and Support Zones

The Site Safety Officer (SSO) will mark the limits of the exclusion zone with red plastic tape, using existing trees to support the tape where possible. The support zone will be marked with green plastic tape if in the SSO's judgment such marking is necessary to avoid confusion with a contaminated area. If the exclusion zone cannot be physically marked, the SSO will annotate a site map or layout sketch and brief all personnel on the zone layout prior to site entry.

11. Protection of Downstream Sensitive Areas

Company's Incident Commander, the response contractor's supervisor and SSO will inspect the boom system to ensure that it is effectively protecting the public and environmentally sensitive areas downstream of the spill. The response contractor's supervisor will direct placement of additional booms or relocation of existing booms if ongoing measures are judged to be ineffective.

Ongoing Response

1. Recovering Wildlife for Transfer to Treatment Facilities

The response contractor will cooperate with Company and local wildlife assistance agencies to recover birds, fish, reptiles and mammals affected by the spill, for transportation by the wildlife agencies to treatment facilities.

2. Recovery and Transfer of Free Product

Construction of the free product temporary storage area will start after the containment booms are in place and judged effective in limiting the spread of the plume. The storage will consist of frac tanks or rubber bladders. The tanks or bladders will be surrounded by a berm built up from on-site materials or imported clay.

The response contractor's team will recover free product with vacuum trucks, sorbent booms and pads, oil skimmers and vacuum pumps.

3. Install Siphon Dams, Etc.

The response contractor's team will construct a siphon dam to contain the spilled product if the contaminated water is flowing, and the water is shallow enough for this to be practical; i.e., if the water depth is less than 10 feet. A siphon dam is built of earth with steel or plastic pipes embedded through it at a vertical angle such that the lighter, floating product is trapped behind the dam while the water below it is permitted to flow through the pipes.

4. Debris Removal

Debris will consist of steel, concrete, timber and vegetation contaminated by the spilled product, plus product-soaked sorbent materials and trash generated by the response contractor's team. Timber debris may result from demolition of docks, piers and similar marina structures contaminated too badly for decontamination to be practical

Company will remove and dispose of debris or may direct the response contractor to do so. Ultimate disposal may depend on the degree of contamination and is subject to approval by the regulating agencies.

Typically, steel and concrete will be transported to a landfill. Timber and vegetation will be either landfilled or incinerated off-site. The regulatory agencies may permit on-site burning of timber and vegetation under some circumstances.

5. Stabilize Damaged or Affected Structures

The response contractor will construct temporary bracing and shoring as necessary to prevent collapse of structures and foundations that might impede or endanger the response work. This may include timber shoring as temporary replacements for sleepers under a damaged pipeline section.

Company will stabilize damaged major pipeline bridges and pipeline river crossings, and public and private marine structures, if needed.

6. Initial Response and Draft Work Plan

The response contractor will prepare a draft work plan and submit it to Company. The work plan will include:

- A summary of initial response actions and results,
- Subsequent planned activities,
- Water and soil removal and treatment and/or disposal,
- Air monitoring program,
- Sampling and Analysis Plan,
- Restoration and repairs, and
- A schedule for the work.

7. Debriefing/Dissemination of Information and Data

The Company Incident Commander will interface with the regulatory agencies and news media. The response contractor will not disseminate any information or data without approval of the Company Incident Commander. The response contractor may furnish personnel to assist the Company Incident Commander in debriefing.

8. Documentation of Cleanup Efforts and Progress

The response contractor will prepare and maintain records, including photos and/or video, documenting the response. Records and documents will include the supervisor's daily notes, personnel time sheets, equipment usage logs, material delivery tickets, daily air monitoring logs, and soil and water analysis reports.

The response contractor's program manager will submit to the Company Incident Commander a report summarizing the accomplishments of the preceding week, the cost status and the response activity schedule.

9. Public Relations/Agency Liaison

The Company Incident Commander will provide all direct contact with the news media and with regulatory agencies.

Cleanup Strategies for Water Supply Intakes

1. Access to, at and on Water Supply Intakes

Access to the site will probably be by road or navigable waterway, subject to approval and oversight by the cognizant authority. Personnel and equipment may be mobilized by truck or boat/barge. Once the floating equipment reaches the water supply intake, the booms can be deployed and moved by boat. Personnel can be landed on the shoreline as required to anchor containment booms, clean shoreside structures and excavate small volumes of contaminated soil. Tracked or wheeled heavy equipment may be used along the shoreline for major excavation where the shore can be approached from the landward side.

The response contractor will construct temporary roads, staging and laydown areas in locations approved by the appropriate authorities responsible for the intake, taking into consideration the need to avoid interfering with the operation of the intake wherever possible.

Where navigable waterways are convenient to the site and the cognizant authorities approve the use of waterborne equipment, the response contractor may use workboats and/or barges to mobilize the response equipment to the site. Equipment sizes may be limited by the capacity of available boats and barges. The response contractor may use existing boat landings/docks or construct a temporary landing to tie up the watercraft and offload the equipment.

Roads, staging areas, and watercraft landings will be restored to their pre-spill conditions as described in SITE RESTORATION below.

2. Protection of Water Supply Intakes

Protection of the water supply intake from contamination by the spilled product is the crucial aspect of this scenario.

Once human health and safety concerns have been addressed, priority will be given to protecting the intake from contamination. Whenever the release is waterborne, booms will be typically deployed as the isolating/protecting mechanism. Boats will probably be used to deploy the booms. The cognizant authority, the Company Incident Commander and the first responder should identify potential boat launch sites and communicate this to the response crew prior to their arrival.

If the release is overland, then priority should be given to preventing the spilled product from reaching the water body. Containment of an overland spill is typically done with ditches and berms. With the approval of and at the direction of the cognizant authorities, the response contractor may dig ditches and build berms downslope of the spill site to stop the overland flow of the spilled product. In some cases it may be possible to use this ditch/berm system to divert the product to a collection point downslope of the spill. If the soil dug from the ditches is clay, it may be used to build the berms. Sandy or gravelly soil does not make good barrier berm material. If importing clay from offsite is impractical and no clay is available onsite, the response contractor may have to use sorbent materials, i.e., sorbent booms and pads, to construct the berm.

3. Recovery of Product from Water and Treatment of Contaminated Water

Typically, product is recovered from surface water like a water supply intake by a combination of mechanical skimming, vacuum recovery, and manual application of sorbent materials. Temporary storage of recovered product may be accomplished by the use of tank trailers, small barges or other containers. All recovery and storage plans, techniques, equipment and materials will be subject to the approval and direction of the cognizant authorities.

Prolonged storage of contaminated water in close proximity to the intake may be inadvisable due to the continued danger of leaks from the tanks and pipefittings. If the cognizant authorities concur, the storage tanks or barges may be moved offsite as soon as practical to reduce this hazard. The Company Incident Commander or the first responder will have to assess the situation quickly and communicate with the response crew in order to ensure that sufficient quantities of the correct storage and transfer equipment are deployed.

Once the contaminated waters have been stored, treatment options can be explored. Although onsite storage and treatment is generally preferred by regulatory agencies, offsite water treatment should be considered as an alternative in order to remove the hazard of recontaminating the water body. Possible treatment options include steam or air stripping, oil/water separation, carbon adsorption, or other methodologies or combinations of methodologies.

4. Cleaning of Affected Structures

Traditional methods of cleaning structures affected by released product include wiping, hot water, low or high-pressure washdown, and/or the use of surfactants, emulsifiers or other agents. Because improper or misapplied materials and procedures may do more harm than good, and because of the potential for irrecoverable damage to the intake structure and the water purification process system downstream of it, the method of choice for cleaning an intake structure contaminated with product will require the approval and direction of the cognizant authority. Alternative methods, including the use of detergents or emulsifiers, will be discussed with the appropriate authorities and used only with their concurrence and at their direction.

5. Solids Handling and Removal

Product-laden soils on the shore of the water supply body will be removed to the satisfaction of, and at the direction of, the appropriate authorities. Heavy equipment, such as tracked excavators and dump trucks, will be used wherever their use is not prohibited by the cognizant authority or impractical due to access restrictions.

Sorbent materials and other solid residue will be placed in trash bags and removed from the site for disposition. The response contractor will take particular care to remove all his site-generated wastes from the area, and will conduct a final walking inspection of the entire area with the Company Incident Commander to confirm that this has been done prior to departure.

Contaminated soils and other solids will be removed from the site as approved by and at the direction of the cognizant authority. Trucks may remove solids where roads are available. Barges may be used for removal of large volumes of contaminated solids where navigable waterways connect to the water supply body, provided caution is exercised to avoid recontamination by spillage.

Site Restoration

1. Sampling and Analysis to Verify Cleanup

Sampling and analysis of the remaining soils and water will be coordinated with local, State and federal agencies to verify that the cleanup meets their requirements. This effort may be prolonged in order to ensure that the public is not endangered by residual spill-related contaminants in the drinking water supply.

2. Rebuild/Reconstruct Affected Structures/Areas

Restoration requirements will vary considerably from site to site. As early as possible, the Company should determine the feasibility and practicality of restoration in consultation with the appropriate authorities so that detailed, deliberate plans, specifications, and costs can be prepared.

3. Final Report

The response contractor will prepare a Final Report for Company, summarizing the actions taken during the response activities, with particular attention to restoration and verification of cleanup.

Sec. 3.7 Wetlands

Environmental Response Scenario

The following scenario provides probable, effective response actions in the event of a spill to wetlands. Depending on the site-specific conditions, Company may choose to respond in a manner different from that described below. The manpower, equipment, and recovery rates are all dependent upon site-specific conditions and Company will respond in an appropriate manner.

Description of the Affected Area

Wetlands are described in 40 CFR 230.3(t) as "...those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas" Wetlands are frequently, but not always, remote from human habitation, and are generally undeveloped. Wetlands are not always identified and marked as such.

1. Public Health and Safety Concerns

Most major wetlands are remote from human habitation, where a spill is unlikely to have a direct effect on public safety and health. However, some small wetlands may be found in or near metropolitan areas, where public safety and health will be a major and immediate concern, primarily due to danger of fire or explosion, or due to inhalation of toxic vapors. The danger zone for the public will generally be downwind of the point of discharge and the resulting plume.

2. Project Personnel Safety Concerns

The greatest safety concern for project personnel is fire and explosion. The response team personnel will conduct continuous air monitoring for flammable vapors with a combustible gas meter and will suspend operations when readings exceed 10 percent of the lower explosive limit (LEL). Response team personnel will use non-sparking equipment whenever monitoring indicates explosion/fire potential. Smoking paraphernalia, including lighters, will not be permitted in the work areas under any circumstances.

Other safety concerns for project personnel, Company representatives and the regulatory agencies' representatives are inhalation of hydrocarbon vapors (specifically benzene vapors), skin contact with liquid hydrocarbons, heat stress and cold exposure, and contact with, or bites from, poisonous plants, insects, snakes, rodents and large wildlife indigenous to the wetlands.

Air monitoring analysis will dictate the level of PPE utilized by workers in the exclusion zone. The support area, including break and eating areas, will be located in a safe area, and upwind of the exclusion zone wherever possible.

3. Property and Environmental Impact

Property impact of a spill on wetlands will depend on its proximity to inhabited or improved property. Major wetlands are generally undeveloped and have little or no commercial value; a spill is expected to have minimal property impact.

Environmental impact on wetlands can be severe. Petroleum hydrocarbons may have an adverse impact on most forms of plant and animal life, and can destroy the exposed portion of wetlands. Wetlands perform a valuable filtering action for the waters that pass through them, removing solids and organic materials. Wetlands also provide a habitat for wildlife and are a source of oxygen for the atmosphere.

4. Potential Logistical Problems

Wetlands are typically remote from major transportation networks and utility services. Roads into and through such areas may be seasonal, intermittent, and should be considered generally unreliable. There may be insufficient solid ground on which to set up support areas, lay-down areas, etc.

Transportation of personnel, equipment and materials into and out of the area may require specialized vehicles such as UTVs, swamp buggies, airboats or barges. The response contractor should possess, or have ready access to, the minimum required equipment.

Temporary utilities, including potable water, fuel and electricity will probably be absent and must be brought in by the response team.

Initial Response Strategies

1. The Company Incident Commander will

- Initiate evacuation of the public from the affected areas and from the area in which the plume is moving,
- Initiate appropriate actions to isolate the pipeline or any other source of the spill; i.e., turn off the nearest block valves and shut down the flow of product.
- Order immediate deployment of the response contractor's oil containment boom (minimum 200 ft long), complete with anchors,
- Notify the response contractor's program manager that a spill is in progress and
- Notify the appropriate Federal, State, and local regulatory agencies. A local, State and Federal agency notification is listed in this FRP.

2. The response contractor's program manager should dispatch a response supervisor to the location of the spill by the fastest means practical. The response contractor's supervisor should be equipped with a one-day supply of PPE to include supplied air, and a radio or mobile telephone. The response contractor's supervisor should contact the Company Incident Commander immediately on arrival at the site and jointly assess the magnitude of the problem, noting any special considerations that may affect selection of resources required to complete the response action.

3. The response contractor's program manager should mobilize the Tier 1 response team while the response contractor's supervisor is en route to the site. The Tier 1 response team should be capable of removing 1,500 BBL of product per day, should be enroute within 2 hours of notification, and should arrive on-site within 12 hours of notification. This response team may consist of:

- 8 HAZWOPER-trained personnel (including a supervisors and a site safety officer),
- 2 pick-up trucks,
- 1 one-ton box truck/associated supplies,
- 2 vacuum trucks,
- 1 van,
- 2 work boats,
- 2,000 ft of containment boom,
- one foam trailer with applicator and foam to cover 90,000 square feet,
- a seven (7)-day supply of PPE,
- 12 sets of air bottles,
- lights,
- 2 skimmers,
- 1 generator,
- 1 air compressor,
- PID/LEL,
- detector tube specific for benzene (not affected by other hydrocarbons)
- 4 radios, and
- expendable supplies (absorbent booms & pads, PPE)

The Tier 1 team should immediately report to the response contractor's supervisor for a briefing on the response action and a tailgate health and safety meeting. The response contractor's supervisor should direct the team's activities from this point on, including setting up laydown areas and support areas.

4. The response contractor's program manager should begin mobilizing the Tier 2 and Tier 3 response teams once the Tier 1 team is en route to the site.

The Tier 2 response team should be capable of removing 3,000 BBL per day, should be on-site within 36 hours of notification, and may consist of the Tier 1 response team, plus:

- 12 HAZWOPER-trained personnel,
- 4 work boats,
- 4,000 feet of containment boom,
- 2 skimmers,
- 2 vans,
- 2 pick-up trucks,
- 2 vacuum trucks,
- 1 skid unit (1,500 gallon capacity),
- 8 radios, and
- 24 air bottles

The Tier 3 response team should be capable of removing 6,000 BBL per day, should be on-site within 60 hours of notification, and may consist of the Tier 1 and Tier 2 response teams, plus:

- 23 HAZWOPER-trained personnel,
 - 2 pick-up trucks,
 - 4 vans,
 - 1 supply trailer,
 - 4 work boats,
 - 6,000 feet of containment boom,
 - 3 vacuum trucks,
 - 3 skimmers,
 - 12 radios, and
 - 48 air bottles
5. The first task of the Tier 1 response team should be to minimize the spread of the product on the water and ground surface in order to protect the public and environmentally sensitive areas. The team should place a containment boom as close as possible to the point of origin of the spill to minimize the area of most severe contamination. The placement of the containment boom will also be based on personnel safety considerations for the personnel setting up the containment boom. The team may then place one or more secondary booms farther away, in the path(s) of the plumes deemed by the Company Incident Commander and the response contractor's supervisor to be the most dangerous to the public or to the environment.
6. Health and Safety Plan

Initial health and safety response actions will be in accordance with the standard operating procedure. The response contractor's Site Safety Officer will complete a Site-Specific Health and Safety Plan after the initial hazard assessment is conducted.

7. Implementation of Air Monitoring Program

Company's Incident Commander will assign a Site Safety Officer (SSO) who will begin monitoring activities (using a PID, an LEL meter and benzene-specific detection tubes) in the area of the spill immediately on arrival, to assess the danger from fire and explosion in the work area, determine potential exposure to benzene, delineate the exclusion zone, and establish the support zone. Instruments, frequency of readings, records and responses to action levels will conform to the Health and Safety Plan. The SSO will pay particular attention to LEL readings.

As soon as possible after the SSO completes his initial air monitoring for the spill site hazard assessment and delineates the work zones, he/she will begin a perimeter air-monitoring program to confirm that the exclusion zone is properly sized and to document potential offsite migration of vapors that could impact the unprotected public or wildlife.

8. Contingency Planning

The Company Incident Commander, the SSO and the response contractor's supervisor will identify evacuation routes of egress and procedures, safe distances and places of refuge, and emergency alerting procedures to be used in the event of an uncontrollable situation such as fire or explosion.

9. Assessment of Affected Area(s)

The Company Incident Commander and the response contractor's supervisor will jointly review the maps provided and inspect the affected area(s) and assess:

- The nature of the spilled liquid,
- Source of the spill,
- Direction(s) of spill migration,
- Apparent or otherwise known subsurface geophysical feature that might impact the work; i.e., subsurface sand layers, water table elevation,
- Overhead and buried utility lines, pipelines, etc.,
- Nearby population, property or environmental features that might be affected by the contained spill, or by an uncontained spill.

The Tiers 1, 2, and 3 response team resources in personnel, equipment and material will be assessed to determine if they are adequate to effectively perform the work.

If the Company Incident Commander determines that additional resources are required, the response contractor's supervisor will request additional resources for the Tier 2 and 3 response teams from the response contractor's program manager. Additional equipment may include backhoes, dump trucks, watercraft, generators, light sets, bulldozers and front-end loaders. Equipment operators, laborers, and engineers may be mobilized as necessary. Additional material may include more spill booms, absorbent materials, foam, and imported clay for berms.

10. Delineation of Exclusion and Support Zones

The Site Safety Officer (SSO) will mark the limits of the exclusion zone with red plastic tape, using existing trees to support the tape where possible. The support zone will be marked with green plastic tape if in the SSO's judgment such marking is necessary to avoid confusion with a contaminated area. If the exclusion zone cannot be physically marked, the SSO will annotate a site map or layout sketch and brief all personnel on the zone layout prior to site entry.

11. Protection of Downstream Sensitive Areas

Company's Incident Commander, the response contractor's supervisor and SSO will inspect the boom system to ensure that it is effectively protecting the public and environmentally sensitive areas downstream of the spill. The response contractor's supervisor will direct placement of additional booms or relocation of existing booms if ongoing measures are judged to be ineffective.

Ongoing Response**1. Recovering Wildlife for Transfer to Treatment Facilities**

The response contractor will cooperate with Company and local wildlife assistance agencies to recover birds, fish, reptiles and mammals affected by the spill, for transportation by the wildlife agencies to treatment facilities.

2. Recovery and Transfer of Free Product

Construction of the free product temporary storage area will start after the containment booms are in place and judged effective in limiting the spread of the plume. The storage will consist of frac tanks or rubber bladders. The tanks or bladders will be surrounded by a berm built up from on-site materials or imported clay.

The response team will recover free product with vacuum trucks, sorbent booms and pads, oil skimmers and vacuum pumps.

3. Install Siphon Dams, Etc.

The response team will construct a siphon dam to contain the spilled product if the contaminated water is flowing. A siphon dam is built of earth with steel or plastic pipes embedded through it at a vertical angle such that the lighter, floating product is trapped behind the dam while the water below it is permitted to flow through the pipes.

4. Debris Removal

Debris will consist of steel, concrete, timber and vegetation contaminated by the spilled product, plus product-soaked sorbent materials and trash generated by the response team.

Company will remove and dispose of debris or may direct the response contractor to do so. Ultimate disposal may depend on the degree of contamination and is subject to approval by the regulating agencies.

Typically, steel and concrete will be transported to a landfill. Timber and vegetation will be either landfilled or incinerated off-site. The regulatory agencies may permit on-site burning of timber and vegetation under some circumstances.

5. Stabilize Damaged or Affected Structures

The response contractor will construct temporary bracing and shoring as necessary to prevent collapse of structures and foundations that might impede or endanger the response work. This may include timber shoring as temporary replacements for sleepers under a damaged pipeline section.

Company will stabilize damaged major pipeline bridges and pipeline river crossings, if needed.

6. Initial Response and Draft Work Plan

The response contractor will prepare a draft work plan and submit it to Company. The work plan will include:

- A summary of initial response actions and results,
- Subsequent planned activities,
- Water and soil removal and treatment and/or disposal,
- Air monitoring program,
- Sampling and Analysis Plan,
- Restoration and repairs, and
- A schedule for the work.

7. Debriefing/Dissemination of Information and Data

The Company Incident Commander will interface with the regulatory agencies and news media. The response contractor will not disseminate any information or data without approval of the Company Incident Commander. The response contractor may furnish personnel to assist the Company Incident Commander in debriefing.

8. Documentation of Cleanup Efforts and Progress

The response contractor will prepare and maintain records, including photos and/or video, documenting the response. Records and documents will include the supervisor's daily notes, personnel time sheets, equipment usage logs, material delivery tickets, daily air monitoring logs, and soil and water analysis reports.

The response contractor's program manager will submit to the Company Incident Commander a weekly report summarizing the accomplishments of the preceding week, the cost status and the response activity schedule.

9. Public Relations/Agency Liaison

The Company Incident Commander will provide all direct contact with the news media and with regulatory agencies.

Cleanup Strategies for Wetlands

1. Access on and Through Wetlands

Access on and through wetlands may probably be severely restricted by the regulatory agencies due to the severe and long-lasting damage that could result. Routes for temporary roads and laydown areas will be coordinated with the appropriate authorities with due consideration for critical and sensitive vegetation and animal habitats. The cognizant authorities will be requested to assist the Company Incident Commander and the response contractor by directing the layout of

temporary roads and work areas, and the marking of areas in which personnel and equipment are prohibited. Response personnel will be briefed on the approved and prohibited areas on their arrival and at the daily tailgate safety briefings.

Boats and/or barges may prove practical and less disruptive to the wetlands than vehicles and tracked equipment in some cases. The response contractor may have to construct a temporary landing to tie up the watercraft and offload some personnel, equipment and materials. The response contractor will minimize the size and number of heavy equipment used in the response, to the minimum necessary to do the work.

All access roads, boat landings, etc. will be restored to their pre-spill conditions as described in SITE RESTORATION below.

2. Protection of Wetlands

Once human health and safety issues have been addressed, the next priority will be given to limiting the spread of spilled product and further contamination of plant and animal life. This is usually done with containment booms and berms. The cognizant authorities, the Company Incident Commander and the first responder will identify the areas threatened by the spill, and select the boom and berm locations. The Company Incident Commander will advise the contractor's response team of special or additional equipment and material needs.

Booms typically protect swamps and ponds that are contaminated or threatened by a spill. Booms will be deployed by boat if possible, provided that the cognizant authorities approve their use. Where the water is too shallow for workboats, the response contractor may have to deploy the boom manually, by workers wading in the water or mud.

Ditches and berms typically protect a spill on solid ground. With the concurrence and at the direction of the cognizant authorities, the response contractor may dig ditches and/or build berms around the spill site to stop the overland flow of the spilled product. Tracked excavators and/or bulldozers may be used for this where there is solid enough ground to support heavy equipment and the regulatory agencies permit its use. In some cases it may be possible to use this ditch/berm system as the product collection system or to divert the product to a collection point. If the soil dug from the ditches is clay, it may be used to build the berms. Sandy or gravelly soil does not make good barrier berm material. Clay dug from other onsite areas may be used only with the approval of, and at the direction of, the cognizant authorities. If importing clay from offsite is impractical and no clay is available onsite, the response contractor may have to use sorbent materials, i.e., sorbent booms and pads, to construct the berm.

3. Recovery of Product from Water and Treatment of Contaminated Water.

Product is typically recovered from lakes, ponds and rivers associated with wetlands by a combination of mechanical skimming, vacuum recovery, and sorbent materials. Boats may be used to move personnel, booms and materials where water depth is adequate and if the cognizant authorities concur.

Product spilled onto the ground of a wetland does not normally soak very far into the soil, due to the saturated nature of the soil. The spilled product will probably collect as pools in low spots of the ground surface. Vacuum pumps and sorbent pads may be used to remove the majority of the product. Excavation of remaining contaminated soils will be done only with the concurrence and at the direction of the appropriate authorities. Other methods such as by soil/vapor extraction, or pumping from recovery wells may be considered as part of a long-term plan. Free product will probably be pumped to temporary storage, and used sorbent materials will be collected and handled as solid wastes.

The methods of temporary storage of the contaminated water will be site-specific, and will depend on suitable onsite ground space, distance to a suitable offsite storage area, and agency approvals. Barges may be practical storage containers where navigable waters are conveniently close and the cognizant authority approves their use. Tank trailers or frac tanks may be used if roads are closer than barge access to the wetlands spill site. In any case, the regulatory agencies may require that product and contaminated water be transported offsite as quickly as possible.

Once the contained waters have been stored, treatment options can be explored. Possible treatment options include steam or air stripping, oil/water separation, carbon adsorption, or other methodologies or combinations of methodologies. It is expected that the water treatment facility will be installed outside the wetlands.

4. Cleaning of Affected Structures

Wetlands typically do not include many man-made structures. However such man-made structures as are contaminated by the spilled product can be cleaned by traditional methods that include wiping, hot water, low or high-pressure wash down, and use of surfactants, emulsifiers or other agents. The use of surfactants, emulsifiers and other agents may be prohibited by the regulatory or other cognizant authorities in some areas. Cleaning methods and materials to be used at a spill will be discussed with the appropriate authorities and used only with their concurrence and at their direction.

Wash down water and other liquids from cleaning activities should be contained by the boom or ditch/berm system, then collected and treated with the contaminated ground and surface waters.

5. Solids Handling and Removal

Removal of product-laden soils will be conducted only with the concurrence and at the direction of the appropriate authorities. Heavy equipment such as excavators will be used where the cognizant authorities permit it. Otherwise contaminated soils will be excavated manually using shovels and other hand tools.

Sorbent materials and other solid residue will be placed in trash bags and removed from the site for disposition. The response contractor will take particular care to remove all his site-generated wastes from the area, and will conduct a final walking inspection of the entire area with the Company Incident Commander to confirm that this has been done prior to departure.

Contaminated soils and other solids will be removed from the site unless the regulatory authorities dictate that they remain onsite. Transportation plans, including routes, vehicle types and loading methods may require the approval of the cognizant authorities. Trucks may be used where roads are available. Barges may be more practical where navigable waterways are reasonably close. Where vehicle and barge use is impractical or prohibited by regulatory agencies, solids from the site may have to be removed manually.

Site Restoration

1. Sampling and Analysis to Verify Cleanup

Sampling and analysis of the remaining soils and water will be coordinated with local, State and federal agencies to verify that the cleanup meets their requirements.

2. Rebuild/Reconstruct Affected Structures/Areas

Wetlands restoration activities will vary considerably from site to site. As early as possible, the Company should determine the feasibility and practicality of restoration in consultation with the appropriate authorities so that detailed, deliberate plans, specifications, and costs can be prepared.

3. Final Report

The response contractor will prepare a Final Report for Company, summarizing the actions taken during the response activities, with particular attention to restoration and verification of cleanup.

Sec. 3.8 Wildlife Refuges

Environmental Response Scenario

The following scenario provides probable, effective response actions in the event of a spill to a wildlife refuge. Depending on the site-specific conditions, Company may choose to respond in a manner different from that described below. The manpower, equipment, and recovery rates are all dependent upon site-specific conditions and Company will respond in an appropriate manner.

Description of the Affected Area

Wildlife refuges are areas designated by the federal government to remain in a natural or underdeveloped condition for the benefit of wild animals, particularly game species and those that are endangered. The vegetation and water supply generally support a wide variety of insects, fish, reptiles, mammals and birds, some of which may be endangered or otherwise protected by law. A wildlife refuge may include any type of terrain, including shorelines, swamps, forests, deserts, and mountainous areas. Wildlife refuges are frequently, but not always, remote from human habitation, and are generally undeveloped. Wildlife refuges are usually identified and marked as such on maps and along their boundaries.

1. Public Health and Safety Concerns

Most major wildlife refuges are remote from human habitation, where a spill may affect the health and safety of a relatively small number of forest rangers, fish and game agents and visitors. The danger zone for the public will generally be downwind of the point of discharge and the resulting plume.

2. Project Personnel Safety Concerns

The greatest safety concern for project personnel is fire and explosion. The response contractor's team personnel will conduct continuous air monitoring for flammable vapors with a combustible gas meter and will suspend operations when readings exceed 10 percent of the lower explosive limit (LEL). Response contractor's team personnel will use non-sparking equipment whenever monitoring indicates explosion/fire potential. Smoking paraphernalia, including lighters, will not be permitted in the work areas under any circumstances.

Other safety concerns for project personnel, Company representatives and the regulatory agencies' representatives are inhalation of hydrocarbon vapors (specifically benzene vapors), skin contact with liquid hydrocarbons, heat stress and cold exposure, and contact with, or bites from, poisonous plants, insects, snakes, rodents and large wildlife indigenous to the wildlife refuge.

Air monitoring analysis will dictate the level of PPE utilized by workers in the exclusion zone. The support area, including break and eating areas, will be located in a safe area, and upwind of the exclusion zone wherever possible.

3. Property and Environmental Impact

Property impact of a spill on a wildlife refuge will depend on its proximity to inhabited or improved property. Major wildlife refuges are generally undeveloped but may have potential commercial value; a spill may have serious impact on the commercial value of public or private property.

Environmental impact of a spill on a wildlife refuge can be immediate and extensive. Petroleum hydrocarbons may have an adverse impact on most forms of plant and animal life, and can destroy the exposed portion of a wildlife refuge. Wildlife refuges provide crucial habitats and food supplies for wildlife and are sources of oxygen for the atmosphere.

The more tender vegetation, such as grasses, may be destroyed by direct contact with the spilled product. Hardier vegetation such as shrubs and trees contaminated by the spilled product may be removed as part of the response activities. The loss of habitat and food supply is expected to have a serious impact on wildlife in the refuge.

Wildlife may be threatened by direct contact with the spilled product, eating product-contaminated vegetation, and hunger if large areas are cleared of contaminated vegetation during the response activities. The times of greatest danger to wildlife will be during migrations, when large numbers of birds depend on the refuges for food and safety. Even temporary loss of part of a major refuge could have a serious impact on some species. Loss of part of a key breeding ground for an endangered species could contribute to its extinction.

4. Potential Logistical Problems

Wildlife refuges differ from site to site, but typically they are remote from major transportation networks and utility services. Roads into and through such areas may be seasonal, intermittent, and should be considered generally unreliable. There may be insufficient solid level ground or a wide enough clearing in which to set up support areas, lay-down areas, etc.

Transportation of personnel, equipment and materials into and out of the area may require specialized vehicles such as UTVs, swamp buggies, airboats or helicopters. The response contractor should possess, or have ready access to, the minimum required equipment.

Temporary utilities, including potable water, fuel and electricity will probably be absent and must be brought in by the response contractor's team.

Initial Response Strategies

1. The Company Incident Commander will:
 - Initiate evacuation of the public from the affected areas and from the area toward which the plume is moving,
 - Initiate appropriate actions to isolate the pipeline or any other source of the spill; i.e., turn off the nearest block valves and shut down the flow of product.
 - Order immediate deployment of the response contractor's oil containment boom (minimum 200 ft long), complete with anchors,
 - Notify the response contractor's program manager that a spill is in progress and
 - Notify the appropriate Federal, State, and local regulatory agencies. Local, State and Federal agency notification is listed in this FRP.

2. The response contractor's program manager should dispatch a response supervisor to the location of the spill by the fastest means practical. The response contractor's supervisor should be equipped with a one-day supply of PPE to include supplied air, and a radio or mobile telephone. The response contractor's supervisor should contact the Company Incident Commander immediately on arrival at the site and jointly assess the magnitude of the problem, noting any special considerations that may affect selection of resources required to complete the response action.

3. The response contractor's program manager should mobilize the Tier 1 response contractor's team while the response contractor's supervisor is en route to the site. The Tier 1 response contractor's team should be capable of removing 1,500 BBL of product per day, should be enroute within 2 hours of notification, and should arrive on-site within 12 hours of notification. This response team may consist of:
 - 8 HAZWOPER-trained personnel (including a supervisors and a site safety officer),
 - 2 pick-up trucks,
 - 1 one-ton box truck/associated supplies,
 - 2 vacuum trucks,
 - 1 van,
 - 2 work boats,
 - 2,000 ft of containment boom,
 - one foam trailer with applicator and foam to cover 90,000 square feet,
 - a seven (7)-day supply of PPE,
 - 12 sets of air bottles,
 - lights,
 - 2 skimmers,
 - 1 generator,
 - 1 air compressor,
 - PID/LEL,
 - detector tube specific for benzene (not affected by other hydrocarbons)
 - 4 radios, and
 - expendable supplies (absorbent booms & pads, PPE)

The Tier 1 response contractor's team should immediately report to the response contractor's supervisor for a briefing on the response action and a tailgate health and safety meeting. The response contractor's supervisor should direct the team's activities from this point on, including setting up laydown areas and support areas.

4. The response contractor's program manager should begin mobilizing the Tier 2 and Tier 3 response contractor's teams once the Tier 1 team is enroute to the site.

The Tier 2 response contractor's team should be capable of removing 3,000 BBL per day, should be on-site within 36 hours of notification, and may consist of the Tier 1 response contractor's team, plus:

- 12 HAZWOPER-trained personnel,
- 4 work boats,
- 4,000 feet of containment boom,
- 2 skimmers,
- 2 vans,
- 2 pick-up trucks,
- 2 vacuum trucks,
- 1 skid unit (1,500 gallon capacity),
- 8 radios, and
- 24 air bottles

The Tier 3 response contractor's team should be capable of removing 6,000 BBL per day, should be on-site within 60 hours of notification, and may consist of the Tier 1 and Tier 2 response contractor's teams, plus:

- 23 HAZWOPER-trained personnel,
- 2 pick-up trucks,
- 4 vans,
- 1 supply trailer,
- 4 work boats,
- 6,000 feet of containment boom,
- 3 vacuum trucks,
- 3 skimmers,
- 12 radios, and
- 48 air bottles

5. The first task of the Tier 1 response contractor's team should be to minimize the spread of the product on the water and ground surface in order to protect the public and the vegetation and wildlife in the refuge. The team should place a containment boom as close as possible to the point of origin of the spill to minimize the area of most severe contamination. The placement of the containment boom will also be based on personnel safety considerations for the personnel setting up the containment boom. The team may then place one or more secondary booms farther away, in the path(s) of the plumes deemed by the Company Incident Commander and the response contractor's supervisor to be the most dangerous to the public or to the environment.

6. Health and Safety Plan

Initial health and safety response actions will be in accordance with the standard operating procedure. The response contractor's Site Safety Officer will complete a Site-Specific Health and Safety Plan after the initial hazard assessment is conducted.

7. Implementation of Air Monitoring Program

Company's Incident Commander will assign a Site Safety Officer (SSO) who will begin monitoring activities (using a PID, an LEL meter and benzene-specific detection tubes) in the area of the spill immediately on arrival, to assess the danger from fire and explosion in the work area, determine potential exposure to benzene, delineate the exclusion zone, and establish the support zone. Instruments, frequency of readings, records and responses to action levels will conform to the Health and Safety Plan. The SSO will pay particular attention to LEL readings.

As soon as possible after the SSO completes his initial air monitoring for the spill site hazard assessment and delineates the work zones, he/she will begin a perimeter air-monitoring program to confirm that the exclusion zone is properly sized and to document potential offsite migration of vapors that could impact the unprotected public or wildlife.

8. Contingency Planning

The Company Incident Commander, the SSO and the response contractor's supervisor will identify evacuation routes of egress and procedures, safe distances and places of refuge, and emergency alerting procedures to be used in the event of an uncontrollable situation such as fire or explosion.

9. Assessment of Affected Area(s)

The Company Incident Commander and the response contractor's supervisor will jointly review the maps provided and inspect the affected area(s) and assess:

- The nature of the spilled liquid,
- Source of the spill,
- Direction(s) of spill migration,
- Apparent or otherwise known subsurface geophysical feature that might impact the work; i.e., subsurface sand layers, water table elevation,
- Overhead and buried utility lines, pipelines, etc.,
- Nearby population, property or environmental features that might be affected by the contained spill, or by an uncontained spill.
- Closest concentration of wildlife and breeding areas

The Tiers 1, 2, and 3 response team resources in personnel, equipment and material will be assessed to determine if they are adequate to effectively perform the work.

If the Company Incident Commander determines that additional resources are required, the response contractor's supervisor will request additional resources for the Tier 2 and 3 response teams from the response contractor's program manager. Additional equipment may include backhoes, dump trucks, watercraft, generators, light sets, bulldozers and front-end loaders. Equipment operators, laborers, and engineers may be mobilized as necessary. Additional material may include more spill booms, absorbent materials, foam and imported clay for berms.

10. Delineation of Exclusion and Support Zones

The Site Safety Officer (SSO) will mark the limits of the exclusion zone with red plastic tape, using existing trees to support the tape where possible. The support zone will be marked with green plastic tape if in the SSO's judgment such marking is necessary to avoid confusion with a contaminated area. If the exclusion zone cannot be physically marked, the SSO will annotate a site map or layout sketch and brief all personnel on the zone layout prior to site entry.

11. Protection of Downstream Sensitive Areas

Company's Incident Commander, the response contractor's supervisor and SSO will inspect the boom system to ensure that it is effectively protecting the public and environmentally sensitive areas downstream of the spill. The response contractor's supervisor will direct placement of additional booms or relocation of existing booms if ongoing measures are judged to be ineffective.

Ongoing Response

1. Recovering Wildlife for Transfer to Treatment Facilities

The response contractor will cooperate with Company and local wildlife assistance agencies to recover birds, fish, small and large animals affected by the spill, for transportation by the appropriate wildlife agencies to treatment facilities. The response contractor will take extreme care to minimize the disruption or displacement of wildlife, with particular attention to the breeding areas of protected species.

2. Recovery and Transfer of Free Product

Construction of the free product temporary storage area will start after the containment booms are in place and judged effective in limiting the spread of the plume. The storage will consist of frac tanks or rubber bladders. The tanks or bladders will be surrounded by a berm built up from on-site materials or imported clay.

The response contractor's team will recover free product with vacuum trucks, sorbent booms and pads, oil skimmers and vacuum pumps.

3. Install Siphon Dams, Etc.

The response contractor's team may construct a siphon dam to contain the spilled product if the contaminated water is flowing. A siphon dam is built of earth with steel or plastic pipes embedded through it at a vertical angle such that the lighter, floating product is trapped behind the dam while the water below it is permitted to flow through the pipes.

4. Debris Removal

Debris will consist of steel, concrete, timber and vegetation contaminated by the spilled product, plus product-soaked sorbent materials and trash generated by the response contractor's team. Contaminated vegetation is anticipated to make up the majority of the debris.

Company will remove and dispose of debris or may direct the response contractor to do so. Ultimate disposal may depend on the degree of contamination and is subject to approval by the regulating agencies.

Typically, steel and concrete will be transported to a landfill. Timber and vegetation will be either landfilled or incinerated off-site. The regulatory agencies may permit on-site burning of timber and vegetation under some circumstances, but this is unlikely within the boundaries of the wildlife refuge itself.

5. Stabilize Damaged or Affected Structures

The response contractor will construct temporary bracing and shoring as necessary to prevent collapse of structures and foundations that might impede or endanger the response work. This may include timber shoring as temporary replacements for sleepers under a damaged pipeline section.

Company will stabilize damaged major pipeline bridges and pipeline river crossings, if needed.

6. Initial Response and Draft Work Plan

The response contractor will prepare a draft work plan and submit it to Company. The work plan will include:

- A summary of initial response actions and results,
- Subsequent planned activities,
- Water and soil removal and treatment and/or disposal,
- Air monitoring program,
- Sampling and Analysis Plan,
- Restoration and repairs, and
- A schedule for the work.

7. Debriefing/Dissemination of Information and Data

The Company Incident Commander will interface with the regulatory agencies and news media. The response contractor will not disseminate any information or data without approval of the Company Incident Commander. The response contractor may furnish personnel to assist the Company Incident Commander in debriefing.

8. Documentation of Cleanup Efforts and Progress

The response contractor will prepare and maintain records, including photos and/or video, documenting the response. Records and documents will include the supervisor's daily notes, personnel time sheets, equipment usage logs, material delivery tickets, daily air monitoring logs, and soil and water analysis reports.

The response contractor's program manager will submit to the Company Incident Commander a report summarizing the accomplishments of the preceding week, the cost status and the response activity schedule.

9. Public Relations/Agency Liaison

The Company Incident Commander will provide all direct contact with the news media and with regulatory agencies.

Cleanup Strategies for Wildlife Refuges

1. Access on and Through Wildlife Refuges

Access on and through wildlife refuges may be severely restricted by the regulatory agencies during the mating /nesting seasons of some animal species. The regulatory agencies are expected to judge whether the response activities may cause more harm than good, or they may elect to postpone some or all of the response activities to a later time. Routes for temporary roads and laydown areas should be established by the appropriate authorities with due consideration to critical and sensitive vegetation and animal habitats. Boats and/or barges may prove practical and less disruptive to the wildlife than vehicles and tracked equipment in some cases. The response contractor may have to construct a temporary landing to tie up the watercraft and offload personnel, equipment and materials. The response contractor will minimize the size and number of heavy equipment used in the response. In all cases the cognizant authorities will participate in and approve all plans, routes, equipment, materials, and methods.

All work areas, to include access roads, laydown areas, boat landings, etc. will be restored to their pre-spill conditions as described in SITE RESTORATION below.

2. Protection of Wildlife Refuges

Once human health and safety issues have been addressed, the next priority will be given to limiting the spread of spilled product and further contamination of plant and animal life. This is typically done with containment booms and earthen berms. The cognizant authorities, Company Incident Commander and the first responder will have to quickly identify the areas threatened by the spill, and select the boom and berm locations. The Company Incident Commander will communicate special or additional equipment and material needs to the contractor's response team.

Where a body of water is affected or threatened by the spill, the response contractor will normally deploy containment booms as close downstream of, or around, the spill site as may be safe and practical. If the impacted area includes rough water, such as rapids and falls, the boom may have to be installed at a distance downstream, where the water is calm enough for the boom to be effective. This may increase the volume of contaminated water to be collected and treated. If use of the nearest effective deployment site is denied by the cognizant authorities, or if lack of roads, cliffs, heavy forests etc. make its use impractical, it may be necessary to deploy the boom at another site even further downstream.

Containment of an overland spill is typically done with ditches and berms. With the approval of, and at the direction of, the cognizant authorities, the response contractor may dig ditches and/or build berms downslope of, or around, the spill site to stop the overland flow of the spilled product. In some cases it may be possible to use this ditch/berm system to divert the product to a collection point. If the soil dug from the ditches is clay, it may be used to build the berms. The cognizant authority may prefer that clay for berms be obtained at an alternative clay source, offsite. Sandy and gravelly soils are not good barrier berm materials. If importing clay from offsite is impractical and no clay is available onsite, the response contractor may have to use sorbent materials, i.e., sorbent booms and pads, to construct the berm.

The Company Incident Commander and the response contractor will cooperate with the cognizant authorities to assist in the recovery of animals affected by the spilled product. The refuge staff, park rangers and/or wildlife rescue specialists will probably handle the animals, with some transportation provided by Company and the response contractor.

3. Recovery of Product from Water and Treatment of Contaminated Water.

Product is typically recovered from water bodies such as lakes, ponds and rivers by a combination of mechanical skimming, vacuum recovery, and sorbent materials. The point of recovery may be some distance downstream of the spill site, if access to closer sites is denied or is impractical. This may increase the response time, the amount of contaminated water, and the length of shoreline to be cleaned and restored. The size and capacity of skimming equipment, pumps, piping, and tankage may be limited by access restrictions, as described above.

Excavation of soil to recover product spilled onto the ground may be strictly controlled by the cognizant authorities, or even prohibited altogether. Other methods such as by soil/vapor extraction, or pumping from recovery wells may be considered as part of the long-term plan for some refuges, but these may be judged to be too intrusive for others.

The methods of temporary storage of the contaminated water will be dependent on site access and approval by the cognizant authorities. Barges may be practical where navigable waters are nearby. Tank trailers or frac tanks may be used if roads are accessible or constructible. Rubber bladder tanks may be used, but require cleared, relatively smooth laydown areas. It may be necessary to pump the contaminated water/product a considerable distance to a storage area outside the refuge itself. The response contractor should be sensitive to noise control and to leaks from fittings and pumps in the transfer system.

Once the contained waters have been stored, treatment options can be explored. Possible treatment options include steam or air stripping, oil/water separation, carbon adsorption, or other methodologies or combinations of methodologies. It is expected that the water treatment facility may be installed outside the refuge. Planning for the treatment technology and the location of the equipment will require approval of the cognizant authority.

4. Cleaning of Affected Structures

Wildlife refuges typically do not include many man-made structures. However, there may be visitor centers, viewing platforms and water-control equipment at some refuges. These structures contaminated by the spilled product may be cleaned by traditional methods that include wiping, hot water, low or high-pressure washdown, and use of surfactants, emulsifiers or other agents. The use of surfactants, emulsifiers and other chemical agents may be prohibited by the regulatory or other cognizant authorities in some areas of the wildlife refuge. Cleaning methods and materials to be used at a spill will be discussed with the appropriate authorities and used only with their concurrence and at their direction. Some wooden structures that cannot be adequately cleaned may have to be removed and/or replaced.

Washdown water and other liquids from cleaning activities should be contained by the boom or ditch/berm system, then collected and treated with the contaminated ground and surface waters.

5. Solids Handling and Removal

Removal of product-laden soils will be conducted only with the concurrence of, and at the direction of, the appropriate authorities. Where the noise and exhaust fumes from heavy equipment such as tracked excavators may disturb mating or nesting animals such equipment will be used only if the cognizant authorities permit it. Otherwise contaminated soils may have to be excavated manually using shovels and other hand tools.

Sorbent materials and other solid residue will be placed in trash bags and removed from the site for disposition. The response contractor will take particular care to remove all his site-generated wastes from the area, and will conduct a final walking inspection of the entire area with the Company Incident Commander to confirm that this has been done prior to departure.

Excavated contaminated soils and other solids will be removed from the site unless the regulatory authorities dictate that they remain onsite. Trucks may be used where roads are available. Barges may be more practical where navigable waterways are reasonably close. Where vehicle and barge use is impractical or prohibited by regulatory agencies, solids from the site may have to be removed manually.

Site Restoration

1. Sampling and Analysis to Verify Cleanup

Sampling and analysis of the remaining soils and water will be coordinated with local, State and federal agencies to verify that the cleanup meets their requirements.

2. Rebuild/Reconstruct Affected Structures/Areas

Wildlife refuge restoration activities will vary considerably from site to site and may entail major efforts by a combination of Company and multiple regulatory and wildlife agencies. As early as possible, the Company should determine the feasibility and practicality of restoration in consultation with the appropriate authorities so that detailed, deliberate plans, specifications, and costs can be prepared.

3. Final Report

The response contractor will prepare a Final Report for Company, summarizing the actions taken during the response activities, with particular attention to restoration and verification of cleanup.

Sec. 3.9 Natural Resource Damage Assessments

Under the provision of CERCLA, the Oil Pollution Act of 1990 (OPA '90), and numerous state statutes, cost recovery can be obtained from industry for natural resource damage caused by the release of oil or hazardous substances to the environment. Natural resources are defined as land, air, biota, groundwater and surface water. A federal or state government entity, an Indian tribe or another nation acting as a public trustee of a natural resource may file claims for damages to natural resources.

A Natural Resource Damage Assessment (NRDA) is used to determine the damages owed to a public Trustee for residual natural resource injuries. This assessment is often conducted by the public Trustee, the potential responsible party or both. During the NRDA study, the injured natural resources are identified, the extent of the injury is quantified and the extent of the economic damage resulting from the loss of services provided by the resources is determined. In addition, the assessment also determines the cost of restoration or replacement of the injured natural resource.

A NRDA study is not conducted in all cases. HSE will work closely with the Trustees on a case-by-case basis to determine if a NRDA study is required. Company may choose to conduct a parallel study if the trustee determines that a NRDA will be conducted. The Environmental Coordinator should be contacted immediately if a Trustee contacts any member of the Company response team. HSE will provide assistance in conducting NRDA studies.

If a spill occurs that could potentially result in a NRDA, steps should be taken to assist the Trustees and to help protect Company interests throughout the assessment process. The following sampling procedures describe the steps that might be taken if the spill enters a stream. Sampling events would be modified appropriately if the spill only impacts land. To fully characterize the impact of the spill, several sampling events may be required. The initial round of samples should be collected as soon as possible following the spill event. Follow up sampling events will be scheduled to document the site restoration.

1. Formulate a sampling plan. Observe the site conditions and determine the best locations to collect samples. Contact a local lab and obtain the proper sampling containers, sampling equipment and documentation. The sample collection may be delegated to the lab or to response contractor personnel.
2. Contact the State Environmental Representative and inform them that samples are to be collected and offer to split the samples. If the State representative is not immediately available, do not wait, go ahead and collect the samples and inform them later. Time is a critical factor.
3. In any spill event, data collection and documentation are key factors to minimizing adverse financial and public perception impact to Company. The increased use of NRDA and lawsuits by local, county and state agencies following a spill, regardless of the efficiency of the response, requires an increased awareness and documentation of our response actions. Any sample collection event and all types of documentation may be utilized in a legal setting, therefore utilizing proper data collection techniques and detailed documentation are important.

- a. **Photo Documentation:** Photograph and/or Video Tape the event as thoroughly as possible. A photo record of the event should be maintained. All major events and response efforts should be photographed to establish a record of the events as they occur.
 - b. **Written Documentation:** A written log should be maintained that outlines the following information: 1) Major response events (i.e. time of the spill, time of the response, when valves were shut in, estimated volume of product. etc.) most of this information is documented on the Release Report Form in this FRP; 2) instructions or guidance provided to Company by State or Trustee representatives; 3) amount of product recovered; 4) amount of hazardous waste or special wastes generated as a result of the spill; 5) a sample collection location map that outlines the date, time, and type of samples collected, and; 6) date of project completion.
4. **Sample Parameters/Collection:** In the event of a product spill, review the State cleanup criteria for the individual state and sample accordingly, your Environmental Coordinator can assist in determining the proper sampling methodology and clean-up standards. If this information is not readily available instruct the lab to analyze for the following parameters: BTEX, (EPA Test Method 8020), and PAH (EPA Test Method 8270). BTEX analysis requires three 40 ml vials for liquid and one 4 oz glass jar for solids. PAH analysis requires a 1 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

4.0 DOT 49 CFR 194



Sec. 4.0 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:	--
(b)(1)	The pipeline's maximum release time in hours, plus the maximum shutdown response time in hours (based on historic discharge data or in the absence of such historic data, the operator's best estimate), multiplied by the maximum flow rate expressed in barrels per hour (based on the maximum daily capacity of the pipeline), plus the largest line drainage volume after shutdown of the line section(s) in the response zone expressed in barrels; or	Annex 1
(b)(2)	The largest foreseeable discharge for the line section(s) within a response zone, expressed in barrels, based on the maximum historic discharge, if one exists, adjusted for any subsequent corrective or preventive action taken; or	Annex 1
(b)(3)	If the response zone contains one or more breakout tanks, the capacity of the single largest tank or battery of tanks within a single secondary containment system, adjusted for the capacity or size of the secondary containment system, expressed in barrels.	Annex 1
(b)(4)	Operators may claim prevention credits for breakout tank secondary containment and other specific spill prevention measures as follows:	Annex 1
§ 194.107	Brief Description	
(a)	Each response plan must plan for resources for responding, to the maximum extent practicable, to a worst case discharge, and to a substantial threat of such a discharge.	Annex 1
(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:	Sec. I
(b)(1)	As a minimum to be consistent with the NCP as a facility response plan must:	-
(b)(1)(i)	Demonstrate an operator's clear understanding of the function of the Federal response structure, 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. II
(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

Sec. 4.0 DOT 49 CFR 194

DOT/PHMSA 49 CFR PART 194 CROSS REFERENCE		
§ 194.105	Brief Description	Location
(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
§ 194.107	Brief Description	
(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
(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;	Sec. II
(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

Sec. 4.0 DOT 49 CFR 194

DOT/PHMSA 49 CFR PART 194 CROSS REFERENCE		
§ 194.105	Brief Description	Location
(c)(3)	A description of the operator's response management system including the functional areas of finance, logistics, operations, planning, and command. The plan must demonstrate that the operator's response management system uses common terminology and has a manageable span of control, a clearly defined chain of command, and sufficient trained personnel to fill each position.	Sec. I & II
§ 194.111	Brief Description	Location
(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
§ 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
(b)(2)	The names or titles and 24-hour telephone numbers of the qualified individual(s) and at least one alternate qualified individual(s);	Annex 2
(b)(3)	The description of the response zone, including county(s) and state(s), for those zones in which a worst case discharge could cause substantial harm to the environment.	Annex 1
(b)(4)	A list of line sections for each pipeline contained in the response zone, identified by milepost or survey station number, or other operator designation.	Annex 1
§ 194.115	Brief Description	Location
(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

Sec. 4.0 DOT 49 CFR 194**DOT/PHMSA 49 CFR PART 194 CROSS REFERENCE**

§ 194.115	Brief Description	Location
(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 1 & 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
§ 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
(a)(1)(iii)	The name of, and procedures for contacting, the qualified individual on a 24-hour basis	Annex 2
(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

Sec. 4.0 DOT 49 CFR 194**DOT/PHMSA 49 CFR PART 194 CROSS REFERENCE**

§ 194.117	Brief Description	Location
(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. 4.0 DOT 49 CFR 194**DOT/PHMSA 49 CFR PART 195.402 & .403 CROSS REFERENCE**

49 CFR 195.402	Brief Description	Location
(c)	<i>Maintenance and Normal Operations:</i> The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:	--
(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.	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. II
(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. 4.0 DOT 49 CFR 194

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. II



Annex 5 – Table of Contents

5.0 Distribution List

5.1 Record of Revisions



Sec. 5.0 Distribution List

Recipient	Address	Plan Type Held	
		Hard Copy	CD
DOT-PHMSA	Attn: Melanie Barber Room E22-210, East Building 1200 New Jersey Avenue, S.E. Washington, D.C. 20590	0	2
Buxton/Cushing Area Maint. Supervisor	Chris Parcell 3006 South Linwood Road Cushing, OK 74023	1	1
Buxton/Cushing Stations Supervisor	Butch Mc Garry 3006 South Linwood Road Cushing, OK 74023	1	1
Oklahoma City Area Maint. Supervisor	Randy J. Roberts 4700 NE 10 th Street Oklahoma City, OK 73117	1	1
Glenpool Area Supervisor	David Walker 10600 South Elwood Jenks, OK 74037	1	1
Facility Supervisor	Keith Tebow RRZ, Box 147 3 miles South of Medford on Hwy 81 Medford, OK 73759	1	1
Chisholm Pipeline	Hal Posey PO Box 774 Kingfisher, OK 73750	0	1
Facility Supervisor	Edgar Gallegos 60 & South Waverly – South Tank Farm Ponca City, OK 74603	1	1
Facility Supervisor	Steve Derk 4700 NE 10 th Street Oklahoma City, OK 73117	1	1
Cherokee Pump Station, Supervisor	Tim Bailey Hwy 60 – Cherokee Pump Station Ponca City, OK 74603	0	1
Medford Area Area Supervisor	Gary Bowen Rural Route 2, Box 147 3 miles South of Medford on Hwy 81 Medford, OK 73759	1	1

Distribution List Cont.

Recipient	Address	Plan Type Held	
		Hard Copy	CD
Director Emergency Response & Security	Rob Yarbrough c/o ERS Coordinator 600 North Dairy Ashford, TR-2002 Houston, TX 77079	1	1
South Tank Farm Supervisor	Raylin Carter Hwy 60 @ S. Waverly - STF Ponca City, OK 74603	0	1
Ponca city Truck Rack Operator	Attn: Mr. Charlie Furnas P.O. Box 1267 Ponca City, OK 74602	1	1
Wichita Falls PL Area Supervisor	Attn: Derrick Gipson 1214 North MLK Jr. Blvd. Wichita Falls, TX 76306	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**Oklahoma 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
Oklahoma ERP CD	Destroy all previously dated Oklahoma CDs.	New Oklahoma 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.	