INTEGRATED CONTINGENCY PLAN

Tremley Point Marine Terminal, Dock, & New Jersey Response Zone

Address:

4601 Tremley Point Road
(or Foot of South Wood Avenue)
Linden, NJ 07036

Agency Plan Reference Numbers:

USCG: NY184

EPA: FRP 02A00043

DOT/PHMSA: CPNJ

Owner/Operator:

Phillips 66
3010 Briarpark Drive
Houston, TX 77042

24-Hour Number

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

VOLUME 1 OF 1

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

Confidentiality Notice: This document is for the sole use of the intended recipient(s) and contains information that is considered to be proprietary to Phillips 66. Any unauthorized review, use, disclosure or distribution is strictly prohibited.

Master Table of Contents

PLAN ORGANIZATION	SECTION
CORE PLAN	
PLAN INTRODUCTION ELEMENTS: Purpose and Scope of Plan, Regulatory Compliance, General Facility Identification Information, Management Certifications, Consistency with NCP and ACP, Glossary/Acronyms	I
CORE PLAN ELEMENTS: Discovery, Initial Response, Notification Procedures, Response Management System, Response Procedures, Detection Procedures, Emergency Response Equipment, Testing & Deployment, Waste Management Plan, Disposal Plan, Containment and Recovery, Water Quality and Sediment Quality Analysis, Drainage Plan, Detection/Mitigation Procedures; Evacuation, Site Security and Control, Site Safety and Health Plan, Personal Protective Equipment, Decontamination, Response Termination and Follow-up Procedures	II
TRAINING / EXERCISE PROGRAM: Overall Training, Response Training, Incident Command System (ICS)/HAZWOPER Training Program, Drill Procedures, Response Exercise Program, PREP Core Components, Record of Qualified Individual (QI) Notification Exercise, Record of Spill Management Team (SMT) Tabletop Exercise, Record of Equipment Deployment Exercise	III
Forms: Company Forms	IV
ANNEXES	
FACILITY AND LOCALITY INFORMATION: Information Summary, Facility and Locality Information, Facility Hazard Analysis, Planning Calculations / Spill Scenarios	1
NOTIFICATION PROCEDURES: Notifications, Oil Spill Removal Organizations	2
ENVIRONMENTAL SENSITIVE AREA INFORMATION: Economically Important and Environmentally Sensitive Area List	3
APPLICABLE REGULATORY CROSS REFERENCE(S):	4
ADMINISTRATION: Distribution List, Record of Revisions	5
ERAP	6

Core – Table of Contents

I	Plan Introduction Elements
II	Core Plan Elements
III	Training / Exercise Program
IV	Forms

Section I – Table of Contents

I-1	Purpose and Scope of Plan Coverage
I-2	Regulatory Compliance
I-3	General Facility Identification Information
I-4	Management Certification
I-5	Consistency with NCP and ACPs
I-6	Plan Implementation, Review and Update Procedures
I-7	Glossary/Acronyms

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: (Effective May 1, 2012)

- 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

June 2013
DATE

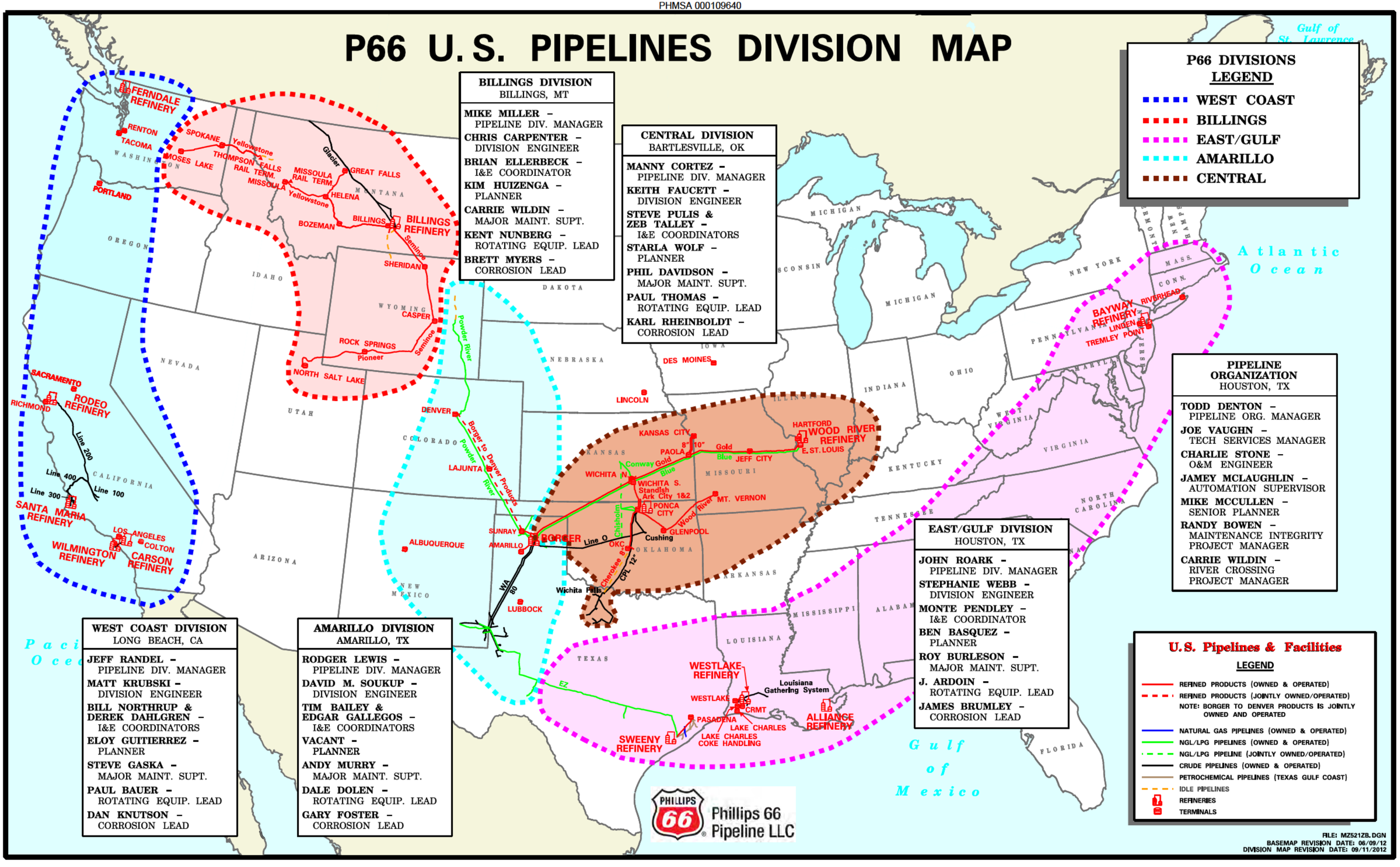
Sec. I-5 Consistency with NCP and ACPs

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

P66 U.S. PIPELINES DIVISION MAP



BILLINGS DIVISION
BILLINGS, MT

MIKE MILLER – PIPELINE DIV. MANAGER
CHRIS CARPENTER – DIVISION ENGINEER
BRIAN ELLERBECK – I&E COORDINATOR
KIM HUIZENGA – PLANNER
CARRIE WILDIN – MAJOR MAINT. SUPT.
KENT NUNBERG – ROTATING EQUIP. LEAD
BRETT MYERS – CORROSION LEAD

CENTRAL DIVISION
BARTLESVILLE, OK

MANNY CORTEZ – PIPELINE DIV. MANAGER
KEITH FAUCETT – DIVISION ENGINEER
STEVE PULIS & ZEB TALLEY – I&E COORDINATORS
STARLA WOLF – PLANNER
PHIL DAVIDSON – MAJOR MAINT. SUPT.
PAUL THOMAS – ROTATING EQUIP. LEAD
KARL RHEINBOLDT – CORROSION LEAD

PIPELINE ORGANIZATION
HOUSTON, TX

TODD DENTON – PIPELINE ORG. MANAGER
JOE VAUGHN – TECH SERVICES MANAGER
CHARLIE STONE – O&M ENGINEER
JAMEY MCLAUGHLIN – AUTOMATION SUPERVISOR
MIKE MCCULLEN – SENIOR PLANNER
RANDY BOWEN – MAINTENANCE INTEGRITY PROJECT MANAGER
CARRIE WILDIN – RIVER CROSSING PROJECT MANAGER

EAST/GULF DIVISION
HOUSTON, TX

JOHN ROARK – PIPELINE DIV. MANAGER
STEPHANIE WEBB – DIVISION ENGINEER
MONTE PENDLEY – I&E COORDINATOR
BEN BASQUEZ – PLANNER
ROY BURLESON – MAJOR MAINT. SUPT.
J. ARDOIN – ROTATING EQUIP. LEAD
JAMES BRUMLEY – CORROSION LEAD

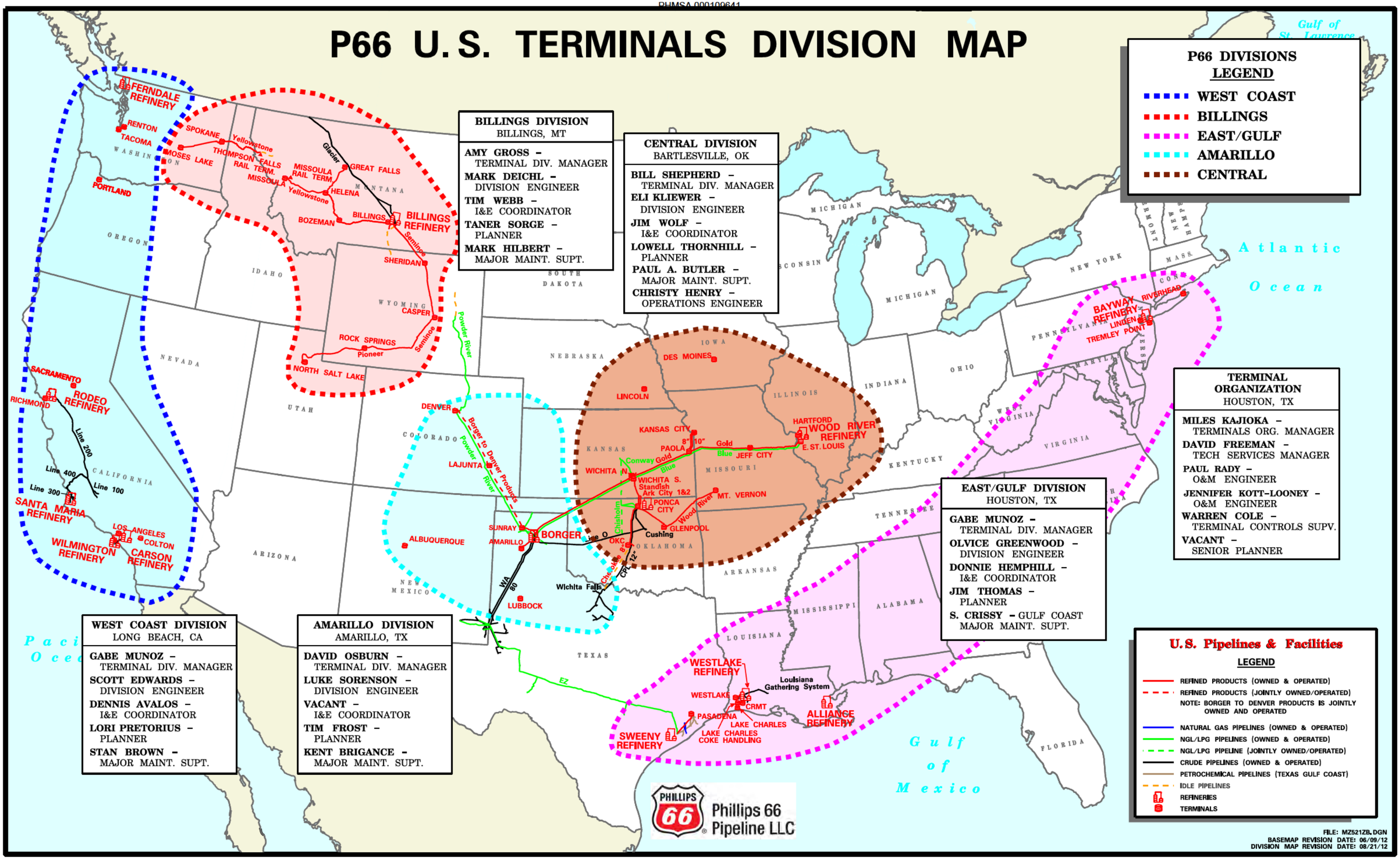
WEST COAST DIVISION
LONG BEACH, CA

JEFF RANDEL – PIPELINE DIV. MANAGER
MATT KRUBSKI – DIVISION ENGINEER
BILL NORTHRUP & DEREK DAHLGREN – I&E COORDINATORS
ELOY GUITIERREZ – PLANNER
STEVE GASKA – MAJOR MAINT. SUPT.
PAUL BAUER – ROTATING EQUIP. LEAD
DAN KNUTSON – CORROSION LEAD

AMARILLO DIVISION
AMARILLO, TX

RODGER LEWIS – PIPELINE DIV. MANAGER
DAVID M. SOUKUP – DIVISION ENGINEER
TIM BAILEY & EDGAR GALLEGOS – I&E COORDINATORS
VACANT – PLANNER
ANDY MURRY – MAJOR MAINT. SUPT.
DALE DOLEN – ROTATING EQUIP. LEAD
GARY FOSTER – CORROSION LEAD

P66 U.S. TERMINALS DIVISION MAP



FILE: MZ521ZB.DGN
BASEMAP REVISION DATE: 06/09/12
DIVISION MAP REVISION DATE: 08/21/12

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 PHMSA.

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	
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.
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.
Assisting Agency	An agency directly contributing tactical or service resources to another agency.
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.
Boom	Any number of specially designed devices that float on water and are used to contain or redirect the flow of oil on the water's surface.
Boom Deployment	The methodology for installing boom based on differing water depths, currents, wave heights, etc.

Term	Definition
C	
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 (200 NM).
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.
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.
Clear Text	The use of plain English in radio communications transmissions. Ten Codes or agency specific codes are NOT 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 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).
Company Away Team	Volunteer Emergency Tier II Responders, See IMAT
Containment Boom	A flotation/freeboard device, made with a skirt/curtain, longitudinal strength member, and ballast unit/weight designed to entrap and contain the product for recovery.
Contingency Plan	A document used by (1) Federal, State, and Local agencies to guide ties planning and response procedures regarding spill of oil, hazardous substances, or other emergencies; (2) a document used by industry as a response plan to spills of oil, hazardous substances, or other emergencies occurring upon their vessels or at their facilities.

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

Term	Definition
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.
Discharge	Any spilling, leaking, pumping, pouring, emitting, emptying, or dumping.
Dispatch	To move resources from one place to another.
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 Teams and Branches.
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 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.
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.

Term	Definition
E (Cont'd)	
Equipment Deployment Exercise	An exercise where response equipment is deployed to a specific site and operated in its normal operating medium.
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.
F	
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/police department) charged with responding to a spill during the emergency phase and alleviating immediate danger to human life, health, safety, or property.
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.

Term	Definition
G	
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.
H	
Handle	To transfer, transport, pump, treat, process, store, dispose of, drill for, or produce.
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/Helispot	ICS Terms defining locations within the general incident area for parking, fueling, maintaining, and loading helicopters/ where a helicopter can take off and land.
I	
Incident Management Assistance Team (IMAT)	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	Any event that results in the spill or release of oil or hazardous materials.

Term	Definition
I (Cont'd)	
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 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/ Unified 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.
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 Support Team (IST)	Company responders.
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, PHMSA and BSEE 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.
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.

Term	Definition
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.
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.
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.
Local On Scene Coordinator (LOSC)	Local Government Representative.
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.
M	
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.

Term	Definition
M (Cont'd)	
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 PHMSA and BSEE, 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.
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.
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-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 b) At least 95% of which by volume distill at a temperature of 370° C (700° F).
Northwest Area Contingency Plan (NWACP)	A geographically specific area plan, covering the coastal and inland zones of Idaho, Oregon, and Washington States, required by the National Contingency Plan (Title 40 Code of Federal Regulations Part 300).

Term	Definition
O	
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 Removal Organization (OSRO)	An entity that provides oil spill response resources, and includes any for-profit or not-for-profit contractor, cooperative, or in-house response resources that have been established in a geographic area to provided required response resources.
Oily Waste	Oil-contaminated waste resulting from an oil spill or spill response operations.
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.
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.
Owner or Operator	Any person, individual, partnership, corporation, association, governmental unit or public or private organization of any character.
P	
Persistent Oil	Under OPA 90, persistent oils are petroleum-based oils that do not meet the distillation criteria for a non-persistent oil. Persistent oils are classified based on a specific gravities as follows: • Group II – specific gravity less than .85; • Group III – specific gravity between .85 and less than .95; • Group IV – specific gravity .95 to and including 1.0.; and • Group V – specific gravity greater than 1.0.

Term	Definition
P (Cont'd)	
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.
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.
Procurement Unit	Functional unit within the Finance/Administration Section responsible for financial matters involving vendor contracts.
R	
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.
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.

Term	Definition
R (Cont'd)	
Response Contractors	Persons/companies contracted to undertake a response action to contain and/or clean up a spill.
Response Guidelines	Guidelines for initial response that are based on the 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.
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 (SOFR)	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.
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.
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.
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.

Term	Definition
S (Cont'd)	
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.
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.
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.

Term	Definition
S (Cont'd)	
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.
Strike Team	Specified combinations of the same kinds and types of resources, with common communications and a leader.
Supervisor	The ICS title for individuals responsible for directing the activities of a Division or Group.
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.
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.
Tribal On Scene Coordinator (TOSC)	Local Tribal Agency Representative.

Term	Definition
U	
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.
V	
Verification	The act of ensuring that an exercise was certified. The Coast Guard, EPA, PHMSA or BSEE will conduct verification.
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.
Wildlife Branch Director	Responsible for minimizing wildlife injuries during spill response.
Wildlife Rescue	Efforts made in conjunction with Federal and State agencies to retrieve, clean, and rehabilitate birds and wildlife affected by an oil spill.
Worst Case Discharge	The 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 PHMSA and BSEE, 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. 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).

Acronyms

Acronym	Description
ACP	Area Contingency Plan
API	American Petroleum Institute
AST	Aboveground Storage Tank
ASTM	American Society for Testing and Materials
B	Beam
BBL	Barrel (Unit of Volume Equal to 42 Gallons)
BSEE	Bureau of Safety and Environmental Enforcement
C	Degrees Centigrade
CCR	California Code of Regulations
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
CFR	Code of Federal Regulations
CG or USCG	Coast Guard
CGIS	Coast Guard Intelligence Service
CH	Cargo Hold
CMST	Crisis Management Support Team
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
DEM	Washington Department of Emergency Management
DL	Decision Letters
DOT/PHMSA	U.S. Department of Transportation/Pipeline & Hazardous Materials Safety Administration
DWT	Deadweight Tons
ECY	Washington Department of Ecology
EOC	Emergency Operations Center
	Explosive Ordinance Disposal
EP	Estimated Position
EPA	U.S. Environmental Protection Agency
EPR&S	TPTN Emergency Preparedness, Response & Security Group
ERT	Emergency Response Team

Acronym	Description
FBI	Federal Bureau of Investigation
FEMA	Federal Emergency Management Agency
FOSC	Federal On-Scene Coordinator
FP	Flashpoint
FPS	Feet Per Second
FWPCA	Federal Water Pollution Control Act (as amended) (33 U.S.C. 1251 et seq.)
GPM	Gallons Per Minute
GT	Gross Tons
HAZMAT	Hazardous Materials
HAZWOPER	Hazardous Waste Operations and Emergency Response
HP	Horse Power
IC	Incident Commander
ICS	Incident Command System
IMAT	Incident Management Assistance Team
IMH	Incident Management Handbook
IS	Intrinsically Safe
IST	Incident Support Team
JTTF	Joint Terrorism Task Force
LEL	Lower Exposure Limit
LEPC	Local Emergency Planning Committee
LOSC	Local On Scene Coordinator
LPG	Liquefied Petroleum Gases
MSDS	Material Safety Data Sheet
MSL	Mean Sea Level
MSRC	Marine Spill Response Corporation
N/A	Not Applicable
NC	Not Certified
NCP	National Contingency Plan
NIOSH	National Institute of Standards and Technology
NM	Nautical Mile
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NRC	National Response Center
NRDA	Natural Resources Damage Assessment
NRT	National Response Team
NWACP	North West Area Contingency Plan
OPA 90	Oil Pollution Act of 1990
OSHA	Federal Occupational Safety and Health Administration

Acronym	Description
OSR	Oil Spill Response
OSRO	Oil Spill Response Organization
OVM	Organic Vapor Monitor
PEL	Permissible Exposure Limit
PHMSA	Pipeline and Hazardous Materials Safety Administration
PID	Photo Ionization Detector
PPE	Personal Protective Equipment
PSI	Pounds per square inch
QI	Qualified Individual
RA	Regional Administrator
RCRA	Resource Conservation and Recovery Act
RRT	Regional Response Team
SERC	State Emergency Response Commission
SI	Surface Impoundment
SIC	Standard Industry Codes
SMART	Special Monitoring for Applied Response Technologies
SOSC	State On-scene Coordinator
SPCC	Spill Prevention, Control, and Countermeasures
TBD	To Be Determined
TPTN	Transportation
TOSC	Tribal On-scene Coordinator
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
UST	Underground Storage Tank
UTV	Utility Vehicle
WT	Water Tight
WDFW	Washington State Department of Fish and Wildlife

Section II – Table of Contents

II-1	Discovery
II-2	Initial Response
II-3	Notification Procedures
II-4	Response Management System
II-5	Response Procedures
II-6	Detection Procedures
II-7	Emergency Response Equipment, Testing & Deployment
II-8	Waste Management Plan
II-9	Disposal Plan
II-10	Containment and Recovery
II-11	Water Quality and Sediment Quality Analysis
II-12	Drainage Plan
II-13	Detection/Mitigation Procedures
II-14	Evacuation
II-15	Site Security and Control
II-16	Site Safety and Health Plan
II-17	Personal Protective Equipment
II-18	Decontamination
II-19	Claims
II-20	Response Termination and Follow-up Procedures

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:	
✓	Activate internal alarms and hazard communication systems to notify all facility personnel
✓	Notify all response personnel, as needed
✓	Identify the character, exact source, amount, and extent of the release, as well as the other items needed for notification
✓	Notify and provide necessary information to 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 interaction of the spilled substance with water and/ or other substances stored at the facility and notify response personnel at the scene of that assessment
✓	Assess the possible hazards to human health and the environment due 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 m^3).
✓	Spills of an unknown volume in an area adjacent to waters of the state (including any environmental conditions that may worsen potential impact).
• Property Damage/Business Interruption	
✓	Property damage events likely to exceed $100,000.00 (USD) in estimated damages (Examples: fire, explosion, acts of nature, vandalism, theft, etc.).
✓	Any situation that should be brought to the attention of Corporate Management (CM&ER) due to actual or potential impact on the Company such as: Unscheduled business interruption that will likely result in $1, 000, 000 (USD) or more in estimated losses. This also applies to Partner/JV operated operations that meet the criteria.
• Evacuation/Shelter-In-Place	
✓	Evacuation beyond facilities of Company employees' and contractor personnel.
✓	Shelter-In-Place of the public
✓	Mandatory evacuation of the public.
• Well Control Incidents	
✓	Loss of surface well control that endangers the rig, onsite personnel or the environment.

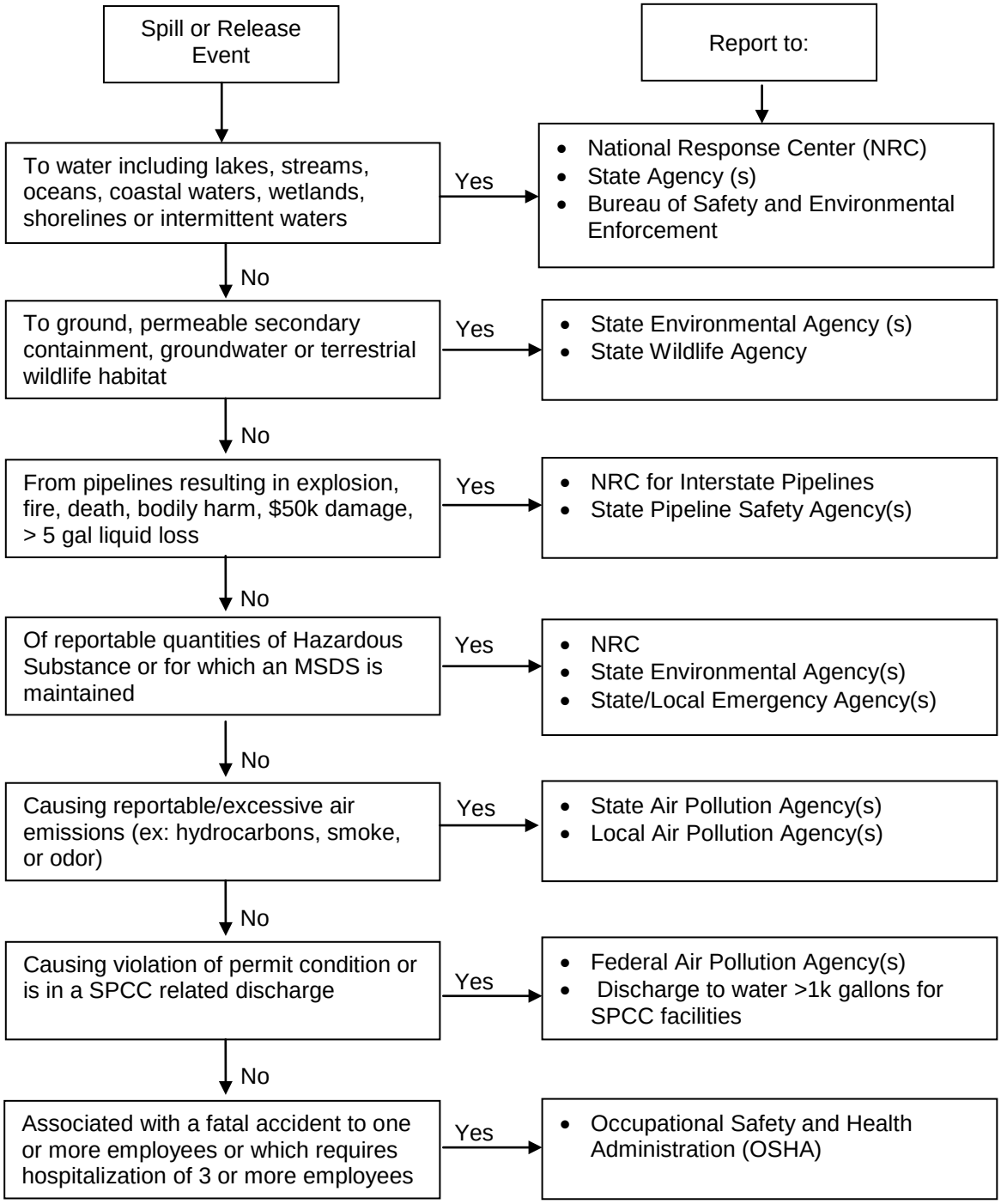
• Public Relation/Actual or Potential Impact	
✓	Serious transportation issues such as derailments involving our products and spills or releases resulting in traffic stoppage or evacuations.
✓	Acts of terrorism (e.g. bomb threats, sabotage, kidnapping, employee violence, etc.).
✓	That attracts, or could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

Sec II-3.9 Notification and Support Teams

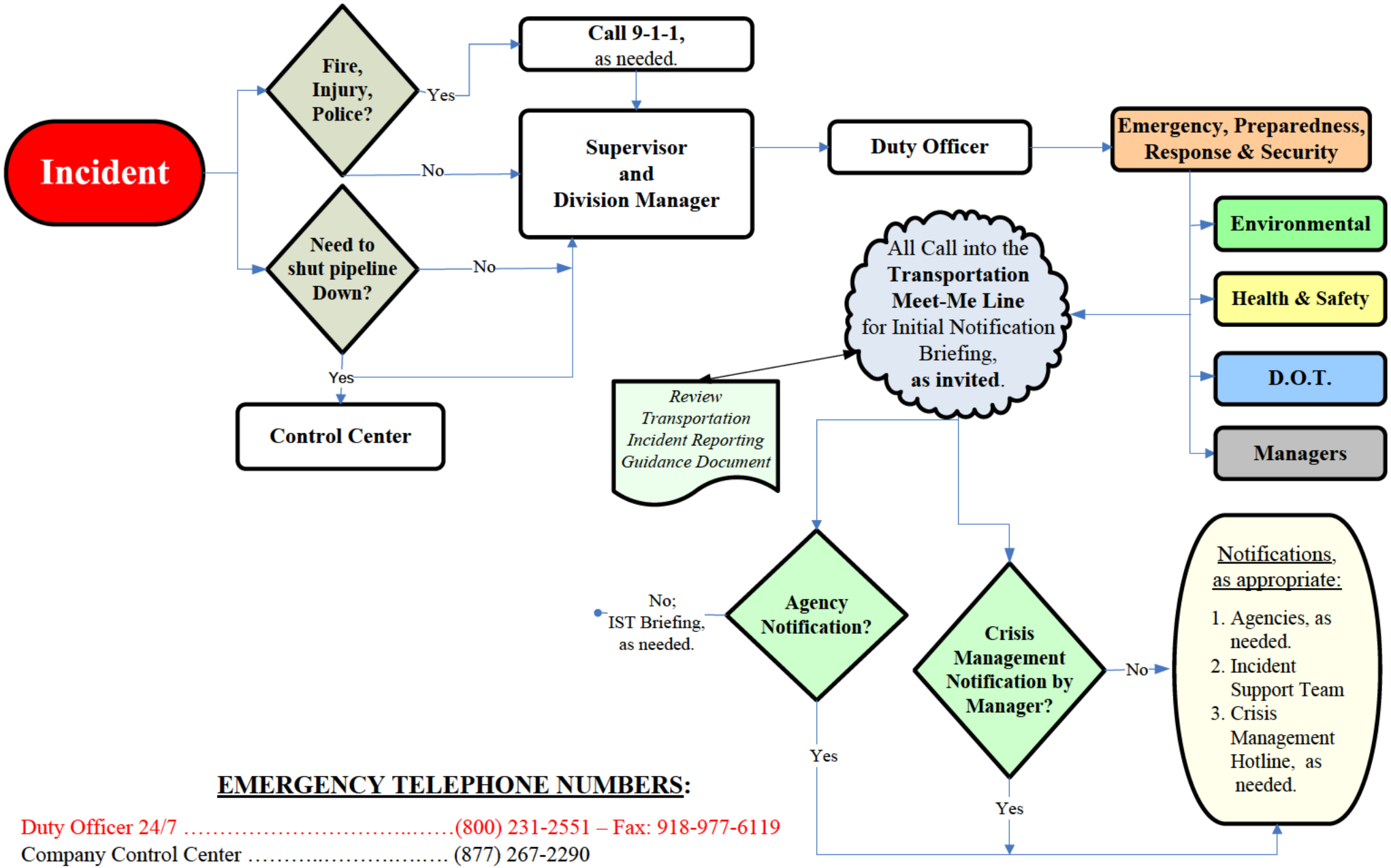
Subject Matter Expert (SME) – Primary Company Representative	
Contacts in the following areas provide support for internal and external notifications; assist with supporting plans, assessment and documentation:	
✓	Environmental Director
✓	Health & Safety Director
✓	DOT Regulatory Compliance Manager
✓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

Incident Support Team (IST)	
Consists of the personnel in the following positions:	
✓	Pipelines Manager
✓	Terminals Manager
✓	Division Managers
✓	Logistics Manager
✓	Engineering & Projects Manager
✓	Health, Safety & Environmental Manager
✓	Emergency Preparedness, Response & Security Director
✓	TPTN Tier 1 Team and/or any other support staff, as deemed necessary by the IST, or requested by the IC.
Company Away Team	
Activation of the team can be made through the Crisis Management Hotline. Follow the Notification Flowchart located in this Section. A description of the Company Away Team organization is as follows:	
✓	Approximately 18 ICS positions can be staffed a minimum of three personnel deep.
✓	The team is made up of Company volunteers from across North America
✓	Operations Division/Group Leaders are available
✓	One hundred plus personnel are available for activation
✓	Will assist with activation, deployment and integration of the ICS spill response organization
✓	Resources also include dedicated communications equipment (i.e., computers, phones, radios, etc.).
✓	Typically the team members attend two weeks of response training and/or exercises annually. Additionally, specialized training in Fire & HAZMAT Response, Oil Spill Response, Incident Command System (NIMS) and Incident/Consequence Management is provided depending on the ICS position.
Tier 1 Response	
✓	Any response that can be effectively managed completely within Transportation services, including functional resources and contractors.
Tier 2 Response	
✓	Any response that requires resources beyond Transportation's ability to effectively manage (i.e., one or more away team resource(s) are deployed to assist with response management).
Tier 3 Response	
✓	Any response that requires the activation of the Crisis Management Support Team (CMST) to assist with the management of the response.

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



Transportation Notifications Flowchart



EMERGENCY TELEPHONE NUMBERS:

Duty Officer 24/7 ……..……(800) 231-2551 – Fax: 918-977-6119
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) 397-3822
Crisis Management Hotline ……..(855) 699-8701 *or* (832) 765-3500

Revision: 20130129

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:
SPILLS/RELEASES:
PROPERTY DAMAGE/BUSINESS INTERRUPTION:
EVACUATION/SHELTER IN PLACE
PUBLIC RELATIONS/ACTUAL OR POTENTIAL COMPANY IMPACT
SECURITY
(b) (7)(F), (b) (3) [redacted]

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 (800-424-8802) or visit the NRC Web Site (http://www.nrc.uscg.mil) for additional information on reporting requirements and procedures. **Refer to Annex 2 Notifications**.	
Reporting Requirements	
☐ **Type**	All spills that impact or threaten navigable water or adjoining shorelines
☐ **Verbal:**	Within 1 Hour of release
☐ **Written:**	As requested by the agency

Sec II-3.10.3 Environmental Protection Agency (EPA)

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

Sec II-3.10.4 United States Coast Guard (USCG)

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

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

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

Sec II-3.10.6 Occupational Safety & Health Administration

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

Sec II-3.10.7 State and Local notifications

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

Sec II-3.10.8 Follow-up Notifications

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

Sec II-3.10.9 Incident Command Posts

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

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

Sec II-3.10.10 Documentation

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

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

To ensure that all pertinent data and information are available for the incident report, documentation should commence immediately upon notification of a spill and should continue until termination of all operations. The Documentation Unit Leader should coordinate all documentation. The documentation unit leader, incident commander, deputy incident commander, directors, supervisors, and designated support personnel should keep notes on all significant occurrences, including details and time of occurrence. Notes are best kept in chronological log format, to be compiled later in the final report. Every contact, written or verbal, with government personnel should be noted. All data should be written in a bound notebook, from which pages cannot be removed without leaving some track. Numbering of notebooks and pages may also help in filing of field data and provide for a method of reference later. These notebooks should also be used by supervisory personnel for documentation of an individual's activities. The Documentation Unit Leader should be responsible for distributing suitable notebooks to all personnel, and for assuring that personnel make proper use of the notebooks.

Sec. II-4 Response Management System

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

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

Sec. II-4.1 Incident Command System Structure

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

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

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

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

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

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

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

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

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

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

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

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

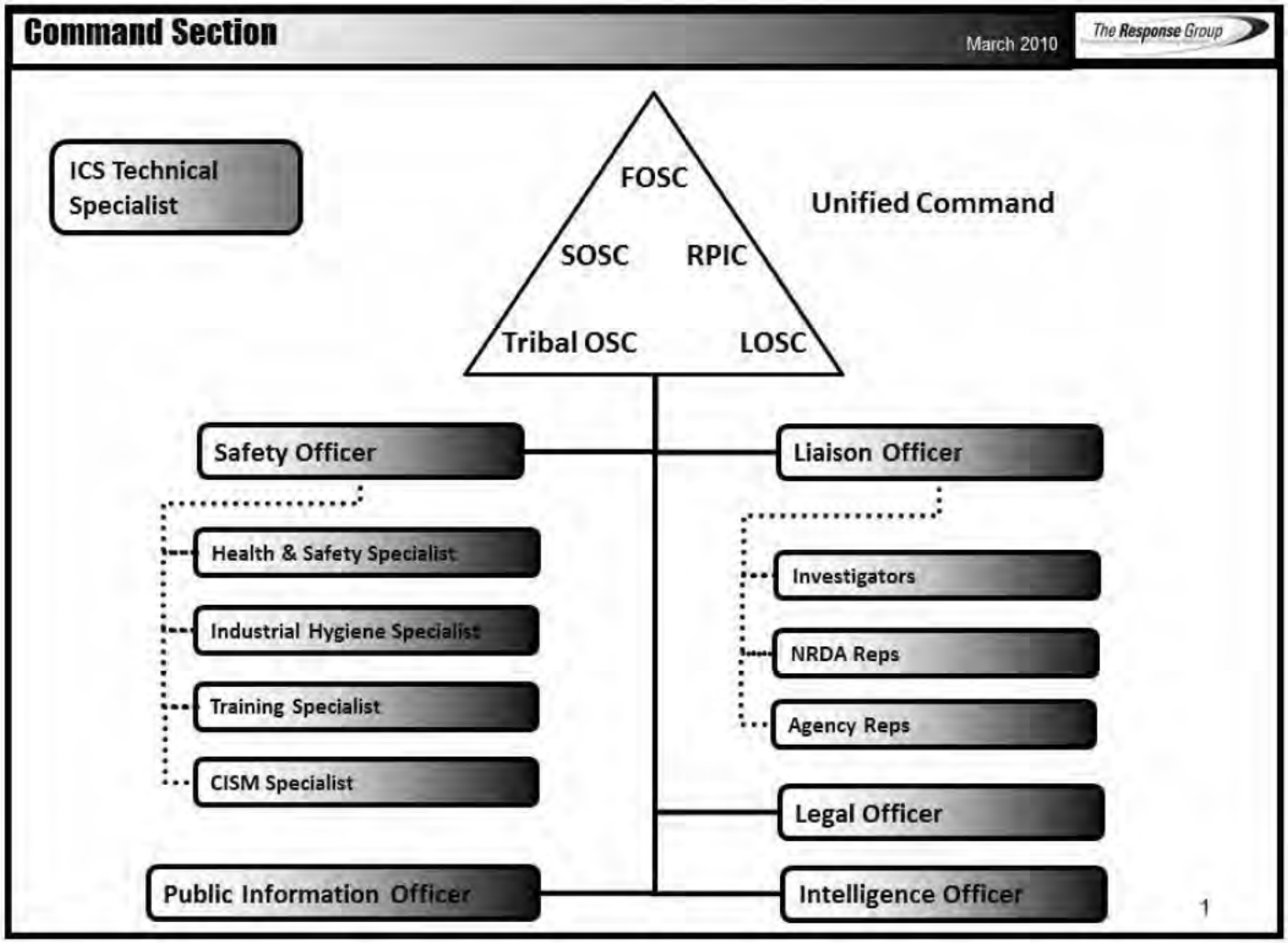
Tactical Operations	
The specific method selected for organizing and executing incident operations will depend on the:	
✓	Type of incident.
✓	Agencies involved.
✓	Objectives and strategies of the incident management effort.

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

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

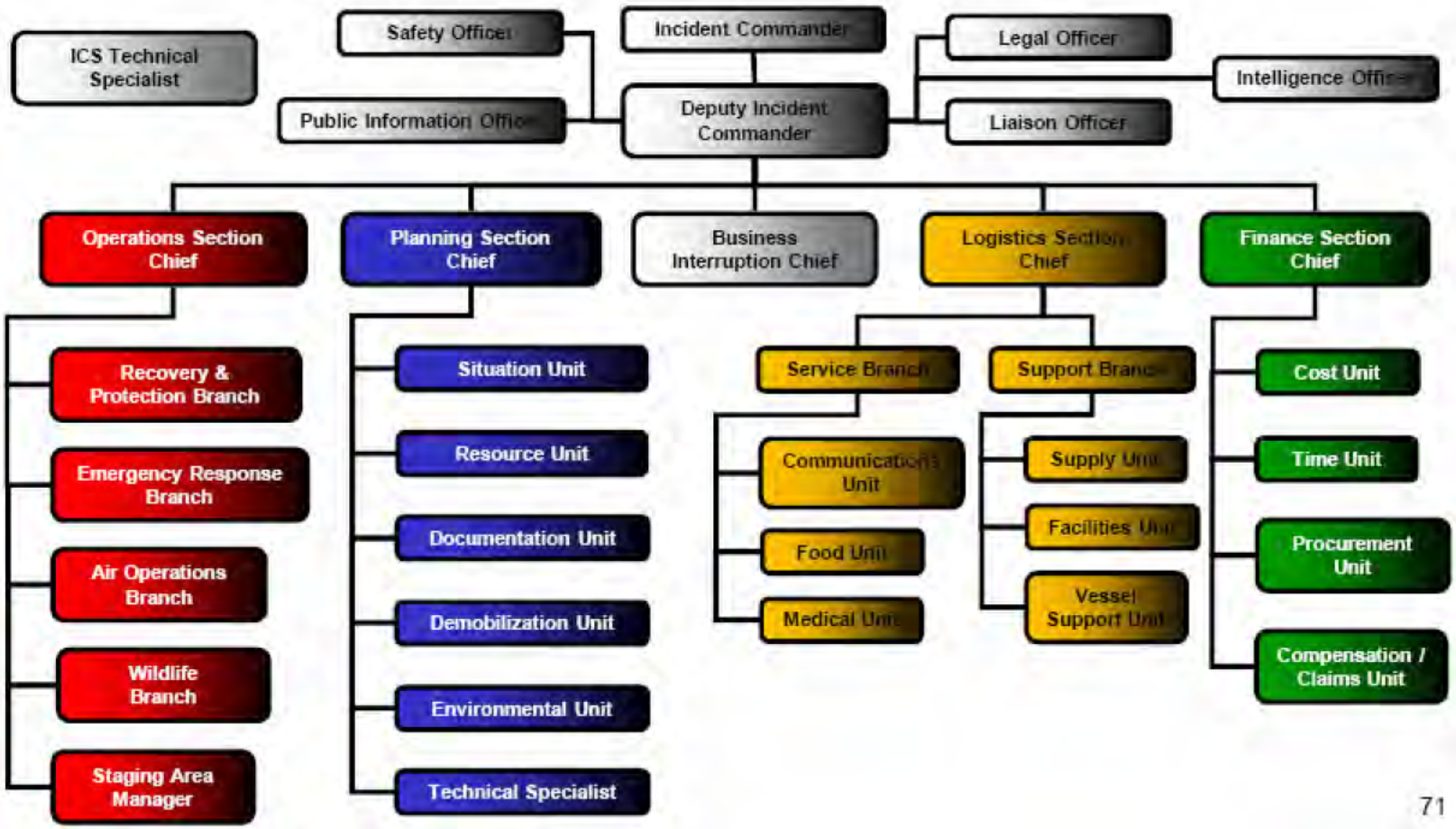
Sec. II-4.2 Company Organization

Figure 4.2.1 Company Command Staff Organization Chart (Sample from IMH)



Sec. II-4.2 Company Organization

Figure 4.2.2 Company IMT Organization Chart (Sample from IMH)



Sec. II-4.3 Common Responsibilities

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

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

Sec. II-4.4 Roles and Responsibilities

Sec. II.4.4.1 Incident Commander and Deputy IC Responsibilities

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

Incident Commander and Deputy IC Checklist	
☐	Review common responsibilities.
☐	Obtain a briefing from the prior IC (201 Briefing).
☐	Determine incident objectives & general direction for managing the incident.
☐	Establish the immediate priorities.
☐	Establish a CP.
☐	Brief Command Staff and General Staff.
☐	Establish an appropriate organization.
☐	Ensure planning meetings are scheduled as required.
☐	Approve and authorize the implementation of an IAP.
☐	Ensure that adequate safety measures are in place.
☐	Coordinate activity for all Command and General Staff.
☐	Coordinate with key people and officials.
☐	Approve requests for additional resources or for the release of resources.
☐	Keep internal and external stakeholders informed.
☐	Evaluate/Approve the use of trainees, volunteers, and auxiliary personnel.
☐	Authorize release of information to the news media.
☐	Ensure ICS 209 is completed and forwarded to appropriate higher authority.
☐	Order the demobilization of the incident when appropriate.

Sec. II.4.4.2 Safety Officer

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

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

Sec. II.4.4.3 Public Information Officer

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

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

Sec. II.4.4.4 Liaison Officer

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

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

Sec. II.4.4.5 ICS/UCS Technical Specialist

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

Sec. II.4.4.6 Legal Officer

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

Sec. II.4.4.7 Intelligence/Security Officer

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

Sec. II.4.4.8 Operations Section Chief

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

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

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

Sec. II.4.4.9 Planning Section Chief

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

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

Sec. II.4.4.10 Logistics Section Chief

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

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

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

Sec. II.4.4.11 Finance Section Chief

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

Finance Section Chief Checklist	
☐	Review Common Responsibilities.
☐	Participate in incident planning meetings and briefings as required.
☐	Review operational plans and provide alternatives where financially appropriate.
☐	Manage all financial aspects of an incident.
☐	Provide financial and cost analysis information as requested.
☐	Gather pertinent information from briefings with responsible agencies.
☐	Develop an operating plan for the Finance/Admin Section; fill supply and support needs.
☐	Determine the need to set up and operate an incident commissary.
☐	Meet with Assisting and Cooperating Agency Representatives, as needed.
☐	Maintain daily contact with agency(s) administrative headquarters on Finance/Admin matters.
☐	Ensure that all personnel time records are accurately completed and transmitted to home agencies, according to policy.
☐	Provide financial input to demobilization planning.
☐	Ensure that all obligation documents initiated at the incident are properly prepared and completed.
☐	Brief agency administrative personnel on all incident-related financial issues needing attention or follow-up prior to leaving incident.
☐	Develop recommended list of Section resources to be demobilized and initial recommendation for release when appropriate.
☐	Receive and implement applicable portions of the Incident Demobilization Plan.
☐	Maintain Unit Log (ICS 214)

Sec. II.4.5 Transition Checklists

Incident Commander Transition Checklist			
	Item or Task	**Documentation or Forum**	**Complete**
☐	Check in	ICS 211 P	
☐	Current Situation update	Individual Briefing	
☐	Status of Objectives information	ICS 202	
☐	Status of Resources	ICS 201-4 or Resource Summary	
☐	Pending Action Items or Assignments	Open Action Tracker, 214 Log – IC you are relieving	
☐	Verify Incident name (IAP Database login if applicable)	Planning Section Chief	
☐	Verify Operational Period	Sit Stat Board – Team member you are relieving	
☐	Organizational Chart Updated	RESL, Unit Leader, Section Chief or Deputy	
☐	ICS Vest	Documentation Unit or Team member you are relieving	
☐	Communications Plan update	ICS 205 and/or ICS 203	
☐	Announcement of transition of IC	ICP announcement, assessment meeting or Shift Briefing	
☐	Assurance that transitioning Command & General Staff have completed transition & check list	Command & General Staff assessment meeting	

Sec. II.4.5 Transition Checklists (Cont'd)

ICS Position Transition Checklist			
	Item or Task	**Documentation or Forum**	**Complete**
☐	Check in	ICS 211 P	
☐	Verify ICS Position assigned	Section Chief or Deputy, Unit Leader, Branch Director, ICS 207 or IC	
☐	Current Situation update	ICS 201 Briefing or Operational Briefing or Section/Unit Briefing or Individual Briefing	
☐	Pending Action Items or Assignments	Open Action Tracker, 214 Log – Team member you are relieving	
☐	Verify Incident name (IAP Database login if applicable)		
☐	Verify Operational Period	Sit Stat Board – Team member you are relieving	
☐	Organizational Chart Updated	RESL, Unit Leader, Section Chief or Deputy	
☐	ICS Vest	Documentation Unit or Team member you are relieving	
☐	Communications Plan update	ICS 205 and/or ICS 203	

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
•	Natural and Other Gas Leaks	Sec II-5.12
•	Natural and Other Gas Leak In or Near a Building	Sec II-5.13
•	Fire / Explosion	Sec II-5.14
•	Pipeline Station or Manifold Fire	Sec II-5.15
•	Truck Loading Rack Fire	Sec II-5.16
•	Tank Fire Pre-Plan / Flowchart	Sec II-5.17
•	Spill Response Strategy Guide	Sec II-5.18
•	Oil Spill / Release	Sec II-5.19
•	Oil Spill Surveillance	Sec II-5.20
•	Spills to Groundwater	Sec II-5.21
•	Natural Disasters	Sec II-5.22
•	Bomb Threat	Sec II-5.23

Sec. II-5.1 Initial Discovery / Response Actions

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

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

Sec. II-5.2 Immediate Action Checklist

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

Sec II-5.3 General Initial Response Procedures – Terminals

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

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

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

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

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

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

Sec II-5.5 Emergency Shutdown

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

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

Sec. II-5.6 Injury / Medical / Rescue

Medical Emergency Checklist

Procedures	✓	Date/Time
Activate professional medical care for the victim by: ☐ Call **911** to arrange for ground or air ambulance support. Provide the 911 dispatch the following information: ☐ Your name and location ☐ Type of medical emergency ☐ Name and location of the injured ☐ Condition of injured ☐ Contact phone number ☐ Transport injured to a local hospital or physician.	☐	__/__/__ ____:____
Caller's Name:		

Note: Evacuation of seriously ill or injured persons should be conducted by ground or air ambulance only. **Transportation by company or private vehicle should be discouraged, unless advised to do so by medical authorities**. All medical emergencies should be documented and applicable emergency notifications completed.

Sec II-5.7 Unconfirmed Report of a Leak

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

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

Sec. II-5.8 Pipeline Leak or Rupture

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

Emergency Response Guide First Responder

Piping Leak

1

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

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

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

2

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

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

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

FIRST RESPONDER GUIDE UNIFIED COMMAND ICS ORGANIZATION

3

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

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

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

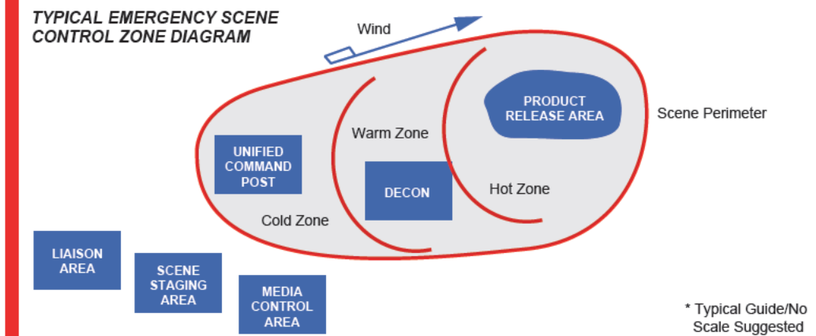
4

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

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

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

TYPICAL EMERGENCY SCENE CONTROL ZONE DIAGRAM



* Typical Guide/No Scale Suggested

FACILITY RESPONSE PLAN QUICK REFERENCE

Sec 1	Notifications	App C	Contractor Capabilities
Sec 2	Spill Mitigation	App D	Communications Plan
Sec 3	Facility Response	App E	Site Safety Plan
Sec 4	ACP	App F	Evacuation
Sec 5	Waste Handling	App G	Definitions
Sec 6	Hazard Evaluation	App H	References
Sec 7	Spill Scenarios	App I	Wildlife
Sec 8	Training & Exercise Program	App J	Spill Protection
Sec 9	Plan Review and Update	App K	Public Relations
App A	Facility Information	App L	SPCC Plan
App B	List of Contacts		

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
- 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

PHILLIPS 66 Transportation

Emergency Response Guide First Responder

Piping Rupture

1

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

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

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

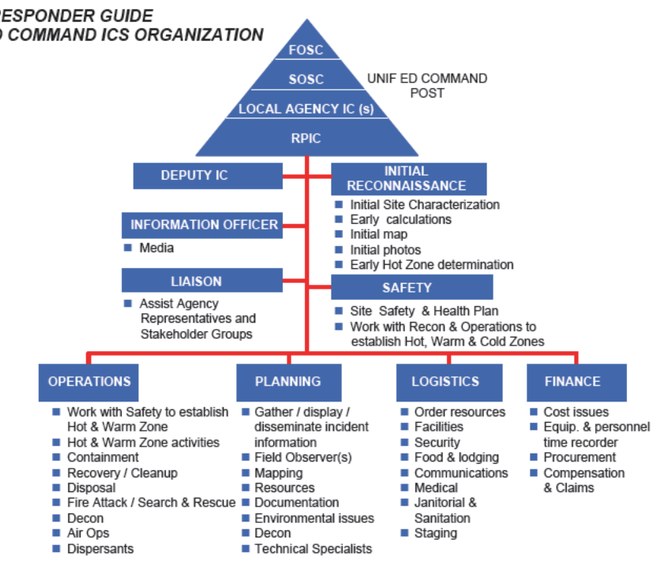
2

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

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

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

FIRST RESPONDER GUIDE UNIFIED COMMAND ICS ORGANIZATION



3

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

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

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

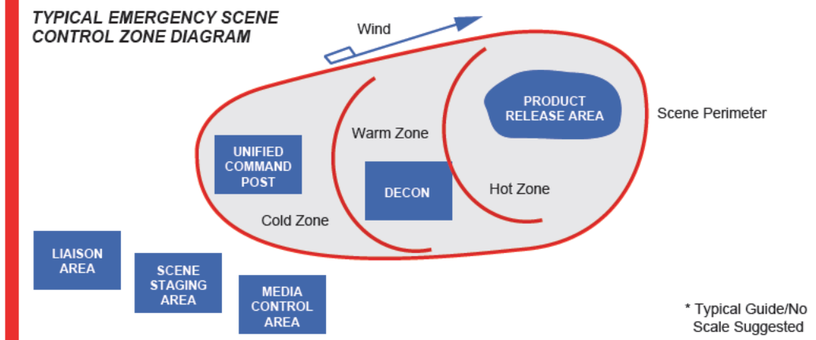
4

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

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

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

TYPICAL EMERGENCY SCENE CONTROL ZONE DIAGRAM



* Typical Guide/No Scale Suggested

FACILITY RESPONSE PLAN QUICK REFERENCE

Sec 1	Notifications	App C	Contractor Capabilities
Sec 2	Spill Mitigation	App D	Communications Plan
Sec 3	Facility Response	App E	Site Safety Plan
Sec 4	ACP	App F	Evacuation
Sec 5	Waste Handling	App G	Definitions
Sec 6	Hazard Evaluation	App H	References
Sec 7	Spill Scenarios	App I	Wildlife
Sec 8	Training & Exercise Program	App J	Spill Protection
Sec 9	Plan Review and Update	App K	Public Relations
App A	Facility Information	App L	SPCC Plan
App B	List of Contacts		

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
- 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

PHILLIPS 66 Transportation

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

Equipment Failure Checklist

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

Emergency Response Guide First Responder Failure of Transfer Equip

1

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

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

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

2

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

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

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

FIRST RESPONDER GUIDE UNIFIED COMMAND ICS ORGANIZATION

3

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

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

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

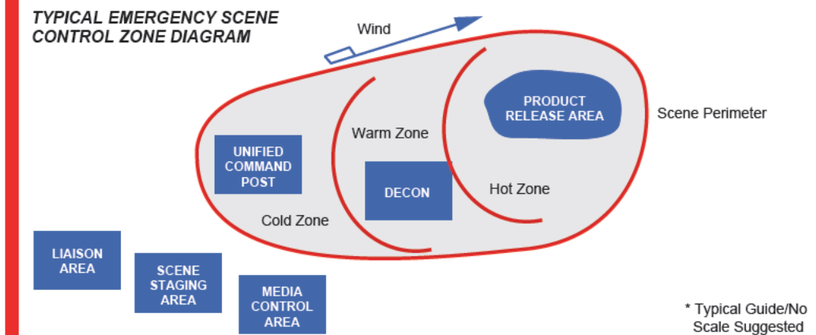
4

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

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

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

TYPICAL EMERGENCY SCENE CONTROL ZONE DIAGRAM



* Typical Guide/No Scale Suggested

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

FACILITY RESPONSE PLAN QUICK REFERENCE

Sec 1	Notifications	App C	Contractor Capabilities
Sec 2	Spill Mitigation	App D	Communications Plan
Sec 3	Facility Response	App E	Site Safety Plan
Sec 4	ACP	App F	Evacuation
Sec 5	Waste Handling	App G	Definitions
Sec 6	Hazard Evaluation	App H	References
Sec 7	Spill Scenarios	App I	Wildlife
Sec 8	Training & Exercise Program	App J	Spill Protection
Sec 9	Plan Review and Update	App K	Public Relations
App A	Facility Information	App L	SPCC Plan
App B	List of Contacts		

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

PHILLIPS 66 Transportation

Emergency Response Guide First Responder

Equipment Failure

1

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

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

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

2

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

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

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

FIRST RESPONDER GUIDE UNIFIED COMMAND ICS ORGANIZATION

3

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

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

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

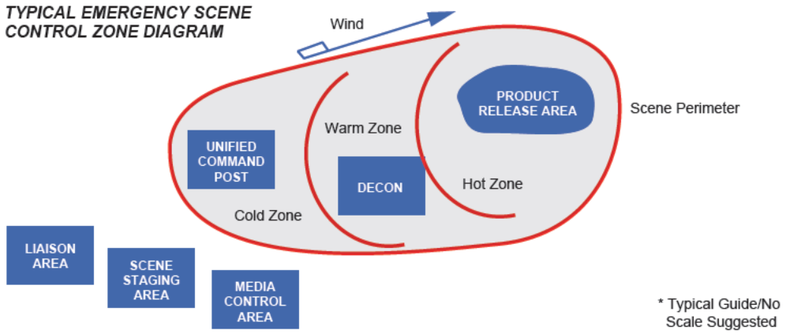
4

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

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

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

TYPICAL EMERGENCY SCENE CONTROL ZONE DIAGRAM



* Typical Guide/No Scale Suggested

FACILITY RESPONSE PLAN QUICK REFERENCE

Sec 1	Notifications	App C	Contractor Capabilities
Sec 2	Spill Mitigation	App D	Communications Plan
Sec 3	Facility Response	App E	Site Safety Plan
Sec 4	ACP	App F	Evacuation
Sec 5	Waste Handling	App G	Definitions
Sec 6	Hazard Evaluation	App H	References
Sec 7	Spill Scenarios	App I	Wildlife
Sec 8	Training & Exercise Program	App J	Spill Protection
Sec 9	Plan Review and Update	App K	Public Relations
App A	Facility Information	App L	SPCC Plan
App B	List of Contacts		

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

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

PHILLIPS 66 Transportation

Sec. II-5.10 Tank Overfill

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

Sec. II-5.11 Tank Failure

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

Emergency Response Guide First Responder

Tank Overfill

1

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

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

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

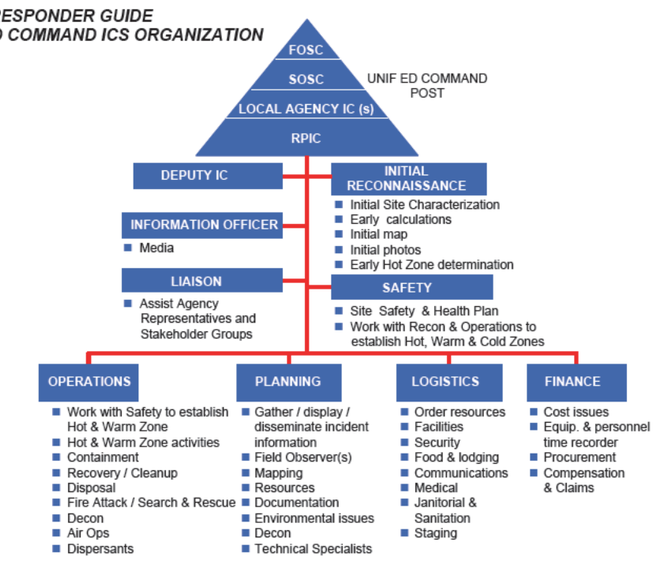
2

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

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

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

FIRST RESPONDER GUIDE
UNIFIED COMMAND ICS ORGANIZATION



3

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

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

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

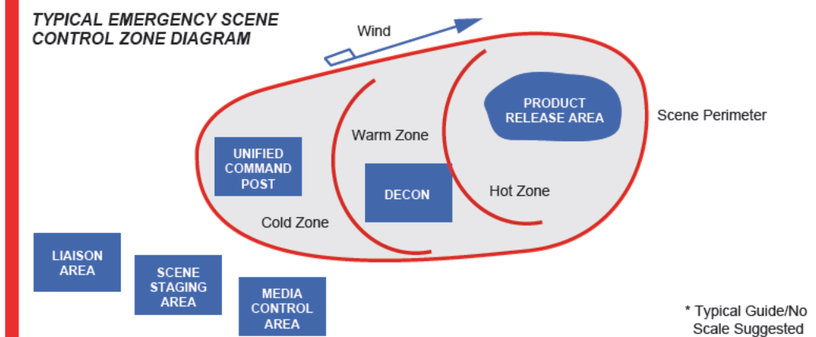
4

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

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

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

TYPICAL EMERGENCY SCENE
CONTROL ZONE DIAGRAM



* Typical Guide/No Scale Suggested

FACILITY RESPONSE PLAN QUICK REFERENCE

Sec 1	Notifications	App C	Contractor Capabilities
Sec 2	Spill Mitigation	App D	Communications Plan
Sec 3	Facility Response	App E	Site Safety Plan
Sec 4	ACP	App F	Evacuation
Sec 5	Waste Handling	App G	Definitions
Sec 6	Hazard Evaluation	App H	References
Sec 7	Spill Scenarios	App I	Wildlife
Sec 8	Training & Exercise Program	App J	Spill Protection
Sec 9	Plan Review and Update	App K	Public Relations
App A	Facility Information	App L	SPCC Plan
App B	List of Contacts		

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
- 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

PHILLIPS 66 Transportation

Emergency Response Guide First Responder

Tank Failure

1

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

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

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

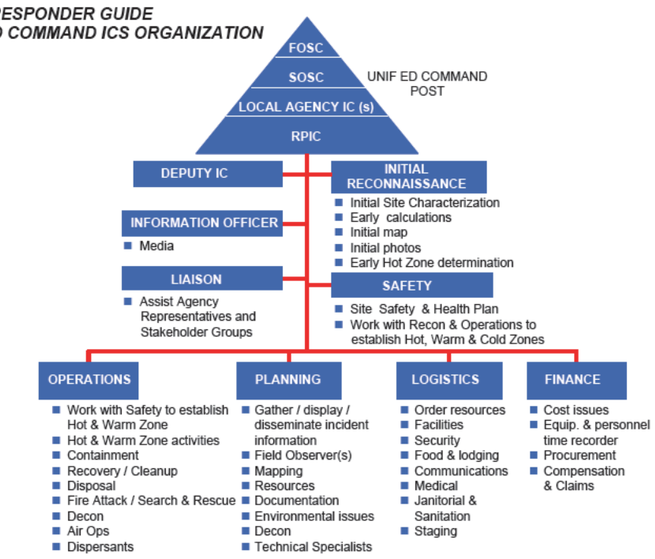
2

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

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

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

FIRST RESPONDER GUIDE
UNIFIED COMMAND ICS ORGANIZATION



3

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

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

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

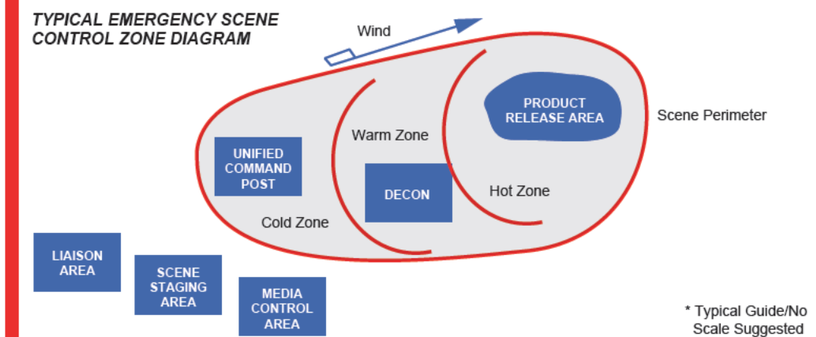
4

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

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

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

TYPICAL EMERGENCY SCENE
CONTROL ZONE DIAGRAM



* Typical Guide/No Scale Suggested

FACILITY RESPONSE PLAN QUICK REFERENCE

Sec 1	Notifications	App C	Contractor Capabilities
Sec 2	Spill Mitigation	App D	Communications Plan
Sec 3	Facility Response	App E	Site Safety Plan
Sec 4	ACP	App F	Evacuation
Sec 5	Waste Handling	App G	Definitions
Sec 6	Hazard Evaluation	App H	References
Sec 7	Spill Scenarios	App I	Wildlife
Sec 8	Training & Exercise Program	App J	Spill Protection
Sec 9	Plan Review and Update	App K	Public Relations
App A	Facility Information	App L	SPCC Plan
App B	List of Contacts		

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

INITIAL ICS/NOTIFICATION FORMS THAT MAY BE UTILIZED
- 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

PHILLIPS 66 Transportation

Sec. II-5.12 Natural and Other Gas Leaks

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

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

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

Emergency Response Guide First Responder

Natural and Other Gas Leaks

1

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

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

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

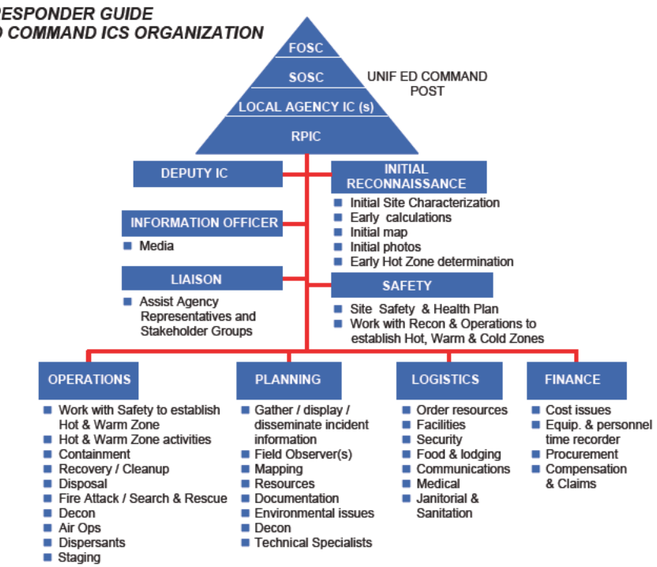
2

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

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

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

FIRST RESPONDER GUIDE
UNIFIED COMMAND ICS ORGANIZATION



3

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

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

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

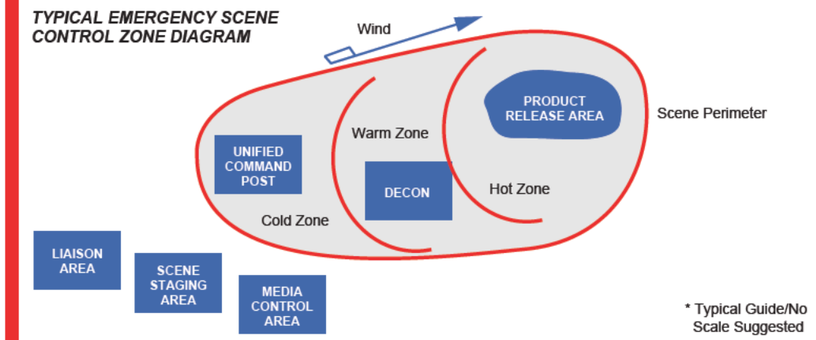
4

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

DISPOSAL
- Minimal disposal issues

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

TYPICAL EMERGENCY SCENE
CONTROL ZONE DIAGRAM



SAFETY FIRST

FACILITY MITIGATION/PROTECTION ACTIONS

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

INITIAL ICS/NOTIFICATION FORMS THAT MAY BE UTILIZED

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

DOT EMERGENCY RESPONSE GUIDEBOOK QUICK REFERENCE PAGES

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

Emergency Response Guide First Responder

Natural and Other Gas Leak In or Near a Building

1

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

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

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

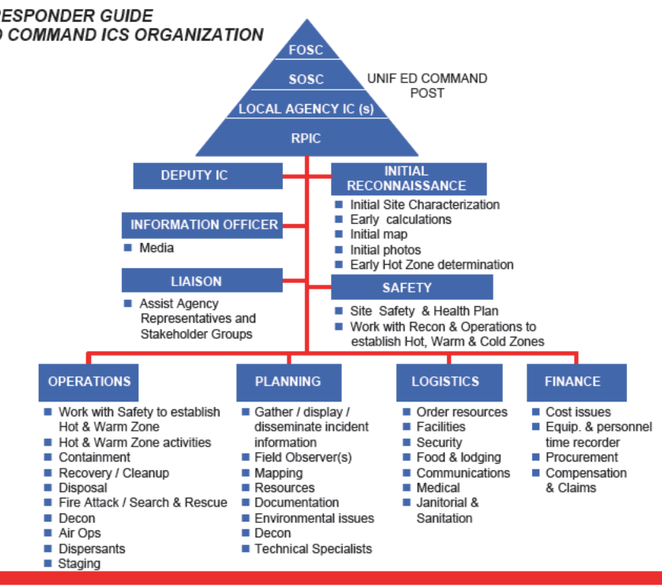
2

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

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

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

FIRST RESPONDER GUIDE
UNIFIED COMMAND ICS ORGANIZATION



3

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

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

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

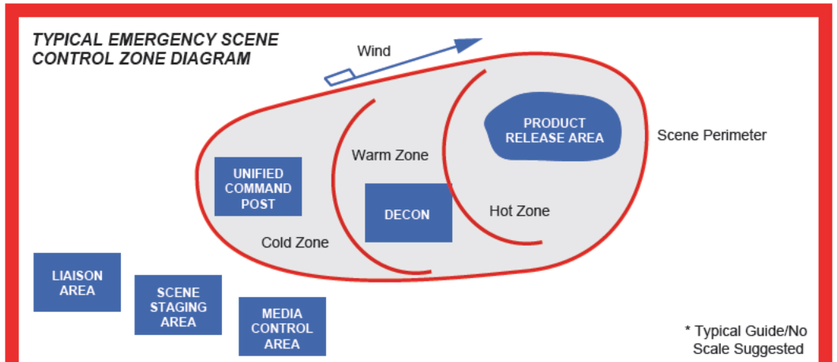
4

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

DISPOSAL
- Minimal disposal issues

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

TYPICAL EMERGENCY SCENE
CONTROL ZONE DIAGRAM



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

PHILLIPS 66 Transportation

Sec. II-5.14 Fire / Explosion

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

Life safety shall be the highest priority for all personnel.

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

Emergency Response Guide First Responder

Fire or Explosion

1

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

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

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

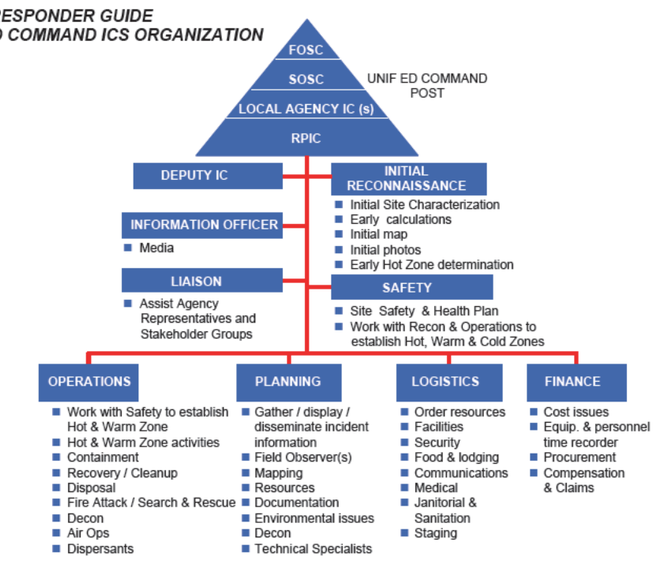
2

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

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

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

FIRST RESPONDER GUIDE
UNIFIED COMMAND ICS ORGANIZATION



3

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

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

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

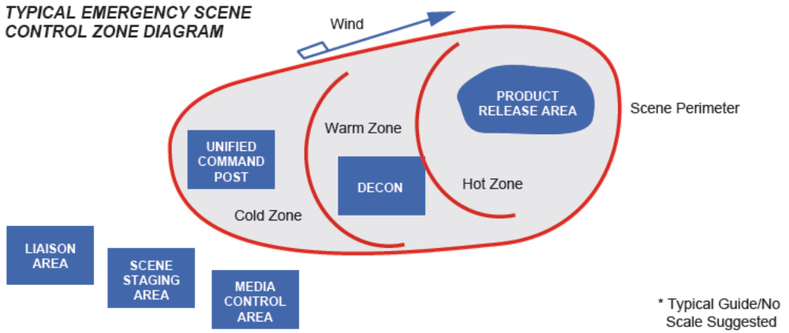
4

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

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

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

TYPICAL EMERGENCY SCENE
CONTROL ZONE DIAGRAM



* Typical Guide/No Scale Suggested

FACILITY RESPONSE PLAN QUICK REFERENCE

Sec 1	Notifications	App C	Contractor Capabilities
Sec 2	Spill Mitigation	App D	Communications Plan
Sec 3	Facility Response	App E	Site Safety Plan
Sec 4	ACP	App F	Evacuation
Sec 5	Waste Handling	App G	Definitions
Sec 6	Hazard Evaluation	App H	References
Sec 7	Spill Scenarios	App I	Wildlife
Sec 8	Training & Exercise Program	App J	Spill Protection
Sec 9	Plan Review and Update	App K	Public Relations
App A	Facility Information	App L	SPCC Plan
App B	List of Contacts		

FACILITY MITIGATION/PROTECTION ACTIONS
- Alert personnel
- Notify Terminal Superintendent 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
- 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

PHILLIPS 66 Transportation

Sec. II-5.14.1 Fire Prevention

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

Sec. II-5.15 Pipeline Station or Manifold Fire

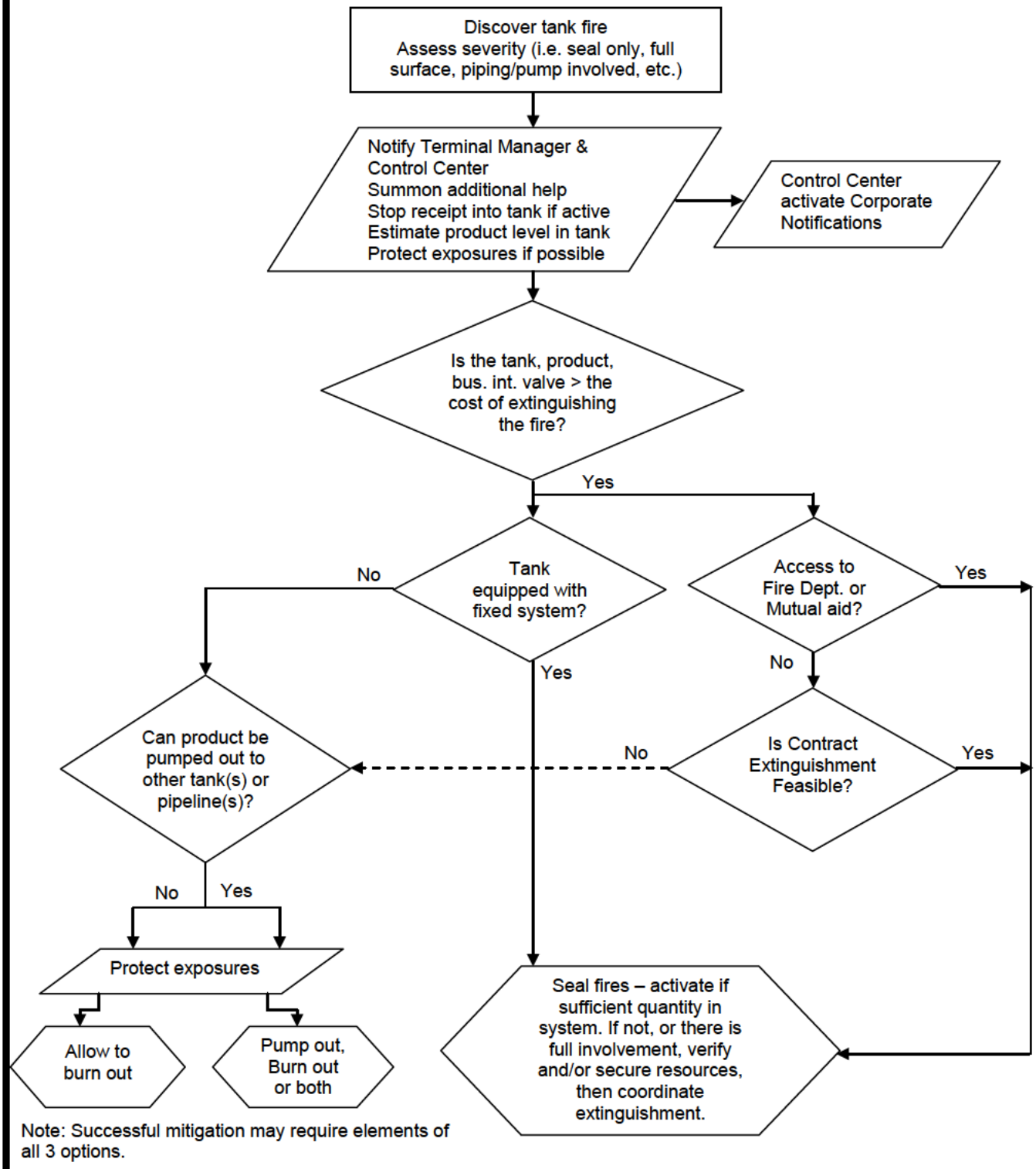
Pipeline Station or Manifold Fire		
Procedures	✓	Date/Time
Bear in mind it is better to take plenty of time in an emergency than to rush in and sustain personal injury.	☐	__/__/__ ____:____
Personnel should immediately evacuate hazardous area.	☐	__/__/__ ____:____
Extinguish fire at once, if possible,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

Sec. II-5.16 Truck Loading Rack Fire

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

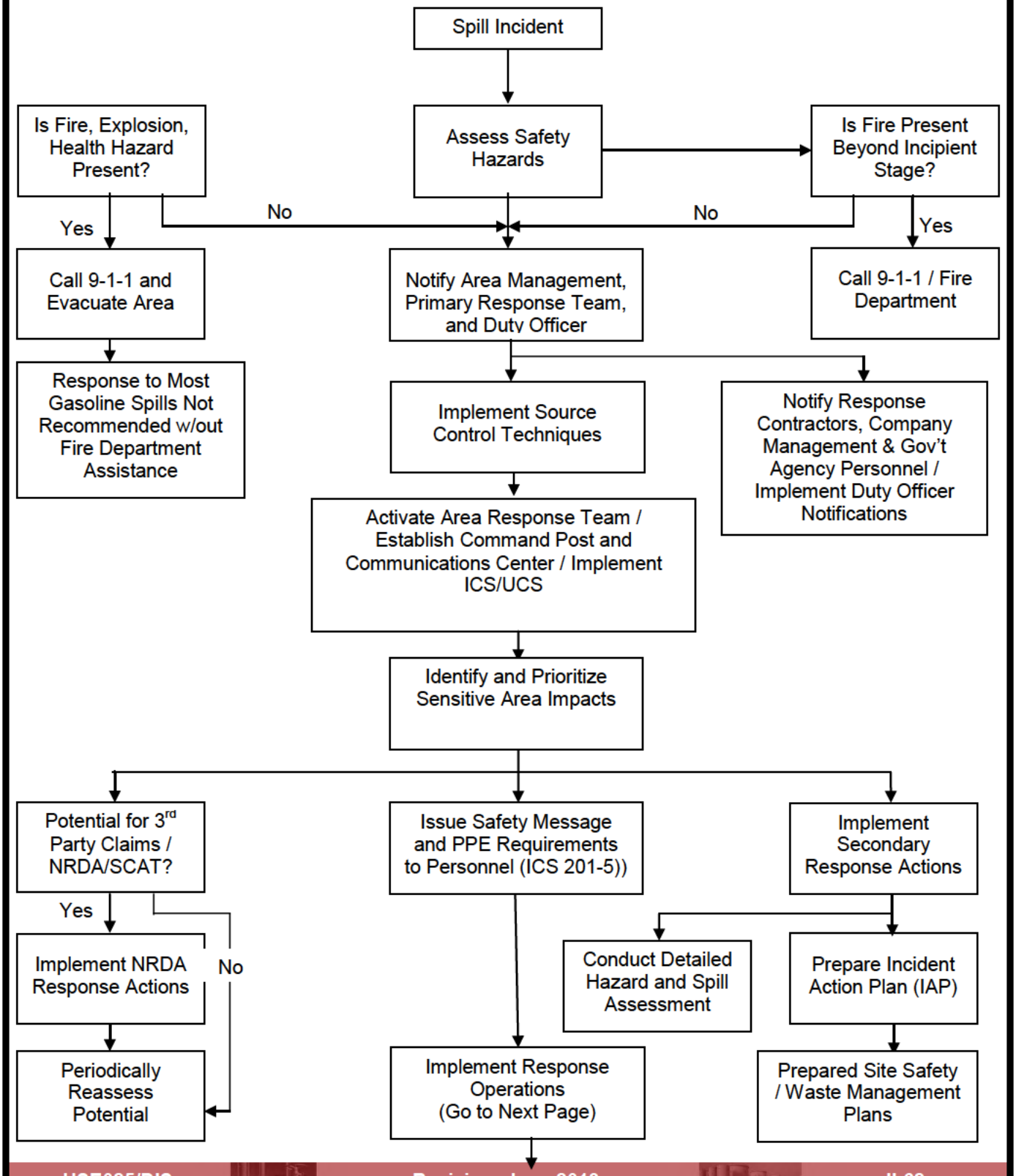
Sec. II-5.17 Tank Fire Pre-Plan / Flowchart

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

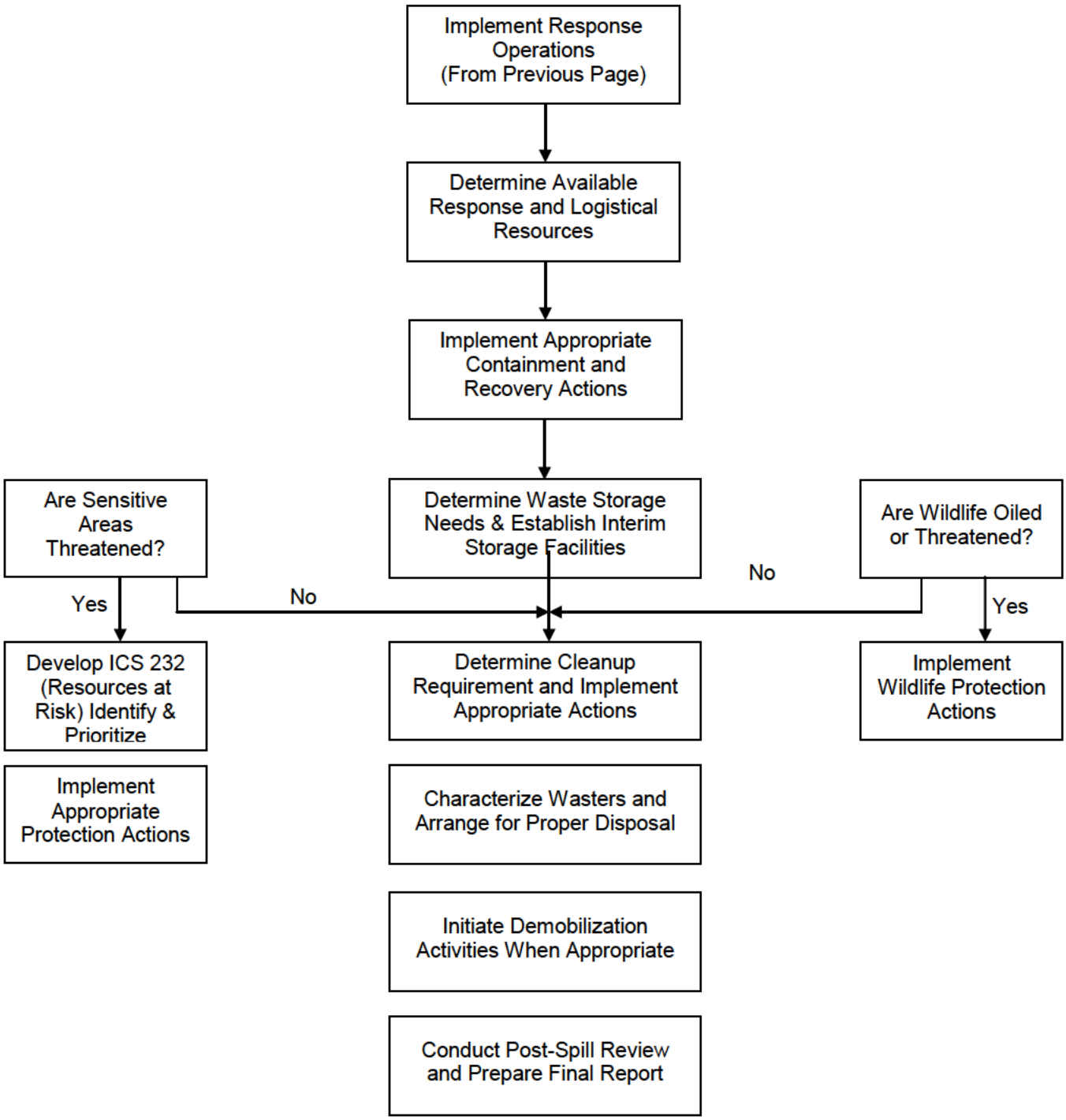


Note: Successful mitigation may require elements of all 3 options.

Sec. II-5.18 Spill Response Strategy Guide



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



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

Sec. II-5.19 Oil Spill / Release

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

Sec. II-5.20 Oil Spill Surveillance

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

Aerial Spill Surveillance Data Sheet

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

Clear ☐	Partly Cloudy ☐	Cloudy ☐

Spill Location

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

Spill Description

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

General Description

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

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

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

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

Figure II-5.1 – Spill Estimation Factors

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

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

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

Sec. II-5.20.1 Estimating Spill Trajectories

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

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

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

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

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

Sec. II-5.20.2 Sampling and Testing

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

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

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

Sec. II-5.21 Spills to Groundwater

Sec. II-5.21.1 General

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

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

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

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

Sec. II-5.21.2 Response Actions

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

Sec. II-5.21.3 Initial Assessment

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

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

Sec. II-5.21.4 Ground Impact Potential

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

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

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

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

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

Retention Capacity

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

Sec. II-5.21.5 Supplemental Assessment

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

These activities commonly include:

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

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

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

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

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

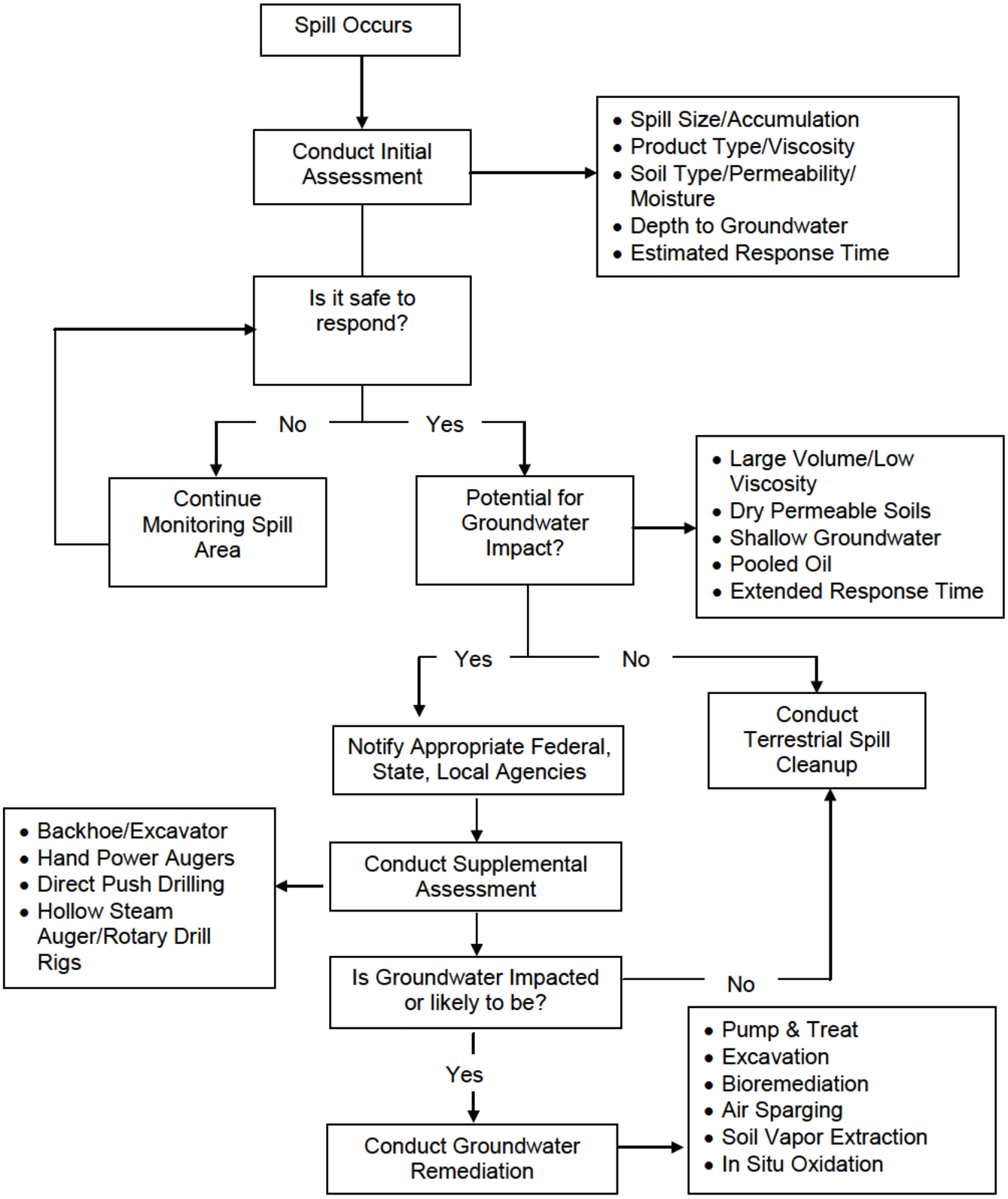
Sec. II-5.21.6 Recover/Remediation

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

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

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

Figure II-5.2 – Groundwater Spill Response Strategy Guide



Sec. II-5.22 Natural Disasters

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

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

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

Earthquake

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

River Flood, Severe Storm, Freeze Protection Preparedness Checklist

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

Sec. II-5.23 Bomb Threat

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

[redacted]

Sec. II-5.23 Bomb Threat (Cont'd)

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

[redacted]

Sec. II-5.23.1 Bomb Threat Call Checklist

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

[redacted]

Sec. II-6 Detection Procedures

Sec. II-6.1 Release Detection

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

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

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

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

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

Sec. II-6.2 Discharge Detection Systems

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

Sec. II-6.3 Discharge Detection by Personnel

Sec. II-6.3.1 Routine Inspections

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

Sec. II-6.3.2 Safe Fill

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

Sec. II-6.3.3 Receipt Monitoring

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

Sec. II-6.3.4 Tank Gauging

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

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 Scully automatic equipment 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 to the situation.
•	(b) (7)(F), (b) (3) [redacted]

Sec. II-6.6 Good Engineering Practices.

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

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

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

Sec. II-6.7 Third-Party Damage Prevention

If the systems are properly designed, constructed, operated and maintained, then the most 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-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 Local Fire Department.

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

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

Sec. II-6.10.1 Storage Tank Overfill Lines

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

Sec. II-6.11 Visual Tank Inspection

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

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

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

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

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

Sec. II-6.12 Secondary Containment Inspection

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

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

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

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

Sec. II-6.13 Pipeline Inspections

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

Lines that are not connected to the SCADA System are generally smaller crude gathering pipelines. These lines are observed regularly by facility/pipeline maintenance personnel. In addition to these inspections, aircraft that fly the pipeline on a scheduled weekly basis inspect the lines.

Sec. II-6.14 Buried Piping

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

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

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

Sec. II-6.14.1 Exposed Buried Piping

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

Sec. II-6.14.2 Out-of-Service Pipes

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

Sec. II-6.14.3 Pipe Supports

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

Sec. II-6.14.4 Elevated Pipes

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

Sec. II-6.15 Dike Drainage

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

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

Sec. II-6.16 High Level Alarms

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

Sec. II-6.17 Rack Drain

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

Sec. II-6.18 Cathodic Protection System

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

Sec. II-6.19 Delivery Lines and Manifold

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

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

Sec. II-7.1 Response Equipment for Small Discharges

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

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

Sec. II-7.2 Response Equipment for Medium Discharges

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

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

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

Sec. II-8 Waste Management Plan

Sec. II-8.1 Introduction

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

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

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

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

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

Sec. II-8.2 Applicability

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

Sec. II-8.3 Amendments to Plan

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

Sec. II-8.4 Identification of Emergency Coordinator

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

Sec. II-8.5 Emergency Procedures

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

Sec. II-8.6 Evacuation Plan

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

Sec. II-8.7 Notification Requirements

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

Sec. II-8.8 Arrangements with Agencies and Contractors

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

Sec. II-8.9 Emergency Equipment

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Sec. II-8.10 Storage

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

Figure II-8.1 – Waste Management Flowchart

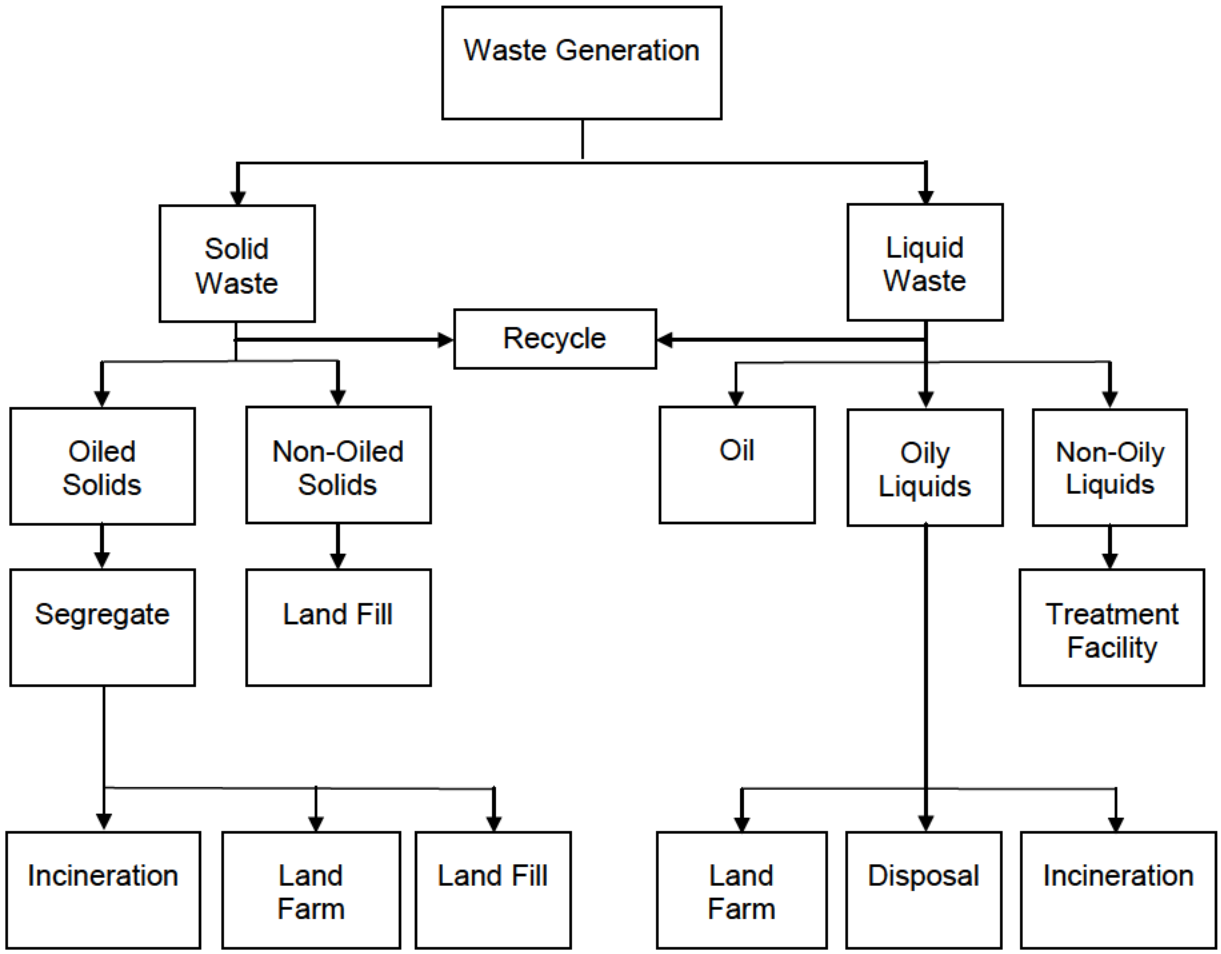


Figure II-8.2 – General Waste Containment and Disposal Checklist

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

Figure II-8.3 – Temporary Storage Methods

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

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

Interim Storage Tracking

Interim Storage Location(s)	Location(s) Received From	Time/Date Received	Volume (Gals/Yds)	Type of Waste:
Totals				

Waste Recovery Tracking Form

Recovery Location(s)	Time Recovered		Volume (Gals/Yds)	Type of Waste:	Projected Interim Storage Demand:
	From:	To:			
Totals					

Waste Disposal Tracking Form

Incident Name: _____ Type of Waste: _____ Waste Stream#: _____

Date	Bill of Lading/ Manifest Number	Originating Site	Transporter	Disposal Facility Destination	Quantity:

Sec. II-9 Disposal Plan

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

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

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

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

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

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

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

Figure II-9.1 Disposal Plan Form

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

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

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

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

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

Sec. II-10 Containment and Recovery

Sec. II-10.1 General

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

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

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

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

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

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

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

Sec. II-10.4 Protection Technique Selection

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

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

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

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

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

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

Sec. II-10.5 Shoreline and Terrestrial Cleanup

Sec. II-10.5.1 General

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

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

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

Sec. II-10.5.2 Cleanup Technique Selection - Shoreline

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

Sec. II-10.5.3 Cleanup Technique Selection - Terrestrial

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

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

Sec. II-10.6 Non-Mechanical Response Options

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

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

Sec. II-10.7 Dispersants – Criteria for Use

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

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

Sec. II-10-7.1 Approval Process

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

Sec. II-10.8 In-situ Burning

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

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

Sec. II-10.8.1 Evaluation

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

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

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

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

Sec. II-10.8.2 Approval Process and Monitoring

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

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

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

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

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

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

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

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

Sec. II-10.9 Bioremediation

Sec. II-10.9.1 General

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

Sec. II-10.9.2 Evaluation

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

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

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

Sec. II-11 Water Quality and Sediment Quality Analysis

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

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

Sec. II-11.1 EPA Analytical Methods**

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

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

Sec. II-12 Drainage Plan

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

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

Sec. II-12.1 Storage Tanks

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

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

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

Sec. II-12.2 Truck Rack Area

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

Sec. II-12.3 Tank Water Drains

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

Sec. II-13 Detection/Mitigation Procedures

Sec. II-13.1 Discharge Detection

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

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

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

Sec. II-13.2 Discharge Detection by Personnel

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

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

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

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

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

Sec. II-13.3 Automated Discharge Detection

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

[redacted]

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

[redacted]

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

Sec. II-13.6.1 Leak Detection and System Shutdown

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

[redacted]

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

Sec. II-13.7.1 Leak Detection and System Shutdown

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

[redacted]

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

Sec. II-13.8 Source Control

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

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

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

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

Sec. II-13.9 Good Engineering Practices

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

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

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

Sec. II-13.10 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-13.11 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-13.12 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-13.13 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

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

[redacted]

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

[redacted]

Evacuation Checklist

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

[redacted]

Sec.II-15 Site Security and Control

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

[redacted]

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

[redacted]

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

[redacted]

Sec. II-16 Site Safety and Health Plan

Sec. II-16.1 Introduction

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

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

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

Sec. II-16.2 Scope

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

Sec. II-16.3 Program Administration

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

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

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

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

Sec. II-16.4 Daily Safety Briefings

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

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

Sec. II-16.5 Visitor Policy

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

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

Sec. II-16.6 Response

During the initial response phase the ICS 201-5 form is used to ensure hazards are identified, evaluated and managed; and would typically be used for a Tier 1 response. The ICS 201-5 form may be supported by attachments such as the released product Safety Data Sheet, a Phillips 66 Job Safety Analysis form (JSA) 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 Safety Data Sheet, 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 Safety Data Sheets, a Phillips 66 JSA and Medical Plan, at the Safety Officers discretion. Safety Data Sheets are available at the facility or may be accessed via the netMSDS intranet website at http://w3apps.phillips66.com/netmsds/ or the webMSDS internet website at: http://corpapps.phillips66.net/webmsds/MSDSViewer.aspx. When a response has transitioned to the "project phase" the project is usually turned over to a remediation project group. At that time a SSHP will be developed based on company safety and health procedures.

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

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

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

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

General – Identify and/or specify:

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

Site Characterization and Analysis:

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

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

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

Risk Identification [1910.120(c)(7):

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

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

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

Monitoring [1910.120(h)]:

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

Illumination Requirements [1910.120(m)]

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

Sanitation Requirements [1910.120(n)]:

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

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

Sec. II-16.8 Site Exposure Monitoring Plan

Site Name:	Date / Time:

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

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

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

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

Sec. II-17 Personal Protective Equipment

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

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

1. PPE Use and Limitations	
Several factors must be considered when selecting and using PPE:	
➢	The protective clothing, gloves and boots must be resistant to permeation or penetration by oil and other chemicals that may be encountered on the site.
➢	Protective clothing and gloves should be durable for heavy work.
➢	Protective clothing and glove materials must maintain protection and flexibility in hot or cold weather conditions.
➢	Protective clothing must be large enough to fit over other clothing without ripping and tearing.
➢	For respirator use, procedures must be in place for the proper selection, use, care, and fit testing of the respirators. Additionally, wearer must be advised as to respirator cartridge expected life and of monitoring for contaminant breakthrough, etc.
➢	Protective footwear must have non-slip soles. Additionally, conditions may require the use of steel toe and/or steel shank footwear.
2. Work Duration	
The work duration is expected to last for the full shift and will involve moderate to heavy physical exertion during cleanup activities.	
3. PPE Maintenance and Storage	
PPE will be maintained and stored by an assigned work crew. Protective clothing and gloves will be evaluated during and at the end of each shift and will be replaced as necessary. Boots and other PPE may be decontaminated for re-use.	
4. PPE Decontamination and Disposal	
PPE may be decontaminated in designated areas by assigned crews using soap or other suitable cleanser and rinse water. The cleaning solution used will be disposed of in properly labeled containers according to applicable regulations. Contaminated protective gloves and any other PPE to be disposed of will be placed in properly labeled bags and disposed of according to applicable regulations.	

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

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

Sec. II-18 Decontamination

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

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

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

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

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

Sec. II-19 Claims

"Phillips 66 Company" Claims Information

Tiers of Oil Spill Claim Events	
•	Tier 1 Claims Event – 1 – 20 oil spill claims are expected or anticipated
•	Tier 2 Claims Event - 20 – 100 oil spill claims are expected or anticipated
•	Tier 3 Claims Event – More than 100 oil spill claims are expected or anticipated

II-19.1 Oil Spill Claims Management

Management of all claims will be provided by the Managing Counsel of Phillips 66 Company's Legal Department Claims Center. Outside contractors may be hired to support claims processing during Tier 1 & Tier 2 events, but management and oversight of the process will continue to be provided by the company resources.

Phillips 66 Company Legal Claims Center:	Scott A. Bilger, Managing Counsel
Telephone:	(918) 977-7159
Fax:	(918) 977-2282
Email:	Scott.A.Bilger@p66.com

II-19.2 Insurance

Phillips 66 Company is self-insured against claims to varying amounts depending on the nature of the loss. A spill that originates from an onshore facility is self insured to $125,000,000. Spills originating from a vessel that involve responsibility of Phillips 66 would be covered by a different policy that includes a $250,000 deductible. Insurance at Phillips 66 Company, including insurance for oil spill related claims, is managed by the company's Corporate Insurance department.

Phillips 66 Company Corporate Insurance:	Brian Mullen, Manager
Telephone:	(832) 765-1801
Fax:	
Email:	Brian.P.Mullen@p66.com

II-19.3 Claims Handling Process

After an oil spill occurs, Phillips 66 Company will provide information as it is developed to the public via the following number: 855-843-2198. Information, including the establishment of a claims process, will be communicated via this number. Additional communication of a claims process will be made via an advertisement for claims following the information provided in Section II-19.4. In addition to this advertisement in local newspapers, claims process information will be communicated via a press release designed to communicate the process in local radio on television media, through social media on the Phillips 66 Facebook and Twitter, and via the internet on the Phillips 66 website. Further details on these various communication tools are provided in Section II-19.4 below. All communications will direct claimants to report their claims via the toll free Claims line to ensure a uniform process, provide quality control, and to ensure the most efficient handling of the claim.

Sec. II-19 Claims (Cont'd)

II-19.3 Claims Handling Process (Cont'd)

Once a claim is reported via the toll free Claims line, the claimant will be contacted by a claim representative that will become the point of contact for the claimant on a go forward basis. At this time the claimant will be provided with phone, fax and email contact information for the claim representative. If at any time, the claim representative is not responsive to the needs of the claimant, the claimant may call the toll free Claims line to request a reassignment of the claim. A review of the file will be conducted and, if warranted, a reassignment will be made. In good faith, Phillips 66 Company is committed to working with claimants to help them understand the type and amount of documentation that might be required to support their claim, but ultimately the responsibility to prove their claim remains with them. Examples of documentation needed for various types of claims can be found in Section II-19.10. Section II-19.9 explains the claims adjudication process at Phillips 66 Company and provides related timeframes.

Depending on the number of expected or anticipated number of claims related to the spill, Phillips 66 Company may or may not establish local claim centers (see II-19.6). Claims related to the reimbursement of Uncompensated Oil Spill Removal Costs will be accepted by Phillips 66 Company up to 6-years from the date cleanup was completed. All other types of claims will be accepted up to 3-years from the date that Phillips 66 Company began advertising for claims or 3-years from the date that the injury or damage being claimed was reasonably discovered – whichever date is earlier. Resource Damage (NRD) claims are handled separately from other claims, and may be accepted by Phillips 66 Company in a manner and timeframe agreed to by the company and the lead federal and/or state trustee agency.

Claims will be managed by the Managing Counsel of our company's Legal Department Claims Center. Contact information is provided below.

II-19.4 Claim Advertisements

Phillips 66 Company will advertise for claims after being advised to do so by our legal department, or within 15-days after being designated as the Responsible Party for an oil spill by the USCG or EPA Federal On-Scene Coordinator (FOSC) or the USCG National Pollution Funds Center (NPFC). More than any other factor, the geographic extent of the oil spill will dictate the publications that claim advertisements will run. At minimum, Phillips 66 Company is committed to advertising for oil spill claims in the Olympian (Olympia, WA) and the Tacoma News Tribune (Tacoma, WA). Additional publications will be considered on a spill-specific basis. The length of time paid advertisements will run in local publications will be based on recommendations provided by our legal department or the length of time specified by FOSC or the NPFC. The following is an example of how paid advertisements for oil spill claims could appear in local publications:

Advertisement for Oil Spill Claims

CompanyX
Oil Spill - January 24, 2010
4300 Gallons Heavy Oil
Budd Inlet (Olympia, WA)
South Puget Sound

The U.S. Coast Guard National Pollution Funds Center has designated CompanyX as the Responsible Party for an oil spill that occurred around 7:00AM (PST) on January 24, 2010, impacting the waters of Budd Inlet and South Puget Sound. An estimated 4,300 gallons of heavy fuel oil was released from our facility on Boston Harbor Road (in Olympia) into Budd Inlet and South Puget Sound.

CompanyX is receiving claims related to this incident. Information about claims and the claims process is available on-line at the CompanyX website (see link below). You can also call, email, or mail us if you need additional assistance or information.

Website: www.companyx.com\claims.htm

Email: claims@companyx.com

Phone: **(360) 407-0007** (Mon-Sat, 8am to 5pm PST)

Mail: CompanyX – Oil Spill Claims
PO Box 4912876, Olympia, WA 98503

Sec. II-19 Claims (Cont'd)

II-19.4 Claim Advertisements (Cont'd)

Additional communication of a claims process is described in Section II-19.3. Specifics on these various communication methods are detailed here:

Website: http://www.phillips66.com/EN/response/Pages/index.aspx
Phone: 855-843-2198 – Incident Information Line
FaceBook: http://www.facebook.com/phillips66co
Twitter: http://twitter.com/p66_operations

Information will also be provided to print and electronic media for further distribution to the public via radio, television and internet sources.

II-19.5 Claims Contact Information

As described in Section II-19.3, Claims Contact information will be communicated by the company in a variety of manners. Examples include local newspapers, via a press conference designed to communicate the process in local radio on television media, through social media on the Phillips 66 Facebook and Twitter, and via the internet on the Phillips 66 website. All communications will direct claimants to report their claims via the toll free Claims Line to ensure a uniform process and provide quality control to the claimant. During this initial reporting process, information from the claimant will be recorded into an electronic database and a claim number will be assigned. Once a claim is reported via the toll free Claims line, the claimant will be contacted by a claim representative that will become the point of contact for the claimant on a go forward basis. At this time the claimant will be provided with phone, fax and email contact information for the claim representative. If at any time, the claim representative is not responsive to the needs of the claimant, the claimant may call the toll free Claims line to request a reassignment of the claim. A review of the file will be conducted and, if warranted, a reassignment will be made.

II-19.6 Local Claim Centers

The establishment of a local claim center, or multiple centers, will only be considered if there is a significant community need or the number of expected or anticipated claims warrants it. If necessary, Phillips 66 Company is committed to establishing a single claim center within the community most greatly impacted by the spill for a period necessary to sufficiently address the needs of those impacted by the spill and as warranted by workload and community need.

Sec. II-19 Claims (Cont'd)

II-19.7 Claim Forms (Internal & External)

During the reporting of a claim via the toll free Claims line, claimants can expect to provide the initial information contained in the Phillips 66 Company Claim Form (Form# CL1), attached hereto. This form may be included on the website to allow the claimant to compile the information in advance. However, to ensure a common process, to expedite processing and to ensure that all claims are addressed as timely as possible, ALL claims will be established/reported via the toll free Claims line. At some point in time during the process, a claimant can expect to be required to establish a "sum-certain" monetary amount being claimed. Additional information on various components of this "sum-certain" and the basis thereof are included in the examples of Documentation found in Section II-19.10.

Copies of the form used by Phillips 66 Company are provided at the end of this section:

- Form# CL-1 Claim Form (example of the type of initial information required during phone reporting)
- Phillips 66 Company uses an internal database to track and manage all claims

II-19.8 Submitting Claims to Phillips 66 Company

To ensure a common process, to expedite processing and to ensure that all claims are addressed as timely as possible, ALL claims will be established/reported via the toll free Claims line. Claims related to the reimbursement of Uncompensated Oil Spill Removal Costs will be accepted by Phillips 66 Company up to 6-years from the date cleanup was completed. All other types of claims will be accepted up to 3-years from the date that Phillips 66 Company began advertising for claims or 3-years from the date that the injury or damage being claimed was reasonably discovered – whichever date is earlier. Resource Damage (NRD) claims are handled separately from other claims, and may be accepted by Phillips 66 Company in a manner and timeframe agreed to by the company and the lead federal and/or state trustee agency.

Questions regarding claims, or the status of claims already submitted, will be handled by the claims representative assigned to the claim. Contact information, including phone number, fax number and email address, will be provided during the initial contact from the claims representative. A process for requesting re-assignment of the file to a new claims representative is addressed in Section II-19.3.

Sec. II-19 Claims (Cont'd)

II-19.9 Claims Adjudication and Timeframes

Phillips 66 Company will process claims in the order they are reported. . During the initial reporting, each claim will be assigned a unique "claims file number" which will be used to track the claim internally. Each claimant will be assigned a representative and a contact name will be provided. All claimants will be contacted after this initial call and provided with contact information (phone number, fax number and email address) for the representative assigned to their claim. The claims file number can also be used by claimants who wish to provide additional information to support their claim, or those inquiring about the status of a claim. Phillips 66 Company will review each claim received to ensure, as much as possible, that all needed information to make a claim decision has been provided by the claimant. If additional information is needed, we will request that the claimant forward that information to us so it can be added to the claim and considered during adjudication. If the information requested is not received within 90 days, Phillips 66 Company will adjudicate the claim with the information it has available. This may result in a reduction of possible claim compensation or an outright denial of the claim. Once Phillips 66 Company sends the claimant a claim determination, the claimant must either accept or reject the offer within 60 days. If they accept the offer, the claimant must sign a release before Phillips 66 Company will process the offer for payment. If the claimant takes no action within 60 days after receiving the claim determination, Phillips 66 Company's offer to pay the claim will be voided and the claim will be closed. If the claimant rejects the offer, they can provide additional information and ask Phillips 66 Company to reconsider the claim determination; typically, this would start an entirely new review process with another claim determination made as a result of the reconsideration - "reconsideration" is not "negotiation." Claims submitted to Phillips 66 Company will be paid in the order that accepted offers (with signed releases) are received. Claims are usually paid with 30-days from the date Phillips 66 Company's receives the claimant's signed release.

II-19.10 Claims Documentation

The amount and type of proof and documentation needed by Phillips 66 Company to make a decision on a claim depends on many factors, including the claim type and the monetary amount claimed. Resource Damage (NRD) claims will be handled separately from other claims, and may only be submitted to Phillips 66 Company by a federal or state trustee agency. Phillips 66 Company is committed to working with trustee agencies directly in the NRD process.

The following types of claims may be submitted to Phillips 66 Company after an oil spill occurs, where Phillips 66 Company accepts or is designated as the "Responsible Party" for the oil spill. Example types of documentation are also included below within the listing of each claim type. The examples provided are for reference only; they may or may not represent everything needed by Phillips 66 Company to adjudicate a claim.

Sec. II-19 Claims (Cont'd)

II-19.10 Claims Documentation (Cont'd)

Removal Costs: Costs to prevent, minimize, mitigate, or clean up the oil spill.

Examples of Proof and Documentation that may be needed:

- Proof that actions were coordinated with the Coast Guard or EPA's Federal On-Scene Coordinator (FOSC) for the incident or approved by Phillips 66 Company in advance.
- Witness statements
- Detailed description of actions
- Dates on which work was performed
- Pictures of area, damage, and spill
- Receipts, invoices, or similar records with description of work
- How rates were determined and any comparison of rates
- Daily records of personnel costs including details on labor rates, hours, travel, and transportation
- Daily records of equipment costs including description and use
- Signed disposal manifests and proof of payment for disposal
- Payroll verification of hourly rate at the time of spill
- Verification of equipment rates for equipment used

Property Damage: Injury to or economic loss resulting from destruction of real property (land or buildings) or other personal property; injury to or economic loss resulting from damage to a boat.

Examples of Proof and Documentation that may be needed:

- Proof of ownership or leasehold interest in the property; lease or rental agreement of any substitute property used
- Proof or evidence that property was injured, destroyed, or not usable because of the oil spill
- Proof of value of property both before and after the spill or injury
- Documented cost of repair or replacement of the property
- Proof of value of property before and after the spill
- Witness statements
- Copy of title, deed, lease, or license to property in claimant's name
- Pictures or videotape of property and/or damage
- Professional property appraisals for the value of the property prior to and after the spill, actual selling price of the property, and evidence connecting the depressed selling price to the oil spill rather than to other economic or real property factors
- Copies of bills paid for repair of damage or estimates showing activities and costs to repair the damage

Sec. II-19 Claims (Cont'd)

II-19.10 Claims Documentation (Cont'd)

Loss of Profits or Earning Capacity: Damages equal to the loss of profits or impairment of earning capacity due to the injury, destruction, or loss of property or natural resources

Examples of Proof and Documentation that may be needed:

- Proof that property or natural resources that were damaged, destroyed or lost, resulted in claimant's loss
- Proof the claimant's income was reduced due to the damage or loss of the property or natural resources and how much it was reduced
- Documentation showing the amount of profits and earnings in similar time periods
- Documentation showing any alternative employment or business during the period claimed and any income received during that period
- Documentation showing savings to overhead costs or other normal expenses - those not paid as a result of the spill (commuting costs, utility fees, employee salaries)
- Statements on how the spill led to loss of business income or earning capacity; explain any earnings anomalies
- Statement on how the spill caused a loss in income
- Affidavit from claimant's employer about the impact the spill had on an employee's work or income, and if the employer intends to file a claim for lost profits or earning capacity
- Copies of pay stubs, receipts, timesheets from before, during, and after the spill
- Personnel records from claimant's employer before, during, and after the spill, showing employment
- Claimant's description of efforts to reduce loss, including job search
- Copies of any job-hunting expenses (e.g., travel costs)
- Signed copies of income tax returns and schedules for at least two years prior to spill
- Details of employment expenses not paid during period being claimed (e.g., commuting costs)
- Copies of pay stubs, receipts, timesheets from alternative employment during time of spill (including unemployment compensation)
- Description and documentation of business losses due to spill
- Copies of letters of business cancellations caused by the spill damage
- Financial statements for at least two years prior to spill and from the year of the spill
- Signed copies of business income tax returns and schedules for at least three years prior to spill
- Details on efforts to mitigate business losses or why no efforts were taken
- For hotels, daily and monthly occupancy information for two years prior to spill and the year of the spill
- Description of marine charter business losses caused by the spill
- Evidence that charter vessel(s) was in the area impacted by the spill and were unable to carry on their business due to the spill
- Signed copies of income tax returns (for charter boat business) and schedules for at least three years prior to spill
- Details on expenses not paid out during period being claimed (e.g., wages)
- Booking records for three years prior to spill and year of spill

Sec. II-19 Claims (Cont'd)

II-19.10 Claims Documentation (Cont'd)

- List of charter rates, including any services the business specializes in (e.g., sport fishing)
- Copies of any logs relating to boating activities for the year prior to and the year of the spill
- Registration documents for the vessel

Loss of Subsistence Use of Natural Resources: Loss of subsistence use claim if natural resources claimants depend on for subsistence use purposes that have been injured, destroyed, or lost by an oil spill Event.

Examples of Proof and Documentation that may be needed:

- Proof that injury, destruction, or loss of natural resources would have been used by the claimant to obtain food, shelter, clothing, medicine, or other minimum necessities of life.
- Documentation identifying each specific natural resource for which compensation for loss of subsistence use is being claimed
- Description of the actual subsistence use you make of each specific natural resource you identify;
- Description of how and to what extent claimant's subsistence use of the natural resource was affected by the injury to, destruction of, or loss of, each specific natural resource;
- Description of claimant's efforts to mitigate subsistence use loss
- Description of alternative source(s) or means of subsistence available to claimant during the period

Loss of Government Revenue: Net loss by Federal, State, or Local Governments of taxes, royalties, rents, fees, or net profit shares due to the injury, destruction, or loss of real property, personal property, or natural resources.

Examples of Proof and Documentation that may be needed:

- Information showing that the loss of revenue was caused by the injury to, destruction of, or loss of real or personal property or natural resources caused by the discharge
- Information showing the amount, identity, and description of the revenue loss for which compensation is claimed, including the applicable authority for collecting the revenue, method of assessment, applicable rate, and dates of collection or periods of loss
- Documentation showing expenditures saved because revenue was not collected
- The total assessment or revenue collected and related expenditures for comparable revenue periods, typically covering two years
- Description of what revenues were impacted and how the spill caused a loss of revenues
- Copies of statutes, regulations, ordinances, etc., outlining applicable authority to raise such revenues, property affected, method of assessment, rate of assessment, and method and dates of collection of assessment
- Government financial reports showing total assessment or revenue collected for comparable periods, typically covering two years
- Details of any expenses not paid out by government

Sec. II-19 Claims (Cont'd)

II-19.10 Claims Documentation (Cont'd)

Increased Public Service Costs: Net costs by State & Local Governments for providing increased or additional public services during or after removal activities, including protection from fire, safety, or health hazards, caused by a discharge of oil or directly attributable to response to the oil spill Event.

Examples of Proof and Documentation that may be needed:

- Documentation showing justification for the public services provided, including documentation of what specific services were provided and the relationship to the spill.
- Documentation showing when services were provided during and after the oil spill removal.
- Documentation showing services were in addition to services normally provided
- Documentation showing the net cost for the services and the methods used to compute those costs
- Reports showing the increased public services were required and if the services were due to fire, health, or safety hazards
- Detailed description of what increased services were necessary and why, including a distinction between removal activities, safety acts, and law enforcement acts, and if the increase was actually incurred or if normal resources were diverted for use
- Daily reports on the activities of the government personnel and equipment involved Government Labor and Equipment Rates:
- Payroll verification of the government hourly rate at the time
- Verification of the standard government equipment rates for any equipment claimed
- Signed and dated records of the spill including hourly rates for labor and equipment
- Explanation as to whether rates are fully loaded or not and formulas used
- Certification that rates used reflected actual costs incurred and did not include punitive damages or fees

Sec. II-19 Claims (Cont'd)

II-19.11 Call Information Sheet – EXAMPLE

[INCIDENT]
[DATE]

Today's Date: _____ Time of call:_____

Name of Caller (verify spelling): _____

SSN: _____ DOB: _____

Address: _____

_____

Phone Numbers
Home:_____ Work:_____ Cell: _____

Details of claim (What happened):

_____

_____

_____

_____

Any prior contact with Phillips 66 representative? If so, who?_____

_____

What type of claim: Personal Injury, Property Damage, Buisness Loss, Sustinence_____

Dollar Amount, if know at this time_____

Have you commenced a legal proceeding regarding this claim or 'signed-up' with an attorney to represent you in regard to this claim:_____

If so, who_____

Description of how the injury or damage was caused_____

_____

What actions did you take, if any, to minimize the injury or damage_____

_____

_____

Sec. II-19 Claims (Cont'd)

II-19.11 Call Information Sheet – EXAMPLE (Cont'd)

If Personal Injuries are included, provide names and ages of all family members affected:

_____

_____

_____

Where were the individuals located at the time of the alleged injuries: ___

_____

_____

What was the Time they were there: _____

Was Medical Treatment sought: Yes ☐ No ☐

Hospital: _____

Physician (if not at hospital): _____

Wintesses Names and Contact information (to include):

Name:
Address:
Telephone Number:

Sec. II-20 Response Termination and Follow-up Procedures

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

Sec. II-20.1 Debriefing the Incident

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

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

Sec. II-20.2 Post-Incident Analysis: (PIA)

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

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

Post-Incident Analysis:	
	PIA is the detailed, step-by-step review of the incident to establish a clear picture of the events that took place during the incident. It is conducted to establish a clear picture of the emergency response for further study.
	The PIA is not the same as investigations conducted to establish the probable cause of the accident for administrative, civil, or criminal proceedings. Those are usually conducted utilizing root cause or hazard and operability methodologies. One person or (or office) should be designated to collect information about the response during the debriefing. Additional data may be obtained from Command post logs, incident reports and eyewitness interpretations.
	Once all available data has been assembled and a rough draft report developed, the entire package should be reviewed by key responders to verify the available facts are arranged properly and actually occurred. The PIA should focus on four key topics: *Command and Control, Tactical Operations, Resources and Support Services*.
	Command and Control – Was command established and sectors organized? Did information flow from operations personnel through Sector Officers to the Incident Commander? Were response objectives communicated to the personnel expected to carry them out?
	Tactical Operations – Were the tactical options ordered by the IC and implemented by emergency response personnel effective? What worked? What did not?
	Resources – Were the resources adequate for the job? Are improvements needed to apparatus and/or equipment? Were personnel trained to do the job effectively?
	Support Services – Were the support services received from other organizations adequate? What is required to bring support to the desired level?

Critiquing the Incident:	
A commitment to critique an all hazardous material response will improve IMT performance by improving efficiency and pinpointing weaknesses. Use the tool as a valuable learning experience (everyone came to the incident with good intentions) A good critique promotes:	
	Trust in the response system as being self-correcting.
	Willingness to cooperate through teamwork.
	Continuing training of skills and techniques.
	Pre-planning for significant incidents.
	Sharing information between response agencies.

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

Section III – Table of Contents

III-1 Overall Training

III-2 Response Training

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

III-4 Response Exercise Program

Sec III-1 Overall Training

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

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

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

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

Sec. III-2 Response Training

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

Sec. III-2.1 Description of Response Training

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

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

Background

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

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

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

Training Requirements

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

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

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

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

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

Training Requirements (Cont'd)

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

Personnel Response Training Logs

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

Sec. III-3.1 Classroom Training

The Company conducts training at this facility. The topics applicable to response training may consist of, but are not limited to, the following:	
•	Facility Response Plan/OPA (annual). FRP Training will include, but not be limited to: • Personnel responsibilities under the plan • Notification processes, including critical phone numbers (NRC, QI, Operator, etc. as identified in Annex 2; refer to the Emergency Notifications Contact List)) • Characteristics of products handled on site
•	SPCC/HWCP Training (annual)
•	PPE Use, Care and Maintenance
•	Biannual Boom Deployment Exercises (If owned and maintained at the facility)
•	Tabletop Drills per this ERP
•	Fire Extinguishing School
•	First Aid/CPR

Sec. III-3.2 HAZWOPER Response Qualifications

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

Sec. III-3-3 HAZWOPER Levels

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

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

First Responder Operations Level

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

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

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

Hazardous Materials Technician

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

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

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

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

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

Sec. III-3.4 Refresher Training

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

Sec. III-3.5 HAZWOPER Training Certification and Documentation

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

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

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

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

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

Sec. III-3.6 Response Contractors

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

Sec. III-3.7 Other Response Personnel

Sec. III-3.7.1 Skilled Temporary Support Personnel

Company and other response support personnel whose skills are needed temporarily to perform immediate emergency support work (such as truck drivers and crane operators) are not required to meet the training requirements discussed above. However, these personnel must be briefed on the potential hazards and the duties to be performed at the site before participating in response operations. They must also receive instruction in the use of any safety and personal protective equipment needed and be provided with all other appropriate safety and health precautions.

Sec. III-3.7.2 Specialist Employees

Specialist employees are experts who would provide technical advice or guidance during response to a spill incident. Examples of such specialists might include chemists, biologists, industrial hygienists, physicians, or others with skills useful during a spill response operation. Such persons must receive appropriate training or demonstrate competency in their specialty annually. There are no specific requirements on training content or hours of training for these persons except that it entails whatever is necessary to maintain competency in their specific area of expertise. Training and demonstration of competency for skilled support personnel and specialists should be documented.

Sec. III-3.7.3 Casual Laborers

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

Sec. III-3.7.4 Volunteers

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

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

Sec. III-3.8 Waste Handling Training

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

Sec. III-3.9 Training Records

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

Sec. III-3.10 Company Approved HAZWOPER Courses

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

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

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

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

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

Sec. III-4 Response Exercise Program

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

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

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

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

Sec. III-4.1 Exercise Format and Procedures

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

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

Sec. III-4.2 Coordination with Local Emergency Services

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

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

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

Sec. III-4.3 Company Terminal Requirements

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

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

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

Sec. III.4.4 Company Pipeline Requirements

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

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

Sec. III-4.5 Guiding Principles

Internal Exercises

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

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

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

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

External Exercises

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

The external exercise includes: Area Exercises

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

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

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

Sec. III-4.7 Credit for Conducting an Exercise

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

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

Objectives that are not successfully met during an exercise will be tested again. Plan deficiencies identified during an exercise will be addressed and amended as appropriate.

Sec. III-4.8 Proper Documentation

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

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

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

Sec. III-4.9 Certification Process

The Incident Commander or Exercise Facilitator certifies the response exercise.

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

Sec. III-4.10 EPA

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

Sec. III-4.10 EPA (Cont'd)

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

Sec. III-4.10 EPA (Cont'd)

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

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

Sec. III-4.10 EPA (Cont'd)

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

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

Sec. III-4.10 EPA (Cont'd)

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

Sec. III-4.11 Coast Guard

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

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

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

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

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

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

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

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

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

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

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

Sec. III-4.12 DOT (PHMSA)

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

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

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

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

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

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

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

Section IV – Table of Contents

IV-1 Company Forms

IV-2 Industry Forms

TRANSPORTATION – HEALTH & SAFETY

EPR&S PREP – COMPANY 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: 3010 Briarpark Dr; PWC 07-7330-34 Address: _____
City, State, Zip: Houston, TX 77042 City, State, Zip: _____
County/Parish: _____ Hwy or River Mile Marker: _____
Section-Township-Range: _____ Latitude _____ Longitude _____
Dist./Dir. to Nearest City: _____ Facility Storage Capacity: _____ (bbls)
Container Type (☐ AST/ ☐ UST) _____ Container Capacity _____ (bbls)
Site Supervisor/Contact: _____ Call Back #: _____

III. INCIDENT DESCRIPTION & IMPACTS

Date/Time Discovered: _____ Discovered by: _____
Material Released: _____ Quantity Released: _____ (bbls/lbs)
Duration of the Release: _____ Weather Conditions: _____
Quantity to Surface Water: _____ Temperature: _____ °F Humidity: _____
Off Company Property? ☐ Yes ☐ No Wind Speed: _____ Direction: _____
Evacuations: ☐ Yes ☐ No # Evacuated: _____ Name of Surface Water _____
Fire: ☐ Yes ☐ No # Hospitalized: _____ Distance to Water: _____ (ft/mi)
Explosion: ☐ Yes ☐ No # of Injuries: _____ # of Fatalities _____ Media coverage expected? ☐Yes ☐ No
If Operator error, has Drug and Alcohol program been initiated? ☐Yes ☐ No **DOT jurisdiction event?** ☐Yes ☐ No

If DOT event, list those completing Drug and Alcohol testing? _____

Incident description (Including Source and or Cause of the Incident) _____

Impacted area description _____

Damage description and estimate ($, days down, etc.) _____

Actions taken to correct, control or mitigate (Change in Security Level, FSP and/or ERP Implemented, etc.) _____

Agency/Person Contacted	Notified By	Office Phone	Cell Phone	Other Phone	Date & Time Notified	Log #	Comments
IV. EMERGENCY NOTIFICATIONS - LOG							
Duty Officer/		800-231-2551					Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No

Agency/Person Contacted	Notified By	Office Phone	Cell Phone	Other Phone	Date & Time Notified	Log #	Comments
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No

V. ADDITIONAL INFORMATION

** Alternate NRC contact information: Fax: 202-267-2165, TDD: 202-267-4477, or e-mail: lst-nrcinfo@comdt.uscg.mil

VI. PREPARED BY AND DISTRIBUTION

Prepared by: _____ **Date:** _____ **IMPACT Entry Complete:** ☐ Yes ☐ No

* Notify the appropriate Company DOT Coordinator to complete the *PHMSA FORM F 7000-1*, as applicable.

Spill Response Equipment Inspection

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

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

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

Aboveground Atmospheric Storage Tank
Monthly Routine In-Service Inspection

GPL-199

Rev 4 2011-05-13

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

Tank No: _____ **Location:** _____

Service: ☐ Break-Out ☐ Storage

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

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

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

Date	Comments

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

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

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

Transportation - Pipelines and Terminals

PI Form - GPL-205 - Annual Tank Inspection Report

1. **TERMINAL/FACILITY:** _____
2. **TANK #:** _____
3. **INSPECTOR:** _____
4. **SERVICE:** _____

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

DATE: _____

5. **CAPACITY:** _____

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

TANK APPURTENANCES (ATMOSPHERIC STORAGE)

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

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

	YES	NO
13. Is the external roof resting on the surface of the stored liquid?		
14. Is gauge hatch in satisfactory condition?		
15. Is roof paint in satisfactory condition?		
16. Is check valve mounted in roof sump, is it free of debris, and does the internal "clapper" operate freely?		
17. Is roof leak-free? Any patches or epoxy-type repairs noted?		
18. Are pontoon compartments free of hydrocarbon liquids?		
19. Does floating roof deck area drain accumulated water well?		
20. Is roof travel apparently free at all shell height posi ions?		
21. Are roof drain sump(s) clear of debris?		
22. Does roof have large quantities of accumulated dirt on deck area?		
23. Is primary/secondary seal in satisfactory condition?		
If not, how much is bad (in linear footage)?	ft	
24. Is seal fabric compa ible 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 floa ing roof and primary seal or the secondary seal (if one is in service) for he following:

	YES	NO
(A) Is the internal floating roof not res ing on he 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, no ify the area environmental coordinator.

FILL IN ITEMS 29 THRU 31 FOR LIFTER ROOF TANKS ONLY

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

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

34 Additional comments: _____

SHELL

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

41. Additional comments: _____

TANK BOTTOM/FOUNDATION AREA

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

48. Additional comments: _____

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

FIRE PROTECTION - If Applicable to Storage Tank

	YES	NO
49. Are foam line(s) and connections braced satisfactorily?		
50. Do foam chambers appear clean and unobstructed?		
51. Does tank dike area drain sa isfactorily?		
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 he internal glass membrane plates remained unbroken in he side-mounted enclosed-shell foam chambers?		
55. Is dike capacity maintained to original design capacity?		
56. Are adequate "No Smoking" and "Hot Work Permit" signs posted at tank dike entranceway?		

57. Additional comments: _____

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

Retain inspection report for 2-year period if required by DOT 49CFR 195.404; or EPA 40 CFR 60.115b (NSPS)
Retain inspection report for 3-year period if required by EPA 40CFR 112.7(e) (SPCC Plan)
Retain inspection report for 5 years if required by facility emergency response plan 40 CFR 112.1.8.1(f) or if facility operates under a Title V Air Permit

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

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

LOCATION: _____

COMPANY CONTACT: _____ **PHONE:** _____

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

TRAINING COURSE TITLE/ LEARNING MANAGEMENT SYSTEM COURSE EXPRESS NUMBER:

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

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

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

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

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

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

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

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

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

END TIME: _____

LOCATION: _____

_____

COMPANY CONTACT: _____ **PHONE:** _____

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

QUALIFIED INDIVIDUAL - NOTIFICATION EXERCISE

Facility Name: _____ **Date:** _____

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

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

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

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

Person Notified: _____
(Name/Position)

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

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

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

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

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

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

Other Notification: _____
(Name/Position)

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

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

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

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

Emergency Scenario: _____

_____

_____

_____

Changes to be implemented: _____

_____

_____

Time Table for Implementation: _____

Corrective Follow-up assignment _____

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

SPILL MANAGEMENT TEAM (SMT) - TABLE TOP EXERCISE

Plan Name: _____ **Date:** _____

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

Location: _____

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

Response Plan Scenario Used:
- ☐ Small Spill / Average Most Probable Discharge
- ☐ Medium Spill / Maximum Most Probable Discharge
- ☐ "Worst-Case" Discharge (WCD)

Product: _____ **Amount:** _____ bbls

1. **Did the Spill Management Team (SMT) utilize the ERP during the exercise?** ☐ Yes ☐ No
2. **Were internal and external notifications completed per the ERP?** ☐ Yes ☐ No
3. **Were communication systems adequate?** ☐ Yes ☐ No
4. **Were the Company Oil Spill Removal Organizations (OSRO) notified?** ☐ Yes ☐ No
5. **Was there good coordination with On-Scene Coordinator, State and applicable agencies?** ☐ Yes ☐ No
6. **Were sensitive site and resource information in the ERP accessed as needed?** ☐ Yes ☐ No
7. **Select which of the 15 PREP core components were employed during this particular exercise:**
   - ☐ Notifications
   - ☐ Staff mobilization
   - ☐ Operate within Response Management System
   - ☐ Discharge control
   - ☐ Assessment of discharge
   - ☐ Containment of discharge
   - ☐ Recovery of spilled material
   - ☐ Protection of sensitive areas
   - ☐ Disposal of recovered material & contaminated debris
   - ☐ Communications
   - ☐ Transportation
   - ☐ Personnel support
   - ☐ Equipment maintenance & support
   - ☐ Procurement
   - ☐ Documentation
8. **Evaluation:** Refer to the attached Exercise Critique for this information.
9. **Changes to be Implemented and person responsible for follow-up of corrective action:**

   _____

   _____

   _____
10. **Time Table for Implementation:**

    _____

    _____

    _____
11. **Self Certifying Signature:** _____

    Print Name / Position: _____

EQUIPMENT DEPLOYMENT EXERCISE (PREP-EDX)

PLAN NAME: _____ **DATE:** _____

EXERCISE TYPE: ☐ **Announced** ☐ **Unannounced** **or** ☐ **Actual Response**

DEPLOYMENT LOCATION: _____

TIME STARTED: _____ ☐ AM ☐ PM **TIME OSRO CALLED:** _____ ☐ AM ☐ PM ☐ N/A

TIME ON-SCENE: _____ ☐ AM ☐ PM **TIME BOOM DEPLOYED:** _____ ☐ AM ☐ PM ☐ N/A

TIME OSRO/RECOVERY EQUIPMENT ARRIVES ON-SCENE FOR DEPLOYMENT: _____ ☐ AM ☐ PM ☐ N/A

TIME COMPLETED EXERCISE: _____ ☐ AM ☐ PM

EQUIPMENT DEPLOYED:

☐ Company-Owned
☐ OSRO/Contractor owned
☐ Both Company, OSRO/Contractor
☐ Co-op Equipment
☐ Both Company & Co-op Equipment
☐ Company, OSRO/Contractor & Co-op

Name of participating OSRO, Co-op and/or Contractor: _____

DESCRIBE THE GOALS OF THE EQUIPMENT DEPLOYMENT AND LIST ANY AREA CONTINGENCY PLAN (ACP) STRATEGIES TESTED. (Refer to the ICS 201-1 form for sketch of equipment deployment location(s) and booming strategies.)

_____

EXERCISE EVALUATION:

1. DEPLOYMENT OF FACILITY-OWNED EQUIPMENT:

a. List type & amount of all equipment deployed (e.g., boom & skimmers) and number of support personnel employed.

Refer to the attached ICS Forms: 211-E (for a list of equipment deployed), 211-P (for personnel employed) or the 201-4 (Resource Summary).

b. All facility/pipeline personnel that are responsible for response operations are involved in a comprehensive training program? ☐ Yes ☐ No

If so, describe: _____

c. All pollution response equipment involved in a comprehensive maintenance program? ☐ Yes ☐ No

If so, describe the program: _____

d. Date of last equipment inspection: _____

e. Was the amount of equipment deployed at least the amount necessary to respond to the pipeline's/ facility's average most probable spill? ☐ Yes ☐ No

If not, describe why: _____

f. Was the equipment deployed by personnel responsible for its deployment in the event of an actual spill? ☐ Yes ☐ No

If not, describe why: _____

g. Was the equipment deployed in its intended operating environment? ☐ Yes ☐ No

If not, explain why: _____

h. Was all deployed equipment operational? ☐ Yes ☐ No

If not, explain why: _____

2. DEPLOYMENT OF OSRO AND/OR COOP-OWNED EQUIPMENT:

a. List type & amount of all equipment deployed (e.g., boom & skimmers) and number of support personnel employed.
Refer to the attached ICS Forms: 211-E (for a list of equipment deployed), 211-P (for personnel employed) or 201-4 (Resource Summary).

b. All response organization personnel that are responsible response operations involved in a comprehensive training program? ☐ Yes ☐ No
If so, describe the program: _____

c. All pollution response equipment involved in a comprehensive maintenance program? ☐ Yes ☐ No
If so, describe the program: _____

d. Date of last equipment inspection: _____

e. Was a representative sample (at least 1,000 ft. of each boom type and one of each skimmer type) deployed? ☐ Yes ☐ No
If not, describe why: _____

f. Was the equipment deployed by personnel responsible for its deployment in the event of an actual spill? ☐ Yes ☐ No
If not, describe why: _____

g. Was the equipment deployed in its intended operating environment? ☐ Yes ☐ No
If not, describe why: _____

h. Was all deployed equipment operational? ☐ Yes ☐ No
If not, explain why: _____

3. Select which of the 15 core components of the response plan were employed during this exercise:

- ☐ Notifications
- ☐ Staff mobilization
- ☐ Operate within Response Management System
- ☐ Discharge control
- ☐ Assessment of discharge
- ☐ Containment of discharge
- ☐ Recovery of spilled material
- ☐ Protection of sensitive areas
- ☐ Disposal of recovered material & contaminated debris
- ☐ Communications
- ☐ Transportation
- ☐ Personnel support
- ☐ Equipment maintenance & support
- ☐ Procurement
- ☐ Documentation

4. EDX CRITIQUE

(Description of lessons learned, procedures and schedule for implementation, and person(s) responsible for follow-up of corrective actions.

a. What went well?

_____

b. Areas for improvement?

_____

c. Corrective actions	d. Implementation schedule	e. Person responsible for follow up of corrective actions

5. SELF-CERTIFYING SIGNATURE: _____ DATE: _____

Print Name/Position: _____

Interim Storage Tracking

Interim Storage Location(s)	Location(s) Received From	Time/Date Received	Volume (Gals/Yds)	Type of Waste:
Totals				

Waste Recovery Tracking Form

Recovery Location(s)	Time Recovered		Volume (Gals/Yds)	Type of Waste:	Projected Interim Storage Demand:
	From:	To:			
Totals					

Waste Disposal Tracking Form

Incident Name: _____ Type of Waste: _____ Waste Stream#: _____

Date	Bill of Lading/ Manifest Number	Originating Site	Transporter	Disposal Facility Destination	Quantity:

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.				

Page 2 of 8

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.				

Page 3 of 8

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.				

Page 4 of 8

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.).				

Page 5 of 8

NATIONAL PREPAREDNESS FOR RESPONSE EXERCISE PROGRAM (PREP)

15 PREP COMPONENTS EVALUATION WORKSHEET (Cont'd)

11) Transportation

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

12) Personnel support

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

NATIONAL PREPAREDNESS FOR RESPONSE EXERCISE PROGRAM (PREP)

15 PREP COMPONENTS EVALUATION WORKSHEET (Cont'd)

12) Personnel support (Cont'd)

Components	ICS Position Responsible	Completed (Y/N)	Date/Time Completed	Comments
12.5 Emergency Procedures: Demonstrate the ability to provide emergency services for personnel involved in the incident.				

13) Equipment maintenance and support

Components	ICS Position Responsible	Completed (Y/N)	Date/Time Completed	Comments
13. Demonstrate the ability to maintain and support all equipment associated with the response.				
13.1 Response Equipment: Demonstrate the ability to provide effective maintenance and support for all response equipment. Provide effective waterborne transportation for all elements of the response.				
13.2 Response Equipment: Demonstrate the ability to provide effective maintenance and support for all equipment that supports the response. This requirement includes communications equipment, transportation equipment, administrative equipment, etc.				

14) Procurement

Components	ICS Position Responsible	Completed (Y/N)	Date/Time Completed	Comments
14. Demonstrate the ability to establish an effective procurement system.				
14.1 Personnel: Demonstrate the ability to procure sufficient personnel to mount and sustain an organized response. This requirement includes insuring that all personnel have qualifications and training required for their position within the response organization.				
14.2 Response Equipment: Demonstrate the ability to procure sufficient response equipment to mount and sustain an organized response.				
14.3 Support Equipment: Demonstrate the ability to procure sufficient support equipment to support and sustain an organized response.				

Page 7 of 8

NATIONAL PREPAREDNESS FOR RESPONSE EXERCISE PROGRAM (PREP)

15 PREP COMPONENTS EVALUATION WORKSHEET (Cont'd)

15) Documentation

Components	ICS Position Responsible	Completed (Y/N)	Date/Time Completed	Comments
15. Demonstrate the ability of the spill response organization to document all operational and support aspects of the response and provide detailed records of decisions and actions taken.				

Page 8 of 8

ICS 201-1 Incident Briefing Map/Sketch	
Incident:	**Prepared By:** at
Period:	**Version Name:**

ICS 201-2 – Summary of Current Actions	
Incident:	Prepared at: By:
Period: to	Version Name:

Date/Time	Action/Note

ICS 201-2 Summary of Current Actions			© 1997-2012 TRG/dbSoft, Inc.

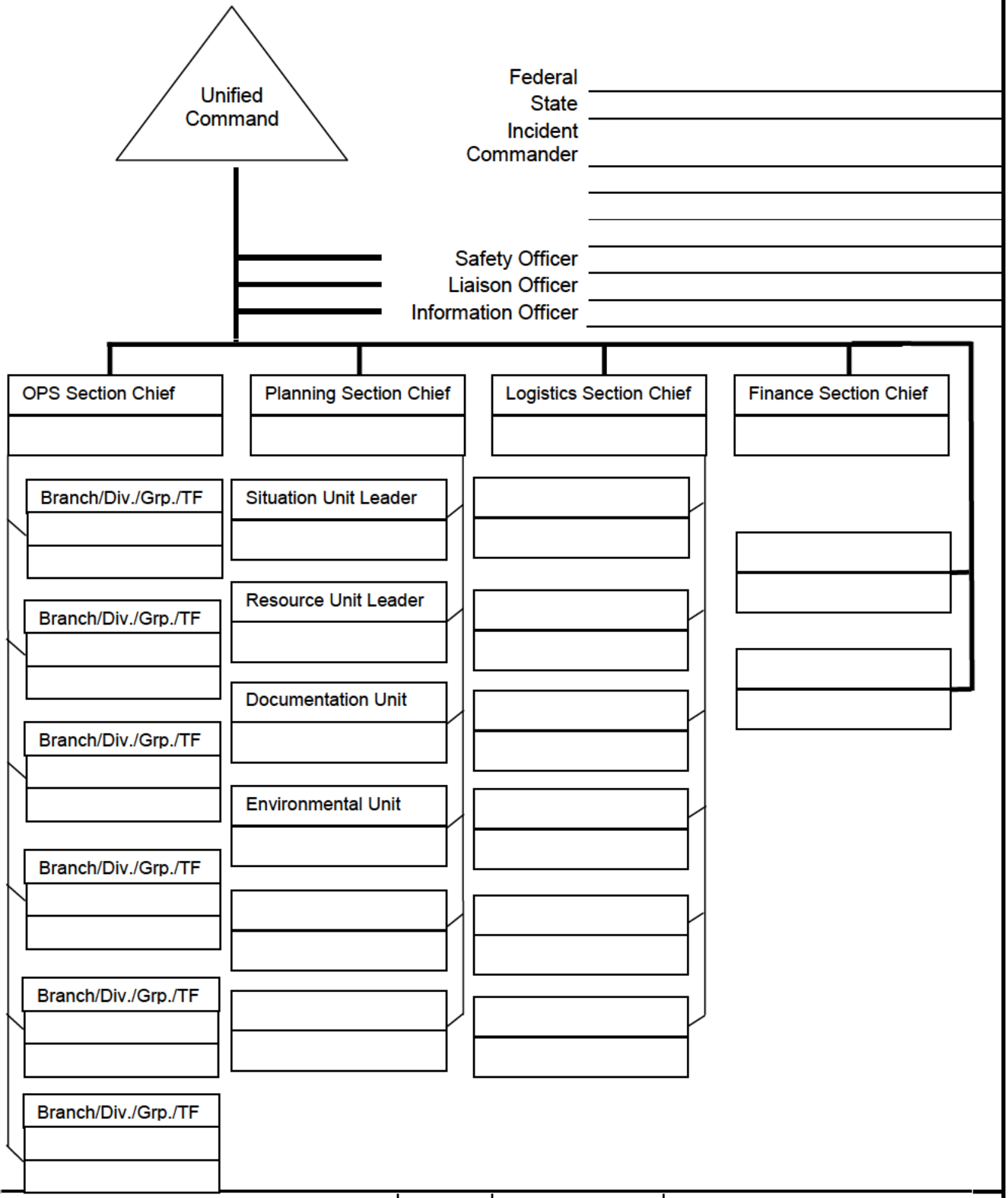
Incident:	Prepared By: at:
Period: to	Version Name:

Date/Time	Action/Note

ICS 201-2 Summary of Current Actions			© 1997-2012 TRG/dbSoft, Inc.

ICS 201-3 Current Organization

Incident:	**Prepared By:** **at:**
Period:	**Version Name:**



ICS 201-3 – Current Organization			**© 1997-2012 TRG/dbSoft, Inc.**

ICS 201-4 – Resource Summary

Incident:	Period:

ICS 201-4 Resource Summary			© 1997-2012 TRG/dbSoft, Inc.

ICS 201-5 Site Safety and Control Analysis

Incident:	**Prepared By:** **at:**
Period:	**Version Name:**
1. Is Site Control set up? ☐ Yes ☐ No	2. Is there an on-scene command post? ☐ Yes ☐ No If so, where?
3. Have all personnel been accounted for? ☐ Yes ☐ No ☐ Don't Know	Injuries: Fatalities: Unaccounted: Trapped:
4. Are observers involved, or rescue attempts planned? Observers: ☐ Yes ☐ No Rescuers: ☐	5. Are decon areas setup? ☐ Yes ☐ No If so, where?
1. Electrical line(s) down or overhead? ☐ Yes ☐ No	2. Unidentified liquid or solid products visible? ☐ Yes ☐ No
3. Wind direction across incident: ☐ Towards your position Wind Speed ☐ Away from	4. Is a safe approach possible? ☐ Yes ☐ No
5. Odors or smells? ☐ Yes ☐ No	6. Vapors visible? ☐ Yes ☐ No
7. Holes, ditches, fast water, cliffs, etc. nearby? ☐ Yes ☐ No	8. Fire, sparks, sources of ignition nearby? ☐ Yes ☐ No
9. Is local traffic a potential problem? ☐ Yes ☐ No	10. Product placards, color codes visible? ☐ Yes ☐ No
11. Other Hazards? ☐ Yes ☐ No	12. As you approach the scene from the upwind side, do you note a change in the status of any of the above? ☐ Yes ☐ No
1. Entry Objectives:	
2. Warning sign(s), barriers, color codes in place? ☐ Yes ☐ No	
3. Hazardous material being monitored? ☐ Yes ☐ No 3a. Sampling Equipment: 3b. Sampling location(s): 3c. Sampling frequency: 3d. Personal exposure monitoring:	
4. Protective gear / level: 4b. Respirators: 4d. Boots:	4a. Gloves: 4c. Clothing: 4e. Chemical cartridge change frequency:
5. Decon 5a. Instructions: 5b. Decon equipment and materials:	
6. Emergency escape route established? ☐ Yes ☐ No Route?	
7. Field responders briefed on hazards? ☐ Yes ☐ No	
8. Remarks:	
ICS 201-5 Site Safety and Control Analysis	**© 1997-2012 TRG/dbSoft, Inc.**

Weather Report

Incident:	**Prepared By:** at
	Version Name:

Present Conditions

Wind Speed:		Wave Height:	
Wind Direction From The:		Wave Direction:	
Air Temperature:		Swell Height:	
Barometric Pressure:		Swell Interval:	
Humidity:		Current Speed:	
Visibility:		Current Direction Toward:	
Ceiling:		Water Temperature:	
Next High Tide (Time):		Next Low Tide (Time):	
Next High Tide (Height):		Next Low Tide (Height):	
Sunrise:		Sunset:	

Notes:

24 Hour Forecast

Sunrise:		Sunset:	
High Tide (Time):		High Tide (Time):	
High Tide (Height):		High Tide (Height):	
Low Tide (Time):		Low Tide (Time):	
Low Tide (Height):		Low Tide (Height):	

Notes:

48 Hour Forecast

Sunrise:		Sunset:	
High Tide (Time):		High Tide (Time):	
High Tide (Height):		High Tide (Height):	
Low Tide (Time):		Low Tide (Time):	
Low Tide (Height):		Low Tide (Height):	

Notes:

© 1997-2012 TRG/dbSoft, Inc.

ICS 202 - General Response Objectives		
Incident:	**Prepared By:**	**at:**
Period:	**Version Name:**	

Overall and Tactical Objectives	Assigned to:	Status
1. Ensure the Safety of Citizens and Response Personnel		
☐ 1a. Identify hazard(s) of spilled material		
☐ 1b. Establish site control (hot zone, warm zone, cold zone, & security)		
☐ 1c. Consider evacuations if needed		
☐ 1d. Establish vessel and/or aircraft restrictions		
☐ 1e. Monitor air in impacted areas		
☐ 1f. Develop site safety plan for personnel & ensure safety briefings are conducted		
2. Control the Source of the Spill		
☐ 2a. Complete emergency shutdown		
☐ 2b. Conduct firefighting		
☐ 2c. Initiate temporary repairs		
☐ 2d. Transfer and/or lighter product		
☐ 2e. Conduct salvage operations, as necessary		
3. Manage a Coordinated Response Effort		
☐ 3a. Complete or confirm notifications		
☐ 3b. Establish a unified command organization and facilities (command post, etc.)		
☐ 3c. Ensure local and tribal officials are included in response organizations		
☐ 3d. Initiate spill response Incident Action Plans (IAP)		
☐ 3e. Ensure mobilization & tracking of resources & account for personnel & equip		
☐ 3f. Complete documentation		
4. Maximize Protection of Environmentally-Sensitive Areas		
☐ 4a. Implement pre-designated response strategies		
☐ 4b. Identify resources at risk in spill vicinity		
☐ 4c. Track oil movement and develop spill trajectories		
☐ 4d. Conduct visual assessments (e.g., overflights)		
☐ 4e. Development/implement appropriate protection tactics		

© 1997-2012 TRG/dbSoft,

Incident:	**Prepared By:**	**at:**
Period:	**Version Name:**	

Overall and Tactical Objectives

	Assigned to:	Status
5. Contain and Recover Spilled Material		
☐ 5a. Deploy containment boom at the spill site & conduct open-water skimming		
☐ 5b. Deploy containment boom at appropriate collection areas		
☐ 5c. Evaluate time-sensitive response technologies (e.g., dispersants, in-situ burning)		
☐ 5d. Develop disposal plan		
6. Recover and Rehabilitate Injured Wildlife		
☐ 6a. Establish oiled wildlife reporting hotline		
☐ 6b. Conduct injured wildlife search and rescue operations		
☐ 6c. Setup primary care unit for injured wildlife		
☐ 6d. Operate wildlife rehabilitation center		
☐ 6e. Initiate citizen volunteer effort for oiled bird rehabilitation		
7. Remove Oil from Impacted Areas		
☐ 7a. Conduct appropriate shoreline cleanup efforts		
☐ 7b. Clean oiled structures (piers, docks, etc.)		
☐ 7c. Clean oiled vessels		
8. Minimize Economic Impacts		
☐ 8a. Consider tourism, vessel movements, & local economic impacts		
☐ 8b. Protect public and private assets, as resources permit		
☐ 8c. Establish damage claims process		
9. Keep Stakeholders and Public Informed of Response Activities		
☐ 9a. Provide forum to obtain stakeholder input and concerns		
☐ 9b. Provide stakeholders with details of response actions		
☐ 9c. Identify stakeholder concerns and issues, and address as practical		
☐ 9d. Provide timely safety announcements		
☐ 9e. Establish a Joint Information Center (JIC)		
☐ 9f. Conduct regular news briefings		
☐ 9g. Manage news media access to spill response activities		
☐ 9h. Conduct public meetings, as appropriate		
ICS 202 General Response Objectives	**© 1997-2012 TRG/dbSoft, Inc.**	

ICS 203 - Organization Assignment

Incident:	**Prepared By:** **at:**
Period:	**Version Name:**

Command Staff

Title	Name	Mobile	Pager	Other	Radio
Federal (FOSC)		( ) -	( ) -	( ) -	
State (SOSC)		( ) -	( ) -	( ) -	
RP(s)		( ) -	( ) -	( ) -	
Incident Commander		( ) -	( ) -	( ) -	
Deputy Incident Commander		( ) -	( ) -	( ) -	
Safety Officer		( ) -	( ) -	( ) -	
Information Officer		( ) -	( ) -	( ) -	
Liaison Officer		( ) -	( ) -	( ) -	
Intelligence Officer		( ) -	( ) -	( ) -	

Operations Section

Title	Name	Mobile	Pager	Other	Radio
Operations Section Chief		( ) -	( ) -	( ) -	
Deputy Operations Section Chief		( ) -	( ) -	( ) -	
Staging Area Manager		( ) -	( ) -	( ) -	
Recovery & Prot. Branch Director		( ) -	( ) -	( ) -	
Emergency Resp. Branch Director		( ) -	( ) -	( ) -	
Air Ops Branch Director		( ) -	( ) -	( ) -	
Wildlife Branch Director		( ) -	( ) -	( ) -	
Branch Director		( ) -	( ) -	( ) -	
Division/Group Supervisor		( ) -	( ) -	( ) -	
Disposal Group Supervisor		( ) -	( ) -	( ) -	

Planning Section

Title	Name	Phone	Fax	Other	Radio
Planning Section Chief		( ) -	( ) -	( ) -	
Deputy Planning Sec ion Chief		( ) -	( ) -	( ) -	
Situation Unit Leader		( ) -	( ) -	( ) -	
Resource Unit Leader		( ) -	( ) -	( ) -	
Documentation Unit Leader		( ) -	( ) -	( ) -	
Technical Specialist		( ) -	( ) -	( ) -	
Demobilization Unit Leader		( ) -	( ) -	( ) -	
Check In Recorder		( ) -	( ) -	( ) -	

ICS 203 Organization Assignment	**© 1997-2012 TRG/dbSoft, Inc.**

ICS 203 - Organization Assignment (Continued)

Incident:	**Prepared By:** at
Period:	**Version Name:**

Logistics section

Title	Name	Phone	Fax	Other	Radio
Logis ics Section Chief		( ) -	( ) -	( ) -	
Deputy Logistics Section Chief		( ) -	( ) -	( ) -	
Service Branch Director		( ) -	( ) -	( ) -	
Medical Unit Leader		( ) -	( ) -	( ) -	
Food Unit Leader		( ) -	( ) -	( ) -	
Communication Unit Leader		( ) -	( ) -	( ) -	
Support Branch Director		( ) -	( ) -	( ) -	
Supply Unit Leader		( ) -	( ) -	( ) -	
Facilities Unit Leader		( ) -	( ) -	( ) -	
Ground Support Unit Leader		( ) -	( ) -	( ) -	
Vessel Support Unit Leader		( ) -	( ) -	( ) -	
		( ) -	( ) -	( ) -	
		( ) -	( ) -	( ) -	
		( ) -	( ) -	( ) -	

Finance Section

Title	Name	Phone	Fax	Other	Radio
Finance Section Chief		( ) -	( ) -	( ) -	
Deputy Finance Section Chief		( ) -	( ) -	( ) -	
Time Unit Leader		( ) -	( ) -	( ) -	
Procurement Unit Leader		( ) -	( ) -	( ) -	
Compensa ion/Cla ims Unit Leader		( ) -	( ) -	( ) -	
Cost Unit Leader		( ) -	( ) -	( ) -	
		( ) -	( ) -	( ) -	
		( ) -	( ) -	( ) -	

Source Control Section

Title	Name	Phone	Fax	Other	Radio
Salvage/Source Control Group		( ) -	( ) -	( ) -	
		( ) -	( ) -	( ) -	
		( ) -	( ) -	( ) -	
		( ) -	( ) -	( ) -	

ICS 203 Organizational Assignment	**© 1997-2012 TRG/dbSoft, Inc.**

ICS 211p – Check-In List (Personnel)

Incident:	Prepared By: at:

Check-In Location - - ☐ Command Post ☐ Staging Area ☐ Other --> Location Name:

Personnel Check-In Information

ICS 211P Check-In List (Personnel)			**© 1997-2012 TRG/dbSoft, Inc.**

ICS 211e – Check-In List (Equipment)					
Incident:			**Prepared By:**		**at:**
Period:			**Version Name:**		
Check-In Location:	☐ Command Post	☐ Staging Area	☐ Other	-->	Location Name:
Equipment Check-In Information					
Equipment Description & Identifier					

ICS 211e Check-In List (Equipment)			**© 1997-2012 TRG/dbSoft, Inc.**

Annex – Table of Contents

1	Facility and Locality Information
2	Notification Procedures
3	Environmental Sensitive Area Information
4	Regulatory Cross Reference
5	Administration
6	Emegency Response Action Plan (ERAP)

Annex 1 – Table of Contents

1.0	Information Summary
1.1	Facility and Locality Information
1.2	Facility Hazard Analysis
1.3	Planning Calculations/Spill Scenarios

1.0 Information Summary

1.0.1 Facility Information

Facility Name:	Tremley Point Terminal
Facility Address:	4601 Tremley Point Road or Foot of South Wood Avenue Linden, NJ 07036
Facility Main Phone / Fax Number:	908-523-6528 / 908-862-6719
Facility Mailing Address:	1400 Park Avenue Linden, NJ 07036
County	Union
Latitude and Longitude:	(b) (7)(F), (b) (3) [redacted]
Wellhead Protection Area	None
Owner of Facility:	Phillips66 Company
Owner Address (if different from facility):	3010 Briarpark Drive Houston, TX 77042
Owner Phone:	281-293-3891
Owner County:	Harris
Operator of Facility:	Phillips66 Company
Dun and Bradstreet Number:	Phillips 66: 07-837-8508
NAICS Cods:	424710 (Petroleum Bulk Stations & Terminals)
Largest Oil Storage Tank Capacity: (DOT)	(b) (7)(F), (b) (3) [redacted]
Facility Maximum Oil Storage Capacity (incl. DOT Breakout Tanks):	(b) (7)(F), (b) (3) [redacted]
Number of Aboveground Oil Storage Tanks: (incl. EPA & DOT Breakout Tanks)	22
Number of Underground Oil Storage Tanks	2 (currently out of service)
Product Stored volume / type / capacity	See tank table – Annex 1.2
Worst Case Discharge Amount: EPA	(b) (7)(F), (b) (3) [redacted]
Worst Case Discharge Amount: USCG	
Facility Distance to Navigable Waters:	0 to ¼ mile
Tenure Owner/Operator & Date of Oil Storage Start-up	1918

General Information	
Current Operation	The Tremley Point Terminal, located on approximately 117 acres south of Newark Bay, on the west bank of the Arthur Kill and bordered by other terminals and industrial property, is a petroleum product terminal.
Vessel, Size, Type, Number	(b) (7)(F), (b) (3) [redacted]
Date(s) and Type(s) of Substantial Expansion(s)	Refer to Tank Table (Annex 1.2) for dates of
Directions to Facility	(b) (7)(F), (b) (3) [redacted]
	Total Distance: 6.82 miles Total Estimated Time: 20 minutes.

1.0.2 Pipeline Information

PIPELINE NAME LENGTH DIAMETER	Linden Harbor to Tremley Product Line 12" (2.1 miles)	
LOCATION	Counties:	Union
	State:	New Jersey
MILEPOST	Active	(b) (7)(F), (b) (3) [redacted]
	Inactive	None
PRODUCT(S) STORED:	Group I	
RESPONSE ZONES:	Tremley Response Zone	
LARGEST BREAKOUT TANK CAPACITY	(b) (7)(F), (b) (3) [redacted]	
WORST CASE DISCHARGE AMOUNT: -DOT		

1.0.3 Certification of Significant and Substantial Harm - EPA

Applicability of Substantial Harm Criteria	
Does the facility transfer oil over-water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?	Yes
Does the facility have a total oil storage capacity of greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?	No
Does the facility have a total oil storage capacity of greater than or equal to 1 million gallons and is the facility located at a distance such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments?	Yes
Does the facility have a total oil storage capacity of greater than or equal to 1 million gallons and is the facility located at a distance such that a discharge from the facility would shut down a public drinking water intake?	Yes
Does the facility have a total oil storage capacity of greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?	No

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

Signature

Rob Yarbrough — Name

05/12 — Date

1.0.4 Certification of Significant and Substantial Harm – USCG

Based on the USCG criteria described in 33 CFR 154.1015 (c), the Riverhead Marine Terminal & Dock is considered to be classified as a Significant and Substantial Harm facility because it has the capability of transferring oil to or from a vessel with a capacity of 250 barrels or more *and* it is part of a non-transportation-related fixed onshore facility with a storage capacity of more than 42,000 gallons.

1.0.5 Qualified Individual (QI)

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 Facility 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

See Section II for the Transportation Incident Notification & Reporting Tool

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

1.1 Facility and Locality Information

1.1.1 Terminal Specifics

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

[redacted]

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

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

Site Location Map

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

[redacted]

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

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

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

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

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

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

[redacted]

#2 Fuel Pipe Layout

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

[redacted]

Preliminary Gasoline Pipe Layout

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

[redacted]

93 Octane-Premium Gasoline Pipe Layout

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

[redacted]

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

[redacted]

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

1.2 Facility Hazard Analysis

1.2.1 Hazard Evaluation

This section examines the facility owner's/operator's ability to predict where releases could occur. Hazard evaluation is a widely used industry practice that allows owners and operators to develop an understanding of potential hazards and the response action necessary to address these hazards. Hazard identification and evaluation will assist facility personnel in planning for releases, thereby reducing the severity of impact resulting from a release. The evaluation may also assist in the identification of release sources resulting in corrective action prior to a release. Specific safety and health considerations are identified for responding to a release as a result of the hazard evaluation.

During the transfer of product both to and from barges, the operator is required to be on location. The tanker man that is furnished by the barge company is on the barge during the complete loading or off-loading procedure. If at any time either of the representatives are not present, the transfer is suspended.

The hose used for product transfer is hydrostatically tested annually and replaced if visual defects are noted.

Where the potential for a worst-case spill is very small, it does nonetheless exist. For this reason, consideration has been given to equipment on-site to minimize the potential for a major spill. Fail-safe engineering practices have resulted in effective spill prevention at this facility, as can be noted by the facility spill history.

Integrity practices in place to minimize spill potential include:	
•	Tanks are designed and constructed with materials that are compatible with the products stored. All tanks at this facility are of welded steel construction built according to API Standard 650, Welded Steel Tanks for Oil Storage.
	Tanks are fail-safe engineered by the following: (b) (3), (b) (7)(F) [redacted]
•	Tanks are subject to periodic integrity testing using such techniques as visual inspections or nondestructive shell thickness testing. Included in these inspections are: • Tank supports and foundations • Signs of deterioration and leaks • Accumulation of oil in tank dikes

Integrity practices in place to minimize spill potential include:	
•	Buried and partially buried metallic storage tanks are protected from corrosion by coatings and cathodic protection.
•	Corrosion protection for buried pipelines includes: • Pipelines are wrapped and coated to reduce corrosion • Cathodic protection is provided • When a pipeline section is exposed, it is examined and corrective action taken as necessary.
•	Pipeline terminal connections are capped or blind-flanged and marked if the pipeline is not in service or on standby service for extended periods. Pipeline terminal connections will be capped or blind-flanged when such lines have been out of service for one year and are expected to remain out of service.
•	Pipe supports are designed to minimize abrasion and corrosion and allow for expansion and contraction.
•	All aboveground valves are inspected and examined upon placing the valve in operation. Aboveground pipe is examined and is also inspected when valves are opened or closed.
•	Facility piping and piping to the bulk storage tanks is pressure tested periodically.

1.2.2 Tank Table

There are a total of 24 aboveground bulk storage tanks varying in size from (b) (7)(F), (b) (3) [redacted]

All of the tanks at this facility are constructed of steel and have API-approved venting features. All tanks are of riveted construction except for tanks 19, 35, 37, 38, 39 and 40, which are of welded construction. All of the tanks rest on concrete ring walls, in a manner to provide drainage away from the tank bottoms to minimize corrosion. All tanks have grounding connections.

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 Varec Liquid level gauging device and an independent high-level alarm system with audible and visual alerts. Alarm lights and horns are located at three points in the terminal: near the office building, and by Tanks 3 and 19. The Varec gauges have local readout at the tank; the gauges and alarms also are connected to an automatic remote tank gauging system into the office building and at the dock control center. In the office building, an operator continuously, i.e., 24 hours per day, 7 days per week, monitors operations throughout the terminal, including tank levels during filling to prevent overfills. During product movements the operator and field personnel maintain radio communication. All tanks are also manually gauged, at least monthly, to check the Varec system.

For the four small tanks listed below under "Mobile/Portable Tank Summary", overfill protection is provided by the delivery personnel who are required to attend the tank during the entire filling period.

Tank Table

TANK NUMBER	TANK TYPE	TANK YEAR	SUBSTANCE STORED Oil & Hazardous	QUANTITY STORED Gallons	MAXIMUM CAPACITY Gallons	TANK DIMENSIONS Dia. x Ht.	CONTAINMENT CAPACITY bbls (gallons) + 6" of rainwater
1	CR	1918	Diesel,500ppm	(b) (7)(F), (b) (3) [redacted]			
2	CR	1918	Diesel, 15ppm				
35*	CR	1952	ULSD				
3 (OOS)	IFR	1934	Regular Gas				
4#	CR	1924	Jet A 54				
23*	IFR	1935	Premium Gas				
38 (OOS)	IFR	1958	Conv. Prem. Gas				
39#	IFR	1958	Ethanol				
9#	IFR	1946	Premium Gas				
37*	IFR	1934	Regular Gas				
19#	CR	1935	Jet A 54, Filtered				
20	IFR	1935	Premium Gas				
24*	CR	1935	Kero 55				
25	IFR	1935	Premium Gas				
21*#	IFR	1934	Regular Gas				
22#	IFR	1934	Regular Gas				
26*	IFR	1935	Regular Gas				
27	IFR	1936	Diesel, 15ppm				
31	CR	1937	Jet A 54				
40	IFR	1964	Regular Gas				
29*	IFR	1937	Transmix				
30	CR	1937	Jet A 54				

OOS – Out Of Service

* - Indicates the largest tank in specified shared containment.
# - Indicates EPA Jurisdiction. All other tanks are regulated by DOT/PHMSA.

Tank Type: CR – Standard Cone Roof IFR – Internal Floating Roof

Refer to the General Plot Plan Diagram in this section for tank location at the facility.

All grouped containment areas meet the SPCC capacity requirements and secondary containment is sufficiently impermeable.

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. In accordance with the NJPDES permit, 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. Flapper-type valves are not used at this facility.

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 via Outfall 00 1 in the terminal's NJPDES permit.

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

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 Bayway Refinery for treatment and oil recovery. All other non-contact storm water leaves the facility via sheet flow.

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.

Mobile/Portable Tank Summary

The terminal has four small mobile/portable storage tanks in an essentially fixed position.

Service	Size (gals)	Location	Comments
Gasoline Additive	8,000	Adjacent truck rack	Concrete block containment
Diesel Fuel Additive	1,999	Truck loading rack	Within rack containment
Slop Oil	500		
Jet Fuel Additive	1,999	Truck loading rack	Within rack containment
ULSD Additive	1,000	Truck loading rack	Within rack containment

In general, the terminal has no ongoing need for other small mobile/portable storage tanks. If the need should arise, the tank will be installed within existing secondary containment or temporary containment will be provided.

1.2.3 Pipelines

Pipeline Identification	Group & Product	Max Flow Rate	Max Operating Pressure	Line Fill
Linden Harbor to Tremley Product Line – 12" (2.1 miles)	Group I ULSD / JET A /KERO / RBOB / PBOB / TMIX	6,000 BPH	270 psi	1,570 bbls

Pipes leading to and from aboveground storage tanks and which enter the tanks below the liquid level, are equipped with easily accessible block valves at to prevent escape of product outside the secondary containment areas.

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.

1.2.4 Loading Operations (EPA)

The terminal has the capability to load and unload tank trucks. While the potential for significant harm due to performing this routine task is small, it does nonetheless exist.

There is one truck loading rack with five loading positions. Gasoline, Jet Fuel, Kerosene, and other distillates including but not limited to Ultra Low Sulfur Diesel are all loaded at this rack.

All positions are equipped with an emergency shutdown push-button. All product piping is run overhead in the canopy structures. The canopy structures also support the high intensity discharge rack lighting system and the foam water sprinkler-piping system. Activation of the fire protection system is either by the detectors or by push-button.

Overfill/grounding equipment is installed at each bottom loading position. Each bottom loading position also has a vapor recovery system connection.

A truck brake interlock system at each bottom loading position is controlled at the rack when a vehicle is connected to the valves. Wheel chocks are also made available at the loading rack.

Prior to commencing loading, lowermost drains and all other connections are examined to ensure they are closed. During filling, and prior to departure, the lowermost drains and all connections are examined for leakage.

Hydrocarbon based gasoline additive is provided from an 8,000-gallon aboveground, horizontal storage tank, located approximately 100 feet south of the truck rack (see Mobile/Portable Tank Summary). Hydrocarbon based diesel additive is supplied from a 2,000-gallon skid mounted storage tank, located at the south end of position No. 4. Jet fuel additive is supplied from a 2,000-gallon tank located at the north end of position No. 5. Ultra Low Sulfur Diesel additive is supplied from a 1,000 double walled tank located beneath the rack. These additives do not contain any hazardous substances beyond what is usually found in petroleum products.

The tanks are filled infrequently, about twice per year, from an additive product delivery truck. This filling occurs over an asphalt-paved surface with the hose connections contained with a drip pan. Storm drains for the area are closed before a transfer takes place and absorbent material is available to clean up small to medium size leaks. Spilled material would remain within this area and not become a discharge. The delivery personnel are required to fully attend each delivery. Tanks also have a high level alarm. In addition, product is not ordered unless the tank volume is sufficiently low to accommodate a full truckload to prevent possible overfilling.

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.

Discharge Detection by Personnel

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.

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.

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 Oil Movements Operations.

Tank Gauging

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

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 Oil Movements Operations and requires immediate contact with the facility operator. Alarms are tested periodically in accordance with company preventive maintenance procedures.

Automated Discharge Detection

The terminal is equipped with high level alarms, which sound an alarm locally at the terminal. Oil Movements Operations 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 Scully automatic equipment 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.

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).

Emergency Response Equipment, Testing & Deployment

Response Equipment for Small Discharges

Response equipment for small discharges (< 50 barrels) will primarily come from the Bayway Refinery equipment stored at this facility. 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.

Response Equipment for Medium Discharges

Response equipment for medium (1,200 barrels) discharges will come from Bayway Refinery inventory, from Clean Harbors Cooperative, and from contractors, as described below for worst-case discharges.

Response Equipment for Worst-Case Discharges

Response equipment for the worst-case discharge response capability caps can be met through use of the Bayway Refinery's equipment inventory, Clean Harbors Cooperative (CHC), and identified plan contractors.

In the event of a medium or worst-case discharge, Bayway Refinery's equipment will be deployed first because of its immediate availability and the Company's desire to act quickly to contain the oil. Thereafter, CHC boom, deployed by terminal and Company Refinery personnel, CHC personnel, or CHC arranged contractors, will be placed for further secondary containment and/or defensive protection of environmentally sensitive areas shown on Company response maps.

Clean Harbors Cooperative alone, being an approved Class E Oil Spill Removal Organization (OSRO), has the capability to respond to and mitigate the terminal's WCD up to the required capability caps for Tiers 1, 2 and 3. Company's actual capability exceeds the required capability caps when taking into account Bayway Refinery's equipment and personnel, CHC, and the three other OSRO contractors with which the Company has separate contracts.

Free oil and oil/water mixtures from recovery operations can be managed through on-site facilities at Company Refinery. This Plan describes these operations. Oil recycling into refinery feed occurs through two on-site recovery operations: the wastewater treatment plant and/or the benzene waste NESHAP facilities.

1.2.5 Daily Operations

The Terminal operates in a manner where very little contact between personnel and handled materials occurs. Typically, materials are delivered to this facility via pipeline. The valve manifolds at the facility are lined up to route the product to the correct tank for storage. When needed, the products will either be piped back into the pipeline, or will be routed to the truck loading/unloading rack for sale. Volumes of handled materials would depend on the specific operation at hand, and could range in size from over a million gallons in a day (which could occur when filling the tanks at the facility from pipeline) to a size of 10,000 gallons or less, which is typically the maximum volume handled when a truck is loaded or unloaded at the rack.

While the potential for significant harm due to performing this routine task is small, it does nonetheless exist. A spill caused by facility operations could occur due to:

Cause	Description
Piping Repair	Procedures are in place for safely repairing or replacing existing piping, valves, pumps, or instrumentation attached to piping. The section of pipe to be repaired or replaced will first be blocked in. Next, the contents of the pipe would be drained by the pipe low-point drains into an appropriate vessel, frequently a vacuum truck. The vessel size would depend on the size and length of the pipe. Then the section of pipe would be blinded in with blind flanges, and finally opened up for repair. Deviation from this procedure would need to be approved by the facility manager. Following this procedure, the maximum volume possible for a spill would be limited to the quantity of liquid contained within the pipe, but would not be expected to exceed the small spill scenario.
Tank Water Draw	Periodically the storage tanks at this facility are purged of water, which settles to the bottom of the tanks. The water expelled from the tanks can be received either in tank water draw boxes located at the base of each tank, or could be received directly by a vacuum truck. Procedure on operating this valve would include an operator **continuously** monitoring the liquids being expelled from this tank. However unlikely, a spill occurring from this type of operation could range from virtually nothing up to the entire contents of the tank, assuming the block valve at the tank waterdraw became stuck in the open position.
Tank Transfers	When operations require transfer of a product from one tank to another, the valve manifolds on site are lined up to route the product from one tank, through a pump, and on to the next tank. Aside from the potential for a major equipment failure (instrument, pump, etc. as addressed in the Hazard Evaluation portion of this section), no real possibility for spill should exist. Upon discovery of such a spill, the facility manager should be immediately notified. Initiation of emergency response plans will be based on the size and nature of the spill, and will be at the discretion of the facility manager.

Secondary Containment

Each tank sits within its own earthen diked secondary containment, which has been determined to be sufficiently impermeable.

Storm drainage is directed from the dike areas to six outfalls covered under the terminal's NJPDES Permit No. NJ0000515. One outfall discharges directly into the Arthur Kill. One outfall collects storm drainage from a ditch along the south side of the property through a marsh area and empties into the Rahway River. Four outfalls drain to a ditch along the north side of the property, which flows to an unnamed creek and empties into the Arthur Kill.

Dike area drains are kept locked during normal operations and are only opened as required to drain water from the dike areas. Before draining, the dikes are checked for evidence of free oil. Any free oil is removed using a vac truck or absorbents. The dike areas are periodically monitored by onsite personnel while the drain valves are opened. After draining, the valves are closed and locked.

Tank containment groupings are arranged to accommodate drainage and to meet the volumetric capacity requirements.

The tank truck loading area is covered by a concrete surface that is impermeable so as to prevent leaks from reaching the groundwater. The loading rack secondary containment is not designed to contain a spill, but to divert that spill to a remote tank. The loading rack area drains by gravity to trench drains at the north and south ends of the rack and then to a 10,000 gallon aboveground collection tank. This tank will also collect a small amount of rainwater in spite of the large canopy over the rack area. The volume of the collection tank is sufficient to accommodate the largest truck compartment and also larger than the volume of the small additive tanks placed inside the truck area containment. This tank is monitored daily and emptied as necessary. Accumulated oil and water in the collection tank are periodically hauled to Bayway Refinery for treatment and oil recovery in order to maintain available containment capacity.

Normal Daily Throughput (EPA)

This facility normally receives predetermined products from the pipeline in discrete and scheduled intervals, and the intervals depend on the volume required for transfer to a particular tank. It is not uncommon for the daily volume transferred across the truck rack to be about 22,312 barrels per day as long as the facility continues to receive products from the pipeline. This facility was designed to manage throughput at varying rates, and therefore, there should be little effect on the potential for release as the daily facility throughput changes.

1.2.6 Marine Terminal Facilities

Area Description

The marine dock facility is wholly owned and has two active berths, Berth A and Berth B, which normally handle barges. Both berths are equipped with large hose connections and one also has marine loading arms. This marine facility has vapor control for loading. A John Zink thermal oxidizer unit was installed in 1992.

Marine Terminal Drainage

The dock loading/unloading areas are equipped with catch pans for catching spilled oil. These pans are covered when there is no barge loading/unloading 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 concrete containment sumps, which channel any spilled product into a 10,000-gallon above ground storage tank. After a rain event, the water in the containment sump is visually inspected prior to being pumped out.

Marine Transfer Area Illumination

Fixed Lighting: The dock, terminal bulk storage and tank truck loading areas have adequate fixed spot lighting conforming to OSHA requirements. This lighting illuminates the following areas sufficiently to safely operate and detect leaks and spills during the hours of darkness:

Areas under illuminations	
•	Each dock petroleum product transfer connection point.
•	Each vessel petroleum product transfer connection point.
•	Each terminal and loading rack petroleum product transfer work area.
•	Each vessel petroleum product transfer work area.

Surface Water Illumination: The dock has adequate fixed spot lighting to illuminate the surface of the water along the dock and sides of ships and/or barges to detect leaks and spills during the hours of darkness. Adequate portable lighting and flashlights are stored at the dock area for use by the operators in detecting spills and leaks along the seaward side of ships and/or barges. All lighting in the dock area of the terminal is in compliance with 33 CFR 154.570.

Emergency Response Equipment – Facility Owned

The terminal has a minimum of fifteen-hundred (1500) feet of swing around boom, which is stored at the dock ready for deployment when necessary, and a permanent shore side boom along the dock. A 21-foot workboat with a 150-hp engine is always maintained in an operational mode at the facility. The boom is deployed such that the dock forms one side of the containment area. A length of boom is permanently deployed along the piles which support the open face pier to prevent any lighter-than-water products from accumulating under the dock, or washing up along the shore. The boom, when first deployed, is at least fifteen (15) feet from the vessel on all sides, except on the dock side where the permanent boom along the piles supporting the open faced pier forms one side of the containment area.

The boom on hand is adequate to encircle both the largest tanker unloaded at the terminal, plus .any transfer barge that might need to be used in an emergency.

Equipment is tested in accordance with PREP guidelines as described in Section III of this plan.

This facility does not own any other response equipment. It is dependent upon OSROs and the sister company (Bayway Refinery).

Bayway Refinery Response Equipment Inventory/Inspection/Testing Log – Not Facility Owned

This facility maintains a contract with its sister company, Bayway Refinery, for use of emergency oil spill response equipment. A copy of this contract, the equipment list and test records for the equipment are retained at the Tremley Point Terminal and can be produced for review upon request.

Additionally, this facility is a member of Clean Harbors Co-Op. A copy of this contract and membership information is retained at the Tremley Point Terminal and can be produced for review upon request.

Inspections of Cargo Hoses

Cargo hoses are visually inspected by the operating personnel prior to connecting for a transfer. Visibly damaged hoses are not used and are removed from the work area. All cargo hoses are inspected and pressure tested by operating personnel annually. The maximum in-service life for the hoses is approximately three years.

1.2.7 Worst Case Discharge (EPA)

In this section, the Company must calculate the worst case discharge volume at the Tremley Point Terminal using the appropriate worksheets in 40 CFR 112, Appendix D. When planning for the worst case discharge response, all of the factors listed in the small and medium discharge section of the response plan will be addressed.

For onshore storage facilities and production facilities, permanently manifolded oil storage tanks are defined as tanks that are designed, installed, and or operated in such a manner that the multiple tanks function as one storage unit (i.e., multiple tank volumes are equalized) In this section of the response plan, owners/operators must provide evidence that oil storage tanks with common piping or piping systems are not operated as one unit.

If such evidence is provided and is acceptable to the Regional Administrator, the worst case discharge volume shall be based on the combined oil storage capacity of all manifold tanks or the oil storage capacity of the largest single oil storage tank within the secondary containment area, whichever is greater.

For permanently manifolded oil storage tanks that function as one storage unit, the worst case discharge shall be based on the combined oil storage capacity of all manifolded tanks or the oil storage capacity of the largest single tank within a secondary containment area, whichever is greater.

For purposes of the worst case discharge calculation, permanently manifolded oil storage tanks that are separated by internal division for each tank are considered to be single tanks and individual manifolded tank volumes are not combined.

If the Regional Administrator determines that the worst case discharge amount calculated is not appropriate, he/she may specify the discharge amount to be used in planning.

For complexes, the worst case planning amount shall be the larger of the amounts calculated for each component of the facility.

Worksheet for Onshore Production Facilities[1] (40 CFR 112, Appendix D, Part A.2)	
Secondary Containment - Multiple Tank Facilities	
Are all aboveground oil storage tanks or groups of aboveground oil storage tanks at the facility without adequate secondary containment[2]	N (Y/N)
1. If the answer is yes, the final worst case discharge planning volume equals the total above ground oil storage capacity at the facility.	
(1) Final worst case volume:	
(2) Do not proceed further.	0 Gal.
2. If the answer is no, calculate the total aboveground oil storage capacity of tanks without adequate secondary containment. If all aboveground oil storage tanks or groups of aboveground oil storage tanks at the facility have adequate secondary containment, ENTER "0".	0 Gal.
3. Calculate the capacity of the largest single aboveground oil storage tank with adequate secondary containment or the combined capacity of a group of aboveground oil storage tanks permanently manifolded together, whichever is greater, plus the volume for Question #2.[3]	(b) (7)(F), (b) (3)
4. Final worst case volume.[4]	
Footnotes:	
[1] "Storage facilities" represent all facilities subject to this part, excluding oil production facilities.	
[2] Secondary containment is defined in 40 CFR 112.7(e)(2). Acceptable methods and structures for containment are also given in 40 CFR 112.7(c)(l).	
[3] For onshore storage facilities and production facilities, permanently manifolded oil storage tanks are defined as tanks that are designed, installed, and/or operated in such a manner that the multiple tanks function as one storage unit (i.e., multiple tank volumes are equalized). Permanently manifolded tanks that are separated by internal divisions for each tank are considered to be single tanks and individual manifolded tank volumes are not combined. (Refer to 40 CFR Part 112, Appendix D, Section 1.2 for further discussion.)	
[4] All complexes that are jointly regulated by EPA and the USCG must also calculate the worst case discharge planning volume for the transportation-related portions of the facility and plan for whichever volume is greater.	

The available containment volume for the largest tank (Tank #4) at this facility is (b) (7)(F), (b) (3). A worst case discharge scenario could occur under circumstances where the structural integrity of a tank or the piping hardware attached directly to a tank shell should fail. It would be expected that containment of the spill would occur via the secondary containment dike installed at the facility for mitigation of such an event. However, if containment is not achieved by the secondary containment dike (which is sized to contain over 100% of the largest tank volume) product could migrate into the Arthur Kill.

The Emergency Response Contractor will be made aware of the likelihood of spilling into the nearby creeks or rivers when they are notified. Additionally, precautions to lessen the severity of spills into creeks and rivers will become the top clean-up priority for the spill response equipment available on-site.

1.2.8 Small and Medium Discharges (EPA)

To address multi-level planning requirements, the Hartford Terminal must consider types of facility-specific discharge scenarios that may contribute to a small or medium discharge. The scenarios shall account for all the operations that take place at the facility including, but not limited to	
•	Loading and unloading of surface transportation
•	Facility maintenance
•	Faculty piping
•	Pumping stations and sumps
•	Oil storage tanks
•	Vehicle refueling
•	Age and condition of facility and components
•	Tank Overflow
•	Valve Failure
•	Tank Failure
•	Pipe Failure
•	Hose Failure
•	Pump Seal Failure

The scenarios will also consider factors that affect the response efforts required by the facility. These include but are not limited to:	
•	Size of the discharge
•	Proximity to down gradient wells, waterways and drinking water intakes
•	Proximity to fish, wildlife and sensitive environments
•	Likelihood that the discharge will travel offsite (i.e. topography, drainage)
•	Location of the material discharged (i.e., on a concrete pad or directly on the soil)
•	Material discharged
•	Weather or aquatic conditions (i.e., river flow)
•	Available remediation equipment
•	Probability of a chain reaction of failures
•	Direction of discharge pathway

Small Discharge

The EPA defines a "small discharge" as any discharge volume less than or equal to 2,100 gallons (50 bbls), but not to exceed the calculated Worst Case Discharge.

Small Discharge = 50 bbl (2,100 gallons)

The most common failure occurring at this type of facility is a hose failure from the transport to the load/unload connection. Because the facility is under constant supervision by the driver while the operation is being performed, the spill event is typically very small, generally less than 42 gallons. However, for planning purposes we will consider a **truck tank compartment as a source** of the 2,100-gallon spill and, as a result, will plan for clean up accordingly.

Medium Discharge

The EPA defines a "medium discharge" as one greater than 2,100 gallons (50 bbls) and less than or equal to 36,000 gal. (857 bbls) or 10% of the capacity of the largest aboveground oil storage tank, whichever is less, provided that this amount is less than the WCD amount. Since 10% of the Worst Case Discharge exceeds 36,000 gallons (857 bbls), the medium discharge planning volume is:

Medium Discharge = 857 bbl (36,000 gallons)

The most common failure occurring at this type of facility is a hose failure from the transport to the load/unload connection. Because the facility is under constant supervision by the driver while the operation is being performed, the spill event is typically very small, generally less than 42 gallons. However, for planning purposes, we will consider **a tank overflow as the source** of the 36,000-gallon spill and, as a result, will plan for the cleanup accordingly.

1.2.9 Worst Case Discharge - USCG

The Worst Case Discharge was formulated assuming a release from the Marine Transportation Related portion of the Facility, as directed by 33 CFR 154.1029.

The Worst Case Discharge is based on a catastrophic failure of all piping carrying oil between the marine transfer manifold and the non-transportation related portion of the Facility.

- **Worst Case Discharge (WCD)** =
  [(maximum time to discover + maximum time to shutdown flow) x maximum flow rate] + piping capacity

- **Average Most Probable Discharge**
  The Average Most Probable Discharge (AMPD) is defined by 33 CFR 154 as the lesser of 50 barrels or 1% of the Worst Case Discharge.

- **Maximum Most Probable Discharge**
  The Maximum Most Probable Discharge (MMPD) is defined by 33 CFR 154 as the discharge of the lesser of 1,200 barrels or 10% of the volume of the Worst Case Discharge.

The dock facility has two berths, Berth A & B, to transfer petroleum products to and from storage tanks. Both berths can operate simultaneously with two barges or a small tanker and one barge. Two scenarios were evaluated for the purposes of calculating a worst case discharge volume.

Scenario Description

A discharge occurs during the offloading of a product tanker and loading of a barge. Assume that all shore tank-to-dock transfer lines catastrophically and completely fail while the product transfers are occurring. The pipe failures cause a down gauge in product storage tank level alerting the operator monitoring the transfers from the central control room. Upon physical confirmation of the problem, the tanker pump and shore pump are shut down and the product storage tank valve is closed. All lines empty their total volume.

Actual Worst Case Discharge Calculations
(b) (7)(F), (b) (3)

[redacted]

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

[redacted]

Tremley Point Terminal

Example of MTR Average Most Probable and Maximum Most Probable Site – Dock Facility Berth

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

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

[redacted]

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

[redacted]

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

[redacted]

SITE SENSITIVE STRATEGIES

Refer to ACP Section 4A of this plan

ConocoPhillips

1.2.10 Worst Case Discharge – DOT/PHMSA

Pipeline Worst Case Discharge Calculations

DOT-PHMSA Discharge Volume Calculation	
Worst Case Discharge = the largest volume (gal and bbls) of the following:	
Option 1	Pipeline's maximum release time (hrs), plus the maximum shutdown response time (hrs), multiplied by the maximum flow rate (bbls/hr), plus the largest line drainage volume after shutdown of the line section.
Option 2	Largest foreseeable discharge for the line section is based on the maximum historic discharge, if one exists, adjusted for any subsequent corrective action or preventive action taken.
Option 3	Capacity of the single largest breakout tank or battery of tanks within a single secondary containment system, adjusted for the capacity or size of the secondary containment system.

Under PHMSA's current policy, operators are allowed to reduce the Worst Case Discharge volume derived from 49 CFR 194.105(b)(3) by no more than 75% if an operator is taking certain spill prevention measures for their breakout tanks and presents supporting information in the response plan.

An operator can reduce the Worst Case Discharge volume based on breakout tanks in the response zones as follows:	
50%	Secondary containment capacity greater than 100% capacity of tank and designed according to NFPA 30
10%	Tank built, rebuilt, and repaired according to API Std 620/650/653
5%	Automatic high-level alarms/shutdowns designed according to NFPA/API RP 2350
5%	Testing/cathodic protection designed according to API Std 650/651/653
5%*	Tertiary containment/drainage/treatment per NFPA 30
75%	Maximum allowable credit or reduction

* The facilities do not have tertiary containment.

The Worst Case Discharge for each response zone was based on the largest volume of the three criteria given above.

Pipeline Worst Case Discharge Calculations (Cont'd)

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

[redacted]

Pipeline Worst Case Discharge Calculations (Cont'd)

The Worst Case Discharge volume calculation for the **breakout tank** is as follows:

Capacity of the single largest breakout tank or battery of tanks within a single secondary containment system, adjusted for the capacity or size of the secondary containment system.

Largest Breakout Tank: Tank #35

(b) (7)(F), (b) (3) [redacted]

Prevention Credits Assigned:		
50%	Secondary containment capacity greater than 100% capacity of tank and designed according to NFPA 30	YES
10%	Tank built, rebuilt, and repaired according to API Std 620/650/653	YES
5%	Automatic high-level alarms/shutdowns designed according to NFPA/API RP 2350	YES
5%	Testing/cathodic protection designed according to API Std 650/651/653	YES
5%*	Tertiary containment/drainage/treatment per NFPA 30	NO
75%	Maximum allowable credit or reduction	70%

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

[redacted]

Spill History

Date	Incident Description	
08/15/06	Tremley Point P/T - ULS Diesel Release to Containment*	While pumping from COP to Valero via Sun Pipeline, a pipeline flange gasket failed, releasing ULSD to the ground in the COP terminal pipeline manifold area. Estimated amount is (b) (7)(F), [redacted]. Sun Pipeline Operator noted no pressure variations or flow alarms between start and finish of the transfer.
06/12/06	Tremley Point Terminal - Transmix Pipeline Release*	During a routine inspection of the terminal, an odor was noticed near the pipeway leading from the pipeline receiving area under the main tankfield road towards Transmix Tk-29. The pipes run under a paved road crossing. They are not buried, but are supported on 10' wide concrete supports. In the containment area under the road, oil was seen on top of collected rain water, and a small stain was found under the northernmost pipe. The staining was not visible without climbing down the road embankment and looking under the roadway between the pipes. The road crossing (bridge)was removed to expose the piping. Hand digging removed dirt that had washed down against the piping on the supports. Close inspection of the pipes showed the Transmix line leading to Tk-29 was wet on the underside, immediately where the pipe and pipe support meet. There was no active drip or spray observed. The line was isolated and is being drained and blanked off. The contaminated soil has been drummed for disposal. The corroded section of pipe will be cut out and replaced with new pipe.

*Non-DOT Regulated

1.2.11 Planning Volume Calculations

Once the Worst Case Discharge volume has been calculated, response resources must be identified to meet the requirements of 40 CFR 112.20(h). Calculations to determine sufficient amount of response equipment necessary to respond to a worst case discharge is described below.

According to 40 CFR 112, Appendix D, Section 1.4 "All complexes that are jointly regulated by EPA and the USCG must compare both calculations for worst case discharge planning volume derived by using the EPA and USCG methodologies and plan for whichever volume is greater."

Per the calculations noted above, the largest, calculated worst case discharge is the EPA volume of (b) (7)(F), (b) and will therefore be the planning volume basis.

Given	
Worst Case Discharge Volume of Oil	(b) (7)(F), (b) (3) [redacted]
Type of Petroleum Handled	
Facility Specific Operating Area	
Emulsification Factor	
Percent Recovered Floating Oil	
Percent Oil On Shore	
Mobilization Factors	

Calculations

(b) (7)(F), (b) (3) [redacted]

The Company has contracted with USCG Certified OSROs for each response zone. Contact information and response capability for each OSRO can be found in the Response Zone Appendix. The OSRO(s) contracted to respond in each Response Zone is capable of being on site and ensuring spill containment activities are accomplished within the appropriate tier times. They will provide sufficient trained personnel and equipment to respond to a worst-case discharge.

Planning Distance Calculations

Planning distance calculations are based on the guidelines in accordance with 40 CFR Part 112. This facility sits on a tidally influenced waterway and the worst case discharge would be from a non-persistent oil. The resulting planning distance is therefore 5 miles from the Facility down current during ebb tide and to the point of maximum tidal influence or 5 miles, whichever is less, during flood tide.

Example of Spill Site(s) Worst Case Discharge (Page 1 of 4)

Tremley Point Terminal

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

[redacted]

Example of WCD Tank 35

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

[redacted]

Additional WCD Spill Site – Dock Facility Berth

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

[redacted]

RESPONSE STRATEGY GUIDELINES

(Actual Response Zone Strategy Will Be Determined By the On-Scene Incident Commander)

Terminal Latitude/Longitude (b) (3), (b) (7)(F)

Location: Linden, New Jersey

Response Tactic: Containment/Exclusion

- Follow ACP strategies found in this section

Current Period Response Objectives Checklist:

- Initiate terminal emergency process
- Safety of public and responders / determine evacuation / hot zone
- Isolate area and deny entry
- Make notifications
- Form Unified Command with responding agencies
- Locate a safe workable Command Post and Staging Area
- Begin completing an ICS Form 201 & 202
- Perform safe reconnaissance up wind, and up hill
- Ensure proper personal protective equipment
- Create Initial Incident Action Plan
- Create Site Safety & Health Plan
- Create a Current 12 Hour Unified Incident Action Plan
- Develop & carry out containment, protection & recovery strategy objectives
- Ensure proper personal protective equipment
- Establish decontamination & cleanup strategies
- Provide for a disposal plan
- Document activities on ICS Form 214 (Unit Log)
- Keep individual Section Logs

Response Tools:

- Appropriate NIMS ICS Forms
- USCG 2006 IMH
- ConocoPhillips IMH

Emergency telephone numbers are located in the Emergency Response Action Plan Booklet in front of this ERP

(Refer to the Training & Exercise Program Section for ICS Forms)

DRIVING DIRECTIONS TO TREMLEY POINT FACILIT

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

[redacted]

Site Locations & Strategies Developed by ConocoPhillips

SITE SENSITIVE STRATEGIES

Refer to ACP Section 4A of this plan

ConocoPhillips

Example of Spill Site(s) Worst Case Discharge (Page 2 of 4 North)

Tremley Point Terminal

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

[redacted]

RESPONSE STRATEGY GUIDELINES

(Actual Response Zone Strategy Will Be Determined By the On-Scene Incident Commander)

Terminal Latitude/Longitude: (b) (7)(F), (b) (3) [redacted]

Location: Linden, New Jersey

Response Tactic: Containment/Exclusion

- Follow ACP strategies found in this section

Current Period Response Objectives Checklist:

- Initiate terminal emergency process
- Safety of public and responders / determine evacuation / hot zone
- Isolate area and deny entry
- Make notifications
- Form Unified Command with responding agencies
- Locate a safe workable Command Post and Staging Area
- Begin completing an ICS Form 201 & 202
- Perform safe reconnaissance up wind, and up hill
- Ensure proper personal protective equipment
- Create Initial Incident Action Plan
- Create Site Safety & Health Plan
- Create a Current 12 Hour Unified Incident Action Plan
- Develop & carry out containment, protection & recovery strategy objectives
- Ensure proper personal protective equipment
- Establish decontamination & cleanup strategies
- Provide for a disposal plan
- Document activities on ICS Form 214 (Unit Log)
- Keep individual Section Logs

Response Tools:

- Appropriate NIMS ICS Forms
- USCG 2006 IMH
- ConocoPhillips IMH

Emergency telephone numbers are located in the Emergency Response Action Plan Booklet in front of this ERP

(Refer to the Training & Exercise Program Section for ICS Forms)

DRIVING DIRECTIONS TO TREMLEY POINT FACILITY

(b) (7)(F), (b) (3) [redacted]

SITE SENSITIVE STRATEGIES

Refer to ACP Section 4A of this plan

Site Locations & Strategies Developed by ConocoPhillips

ConocoPhillips

Example of Spill Site(s) Worst Case Discharge (Page 3 of 4 South)

Tremley Point Terminal

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

[redacted]

RESPONSE STRATEGY GUIDELINES

(Actual Response Zone Strategy Will Be Determined By the On-Scene Incident Commander)

Terminal Latitude/Longitude: (b) (7)(F), (b) (3) [redacted]

Location: Linden, New Jersey

Response Tactic: Containment/Exclusion

- Follow ACP strategies found in this section

Current Period Response Objectives Checklist:

- Initiate terminal emergency process
- Safety of public and responders / determine evacuation / hot zone
- Isolate area and deny entry
- Make notifications
- Form Unified Command with responding agencies
- Locate a safe workable Command Post and Staging Area
- Begin completing an ICS Form 201 & 202
- Perform safe reconnaissance up wind, and up hill
- Ensure proper personal protective equipment
- Create Initial Incident Action Plan
- Create Site Safety & Health Plan
- Create a Current 12 Hour Unified Incident Action Plan
- Develop & carry out containment, protection & recovery strategy objectives
- Ensure proper personal protective equipment
- Establish decontamination & cleanup strategies
- Provide for a disposal plan
- Document activities on ICS Form 214 (Unit Log)
- Keep individual Section Logs

Response Tools:

- Appropriate NIMS ICS Forms
- USCG 2006 IMH
- ConocoPhillips IMH

Emergency telephone numbers are located in the Emergency Response Action Plan Booklet in front of this ERP

(Refer to the Training & Exercise Program Section for ICS Forms)

DRIVING DIRECTIONS TO TREMLEY POINT FACILITY

(b) (7)(F), (b) (3) [redacted]

Site Locations & Strategies Developed by ConocoPhillips

SITE SENSITIVE STRATEGIES

Refer to ACP Section 4A of this plan

ConocoPhillips

Example of Spill Site(s) Worst Case Discharge (Page 4 of 4 South)

Tremley Point Terminal

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

[redacted]

DRIVING DIRECTIONS TO TREMLEY POINT FACILITY

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

[redacted]

Site Locations & Strategies Developed by ConocoPhillips

SITE SENSITIVE STRATEGIES

Refer to ACP Section 4A of this plan

RESPONSE STRATEGY GUIDELINES

(Actual Response Zone Strategy Will Be Determined By the On-Scene Incident Commander)

Terminal Latitude/Longitude: (b) (7)(F), (b) (3) [redacted]

Location: Linden, New Jersey

Response Tactic: Containment/Exclusion

- Follow ACP strategies found in this section

Current Period Response Objectives Checklist:

- Initiate terminal emergency process
- Safety of public and responders / determine evacuation / hot zone
- Isolate area and deny entry
- Make notifications
- Form Unified Command with responding agencies
- Locate a safe workable Command Post and Staging Area
- Begin completing an ICS Form 201 & 202
- Perform safe reconnaissance up wind, and up hill
- Ensure proper personal protective equipment
- Create Initial Incident Action Plan
- Create Site Safety & Health Plan
- Create a Current 12 Hour Unified Incident Action Plan
- Develop & carry out containment, protection & recovery strategy objectives
- Ensure proper personal protective equipment
- Establish decontamination & cleanup strategies
- Provide for a disposal plan
- Document activities on ICS Form 214 (Unit Log)
- Keep individual Section Logs

Response Tools:

- Appropriate NIMS ICS Forms
- USCG 2006 IMH
- ConocoPhillips IMH

Emergency telephone numbers are located in the Emergency Response Action Plan Booklet in front of this ERP

(Refer to the Training & Exercise Program Section for ICS Forms.)

ConocoPhillips

1.3 Vulnerability Analysis

1.3.1 Facility Vulnerability Specifics

The following information, based on the Area Contingency Plan, has been used to determine 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.

Spill events at this facility may occur at several locations. These locations include the barge and ship loading/unloading area, the truck loading rack, the bulk storage tank farms, tank lines and tank dike drain lines.

A surface discharge from the facility that escaped secondary containment could flow overland and enter either the Arthur Kill or an unnamed inlet on the Arthur Kill less than 0.10 miles from the largest tanks at the facility. Any material, which could not be contained in the unnamed inlet, could also reach the Arthur Kill.

Tidal currents in the Arthur Kill can travel either north or south, but are generally low within the Arthur Kill (NOS, 1977; Hires, 1992). The experience of the Governors Island office of the U.S. Coast Guard (Levine, personal communication) indicates that spills within the Arthur Kill travel approximately four (4) miles south and three (3) miles north over the course of a tidal cycle, or a maximum of seven (7) miles south and three (3) miles north during a 48-hour period. As a result, environmentally sensitive areas both upstream and downstream of the Tremley Point Terminal were mapped.

Both the modeling results (Hires, 1992) and the experience of the Coast Guard (Levine, 1992) indicate that a spill from the terminal would have little chance of moving outside of the confines of the Arthur Kill.

1.3.2 Analysis of the Potential for a Spill

The probability of a spill occurring at one of these facilities is minimal for the following reasons:

Potential Spill Results

Tanks	A tank spill could occur as a result of catastrophic equipment failure. Causes for such an event could be the result from seam failures, fitting failures, vandalism, valve failures, foundation failures, earthquake and/or undetected corrosion. This type of equipment failure could range from a small spill to a spill the size of the entire tank contents. Upon discovery of such a spill, the facility manager should immediately be notified, and the Facility Response Plan should be initiated. The immediate health results of a spill of this magnitude would be directly dependent on the type of material spilled.
Piping Failure	Spills from piping failures may be caused by the failure of a pipe, failure of pipe flange gaskets, failure of a valve or valve packing, or damage to the pipe rack carrying the pipe. Spill quantities and rates of flow associated with these failures would depend upon the nature of the piping failure, but could be expected to trigger the response plans for either the small or medium release scenarios, but not likely the worst-case release scenarios. Initiation of emergency response plans will be at the discretion of the facility manager based on information available at the time of the incident.
Instrumentation	The failure of most electronic or mechanical instrumentation would be expected to result in spills from equipment due to overfilling vessels. Failures of this type are somewhat unusual. Upon discovery of such a spill, the facility manager should be notified. Initiation of emergency response plans will be at the discretion of the facility manager based on information available at the time of the incident.
Loading Rack	Spills from loading racks may be caused by tank overfill, loading arm failure, operator neglect, pump failure, hose failure, and/or truck leakage. Spill quantities and rates of flow associated with these failures would depend upon the exact operation during which the spill occurred, but would generally be expected to be small. Initiation of emergency response plans will be at the discretion of the facility manager.
Pumps	Spills from pumps may be caused by the failure of the pump casing, or by failure of piping hardware associated with the pump. Spill quantities and rates of flow associated with these failures would depend upon the exact operation during which the spill occurred, but would generally be expected to be small. Initiation of emergency response plans will be at the discretion of the facility manager.

1.3.3 Oil Spill Potential Spill Risk Probability Matrix

The following table lists potential spill occurrences and the quantities, comparative probabilities, likely consequences and impacts.

Source	Major Type of Failure	Total Quantity	Race (BBL/hr)	Secondary Containment	Direction of Flow
		(b) (7)(F), (b) (3)	[redacted]		
Loading/Unloading Ships & Barges	Loading Lines	[redacted]	[redacted]	arge Berth Spill ans, Boom in iver	Arthur Kill
Loading/Unloading Ships & Barges	Ship Tan Rupture	[redacted]	[redacted]	one	Arthur Kill
Loading/Unloading Ships & Barges	Overfill	[redacted]	[redacted]	one	Arthur Kill
Loading Rack	Truck Tank Rupture	[redacted]	[redacted]	ontainment ump	Containm ent Sump
Loading Rack	Overfill	[redacted]	[redacted]	ontainment ump	Containm ent Sump
Loading Rack	Loading System Piping Rupture	[redacted]	[redacted]	ontainment ump	Containm ent Sump
Storage Tanks	Overfill	[redacted]	[redacted]	ikes	To Dikes
Storage Tanks	Leak/Ruptu re	[redacted]	[redacted]	ikes	To Dikes
Tank Pumps & Piping	Leak	[redacted]	[redacted]	ikes	To Dikes
Dike Drain Lines	Failure t Close Valves in Case o Release	[redacted]	[redacted]	alves are cated on inside f dike walls, ermitting storm ater drainage outfall. These re locked osed.	To Dikes

1.3.4 List of Hazardous Materials/Oils

The following is a sample list of products handled / stored at this facility	
•	Diesel
•	Ultra-low Sulfur Diesel
•	Regular Gas
•	Premium Gas
•	Ethanol
•	Jet A 54
•	Kero 55
•	Transmix
•	Reformate

All MSDS's can be located on the Company's web page.

1.3.5 Emergency Shutdown

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

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

1.3.6 Evacuation

Evacuation plans for the Tremley Point Terminal are illustrated in the safety plan diagram located in Annex 1 of this plan. All evacuation directives will be communicated through an audible signal, either through voice by the Emergency Response Coordinator, or by the activation of the terminal 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 Company believes that constant training of its employees is the cornerstone of effective emergency response and mitigation of threats to human health and the environment. Personnel evacuation direction is further defined as follows:

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

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

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

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

Evacuation Checklist

Procedures	✓	Date/Time
Immediately stop work activities.	☐	__/__/__ [00:00]
Check the wind direction.	☐	__/__/__ [00:00]
Move upwind or cross wind.	☐	__/__/__ [00:00]
Check the wind again.	☐	__/__/__ [00:00]
Person-in-Charge will conduct a head count to account for all personnel known to be at the facility.	☐	__/__/__ [00:00]
Person-in-Charge will assist in alerting and escorting personnel, including visitors and contractors to the appropriate evacuation point.	☐	__/__/__ [00:00]
Person-in-Charge will notify the appropriate office, and make all other appropriate notifications, as necessary.	☐	__/__/__ [00:00]
Person-in-Charge will assist in hazard control activities as requested.	☐	__/__/__ [00:00]
Person-in-Charge will initiate search and rescue of missing persons.	☐	__/__/__ [00:00]
All other personnel will remain at the evacuation point until the "All Clear" signal is given.	☐	__/__/__ [00:00]

Note: Evacuation should be carried out in an orderly manner. Personnel should WALK, not run or panic.

Annex 2 – Table of Contents

2.0 Notifications

2.1 Oil Spill Removal Organizations

2.0 Notifications

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 the contact information to address an incident at the facility:

TREMLEY POINT 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 Mark Kaminski, Facility Supervisor	(908) 523-6101	(b) (6) [redacted]		1 hr
Office: 4601 Tremly Point Road, Linden, NJ 07036		**Home:** (b) (6) [redacted]		
Alt. QI/IC Ed Kaminski, Area Supervisor	(908) 523-5434	(b) (6) [redacted]		1 hr
Office: 1100 Route 1 North, Linden, NJ 07036		**Home:** (b) (6) [redacted]		

Incident Support Team

Position	Name	Office Phone	Home Phone	Mobile Phone
EPR&S Contact	Rob Yarbrough	832-865-1693	(b) (6) [redacted]	
Alt. Environmental Contact	Jim Phelan	(281) 293-3715		
Alt. DOT Contact	Todd Tullio	832-765-1636		
Alt. Health & Safety Contact	Brad A. Hendrix	(918) 661-0140		
Manager, Division	Stephanie Webb	(832) 765-1534		
Manager, HSE	Jeff Mazzoccoli	832-765-1150		
Manager, Engineering & Projects	Dave Barney	(281) 293-4385		
Manager, Logistics	Doug B. Sauer	(918) 661-0271		

Transportation Tier 1 Responders

Name	Office Phone	Home Phone	Mobile Number	Resp. Time
Karlovich, Mike - BWR-Strategic Comms Manage	(908) 523-6041	(b) (6) [redacted]		1 hr
Wuertz, Ray - BWR-HSE Manager	(908) 523-5617			1 hr
Santos, Mark - (McKeon Group)	(908) 523-6052			1 hr
Lam, Pat - Engineer	(908) 523-5781			1 hr
Fagan, Susana - BWR-Clean Products Advisor	(908) 523-5921			1 hr
Simone, Pete -	(908) 523-5135			1 hr

Emergency Response Contractors

Name	Phone	Alt. Phone	Resp. Time
Contract			
CHEMTREC	(800) 424-9300	(202) 483-7616	1 hr
Clean Harbors Cooperative, LLC	(732) 661-2548		1 hr
Clean Venture	(908) 354-0210		1 hr
Miller Environmental Group, Inc.	(800) 394-8606	(631) 369-4900	1 hr
MSRC & STAR Contractors	(800) 645-7745	(800) 259-6772	1 hr
Other			
Tri-State Bird Rescue/Research, Inc.	(302) 737-7241		1 hr

Agency/Other Telephone Numbers

Agency/Group	Telephone	Other Telephone/Fax
Federal		
National Response Center	(800) 424-8802	(202) 267-2675
EPA Region 02	(732) 906-6803	
USCG Sector New York, NY	(718) 354-4353	(718) 354-4356
State		
NJ Dept. of Environmental Protection & Energy	(877) 927-6337	(609) 882-2000
Bureau of Emergency Response, New Jersey	(973) 669-3955	
Dept. of Environmental Conservation (NYSDEC)	(800) 457-7362	(518)457-7362
Dept. of Environmental Conservation, NY	(800) 457-7362	(518) 457-7362
Dept. of Environmental Protection, NJ	(877) 927-6337	
Division of Fish, Game & Wildlife, NJ	(908) 735-8975	
State Police, NJ	(609) 882-2000	
Local		
Fire Dept., Elizabeth	(908) 820-2800	
Fire Dept., Linden	911	(908) 486-3500
ER/Fire/Ambulance: Bayway Refi	"300" Call or 911	
Police Dept., Elizabeth	(908) 558-2000	
Police Dept., Linden	911	(908) 486-3200
Police Dept., Union County	(908) 654-9881	
Hospital, Trinitas-E.Jersey	(908) 994-8600	
Hospital, Trinitas-Williamson	(908) 994-5000	
Media, TV-WFUT	(973) 643-6800	
Media-Radio-WNCE	(973) 645-5316	
Amex	(732) 541-4141	
BP/Amoco, Carteret	(732) 541-5131	
Citgo - Dock	(908) 862-3332	
Citgo - Supervisor	(908) 862-3301	
City Park, Bayonne	(201) 217-5484	
City Police, New York	(212) -374-5580	
Coastal Oil, NY	(201) 437-2104	
Consolidated Edison	(732) 390-2740 x1	
Dept. of Health, Linden	908-474-8409	
Gateway Terminal	(732) 541-1200	
HAZMAT Dept., Middlesex County	732-727-6622	
Kinder-Morgan, NJ	(718) 667-6222	
LEPC: Linden City, NJ	(908) 862-7364	
Marina, Elco	(201) 437-2355	
Marina, Elizabeth	(908) 820-4296	
Mariner's Harbor Yacht Club	(718) 442-5843	
Mayor, Elizabeth	908-820-4170	
Mayor, Linden	908-474-8493	
National Weather Service, NJ	(201) 976-1212	
Office of Emergency Mgmt., Linden	908-474-8477	
Office of Emergency Mgmt., NY City	212-374-5580	
Parks Department, Staten Island	(718) 390-8000	
Public Service Electric & Gas	(908) 353-7000	
Robins Reef Yacht Club	(201) 858-9510	
Rucci Oil	(718) 442-2080	
ST Terminals, Linden NJ	(908) 862-5740	
Staten Island Borough President	(718) 816-2130	
Water Supply, Linden/Rahway	(908) 862-7100	(908) 862-7100

2.1 OSRO Information

The Company has obtained letters of agreement from several Oil Spill Removal Organizations (OSROs) to provide Company with emergency spill control and clean up services. Copies of the letters of agreement follow this page.

The following US Coast Guard-approved OSROs provide services for this area:

- Marine Spill Response Corporation (MSRC)
- Clean Harbors Cooperative, LLC
- Miller Environmental Group, Incorporated
- Clean Venture, Incorporated

2.1.1 Marine Spill Response Corporation (MSRC)

MARINE SPILL RESPONSE CORPORATION
SERVICE AGREEMENT

STANDARD FORM OF SERVICE AGREEMENT

amended and restated as of September 27, 1996

between

the COMPANY

and

MARINE SPILL RESPONSE CORPORATION

a Tennessee nonprofit corporation

10. 03. Continued Performance. Each party will continue to perform its obligations under this Agreement without deduction, set-off, or any other charges of any nature whatsoever and without prejudice to its position in any pending dispute. Each party will retain its rights to terminate or suspend the provision of Resources under this Agreement.

10. 04. Jurisdiction. Any judicial action or proceeding between the **COMPANY** and **MSRC** directly or indirectly connected with and permitted under this Agreement will be brought in the United States District Court for the Southern District of New York if that court has subject matter jurisdiction, and in all other cases in the Supreme Court of the State of New York, County of New York. The **COMPANY** and **MSRC** each consent to process being served in any manner permitted by law.

10. 05. Enforceable Award. Any award in an arbitration may be enforced against the parties to the arbitration or their assets, wherever found. Judgment upon an arbitration award may be entered in the United States District Court for the Southern District of New York.

10. 06. Requirements for All Persons. Indemnification under Section 9.03 is contingent on the Indemnitee abiding by the provisions of this Article X.

ARTICLE XI. TERM AND AMENDMENT OF AGREEMENT

11. 01. Full Termination by MSRC.

11. 01(a). Events of Default. If any of the following events occurs and is continuing, it is an "Event of Default":

(i) Any of the **COMPANY** representations and warranties in Section 8.01 prove to be untrue or incorrect in any material respect;

(ii) Any **COMPANY** Insolvency Event occurs;

(iii) The **COMPANY** fails to satisfy any of this Agreement's payment obligations (including the obligations in Article VII) in an aggregate amount in excess of $100,000, fails to pay any disputed **MSRC** invoices in an aggregate amount **MSRC** reasonably considers to be a problem for the funding of **MSRC**'s operations or readiness, or fails to provide security for payment in accordance with Section 7.01;

(iv) The **COMPANY** or a Covered Entity engages in a pervasive pattern of illegal or knowingly unsafe practices in directing Response Activities performed or provided under this Agreement; or

(v) The **COMPANY** breaches its material obligations under this Agreement, other than the obligations under (i), (iii), and (iv) above, and that breach is not cured within thirty (30) days after written notice from **MSRC** specifying that breach.

11. 01(b) MSRC Termination of Resources. Upon an Event of Default **MSRC** may terminate Resources to the Covered Entity with at least twenty-four (24) hours (or 48 hours if the Event of Default is a failure to pay under Section 11.01(a)(iii)) prior notice to the Covered Entity and, if applicable, the FOSC. **MSRC** may withdraw all Resources from the Spill Event when the notice period expires. **MSRC** also may terminate Resources without any notice if any of the **COMPANY**'s representations or warranties in Section 8.01(e) or (f) prove to be materially untrue or incorrect or if it has an Insolvency Event (Section 11.01(a)(ii)).

The Covered Entity must pay **MSRC** costs incurred after termination only for demobilizing, on a reasonable schedule, **MSRC** Response Personnel, **MSRC** Response Equipment, and any (unassigned) MSRC Subcontractor from the Spill Event, and for any cleaning, repair, or maintenance of MSRC Response Equipment required under Section 7.02.

11. 01(c). Reinstatement Option. **MSRC** may, in its discretion after an Insolvency Event (Section 11.01(a)(ii)) reinstate Resources, upon the Covered Entity's compliance with MSRC's request for payment security under Section 7.01(c).

11. 02. Covered Entity Termination of Resources. The Covered Entity may terminate, in whole or in part at any time, Resources being provided under this Agreement by written notice to **MSRC**.

11. 03. Term of the Agreement.

11. 03(a). Term. This Agreement is effective on or after October 15, 1996, and it will continue until December 31, 1997, or until the earlier termination pursuant to the provisions of Sections 11.03(b) or 11.03(c). This Agreement will continue automatically for successive periods of three (3) years unless either party gives the other party notice of termination at least ninety (90) days before the date of expiration of the term.

11. 03(b). MSRC Termination of Agreement. If any Event of Default occurs and continues **MSRC** may, in addition to its right to terminate Resources pursuant to Section 11.01(b) and any other rights and remedies under this Agreement and at law or in equity, terminate this Agreement in its entirety by providing the **COMPANY** with at least ninety (90) days prior written notice.

MSRC is also entitled to terminate this Agreement upon thirty (30) days notice if

(i) **MSRC** has liquidated assets to pay Claims against **MSRC** and therefore cannot provide the contemplated level of Resources, or

(ii) **MSRC** has not received the required payments at the times required under the Directors and Officers Indemnification Grant and Security Agreement, as amended (dated as of July 16, 1993 by and between **MSRC** and MPA concerning the indemnification of the executive officers and directors of **MSRC**); the **COMPANY** or a **COMPANY** affiliate has not made the payments at the times required under the

STANDARD FORM OF AGREEMENT

Parties and Background

This is a **SERVICE AGREEMENT** with attached signature pages (the "Agreement") between the **COMPANY** and **MARINE SPILL RESPONSE CORPORATION**, a nonprofit corporation organized under the laws of Tennessee **("MSRC").**

For convenience and simplicity, as between the **COMPANY** and Covered Entity (if any), references to the party for performance are made to a "Covered Entity," but the **COMPANY** can exercise the rights and will guarantee the performance of a Covered Entity as set forth more fully in this Agreement.

In consideration of the promises and the mutual covenants of this Agreement, **MSRC** and the **COMPANY** agree as follows:

Articles

ARTICLE I CALLOUT

1.01. <u>Call-Out of Resources</u>

1.01(a). Alert. A Covered Entity may alert **MSRC** of the possibility of a call-out under this Agreement. Upon receipt of an alert **MSRC** will review its readiness to respond in the event of a call-out under Section 1.01(b). Such alert does not (i) obligate the Covered Entity to pay **MSRC**'s rates or any costs incurred by **MSRC**, (ii) obligate **MSRC** to Mobilize any Resources, or (iii) give the Covered Entity any rights to obtain any particular Resources, unless and until **MSRC** is called out in accordance with this Agreement.

1.01(b). Call Out Process. An Authorized Representative, or an individual **MSRC** reasonably believes is acting on behalf of a Covered Entity, may obtain and **MSRC** will provide any of the Resources available under this Agreement by calling an **MSRC** response manager through one of the telephone call-out numbers provided by MSRC from time to time by notice to the **COMPANY**. This Initial Callout Notice shall consist of a specific request for desired Resources to be provided from the list on Schedule 3 (or as otherwise made available by **MSRC** at the time of callout), in consultation with one of **MSRC**'s response managers. The Authorized Representative or the Incident Commander of a Covered Entity may add to or discontinue use of any Resources, in consultation with **MSRC**'s response manager, at any time. The Covered Entity and **MSRC** will document the Resources requested and provided. If MSRC Subcontractors are required to provide the requested Resources, **MSRC** will call out and supervise those MSRC Subcontractors, unless and until other arrangements are made as described in Section 3.04. Part II of

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, as amended, is hereby entered into by and between

Phillips 66 Company
[Name of COMPANY]

a Delaware Corporation
[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. GMPA 329 [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 ~~April~~ May 1, 2012.

Phillips 66 Company [COMPANY]

By: Franez M Vallejo [signature]

Fran Vallejo [print name]

Title: Vice President & Treasurer

Address: 600 North Dairy Ashford
Houston, Texas 77079

Telephone: 281-293-3227 Fax: 281-293-6067

MARINE SPILL RESPONSE CORPORATION:

By: Judith A. Roos
Judith A. Roos
Vice President
Marketing, Customer Services & Corporate Relations
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

2.1.2 Clean Harbors Cooperative, LLC

Clean Harbors
COOPERATIVE, L.L.C.

January 17, 2006

CLEAN HARBORS COOPERATIVE, L.L.C.
OIL SPILL REMOVAL ORGANIZATION 2005
EXERCISE REQUIREMENTS

Mr. Paul Dietrich
ConocoPhillips
1400 Park Avenue
Linden, NJ 07036

Dear Mr. Dietrich:

ConocoPhillips, as a member of Clean Harbors Cooperative, L.L.C. is insured by the Operating Agreement to provide oil spill response resources and personnel to the maximum extent, in the event of an oil spill discharge. ConocoPhillips has the right to name Clean Harbors Cooperative and all its resources for the Oil Pollution Act of 1990 coverage for their Tremley Point Terminal and Bayway Refinery Facility.

Clean Harbors Cooperative, as your USCG Oil Spill Removal Organization (OSRO#30), has conducted our annual equipment and personnel exercises on July 25, 2005 and December 13, 2005 as required by the Facility Response Plan Regulation in 33 CFR 154, 40 CFR 112, National Preparedness for Response Exercise Program (PREP) Guidelines, and the Oil Pollution Act of 1990.

On June 8, 2005, Clean Harbors Cooperative conducted training deployed by its Sea Sentry deflection boom in conjunction with a self propelled Skimming vessel. On December the 13, 2005 Clean Harbors Cooperative participated in an oil spill exercise on the Arthur Kill with 3 response boats installing 2,700 feet of protective and containment boom at two Environmentally Sensitive Areas.

The U.S. Coast Guard had reviewed Clean Harbors Cooperative's application and inspected our spill response resources, maintenance records, its condition, systems compatibility, and training records for the purpose of determining our classification level. As an approve OSRO, on November 4, 2005, Clean Harbors Cooperative received classification for both Facilities and Vessels for River/Canal and Inland Environments for MMD, Tier I, II and III.

It is recommended that the enclosed information be included in your Facility Response Plan, so that it could be available to regulatory personnel for review. A copy of our complete deployment exercise responses are kept on file at CHC offices and are available for review. If you have any questions, please do not hesitate to call me at (908) 862-7500

Sincerely,

Dennis J. McCarthy
Manager

Clean Harbors
COOPERATIVE, L.L.C.

January 08, 1999

CLEAN HARBORS COOPERATIVE, L.L.C.
OSRO COVERAGE – OPA 90

To: Clean Harbors Cooperative Representatives

Dear Member

This is to advise that Bayway Refining Company (BRC) is a Member of Clean Harbors Cooperative, L.L.C. (CHC). Bayway became a member on April 08, 1993 and has been an active member in good standing during the entire interim period. Full oil spill coverage is provided to BRC's Bayway, Linden, N.J. facility and marine activity in the greater New York Harbor area.

Enclosed are Clean Harbors Cooperative's Overview, USCG Oil Spill Removal Organization Classification Letter, Equipment Listing, Oil Spill Responses in the past year, Spill Management Tabletop Exercises, Equipment Deployment Program, Training and Exercises for 1998. The documented information demonstrates that Clean Harbors Cooperative as your Oil Spill Removal Organization (OSRO) actively responded to oil spill cleanups, participated in member Spill Management Tabletop, and Facility Response Plan OSRO Notification Exercises, as well as continuing Equipment Deployment Testing and Training Drills. These activities are in accordance with Oil Pollution Act of 1990, National Preparedness for Response Exercise Program (PREP), and Facility Response Planning guidelines.

On July 28, 1997 Clean Harbors Cooperative, L.L.C. (OSRO 96-030) received Class A, B, C, D and E Classifications as an Oil Spill Removal Organization for River/Canal and Inland Environments for both Facilities and Vessels. This is in accordance with the new United States Coast Guard Classification Guidelines dated December 28, 1995. The USCG made a formal inspection of Clean Harbors equipment and maintenance records prior to awarding the Final Classifications as noted above. Enclosed is a copy of the Final Classification.

"Classification A" is defined as an "Average Most Probable Discharge" and requires a minimum of 50 BPD of effective daily recovery capacity, 100 Bbls. of temporary storage capacity and a total of 8,000 feet of containment and protective boom in a one hour response time.

RECEIVED
JAN 20 1999

427 Hamilton Avenue, Elizabeth, NJ 07201-3862 • Tel 732-225-2300 • Fax 732-225-5254

CLEAN HARBORS COOPERATIVE, L.L.C.
OSRO COVERAGE – OPA 90

January 08, 1999
Page 2

"Classification B" is defined as a "Maximum Most Probable Discharge" and requires a minimum of 1,250 BPD of effective daily recovery capacity, 2,500 Bbls. of temporary storage capacity and a total of 12,000 feet of containment and protective boom in a 6 hour response time for facilities and a 12 hour response time for vessels.

"Classification C" is defined as a "Worst Case Discharge Tier 1" and requires a minimum of 10,000 BPD of effective daily recovery capacity, 20,000 Bbls. of temporary storage and a total of 24,000 feet of containment and protective boom in a 6 hour response time for facilities and a 12 hour response time for vessels.

"Classification D" is defined as a "Worst Case Discharge Tier 2" and requires a minimum of 20,000 BPD of effective daily recovery capacity, 40,000 Bbls. of temporary storage and a total of 36,000 feet of containment and protective boom in a 30 hour response time for facilities and a 36 hour response time for vessels.

"Classification E" is defined as a "Worst Case Discharge Tier 3" and requires a minimum of 40,000 BPD of effective daily recovery capacity, 80,000 Bbls. of temporary storage and a total of 48,000 feet of containment and protective boom in a 54 hour response time for facilities and a 60 hour response time for vessels.

All of the above requirements are for "Inland Environment" in New York Harbor, which is defined as a high volume port.

Also enclosed are descriptions, capabilities and berthing or storage locations of CHC's marine vessels, self-propelled skimming vessels, portable skimmers, dispersant equipment, boom and absorbents.

It is recommended that the enclosed information be included in your Facility Response Plan so that it could be available to regulatory personnel for review. If you have any questions, please do not hesitate to call me at 732/ 225-2303.

Very truly yours,

Dennis J. McCarthy
Manager

DJM: pal
Enclosure(s)
cc: U.S.C.G. Activities New York
U.S. Environmental Protection Agency Region II
New Jersey DEP
New York State DEC
New York City DEP

2.1.3 Miller Environmental Group

MASTER SERVICE AGREEMENT NO. 4500007797

Between

CONOCOPHILLIPS COMPANY
CONOCOPHILLIPS PIPE LINE COMPANY
PHILLIPS PIPE LINE COMPANY

and

MILLER ENVIRONMENTAL GROUP

Effective November 22, 2004

MASTER SERVICE AGREEMENT

Revised: 10 March 2004 (General, U.S. Operations) Agreement Number 4600007727

This Agreement is made on this 22nd day of November, 2006, by and between ConocoPhillips Company, ConocoPhillips Pipe Line Company, Phillips Pipe Line Company, (hereinafter called "Company") and Miller Environmental Group (hereinafter called "Contractor").

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

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

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

1. **PERFORMANCE OF WORK**

Company and Contractor may agree from time to time that Contractor shall perform certain work and/or provide items of equipment, machinery, materials or supplies for Company.

Contractor shall diligently perform all work in a skillful and workmanlike manner. Except as otherwise specifically agreed, Contractor shall provide all labor and skills and all equipment, machinery, materials and supplies necessary for the performance of such work. Title to all work, including all studies, designs, specifications, and data shall belong to Company.

Company and Contractor further agree that Contractor and any Affiliate of Company may agree from time to time that Contractor shall perform certain work and/or provide items of equipment, machinery, materials or supplies for such Affiliate under the terms of this Agreement.

2. **CONTRACTS BETWEEN THE PARTIES**

Any contract whereby Contractor agrees to perform work and/or provide items of equipment, machinery, materials or supplies for Company may be written or oral. The parties shall endeavor, however, to execute an "Order" in the form set forth in Exhibit "A", attached hereto and made a part hereof, or such other call-off document that includes, but is not limited to Contractor's identifying vendor and contract numbers and ordering address, Company's purchasing organization and group, and material or service description(s), quantity ordered, unit of measurement, price, delivery date and tax usage code and jurisdiction (hereinafter referred to as "Order"), prior to beginning any work, but such shall not be a condition precedent to the applicability of this Agreement.

Likewise, any contract whereby Contractor agrees to perform work and/or provide items of equipment, machinery, materials or supplies for an Affiliate of Company may be written or oral in the same manner as provided above. In such event, the references to Company in this Agreement shall mean such Affiliate of Company entering into such contract with Contractor solely with respect to work for and/or providing the items of equipment, machinery, materials or supplies to such Affiliate of Company. By entering into any such oral agreement or executing an Order, such Affiliate shall be deemed to ratify, and agrees to be bound by, the terms and conditions of this Agreement with respect to the work covered by said oral contract or Order.

Except as may be specifically stated otherwise herein, this Agreement shall apply to every contract of whatever nature entered into between the parties during the term hereof with the same force and effect as if the terms and conditions hereof were fully set forth in any such contract. In the event of a conflict between the terms of this Agreement and (1) an Order or (2) a separate Company-issued purchase order that references this Agreement, the terms of this Agreement shall control. Any purported amendment of the terms, requirements or obligations of this Agreement shall be void and of no force unless it is (i) in writing, (ii) signed by duly authorized representatives of both parties, (iii) expressly refers to the specific article or section to be amended, including a reference to the number and heading of the same, and (iv) expressly indicates agreement of the parties to amend such specific article or section referred to herein.

This Agreement, however, shall apply only to contracts entered into by Company which are performed in the United States of America, including waters on the outer continental shelf of the United States of America, and to any other contracts and Orders which reference this Agreement. It shall also apply to the procurement of equipment, machinery, materials or supplies provided to Company pursuant to any separate Company-issued purchase order that references this Agreement. This Agreement shall not apply to the purchase of oil and/or gas reserves.

This Agreement supersedes any and all previous Master Service Agreements, or their equivalents to the extent they cover the scope of work covered by this Agreement, between Company and Contractor with respect to the above referenced contracts and shall apply to any such contracts (as described and limited in this Article 2) from and after the date hereof.

(a) Contractor shall **DEFEND, INDEMNIFY AND HOLD COMPANY, ITS AFFILIATES AND COVENTURERS HARMLESS** from any and all claims, judgments, losses, expenses and any costs related thereto (including court costs and attorney's fees) and for all taxes as specified below which may be assessed or levied directly or indirectly against Company, its Affiliates or Coventurers, or Contractor by any taxing authorities claiming jurisdiction over the Agreement or any contract hereunder, including but not limited to:

(i) All income, excess profit or other taxes, charges and imposts assessed or levied on account of Contractor's earnings.

(ii) All taxes assessed or levied against or on account of salaries or other benefits paid by Contractor to Contractor's employees.

(iii) All taxes assessed or levied against or on account of any property of Contractor.

(iv) All applicable excise, sales or use taxes assessed or levied against or on account of the rates or compensation received by Contractor under the terms of this Agreement.

(b) Contractor shall make all reports and take all necessary action required for such indemnification. Company, in the event it is required by law, will be entitled to withhold and pay to the proper tax authorities any tax levied or assessed on account of work performed hereunder.

(c) It is the intent of this Article that all taxes listed in Article 23 (a) above which accrue as a result of performance by Contractor pursuant to this Agreement be the legal responsibility of Contractor. All such applicable taxes will be paid by Contractor to the proper taxing authority in the manner prescribed by law. Excise, sales, or use taxes, referred to in Article 23 (a) iv) above, if any, which accrue as a result of performance by Contractor pursuant to this Agreement may be passed through to Company by Contractor. It is, however, the responsibility of Contractor to make timely remittance of such excise, sales or use taxes to the proper taxing authority, and Contractor agrees to defend and indemnify Company, its Affiliates and Coventurers, from any liens, penalties, interest, costs (including attorney fees) or other assessments resulting from Contractor's failure to make such timely remittance of such taxes as set forth above, and reimburse Company and its Coventurers for any and all such amounts, if any, paid by Company and its Coventurers as a result thereof. If compensation to Contractor is other than lump sum, Contractor's invoices shall display the total amount of applicable sales, use and other excise taxes paid or billed by Contractor.

24. **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: (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 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		CONTRACTOR
Name:	ConocoPhillips Company	Miller Environmental Group
Address:	1000 South Pine P. O. Box 1267 Ponca City, OK 74602-1267	188 Edwards Ave. Calverton, NY 11933
Contact Person:	Gary D. Johnings	George Wallace
Telephone:	(580) 767-6188	(631) 369-4900
Fax:	(918) 662-3253	(631) 369-4909

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.

25. **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 term also 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.

If work or deliveries under a contract are to be effected on or for an offshore facility, and if that offshore facility becomes an actual, constructive, arranged or compromised total loss, such contract shall terminate from the moment the loss

occurs, and Company shall owe Contractor only the compensation earned to time of notice plus any demobilization fee provided for in such contract.

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

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, 16, 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
CONOCOPHILLIPS PIPE LINE COMPANY
PHILLIPS PIPE LINE COMPANY

Carry D. Jennings
Signature

Carry D. Jennings
Printed Name

Contract Specialist
Title

11/18/04
Date

MILLER ENVIRONMENTAL GROUP

Signature

JAMES H. DAVY
Printed Name

V.P.
Title

11-16-04
Date

2.1.4 Clean Venture Inc

CleanVenture Responsive Environmental Management Services

February 16, 1995

Bayway Refining Company
a subsidiary of Tosco Corporation
1400 Park Avenue
Linden, New Jersey 07036

Attn: Dorothy Porter

Dear Ms. Porter:

Clean Venture, Inc. would like to be on call as your emergency contractor in the event of a hazardous material or petroleum spill on land or water.

We will respond and supply the necessary supervision, manpower and equipment within 2 hours to contain and clean up the spill. Our Federal EPA Id number is NJD982281016. Our New Jersey Waste Haulers Permit number is S-5811.

Our current Emergency Response Rate Sheets are included with the enclosed literature package.

Thank you for considering us as your emergency contractor A copy of this letter is enclosed which can be signed and returned as an acknowledgement.

Very truly yours,

CLEAN VENTURE, INC.

Ruth Osolin

Ruth Osolin
Inside Sales Manager

RO:dr

Bayway Refining Company agrees to name Clean Venture, Inc. as our first call emergency contractor for a period of one year.

Signed: _____ Date:

enclosures

cmrrcs.bo2

1160 State Street
Perth Amboy, NJ 08862
908-442-4900
FAX: 908-826-9380

82 Midland Avenue
Saddle Brook, NJ 07662
201-340-8200
FAX: 201-340-9860

322 R.D. No. 1 - Box 202B
Swedesboro, NJ 08085
609-467-4483
FAX: 609-467-2660

806-P Burlewood Court
Linthicum, MD 21090
410-636-8290
FAX: 410-636-8289

655 Washington Blvd.
Stamford, CT 06901
203-969-2800
FAX: 203-975-9078

Annex 3 – Table of Contents

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

3.0 Sensitive Area General Response Strategies

One of the most important considerations of response planning is the identification of environmentally sensitive areas. These areas must be protected against intrusion of oil and hazardous substances. Highly vulnerable areas have been identified within each of the geographic areas identified in this plan. Naturally, the enormous size and diversity if the waterfront of the Port of New York and New Jersey yields a great number of vulnerable and sensitive areas. Where possible, industrial areas such as water intakes, are identified along with environmental areas such as wetlands. The large number of recreational areas, such as marinas and beaches, are similarly identified. All should be considered for pre-staging of equipment early in the initial phase of the response if there is a potential for any impact

3.0.1 User Guide or Sensitivity Maps & Response Strategy Matrices

Description:

The sensitivity maps and accompanying worksheets, known as “strategy matrices”, that are included in the following tabs were developed jointly by the Sensitive Area Workgroup and the Response Strategy Workgroup of the Area Committee. This information was prepared for planning purposes only, to identify those areas most at risk for initial deployment of response equipment.. They do not represent all of the areas where the equipment deployment may be necessary since resources actually at risk would be assessed and prioritized during an actual spill. These emergency response graphics were designed as a simplistic overview of specific geographic areas, allowing users a quick assessment of environmentally sensitive areas and the recommended response needed during an actual release.

Purpose:

Response decisions can be prioritized and simplified through the use of the “sensitivity maps” with their accompanying “strategy matrices” which provide the textual information represented on the maps.

Map Particulars:

Each map is focused on a specific geographic area which is divided from within the COTP NY area of responsibility. The maps are labeled with the name tying it to an easily recognizable feature within the map’s boundary. The maps were developed with just enough cartographic information (shoreline detail, grid lines, place names, etc.) to assure rapid recognition of relative location. Land masses are represented by grey shaded area, with the white sections representing a water body. Each map contains a copy of the legend with a key to all the symbology used on the maps. Additionally, the name on the lower left contains the date of the latest version in the form of Map Name, yy/mm/dd.

Map Symbols:

Sensitive Areas: Sensitive areas are marked by diamond symbols and alphanumeric codes to represent the degree of sensitivity. Three diamonds ♦♦♦ being the most sensitive, known as a level "A" area, representing those areas that should be protected prior to oil impact. Two diamonds ♦♦ represent a "B" area and should be protected after "A" areas in that location. One diamond ♦ is a "C" and should be protected after "A" and "B" areas. The alphanumeric characters assigned under the diamonds (i.e.: A72, B9, C70) represent the level of sensitivity, while also assigning a number for each specific location. The number has no significance other than to identify the specific location on the strategy matrix. Some areas have been designated on an A, B, or C area, yet due to their location it is impractical to use boom to contain the oil due to the local currents, distances required, or location. Boom may be used to deflect the oil away or to assist skimming operations before the oil impacts the area. These areas employ the symbol of an X in the place of the diamond, and can have three (XXX), two (XX), or one (X) and thus retain their level of sensitivity as a A, B, or C respectively, despite their impracticality for protective booming. As with all sensitive areas, these zones will have to be carefully considered to determine the best method of catching or deflecting the oil before it impacts each area during an actual spill.

Marinas:

Marinas are identified by the anchor symbol ⚓ and also have an alphanumeric reference for the strategy matrix. Marinas are classified primarily due to economic as opposed to environmental concerns and therefore will be considered for protection strategies only after threatened sensitive areas have been protected

Water Intakes:

Water intakes are identified by the water drop symbol and can be classified as sensitive either due to the potential of affecting drinking water supplies, or for their use in the generation of electric power for the public. Other intakes serve commercial sources, and therefore classified mostly for economic reasons. These too have alphanumeric codes to identify them on the strategy matrix and sensitivity maps.

Collection Areas:

Oil collection and recovery areas are represented by the symbol. These note locations where currents or land features cause natural collection points for oil or debris. It is noted that often an area must be sacrificed as a collection area for the use of concentrating oil. Although it appears destructive, collecting the oil in these locations prevents it from floating away, and thus maximizes recovery efforts.

Pipelines:

Pipeline areas are represented by the pipeline symbol on the maps, and have a key of their own in the ACP. Although these symbols do not represent a sensitive area, they should not be overlooked in the event of a spill response. Due to their hidden nature, they are often in areas not easily recognizable if not aware of them. For this reason, each pipeline's volume, product carried, and point of contact are listed for response planning purposes.

Sec.3.0.2 Strategy Matrix

General: For each sensitivity map there is a spreadsheet type guide that accompanies it known as the "strategy matrix". The upper left hand corner lists the map number as well as the general location covered by that matrix. Here too is listed the last date of revision to ensure it is the most current version available. From left to right, the columns expand upon the codes from the sensitivity maps in simple yet descriptive terms. Information for several of the matrices has not yet been developed. They have been left blank while data is collected.

Matrix Codes: First is the code itself, and can be a sensitive area (A71, B66, C70, etc.), a marina (M36), a water intake (W15), or a recovery area (R2). These are listed in alphanumeric order and can have gaps between numbers due to the coverage areas of the sensitivity maps. Next is a specific local name for each code number to add a more specific geographical location to each area.

Booming Methods: Suggested boom lengths, in feet, are listed for initial mobilization purposes, as a guide for response planning. The actual amount necessary for an area will depend on conditions present at the time of the spill. Minimum acceptable boom is a hard boom at least 18 inches high and suitable for the weather and wave conditions experienced in New York/New jersey harbor. Absorbent or sausage boom can augment the hard boom recommended, but is considered unacceptable when used alone. If an area has been designated with the XXX symbol, protection or exclusionary techniques have been deemed ineffective due to currents or distances required, and thus deflection or collection techniques should be considered during an actual spill. Booming methods are listed alone or in combinations of:

D = for deflection boom techniques recommended
P = protection or exclusionary techniques are recommended
R = containment or collection for recovery

3.1 Historical/Archaeological Sites

Environmental Response Scenario

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

Description of the Affected Area

Historical / Archaeological Sites are areas such as battlefields, homes of historically or culturally significantly individuals, and prehistoric dwellings and burial grounds designated by federal, State and local governments for preservation. Historical / Archaeological Sites may be either remote from, or close to, human habitation. Historical / Archaeological Sites are generally identified and marked as such on maps and at public access points.

1. Public Health and Safety Concerns

   Immediate evacuation of the public from the affected area, and their subsequent health and safety are a major concern. The danger zone for the public will generally be downwind of the point of discharge and the resulting plume.

2. Project Personnel Safety Concerns

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

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

   Air monitoring analysis will dictate the level of PPE utilized by workers in the exclusion zone. The support area, including break and eating areas, will be located in a safe area, and upwind of the exclusion zone wherever possible. The response contractor will exercise due care to avoid damage to the historical/archaeological site.

FIGURE 1 TO TAB A
ACP KEY-NY/NJ HARBOR

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

[redacted]

FIGURE 1

FIGURE 2 TO TAB A
ACP KEY-HUDSON RIVER

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

[redacted]

Hudson River Map Key

1 Yonkers
2 Tarrytown
3 New City
4 Peekskill
5 West Point
6 Beacon
7 Milton
8 Poughkeepsie
9 Kingston
10 Glasco
11 Saugerties
12 Hudson
13 Coxsackie
14 New Baltimore
15 Albany
16 Troy

TAB E

LOWER EAST RIVER

References: (a) Sensitivity of Coastal Environments & Wildlife to Spilled Oil - New York Harbor and Hudson River
(b) NYSDEC Region II Contingency Plan.

1. **DESCRIPTION**: (b) (7)(F), (b) (3) [redacted] (b).

2. **WATER CURRENTS**: (b) (7)(F), (b) (3) [redacted]

3. **WATER INTAKES**: (b) (7)(F), (b) (3) [redacted]

4. **SENSITIVE AREAS**: (b) (7)(F), (b) (3) [redacted]

MAP LEGEND

Priority Scale:

A = Boom prior to oil impact
B = Protect after **A** areas
C = Protect after **B** areas
M = Marinas
R = Oil collection and recovery area
W = Water Intake-boom prior to oil impact
P = Pipeline
XXX = Protection or exclusionary techniques ineffective

Booming Method:

P = Protection
D = Deflection
R = Recovery and Collection

Map: 4. Lower East River map and strategy matrix

MAP 4 TO TAB E
LOWER EAST RIVER

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

[redacted]

STRATEGY MATRIX
REV: 20 NOV 98

(b) (7)(F), (b) (3) [redacted]

SENSITIVE AREA MAP 4		***BOOM METHOD/ MIN BOOM LENGTH IN FT***	***STAGING SITE MAP CODE PHONE NUMBER***	***IMPACT/ ACCESS***	
CODE	***SENSITIVE AREA NAME***				
B80	(b) (7)(F), (b) (3) [redacted]			E/$	B/V
M36				$	B/V
M37				$	B/V
P1				$	B
P2				$	B
R6				E	B/V
R91				E	B/V
W1				$	B/V
W4				E/$	B
W5				E/$	B
W7				E/$	B
W17				E/$	B/V
NOTES:					

BOOMING METHOD
D = DEFLECT
P = PROTECT
R = RECOVER

IMPACT
E = ENVIRONMENTAL
$ = ECONOMIC

ACCESS
B = BOAT
V = VEHICLE

TAB F

HUDSON RIVER, EDGEWATER/FORT LEE

References: (a) Sensitivity of Coastal Environments & Wildlife to Spilled Oil - New York (b) (7)(F), (b) (3)
(b) NYSDEC Region II Contingency Plan.

1. **DESCRIPTION**: (b) (7)(F), (b) (3) [redacted]

2. **WATER CURRENTS**: (b) (7)(F), (b) (3) [redacted]

3. **WATER INTAKES**: (b) (7)(F), (b) (3) [redacted]

4. **SENSITIVE AREAS**: (b) (7)(F), (b) (3) [redacted] A strategy matrix for the area immediately follows the Map.

MAP LEGEND

Priority Scale:

A = Boom prior to oil impact
B = Protect after **A** areas
C = Protect after **B** areas
M = Marinas
R = Oil collection and recovery area
W = Water Intake-boom prior to oil impact
P = Pipeline
XXX = Protection or exclusionary techniques ineffective

Booming Method:

P = Protection
D = Deflection
R = Recovery and Collection

Map: 5. Hudson River, Edgewater/Fort Lee map and strategy matrix

MAP 5 TO TAB F

HUDSON RIVER, EGDEWATER/FORT LEE

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

[redacted]

STRATEGY MATRIX
REV: 20 NOV 98
HUDSON RIVER/EDGEWATER/FORT LEE

SENSITIVE AREA MAP 5		***BOOM METHOD/ MIN BOOM LENGTH IN FT***		***STAGING SITE MAP CODE PHONE NUMBER***	***IMPACT/ ACCESS***	
CODE	***SENSITIVE AREA NAME***					
B79	(b) (7)(F), (b) (3) [redacted]	P		(b) (7)(F), (b) (3) [redacted]	E	B
M12		P	1000		$	B/V
R11		R	1000		$	B/V
W6		P/D	1300		$	B/V
W8		P/D	1300		$	B/V
W9		P/D	1300		$	B/V
W13		P/D	1300		$	B/V
NOTES	[redacted]	***STED AFTER***		[redacted]		

BOOMING METHOD
D = DEFLECT
P = PROTECT
R = RECOVER

IMPACT
E = ENVIRONMENTAL
$ = ECONOMIC

ACCESS
B = BOAT
V = VEHICLE

TAB G

(b) (7)(F), (b) (3) [redacted]

References: (a) (b) (7)(F), (b) (3) [redacted]

(b) NYSDEC Region II Contingency Plan.

1. **DESCRIPTION**: (b) (7)(F), (b) (3) [redacted]

2. **WATER CURRENTS**: (b) (7)(F), (b) (3) [redacted]

3. **WATER INTAKES**: (b) (7)(F), (b) (3) [redacted]

4. **SENSITIVE AREAS**: (b) (7)(F), (b) (3) [redacted] A strategy matrix for the area immediately follows the map.

MAP LEGEND

Priority Scale:

A = Boom prior to oil impact
B = Protect after **A** areas
C = Protect after **B** areas
M = Marinas
R = Oil collection and recovery area
W = Water Intake-boom prior to oil impact
P = Pipeline
XXX = Protection or exclusionary techniques ineffective

Booming Method:

P = Protection
D = Deflection
R = Recovery and Collection

Map: 6. Hudson River, Hoboken/Jersey City map and strategy matrix

MAP 6 TO TAB G

HUDSON RIVER, HOBOKEN/JERSEY CITY

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

[redacted]

74° 00' W

E-V-G
MAP 6

STRATEGY MATRIX
REV: 20 NOV 98
HUDSON RIVER/JERSEY CITY/HOBOKEN

SENSITIVE AREA MAP 6		***BOOM METHOD/ MIN BOOM LENGTH IN FT***		***STAGING SITE MAP CODE PHONE NUMBER***	***IMPACT/ ACCESS***	
CODE	***SENSITIVE AREA NAME***					
B67	(b) (7)(F), (b) (3) [redacted]	P/D	6000	(b) (7)(F), (b) (3) [redacted]	E/$	B/V
M4		P	500		$	B/V
M7		P/D	300		$	B/V
M8		P/D	300		$	B/V
M10		P/D	800		$	B/V
M11		P/D	2000		$	B/V
M36		P/D	3000		$	B/V
P3		*	*		$	B
P4		*	*		$	B
R10		R	2800		$	B/V
W10		P/D	1300		$	B
W15		P/D	1300		$	B
W16		P/D	1300		$	B
NOTES:	[redacted]	***ISTED AFTER***		[redacted]		

BOOMING METHOD
D = DEFLECT
P = PROTECT
R = RECOVER

IMPACT
E = ENVIRONMENTAL
$ = ECONOMIC

ACCESS
B = BOAT
V = VEHICLE

TAB H

(b) (7)(F), (b) (3) [redacted]

Reference: (a) (b) (7)(F), (b) (3) [redacted]

(b) NYSDEC Region II Contingency Plan.

1. **DESCRIPTION**: (b) (7)(F), (b) (3) [redacted]

2. **WATER CURRENTS**: (b) (7)(F), (b) (3) [redacted]

3. **WATER INTAKES**: (b) (7)(F), (b) (3) [redacted]

4. **SENSITIVE AREAS**: (b) (7)(F), (b) (3) [redacted] A strategy matrix for this area immediately follows the map.

MAP LEGEND

Priority Scale:

A = Boom prior to oil impact
B = Protect after **A** areas
C = Protect after **B** areas
M = Marinas
R = Oil collection and recovery area
W = Water Intake-boom prior to oil impact
P = Pipeline
XXX = Protection or exclusionary techniques ineffective

Booming Method:

P = Protection
D = Deflection
R = Recovery and Collection

Map: 7. (b) (7)(F), (b) (3) [redacted]

MAP 7 TO TAB H

UPPER NEW YORK BAY

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

[redacted]

MAP 7

STRATEGY MATRIX
REV: 20 NOV 98
UPPER NEW YORK BAY

SENSITIVE AREA MAP 7		***BOOM METHOD/ MIN BOOM LENGTH IN FT***		***STAGING SITE MAP CODE PHONE NUMBER***	***IMPACT/ ACCESS***	
CODE	***SENSITIVE AREA NAME***					
A72	(b) (7)(F), (b) (3) [redacted]	P/D	3500	(b) (7)(F), (b) (3) [redacted]	E/$	B/V
B8		P/D	4500		E/$	B
B9		P/D/R	5000		E/$	B/V
B67		P/D/R	6000		E/$	B
M4		P	500		$	B/V
M7		P/D	300		$	B/V
M8		P/D	300		$	B/V
M16		P/R	700		$	B./V
M36		P/D	3000		$	B/V
P3		*	*		$	B
P4		*	*		$	B
P5		*	*		$	B
P6		*	*		$	B
P7		*	*		$	B
P8		*	*		$	B
P9		*	*		$	B
R2		R	900		$	B/V
R3		R	1000		$	B
R6		R	1500		E/$	B/V
R7		R	1500		E	B
R8		R	300		E	B
R9		R			$	B
R90		P/R	1800		E	B
R92		P/R	1000		E	B./V
W4		P/D	1300		$	B/V
W5		P/D	1300		$	B
W10		P/D	1300		$	B
W15		P/D	1300		$	
W16		P/D	1300		$	B
NOTES:	[redacted]	***LISTED AFTER PIPELINE AREA***		[redacted]		

BOOMING METHOD
D = DEFLECT
P = PROTECT
R = RECOVER

IMPACT
E = ENVIRONMENTAL
$ = ECONOMIC

ACCESS
B = BOAT
V = VEHICLE

TAB I

(b) (7)(F), (b) (3) [redacted]

Reference: (a) (b) (7)(F), (b) (3) [redacted]

1. **DESCRIPTION**: (b) (7)(F), (b) (3) [redacted].

2. **WATER CURRENTS**: (b) (7)(F), (b) (3) [redacted]

3. **SENSITIVE AREAS**: (b) (7)(F), (b) (3) [redacted]. A strategy matrix for the area immediately follows the map.

MAP LEGEND

Priority Scale:

A = Boom prior to oil impact
B = Protect after **A** areas
C = Protect after **B** areas
M = Marinas
R = Oil collection and recovery area
W = Water Intake-boom prior to oil impact
P = Pipeline
XXX = Protection or exclusionary techniques ineffective

Booming Method:

P = Protection
D = Deflection
R = Recovery and Collection

Map: 8. (b) (7)(F), (b) (3) [redacted]

MAP 8 TO TAB I

NEWARK BAY, PASSAIC AND HACKENSACK RIVERS

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

[redacted]

N

STRATEGY MATRIX
REV: 20 NOV 98
NEWARK BAY/PASSAIC AND HACKENSACK RIVERS

SENSITIVE AREA MAP 8		***BOOM METHOD/ MIN BOOM LENGTH IN FT***		***STAGING SITE MAP CODE PHONE NUMBER***	***IMPACT/ ACCESS***	
CODE	***SENSITIVE AREA NAME***					
A12	(b) (7)(F), (b) (3) [redacted]	P/D/R	5000	(b) (7)(F), (b) (3) [redacted]	E/$	B/V
A13		P/D/R	3500		E/$	B/V
A14		P	8000		E	B
A16		P	1500		E	B/V
A57		P/D	3500		E/$	B/V
A58		P/D	800		E/$	B/V
A59		P/D	1000		E/$	B/V
A72		P/D	3500		E/$	B/V
A74		P/D	650		E	B
A75		P/D	300		E	B/V
A93		P			E	B
B8		P/D	4500		E/$	B
B9		P/D/R	5000		E/$	B/V
B15					E/$	B/V
B46		P			E	B/V
M1		P/D	500		$	B/V
M39		P	300		$	B
M43		P			$	B/V
M47					$	B/V
M48		P	500		$	B/V
M49		P	1000		$	B./V
M50		P			$	B/V
M57					$	B/V
P10		*	*		$	B
P11		*	*		$	B
P12		*	*		$	B
P13		*	*		$	B
P14		*	*		$	B
P15		*	*		$	B
P16		*	*		$	B
P17		*	*		$	B
P18		*	*		$	B
P19		*	*		$	B
R1		R			$	B
R2		R	900		$	B
R3		R	1000		$	B
R12		P/R	5000		$	B/V
R13		R	1000		$	B/V
R14		R	1000		E/$	B/V
R15		R	1000		$	B/V
NOTES		***PIPELINE AREA***				

BOO
D = D
P = P
R = R [redacted]

IMPACT
E = ENVIRO
$ = ECONO

TAB J

(b) (7)(F), (b) (3) [redacted]

References: (a) (b) (7)(F), (b) (3) [redacted]

(b) NYSDEC Region II Contingency Plan.

1. **DESCRIPTION**: (b) (7)(F), (b) (3) [redacted]

2. **WATER CURRENTS**: (b) (7)(F), (b) (3) [redacted]

3. **WATER INTAKES**: (b) (7)(F), (b) (3) [redacted]

3. **SENSITIVE AREAS**: (b) (7)(F), (b) (3) [redacted]

A strategy matrix for each area immediately follows the corresponding map.

MAP LEGEND

Priority Scale:

A	=	Boom prior to oil impact
B	=	Protect after **A** areas
C	=	Protect after **B** areas
M	=	Marinas
R	=	Oil collection and recovery area
W	=	Water Intake-boom prior to oil impact
P	=	Pipeline
XXX	=	Protection or exclusionary techniques ineffective

Booming Method: **P** = Protection
D = Deflection
R = Recovery and Collection

Map: 9 (b) (7)(F), (b) (3) [redacted]

MAP 9 TO TAB J

STATEN ISLAND/THE KILLS

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

[redacted]

STRATEGY MATRIX
REV: 20 NOV 98

(b) (7)(F), (b) (3) [redacted] N ISLAND/T (b) (7)(F), (b) (3) [redacted]

SENSIT MAP 9 CODE		***BOOM METHOD/ MIN BOOM LENGTH IN FT***			***IMPACT/ ACCESS***	
A14	[redacted]	P	8000	[redacted]	E	B
A16	[redacted]	P	1500	[redacted]	E	B/V
A19	[redacted]	P	1200	[redacted]	E	B
A20	[redacted]	P	300	[redacted]	E	B/V
A21	[redacted]	P/D	7500	[redacted]	E	B
A22	[redacted]	P	300	[redacted]	E	B
A24	[redacted]	P/D	1600	[redacted]	E	B
A25	[redacted]	P/D	300	[redacted]	E/$	B/V
A26	[redacted]	P	600	[redacted]	E	B/V
A27	[redacted]	P/D	5000	[redacted]	E/$	B/V
A57	[redacted]	P/D	3500	[redacted]	E/$	B/V
A61	[redacted]	P/D	300	[redacted]	E	B/V
A63	[redacted]	P/D	900	[redacted]	E	B
A66	[redacted]	D		[redacted]	E	B
A70	[redacted]	D/R	300	[redacted]	E	B/V
A71	[redacted]	D	9500	[redacted]	E/$	B/V
A74	[redacted]	P/D	650	[redacted]	E	B
A75	[redacted]	P/D	300	[redacted]	E	B/V
A93	[redacted]	P		[redacted]	E	B/V
A94	[redacted]	P		[redacted]	E/$	B/V
A95	[redacted]	P		[redacted]	E	B/V
B9	[redacted]	P/D/R	5000	[redacted]	E/$	B/V
B15	[redacted]	P/D	1500	[redacted]	E/$	B/V
B17	[redacted]	P/D	1500	[redacted]	E/$	B
B18	[redacted]	P/D	300	[redacted]	E	B
B23	[redacted]	P/D	1500	[redacted]	E/$	B/V
B30	[redacted]	P/D	1600	[redacted]	E/$	B/V
B46	[redacted]	P		[redacted]	E	B/V
B81	[redacted]			[redacted]	E	B/V
M1	[redacted]	P/D	500	[redacted]	$	B/V
M5	[redacted]	P/D	1500	[redacted]	E/$	B/V
M39	[redacted]	P	300	[redacted]	$	B
M40	[redacted]	P	500	[redacted]	$	B
M41	[redacted]	P	2000	[redacted]	$	B/V
M42	[redacted]			[redacted]	$	B
M43	[redacted]	P		[redacted]	$	B/V
M50	[redacted]	P		[redacted]	$	B/V
M57	[redacted]			[redacted]	$	B/V
NOTES: [redacted]						

BOOMING METHOD
D = DEFLECT
P = PROTECT
R = RECOVER

IMPACT
E = ENVIRONMENTAL
$ = ECONOMIC

ACCESS
B = BOAT
V = VEHICLE

STRATEGY MATRIX
REV: 20 NOV 98
STATEN ISLAND/ THE KILLS

SENSITIVE AREA MAP 9 continued		***BOOM METHOD/ MIN BOOM LENGTH IN FT***		***STAGING SITE MAP CODE PHONE NUMBER***	***IMPACT/ ACCESS***	
CODE	***SENSITIVE AREA NAME***					
P14	(b) (7)(F), (b) (3) [redacted]	*	*	(b) (7)(F), (b) (3) [redacted]	$	B
P15		*	*		$	B
P16		*	*		$	B
P19		*	*		$	B
P20		*	*		$	B
P21		*	*		$	B
P22		*	*		$	B
P23		*	*		$	B
P24		*	*		$	B
P25		*	*		$	B
P26		*	*		$	B
P27		*	*		$	B
P28		*	*		$	B
P29		*	*		$	B
P30		*	*		$	B
R1		R			$	B
R2		R	900		$	B
R3		R	1000		$	B
R12		P/R	5000		$	B/V
R13		R	1000		$	B/V
R14		R	1000		E/$	B/V
R15		R	1000			B
W3		P/D	2000		E/$	B/V
NOTES	[redacted]	***LISTED AFTE IPELINE ARE***		[redacted]		

BOOMING METHOD
D = DEFLECT
P = PROTECT
R = RECOVER

IMPACT
E = ENVIRONMENTAL
$ = ECONOMIC

ACCESS
B = BOAT
V = VEHICLE

MAP 9a TO TAB J

UPPER ARTHUR KILL/KILL VAN KULL

[redacted]

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

PHMSA 000110000

STRATEGY MATRIX
REV: 20 NOV 98
ARTHUR KI

(b) (7)(F), (b) (3) [redacted]

(b) (7)(F), (b) (3) [redacted]

SENSITI MAP 9A CODE		***BOOM METHOD/ MIN BOOM LENGTH IN FT***			***IMPACT/ ACCESS***	
A14		P	8000		E	B
A16		P	1500		E	B/V
A19		P	1200		E	B
A20		P	300		E	B/V
A21		P/D	7500		E	B
A22		P	300		E	B
A57		P/D	3500		E/$	B/V
A74		P/D	650		E	B
A75		P/D	300		E	B/V
A93		P			E	B/V
B9		P/D/R	5000		E/$	B/V
B15		P/D	1500		E/$	B/V
B17		P/D	1500		E/$	B
B18		P/D	300		E	B
B23		P/D	1500		E/$	B/V
B46		P			E	B/V
M1		P/D	500		$	B/V
M39		P	300		$	B
M50		P			$	B/V
M57					$	B/V
P14		*	*		$	B
P15		*	*		$	B
P16		*	*		$	B
P19		*	*		$	B
P20		*	*		$	B
P21		*	*		$	B
P22		*	*		$	B
P23		*	*		$	B
P24		*	*		$	B
P25		*	*		$	B
P26		*	*		$	B
P27		*	*		$	B
P28		*	*		$	B
R1		R			$	B
R2		R	900		$	B
R3		R	1000		$	B
R12		P/R	5000		$	B/V
R13		R	1000		$	B/V
R14		R	1000		E/$	B/V
R15		R	1000		$	B/V

NOTES: ***DO NOT ANCHOR AROUND PIPELINE AREAS***

BOOMING METHOD
D = DEFLECT
P = PROTECT
R = RECOVER

IMPACT
E = ENVIRONMENTAL
$ = ECONOMIC

ACCESS
B = BOAT
V = VEHICLE

MAP 9b TO TAB J

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

[redacted]

MAP 9b

STRATEGY MATRIX
REV: 20 NOV 98
LOWER AR

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

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

SENSIT MAP 9B CODE		***BOOM METHOD/ MIN BOOM LENGTH IN FT***			***IMPACT/ ACCESS***	
A20		P	300		E	B/V
A21		P/D	7500		E	B
A22		P	300		E	B
A24		P/D	1600		E	B
A25		P/D	300		E/$	B/V
A26		P	600		E	B/V
A27		P/D	5000		E/$	B/V
A61		P/D	300		E	B/V
A63		P/D	900		E	B
A66		D			E	B
A70		D/R	300		E	B/V
A95		P			E	B/V
B23		P/D	1500		E/$	B/V
B81					E	B/V
M40		P	500		$	B
M41		P	2000		$	B/V
P28		*	*		$	B
P29		*	*		$	B
W3		P/D	2000		E/$	B

NOTES: ***DO NOT ANCHOR AROUND PIPELINE AREAS***

BOOMING METHOD
D = DEFLECT
P = PROTECT
R = RECOVER

IMPACT
E = ENVIRONMENTAL
$ = ECONOMIC

ACCESS
B = BOAT
V = VEHICLE

TAB K

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

1. **DESCRIPTION**: (b) (7)(F), (b) (3)

2. **WATER CURRENTS**: (b) (7)(F), (b) (3)

3. **WATER INTAKES**: (b) (7)(F), (b) (3)

4. **SENSITIVE AREAS**: (b) (7)(F), (b) (3) A strategy matrix for the area immediately follows the map.

MAP LEGEND

Priority Scale:

A = Boom prior to oil impact
B = Protect after **A** areas
C = Protect after **B** areas
M = Marinas
R = Oil collection and recovery area
W = Water Intake-boom prior to oil impact
P = Pipeline
XXX = Protection or exclusionary techniques ineffective

Booming Method:

P = Protection
D = Deflection
R = Recovery and Collection

Map: (b) (7)(F), (b) (3)

[redacted]

techniques ineffective

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

PHMSA 000110005

STRATEGY MATRIX
REV: 20 NOV 98
AMAICA BAY

(b) (7)(F), (b) (3) [redacted]

SENSIT MAP 10		***BOOM METHOD/ MIN BOOM LENGTH IN FT***			***IMPACT/ ACCESS***	
CODE						
A1	[redacted]	D/R	11000	[redacted]	E	B/V
A37	[redacted]	P/D	2000	[redacted]	E/$	B/V
A64	[redacted]	D/R	5000	[redacted]	E	
A81	[redacted]	D/R	2700	[redacted]	E	
A82	[redacted]	P/D	1300	[redacted]	E/$	B
A86	[redacted]	P		[redacted]		
A96	[redacted]	P		[redacted]	E	B
A97	[redacted]	P		[redacted]	E	
A98	[redacted]	P		[redacted]	E	
A99	[redacted]	P		[redacted]	E	B/V
A100	[redacted]	P		[redacted]	E	B/V
A101	[redacted]	P/D		[redacted]	E	B
A103	[redacted]	P		[redacted]	E	B/V
A104	[redacted]	P/D		[redacted]	E	B/V
B10	[redacted]	D/R	5000	[redacted]	E	B
B69	[redacted]	D		[redacted]	E	B/V
B82	[redacted]	P/R	800	[redacted]		
B83	[redacted]	P		[redacted]	E	
B84	[redacted]	P		[redacted]	E/$	B
B85	[redacted]	D		[redacted]	E	B/V
C2	[redacted]	P/D	800	[redacted]	E/$	B/V
M2	[redacted]	P/D	900	[redacted]	$	B/V
M3	[redacted]	P/D	500	[redacted]	$	B/V
M6	[redacted]	P/D	900	[redacted]	$	B
M33	[redacted]	P	600	[redacted]	$	B/V
M34	[redacted]	P	1500	[redacted]	$	B/V
M35	[redacted]	P	500	[redacted]	E	B/V
M44	[redacted]	P	500	[redacted]	$	B/V
M56	[redacted]	P	700	[redacted]	$	B/V
P31	[redacted]	*	*	[redacted]	$	B
R5	[redacted]	R	800	[redacted]		B/V
R8	[redacted]	R	300	[redacted]		B
R16	[redacted]	R	1000	[redacted]		B/V
R17	[redacted]	R	600	[redacted]		B/V
R18	[redacted]	R	600	[redacted]		B
R90	[redacted]	P/R	1800	[redacted]		B/V
R92	[redacted]	P/R	1000	[redacted]		B/V
W12	[redacted]	P/D	1300	[redacted]	E/$	B/V
W14	[redacted]	P/D	1300	[redacted]	E/$	B/V

NOTES ***WATER INTAKE SIZES ARE LISTED AFTER SENSITIVE AREA NAME***
DO NOT ANCHOR AROUND PIPELINE AREAS

BOOMING METHOD
D = DEFLECT
P = PROTECT
R = RECOVER

IMPACT
E = ENVIRONMENTAL
$ = ECONOMIC

ACCESS
B = BOAT
V = VEHICLE

TAB L TO APPENDIX V TO ANNEX E TO THE NEW YORK/NEW JERSEY ACP
(b) (7)(F), (b) (3) [redacted]

References: (a) (b) (7)(F), (b) (3) [redacted]

(b) NYSDEC Region II Contingency Plan.

1. **DESCRIPTION**: (b) (7)(F), (b) (3) [redacted].

2. **WATER CURRENTS**: (b) (7)(F), (b) (3) [redacted]

3. **WATER INTAKES**: (b) (7)(F), (b) (3) [redacted]

4. **SENSITIVE AREAS**: (b) (7)(F), (b) (3) [redacted] A strategy matrix for the area immediately follows the map.

MAP LEGEND

Priority Scale:

A = Boom prior to oil impact
B = Protect after **A** areas
C = Protect after **B** areas
M = Marinas
R = Oil collection and recovery area
W = Water Intake-boom prior to oil impact
P = Pipeline
XXX = Protection or exclusionary techniques ineffective

Booming Method:

P = Protection
D = Deflection
R = Recovery and Collection

Map: 11. (b) (7)(F), (b) (3) [redacted]

MAP 11 TO TAB L

RARITAN RIVER

[redacted]

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

PHMSA 000110008

STRATEGY MATRIX
REV: 20 NOV 98
RARITAN RIVER

SENSITIVE AREA MAP 11		***BOOM METHOD/ MIN BOOM LENGTH IN FT***		***STAGING SITE MAP CODE PHONE NUMBER***	***IMPACT/ ACCESS***	
CODE	***SENSITIVE AREA NAME***					
W29	(b) (7)(F), (b) (3) [redacted]	P/D	1300	(b) (7)(F), (b) (3) [redacted]	$	B/V
W30		P/D	1500		$	B/V
W31		P/D	1200		$	B/V
W32		P/D	1300		$	B/V

NOTES: [redacted] ***E LISTED AFTER*** [redacted]

BOOMING METHOD
D = DEFLECT
P = PROTECT
R = RECOVER

IMPACT
E = ENVIRONMENTAL
$ = ECONOMIC

ACCESS
B = BOAT
V = VEHICLE

TAB M

(b) (7)(F), (b) (3) [redacted]

Reference: (a) (b) (7)(F), (b) (3) [redacted]

1. **DESCRIPTION**: (b) (7)(F), (b) (3) [redacted]

2. **WATER CURRENTS**: (b) (7)(F), (b) (3) [redacted]

3. **SENSITIVE AREAS**: (b) (7)(F), (b) (3) [redacted] strategy matrix for the area immediately follows the map.

MAP LEGEND

Priority Scale:

A = Boom prior to oil impact
B = Protect after **A** areas
C = Protect after **B** areas
M = Marinas
R = Oil collection and recovery area
W = Water Intake-boom prior to oil impact
P = Pipeline
XXX = Protection or exclusionary techniques ineffective

Booming Method:

P = Protection
D = Deflection
R = Recovery and Collection

Map: 12. (b) (7)(F), (b) (3) [redacted]

MAP 12

RARITAN BAY/LOWER NEW YORK BAY

[redacted]

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

PHMSA 000110011

STRATEGY MATRIX
REV: 20 NOV 98

(b) (7)(F), (b) (3) [redacted] N RIVER / LO (b) (7)(F), (b) (3) [redacted]

SENSIT MAP 12		***BOOM METHOD/ MIN BOOM LENGTH IN FT***			***IMPACT/ ACCESS***	
CODE						
A29	[redacted]	P	1500	[redacted]	E/$	B/V
A31	[redacted]	P	1000	[redacted]	$	B/V
A32	[redacted]	P	900	[redacted]	E	B
A33	[redacted]	D/R	1200	[redacted]	E	B
A56	[redacted]	P	2000	[redacted]	E	B/V
A61	[redacted]	P/D	300	[redacted]	E	B/V
A70	[redacted]	D/R	300	[redacted]	E	B/V
A71	[redacted]	D	9500	[redacted]	E	B/V
A87	[redacted]	P/D		[redacted]	E	V
B28	[redacted]	P	300	[redacted]	E/$	B/V
B30	[redacted]	P/D	1600	[redacted]	E/$	B/V
B66	[redacted]	P/D	400	[redacted]	E/$	B/V
M5	[redacted]	P/D	1500	[redacted]	E/$	B/V
M13	[redacted]	P/D	1000	[redacted]	$	B/V
M15	[redacted]	P	2100	[redacted]	$	B/V
M54	[redacted]	P	300	[redacted]	$	B/V
M55	[redacted]	P/D	900	[redacted]	$	B/V
P31	[redacted]	*	*	[redacted]	$	B
W33	[redacted]			[redacted]	E/$	B/V

NOTES***: DO NOT ANCHOR AROUND PIPELINE AREAS***
W33 OPERATES AT 350-400 GPM 24 HOURS PER DAY. INTAKE IS LOCATED 3 TO 4 FT BELOW SANDY BOTTOM.

BOOMING METHOD
D = DEFLECT
P = PROTECT
R = RECOVER

IMPACT
E = ENVIRONMENTAL
$ = ECONOMIC

ACCESS
B = BOAT
V = VEHICLE

N

Division Overview

ConocoPhillips

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

[redacted]

0 0.5 1 2 Miles

TRG

Lower Arthur Kill Division Overview Map

N

ConocoPhillips

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

[redacted]

0 1,250 2,500 5,000 Feet

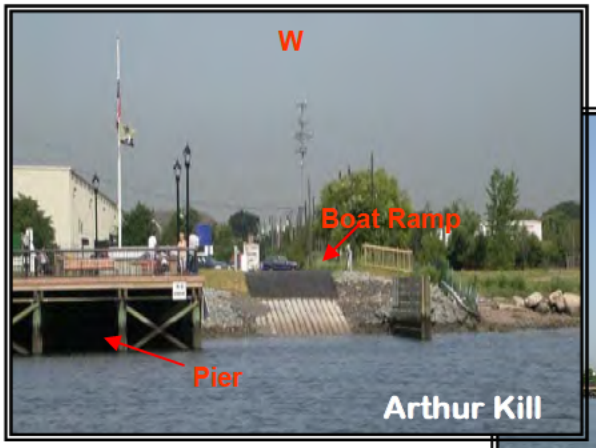
TRG

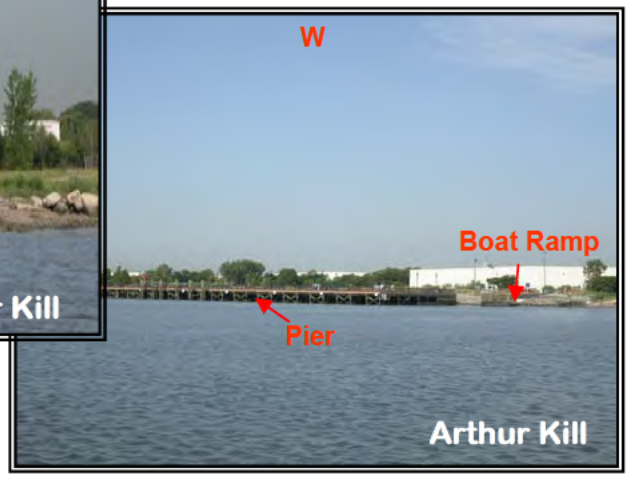
ConocoPhillips

CARTERET RAMP & PARK
LOWER ARTHUR KILL DIVISION – SITE 1

PROTECTION SITE
Arthur Kill, NJ

SITE PICTURE





RESPONSE INFORMATION

Deployment Type: Protection
Response Method: **Low Water:** Booming **High Water:** Booming
Need Radio: Yes **Cell Ph. Reception:** Good
Heavy Equipment Access: Yes
Tidally Influenced: Yes
Closest Staging Area: Bayway Refinery
Distance Bayway Docks : 4.15mi.

SITE INFORMATION

Strategic Objective: Minimize impact to shoreline and river to extent possible.

Location: Deploy protection boom to protect Carteret Park dock area along the New Jersey side of the Arthur Kill.

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

Staging Area: Bayway Refinery

Population Density: Moderate
Area Classification: Recreational

Site Limitations: Bulkhead and concrete shoreline. Medium slope to river. Accessible from left descending bank.

ACCESS INFORMATION

Access Type: Public
Site Access: Boat
Road Surface Type: N/A
Road Condition: N/A
Road Width: N/A

WATERWAY INFORMATION

Type of Waterway: River
River Width: Low Water: ~15m

DESCRIPTION OF WORK

Deploy 750' of protection boom along the shoreline to protect Carteret Park shoreline.

SHORELINE CHARACTERISTICS

Shoreline Type: Bulkhead, concrete
Beach Length (Ft): N/A
Existing Facilities: Building, parking, boat ramp

RESPONSE OBJECTIVES CHECKLIST

Safety
- ❑ Identify hazard(s) of emitted material
- ❑ Activate emergency services as required (911, Fire, LEPC)
- ❑ Evacuate and secure area if required
- ❑ Conduct air monitoring & site characterization
- ❑ Establish isolation perimeter, safety zones, & evacuation route
- ❑ Prepare/Implement Site Safety Plan & Medical Plan
- ❑ Restrict/secure area to properly equipped & trained personnel
- ❑ Continually evaluate site hazards & risks

Response
- ❑ Conduct external agency & internal notifications
- ❑ Identify and setup staging areas to support response ops
- ❑ Activate response contractors & equipment
- ❑ Implement response tactics to contain & recover product
- ❑ Establish command post & field communications
- ❑ Request flight traffic restriction if required
- ❑ Implement waste handling & disposal procedures as required
- ❑ Initiate decon & demob procedures when appropriate

Environmental
- ❑ Identify, prioritize, & protect socio-economic sensitivities
- ❑ Identify, prioritize, & protect environmentally sensitive areas
- ❑ Establish wildlife rescue & rehabilitation operation if required

Support
- ❑ Conduct visual assessments (spill tracking & surveillance)
- ❑ Provide personnel & equipment support as required
- ❑ Establish first aid stations & site security as required

ConocoPhillips

Carteret Ramp & Park

Site 1 - Protection Site
Lower Arthur Kill Division

Lat: 40° 34.284'
Long: 74° 12.673'

N

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

[redacted]

0 250 500 1,000 Feet

The Response Group
Emergency Response | Pre-Planning & Support

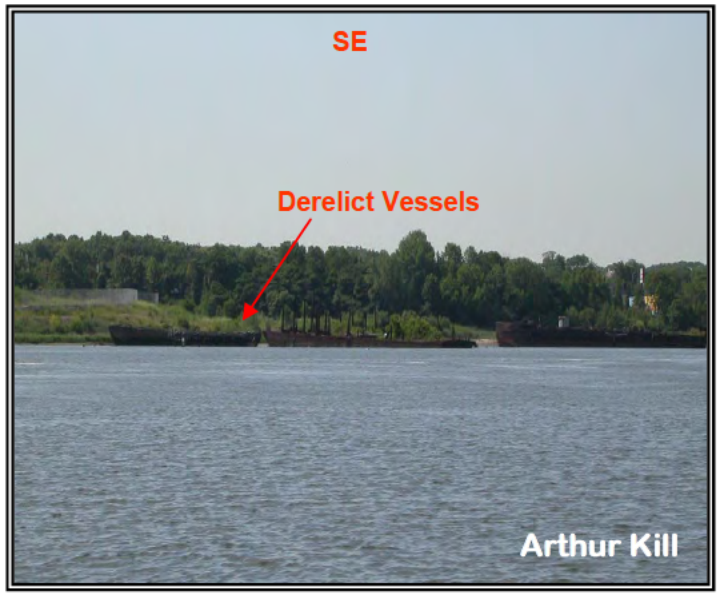
0 0.05 0.1 0.2 Miles

ConocoPhillips

TUFT'S POINT
LOWER ARTHUR KILL DIVISION – SITE 2

PROTECTION SITE
Staten Island, NY

SITE PICTURE



SITE INFORMATION

Strategic Objective: Deploy protection boom to prevent product from impacting major debris located along the Staten Island side of the Arthur Kill near Tuft's Point.

Location: South of Fresh Kill Bone Yard at Tuft's Point.

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

Staging Area: Bayway Refinery

Population Density: Low **Area Classification:** Rural

Site Limitations: Brush and grass shoreline. Slight slope to river. Accessible from left descending bank.

ACCESS INFORMATION

Access Type: Public
Site Access: Boat
Road Surface Type: N/A

WATERWAY INFORMATION

Type of Waterway: River
River Width: Low Water: ~15m

DESCRIPTION OF WORK

Deploy 3500' of protection and or deflection boom along the shore around debris located along the Staten Island side of the Arthur Kill near Tuft's Point.

SHORELINE CHARACTERISTICS

Shoreline Type: Brush, grass
Beach Length (Ft): N/A
Existing Facilities: None

RESPONSE INFORMATION

Deployment Type: Protection
Response Method: **Low Water:** Booming **High Water:** Booming
Need Radio: Yes **Cell Ph. Reception:** Good
Heavy Equipment Access: Yes
Tidally Influenced: Yes
Closest Staging Area: Bayway Refinery
Distance Bayway Docks : 5.23mi.

RESPONSE OBJECTIVES CHECKLIST

Safety
- ❑ Identify hazard's) of emitted material
- ❑ Activate emergency services as required (911, Fire, LEPC)
- ❑ Evacuate and secure area if required
- ❑ Conduct air monitoring & site characterization
- ❑ Establish isolation perimeter, safety zones, & evacuation route
- ❑ Prepare/Implement Site Safety Plan & Medical Plan
- ❑ Restrict/secure area to properly equipped & trained personnel
- ❑ Continually evaluate site hazards & risks

Response
- ❑ Conduct external agency & internal notifications
- ❑ Identify and setup staging areas to support response ops
- ❑ Activate response contractors & equipment
- ❑ Implement response tactics to contain & recover product
- ❑ Establish command post & field communications
- ❑ Request flight traffic restriction if required
- ❑ Implement waste handling & disposal procedures as required
- ❑ Initiate decon & demob procedures when appropriate

Environmental
- ❑ Identify, prioritize, & protect socio-economic sensitivities
- ❑ Identify, prioritize, & protect environmentally sensitive areas
- ❑ Establish wildlife rescue & rehabilitation operation if required

Support
- ❑ Conduct visual assessments (spill tracking & surveillance)
- ❑ Provide personnel & equipment support as required
- ❑ Establish first aid stations & site security as required

ConocoPhillips

Tofts Point

Site 2 - Protection Site
Lower Arthur Kill Division

Lat: 40° 33.535'
Long: 74° 12.933'

N

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

[redacted]

0 250 500 1,000 Feet

The Response Group
Emergency Response Pre-Planning & Support

0 0.05 0.1 0.2 Miles

ConocoPhillips

PSE&G POWER PLANT
LOWER ARTHUR KILL DIVISION – SITE 3

PROTECTION SITE
Arthur Kill, NJ

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

[redacted]

ConocoPhillips

PSE&G Power Plant

Site 3 - Protection Site
Lower Arthur Kill Division

Lat: 40° 32.262'
Long: 74° 14.721'

N

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

[redacted]

0 250 500 1,000 Feet

The Response Group
Emergency Response Pre-Planning & Support

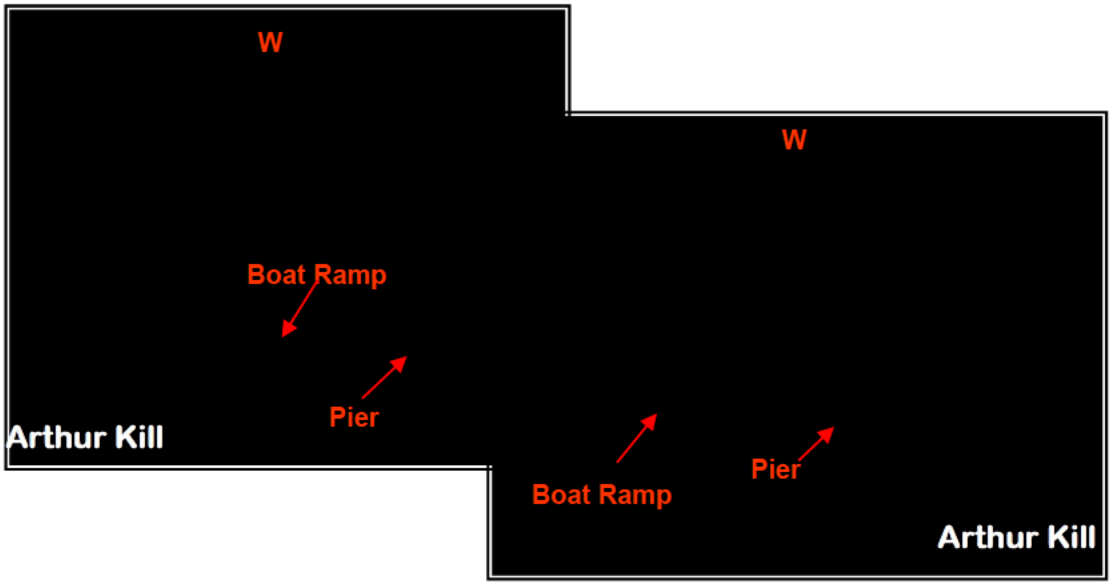
0 0.05 0.1 0.2 Miles

ConocoPhillips

SEWAREN BOAT RAMP
LOWER ARTHUR KILL DIVISION – SITE 4

PROTECTION SITE
Arthur Kill, NJ

SITE PICTURE



SITE INFORMATION

Strategic Objective: Minimize impact to shoreline and river to extent possible.

Location: Sewaren Boat Ramp

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

Staging Area: Bayway Refinery

Population Density: Moderate
Area Classification: Recreational

Site Limitations: Bulkhead shoreline. Medium slope to river. Accessible from left descending bank.

ACCESS INFORMATION

Access Type: Public
Site Access: Boat
Road Surface Type: N/A
Road Condition: N/A
Road Width: N/A

WATERWAY INFORMATION

Type of Waterway: River
River Width: Low Water: ~15m

DESCRIPTION OF WORK

Deploy 600' of protection and or deflection boom around Sewaren Boat Ramp dock area.

SHORELINE CHARACTERISTICS

Shoreline Type: Bulkhead
Beach Length (Ft): N/A
Existing Facilities: Boat Ramp

RESPONSE INFORMATION

Deployment Type: Protection
Response Method: **Low Water:** Booming **High Water:** Booming
Need Radio: Yes **Cell Ph. Reception:** Good
Heavy Equipment Access: Yes
Tidally Influenced: Yes
Closest Staging Area: Sewaren Municipal Boat Ramp
Distance Bayway Docks : 6.4mi.

RESPONSE OBJECTIVES CHECKLIST

Safety
- ❑ Identify hazard's) of emitted material
- ❑ Activate emergency services as required (911, Fire, LEPC)
- ❑ Evacuate and secure area if required
- ❑ Conduct air monitoring & site characterization
- ❑ Establish isolation perimeter, safety zones, & evacuation route
- ❑ Prepare/Implement Site Safety Plan & Medical Plan
- ❑ Restrict/secure area to properly equipped & trained personnel
- ❑ Continually evaluate site hazards & risks

Response
- ❑ Conduct external agency & internal notifications
- ❑ Identify and setup staging areas to support response ops
- ❑ Activate response contractors & equipment
- ❑ Implement response tactics to contain & recover product
- ❑ Establish command post & field communications
- ❑ Request flight traffic restriction if required
- ❑ Implement waste handling & disposal procedures as required
- ❑ Initiate decon & demob procedures when appropriate

Environmental
- ❑ Identify, prioritize, & protect socio-economic sensitivities
- ❑ Identify, prioritize, & protect environmentally sensitive areas
- ❑ Establish wildlife rescue & rehabilitation operation if required

Support
- ❑ Conduct visual assessments (spill tracking & surveillance)
- ❑ Provide personnel & equipment support as required
- ❑ Establish first aid stations & site security as required

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

ConocoPhillips

FRESH KILL
LOWER ARTHUR KILL DIVISION – SITE A24

PROTECTION SITE
Arthur Kill, NJ

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

[redacted]

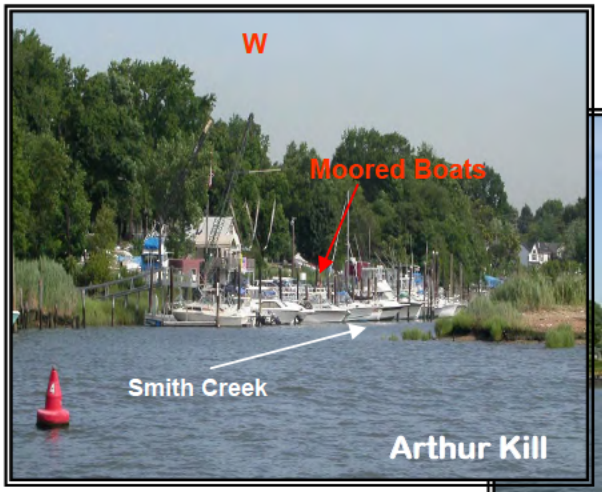
(b) (7)(F), (b) (3)

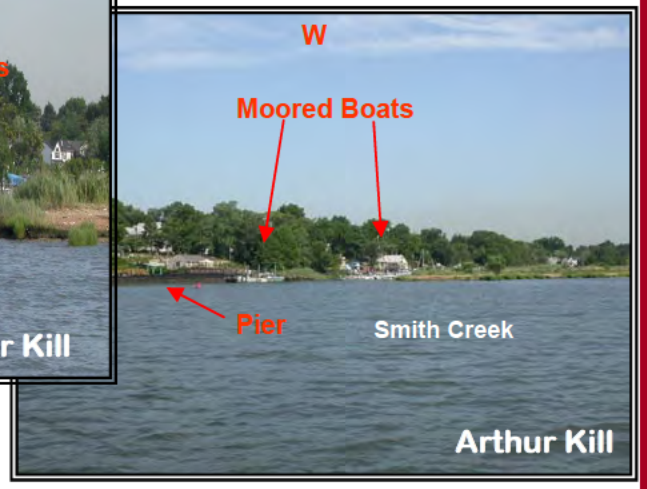
ConocoPhillips

SMITH CREEK
LOWER ARTHUR KILL DIVISION – SITE A25

PROTECTION SITE
Arthur Kill, NJ

SITE PICTURE





SITE INFORMATION

Strategic Objective: Minimize impact to shoreline and creek to extent possible.
Location: Lower Arthur Kill / Sewaren, NJ

(b) (3), (b) (7)(F) [redacted] at, some vehicle access.)

Population Density: Low **Area Classification:** Residential
Site Limitations: Grass and dirt shoreline. Slight slope to river. Accessible from left descending bank.

Special Environmental Considerations: WILDLIFE: Nesting waterfowl, including mallard, black ducks, blue/green wing teal, gadwalls, ruddy ducks, coot, C.Geese, and mute swans; hooded, red breasted, and common mergansers (fall-winter); canvasback, scaup, gadwalls, buffleheads, (open water, winter); pintails and wigeon; blue crabs; killifish; weakfish; bluefish; winter flounder. HABITAT: Nesting area for numerous waterfowl species.

ACCESS INFORMATION

Access Type: Public
Site Access: Boat
Road Surface Type: N/A
Road Condition: N/A
Road Width: N/A

WATERWAY INFORMATION

Type of Waterway: Creek
River Width: Low Water: ~15m

DESCRIPTION OF WORK

Deploy 600' of protection and or deflection boom across the Smith Creek Entrance

SHORELINE CHARACTERISTICS

Shoreline Type: Fine sand beaches, coarse sand beaches, exposed tidal flats, marshes.
Existing Facilities: None

RESPONSE INFORMATION

Deployment Type: Protection
Response Method: **Low Water:** Booming **High Water:** Booming
Need Radio: Yes **Cell Ph. Reception:** Good
Heavy Equipment Access: Yes
Tidally Influenced: Yes
Closest Staging Area: Bayway Refinery
Distance Bayway Docks : 6.29mi.
Additional Information: Tidal Range 5-6ft, Pocket marsh about 1 1/2 miles long by 3/4 mile wide surrounded by industry.

RESPONSE OBJECTIVES CHECKLIST

Safety
- ❑ Identify hazard's) of emitted material
- ❑ Activate emergency services as required (911, Fire, LEPC)
- ❑ Evacuate and secure area if required
- ❑ Conduct air monitoring & site characterization
- ❑ Establish isolation perimeter, safety zones, & evacuation route
- ❑ Prepare/Implement Site Safety Plan & Medical Plan
- ❑ Restrict/secure area to properly equipped & trained personnel
- ❑ Continually evaluate site hazards & risks

Response
- ❑ Conduct external agency & internal notifications
- ❑ Identify and setup staging areas to support response ops
- ❑ Activate response contractors & equipment
- ❑ Implement response tactics to contain & recover product
- ❑ Establish command post & field communications
- ❑ Request flight traffic restriction if required
- ❑ Implement waste handling & disposal procedures as required
- ❑ Initiate decon & demob procedures when appropriate

Environmental
- ❑ Identify, prioritize, & protect socio-economic sensitivities
- ❑ Identify, prioritize, & protect environmentally sensitive areas
- ❑ Establish wildlife rescue & rehabilitation operation if required

Support
- ❑ Conduct visual assessments (spill tracking & surveillance)
- ❑ Provide personnel & equipment support as required
- ❑ Establish first aid stations & site security as required

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

ConocoPhillips

WOODBRIDGE CREEK
LOWER ARTHUR KILL DIVISION – SITE A26

PROTECTION SITE
Arthur Kill, NJ

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

[redacted]

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

ConocoPhillips

MILL CREEK
LOWER ARTHUR KILL DIVISION – SITE A63

PROTECTION SITE
Arthur Kill, NJ

SITE PICTURE

NO PICTURE AVAILABLE

RESPONSE INFORMATION

Deployment Type: Protection
Response Method: **Low Water:** Booming **High Water:** Booming
Need Radio: Yes **Cell Ph. Reception:** Good
Heavy Equipment Access: Yes
Tidally Influenced: Yes
Closest Staging Area: Bayway Refinery
Distance Bayway Docks : 8.4mi.
Additional Information: Tidal Range 5-6ft.

RESPONSE OBJECTIVES CHECKLIST

Safety
- ❑ Identify hazard(s) of emitted material
- ❑ Activate emergency services as required (911, Fire, LEPC)
- ❑ Evacuate and secure area if required
- ❑ Conduct air monitoring & site characterization
- ❑ Establish isolation perimeter, safety zones, & evacuation route
- ❑ Prepare/Implement Site Safety Plan & Medical Plan
- ❑ Restrict/secure area to properly equipped & trained personnel
- ❑ Continually evaluate site hazards & risks

Response
- ❑ Conduct external agency & internal notifications
- ❑ Identify and setup staging areas to support response ops
- ❑ Activate response contractors & equipment
- ❑ Implement response tactics to contain & recover product
- ❑ Establish command post & field communications
- ❑ Request flight traffic restriction if required
- ❑ Implement waste handling & disposal procedures as required
- ❑ Initiate decon & demob procedures when appropriate

Environmental
- ❑ Identify, prioritize, & protect socio-economic sensitivities
- ❑ Identify, prioritize, & protect environmentally sensitive areas
- ❑ Establish wildlife rescue & rehabilitation operation if required

Support
- ❑ Conduct visual assessments (spill tracking & surveillance)
- ❑ Provide personnel & equipment support as required
- ❑ Establish first aid stations & site security as required

SITE INFORMATION

Strategic Objective: Deploy protection boom to prevent product from impacting Mill Creek along the Staten Island side of the Arthur Kill.
Location: Arthur Kill / Southwest Staten Island / Tottenville

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

Population Density: Low **Area Classification:** Industrial
Site Limitations: Bulkhead and concrete shoreline. Steep slope to river. Accessible from left descending bank.

Special Environmental Considerations: WILDLIFE: Birds. HABITAT: Tidal and freshwater marshes; tidal flats are feeding area for birds. OTHER (RR): Anchorage area.

ACCESS INFORMATION

Access Type: Public
Site Access: Boat
Road Surface Type: N/A
Road Condition: N/A
Road Width: N/A

WATERWAY INFORMATION

Type of Waterway: River
River Width: Low Water: ~15m

DESCRIPTION OF WORK

Deploy 900ft of protection and or deflection boom across the mill creek entrance.

SHORELINE CHARACTERISTICS

Shoreline Type: Coarse sand beaches, exposed tidal flats, marshes.
Existing Facilities: Lighting, electricity, building

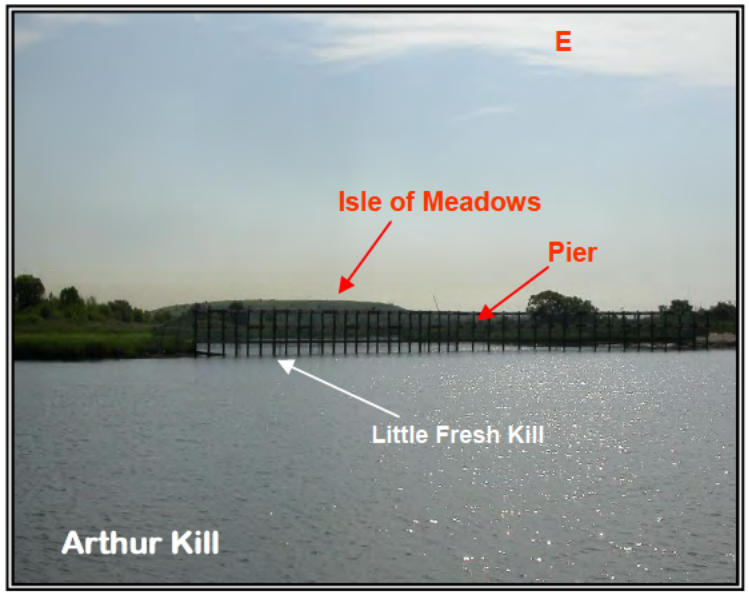
(b) (7)(F), (b) (3)

ConocoPhillips

ISLE OF MEADOWS
LOWER ARTHUR KILL DIVISION – SITE A66

PROTECTION SITE
Staten Island, NY

SITE PICTURE



SITE INFORMATION

Strategic Objective: Deploy protection boom to prevent product from impacting Fresh Kill & entering the waterways located on the north and south end of Isle of Meadows along the Staten Island side of the Arthur Kill.
Location: Western Staten Island at confluence of Arthur Kill and Fresh Kill Channel
(b) (3), (b) (7)(F)
Staging Area: Bayway Refinery (entire shoreline fenced
Access by boat – Route 440 / Victory Blvd.)
Population Density: Low **Area Classification:** Rural

Site Limitations: Grass and dirt shoreline. Slight slope to river. Accessible from right descending bank.
Special Environmental Considerations: WILDLIFE: wading birds, including herons, egrets, and ibises; gulls. HABITAT: Important nesting and feeding area for wading birds; Little Fresh Kills is a favorite foraging site for immature birds. OTHER (RR); One of three colonial waterbird rookeries within the Harbor Herons ecosystem; NY State Significant Coastal Habitat; NYC Dept of Sanitation.

ACCESS INFORMATION

Access Type: Public
Site Access: Boat

WATERWAY INFORMATION

Type of Waterway: River
River Width: Low Water: ~15m

DESCRIPTION OF WORK

- Deploy 200' of protection and or deflection boom across the northern waterway from Staten Island to the northern tip of Isle of Meadows
- Deploy 1000' of protection boom and or deflection boom across the southern waterway from the southern end of Isle of Meadows to Staten Island.

SHORELINE CHARACTERISTICS

Shoreline Type: Fine Sand Beaches, Sheltered tidal flats, marshes.

RESPONSE INFORMATION

Deployment Type: Protection
Response Method: **Low Water:** Booming **High Water:** Booming
Need Radio: Yes **Cell Ph. Reception:** Good
Heavy Equipment Access: Yes
Tidally Influenced: Yes
Closest Staging Area: Bayway Refinery
Distance Bayway Docks : 3.8mi.
Additional Information: Site Area: 101 Acres; Tidal Ranges: 5-6ft.

RESPONSE OBJECTIVES CHECKLIST

Safety
- ❑ Identify hazard(s) of emitted material
- ❑ Activate emergency services as required (911, Fire, LEPC)
- ❑ Evacuate and secure area if required
- ❑ Conduct air monitoring & site characterization
- ❑ Establish isolation perimeter, safety zones, & evacuation route
- ❑ Prepare/Implement Site Safety Plan & Medical Plan
- ❑ Restrict/secure area to properly equipped & trained personnel
- ❑ Continually evaluate site hazards & risks

Response
- ❑ Conduct external agency & internal notifications
- ❑ Identify and setup staging areas to support response ops
- ❑ Activate response contractors & equipment
- ❑ Implement response tactics to contain & recover product
- ❑ Establish command post & field communications
- ❑ Request flight traffic restriction if required
- ❑ Implement waste handling & disposal procedures as required
- ❑ Initiate decon & demob procedures when appropriate

Environmental
- ❑ Identify, prioritize, & protect socio-economic sensitivities
- ❑ Identify, prioritize, & protect environmentally sensitive areas
- ❑ Establish wildlife rescue & rehabilitation operation if required

Support
- ❑ Conduct visual assessments (spill tracking & surveillance)
- ❑ Provide personnel & equipment support as required
- ❑ Establish first aid stations & site security as required

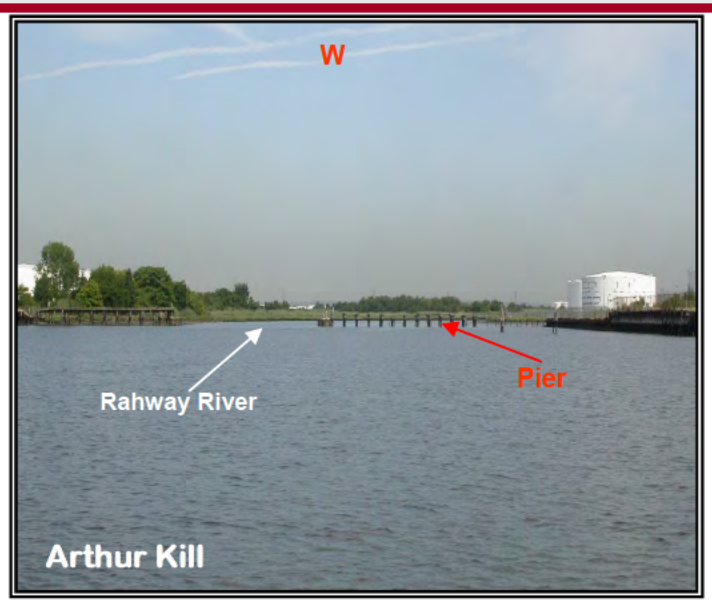
(b) (7)(F), (b) (3)

ConocoPhillips

RAHWAY RIVER
LOWER ARTHUR KILL DIVISION – SITE B23

PROTECTION SITE
Arthur Kill, NJ

SITE PICTURE



SITE INFORMATION

Strategic Objective: Deploy protection boom to prevent product from impacting the Rahway River along the New Jersey side of the Arthur Kill.
Location: Arthur Kill / North of Carteret, New Jersey 1/2 mile

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

Staging Area: Bayway Refinery (Access by vehicle or boat)

Population Density: Low **Area Classification:** Rural
Site Limitations: Bulkhead and concrete shoreline. Medium slope to river. Accessible from left descending bank.

Special Environmental Considerations: WILDLIFE: Large numbers of forage fish and blue crabs; nesting waterfowl, incl. black ducks, mallard, blue'green wing teal, gadwalls, ruddy ducks, coot, C.geese, & mute swans; hooded, red-breasted, and common mergansers; wintering canvasback, scaup, gadwalls, buffleheads; pintail and wigeon; mammals, incl. muskrat, red fox, raccoon, skunk, otter & weasel.

ACCESS INFORMATION

Access Type: Public
Site Access: Boat
Road Surface Type: N/A

WATERWAY INFORMATION

Type of Waterway: River
River Width: Low Water: ~15m

DESCRIPTION OF WORK

- Deploy 1000' of deflection and or protection boom across the mouth of the Rahway River.
- Deploy 700' of secondary protection boom inside the Rahway River.

SHORELINE CHARACTERISTICS

Shoreline Type: Sheltered tidal flats, marshes, man-made structures
Existing Facilities: None

RESPONSE INFORMATION

Deployment Type: Protection
Response Method: **Low Water:** Booming **High Water:** Booming
Need Radio: Yes **Cell Ph. Reception:** Good
Heavy Equipment Access: Yes
Tidally Influenced: Yes
Closest Staging Area: Bayway Refinery
Distance Bayway Docks: 2.58mi.

RESPONSE OBJECTIVES CHECKLIST

Safety
- ❑ Identify hazard(s) of emitted material
- ❑ Activate emergency services as required (911, Fire, LEPC)
- ❑ Evacuate and secure area if required
- ❑ Conduct air monitoring & site characterization
- ❑ Establish isolation perimeter, safety zones, & evacuation route
- ❑ Prepare/Implement Site Safety Plan & Medical Plan
- ❑ Restrict/secure area to properly equipped & trained personnel
- ❑ Continually evaluate site hazards & risks

Response
- ❑ Conduct external agency & internal notifications
- ❑ Identify and setup staging areas to support response ops
- ❑ Activate response contractors & equipment
- ❑ Implement response tactics to contain & recover product
- ❑ Establish command post & field communications
- ❑ Request flight traffic restriction if required
- ❑ Implement waste handling & disposal procedures as required
- ❑ Initiate decon & demob procedures when appropriate

Environmental
- ❑ Identify, prioritize, & protect socio-economic sensitivities
- ❑ Identify, prioritize, & protect environmentally sensitive areas
- ❑ Establish wildlife rescue & rehabilitation operation if required

Support
- ❑ Conduct visual assessments (spill tracking & surveillance)
- ❑ Provide personnel & equipment support as required
- ❑ Establish first aid stations & site security as required

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

ConocoPhillips

TOTTENVILLE MARINA
LOWER ARTHUR KILL DIVISION – SITE M41

PROTECTION SITE
Arthur Kill, NJ

SITE PICTURE

NO PICTURE AVAILABLE

RESPONSE INFORMATION

Deployment Type: Protection
Response Method: **Low Water:** Booming **High Water:** Booming
Need Radio: Yes **Cell Ph. Reception:** Good
Heavy Equipment Access: Yes
Tidally Influenced: Yes
Closest Staging Area: Bayway Refinery
Distance Bayway Docks : 8.8mi.

RESPONSE OBJECTIVES CHECKLIST

Safety
- ❑ Identify hazard(s) of emitted material
- ❑ Activate emergency services as required (911, Fire, LEPC)
- ❑ Evacuate and secure area if required
- ❑ Conduct air monitoring & site characterization
- ❑ Establish isolation perimeter, safety zones, & evacuation route
- ❑ Prepare/Implement Site Safety Plan & Medical Plan
- ❑ Restrict/secure area to properly equipped & trained personnel
- ❑ Continually evaluate site hazards & risks

Response
- ❑ Conduct external agency & internal notifications
- ❑ Identify and setup staging areas to support response ops
- ❑ Activate response contractors & equipment
- ❑ Implement response tactics to contain & recover product
- ❑ Establish command post & field communications
- ❑ Request flight traffic restriction if required
- ❑ Implement waste handling & disposal procedures as required
- ❑ Initiate decon & demob procedures when appropriate

Environmental
- ❑ Identify, prioritize, & protect socio-economic sensitivities
- ❑ Identify, prioritize, & protect environmentally sensitive areas
- ❑ Establish wildlife rescue & rehabilitation operation if required

Support
- ❑ Conduct visual assessments (spill tracking & surveillance)
- ❑ Provide personnel & equipment support as required
- ❑ Establish first aid stations & site security as required

SITE INFORMATION

Strategic Objective: Deploy protection boom to protect Tottenville Marina along the Staten Island side of the Arthur Kill.

Location: 0.5 mi. south of Outerbridge / Staten Island.

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

Staging Area: Bayway Refinery

Population Density: Low **Area Classification:** Industrial

Site Limitations: Bulkhead and concrete shoreline. Steep slope to river. Accessible from left descending bank.

ACCESS INFORMATION

Access Type: Public
Site Access: Boat
Road Surface Type: N/A
Road Condition: N/A
Road Width: N/A

WATERWAY INFORMATION

Type of Waterway: River
River Width: Low Water: ~15m

DESCRIPTION OF WORK

Deploy 2000' of protection and/or deflection boom around Tottenville Marina.

SHORELINE CHARACTERISTICS

Shoreline Type: Coarse sand beaches, exposed tidal flats, marshes.
Existing Facilities: Lighting, electricity, building

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

ConocoPhillips

CON EDISON POWER PLANT
LOWER ARTHUR KILL DIVISION – SITE W3

PROTECTION SITE
Staten Island, NY

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

[redacted]

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

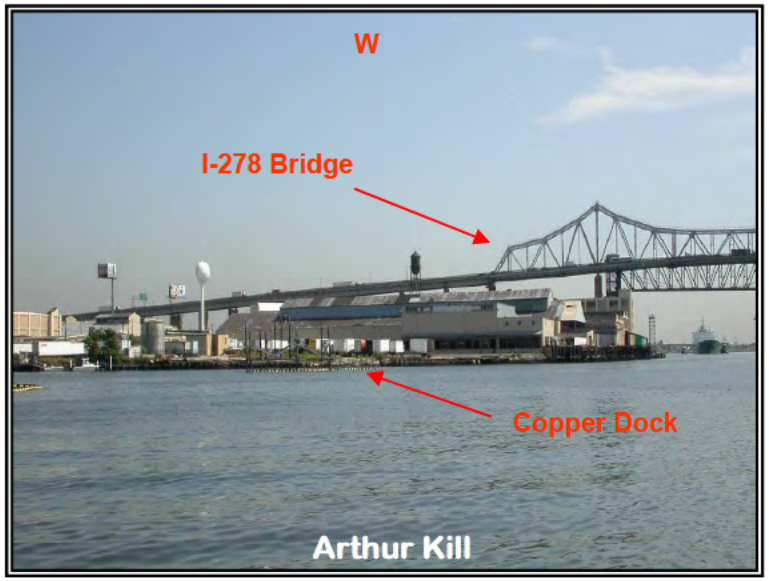
(b) (7)(F), (b) (3)

ConocoPhillips

PHELPS COPPER DOCK
UPPER ARTHUR KILL DIVISION - SITE 1

PROTECTION , CONTAINMENT & RECOVERY SITE
Arthur Kill, NJ

SITE PICTURE



RESPONSE INFORMATION

Deployment Type: Protection, Containment
Response Method: **Low Water:** Booming **High Water:** Booming
Need Radio: Yes **Cell Ph. Reception:** Good
Heavy Equipment Access: Yes
Tidally Influenced: Yes
Closest Staging Area: Bayway Refinery
Distance Bayway Docks : 0.0mi.

RESPONSE OBJECTIVES CHECKLIST

Safety
- ❑ Identify hazard(s) of emitted material
- ❑ Activate emergency services as required (911, Fire, LEPC)
- ❑ Evacuate and secure area if required
- ❑ Conduct air monitoring & site characterization
- ❑ Establish isolation perimeter, safety zones, & evacuation route
- ❑ Prepare/Implement Site Safety Plan & Medical Plan
- ❑ Restrict/secure area to properly equipped & trained personnel
- ❑ Continually evaluate site hazards & risks

Response
- ❑ Conduct external agency & internal notifications
- ❑ Identify and setup staging areas to support response ops
- ❑ Activate response contractors & equipment
- ❑ Implement response tactics to contain & recover product
- ❑ Establish command post & field communications
- ❑ Request flight traffic restriction if required
- ❑ Implement waste handling & disposal procedures as required
- ❑ Initiate decon & demob procedures when appropriate

Environmental
- ❑ Identify, prioritize, & protect socio-economic sensitivities
- ❑ Identify, prioritize, & protect environmentally sensitive areas
- ❑ Establish wildlife rescue & rehabilitation operation if required

Support
- ❑ Conduct visual assessments (spill tracking & surveillance)
- ❑ Provide personnel & equipment support as required
- ❑ Establish first aid stations & site security as required

SITE INFORMATION

Strategic Objective: Contain and Recovery Product.

Location: Phelps Copper Dock

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

Staging Area: Bayway Refinery

Population Density: Low **Area Classification:** Commercial

Site Limitations: Bulkhead and concrete shoreline. Steep slope to river. Accessible from right descending bank.

ACCESS INFORMATION

Access Type: Public
Site Access: Boat

WATERWAY INFORMATION

Type of Waterway: River
River Width: Low Water: ~15m

DESCRIPTION OF WORK

- Deploy 300' of containment boom at SE end of Copper dock to contain oil along the dock.
- Deploy 200' of boom at recovery point along dock to prevent product from migrating under the Copper dock. Recover product with vacuum trucks.

SHORELINE CHARACTERISTICS

Shoreline Type: Bulkhead, concrete
Existing Facilities: Lighting, electricity, building, phones, restrooms, water, parking, security

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

ConocoPhillips

PSE&G WATER INTAKE / PILES CREEK
UPPER ARTHUR KILL DIVISION - SITE B18

PROTECTION AREA
Arthur Kill, NJ

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

[redacted]

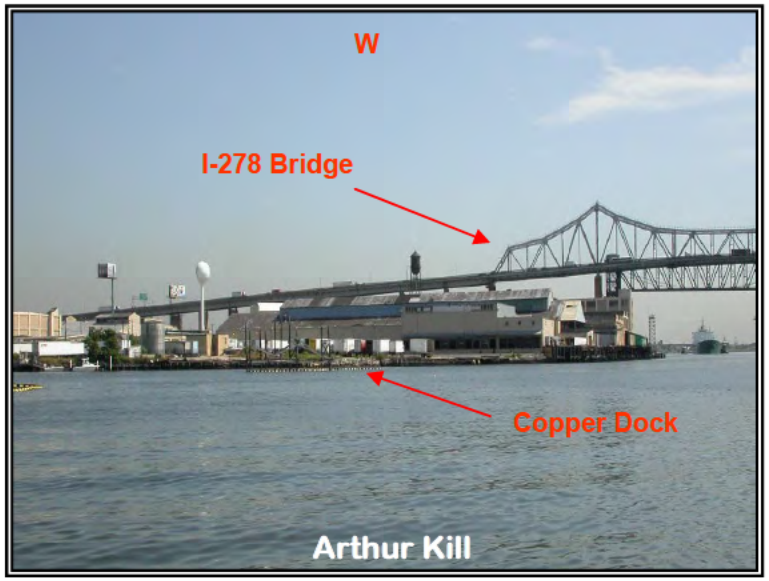
(b) (7)(F), (b) (3)

ConocoPhillips

MORSES CREEK
UPPER ARTHUR KILL DIVISION - SITE B17

PROTECTION / CONTAINMENT / RECOVERY SITE
Arthur Kill, NJ

SITE PICTURE



SITE INFORMATION

Strategic Objective: Deploy protection boom to prevent product from impacting Morses Creek along the New Jersey side of the Arthur Kill.
Location: Arthur Kill; Linden, NJ 1/4 mile SW of Goethals Bridge

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

Staging Area: Bayway Refinery (Access by vehicle or boat, partial vehicle access)

Population Density: Low **Area Classification:** Commercial
Site Limitations: Bulkhead and concrete shoreline. Steep slope to river. Accessible from right descending bank.

Special Environmental Considerations: WILDLIFE: Forage fish, incl. killifish, bay anchovy & Atlantic silversides; wading birds; waterfowl, incl. black ducks, mallard, blue/green wing teal, gadwalls, ruddy ducks, coot, Canada geese, & mute swans; hooded, red-breasted, and common mergansers; wintering canvasback, scaup,gadwalls, buffleheads, etc.

ACCESS INFORMATION

Access Type: Public
Site Access: Boat
Road Surface Type: N/A
Road Condition: N/A
Road Width: N/A

WATERWAY INFORMATION

Type of Waterway: River
River Width: Low Water: ~15m

DESCRIPTION OF WORK

Deploy 300' of protection and/or deflection boom at Morses Creek intersection with Arthur Kill.

SHORELINE CHARACTERISTICS

Shoreline Type: Bulkhead, concrete
Beach Length (Ft): N/A
Existing Facilities: Lighting, electricity, building, phones, restrooms, water, parking, security

RESPONSE INFORMATION

Deployment Type: Protection, Containment
Response Method: **Low Water:** Booming **High Water:** Booming
Need Radio: Yes **Cell Ph. Reception:** Good
Heavy Equipment Access: Yes
Tidally Influenced: Yes
Closest Staging Area: Bayway Refinery
Distance Bayway Docks : 0.3mi.
Additional Information: Tidal Range 5-6ft., Physical Description: Small, 2 mile long meandering tidal creek surrounded by salt marsh.

RESPONSE OBJECTIVES CHECKLIST

Safety
- ❑ Identify hazard(s) of emitted material
- ❑ Activate emergency services as required (911, Fire, LEPC)
- ❑ Evacuate and secure area if required
- ❑ Conduct air monitoring & site characterization
- ❑ Establish isolation perimeter, safety zones, & evacuation route
- ❑ Prepare/Implement Site Safety Plan & Medical Plan
- ❑ Restrict/secure area to properly equipped & trained personnel
- ❑ Continually evaluate site hazards & risks

Response
- ❑ Conduct external agency & internal notifications
- ❑ Identify and setup staging areas to support response ops
- ❑ Activate response contractors & equipment
- ❑ Implement response tactics to contain & recover product
- ❑ Establish command post & field communications
- ❑ Request flight traffic restriction if required
- ❑ Implement waste handling & disposal procedures as required
- ❑ Initiate decon & demob procedures when appropriate

Environmental
- ❑ Identify, prioritize, & protect socio-economic sensitivities
- ❑ Identify, prioritize, & protect environmentally sensitive areas
- ❑ Establish wildlife rescue & rehabilitation operation if required

Support
- ❑ Conduct visual assessments (spill tracking & surveillance)
- ❑ Provide personnel & equipment support as required
- ❑ Establish first aid stations & site security as required

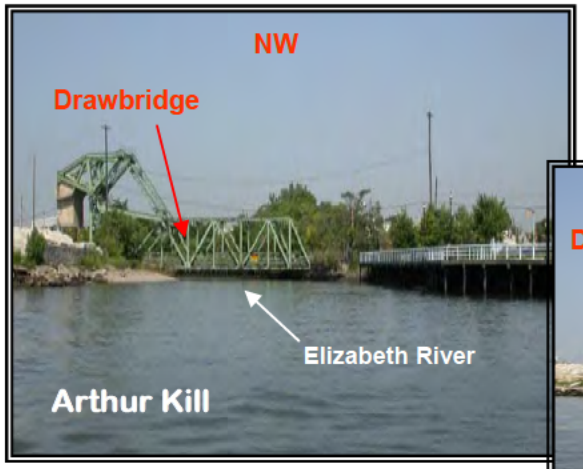
(b) (7)(F), (b) (3)

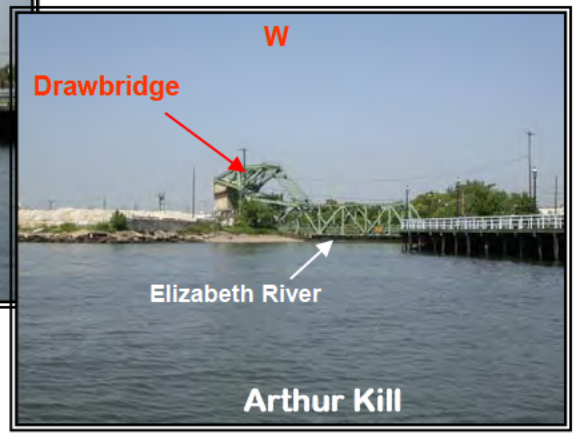
ConocoPhillips

ELIZABETH RIVER
UPPER ARTHUR KILL DIVISION - SITE B15

PROTECTION SITE
Arthur Kill, NJ

SITE PICTURE





SITE INFORMATION

Strategic Objective: Deploy protection boom to prevent product from impacting the Elizabeth River along the New Jersey side of the Arthur Kill.
Location: Arthur Kill / Elizabeth, NJ; 0.6nm northeast of Goethals Bridge.

Latitude: 40° 38' 40" **Longitude:** 74° 11' 20"

Staging Area: Bayway Refinery

Population Density: Low **Area Classification:** Recreational

Site Limitations: Bulkhead and concrete shoreline. Medium slope to river. Accessible from right descending bank.

ACCESS INFORMATION

Access Type: Public
Site Access: Boat
Road Surface Type: N/A
Road Condition: N/A
Road Width: N/A

WATERWAY INFORMATION

Type of Waterway: Creek
River Width: Low Water: ~15m

DESCRIPTION OF WORK

Deploy 200' of protection and/or deflection boom across the mouth of the Elizabeth River entrance.

SHORELINE CHARACTERISTICS

Shoreline Type: Fine Sand Beaches, Marshes, Man-Made Structures
Beach Length (Ft): N/A
Existing Facilities: None

RESPONSE INFORMATION

Deployment Type: Protection
Response Method: **Low Water:** Booming **High Water:** Booming
Need Radio: Yes **Cell Ph. Reception:** Good
Heavy Equipment Access: Yes
Tidally Influenced: Yes
Closest Staging Area: Bayway Refinery
Distance Bayway Docks : 1.17mi.
Additional Information: Tidal Range 5-6ft.

RESPONSE OBJECTIVES CHECKLIST

Safety
- ❑ Identify hazard(s) of emitted material
- ❑ Activate emergency services as required (911, Fire, LEPC)
- ❑ Evacuate and secure area if required
- ❑ Conduct air monitoring & site characterization
- ❑ Establish isolation perimeter, safety zones, & evacuation route
- ❑ Prepare/Implement Site Safety Plan & Medical Plan
- ❑ Restrict/secure area to properly equipped & trained personnel
- ❑ Continually evaluate site hazards & risks

Response
- ❑ Conduct external agency & internal notifications
- ❑ Identify and setup staging areas to support response ops
- ❑ Activate response contractors & equipment
- ❑ Implement response tactics to contain & recover product
- ❑ Establish command post & field communications
- ❑ Request flight traffic restriction if required
- ❑ Implement waste handling & disposal procedures as required
- ❑ Initiate decon & demob procedures when appropriate

Environmental
- ❑ Identify, prioritize, & protect socio-economic sensitivities
- ❑ Identify, prioritize, & protect environmentally sensitive areas
- ❑ Establish wildlife rescue & rehabilitation operation if required

Support
- ❑ Conduct visual assessments (spill tracking & surveillance)
- ❑ Provide personnel & equipment support as required
- ❑ Establish first aid stations & site security as required

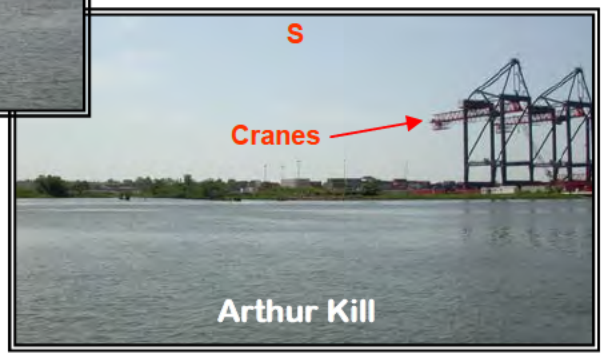
(b) (7)(F), (b) (3)

ConocoPhillips

BRIDGE CREEK
UPPER ARTHUR KILL DIVISION - SITE A93

PROTECTION SITE
Staten Island, NY

SITE PICTURE



RESPONSE INFORMATION

Deployment Type: Protection
Response Method: **Low Water:** Booming **High Water:** Booming
Need Radio: Yes **Cell Ph. Reception:** Good
Heavy Equipment Access: Yes
Tidally Influenced: Yes
Closest Staging Area: Bayway Refinery
Distance Bayway Docks : 1.49mi.
Additional Information: Tidal Range 5-6 ft.

SITE INFORMATION

Strategic Objective: Deploy protection boom to prevent product from impacting Bridge Creek along the Staten Island side of the Arthur Kill.
Location: Arthur Kill / Elizabeth, NJ; 0.8nm northeast of Goethals Bridge; 71 Front St. Elizabeth N.J. 07206

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

Staging Area: Bayway Refinery (Access by boat)

Population Density: Low **Area Classification:** Rural
Site Limitations: Grass, dirt and rock shoreline. Medium slope to river. Accessible from left descending bank.

Special Environmental Considerations: WILDLIFE: Birds, including herons, egrets, black ducks, pheasants, waterfowl, and shorebirds. HABITAT: Tidal wetlands, tidal flats, tidal/freshwater ponds; feeding area for birds. THREATENED/ENDANGERD: Penegrine falcon. OTHER (RR): NYC Parks is conducting an extensive marsh restoration project in this area.

ACCESS INFORMATION

Access Type: Public
Site Access: Boat
Road Surface Type: N/A
Road Condition: N/A
Road Width: N/A

WATERWAY INFORMATION

Type of Waterway: River
River Width: Low Water: ~15m

DESCRIPTION OF WORK

Deploy 500 ft. of protection boom across Bridge Creek.

SHORELINE CHARACTERISTICS

Shoreline Type: Exposed Tidal Flats, Marshes, Man-made structures.
Beach Length (Ft): N/A
Existing Facilities: None

RESPONSE OBJECTIVES CHECKLIST

Safety
- ❑ Identify hazard(s) of emitted material
- ❑ Activate emergency services as required (911, Fire, LEPC)
- ❑ Evacuate and secure area if required
- ❑ Conduct air monitoring & site characterization
- ❑ Establish isolation perimeter, safety zones, & evacuation route
- ❑ Prepare/Implement Site Safety Plan & Medical Plan
- ❑ Restrict/secure area to properly equipped & trained personnel
- ❑ Continually evaluate site hazards & risks

Response
- ❑ Conduct external agency & internal notifications
- ❑ Identify and setup staging areas to support response ops
- ❑ Activate response contractors & equipment
- ❑ Implement response tactics to contain & recover product
- ❑ Establish command post & field communications
- ❑ Request flight traffic restriction if required
- ❑ Implement waste handling & disposal procedures as required
- ❑ Initiate decon & demob procedures when appropriate

Environmental
- ❑ Identify, prioritize, & protect socio-economic sensitivities
- ❑ Identify, prioritize, & protect environmentally sensitive areas
- ❑ Establish wildlife rescue & rehabilitation operation if required

Support
- ❑ Conduct visual assessments (spill tracking & surveillance)
- ❑ Provide personnel & equipment support as required
- ❑ Establish first aid stations & site security as required

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

ConocoPhillips

SLATER PARK
UPPER ARTHUR KILL DIVISION - SITE A75

PROTECTION SITE
Arthur Kill, NJ

SITE PICTURE

RESPONSE INFORMATION

Deployment Type: Protection
Response Method: **Low Water:** Booming **High Water:** Booming
Need Radio: Yes **Cell Ph. Reception:** Good
Heavy Equipment Access: Yes
Tidally Influenced: Yes
Closest Staging Area: Bayway Refinery
Distance Bayway Docks: 1.82mi.

SITE INFORMATION

Strategic Objective: Deploy protection boom along shoreline to prevent from impacting Slater Park along the New Jersey side of Arthur Kill / Newark Bay.
Location: Slater Park at the intersection of the Arthur Kill and Newark Bay.

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

Staging Area: Bayway Refinery

Population Density: Low **Area Classification:** Rural

Site Limitations: Grass, dirt, rock and marsh shoreline. Slight slope to river. Accessible from right descending bank.

ACCESS INFORMATION

Access Type: Public
Site Access: Boat
Road Surface Type: N/A
Road Condition: N/A
Road Width: N/A

WATERWAY INFORMATION

Type of Waterway: River
River Width: Low Water: ~15m

DESCRIPTION OF WORK

Deploy 1900ft. of protection boom along the shoreline to protect Slater Park shoreline.

SHORELINE CHARACTERISTICS

Shoreline Type: Grass, dirt, rock, marsh
Beach Length (Ft): N/A
Existing Facilities: None

RESPONSE OBJECTIVES CHECKLIST

Safety
- ❑ Identify hazard(s) of emitted material
- ❑ Activate emergency services as required (911, Fire, LEPC)
- ❑ Evacuate and secure area if required
- ❑ Conduct air monitoring & site characterization
- ❑ Establish isolation perimeter, safety zones, & evacuation route
- ❑ Prepare/Implement Site Safety Plan & Medical Plan
- ❑ Restrict/secure area to properly equipped & trained personnel
- ❑ Continually evaluate site hazards & risks

Response
- ❑ Conduct external agency & internal notifications
- ❑ Identify and setup staging areas to support response ops
- ❑ Activate response contractors & equipment
- ❑ Implement response tactics to contain & recover product
- ❑ Establish command post & field communications
- ❑ Request flight traffic restriction if required
- ❑ Implement waste handling & disposal procedures as required
- ❑ Initiate decon & demob procedures when appropriate

Environmental
- ❑ Identify, prioritize, & protect socio-economic sensitivities
- ❑ Identify, prioritize, & protect environmentally sensitive areas
- ❑ Establish wildlife rescue & rehabilitation operation if required

Support
- ❑ Conduct visual assessments (spill tracking & surveillance)
- ❑ Provide personnel & equipment support as required
- ❑ Establish first aid stations & site security as required

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

ConocoPhillips

MARINER'S MARSH
UPPER ARTHUR KILL DIVISION – SITE A74

PROTECTION SITE
Staten Island, NY

SITE PICTURE

NO PICTURE AVAILABLE

SITE INFORMATION

Strategic Objective: Deploy Protection boom along shoreline to prevent product from impacting Mariners Marsh along the Staten Island side of Arthur Kill / Newark Bay.
Location: Northwest corner of Staten Island / Port Ivory; west of Holland Ave

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

Staging Area: Bayway Refinery (Access by Boat)

Population Density: Low **Area Classification:** Rural
Site Limitations: Grass and dirt shoreline. Slight slope to river. Accessible from right descending bank.

Special Environmental Considerations: WILDLIFE: Birds, including herons, egrets, marsh wren, and shorebirds; fish. HABITAT; breeding, feeding and wintering area; tidal wetlands / freshwater ponds; part of the Harbor Herons ecosystem. THREATENED / ENDANGERED; Northern harrier (NYS threatened) OTHER(RR); Heavy use by public for h king.

ACCESS INFORMATION

Access Type: Public
Site Access: Boat
Road Surface Type: N/A
Road Condition: N/A
Road Width: N/A

WATERWAY INFORMATION

Type of Waterway: Creek
River Width: Low Water: ~15m

DESCRIPTION OF WORK

Deploy 1200' of protection boom along shoreline across Mariners Marsh Embayment.

SHORELINE CHARACTERISTICS

Shoreline Type: gravel beaches, sheltered tidal flats
Beach Length (Ft): N/A
Existing Facilities: None

RESPONSE INFORMATION

Deployment Type: Protection
Response Method: **Low Water:** Booming **High Water:** Booming
Need Radio: Yes **Cell Ph. Reception:** Good
Heavy Equipment Access: Yes
Tidally Influenced: Yes
Closest Staging Area: Bayway Refinery
Distance Bayway Docks : 1.57mi.
Additional Information: Tidal Range 5-6 ft.

RESPONSE OBJECTIVES CHECKLIST

Safety
- ❑ Identify hazard(s) of emitted material
- ❑ Activate emergency services as required (911, Fire, LEPC)
- ❑ Evacuate and secure area if required
- ❑ Conduct air monitoring & site characterization
- ❑ Establish isolation perimeter, safety zones, & evacuation route
- ❑ Prepare/Implement Site Safety Plan & Medical Plan
- ❑ Restrict/secure area to properly equipped & trained personnel
- ❑ Continually evaluate site hazards & risks

Response
- ❑ Conduct external agency & internal notifications
- ❑ Identify and setup staging areas to support response ops
- ❑ Activate response contractors & equipment
- ❑ Implement response tactics to contain & recover product
- ❑ Establish command post & field communications
- ❑ Request flight traffic restriction if required
- ❑ Implement waste handling & disposal procedures as required
- ❑ Initiate decon & demob procedures when appropriate

Environmental
- ❑ Identify, prioritize, & protect socio-economic sensitivities
- ❑ Identify, prioritize, & protect environmentally sensitive areas
- ❑ Establish wildlife rescue & rehabilitation operation if required

Support
- ❑ Conduct visual assessments (spill tracking & surveillance)
- ❑ Provide personnel & equipment support as required
- ❑ Establish first aid stations & site security as required

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

ConocoPhillips

NECK CREEK
UPPER ARTHUR KILL DIVISION – SITE A22

PROTECTION SITE
Staten Island, NY

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

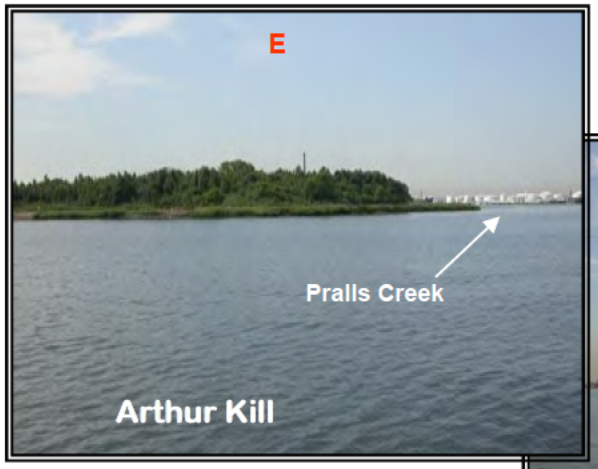
(b) (7)(F), (b) (3)

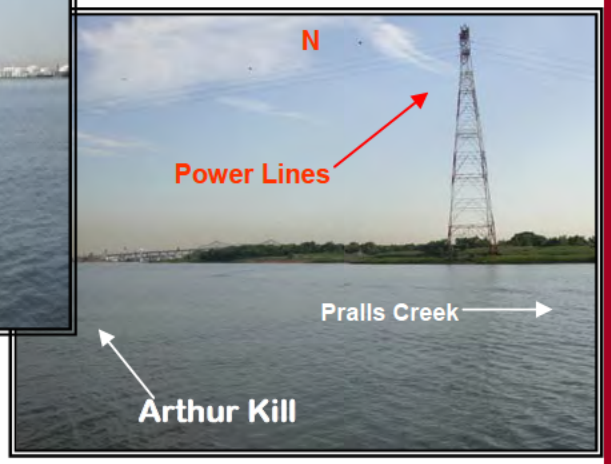
ConocoPhillips

PRALL'S ISLAND
UPPER ARTHUR KILL DIVISION – SITE A21

PROTECTION SITE
Staten Island, NY

SITE PICTURE





SITE INFORMATION

Strategic Objective: Deploy protection boom to prevent product from impacting Prall's Island, Prall's Creek and waterways east of Prall's Isalnd.

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

Staging Area: Bayway Refinery (Access by Boat Only)

Population Density: Low **Area Classification:** Industrial
Site Limitations: Dirt and grass shoreline. Slight slope to river. Accessible from right descending bank.

Special Environmental Considerations: Wading birds, including herons, egrets, and ibises; surface feeding coastal seabirds, including gulls; waterfowl, including ducks and geese important nesting area for large numbers of colonial waterbirds (especially herons) as there is a relative shortage of suitable nesting areas in the region. NYC Parks is conducting an extensive salt marsh restoration.

ACCESS INFORMATION

Access Type: Public
Site Access: Boat
Road Surface Type: N/A
Road Condition: N/A
Road Width: N/A

WATERWAY INFORMATION

Type of Waterway: River
River Width: Low Water: ~15m

DESCRIPTION OF WORK

Deploy 7500 ft. of protection and or deflection boom around the west side of Prall's Is. from high tension tower north of Prall's Is. to Staten Is. South of Prall's Is.

SHORELINE CHARACTERISTICS

Shoreline Type: Dirt, grass
Beach Length (Ft): N/A
Existing Facilities: None

RESPONSE INFORMATION

Deployment Type: Protection
Response Method: **Low Water:** Booming **High Water:** Booming
Need Radio: Yes **Cell Ph. Reception:** Good
Heavy Equipment Access: Yes
Tidally Influenced: Yes
Closest Staging Area: Bayway Refinery
Distance Bayway Docks: 1.54mi.
Additional Information: Tidal Range 5-6 ft. Uninhabited, densley wooded island with wetlands around perimeter; large, undisturbed upland and wetland environment.

RESPONSE OBJECTIVES CHECKLIST

Safety
- ❑ Identify hazard(s) of emitted material
- ❑ Activate emergency services as required (911, Fire, LEPC)
- ❑ Evacuate and secure area if required
- ❑ Conduct air monitoring & site characterization
- ❑ Establish isolation perimeter, safety zones, & evacuation route
- ❑ Prepare/Implement Site Safety Plan & Medical Plan
- ❑ Restrict/secure area to properly equipped & trained personnel
- ❑ Continually evaluate site hazards & risks

Response
- ❑ Conduct external agency & internal notifications
- ❑ Identify and setup staging areas to support response ops
- ❑ Activate response contractors & equipment
- ❑ Implement response tactics to contain & recover product
- ❑ Establish command post & field communications
- ❑ Request flight traffic restriction if required
- ❑ Implement waste handling & disposal procedures as required
- ❑ Initiate decon & demob procedures when appropriate

Environmental
- ❑ Identify, prioritize, & protect socio-economic sensitivities
- ❑ Identify, prioritize, & protect environmentally sensitive areas
- ❑ Establish wildlife rescue & rehabilitation operation if required

Support
- ❑ Conduct visual assessments (spill tracking & surveillance)
- ❑ Provide personnel & equipment support as required
- ❑ Establish first aid stations & site security as required

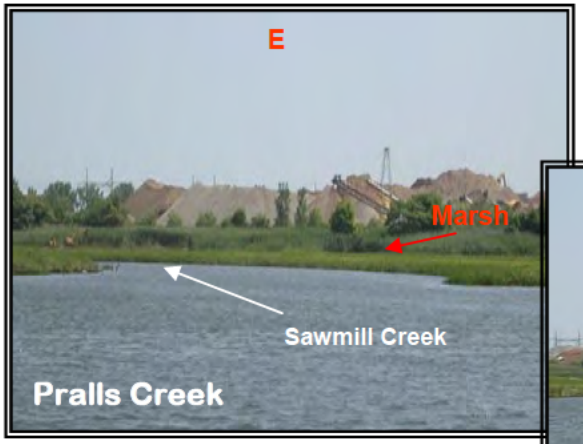
(b) (7)(F), (b) (3)

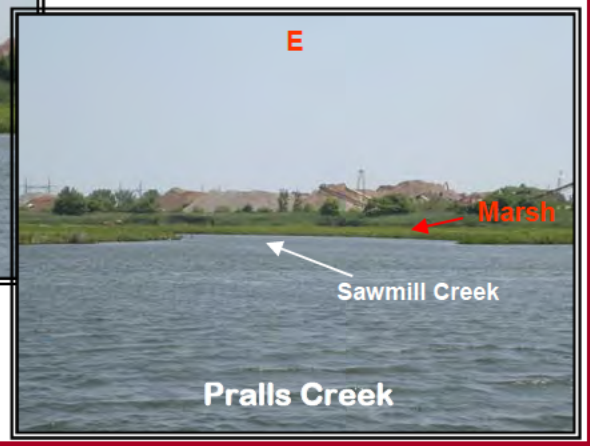
ConocoPhillips

SAWMILL CREEK
UPPER ARTHUR KILL DIVISION – SITE A20

PROTECTION SITE
Staten Island, NY

SITE PICTURE





SITE INFORMATION

Strategic Objective: Deploy protection boom to prevent product from impacting Sawmill Creek along the Staten Island bank of the Arthur Kill just east of Prall's Island.

Location: Sawmill Creek along the Staten Island bank east of Prall's Island.

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

Staging Area: Bayway Refinery

Population Density: Low **Area Classification:** Rural

Site Limitations: Marsh shoreline. Slight slope to river. Accessible from left descending bank.

ACCESS INFORMATION

Access Type: Public
Site Access: Boat
Road Surface Type: N/A
Road Condition: N/A
Road Width: N/A

WATERWAY INFORMATION

Type of Waterway: Creek
River Width: Low Water: ~15m

DESCRIPTION OF WORK

Deploy 300 ft. of protection boom across Sawmill Creek.

SHORELINE CHARACTERISTICS

Shoreline Type: Marsh
Beach Length (Ft): N/A
Existing Facilities: None

RESPONSE INFORMATION

Deployment Type: Protection
Response Method: **Low Water:** Booming **High Water:** Booming
Need Radio: Yes **Cell Ph. Reception:** Good
Heavy Equipment Access: Yes
Tidally Influenced: Yes
Closest Staging Area: Bayway Refinery
Distance Bayway Docks : 1.46mi.

RESPONSE OBJECTIVES CHECKLIST

Safety
- ❑ Identify hazard(s) of emitted material
- ❑ Activate emergency services as required (911, Fire, LEPC)
- ❑ Evacuate and secure area if required
- ❑ Conduct air monitoring & site characterization
- ❑ Establish isolation perimeter, safety zones, & evacuation route
- ❑ Prepare/Implement Site Safety Plan & Medical Plan
- ❑ Restrict/secure area to properly equipped & trained personnel
- ❑ Continually evaluate site hazards & risks

Response
- ❑ Conduct external agency & internal notifications
- ❑ Identify and setup staging areas to support response ops
- ❑ Activate response contractors & equipment
- ❑ Implement response tactics to contain & recover product
- ❑ Establish command post & field communications
- ❑ Request flight traffic restriction if required
- ❑ Implement waste handling & disposal procedures as required
- ❑ Initiate decon & demob procedures when appropriate

Environmental
- ❑ Identify, prioritize, & protect socio-economic sensitivities
- ❑ Identify, prioritize, & protect environmentally sensitive areas
- ❑ Establish wildlife rescue & rehabilitation operation if required

Support
- ❑ Conduct visual assessments (spill tracking & surveillance)
- ❑ Provide personnel & equipment support as required
- ❑ Establish first aid stations & site security as required

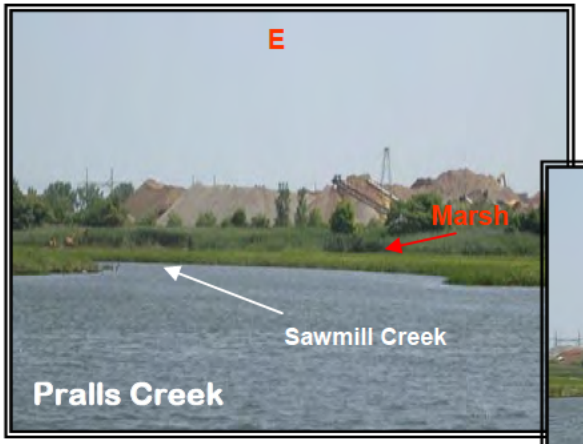
(b) (7)(F), (b) (3)

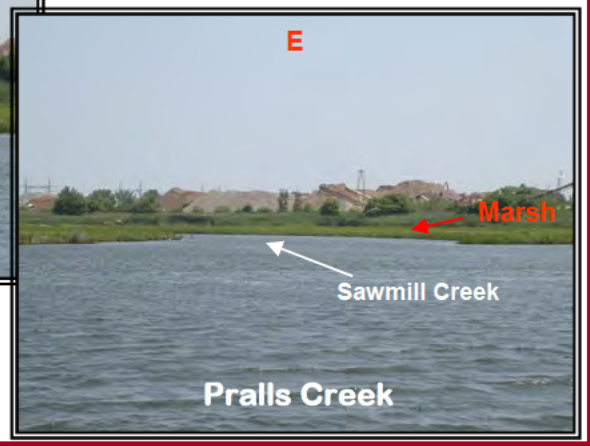
ConocoPhillips

PRALL'S CREEK
UPPER ARTHUR KILL DIVISION – SITE A19

PROTECTION SITE
Staten Island, NY

SITE PICTURE





SITE INFORMATION

Strategic Objective: Deploy protection boom to prevent product from impacting Prall's Creek inlets along the Staten Island bank of the Arthur Kill just east of Prall's Island.

Location: Prall's Creek inlets along the Staten Island bank east of Prall's Island.

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

Staging Area: Bayway Refinery

Population Density: Low **Area Classification:** Rural

Site Limitations: Marsh shoreline. Slight slope to river. Accessible from left descending bank.

ACCESS INFORMATION

Access Type: Public
Site Access: Boat
Road Surface Type: N/A
Road Condition: N/A
Road Width: N/A

WATERWAY INFORMATION

Type of Waterway: Creek
River Width: Low Water: ~15m

DESCRIPTION OF WORK

Deploy 250', 200', and 3-50' sections of protection boom across inlets to Prall's Creek.

SHORELINE CHARACTERISTICS

Shoreline Type: Marsh
Beach Length (Ft): N/A
Existing Facilities: None

RESPONSE INFORMATION

Deployment Type: Protection
Response Method: **Low Water:** Booming **High Water:** Booming
Need Radio: Yes **Cell Ph. Reception:** Good
Heavy Equipment Access: Yes
Tidally Influenced: Yes
Closest Staging Area: Bayway Refinery
Distance Bayway Docks : 1.27mi.

RESPONSE OBJECTIVES CHECKLIST

Safety
- ❑ Identify hazard(s) of emitted material
- ❑ Activate emergency services as required (911, Fire, LEPC)
- ❑ Evacuate and secure area if required
- ❑ Conduct air monitoring & site characterization
- ❑ Establish isolation perimeter, safety zones, & evacuation route
- ❑ Prepare/Implement Site Safety Plan & Medical Plan
- ❑ Restrict/secure area to properly equipped & trained personnel
- ❑ Continually evaluate site hazards & risks

Response
- ❑ Conduct external agency & internal notifications
- ❑ Identify and setup staging areas to support response ops
- ❑ Activate response contractors & equipment
- ❑ Implement response tactics to contain & recover product
- ❑ Establish command post & field communications
- ❑ Request flight traffic restriction if required
- ❑ Implement waste handling & disposal procedures as required
- ❑ Initiate decon & demob procedures when appropriate

Environmental
- ❑ Identify, prioritize, & protect socio-economic sensitivities
- ❑ Identify, prioritize, & protect environmentally sensitive areas
- ❑ Establish wildlife rescue & rehabilitation operation if required

Support
- ❑ Conduct visual assessments (spill tracking & surveillance)
- ❑ Provide personnel & equipment support as required
- ❑ Establish first aid stations & site security as required

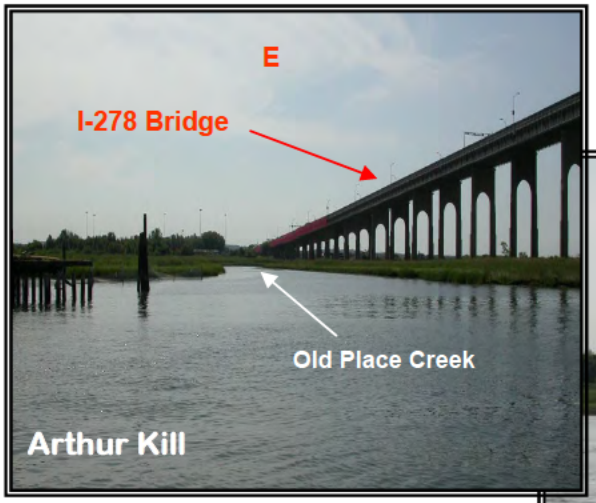
(b) (7)(F), (b) (3)

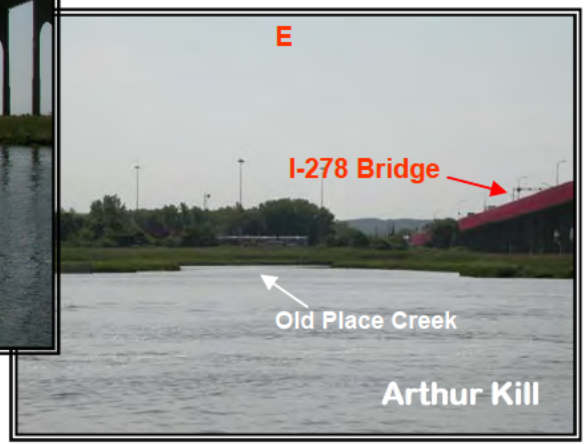
ConocoPhillips

OLD PLACE CREEK
UPPER ARTHUR KILL DIVISION – SITE A16

PROTECTION SITE
Staten Island, NY

SITE PICTURE





SITE INFORMATION

Strategic Objective: Deploy protection boom to prevent product from impacting Old Place Creek along the Staten Island bank of Arthur Kill.
Location: NW corner of Staten Is. On Arthur Kill, Goethals Bridge Area
(b) (3), (b) (7)(F)

Staging Area: Bayway Refinery (Access by vehicle or boat)

Population Density: Low **Area Classification:** Rural
Site Limitations: Marsh shoreline. Slight slope to river. Accessible from left descending bank.

Special Environmental Considerations:
Birds, including wading birds (herons, egrets, and ibises), shorebirds and waterfowl. Feeding grounds for egrets and other wading birds from nearby colonies; wintering area for waterfowl; migratory stopover. NYC Parks is conducting an extensive marsh restoration project in this area; Part of the Harbor Herons ecosystem.

ACCESS INFORMATION

Access Type: Public
Site Access: Boat
Road Surface Type: N/A
Road Condition: N/A
Road Width: N/A

WATERWAY INFORMATION

Type of Waterway: Creek
River Width: Low Water: ~15m

DESCRIPTION OF WORK

Deploy 1000 ft. of deflection and or protection boom across Old Place Creek.

SHORELINE CHARACTERISTICS

Shoreline Type: Exposed Tidal Flats, Marshes
Beach Length (Ft): N/A
Existing Facilities: None

RESPONSE INFORMATION

Deployment Type: Protection
Response Method: **Low Water:** Booming **High Water:** Booming
Need Radio: Yes **Cell Ph. Reception:** Good
Heavy Equipment Access: Yes
Tidally Influenced: Yes
Closest Staging Area: Bayway Refinery
Distance Bayway Docks : 0.58mi
Additional Information: Tidal Range 5-6 ft. Meandering tidal creek draining tidal and freshwater wetlands and high marsh

RESPONSE OBJECTIVES CHECKLIST

Safety
- ❑ Identify hazard(s) of emitted material
- ❑ Activate emergency services as required (911, Fire, LEPC)
- ❑ Evacuate and secure area if required
- ❑ Conduct air monitoring & site characterization
- ❑ Establish isolation perimeter, safety zones, & evacuation route
- ❑ Prepare/Implement Site Safety Plan & Medical Plan
- ❑ Restrict/secure area to properly equipped & trained personnel
- ❑ Continually evaluate site hazards & risks

Response
- ❑ Conduct external agency & internal notifications
- ❑ Identify and setup staging areas to support response ops
- ❑ Activate response contractors & equipment
- ❑ Implement response tactics to contain & recover product
- ❑ Establish command post & field communications
- ❑ Request flight traffic restriction if required
- ❑ Implement waste handling & disposal procedures as required
- ❑ Initiate decon & demob procedures when appropriate

Environmental
- ❑ Identify, prioritize, & protect socio-economic sensitivities
- ❑ Identify, prioritize, & protect environmentally sensitive areas
- ❑ Establish wildlife rescue & rehabilitation operation if required

Support
- ❑ Conduct visual assessments (spill tracking & surveillance)
- ❑ Provide personnel & equipment support as required
- ❑ Establish first aid stations & site security as required

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

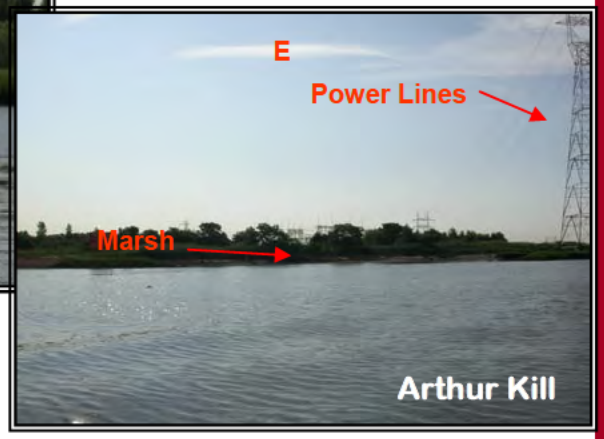
(b) (7)(F), (b) (3)

ConocoPhillips

COLLECTION POINT – STATEN ISLAND #1&2
UPPER ARTHUR KILL DIVISION – SITE 6

CONTAINMENT / RECOVERY AREA
Staten Island, NY

SITE PICTURE



RESPONSE INFORMATION

Deployment Type: Containment / Recovery
Response Method: **Low Water:** Booming **High Water:** Booming
Need Radio: Yes **Cell Ph. Reception:** Good
Heavy Equipment Access: Yes
Tidally Influenced: Yes
Closest Staging Area: Bayway Refinery
Distance Bayway Docks : 0.86mi.

SITE INFORMATION

Strategic Objective: Contain & Recover Product

Location: Collection point located on Staten Island north of Prall's Island.

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

[redacted]

Staging Area: Bayway Refinery

Population Density: Low

Area Classification: Industrial

Site Limitations: Dirt, grass and marsh shoreline. Slight slope to river. Accessible from right descending bank.

ACCESS INFORMATION

Access Type: Public
Site Access: Boat
Road Surface Type: N/A

WATERWAY INFORMATION

Type of Waterway: River
River Width: Low Water: ~15m

DESCRIPTION OF WORK

Deploy 2-500' sections of containment boom from natural collection points along the left descending bank. Recover product using sorbents and pom-poms.

SHORELINE CHARACTERISTICS

Shoreline Type: Dirt, grass, marsh
Beach Length (Ft): N/A
Existing Facilities: None

RESPONSE OBJECTIVES CHECKLIST

Safety
- ❑ Identify hazard(s) of emitted material
- ❑ Activate emergency services as required (911, Fire, LEPC)
- ❑ Evacuate and secure area if required
- ❑ Conduct air monitoring & site characterization
- ❑ Establish isolation perimeter, safety zones, & evacuation route
- ❑ Prepare/Implement Site Safety Plan & Medical Plan
- ❑ Restrict/secure area to properly equipped & trained personnel
- ❑ Continually evaluate site hazards & risks

Response
- ❑ Conduct external agency & internal notifications
- ❑ Identify and setup staging areas to support response ops
- ❑ Activate response contractors & equipment
- ❑ Implement response tactics to contain & recover product
- ❑ Establish command post & field communications
- ❑ Request flight traffic restriction if required
- ❑ Implement waste handling & disposal procedures as required
- ❑ Initiate decon & demob procedures when appropriate

Environmental
- ❑ Identify, prioritize, & protect socio-economic sensitivities
- ❑ Identify, prioritize, & protect environmentally sensitive areas
- ❑ Establish wildlife rescue & rehabilitation operation if required

Support
- ❑ Conduct visual assessments (spill tracking & surveillance)
- ❑ Provide personnel & equipment support as required
- ❑ Establish first aid stations & site security as required

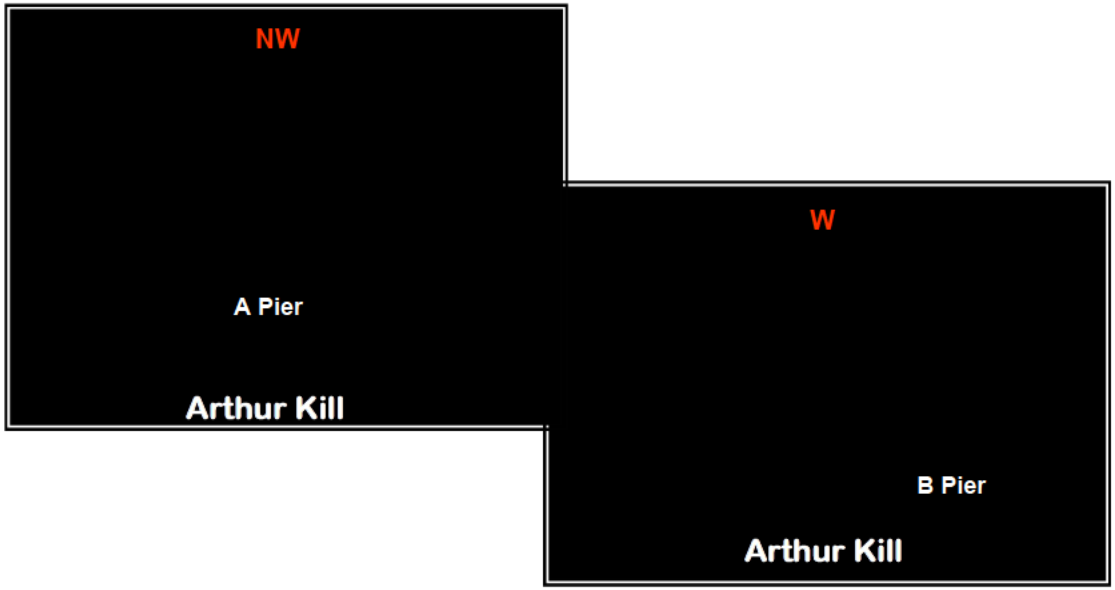
(b) (7)(F), (b) (3)

ConocoPhillips

BAYWAY REFINERY A&B PIERS
UPPER ARTHUR KILL DIVISION- SITE 4

PROTECTION , CONTAINMENT
Arthur Kill, NJ

SITE PICTURE



SITE INFORMATION

Strategic Objective: Contain and Recovery Product.

Location: Bayway Refinery Pier A&B

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

Staging Area: Bayway Refinery

Population Density: Low

Area Classification: Commercial

Site Limitations: Bulkhead and concrete shoreline. Steep slope to river. Accessible from right descending bank.

ACCESS INFORMATION

Access Type: Public
Site Access: Boat
Road Surface Type: N/A

WATERWAY INFORMATION

Type of Waterway: River
River Width: Low Water: ~15m

DESCRIPTION OF WORK

Deploy 2000' of containment / protection boom around vessel if a spill occurs at the A or B Pier.

SHORELINE CHARACTERISTICS

Shoreline Type: Bulkhead, concrete
Beach Length (Ft): N/A
Existing Facilities: Lighting, electricity, building, phones, restrooms, water, parking, security

RESPONSE INFORMATION

Deployment Type: Protection, Containment
Response Method: **Low Water:** Booming **High Water:** Booming
Need Radio: Yes **Cell Ph. Reception:** Good
Heavy Equipment Access: Yes
Tidally Influenced: Yes
Closest Staging Area: Bayway Refinery
Distance Bayway Docks : 0.292mi.

RESPONSE OBJECTIVES CHECKLIST

Safety
- ❑ Identify hazard(s) of emitted material
- ❑ Activate emergency services as required (911, Fire, LEPC)
- ❑ Evacuate and secure area if required
- ❑ Conduct air monitoring & site characterization
- ❑ Establish isolation perimeter, safety zones, & evacuation route
- ❑ Prepare/Implement Site Safety Plan & Medical Plan
- ❑ Restrict/secure area to properly equipped & trained personnel
- ❑ Continually evaluate site hazards & risks

Response
- ❑ Conduct external agency & internal notifications
- ❑ Identify and setup staging areas to support response ops
- ❑ Activate response contractors & equipment
- ❑ Implement response tactics to contain & recover product
- ❑ Establish command post & field communications
- ❑ Request flight traffic restriction if required
- ❑ Implement waste handling & disposal procedures as required
- ❑ Initiate decon & demob procedures when appropriate

Environmental
- ❑ Identify, prioritize, & protect socio-economic sensitivities
- ❑ Identify, prioritize, & protect environmentally sensitive areas
- ❑ Establish wildlife rescue & rehabilitation operation if required

Support
- ❑ Conduct visual assessments (spill tracking & surveillance)
- ❑ Provide personnel & equipment support as required
- ❑ Establish first aid stations & site security as required

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

ConocoPhillips

BAYWAY SALTWATER PUMP HOUSE
UPPER ARTHUR KILL DIVISION- SITE 5

PROTECTION , CONTAINMENT
Arthur Kill, NJ

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

[redacted]

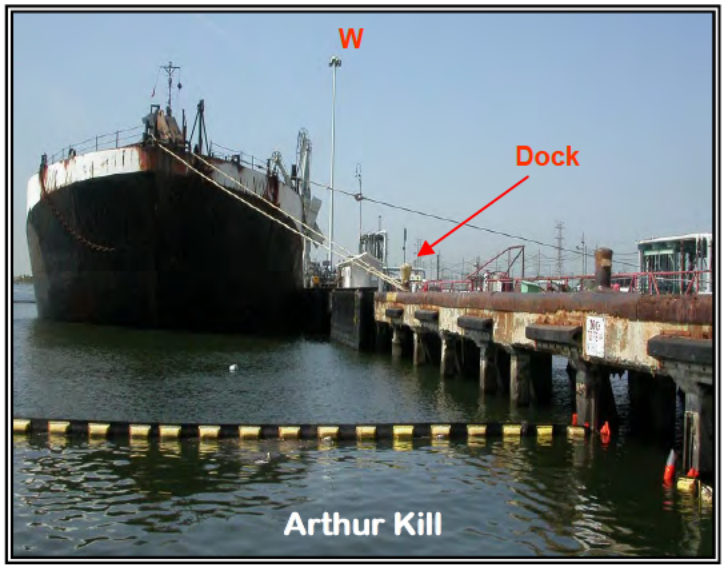
(b) (7)(F), (b) (3)

ConocoPhillips

BAYWAY REFINERY #2 STEAMER DOCK
UPPER ARTHUR KILL DIVISION - SITE 3

PROTECTION , CONTAINMENT & RECOVERY SITE
Arthur Kill, NJ

SITE PICTURE



SITE INFORMATION

Strategic Objective: Contain & Recover product.

Location: Bayway Refinery #2 Steamer Dock

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

Population Density: Low **Area Classification:** Commercial

Staging Area: Bayway Refinery

Site Limitations: Bulkhead and concrete shoreline. Steep slope to river. Accessible from right descending bank.

ACCESS INFORMATION

Access Type: Public
Site Access: Boat
Road Surface Type: N/A

WATERWAY INFORMATION

Type of Waterway: River
River Width: Low Water: ~15m

DESCRIPTION OF WORK

Deploy 1000 ft. of secondary containment boom around vessel if a spill occurs at the #1 steamer dock. Note: 1000' of primary boom is deployed around vessels once they arrive at dock as a standard operating procedure.

SHORELINE CHARACTERISTICS

Shoreline Type: Bulkhead, concrete
Existing Facilities: Lighting, electricity, building, phones, restrooms, water, parking, security

RESPONSE INFORMATION

Deployment Type: Protection, Containment
Response Method: **Low Water:** Booming **High Water:** Booming
Need Radio: Yes **Cell Ph. Reception:** Good
Heavy Equipment Access: Yes
Tidally Influenced: Yes
Closest Staging Area: Bayway Refinery
Distance Bayway Docks : 0.0mi.

RESPONSE OBJECTIVES CHECKLIST

Safety
- ❑ Identify hazard(s) of emitted material
- ❑ Activate emergency services as required (911, Fire, LEPC)
- ❑ Evacuate and secure area if required
- ❑ Conduct air monitoring & site characterization
- ❑ Establish isolation perimeter, safety zones, & evacuation route
- ❑ Prepare/Implement Site Safety Plan & Medical Plan
- ❑ Restrict/secure area to properly equipped & trained personnel
- ❑ Continually evaluate site hazards & risks

Response
- ❑ Conduct external agency & internal notifications
- ❑ Identify and setup staging areas to support response ops
- ❑ Activate response contractors & equipment
- ❑ Implement response tactics to contain & recover product
- ❑ Establish command post & field communications
- ❑ Request flight traffic restriction if required
- ❑ Implement waste handling & disposal procedures as required
- ❑ Initiate decon & demob procedures when appropriate

Environmental
- ❑ Identify, prioritize, & protect socio-economic sensitivities
- ❑ Identify, prioritize, & protect environmentally sensitive areas
- ❑ Establish wildlife rescue & rehabilitation operation if required

Support
- ❑ Conduct visual assessments (spill tracking & surveillance)
- ❑ Provide personnel & equipment support as required
- ❑ Establish first aid stations & site security as required

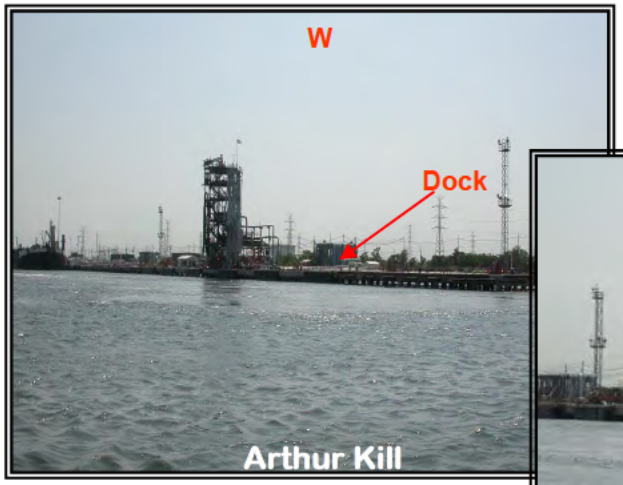
(b) (7)(F), (b) (3)

ConocoPhillips

BAYWAY REFINERY #1 STEAMER DOCK
UPPER ARTHUR KILL DIVISION - SITE 2

PROTECTION , CONTAINMENT
Arthur Kill, NJ

SITE PICTURE



SITE INFORMATION

Strategic Objective: Contain and recover product.

Location: Bayway Refinery #1 Steamer Dock

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

Staging Area: Bayway Refinery

Population Density: Low **Area Classification:** Commercial

Site Limitations: Bulkhead and concrete shoreline. Steep slope to river. Accessible from right descending bank.

ACCESS INFORMATION

Access Type: Public
Site Access: Boat
Road Surface Type: N/A

WATERWAY INFORMATION

Type of Waterway: River
River Width: Low Water: ~15m

DESCRIPTION OF WORK

Deploy 1000 ft. of secondary containment boom around vessel if a spill occurs at the #1 steamer dock. Note: 1000' of primary boom is deployed around vessels once they arrive at dock as a standard operating procedure.

SHORELINE CHARACTERISTICS

Shoreline Type: Bulkhead, concrete
Existing Facilities: Lighting, electricity, building, phones, restrooms, water, parking, security

RESPONSE INFORMATION

Deployment Type: Protection, Containment
Response Method: **Low Water:** Booming **High Water:** Booming
Need Radio: Yes **Cell Ph. Reception:** Good
Heavy Equipment Access: Yes
Tidally Influenced: Yes
Closest Staging Area: Bayway Refinery
Distance Bayway Docks : 0.0mi.

RESPONSE OBJECTIVES CHECKLIST

Safety
- ❑ Identify hazard(s) of emitted material
- ❑ Activate emergency services as required (911, Fire, LEPC)
- ❑ Evacuate and secure area if required
- ❑ Conduct air monitoring & site characterization
- ❑ Establish isolation perimeter, safety zones, & evacuation route
- ❑ Prepare/Implement Site Safety Plan & Medical Plan
- ❑ Restrict/secure area to properly equipped & trained personnel
- ❑ Continually evaluate site hazards & risks

Response
- ❑ Conduct external agency & internal notifications
- ❑ Identify and setup staging areas to support response ops
- ❑ Activate response contractors & equipment
- ❑ Implement response tactics to contain & recover product
- ❑ Establish command post & field communications
- ❑ Request flight traffic restriction if required
- ❑ Implement waste handling & disposal procedures as required
- ❑ Initiate decon & demob procedures when appropriate

Environmental
- ❑ Identify, prioritize, & protect socio-economic sensitivities
- ❑ Identify, prioritize, & protect environmentally sensitive areas
- ❑ Establish wildlife rescue & rehabilitation operation if required

Support
- ❑ Conduct visual assessments (spill tracking & surveillance)
- ❑ Provide personnel & equipment support as required
- ❑ Establish first aid stations & site security as required

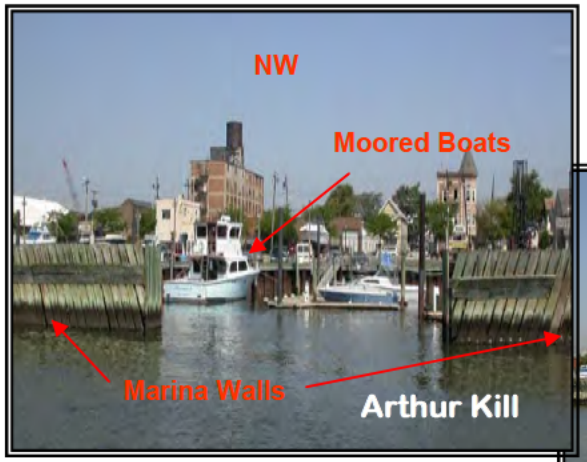
(b) (7)(F), (b) (3)

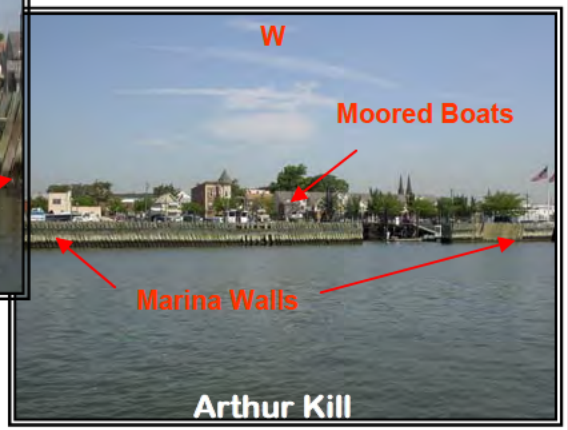
ConocoPhillips

ELIZABETH MARINA
UPPER ARTHUR KILL DIVISION - SITE M1

PROTECTION SITE
Arthur Kill, NJ

SITE PICTURE





RESPONSE INFORMATION

Deployment Type: Protection
Response Method: **Low Water:** Booming **High Water:** Booming
Need Radio: Yes **Cell Ph. Reception:** Good
Heavy Equipment Access: Yes
Tidally Influenced: Yes
Closest Staging Area: Bayway Refinery
Distance Bayway Docks : 1.31mi.

SITE INFORMATION

Strategic Objective: Deploy protection boom to protect Elizabeth Marina along the New Jersey side of the Arthur Kill.
Location: Arthur Kill / Elizabeth, NJ; 0.8nm northeast of Goethals Bridge 71 Front St. Elizabeth NJ, 07206

(b) (3), (b) (7)(F) [redacted]

Staging Area: Bayway Refinery (Access by vehicle or boat)

Population Density: Moderate
Area Classification: Recreational

Site Limitations: Bulkhead shoreline. Steep slope to river. Accessible from right descending bank.

ACCESS INFORMATION

Access Type: Public
Site Access: Boat
Road Surface Type: N/A
Road Condition: N/A
Road Width: N/A

WATERWAY INFORMATION

Type of Waterway: River
River Width: Low Water: ~15m

DESCRIPTION OF WORK

Deploy 1000 ft of protection and/or deflection boom around Elizabeth Marina.

SHORELINE CHARACTERISTICS

Shoreline Type: Man-Made Structures
Beach Length (Ft): N/A
Existing Facilities: None

RESPONSE OBJECTIVES CHECKLIST

Safety
- ❑ Identify hazard(s) of emitted material
- ❑ Activate emergency services as required (911, Fire, LEPC)
- ❑ Evacuate and secure area if required
- ❑ Conduct air monitoring & site characterization
- ❑ Establish isolation perimeter, safety zones, & evacuation route
- ❑ Prepare/Implement Site Safety Plan & Medical Plan
- ❑ Restrict/secure area to properly equipped & trained personnel
- ❑ Continually evaluate site hazards & risks

Response
- ❑ Conduct external agency & internal notifications
- ❑ Identify and setup staging areas to support response ops
- ❑ Activate response contractors & equipment
- ❑ Implement response tactics to contain & recover product
- ❑ Establish command post & field communications
- ❑ Request flight traffic restriction if required
- ❑ Implement waste handling & disposal procedures as required
- ❑ Initiate decon & demob procedures when appropriate

Environmental
- ❑ Identify, prioritize, & protect socio-economic sensitivities
- ❑ Identify, prioritize, & protect environmentally sensitive areas
- ❑ Establish wildlife rescue & rehabilitation operation if required

Support
- ❑ Conduct visual assessments (spill tracking & surveillance)
- ❑ Provide personnel & equipment support as required
- ❑ Establish first aid stations & site security as required

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

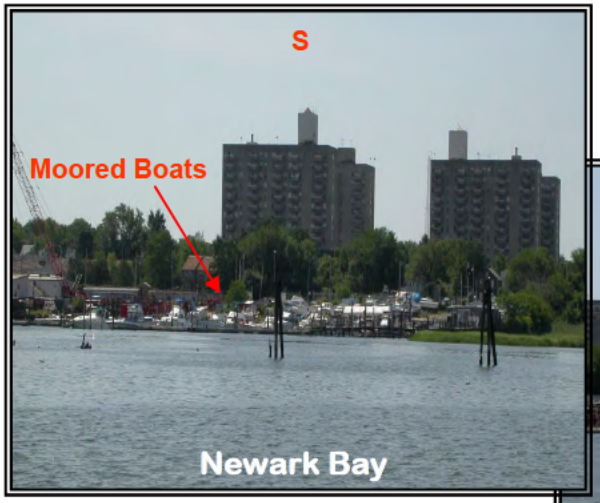
(b) (7)(F), (b) (3)

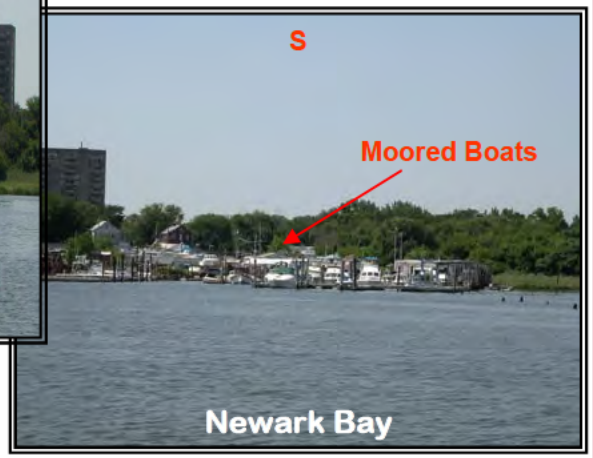
ConocoPhillips

STATEN ISLAND MARINA
NEWARK BAY DIVISION - SITE M43

PROTECTION SITE
Staten Island, NY

SITE PICTURE





RESPONSE INFORMATION

Deployment Type: Protection
Response Method: **Low Water:** Booming **High Water:** Booming
Need Radio: Yes **Cell Ph. Reception:** Good
Heavy Equipment Access: Yes
Tidally Influenced: Yes
Closest Staging Area: Bayway Refinery
Distance Bayway Docks : 5.35mi.

SITE INFORMATION

Strategic Objective: Deploy protection boom to protect Staten Island side of the Arthur Kill.

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

Staging Area: Bayway Refinery (Access by vehicle or boat)

Population Density: Moderate

Area Classification: Recreational

Site Limitations: Grass, dirt and marsh shoreline. Slight slope to river. Accessible from left descending bank.

ACCESS INFORMATION

Access Type: Public
Site Access: Boat
Road Surface Type: N/A
Road Condition: N/A
Road Width: N/A

WATERWAY INFORMATION

Type of Waterway: River
River Width: Low Water: ~15m

DESCRIPTION OF WORK

Deploy 900' of protection boom around Staten Island Marina.

SHORELINE CHARACTERISTICS

Shoreline Type: Grass, dirt, marsh
Beach Length (Ft): N/A
Existing Facilities: None

RESPONSE OBJECTIVES CHECKLIST

Safety
- ❑ Identify hazard(s) of emitted material
- ❑ Activate emergency services as required (911, Fire, LEPC)
- ❑ Evacuate and secure area if required
- ❑ Conduct air monitoring & site characterization
- ❑ Establish isolation perimeter, safety zones, & evacuation route
- ❑ Prepare/Implement Site Safety Plan & Medical Plan
- ❑ Restrict/secure area to properly equipped & trained personnel
- ❑ Continually evaluate site hazards & risks

Response
- ❑ Conduct external agency & internal notifications
- ❑ Identify and setup staging areas to support response ops
- ❑ Activate response contractors & equipment
- ❑ Implement response tactics to contain & recover product
- ❑ Establish command post & field communications
- ❑ Request flight traffic restriction if required
- ❑ Implement waste handling & disposal procedures as required
- ❑ Initiate decon & demob procedures when appropriate

Environmental
- ❑ Identify, prioritize, & protect socio-economic sensitivities
- ❑ Identify, prioritize, & protect environmentally sensitive areas
- ❑ Establish wildlife rescue & rehabilitation operation if required

Support
- ❑ Conduct visual assessments (spill tracking & surveillance)
- ❑ Provide personnel & equipment support as required
- ❑ Establish first aid stations & site security as required

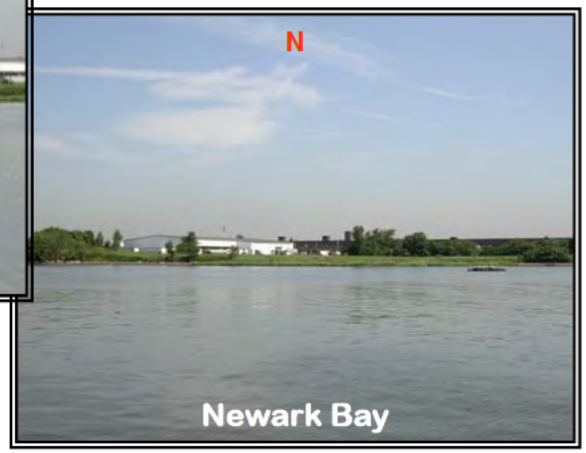
(b) (7)(F), (b) (3)

ConocoPhillips

SINGER FLATS
NEWARK BAY DIVISION - SITE A57

PROTECTION SITE
Arthur Kill, NJ

SITE PICTURE



RESPONSE INFORMATION

Deployment Type: Protection
Response Method: **Low Water:** Booming **High Water:** Booming
Need Radio: Yes **Cell Ph. Reception:** Good
Heavy Equipment Access: Yes
Tidally Influenced: Yes
Closest Staging Area: Bayway Refinery
Distance Bayway Docks : 3.1mi.

SITE INFORMATION

Strategic Objective: Deploy protection boom along shoreline to prevent product from impacting Singer Flats along the New Jersey side in Newark Bay.

Location: Singer Flats in Newark Bay

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

Staging Area: Bayway Refinery

Population Density: Low **Area Classification:** Rural

Site Limitations: Grass, dirt, rock and marsh shoreline. Slight slope to river. Accessible from right descending bank.

ACCESS INFORMATION

Access Type: Public
Site Access: Boat
Road Surface Type: N/A
Road Condition: N/A
Road Width: N/A

WATERWAY INFORMATION

Type of Waterway: River
River Width: Low Water: ~15m

DESCRIPTION OF WORK

Deploy 3500' protection and/or deflection boom at Singer Flats.

SHORELINE CHARACTERISTICS

Shoreline Type: Grass, dirt, rock, marsh
Beach Length (Ft): N/A
Existing Facilities: None

RESPONSE OBJECTIVES CHECKLIST

Safety
- ❑ Identify hazard(s) of emitted material
- ❑ Activate emergency services as required (911, Fire, LEPC)
- ❑ Evacuate and secure area if required
- ❑ Conduct air monitoring & site characterization
- ❑ Establish isolation perimeter, safety zones, & evacuation route
- ❑ Prepare/Implement Site Safety Plan & Medical Plan
- ❑ Restrict/secure area to properly equipped & trained personnel
- ❑ Continually evaluate site hazards & risks

Response
- ❑ Conduct external agency & internal notifications
- ❑ Identify and setup staging areas to support response ops
- ❑ Activate response contractors & equipment
- ❑ Implement response tactics to contain & recover product
- ❑ Establish command post & field communications
- ❑ Request flight traffic restriction if required
- ❑ Implement waste handling & disposal procedures as required
- ❑ Initiate decon & demob procedures when appropriate

Environmental
- ❑ Identify, prioritize, & protect socio-economic sensitivities
- ❑ Identify, prioritize, & protect environmentally sensitive areas
- ❑ Establish wildlife rescue & rehabilitation operation if required

Support
- ❑ Conduct visual assessments (spill tracking & surveillance)
- ❑ Provide personnel & equipment support as required
- ❑ Establish first aid stations & site security as required

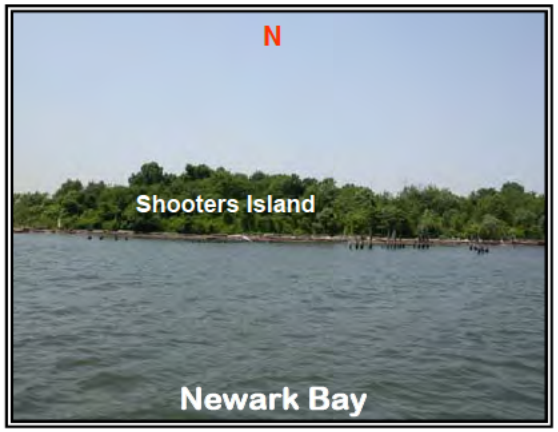
(b) (7)(F), (b) (3)

ConocoPhillips

SHOOTER'S ISLAND
NEWARK BAY DIVISION - SITE A14

PROTECTION SITE
Staten Island, NY

SITE PICTURE



RESPONSE INFORMATION

Deployment Type: Protection
Response Method: **Low Water:** Booming **High Water:** Booming
Need Radio: Yes **Cell Ph. Reception:** Good
Heavy Equipment Access: Yes
Tidally Influenced: Yes
Closest Staging Area: Port Authority Beach or K-Sea Marine, Staten Island
Distance Bayway Docks : 2.27mi.
Additional Information: Site Area: 51 Acres. Tidal Range: 5-6ft.

RESPONSE OBJECTIVES CHECKLIST

Safety
- ❑ Identify hazard(s) of emitted material
- ❑ Activate emergency services as required (911, Fire, LEPC)
- ❑ Evacuate and secure area if required
- ❑ Conduct air monitoring & site characterization
- ❑ Establish isolation perimeter, safety zones, & evacuation route
- ❑ Prepare/Implement Site Safety Plan & Medical Plan
- ❑ Restrict/secure area to properly equipped & trained personnel
- ❑ Continually evaluate site hazards & risks

Response
- ❑ Conduct external agency & internal notifications
- ❑ Identify and setup staging areas to support response ops
- ❑ Activate response contractors & equipment
- ❑ Implement response tactics to contain & recover product
- ❑ Establish command post & field communications
- ❑ Request flight traffic restriction if required
- ❑ Implement waste handling & disposal procedures as required
- ❑ Initiate decon & demob procedures when appropriate

Environmental
- ❑ Identify, prioritize, & protect socio-economic sensitivities
- ❑ Identify, prioritize, & protect environmentally sensitive areas
- ❑ Establish wildlife rescue & rehabilitation operation if required

Support
- ❑ Conduct visual assessments (spill tracking & surveillance)
- ❑ Provide personnel & equipment support as required
- ❑ Establish first aid stations & site security as required

SITE INFORMATION

Strategic Objective: Deploy protection boom around Shooters Island to prevent product from impacting sensitive areas along the Shooters Island shoreline in Newark Bay.
Location: Northern Staten Island at confluence of Arthur Kill and Kill Van Kull.
(b) (3), (b) (7)(F) [redacted]

Staging Area: Bayway Refinery

Population Density: Low **Area Classification:** Recreational
Site Limitations: **Tree-lined, brush and** dirt shoreline. Slight slope to bay.

Special Environmental Considerations: Birds, including wading birds, diving coastal seabirds, surface feeding coastal seabirds, and waterfowl; Provides rare, undisturbed upland environment; significant colonial waterbird nesting area; small patches of salt marsh scattered around the shoreline; drift material and debris around island is dense enough o form tidal pools.

ACCESS INFORMATION

Access Type: Public
Site Access: Boat
Road Surface Type: N/A
Road Condition: N/A
Road Width: N/A

WATERWAY INFORMATION

Type of Waterway: Bay
River Width: Low Water: ~15m

DESCRIPTION OF WORK

Deploy 7500' of protection boom around Shooter's Island using pre-staged mooring buoys.

SHORELINE CHARACTERISTICS

Shoreline Type: Tree-lined, brush, dirt, course sand beaches, marshes
Beach Length (Ft): N/A
Existing Facilities: None

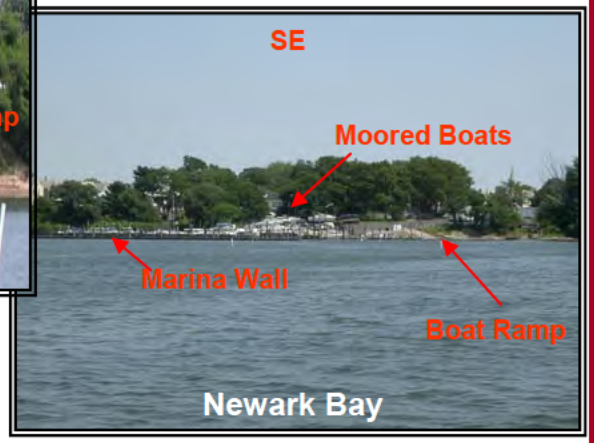
(b) (7)(F), (b) (3)

ConocoPhillips

ROBBIN'S REEF MARINA
NEWARK BAY DIVISION - SITE M50

PROTECTION SITE
Newark Bay, NJ

SITE PICTURE



RESPONSE INFORMATION

Deployment Type: Protection
Response Method: **Low Water:** Booming **High Water:** Booming
Need Radio: Yes **Cell Ph. Reception:** Good
Heavy Equipment Access: Yes
Tidally Influenced: Yes
Closest Staging Area: Bayway Refinery
Distance Bayway Docks : 4.17mi.

SITE INFORMATION

Strategic Objective: Deploy protection boom to protect Robbins Reef Marina along the Staten Island side of the Arthur Kill.
Location: Newark Bay, Bayonne NJ; North of Elco Marina (M49)

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

Staging Area: Bayway Refinery (Access by vehicle or boat)

Population Density: Moderate

Area Classification: Recreational

Site Limitations: **Brush, sand, rock and** bulkhead shoreline. Steep slope to bay.

ACCESS INFORMATION

Access Type: Public
Site Access: **Road,** Boat
Road Surface Type: N/A
Road Condition: N/A
Road Width: N/A

WATERWAY INFORMATION

Type of Waterway: Bay
River Width: Low Water: ~15m

DESCRIPTION OF WORK

Deploy 1200' of protection boom around Robbins Reef Marina

SHORELINE CHARACTERISTICS

Shoreline Type: Brush, sand, rock, bulkhead
Beach Length (Ft): N/A
Existing Facilities: None

RESPONSE OBJECTIVES CHECKLIST

Safety
- ❑ Identify hazard(s) of emitted material
- ❑ Activate emergency services as required (911, Fire, LEPC)
- ❑ Evacuate and secure area if required
- ❑ Conduct air monitoring & site characterization
- ❑ Establish isolation perimeter, safety zones, & evacuation route
- ❑ Prepare/Implement Site Safety Plan & Medical Plan
- ❑ Restrict/secure area to properly equipped & trained personnel
- ❑ Continually evaluate site hazards & risks

Response
- ❑ Conduct external agency & internal notifications
- ❑ Identify and setup staging areas to support response ops
- ❑ Activate response contractors & equipment
- ❑ Implement response tactics to contain & recover product
- ❑ Establish command post & field communications
- ❑ Request flight traffic restriction if required
- ❑ Implement waste handling & disposal procedures as required
- ❑ Initiate decon & demob procedures when appropriate

Environmental
- ❑ Identify, prioritize, & protect socio-economic sensitivities
- ❑ Identify, prioritize, & protect environmentally sensitive areas
- ❑ Establish wildlife rescue & rehabilitation operation if required

Support
- ❑ Conduct visual assessments (spill tracking & surveillance)
- ❑ Provide personnel & equipment support as required
- ❑ Establish first aid stations & site security as required

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

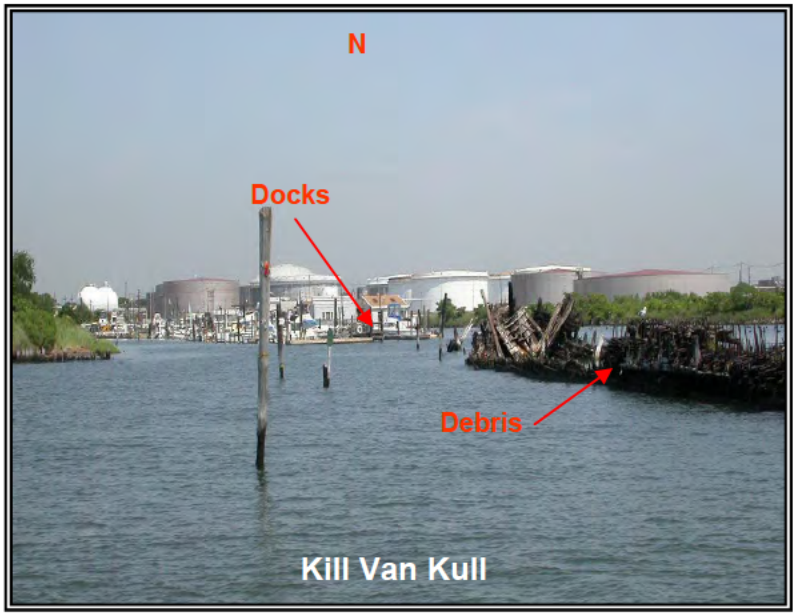
(b) (7)(F), (b) (3)

ConocoPhillips

ATLAS YACHT CLUB
KILL VAN KULL DIVISION - SITE M39

PROTECTION SITE
Kill Van Kull, NJ

SITE PICTURE



SITE INFORMATION

Strategic Objective: Deploy Protection Boom to protect Atlas Marina along the New Jersey side of the Kill Van Kull.

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

Staging Area: Bayway Refinery (Access by vehicle or boat)

Population Density: Moderate
Area Classification: Recreational

Site Limitations: **Brush, grass and marsh** shoreline. Medium slope to river. Accessible from right descending bank.

ACCESS INFORMATION

Access Type: Public
Site Access: **Road,** Boat
Road Surface Type: N/A
Road Condition: N/A
Road Width: N/A

WATERWAY INFORMATION

Type of Waterway: River

River Width: Low Water: ~15m

SHORELINE CHARACTERISTICS

Shoreline Type: Brush, grass, marsh, Man-Made Structures
Beach Length (Ft): N/A
Existing Facilities: Lighting

RESPONSE INFORMATION

Deployment Type: Protection
Response Method: **Low Water:** Booming **High Water:** Booming
Need Radio: Yes **Cell Ph. Reception:** Good
Heavy Equipment Access: Yes
Tidally Influenced: Yes
Closest Staging Area: Bayway Refinery
Distance Bayway Docks : 4.79mi.

RESPONSE OBJECTIVES CHECKLIST

Safety
- ❑ Identify hazard(s) of emitted material
- ❑ Activate emergency services as required (911, Fire, LEPC)
- ❑ Evacuate and secure area if required
- ❑ Conduct air monitoring & site characterization
- ❑ Establish isolation perimeter, safety zones, & evacuation route
- ❑ Prepare/Implement Site Safety Plan & Medical Plan
- ❑ Restrict/secure area to properly equipped & trained personnel
- ❑ Continually evaluate site hazards & risks

Response
- ❑ Conduct external agency & internal notifications
- ❑ Identify and setup staging areas to support response ops
- ❑ Activate response contractors & equipment
- ❑ Implement response tactics to contain & recover product
- ❑ Establish command post & field communications
- ❑ Request flight traffic restriction if required
- ❑ Implement waste handling & disposal procedures as required
- ❑ Initiate decon & demob procedures when appropriate

Environmental
- ❑ Identify, prioritize, & protect socio-economic sensitivities
- ❑ Identify, prioritize, & protect environmentally sensitive areas
- ❑ Establish wildlife rescue & rehabilitation operation if required

Support
- ❑ Conduct visual assessments (spill tracking & surveillance)
- ❑ Provide personnel & equipment support as required
- ❑ Establish first aid stations & site security as required

3. Property and Environmental Impact

   Property impact of a spill in a historical / archeological site will be a major concern. Major historical / archaeological sites sometimes have considerable commercial value due to tourism. A spill may have adversely affect the commercial value of adjacent public and private property, as well as the historical / archeological site itself.

   Environmental impact on a historical / archeological site will vary depending on the size of undeveloped land and water affected by the spill. Petroleum hydrocarbons may have an adverse impact on most forms of plant and animal life, and can destroy the exposed natural portion of a historical/archaeological site.

4. Potential Logistical Problems

   Logistic support at historical/archaeological sites will vary from site to site. Historical sites typically have good transportation and utility service. Archeological sites are frequently in remote areas lacking both transportation and utilities. It may be necessary to set up support areas, lay-down areas, etc., outside the site itself, in order to minimize disturbance of the site.

   Transportation of personnel, equipment and materials into and out of the area should not require specialized vehicles. Temporary utilities, including potable water, fuel and electricity may be available locally.

Initial Response Strategies

1. The Company Incident Commander will:

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

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

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

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

   The Tier 1 team should immediately report to the response contractor's supervisor for a briefing on the response action, a tailgate health and safety meeting, and a briefing by appropriate authorities concerning care to be taken to avoid damage to the historical/archaeological site. The response contractor's supervisor should direct the team's activities from this point on, including setting up laydown areas and support areas.

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

   The Tier 2 response team should be capable of removing 3,000 BBL per day, should be on-site within 36 hours of notification, and may consist of the Tier 1 response team, plus:
   - 12 HAZWOPER-trained personnel,
   - 4 work boats,
   - 4,000 feet of containment boom,
   - 2 skimmers,
   - 2 vans,
   - 2 pick-up trucks,
   - 2 vacuum trucks,
   - 1 skid unit (1,500 gallon capacity),
   - 8 radios, and
   - 24 air bottles

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

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

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

6. Health and Safety Plan

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

7. Implementation of Air Monitoring Program

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

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

8. Contingency Planning

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

9. Assessment of Affected Area(s)

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

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

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

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

10. Delineation of Exclusion and Support Zones

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

11. Protection of Downstream Sensitive Areas

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

Ongoing Response

1. Recovering Wildlife for Transfer to Treatment Facilities

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

2. Recovery and Transfer of Free Product

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

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

3. Install Siphon Dams, Etc.

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

4. Debris Removal

   Debris will consist of steel, concrete, timber and vegetation contaminated by the spilled product, plus product-soaked sorbent materials and trash generated by the response team. Debris will be inspected by appropriate agency experts for historically or archaeologically important artifacts or other material prior to its disposal.

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

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

5. Stabilize Damaged or Affected Structures

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

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

6. Initial Response and Draft Work Plan

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

   - Special measures to avoid damage to historical/archaeological features, materials and artifacts,
   - A summary of initial response actions and results,
   - Subsequent planned activities,
   - Water and soil removal and treatment and/or disposal,
   - Air monitoring program,
   - Sampling and Analysis Plan,
   - Restoration and repairs, and
   - A schedule for the work.

7. Debriefing/Dissemination of Information and Data

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

8. Documentation of Cleanup Efforts and Progress

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

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

9. Public Relations/Agency Liaison

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

Cleanup Strategies Historical/Archaeological Sites

1. Access on or Through Historical/Archaeological Sites

   Because of the potential for irrecoverable damage to historical/archaeological sites, vehicle and equipment access will be strictly controlled and coordinated with the appropriate government entities and/or custodians. When equipment is permitted to enter or cross a historical/archaeological site. Access routes will be clearly marked and the response crews will be thoroughly briefed on where and where not, they may place and utilize equipment. On this type of site, the probability is high that the amount of laborers will dramatically increase to compensate for equipment not being permitted on the site or equipment usage being limited.

2. Protection of Historical/Archaeological Sites

Once human health and safety concerns have been addressed, priority will be given to protecting historical/archaeological sites from contamination or to limiting further contamination. Whenever the release is waterborne, booms will typically be deployed as the isolating/protecting mechanism. Because of potential access restrictions, boats used to deploy the boom may have to be landed at some distance from the site and floated to the scene. The first responder should identify potential boat launch sites and communicate this to the response crew prior to their arrival.

If the release is overland, then protection and isolation of historical/archaeological sites becomes more difficult. Typically, overland releases are contained by digging berms and trenches downstream of the spill. However, in the event that the spill occurs on or near historical/archaeological areas, it is possible that digging of berms and trenches will be severely curtailed or prohibited. Therefore, berms will be constructed either from sorbent materials or from imported fill.

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

Typically, product is recovered from surface water (i.e., rivers, lakes, and ponds) by a combination of mechanical skimming, vacuum recovery, and the use of sorbent materials. As mentioned above, access of equipment through or near historical/archaeological sites may be restricted or prohibited altogether. It may become necessary for recovery equipment to be launched some distance from the release site. This may have an impact on response time and will be factored accordingly. Temporary storage of recovered product may be accomplished by the use of small barges or other containers.

The treatment of contaminated water will have several challenges under this scenario. It will most likely not be feasible to store contaminated water in traditional storage containers such as tanks, at least in close proximity to the site. This could be overcome by pumping across or around the site to a place where adequate storage can be staged. The Company Incident Commander or the first responder will have to assess the situation quickly and communicate with the response crew in order to ensure that sufficient quantities of the correct equipment are deployed.

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

4. Cleaning of Affected Structures

Traditional methods of cleaning structures affected by released product include wiping, hot water, low or high-pressure wash-down, and/or the use of surfactants, emulsifiers, or other agents. Because of the potential for irrecoverable damage to historical/archaeological structures, the method of choice for cleaning structures will be wiping with sorbent pads. Alternative methods will be discussed with the appropriate authorities and used only with their concurrence.

5. Solids Handling/Removal

   Removal of product-laden soils will be conducted only with the concurrence and at the direction of the cognizant authorities.

   Sorbent materials and other solid residue will be placed in trash bags and removed from the site for disposition.

   Because of the nature of historical/archaeological sites, contaminated debris will be removed only with the concurrence and at the direction of the cognizant authorities.

Site Restoration

1. Sampling and Analysis to Verify Cleanup

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

2. Rebuild/Reconstruct Affected Structures/Areas

   Historical / archaeological site restoration activities will be site-specific and may entail major efforts by a combination of Company and multiple regulatory and preservation agencies. As early as possible, Company should determine the feasibility and practicality of restoration in consultation with the appropriate authorities so that detailed, deliberate plans, specifications and costs can be prepared.

3. Final Report

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

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.

3.3 National, State and Local Parks

Environmental Response Scenario

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

Description of the Affected Area

National, State and local parks are areas designated by various government agencies for the benefit of the general public. The larger public parks may have a general office with a recreational area and/or a camping ground. Much of a major park may be relatively undeveloped. The smaller public parks could be limited to combination general buildings, rest rooms, recreation areas, playgrounds, swimming pools, camping areas, hiking paths, or undeveloped terrain. A public park maybe located in almost any type of terrain, including shorelines, forests, deserts, and mountainous areas. Parks are usually, but not always, populated by administrative personnel, campers and hikers, with a variety of mammals, reptiles, birds, fish and insects. Public parks are identified and marked as such on maps and sometimes along their boundaries.

1. Public Health and Safety Concerns

   Many National, State and local parks are close to centers of human habitation, where a spill is likely to have a major, direct effect on public safety and health. A major priority will be evacuation of the public in the affected area. The danger zone for the public will generally be downwind of the point of discharge and the resulting plume.

2. Project Personnel Safety Concerns

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

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

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

3. Property and Environmental Impact

   Property impact of a spill on a public park will depend on the extent to which it has been improved or developed. Public parks are frequently well developed and have considerable commercial value; a spill may have a serious impact on the commercial value of public property.

   Environmental impact on a public park will vary depending on the size of undeveloped land and water affected by the spill. Petroleum hydrocarbons may have an adverse impact on most forms of plant and animal life, and can destroy the exposed natural portion of a public park.

4. Potential Logistical Problems

   Availability of roads and utilities are site-specific and may vary from place to place within a single large park. It may be necessary to close existing public and private roads for the duration of the response activities. There may be insufficient solid level ground or a wide enough clearing in which to set up support areas, lay-down areas, etc.

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

   Temporary utilities, including potable water, fuel and electricity may be available at some parks and absent at others. If not available, they must be brought in by the contractor's response team.

Initial Response Strategies

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

2. The response contractor's program manager should dispatch a response supervisor to the location of the spill by the fastest means practical. The response supervisor should be equipped with a one-day supply of PPE to include supplied air, and a radio or mobile telephone.

   The response supervisor should contact the Company Incident Commander immediately on arrival at the site and jointly assess the magnitude of the problem, noting any special considerations that may affect selection of resources required to complete the response action.

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

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

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

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

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

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

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

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

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

6. Health and Safety Plan

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

7. Implementation of Air Monitoring Program

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

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

8. Contingency Planning

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

9. Assessment of Affected Area(s)

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

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

The Tiers 1, 2, and 3 response contractor's team resources in personnel, equipment and material will be assessed to determine if they are adequate to effectively perform the work.

If the Company Incident Commander determines that additional resources are required, the response contractor's supervisor will request additional resources for the Tier 2 and 3 response contractor's teams from the response contractor's program manager. Additional equipment may include backhoes, dump trucks, watercraft, generators, light sets, bulldozers and front-end loaders. Equipment operators, laborers, and engineers may be mobilized as necessary. Additional material may include more spill booms, absorbent materials, foam and imported clay for berms.

10. Delineation of Exclusion and Support Zones

The Site Safety Officer (SSO) will mark the limits of the exclusion zone with red plastic tape, using existing trees to support the tape where possible. The support zone will be marked with green plastic tape if in the SSO's judgment such marking is necessary to avoid confusion with a contaminated area. If the exclusion zone cannot be physically marked, the SSO will annotate a site map or layout sketch and brief all personnel on the zone layout prior to site entry.

11. Protection of Downstream Sensitive Areas

Company's Incident Commander, the response contractor's supervisor and SSO will inspect the boom / berm system to ensure that it is effectively protecting the public and environmentally sensitive areas downstream of the spill. The response contractor's supervisor will direct placement of additional booms / berms or relocation of existing booms / berms if ongoing measures are judged to be ineffective.

Ongoing Response

1. Recovering Wildlife for Transfer to Treatment Facilities

   The response contractor will cooperate with Company and local wildlife assistance agencies to recover birds, fish, small and large animals affected by the spill, for transportation by the appropriate wildlife agencies to treatment facilities.

2. Recovery and Transfer of Free Product

   Construction of the free product temporary storage area will start after the containment booms / berms are in place and judged effective in limiting the spread of the plume. The storage will consist of frac tanks or rubber bladders. The tanks or bladders will be surrounded by a berm built up from on-site materials, or imported clay.

   The response contractor's team will recover free product with vacuum trucks, sorbent booms and pads, oil skimmers and vacuum pumps.

3. Install Siphon Dams, Etc.

   The response contractor's team may construct a siphon dam to contain the spilled product if contaminated surface water is flowing. A siphon dam is built of earth with steel or plastic pipes embedded through it at a vertical angle such that the lighter, floating product is trapped behind the dam while the water below it is permitted to flow through the pipes.

4. Debris Removal

   Debris will consist of steel, concrete, timber and vegetation contaminated by the spilled product, plus product-soaked sorbent materials and trash generated by the response contractor's team.

   Company will remove and dispose of debris or may direct the response contractor to do so. Ultimate disposal may depend on the degree of contamination and is subject to approval by the regulating agencies.

   Typically, steel and concrete will be transported to a landfill. Timber and vegetation will be either landfilled or incinerated off-site. The regulatory agencies may permit burning of timber and vegetation under some circumstances, but this is unlikely within the boundaries of the public park itself.

5. Stabilize Damaged or Affected Structures

   The response contractor will construct temporary bracing and shoring as necessary to prevent collapse of structures and foundations that might impede or endanger the response work. This may include timber shoring as temporary replacements for sleepers under a damaged pipeline section.

   Company will stabilize damaged major pipeline bridges and pipeline river crossings, if needed.

6. Initial Response and Draft Work Plan

   The response contractor will prepare a draft work plan and submit it to Company. The work plan will include:

   - A summary of initial response actions and results,
   - Subsequent planned activities,
   - Water and soil removal and treatment and/or disposal,
   - Air monitoring program,
   - Sampling and Analysis Plan,
   - Restoration and repairs, and
   - A schedule for the work.

7. Debriefing/Dissemination of Information and Data

   The Company Incident Commander will interface with the regulatory agencies and news media. The response contractor will not disseminate any information or data without approval of the Company Incident Commander. The response contractor may furnish personnel to assist the Company Incident Commander in debriefing.

8. Documentation of Cleanup Efforts and Progress

   The response contractor will prepare and maintain records, including photos and/or video, documenting the response. Records and documents will include the supervisor's daily notes, personnel time sheets, equipment usage logs, material delivery tickets, daily air monitoring logs, and soil and water analysis reports.

   The response contractor's program manager will submit to the Company Incident Commander a report summarizing the accomplishments of the preceding week, the cost status and the response activity schedule.

9. Public Relations/Agency Liaison

   The Company Incident Commander will provide all direct contact with the news media and with regulatory agencies.

Cleanup Strategies for National, State and Local Parks

1. Access on or Through National, State and Local Parks

   Response activities, particularly movement of vehicles and equipment into and out of the area may temporarily inconvenience or disrupt the public's use of the park facilities. The Company Incident Commander and the response contractor will coordinate response activity traffic control with the authorities responsible for the park.

The response contractor will use existing roads into the spill area wherever possible and where permitted by the cognizant authorities. The response contractor will construct staging and laydown areas, in locations approved by the appropriate authorities responsible for the park, taking into consideration any ongoing use of the park, and nearby habitations if any are present. Where roads do not exist but a practical and approved route is available, the response contractor may construct temporary roads to the spill site, and staging/laydown areas. The response contractor will utilize the minimum size and number of vehicles in the response activities.

Where the cognizant authorities approve and navigable waterways are convenient to the site, the response contractor may use workboats and/or barges to mobilize the response equipment to the site. Equipment sizes may be limited by the capacity of available boats and barges. It may be necessary to construct a temporary landing to tie up the watercraft and offload the equipment.

If the spill occurs in a park area so rugged that land and water transportation is impractical, the response contractor may have to use helicopters to lift personnel and equipment to the site. Since heavy equipment is not readily air-transportable, most of the response work in such areas may have to be done using labor and hand tools, with a limited amount of lightweight powered equipment. Helicopter landing zones may be located, and if necessary cleared, at the direction of Company and the appropriate government agencies.

Roads, staging areas, watercraft landings and helicopter landing zones will be restored to their pre-spill conditions as described in SITE RESTORATION below.

2. Protection of National, State and Local Parks

Once human health and safety have been addressed, priority will be given to protecting the park features from contamination, and limiting further spread of the spilled product. Natural areas, playground equipment, swimming pools, and pavilions used for public gatherings will be given special attention. Containment booms and) berms are usually used to contain and direct the spilled product. The cognizant authority, Company Incident Commander and the first responder will identify the park features, land areas and water bodies threatened by the spill, prioritize the features to be protected, and select the boom and berm locations. The Company Incident Commander will communicate special or additional equipment and material needs to the contractor's response team.

Where a body of water is affected or threatened by the spill, the response contractor will normally deploy containment booms as close downstream of the spill site as may be safe and practical. If the impacted area includes rough water, such as rapids and waterfalls, the boom may have to be installed at a distance downstream, where the water is calm enough for the boom to be effective. This may increase the volume of contaminated water to be collected and treated. If use of the nearest effective deployment site is denied by the cognizant authorities, or if lack of roads, cliffs, heavy forests etc. make its use impractical, it may be necessary to deploy the boom at another site even further downstream.

Containment of an overland spill is usually done with ditches and berms. With the approval at the direction of the cognizant authorities, the response contractor will dig ditches and build berms downslope of the spill site to stop the overland flow of the spilled product. In some cases it may be possible to use this ditch/berm system to divert the product to a collection point downslope of the spill. If the soil dug from the ditches is clay, it may be used to build the berms. Sandy or gravelly soil does not make good barrier berm material. If importing clay from offsite is impractical and no clay is available onsite, the response contractor may have to use sorbent materials, i.e., sorbent booms and pads, to construct the berm.

3. Recovery of Product from Water and Treatment of Contaminated Water

Product is typically recovered from water bodies such as lakes, ponds and rivers by a combination of mechanical skimming, vacuum recovery, and sorbent materials. The preferred point of recovery is normally be as close as practical downstream of the spill site. Access for personnel and equipment will be a major factor in selecting the equipment and where it will be used.

Product spilled onto the ground is usually recovered by excavating the product-laden soils. Other methods such as by soil/vapor extraction, or pumping from recovery wells may be considered as part of the long-term plan. Porous soils, such as sands and gravels may permit the product to soak in to a depth of several feet or more, usually until it is stopped by a layer of clay, solid rock or a water table. It is expected that product-contaminated soils in playgrounds and other areas of frequent and intense human use may be excavated more completely than at spill sites in less-used areas of parks. Clay soils usually retain the product at or near the surface, and require less excavation than sandy/gravelly soils.

If space is available and if the cognizant agency permits, the response contractor may construct the water storage and treatment system in the park, near the site of the spill, at a safe distance from any feature subject to human occupation or usage. If space is not available for practical reasons, or if onsite treatment would be a continuing hazard to the public safety and health, the contained water may have to be transported offsite for treatment or disposal.

Once the contained waters have been stored, treatment options can be explored. Possible treatment options include steam or air stripping, oil/water separation, carbon adsorption, or other methodologies or combinations of methodologies.

4. Cleaning of Affected Structures

Man-made structures can be cleaned by traditional methods that include wiping, hot water, low or high-pressure wash down, and use of surfactants, emulsifiers or other agents. Swimming pools and playground equipment will receive special attention during cleaning. Some wooden structures that cannot be adequately cleaned may have to be removed and/or replaced.

Affected natural structures may include large rocks and boulders, which can usually be cleaned by the same methods as man-made structures. Cleaning rocky shorelines along rapids and near waterfalls, and rocky cliffs, may require special safety precautions and special equipment such as safety lines.

Cleaning methods and materials to be used at a spill will be discussed with the appropriate authorities and used only with their concurrence.

Washdown water and other liquids from cleaning activities should be contained by the boom or ditch/berm system, then collected and treated with the contaminated ground and surface waters.

5. Solids Handling and Removal

Product-laden soils will be removed to the satisfaction of, and at the direction of, the appropriate authorities. The extent of excavation may be limited in some park areas, since excavation will mar their natural state. Heavy equipment, such as tracked excavators and dump trucks, will probably be used wherever their use is not prohibited by the cognizant authorities or impractical due to access restrictions.

Sorbent materials and other solid residue will be placed in trash bags and removed from the site for disposition. The response contractor will take particular care to remove all his site-generated wastes from the area, and will conduct a final walking inspection of the entire area with the Company Incident Commander to confirm that this has been done prior to departure.

Contaminated soils and other solids will be removed from the site unless the cognizant authorities concur with or direct other disposition. Solids may be removed by s trucks where roads are available, or by barges where navigable waterways are reasonably close. In areas so remote that the only access is by aircraft, removal of solids from the site may be impractical. In this event, the Company Incident Commander and the appropriate authorities will determine if onsite containment or disposal is acceptable, and if it is, the best methods of doing so consistent with protection of the environment and the public health and safety.

Site Restoration

1. Sampling and Analysis to Verify Cleanup

Sampling and analysis of the remaining soils and water will be coordinated with local, State and federal agencies to verify that the cleanup meets their requirements.

2. Rebuild/Reconstruct Affected Structures/Areas

Public Park restoration activities will vary considerably from site to site and may involve park officials. As early as possible, the Company should determine the feasibility and practicality of restoration in consultation with the appropriate authorities so that detailed, deliberate plans, specifications, and costs can be prepared.

3. Final Report

The response contractor will prepare a Final Report for Company, summarizing the actions taken during the response activities, with particular attention to restoration and verification of cleanup.

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.

3.5 Recreational Sites

Environmental Response Scenario

The following scenario provides probable, effective response actions in the event of a spill to a recreational site. Depending on the site-specific conditions, Company may choose to respond in a manner different from that described below. The manpower, equipment, and recovery rates are all dependent upon site-specific conditions and Company will respond in an appropriate manner.

Description of the Affected Area

Recreational sites are areas designated by federal, State and local governments for public use. A recreational site may include any type of terrain, including beaches, streams, lakes, forests, and mountainous areas. Recreational sites may be either remote from, or close to, human habitation, and are frequently developed for residential use and commercial enterprises related to recreation activities.

Recreational sites are generally identified and marked as such on maps.

1. Public Health and Safety Concerns

   Immediate evacuation of the public, and their subsequent health and safety, are a major concern. The danger zone for the public will generally be downwind of the point of discharge and the resulting plume.

2. Project Personnel Safety Concerns

   The greatest safety concern for project personnel is fire and explosion. The response contractor's team personnel will conduct continuous air monitoring for flammable vapors with a combustible gas meter and will suspend operations when readings exceed 10 percent of the lower explosive limit (LEL). Response contractor's team personnel will use non-sparking equipment whenever monitoring indicates explosion/fire potential. Smoking paraphernalia, including lighters, will not be permitted in the work areas under any circumstances.

   Other safety concerns for project personnel, Company representatives and the regulatory agencies' representatives are inhalation of hydrocarbon vapors (specifically benzene vapors), skin contact with liquid hydrocarbons, heat stress and cold exposure, and contact with, or bites from, poisonous plants, insects, snakes, rodents and large wildlife indigenous to the recreational site.

   Air monitoring analysis will dictate the level of PPE utilized by workers in the exclusion zone. The support area, including break and eating areas, will be located in a safe area and upwind of the exclusion zone wherever possible.

3. Property and Environmental Impact

   Property impact of a spill on a recreational site will depend on the degree of private, commercial and public development in the affected area. Major recreational sites are generally well developed and have considerable commercial value; a spill may be expected to have a major impact on the commercial value of public and private property.

   Environmental impact on a recreational site can be immediate and extensive. Petroleum hydrocarbons may have an adverse impact on most forms of plant and animal life, and can destroy the exposed portion of a recreational site. Major recreational sites provide habitats and food supplies for wildlife and are sources of oxygen for the atmosphere.

4. Potential Logistical Problems

   Logistic support at recreational sites will vary from site to site, but typically includes access to major transportation networks and utility services. Roads into and through such areas may be considered generally reliable. Sufficient solid level ground or a wide enough clearing in which to set up support areas, lay-down areas, etc should be available.

   Transportation of personnel, equipment and materials into and out of some recreation sites may require specialized vehicles such as UTVs, swamp buggies, airboats or helicopters. The response contractor should possess, or have ready access to, the minimum required equipment.

   Temporary utilities, including potable water, fuel and electricity may be available at some recreation areas and absent at others. If not available, they must be brought in by the contractor's response team.

Initial Response Strategies

1. The Company Incident Commander will:

   - Initiate evacuation of the public from the immediate area of the spill and from the area toward which the plume is moving,
   - Initiate appropriate actions to isolate the pipeline or any other source of the spill; i.e., turn off the nearest block valves and shut down the flow of product.
   - Order immediate deployment of the response contractor's oil containment boom (minimum 200 ft long), complete with anchors,
   - Notify the response contractor's program manager that a spill is in progress and
   - Notify the appropriate Federal, State, and local regulatory agencies. Local, State and Federal agency notification is listed in this FRP.

2. The response contractor's program manager should dispatch a response supervisor to the location of the spill by the fastest means practical. The response contractor's supervisor should be equipped with a one-day supply of PPE to include supplied air, and a radio or mobile telephone. The response contractor's supervisor should contact the Company Incident Commander immediately on arrival at the site and jointly assess the magnitude of the problem, noting any special considerations that may affect selection of resources required to complete the response action.

3. The response contractor's program manager should mobilize the Tier 1 response contractor's team while the response contractor's supervisor is en route to the site. The Tier 1 response contractor's team should be capable of removing 1,500 BBL of product per day, should be en route within 2 hours of notification, and should arrive on-site within 12 hours of notification. This response team may consist of:

   - 8 HAZWOPER-trained personnel (including a supervisors and a site safety officer),
   - 2 pick-up trucks,
   - 1 one-ton box truck/associated supplies,
   - 2 vacuum trucks,
   - 1 van,
   - 2 work boats,
   - 2,000 ft of containment boom,
   - one foam trailer with applicator and foam to cover 90,000 square feet,
   - a seven (7)-day supply of PPE,
   - 12 sets of air bottles,
   - lights,
   - 2 skimmers,
   - 1 generator,
   - 1 air compressor,
   - PID/LEL,
   - detector tube specific for benzene (not affected by other hydrocarbons)
   - 4 radios, and
   - expendable supplies (absorbent booms & pads, PPE)

   The Tier 1 team should immediately report to the response contractor's supervisor for a briefing on the response action and a tailgate health and safety meeting. The response contractor's supervisor should direct the team's activities from this point on, including setting up laydown areas and support areas.

4. The response contractor's program manager should begin mobilizing the Tier 2 and Tier 3 response contractor's teams once the Tier 1 team is enroute to the site.

   The Tier 2 response contractor's team should be capable of removing 3,000 BBL per day, should be on-site within 36 hours of notification, and may consist of the Tier 1 response contractor's team, plus:

   - 12 HAZWOPER-trained personnel,
   - 4 work boats,
   - 4,000 feet of containment boom,
   - 2 skimmers,
   - 2 vans,
   - 2 pick-up trucks,
   - 2 vacuum trucks,
   - 1 skid unit (1,500 gallon capacity),
   - 8 radios, and
   - 24 air bottles

The Tier 3 response contractor's team should be capable of removing 6,000 BBL per day, should be on-site within 60 hours of notification, and may consist of the Tier 1 and Tier 2 response contractor's teams, plus:

- 23 HAZWOPER-trained personnel,
- 2 pick-up trucks,
- 4 vans,
- 1 supply trailer,
- 4 work boats,
- 6,000 feet of containment boom,
- 3 vacuum trucks,
- 3 skimmers,
- 12 radios, and
- 48 air bottles

5. The first task of the Tier 1 response contractor's team should be to minimize the spread of the product on the water and ground surface in order to protect the public and environmentally sensitive areas downstream of the spill. The team should place a containment boom on water or construct earthen berms on land as close as possible to the point of origin of the spill to minimize the area of most severe contamination. The placement of the containment boom / berm will also be based on personnel safety considerations for the personnel setting up the containment boom / berm. The team may then place one or more secondary booms / berms farther away, in the path(s) of the plumes deemed by the Company Incident Commander and the response contractor's supervisor to be the most dangerous to the public or to the environment.

6. Health and Safety Plan

   Initial health and safety response actions will be in accordance with the standard operating procedure. The response contractor's Site Safety Officer will complete a Site-Specific Health and Safety Plan after the initial hazard assessment is conducted.

7. Implementation of Air Monitoring Program

   Company's Incident Commander will assign a Site Safety Officer (SSO) who will begin monitoring activities (using a PID, an LEL meter and benzene-specific detection tubes) in the area of the spill immediately on arrival, to assess the danger from fire and explosion in the work area, determine potential exposure to benzene, delineate the exclusion zone, and establish the support zone. Instruments, frequency of readings, records and responses to action levels will conform to the Health and Safety Plan. The SSO will pay particular attention to LEL readings.

   As soon as possible after the SSO completes his initial air monitoring for the spill site hazard assessment and delineates the work zones, he/she will begin a perimeter air-monitoring program to confirm that the exclusion zone is properly sized and to document potential offsite migration of vapors that could impact the unprotected public or wildlife.

8. Contingency Planning

The Company Incident Commander, the SSO and the response contractor's supervisor will identify evacuation routes of egress and procedures, safe distances and places of refuge, and emergency alerting procedures to be used in the event of an uncontrollable situation such as fire or explosion.

9. Assessment of Affected Area(s)

The Company Incident Commander and the response contractor's supervisor will jointly review the maps provided and inspect the affected area(s) and assess:

- The nature of the spilled liquid,
- Source of the spill,
- Direction(s) of spill migration,
- Apparent or otherwise known subsurface geophysical feature that might impact the work; i.e., subsurface sand layers, water table elevation,
- Overhead and buried utility lines, pipelines, etc.,
- Nearby population, property or environmental features that might be affected by the contained spill or by an uncontained spill.

The Tiers 1, 2, and 3 response contractor's team resources in personnel, equipment and material will be assessed to determine if they are adequate to effectively perform the work.

If the Company Incident Commander determines that additional resources are required, the response contractor's supervisor will request additional resources for the Tier 2 and 3 response contractor's teams from the response contractor's program manager. Additional equipment may include backhoes, dump trucks, watercraft, generators, light sets, bulldozers and front-end loaders. Equipment operators, laborers, and engineers may be mobilized as necessary. Additional material may include more spill booms, absorbent materials, foam and imported clay for berms.

10. Delineation of Exclusion and Support Zones

The Site Safety Officer (SSO) will mark the limits of the exclusion zone with red plastic tape, using existing trees to support the tape where possible. The support zone will be marked with green plastic tape if in the SSO's judgment such marking is necessary to avoid confusion with a contaminated area. If the exclusion zone cannot be physically marked, the SSO will annotate a site map or layout sketch and brief all personnel on the zone layout prior to site entry.

11. Protection of Downstream Sensitive Areas

Company's Incident Commander, the response contractor's supervisor and SSO will inspect the boom / berm system to ensure that it is effectively protecting the public and environmentally sensitive areas downstream of the spill. The response contractor's supervisor will direct placement of additional booms / berms or relocation of existing booms / berms if ongoing measures are judged to be ineffective.

Ongoing Response

1. Recovering Wildlife for Transfer to Treatment Facilities

   The response contractor will cooperate with Company and local wildlife assistance agencies to recover birds, fish, small and large animals affected by the spill, for transportation by the appropriate wildlife agencies to treatment facilities.

2. Recovery and Transfer of Free Product

   Construction of the free product temporary storage area will start after the containment booms / berms are in place and judged effective in limiting the spread of the plume. The storage will consist of frac tanks or rubber bladders. The tanks or bladders will be surrounded by a berm built up from on-site materials or imported clay.

   The response contractor's team will recover free product with vacuum trucks, sorbent booms and pads, oil skimmers and vacuum pumps.

3. Install Siphon Dams, Etc.

   The response contractor's team may construct a siphon dam to contain the spilled product if contaminated surface water is flowing. A siphon dam is built of earth with steel or plastic pipes embedded through it at a vertical angle such that the lighter, floating product is trapped behind the dam while the water below it is permitted to flow through the pipe.

4. Debris Removal

   Debris will consist of steel, concrete, timber and vegetation contaminated by the spilled product, plus product-soaked sorbent materials and trash generated by the response contractor's team. Contaminated lumber from marine facilities is anticipated to make up the majority of the debris.

   Company will remove and dispose of debris or may direct the response contractor to do so. Ultimate disposal may depend on the degree of contamination and is subject to approval by the regulating agencies.

   Typically, steel and concrete will be transported to a landfill. Timber and vegetation will be either landfilled or incinerated off-site. The regulatory agencies may permit on-site burning of timber and vegetation under some circumstances.

5. Stabilize Damaged or Affected Structures

   The response contractor will construct temporary bracing and shoring as necessary to prevent collapse of structures and foundations that might impede or endanger the response work. This may include timber shoring as temporary replacements for sleepers under a damaged pipeline section.

   Company will stabilize damaged major pipeline bridges and pipeline river crossings, if needed.

6. Initial Response and Draft Work Plan

   The response contractor will prepare a draft work plan and submit it to Company. The work plan will include:

   - A summary of initial response actions and results,
   - Subsequent planned activities,
   - Water and soil removal and treatment and/or disposal,
   - Air monitoring program,
   - Sampling and Analysis Plan,
   - Restoration and repairs, and
   - A schedule for the work.

7. Debriefing/Dissemination of Information and Data

   The Company Incident Commander will interface with the regulatory agencies and news media. The response contractor will not disseminate any information or data without approval of the Company Incident Commander. The response contractor may furnish personnel to assist the Company Incident Commander in debriefing.

8. Documentation of Cleanup Efforts and Progress

   The response contractor will prepare and maintain records, including photos and/or video, documenting the response. Records and documents will include the supervisor's daily notes, personnel time sheets, equipment usage logs, material delivery tickets, daily air monitoring logs, and soil and water analysis reports.

   The response contractor's program manager will submit to the Company Incident Commander a report summarizing the accomplishments of the preceding week, the cost status and the response activity schedule.

9. Public Relations/Agency Liaison

   The Company Incident Commander will provide all direct contact with the news media and with regulatory agencies.

Cleanup Strategies for Recreational Sites

1. Access on and through Recreational Sites

   Response activities, particularly movement of vehicles and equipment into and out of the area may temporarily inconvenience or disrupt the public's use of the recreational site facilities. The Company Incident Commander and the response contractor will coordinate access routes and response activity traffic control with the authorities responsible for the recreational site.

   The response contractor may use existing roads into the spill area wherever possible and where permitted by the cognizant authorities. The response contractor will construct staging and laydown areas in locations approved by the appropriate authorities responsible for the recreational site, taking into consideration all ongoing public activities, and any nearby habitations. Where roads do not exist but a practical and approved route is available, the response contractor may construct temporary roads to the spill site, and staging/laydown areas. The response contractor will utilize the minimum size and number of vehicles in the response activities.

   Where navigable waterways are convenient to the site and the cognizant authorities approve waterborne access, the response contractor may use workboats and/or barges to mobilize the response equipment to the site. Response equipment sizes may be limited by the capacity of available boats and barges. The response contractor may use existing boat landings/docks or construct a temporary landing to tie up the watercraft and offload the equipment.

   Roads, staging areas and watercraft landings will be restored to their pre-spill conditions as described in SITE RESTORATION below.

2. Protection of Recreational Sites

   One of the major concerns in this scenario is the removal of contamination to levels acceptable for the protection of the public using the park.

   Once immediate human health and safety have been addressed, priority will be given to protecting the recreational site features from contamination, and limiting further spread of the spilled product. Playground equipment, swimming pools, and pavilions used for public gatherings will be given special attention. Containment booms and berms may be used to contain and direct the spilled product. The cognizant authority, the Company Incident Commander and the first responder will identify the recreational site features, land areas and water bodies threatened by the spill, prioritize the features to be protected, and select the boom and berm locations. The Company Incident Commander will communicate special or additional equipment and material needs to the contractor's response team.

   Where a body of water is affected or threatened by the spill, the response contractor will usually deploy containment booms as the isolating/protecting mechanism. The booms will be deployed downstream of the spill if the water is moving, as in a stream or river. The boom will be deployed to surround the spill if it is on a pond or lake where the water is relatively stagnant.

Containment of an overland spill is typically done with ditches and berms. With the concurrence of and at the direction of the cognizant authority, the response contractor may dig ditches and build berms downslope of the spill site to stop the overland flow of the spilled product. In some cases it may be possible to use this ditch/berm system to divert the product to a collection point downslope of the spill. If the soil dug from the ditches is clay, it may be used to build the berms. Sandy or gravelly does not make good barrier berm material. If importing clay from offsite is impractical and no clay is available onsite, the response contractor may have to use sorbent materials, i.e., sorbent booms and pads, to construct the berm.

3. Recovery of Product from Water and Treatment of Contaminated Water

Product is typically recovered from water bodies such as lakes, ponds and rivers by a combination of mechanical skimming, vacuum recovery, and sorbent materials. The point of recovery will be as close as practical downstream of the spill site.

Product spilled onto the ground is usually recovered by excavating the product-laden soils. Excavation of contaminated soils will be performed only with the concurrence of and at the direction of the cognizant authorities. Other methods such as soil/vapor extraction, or pumping from recovery wells may be considered as part of the long-term plan. Porous soils, such as sands and gravels may permit the product to soak in to a depth of several feet or more, usually until it is stopped by a layer of clay, solid rock or a water table. Clay soils usually retain the product at or near the surface, and require less excavation. Collection of product for treatment or disposal will easier in clay soils than in sandy/gravelly soils.

Selection of storage and treatment locations will depend on patterns of public use of the site, proximity of the public using the recreational site, and approvals and/or preferences of the responsible authorities. If space is available and if the cognizant agency permits, the response contractor may construct the water storage and treatment system in or adjacent to the recreational site, near the site of the spill, at a safe distance from any feature subject to human occupation or usage. If space is not available for practical reasons, or if onsite treatment would be a continuing hazard to the public safety and health, the contained water may have to be transported offsite for treatment or disposal.

Once the contaminated waters have been stored, treatment options can be explored. Possible treatment options include steam or air stripping, oil/water separation, carbon adsorption, or other methodologies or combinations of methodologies.

4. Cleaning of Affected Structures

Man-made structures can be cleaned by traditional methods that include wiping, hot water, low or high-pressure washdown, and use of surfactants, emulsifiers or other agents. Swimming pools, playground equipment, pavilions and similar structures will receive special attention during cleaning. Some wooden structures that cannot be adequately cleaned may have to be removed and/or replaced.

Cleaning methods and materials to be used at a spill will be discussed with the appropriate authorities and used only with their concurrence and at their direction.

Washdown water and other liquids from cleaning activities should be contained by the boom or ditch/berm system, then collected and treated with the contaminated ground and surface waters.

5. Solids Handling and Removal

Product-laden soils will be removed to the satisfaction of, and at the direction of, the appropriate authorities. It is expected that product-contaminated soils in playgrounds and other areas of frequent and intense human use at recreational sites will be excavated more completely than at spill sites in more remote areas. Heavy equipment, such as tracked excavators and dump trucks, may be used wherever their use is not prohibited by the cognizant authority, or is impractical due to access restrictions.

Sorbent materials and other solid residue will be placed in trash bags and removed from the site for disposition. The response contractor will take particular care to remove all his site-generated wastes from the area, and will conduct a final walking inspection of the entire area with the Company Incident Commander to confirm that this has been done prior to departure.

Contaminated soils and other solids will be removed from the site. Solids will be removed by trucks where roads are available, or by barges where navigable waterways are reasonably close and the volume of contaminated soils justifies their use.

Site Restoration

1. Sampling and Analysis to Verify Cleanup

Sampling and analysis of the remaining soils and water will be coordinated with local, State and federal agencies to verify that the cleanup meets their requirements.

2. Rebuild/Reconstruct Affected Structures/Areas

Recreational site restoration activities will vary considerably from site to site and may entail major efforts by a combination of Company and multiple regulatory and municipal, county or state agencies. As early as possible, the Company should determine the feasibility and practicality of restoration in consultation with the appropriate authorities so that detailed, deliberate plans, specifications, and costs can be prepared.

3. Final Report

The response contractor will prepare a Final Report for Company, summarizing the actions taken during the response activities, with particular attention to restoration and verification of cleanup.

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.

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.

.

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.

3.9 Natural Resource Damage Assessments

Under the provision of CERCLA, the Oil Pollution Act of 1990 (OPA '90), and numerous state statutes, cost recovery can be obtained from industry for natural resource damage caused by the release of oil or hazardous substances to the environment. Natural resources are defined as land, air, biota, groundwater and surface water. A federal or state government entity, an Indian tribe or another nation acting as a public trustee of a natural resource may file claims for damages to natural resources.

A Natural Resource Damage Assessment (NRDA) is used to determine the damages owed to a public Trustee for residual natural resource injuries. This assessment is often conducted by the public Trustee, the potential responsible party or both. During the NRDA study, the injured natural resources are identified, the extent of the injury is quantified and the extent of the economic damage resulting from the loss of services provided by the resources is determined. In addition, the assessment also determines the cost of restoration or replacement of the injured natural resource.

A NRDA study is not conducted in all cases. HSE will work closely with the Trustees on a case-by-case basis to determine if a NRDA study is required. Company may choose to conduct a parallel study if the trustee determines that a NRDA will be conducted. The Environmental Coordinator should be contacted immediately if a Trustee contacts any member of the Company response team. HSE will provide assistance in conducting NRDA studies.

If a spill occurs that could potentially result in a NRDA, steps should be taken to assist the Trustees and to help protect Company interests throughout the assessment process. The following sampling procedures describe the steps that might be taken if the spill enters a stream. Sampling events would be modified appropriately if the spill only impacts land. To fully characterize the impact of the spill, several sampling events may be required. The initial round of samples should be collected as soon as possible following the spill event. Follow up sampling events will be scheduled to document the site restoration.

1. Formulate a sampling plan. Observe the site conditions and determine the best locations to collect samples. Contact a local lab and obtain the proper sampling containers, sampling equipment and documentation. The sample collection may be delegated to the lab or to response contractor personnel.

2. Contact the State Environmental Representative and inform them that samples are to be collected and offer to split the samples. If the State representative is not immediately available, do not wait, go ahead and collect the samples and inform them later. Time is a critical factor.

3. In any spill event, data collection and documentation are key factors to minimizing adverse financial and public perception impact to Company. The increased use of NRDA and lawsuits by local, county and state agencies following a spill, regardless of the efficiency of the response, requires an increased awareness and documentation of our response actions. Any sample collection event and all types of documentation may be utilized in a legal setting, therefore utilizing proper data collection techniques and detailed documentation are important.

a. Photo Documentation: Photograph and/or Video Tape the event as thoroughly as possible. A photo record of the event should be maintained. All major events and response efforts should be photographed to establish a record of the events as they occur.

b. Written Documentation: A written log should be maintained that outlines the following information: 1) Major response events (i.e. time of the spill, time of the response, when valves were shut in, estimated volume of product. etc.) most of this information is documented on the Release Report Form in this FRP; 2) instructions or guidance provided to Company by State or Trustee representatives; 3) amount of product recovered; 4) amount of hazardous waste or special wastes generated as a result of the spill; 5) a sample collection location map that outlines the date, time, and type of samples collected, and; 6) date of project completion.

4. Sample Parameters/Collection: In the event of a product spill, review the State cleanup criteria for the individual state and sample accordingly, your Environmental Coordinator can assist in determining the proper sampling methodology and clean-up standards. If this information is not readily available instruct the lab to analyze for the following parameters: BTEX, (EPA Test Method 8020), and PAH (EPA Test Method 8270). BTEX analysis requires three 40 ml vials for liquid and one 4 oz glass jar for solids. PAH analysis requires a l liter glass jar for liquids, and one 8 oz. glass jar for solids. Properly labeling and chain of custody must be employed when collecting samples. All sample containers should be laboratory quality, glass containers. Use clean stainless steel or Teflon sample spoons and use proper decontamination techniques between samples. All samples should be placed in an ice chest, cooled and transported to the lab as soon as possible. You may choose to delegate the sampling duties to the lab or to the response contractor. Consult your Environmental Coordinator if you have questions concerning proper sample containers or equipment.

Sample Location #1: Background Samples
1 Sediment Sample -- BTEX, PAH
1 Water Sample -- BTEX, PAH

As soon as possible following the spill event, collect a background sample. This sample should be upstream of the spill event in an area that has not been impacted by the spill.

Sample #2: Spilled Product Sample

Collect a sample of the product that has been spilled. This sample is not to be analyzed but should be stored on ice for the next few weeks. The material may be useful in the future in the event that fingerprint analysis is required. Collect approximately 2 quarts of the material if possible.

Sample Location #3: Midpoint Sample
1 Water Sample -- BTEX, PAH
1 Sediment Sample -- BTEX, PAH

Collect a sample of the water and sediment in the area that has been impacted by the release event. This sample will help determine the impact of the spill on the environment.

Sample Location #4: Downstream Sample
1 Water Sample -- BTEX, PAH
1 Sediment Sample -- BTEX, PAH

Collect a sample downstream of the area that has been impacted. This should be downstream of the last containment dike or boom. If the release has not been contained attempt to get ahead of the plume to collect the samples.

5. Air Samples Surveys should be conducted near the release site. Initially, a simple benzene draeger tube may be used. Your Environmental Coordinator will assist in establishing a sampling program if more sophisticated air sampling is required. Follow the same basic approach that is applied to the water sampling. Collect at least one air sample from an upwind location and two samples from a downwind location. Always take precautions collecting the samples and do not put yourself at risk when collecting the samples.

Sampling Procedures

1. Always wear latex or rubber gloves when taking samples. This protects the sample from your hands and your hands from the sample.

2. It is best to use a clean, clear glass jar for sampling. Four- or six-ounce jars are sufficient. Dip or lower the jar (using string if necessary) into the oil or oily water at about a 30° angle. This may allow more oil and less water to flow over the lip of the jar. Do not fill the jar more than 2/3 full.

3. If sampling a small amount of light oil, such as a sheen, the oil can be collected more easily using a Teflon strip or sorbent pad that is transferred to a sample jar. Do not use anything containing organic fibers such as rag, cotton, cheesecloth, etc.; these may contaminate the sample, thus, giving improper analysis results.

4. Decanting the water may be necessary to get enough oil for analysis. To decant, fasten the lid on securely and turn the jar over allowing the water to settle towards the lid. Then unscrew the lid just enough to allow the excess water to slowly escape.

5. Fasten the lid after lining it with aluminum foil or Teflon to obtain a good seal.

6. Affix the documentation label to the jar after wiping it clean and dry for the label to adhere. The label should identify the following information:

    - Date and time of sampling
    - Source/location of sample (be specific)
    - Name of person who took the sample
    - Sample designation using a sequential numbering or lettering system

    a. Samples should be delivered to a laboratory immediately for analysis. If samples cannot be delivered immediately, they should be temporarily stored in a refrigerator or a cool dark place since exposure to heat and light could affect the analysis. Samples should be transported in waterproof containers or wrapped in enough sorbent material to soak up the entire contents of the jar in case of leakage or breakage.

Annex 4 – Table of Contents

4.0	EPA 40 CFR 112
4.1	USCG 33 CFR 154
4.2	DOT 49 CFR 194
4.3	DOT 49 CFR 195
4.4	OSHA 29 CFR 1910.120

4.0 EPA 40 CFR 112

U.S. EPA -OPA 90 Appendix F to Part 112 – Facility Specific Response Plan		
Appendix F	**BRIEF DESCRIPTION**	**LOCATION**
1.0	**Model Facility-Specific Response Plan**	---
1.1	**Emergency Response Action Plan**	--
	1. Qualified Individual Information	ERAP
	2. Emergency Notification Phone List	ERAP
	3. Spill Response Notification Form	ERAP
	4. Response Equipment List and Location	ERAP
	5. Response Equipment Testing and Deployment	ERAP
	6. Facility Response Team	ERAP
	7. Evacuation Plan	ERAP
	8. Immediate Actions	ERAP
	9. Facility Diagram	ERAP
1.2	**Facility Information**	--
1.2.1	Facility name and location	Annex 1
1.2.2	Latitude and Longitude	Annex 1
1.2.3	Wellhead Protection Area	Annex 1
1.2.4	Owner/operator	Annex 1
1.2.5	Qualified Individual	Annex 2
1.2.6	Date of Oil Storage Start-up	Annex 1
1.2.7	Current Operation	Annex 1
1.2.8	Dates and Types of Substantial Expansion	Annex 1
1.3	**Emergency Response Information**	
1.3.1	Notification	Sec. II, Annex 2
1.3.2	Response Equipment List / Location	Annex 2
1.3.3	Response Equipment Testing/Deployment	Sec. III
1.3.4	Personnel	
	• A description of information to pass to response personnel	Sec II
	• A description of response personnel capabilities, including: • Duties of persons at the Facility during a response action	Sec. II
	• Response times and qualifications	Annex 1 & 2
	• Evidence of contractual arrangements	Annex 2

U.S. EPA -OPA 90 Appendix F to Part 112 – Facility Specific Response Plan		
APPENDIX F	**BRIEF DESCRIPTION**	**LOCATION**
1.3.5	Evacuation Plans	Annex 1
	Plans for evacuation…and community evacuation plans, as appropriate	Annex 1
1.3.6	Qualified Individual's Duties	Sec. II, Annex 1
	A description of the duties of the qualified individual to include:	
	Activate internal alarms and hazard communication systems to notify all facility personnel;	Sec. II, Annex 1
	Notify all response personnel, as needed;	Sec. II, Annex 1
	Identify the character, exact source, amount, and extent of the release, as well as the other items needed for notification;	Sec. II, Annex 1
	Notify and provide necessary information to the appropriate Federal, State, and local authorities with designated response roles, including the National Response Center, State Emergency Response Commission, and Local Emergency Planning Committee;	Sec. II, Annex 1
	Assess the interaction of the spilled substance with water and/ or other substances stored at the facility and notify response personnel at the scene of that assessment;	Sec. II, Annex 1
	Assess the possible hazards to human health and the environment due to the release. This assessment must consider both the direct and indirect effects of the release (i.e., the effects of any toxic, irritating, or asphyxiating gases that may be generated, or the effects of any hazardous surface water runoffs from water or chemical agents used to control fire and heat-induced explosion);	Sec. II, Annex 1
	Assess and implement prompt removal actions to contain and remove the substance released;	Sec. II
	Coordinate rescue and response actions as previously arranged with all response personnel;	Sec. II
	Use authority to immediately access company funding to initiate cleanup activities; and	Annex 1
	Direct cleanup activities until properly relieved of this responsibility.	Sec. II
1.4	**Hazard Evaluation**	
1.4.1	Hazard Identification	Annex 1
1.4.2	Vulnerability Analysis	Annex 1
1.4.3	Analysis of the Potential for an Oil Spill	Annex 1
1.4.4	Facility Reportable Oil Spill History	Annex 1
1.5	**Discharge Scenarios**	Annex 1
1.5.1	Small and Medium Discharges	Annex 1
1.5.2	Worst Case Discharge	Annex 1

U.S. EPA -OPA 90 Appendix F to Part 112 – Facility Specific Response Plan		
APPENDIX F	**BRIEF DESCRIPTION**	**LOCATION**
1.6	**Discharge Detection Systems**	Sec II--
1.6.1	Discharge Detection by Personnel	Sec. II, Annex 1
1.6.2	Automated Discharge Detection	Sec. II, Annex 1
1.7	**Plan Implementation**	
1.7.1	Response Resources for Small, Medium, and Worst Case Spills	Annex 1 & 2
1.7.2	Disposal Plans	Sec. II
1.7.3	Containment and Drainage Planning	Sec. II
1.8	**Self-Inspection, Drills/Exercises, and Response Training**	
1.8.1	Facility Self-Inspection	Sec. III
	1.8.1.1 Tank Inspection	Sec. III
	1.8.1.2 Response Equipment Inspection	Sec. III
	1.8.1.3 Secondary Containment Inspection	Sec. III
1.8.2	Facility Drills/Exercises	Sec. III
	1.8.2.1 Qualified Individual Notification Drill Log	Sec. III
	1.8.2.2 Crisis Management Team Tabletop Exercise Log	Sec. III
1.8.3	Response Training	Sec. III
	1.8.3.1 Personnel Response Training Log	Sec. III
	1.8.3.2 Discharge Prevention Meeting Log	Sec. III
1.9	**Diagrams**	
	(1) Site Plan Diagram	Annex 1
	(2) Site Drainage Plan Diagram	Annex 1
	(3) Site Evacuation Plan Diagram	Annex 1
1.10	**Security**	Sec. II
2.0	**Response Plan Cover Sheet**	Annex 1
3.0	**Acronyms**	Sec. I

U.S. EPA -OPA 90 Appendix F to Part 112 – Facility Specific Response Plan (Cont'd)		
40 CFR 112.21	**BRIEF DESCRIPTION**	**LOCATION**
(a)	Develop a training and drill program that satisfies the requirements of this section.	Sec. III
(b)	Develop a facility response training program to train personnel involved in response activities.	Sec. III
(b)(1)	Proper instruction of facility personnel in the procedures to respond to discharges of oil and in applicable oil spill response laws, rules, and regulations.	Sec. III
(b)(2)	Training shall be functional in nature according to job tasks for both supervisory and non-supervisory operational personnel.	Sec. III
(b)(3)	Trainers shall develop specific lesson plans on subject areas relevant to facility personnel involved in oil spill response and cleanup.	Sec. III
(c)	Develop a program of facility response drills/exercises, including evaluation procedures. Can follow PREP.	Sec. III

4.1 USCG 33 CFR 154

33 CFR Part 154 – Facilities Transferring Oil or Hazardous Materials in Bulk	
33 CFR §154.1030	**LOCATION**
(a) The plan must be written in English.	--
(b) A response plan must be divided into the sections listed in this paragraph and formatted in the order specified herein unless noted otherwise. It must also have some easily found marker identifying each section listed below. The following are the sections and subsections of a facility response plan:	T.O.C.
(1) Introduction and plan contents.	T.O.C., Sec. I
(2) Emergency response action plan:	ERAP
(i) Notification procedures.	ERAP
(ii) Facility's spill mitigation procedures.	ERAP
(iii) Facility's response activities.	ERAP
(iv) Fish and wildlife and sensitive environments.	ERAP
(v) Disposal plan.	ERAP
(3) Training and Exercises:	ERAP
(i) Training procedures.	Sec. III
(ii) Exercise procedures.	Sec. III
(4) Plan review and update procedures.	Sec. I
(5) Appendices.	
(i) Facility-specific information.	Annex 1
(ii) List of contacts.	Annex 2
(iii) Equipment lists and records.	Sec. III
(iv) Communications plan.	Sec. II
(v) Site-specific safety and health plan.	Sec. II
(vi) List of acronyms and definitions.	Sec. I
(vii) A geographic-specific appendix for each zone in which a mobile facility operates.	N/A
(c) The required contents for each section and subsection of the plan are contained in §§ 154.1035, 154.1040, and 154.1041, as appropriate.	Annex 4
(d) The sections and subsections of response plans submitted to the COTP must contain at a minimum all the information required in §§154.1035, 154.1040, and 154.1041, as appropriate. It may contain other appropriate sections, subsections, or information that are required by other Federal, State, and local agencies.	Annex 4
(e) For initial and subsequent submission, a plan that does not follow the format specified in paragraph (b) of this section must be supplemented with a detailed cross-reference section to identify the location of the applicable sections required by this subpart.	Annex 4

33 CFR Part 154 – Facilities Transferring Oil or Hazardous Materials in Bulk

33 CFR §154.1030 (Cont'd)	LOCATION
(f) The information contained in a response plan must be consistent with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 CFR part 300) and the Area Contingency Plan(s) (ACP) covering the area in which the facility operates. Facility owners or operators shall ensure that their response plans are in accordance with the ACP in effect 6 months prior to initial plan submission or the annual plan review required under § 154.1065(a). Facility owners or operators are not required to, but may at their option, conform to an ACP which is less than 6 months old at the time of plan submission.	Sec. I
CFR §154.1035	**LOCATION**
(a) *Introduction and plan content.* This section of the plan must include facility and plan information as follows:	--
(1) The facility's name, street address, city, county, state, ZIP code, facility telephone number, and facsimile number, if so equipped. Include mailing address if different from street address.	Annex 1
(2) The facility's location described in a manner that could aid both a reviewer and a responder in locating the specific facility covered by the plan, such as, river mile or location from a known landmark that would appear on a map or chart.	Annex 1
(3) The name, address, and procedures for contacting the facility's owner or operator on a 24-hour basis.	Annex 1
(4) A table of contents.	Annex 1
(5) During the period that the submitted plan does not have to conform to the format contained in this subpart, a cross index, if appropriate.	Sec. I, Annex 1, 2, 3, 4
(6) A record of change(s) to record information on plan updates.	Sec. I
(b) *Emergency Response Action Plan.* This section of the plan must be organized in the subsections described in this paragraph:	--
(1) *Notification procedures.* (i) This subsection must contain a prioritized list identifying the person(s), including name, telephone number, and their role in the plan, to be notified of a discharge or substantial threat of a discharge of oil. The telephone number need not be provided if it is listed separately in the list of contacts required in the plan. This Notification Procedures listing must include:-	Sec. II, Annex 2
(A) Facility response personnel, the spill management team, oil spill removal organizations, and the qualified individual(s) and the designated alternate(s); and	Sec. II, Annex 2
(B) Federal, State, or local agencies, as required.	Sec. II, Annex 2
(ii) This subsection must include a form, such as that depicted in Figure 1, which contains information to be provided in the initial and follow-up notifications to Federal, State, and local agencies. The form shall include notification of the National Response Center as required in part 153 of this chapter. Copies of the form also must be placed at the location(s) from which notification may be made. The initial notification form must include space for the information contained in Figure 1. The form must contain a prominent statement that initial notification must not be delayed pending collection of all information.	Sec. I
(2) *Facility's spill mitigation procedures.* (i) This subsection must describe the volume(s) and oil groups that would be involved in the --	Annex 1
(A) Average most probable discharge from the MTR facility;	Annex 1
(B) Maximum most probable discharge from the MTR facility;	Annex 1
(C) Worst case discharge from the MTR facility; and	Annex 1
(D) Where applicable, the worst case discharge from the non-transportation-related facility. This must be the same volume provided in the response plan for the non-transportation-related facility.	Annex 1

33 CFR Part 154 – Facilities Transferring Oil or Hazardous Materials in Bulk

CFR §154.1035 (Cont'd)	LOCATION
(ii) This subsection must contain prioritized procedures for facility personnel to mitigate or prevent any discharge or substantial threat of a discharge of oil resulting from operational activities associated with internal or external facility transfers including specific procedures to shut down affected operations. Facility personnel responsible for performing specified procedures to mitigate or prevent any discharge or potential discharge shall be identified by job title. A copy of these procedures shall be maintained at the facility operations center. These procedures must address actions to be taken by facility personnel in the event of a discharge, potential discharge, or emergency involving the following equipment and scenarios:	Sec. II
(A) Failure of manifold, mechanical loading arm, other transfer equipment, or hoses, as appropriate;	Sec. II
(B) Tank overfill;	Sec. II
(C) Tank failure;	Sec. II
(D) Piping rupture;	Sec. II
(E) Piping leak, both under pressure and not under pressure, if applicable;	Sec. II
(F) Explosion or fire; and	Sec. II
(G) Equipment failure (e.g. pumping system failure, relief valve failure, or other general equipment relevant to operational activities associated with internal or external facility transfers.)	Sec. II
(iii) This subsection must contain a listing of equipment and the responsibilities of facility personnel to mitigate an average most probable discharge.	Sec. II, Annex 2
(3) *Facility's response activities.*	
(i) This subsection must contain a description of the facility personnel's responsibilities to initiate a response and supervise response resources pending the arrival of the qualified individual.	Sec. II
(ii) This subsection must contain a description of the responsibilities and authority of the qualified individual and alternate as required in § 154.1026.	Sec. II, Annex 1
(iii) This subsection must describe the organizational structure that will be used to manage the response actions. This structure must include the following functional areas.	Sec. II
(A) Command and control;	Sec. II
(B) Public information;	Sec. II
(C) Safety;	Sec. II
(D) Liaison with government agencies;	Sec. II
(E) Spill Operations;	Sec. II
(F) Planning;	Sec. II
(G) Logistics support; and	Sec. II
(H) Finance.	Sec. II

33 CFR Part 154 – Facilities Transferring Oil or Hazardous Materials in Bulk

CFR §154.1035 (Cont'd)	LOCATION
(iv) This subsection must identify the oil spill removal organizations and the spill management team to:	--
(A) Be capable of providing the following response resources:	--
(*1*) Equipment and supplies to meet the requirements of §§ 154.1045, 154.1047 or subparts H or I of this part, as appropriate; and	Annex 2
(*2*) Trained personnel necessary to continue operation of the equipment and staff of the oil spill removal organization and spill management team for the first 7 days of the response.	Sec. II, Annex 2
(B) This section must include job descriptions for each spill management team member within the organizational structure described in paragraph (b)(3)(iii) of this section. These job descriptions should include the responsibilities and duties of each spill management team member in a response action.	Sec. II
(v) For mobile facilities that operate in more than one COTP zone, the plan must identify the oil spill removal organization and the spill management team in the applicable geographic-specific appendix. The oil spill removal organization(s) and the spill management team discussed in paragraph (b)(3)(iv)(A) of this section must be included for each COTP zone in which the facility will handle, store, or transport oil in bulk.	N/A
(4) *Fish and wildlife and sensitive environments.* (i) This section of the plan must identify areas of economic importance and environmental sensitivity, as identified in the ACP, which are potentially impacted by a worst case discharge. ACPs are required under section 311(j)(4) of the FWPCA to identify fish and wildlife and sensitive environments. The applicable ACP shall be used to designate fish and wildlife and sensitive environments in the plan. Changes to the ACP regarding fish and wildlife and sensitive environments shall be included in the annual update of the response plan, when available.	Sec. I, Annex 3
(ii) For a worst case discharge from the facility, this section of the plan must	--
(A) List all fish and wildlife and sensitive environments identified in the ACP which are potentially impacted by a discharge of persistent oils, non-persistent oils, or non-petroleum oils.	Annex 3
(B) Describe all the response actions that the facility anticipates taking to protect these fish and wildlife and sensitive environments.	Annex 3
(C) Contain a map or chart showing the location of those fish and wildlife and sensitive environments which are potentially impacted. The map or chart shall also depict each response action that the facility anticipates taking to protect these areas. A legend of activities must be included on the map page.	Annex 3

33 CFR Part 154 – Facilities Transferring Oil or Hazardous Materials in Bulk

CFR §154.1035 (Cont'd)	LOCATION
(iii) For a worst case discharge, this section must identify appropriate equipment and required personnel, available by contract or other approved means as described in § 154.1028, to protect fish and wildlife and sensitive environments which fall within the distances calculated using the methods outlined in this paragraph as follows:	Sec. I, Annex 2
(A) Identify the appropriate equipment and required personnel to protect all fish and wildlife and sensitive environments in the ACP for the distances, as calculated in paragraph (b)(4)(iii)(B) of this section, that the persistent oils, non-persistent oils, or non-petroleum oils are likely to travel in the noted geographic area(s) and number of days listed in Table 2 of appendix C of this part;	Annex 2
(B) Calculate the distances required by paragraph (b)(4)(iii)(A) of this section	Annex 3
(5) *Disposal Plan.* This subsection must describe any actions to be taken or procedures to be used to ensure that all recovered oil and oil contaminated debris produced as a result of any discharge are disposed according to Federal, state, or local requirements.	Sec. III
(c) *Training and exercises.* This section must be divided into the following two subsections:	Sec. III
(1) *Training procedures.* This subsection must describe the training procedures and programs of the facility owner or operator to meet the requirements in § 154.1050.	Sec. III
(2) *Exercise procedures.* This subsection must describe the exercise program to be carried out by the facility owner or operator to meet the requirements in § 154.1055.	Sec. III
(d) *Plan review and update procedures.* This section must address the procedures to be followed by the facility owner or operator to meet the requirements of §154.1065 and the procedures to be followed for any post-discharge review of the plan to evaluate and validate its effectiveness.	Sec. I
(e) *Appendices.* This section of the response plan must include the appendices described in this paragraph.	
(1) *Facility-specific information.* This appendix must contain a description of the facility's principal characteristics.	Annex 1
(i) There must be a physical description of the facility including a plan of the facility showing the mooring areas, transfer locations, control stations, locations of safety equipment, and the location and capacities of all piping and storage tanks.	Annex 1
(ii) The appendix must identify the sizes, types, and number of vessels that the facility can transfer oil to or from simultaneously.	Annex 1

33 CFR Part 154 – Facilities Transferring Oil or Hazardous Materials in Bulk

CFR §154.1035 (Cont'd)	LOCATION
(iii) The appendix must identify the first valve(s) on facility piping separating the transportation-related portion of the facility from the non transportation-related portion of the facility, if any. For piping leading to a manifold located on a dock serving tank vessels, this valve is the first valve inside the secondary containment required by 40 CFR part 112.	Annex 1
(iv) The appendix must contain information on the oil(s) and hazardous material handled, stored, or transported at the facility in bulk. A material safety data sheet meeting the requirements of 29 CFR 1910.1200, 33 CFR 154.310(a)(5) or an equivalent will meet this requirement. This information can be maintained separately providing it is readily available and the appendix identifies its location. This information must include --	Annex 1
(A) The generic or chemical name;	Annex 1
(B) A description of the appearance and odor;	Annex 1
(C) The physical and chemical characteristics;	Annex 1
(D) The hazards involved in handling the oil(s) and hazardous materials. This shall include hazards likely to be encountered if the oil(s) and hazardous materials come in contact as a result of a discharge; and	Annex 1
(E) A list of firefighting procedures and extinguishing agents effective with fires involving the oil(s) and hazardous materials.	Annex 1
(2) *List of contacts.* This appendix must include information on 24-hour contact of key individuals and organizations. If more appropriate, this information may be specified in a geographic-specific appendix. The list must include -	Annex 2
(i) The primary and alternate qualified individual(s) for the facility;	Annex 2
(ii) The contact(s) identified under paragraph (b)(3)(iv) of this section for activation of the response resources; and	Annex 2
(iii) Appropriate Federal, State, and local officials.	Sec. II, Annex 2
(3) *Equipment list and records.* This appendix must include the information specified in this paragraph.	
(i) The appendix must contain a list of equipment and facility personnel required to respond to an average most probable discharge, as defined in § 154.1020. The appendix must also list the location of the equipment.	Annex 2
(ii) The appendix must contain a detailed listing of all the major equipment identified in the plan as belonging to an oil spill removal organization(s) that is available, by contract or other approved means as described in § 154.1028(a), to respond to a maximum most probable or worst case discharge, as defined in § 154.1020. The detailed listing of all major equipment may be located in a separate document referenced by the plan. Either the appendix or the separate document referenced in the plan must provide the location of the major response equipment.	Annex 2

33 CFR Part 154 – Facilities Transferring Oil or Hazardous Materials in Bulk

CFR §154.1035 (Cont'd)	LOCATION
(iii) It is not necessary to list response equipment from oil spill removal organization(s) when the organization has been classified by the Coast Guard and their capacity has been determined to equal or exceed the response capability needed by the facility. For oil spill removal organization(s) classified by the Coast Guard, the classification must be noted in this section of the plan.	Annex 2
(4) *Communications plan.* This appendix must describe the primary and alternate method of communication during discharges, including communications at the facility and at remote locations within the areas covered by the response plan. The appendix may refer to additional communications packages provided by the oil spill removal organization. This may reference another existing plan or document.	Sec. II
(5) *Site-specific safety and health plan.* This appendix must describe the safety and health plan to be implemented for any response location(s). It must provide as much detailed information as is practicable in advance of an actual discharge. This appendix may reference another existing plan requiring under 29 CFR 1910.120.	Sec. II
(6) *List of acronyms and definitions.* This appendix must list all acronyms used in the response plan including any terms or acronyms used by Federal, State, or local governments and any operational terms commonly used at the facility. This appendix must include all definitions that are critical to understanding the response plan.	Sec. I
CFR §154.1050	**LOCATION**
(a) A response plan submitted to meet the requirements of §154.1035 or §154.1040, as appropriate, must identify the training to be provided to each individual with responsibilities under the plan. A facility owner or operator must identify the method to be used for training any volunteers or casual laborers used during a response to comply with the requirements of 29 CFR 1910.120.	Sec. II
(b) A facility owner or operator shall ensure the maintenance of record sufficient to document training of facility personnel; and shall make them available for inspection upon request by the U.S. Coast Guard. Records of facility personnel must be maintained that the facility for 3 years.	Sec. II
(c) Where applicable, a facility owner or operator shall ensure that an oil spill removal organization identified in a response plan to meet the requirements of this subpart maintains records sufficient to document training for the organization's personnel and shall make them available for inspection upon request by the facility's management personnel, the qualified individual, and U.S. Coast Guard. Records must be maintained for 3 years following the completion of training.	Sec. II
(d) The facility owner or operator remains responsible for ensuring that all private response personnel are trained to meet the Occupation Safety and Health Administration (OSHA) standards for emergency response operations in 29 CFR 1910.120.	Sec. II

33 CFR Part 154 – Facilities Transferring Oil or Hazardous Materials in Bulk

CFR §154.1055	LOCATION
(a)(1) Qualified individual notification exercises (quarterly).	Sec. III
(a)(2) Spill management team tabletop exercises (annually). In a 3-year period, at least one of these exercises must include a worst case discharge scenario.	Sec. III
(a)(3)(i) Equipment deployment exercises. Semi-annually for facility owned and operated equipment.	Sec. III
(a)(3)(ii) Equipment deployment exercises. Annually for oil spill removal organization equipment.	Sec. III
(a)(4) Emergency procedures exercises (optional).	Sec. III

4.2 DOT 49 CFR 194

DOT/PHMSA 49 CFR PART 194 CROSS REFERENCE		
§ 194.105	**BRIEF DESCRIPTION**	**LOCATION**
(a)	Each operator shall determine the worst case discharge for each of its response zones and provide the methodology, including calculations, used to arrive at the volume.	Annex 1
(b)	The worst case discharge is the largest volume, in barrels, of the following:	Annex 1
(b)(1)	The pipeline's maximum release time in hours, plus the maximum shutdown response time in hours (based on historic discharge data or in the absence of such historic data, the operator's best estimate), multiplied by the maximum flow rate expressed in barrels per hour (based on the maximum daily capacity of the pipeline), plus the largest line drainage volume after shutdown of the line section(s) in the response zone expressed in barrels; or	Annex 1
(b)(2)	The largest foreseeable discharge for the line section(s) within a response zone, expressed in barrels, based on the maximum historic discharge, if one exists, adjusted for any subsequent corrective or preventive action taken; or	Annex 1
(b)(3)	If the response zone contains one or more breakout tanks, the capacity of the single largest tank or battery of tanks within a single secondary containment system, adjusted for the capacity or size of the secondary containment system, expressed in barrels.	Annex 1
(b)(4)	Operators may claim prevention credits for breakout tank secondary containment and other specific spill prevention measures as follows:	Annex 1
§ 194.107	**BRIEF DESCRIPTION**	
(a)	Each response plan must plan for resources for responding, to the maximum extent practicable, to a worst case discharge, and to a substantial threat of such a discharge.	Annex 2
(b)	An operator must certify in the response plan that it reviewed the NCP and each applicable ACP and that its response plan is consistent with the NCP and each applicable ACP as follows:	Sec. I
(b)(1)	As a minimum to be consistent with the NCP as a facility response plan must:	Sec. I
(b)(1)(i)	Demonstrate an operator's clear understanding of the function of the Federal response structure, including procedures to notify the National Response Center reflecting the relationship between the operator's response organization's role and the Federal On Scene Coordinator's role in pollution response;	Sec. 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
(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

DOT/PHMSA 49 CFR PART 194 CROSS REFERENCE		
§ 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, ERAP
(c)(1)(vii)	Training procedures,	Sec. III
(c)(1)(viii)	Equipment testing,	Sec. III
(c)(1)(ix)	Drill program – an operator will satisfy the requirement for a drill program by following the National Preparedness for Response Exercise Program (PREP) guidelines. An operator choosing not to follow PREP guidelines must have a drill program that is equivalent to PREP. The operator must describe the drill program in the response plan and OPS will determine if the program is equivalent to PREP.	Sec. III
(c)(1)(x)	Plan review and update procedures;	Sec. I
(c)(2)	An appendix for each response zone that includes the information required in paragraph (c)(1)(i)-(ix) of this section and the worst case discharge calculations that are specific to that response zone. An operator submitting a response plan for a single response zone does not need to have a core plan and a response zone appendix. The operator of a single response zone onshore pipeline shall have a single summary in the plan that contains the required information in § 194.113.7; and.	Annex 1
(c)(3)	A description of the operator's response management system including the functional areas of finance, logistics, operations, planning, and command. The plan must demonstrate that the operator's response management system uses common terminology and has a manageable span of control, a clearly defined chain of command, and sufficient trained personnel to fill each position.	Sec. I, Sec II
§ 194.111	**BRIEF DESCRIPTION**	
(a)	Each operator shall maintain relevant portions of its response plan at the operator's headquarters and at other locations from which response activities may be conducted, for example, in field offices, supervisor's vehicles, or spill response trailers.	Sec. I

DOT/PHMSA 49 CFR PART 194 CROSS REFERENCE		
§ 194.113	**BRIEF DESCRIPTION**	
(a)	The information summary for the core plan, required by § 194.107, must include:	--
(a)(1)	The name and address of the operator.	Sec. I, Annex 1
(a)(2)	For each response zone which contains one or more line sections that meet the criteria for determining significant and substantial harm as described in § 194.103, a listing and description of the response zones, including county(s) and state(s).	Annex 1
(b)	The information summary for the response zone appendix, required in § 194.107, must include:	--
(b)(1)	The information summary for the core plan.	Sec. I
(b)(2)	The names or titles and 24-hour telephone numbers of the qualified individual(s) and at least one alternate qualified individual(s);	Annex 2
(b)(3)	The description of the response zone, including county(s) and state(s), for those zones in which a worst case discharge could cause substantial harm to the environment.	Annex 1
(b)(4)	A list of line sections for each pipeline contained in the response zone, identified by milepost or survey station number, or other operator designation.	Annex 1
§ 194.115	**BRIEF DESCRIPTION**	
(b)(5)	The basis for the operator's determination of significant and substantial harm.	Sec. I
(b)(6)	The type of oil and volume of the worst case discharge.	Annex 1
(a)	Each operator shall identify and ensure, by contract or other approved means, the resources necessary to remove, to the maximum extent practicable, a worst case discharge and to mitigate or prevent a substantial threat of a worst case discharge.	Annex 2
(b)	An operator shall identify in the response plan the response resources which are available to respond within the time specified, after discovery of a worst case discharge, or to mitigate the substantial threat of such a discharge.	Sec. II, Annex 2

DOT/PHMSA 49 CFR PART 194 CROSS REFERENCE		
§ 194.117	BRIEF DESCRIPTION	
(a)	Each operator shall conduct training to ensure that:	--
(a)(1)	All personnel know --	--
(a)(1)(I)	Their responsibilities under the response plan	Sec. II, Annex 2
(a)(1)(ii)	The name and address of, and the procedure for contacting, the operator on a 24-hour basis	Annex 2, ERAP
(a)(1)(iii)	The name of, and procedures for contacting, the qualified individual on a 24-hour basis	Annex 2, ERAP
(a)(2)	Reporting personnel know --	
(a)(2)(I)	The content of the information summary of the response plan.	Sec. II, Annex 2
(a)(2)(ii)	The toll-free telephone number of the National Response Center	Sec. II, Annex 2
(a)(2)(iii)	The notification process	Sec. II, Annex 2
(a)(3)	Personnel engaged in response activities know --	--
(a)(3)(I)	The characteristics and hazards of the oil discharged	Annex 1
(a)(3)(ii)	The conditions that are likely to worsen emergencies, including the consequences of facility malfunctions or failures, and the appropriate corrective actions.	Sec. II, Annex 1
(a)(3)(iii)	The steps necessary to control any accidental discharge of oil and to minimize the potential for fire, explosion, toxicity, or environmental damage	Sec. II, Annex 1
(a)(3)(iv)	The proper firefighting procedures and use of equipment, fire suits, and breathing apparatus	Sec. II, Annex 1
(b)	Each operator shall maintain a training record for each individual that has been trained as required by this section. These records must be maintained in the following manner as long as the individual is assigned duties under the response plan	Sec. III
(b)(1)	Records for operator personnel must be maintained at the operator's headquarters	Sec. III
(b)(2)	Records for personnel engaged in response, other than operator personnel, shall be maintained as determined by the operator.	Sec. III
(c)	Nothing in this section relieves an operator from the responsibility to ensure that all response personnel are trained to meet the OSHA standards for emergency response operations in 29 CFR 1910.120 ...	Sec. III

4.3 DOT 49 CFR 195

DOT/PHMSA 49 CFR PART 195.402 & .403 CROSS REFERENCE		
49 CFR 195.402	**Brief Description**	**Location**
(c)	*Maintenance and Normal Operations:* The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:	Annex 1
(c)(4)	Determining which pipeline facilities are located in areas that would required an immediate response by the operator to prevent hazards to the public if the facilities failed or malfunctioned.	Annex 1
(c)(5)	Analyzing pipeline accidents to determine their causes.	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. III
(e)	Emergencies	Sec. II
(e)(1)	Receive, Identify, and Classify Notices of Events	Sec. II
(e)(2)	Procedures for Prompt and Effective Response	Sec. II
(e)(3)	Availability of Response Personnel and Resources	Sec. II, Annex 1 & 2
(e)(4)	Emergency Shutdown and Pressure Reduction Procedures	Sec. II
(e)(5)	Control and Minimization of Released Hazardous Liquid	Sec. II
(e)(6)	Evacuation, Traffic, and Security Control	Sec. II
(e)(7)	Notification of Emergency Officials	Sec. II, Annex 2
(e)(8)	Assessment of HVL Clouds	N/A
(e)(9)	Post Incident Critique	Annex 1

DOT/PHMSA 49 CFR PART 195.402 & .403 CROSS REFERENCE		
49 CFR 195.403	**Brief Description**	**Location**
(a)	Operator Personnel Training	Sec. III-
(a)(1)	Carry Out 195.402 Emergency Procedures	Sec. II
(a)(2)	Characteristics and Hazards of Liquids and HVLs	Annex 1
(a)(3)	Recognition of Emergency Causes and Preventative Actions	Sec. II, Annex 1
(a)(4)	Steps to Control and Minimize Effects of Accidental Release	Sec. II
(a)(5)	Firefighting Procedures and Equipment	Sec II, Annex 1
(b)	Operator's Training Program	Sec. III
(b)(1)	Review and Evaluate Response Personnel Performance	Annex 1
(b)(2)	Implement Training Program Changes Where Appropriate	Sec. III
(c)	Supervise Knowledge of Applicable Response Procedures	Sec III

4.4 OSHA 29 CFR 1910.120

OSHA Emergency Response Plan Requirements (29 CFR 1910.120(p)(8)(ii))	
Brief Description	Location
Pre-emergency planning and coordination with outside parties	Sec II
Personnel roles, lines of authority and communication	Sec. II, Annex 2
Emergency recognition and prevention	Sec. II, Annex 1
Safe distances and places of refuge	Sec. II, Annex 1
Site security and control	Sec. II
Evacuation routes and procedures	Sec. II, Annex 1
Decontamination procedures	Sec. II
Emergency medical treatment and first aid	Sec. II
Emergency alerting and response procedures	Sec. II, Annex 1
Critique of response and follow-up	Sec. II, Annex 1
PPE and emergency equipment	Sec. II

Annex 5 – Table of Contents

5.0 Distribution List

5.1 Record of Revisions

5.0 Distribution List

Recipient	Address	Plan Type Held	
		Hard Copy	CD
U.S. EPA - Region 2	Arlene Anderson FRP Coordinator Response & Prevention Branch 2890 Woodbridge Avenue, MS-211 Edison, NJ 08837	**1**	**1**
U.S. Coast Guard - Commanding Officer, Marine Safety Office	311 Battery Road Staten Island, NY 10305	**1**	**1**
Facility Supervisor	Mark Kaminski 4601 Tremley Point Road Linden, NJ 07036	**1**	**1**
Director, Emergency Response & Security	Rob Yarbrough 3010 Briarpark Drive Houston, TX 77042	**1**	**1**
Area Supervisor	Ed Kaminski 1100 Route 1 North Linden, NJ 07036	**1**	**1**
US DOT/PHMSA	Attn: Melanie Barber 1200 New Jersey Ave; Rm. E22-210, East Bldg Washington, D.C. 20590	**0**	**2**
Bayway Refinery – Shift Superintendent's Office	1400 Park Avenue FPCC Building Linden, NJ 07036-1610	**1**	**1**

5.1 Record of Revisions

Date	Revision No.	Revision
05/12	Initial Version	New Hard Copy and CD
10/13	2013-1	Updated formatting throughout, updated address,
01/14	2014-1	Added in NRC Phone # to Page 10; removed reference to Operations Field Response Manual; added in Facility Spill History to Annex 1; updated page numbers in Annex 1.

Update Notice

Tremley Point Marine Terminal, Dock & NJ-RZ Appendix 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
Tremely Point Terminal ICP **ERP CD**	Destroy all previously dated Tremley Point Marine Terminal ICP CDs.	New Tremley Point Marine Terminal ICP 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.	

Update Notice

Tremley Point Marine Terminal, Dock & NJ-RZ Appendix Integrated Contingency Plan (ICP)

To all holders of the ICP

Date: October 2013
Revision: 2013-1

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
Tremely Point Terminal ICP **ERP CD**	Destroy all previously dated Tremley Point Marine Terminal ICP CDs.	New Tremley Point Marine Terminal ICP Dated 10/13
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.	

Update Notice

Tremley Point Marine Terminal, Dock & NJ-RZ Appendix Integrated Contingency Plan (ICP)

To all holders of the ICP

Date: January 2014
Revision: 2014-1

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
Section 2	Page 10 Page 113	Page 10 Page 113
Annex 1	Pages 44 – end	Pages 44 – end
Tremely Point Terminal ICP **ERP CD**	Destroy all previously dated Tremley Point Marine Terminal ICP CDs.	New Tremley Point Marine Terminal ICP Dated 01/14.
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.	

EMERGENCY RESPONSE ACTION PLAN

Tremley Point Marine Terminal, Dock, & New Jersey Response Zone

Address:

4601 Tremley Point Road
(or Foot of South Wood Avenue)
Linden, NJ 07036

Agency Plan Reference Numbers:

USCG: NY184

EPA: FRP 02A00043

DOT/PHMSA: CPNJ

Owner/Operator:

Phillips 66
3010 Briarpark Drive
Houston, TX 77042

24-Hour Number

(800) 231-2551 or (877) 267-2290

VOLUME 1 OF 1

Prepared by: The Response Group, Inc. • 13939 Telge Road • Cypress, Texas 77429

Confidentiality Notice: This document is for the sole use of the intended recipient(s) and contains information that is considered to be proprietary to Phillips 66. Any unauthorized review, use, disclosure or distribution is strictly prohibited.

Annex 6 – Table of Contents

6.0	General Facility Identification Information
6.1	Communication Equipment
6.2	Notification Sequence
6.3	Emergency Notification Contact List
6.4	Emergency Response Equipment, Testing & Deployment
6.5	Evacuation
6.6	Facility Diagrams
6.7	Response Forms

The purpose of this Emergency Response Action Plan (ERAP) is to provide quick access to key types of information that are often required in the initial stage of a spill response. The information provided in this ERAP is presented in greater detail in other sections of the plan.

6.0 General Facility Identification Information

Facility Information

Facility Name:	Tremley Point Terminal
Facility Address:	4601 Tremley Point Road or Foot of South Wood Avenue Linden, NJ 07036
Facility Main Phone / Fax Number:	908-523-6528 / 908-862-6719
Facility Mailing Address:	1400 Park Avenue Linden, NJ 07036
County	Union
Latitude and Longitude:	(b) (7)(F), (b) (3) [redacted]
Wellhead Protection Area	None
Owner of Facility:	Phillips66 Company
Owner Address (if different from facility):	3010 Briarpark Drive Houston, TX 77042
Owner Phone:	281-293-3891
Owner County:	Harris
Operator of Facility:	Phillips66 Company
Dun and Bradstreet Number:	Phillips 66:07-837-8508
NAICS Cods:	424710 (Petroleum Bulk Stations & Terminals)
Largest Oil Storage Tank Capacity: (EPA)	(b) (7)(F), (b) (3) [redacted]
Facility Maximum Oil Storage Capacity (incl. DOT Breakout Tanks):	
Number of Aboveground Oil Storage Tanks: (incl. EPA & DOT Breakout Tanks)	24
Number of Underground Oil Storage Tanks	2 (currently out of service)
Product Stored volume / type / capacity	See tank table – Annex 1.2
Worst Case Discharge Amount: EPA	(b) (7)(F), (b) (3) [redacted]
Worst Case Discharge Amount: USCG	
Facility Distance to Navigable Waters:	0 to ¼ mile
Tenure Owner/Operator & Date of Oil Storage Start-up	1918

Facility Information (Cont'd)

General Information	
Current Operation	The Tremley Point Terminal, located on approximately 117 acres south of Newark Bay, on the west bank of the Arthur Kill and bordered by other terminals and industrial property, is a petroleum product terminal.
Vessel, Size, Type, Number	(b) (7)(F), (b) (3) [redacted]
Date(s) and Type(s) of Substantial Expansion(s)	Refer to Tank Table (Annex 1.2) for dates of expansion.
Directions to Facility	(b) (7)(F), (b) (3) [redacted] Total Distance: 6.82 miles Total Estimated Time: 20 minutes.

Pipeline Information

PIPELINE NAME LENGTH DIAMETER	Linden Harbor to Tremley Product Line 12" (2.1 miles)	
LOCATION	Counties:	Union
	State:	New Jersey
MILEPOST	Active	(b) (7)(F), (b) (3) [redacted]
	Inactive	None
PRODUCT(S) STORED:	Group I	
RESPONSE ZONES:	Tremley Response Zone	
LARGEST BREAKOUT TANK CAPACITY	(b) (7)(F), (b) (3) [redacted]	
WORST CASE DISCHARGE AMOUNT: -DOT		

6.1 Communication Equipment

Primary communications for Company response activities will consist of the following:	
	Company mobile phones, hard line phones, faxes, and Company intranet devices, VHF-FM marine radios, VHF-AM aircraft radios, UHF oil spill radios, HF Single Sideband radios, satellite phones and paging systems.
	Company Response Team mobile and office telephone numbers are located in Annex 2 of this Plan.
	Communications needs beyond primary communications devices will be supplied by Company contracted OSRO's.
	OSRO telephone numbers are located in Annex 2 of this Plan.

6.2 Notification Sequence

Facility, Corporate & Regulatory Notifications

In the event of an emergency, it is the responsibility of the Incident Commander (IC) to ensure that the required and applicable notifications are made. However, if the Incident Commander elects to do so, he may choose to delegate these notifications to the appropriate support resources. (Refer to Emergency Notification - Telephone List, located in this plan for support resource contact information.)

NOTE: Use the Incident Report Form, Notification Information to document notifications completed and follow-up requests.

TREMLEY POINT 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 Mark Kaminski, Facility Supervisor	(908) 523-6101	(b) (6) [redacted]		1 hr
Office: 4601 Tremly Point Road, Linden, NJ 07036		**Home:** (b) (6) [redacted]		
Alt. QI/IC Ed Kaminski, Area Supervisor	(908) 523-5434	(b) (6) [redacted]		1 hr
Office: 1100 Route 1 North, Linden, NJ 07036		**Home:** (b) (6) [redacted]		

Incident Support Team

Position	Name	Office Phone	Home Phone	Mobile Phone
EPR&S Contact	Rob Yarbrough	832-865-1693	(b) (6) [redacted]	
Alt. Environmental Contact	Jim Phelan	(281) 293-3715		
Alt. DOT Contact	Todd Tullio	832-765-1636		
Alt. Health & Safety Contact	Brad A. Hendrix	(918) 661-0140		
Manager, Division	Stephanie Webb	(832) 765-1534		
Manager, HSE	Jeff Mazzoccoli	832-765-1150		
Manager, Engineering & Projects	Dave Barney	(281) 293-4385		
Manager, Logistics	Doug B. Sauer	(918) 661-0271		

Transportation Tier 1 Responders

Name	Office Phone	Home Phone	Mobile Number	Resp. Time
Karlovich, Mike - BWR-Strategic Comms Manage	(908) 523-6041	(b) (6) [redacted]		1 hr
Wuertz, Ray - BWR-HSE Manager	(908) 523-5617			1 hr
Santos, Mark - (McKeon Group)	(908) 523-6052			1 hr
Lam, Pat - Engineer	(908) 523-5781			1 hr
Fagan, Susana - BWR-Clean Products Advisor	(908) 523-5921			1 hr
Simone, Pete -	(908) 523-5135			1 hr

Emergency Response Contractors

Name	Phone	Alt. Phone	Resp. Time
Contract			
CHEMTREC	(800) 424-9300	(202) 483-7616	1 hr
Clean Harbors Cooperative, LLC	(732) 661-2548		1 hr
Clean Venture	(908) 354-0210		1 hr
Miller Environmental Group, Inc.	(800) 394-8606	(631) 369-4900	1 hr
MSRC & STAR Contractors	(800) 645-7745	(800) 259-6772	1 hr
Other			
Tri-State Bird Rescue/Research, Inc.	(302) 737-7241		1 hr

Agency/Other Telephone Numbers

Agency/Group	Telephone	Other Telephone/Fax
Federal		
National Response Center	(800) 424-8802	(202) 267-2675
EPA Region 02	(732) 906-6803	
USCG Sector New York, NY	(718) 354-4353	(718) 354-4356
State		
NJ Dept. of Environmental Protection & Energy	(877) 927-6337	(609) 882-2000
Bureau of Emergency Response, New Jersey	(973) 669-3955	
Dept. of Environmental Conservation (NYSDEC)	(800) 457-7362	(518)457-7362
Dept. of Environmental Conservation, NY	(800) 457-7362	(518) 457-7362
Dept. of Environmental Protection, NJ	(877) 927-6337	
Division of Fish, Game & Wildlife, NJ	(908) 735-8975	
State Police, NJ	(609) 882-2000	
Local		
Fire Dept., Elizabeth	(908) 820-2800	
Fire Dept., Linden	911	(908) 486-3500
ER/Fire/Ambulance: Bayway Refi	"300" Call or 911	
Police Dept., Elizabeth	(908) 558-2000	
Police Dept., Linden	911	(908) 486-3200
Police Dept., Union County	(908) 654-9881	
Hospital, Trinitas-E.Jersey	(908) 994-8600	
Hospital, Trinitas-Williamson	(908) 994-5000	
Media, TV-WFUT	(973) 643-6800	
Media-Radio-WNCE	(973) 645-5316	
Amex	(732) 541-4141	
BP/Amoco, Carteret	(732) 541-5131	
Citgo - Dock	(908) 862-3332	
Citgo - Supervisor	(908) 862-3301	
City Park, Bayonne	(201) 217-5484	
City Police, New York	(212) -374-5580	
Coastal Oil, NY	(201) 437-2104	
Consolidated Edison	(732) 390-2740 x1	
Dept. of Health, Linden	908-474-8409	
Gateway Terminal	(732) 541-1200	
HAZMAT Dept., Middlesex County	732-727-6622	
Kinder-Morgan, NJ	(718) 667-6222	
LEPC: Linden City, NJ	(908) 862-7364	
Marina, Elco	(201) 437-2355	
Marina, Elizabeth	(908) 820-4296	
Mariner's Harbor Yacht Club	(718) 442-5843	
Mayor, Elizabeth	908-820-4170	
Mayor, Linden	908-474-8493	
National Weather Service, NJ	(201) 976-1212	
Office of Emergency Mgmt., Linden	908-474-8477	
Office of Emergency Mgmt., NY City	212-374-5580	
Parks Department, Staten Island	(718) 390-8000	
Public Service Electric & Gas	(908) 353-7000	
Robins Reef Yacht Club	(201) 858-9510	
Rucci Oil	(718) 442-2080	
ST Terminals, Linden NJ	(908) 862-5740	
Staten Island Borough President	(718) 816-2130	
Water Supply, Linden/Rahway	(908) 862-7100	(908) 862-7100

6.4 Emergency Response Equipment, Testing & Deployment

The terminal has a minimum of fifteen-hundred (1500) feet of swing around boom, which is stored at the dock ready for deployment when necessary, and a permanent shore side boom along the dock. A 21-foot workboat with a 150-hp engine is always maintained in an operational mode at the facility. The boom is deployed such that the dock forms one side of the containment area. A length of boom is permanently deployed along the piles which support the open face pier to prevent any lighter-than-water products from accumulating under the dock, or washing up along the shore. The boom, when first deployed, is at least fifteen (15) feet from the vessel on all sides, except on the dock side where the permanent boom along the piles supporting the open faced pier forms one side of the containment area.

The boom on hand is adequate to encircle both the largest tanker unloaded at the terminal, plus .any transfer barge that might need to be used in an emergency.

Equipment is tested in accordance with PREP guidelines as described in Section III of this plan.

This facility does not own any other response equipment. It is dependent upon OSROs and the sister company (Bayway Refinery).

Bayway Refinery Response Equipment Inventory/Inspection/Testing Log – Not Facility Owned

This facility maintains a contract with its sister company, Bayway Refinery, for use of emergency oil spill response equipment. A copy of this contract, the equipment list and test records for the equipment are retained at the Tremley Point Terminal and can be produced for review upon request.

Additionally, this facility is a member of Clean Harbors Co-Op. A copy of this contract and membership information is retained at the Tremley Point Terminal and can be produced for review upon request.

Inspections of Cargo Hoses

Cargo hoses are visually inspected by the operating personnel prior to connecting for a transfer. Visibly damaged hoses are not used and are removed from the work area. All cargo hoses are inspected and pressure tested by operating personnel annually. The maximum in-service life for the hoses is approximately three years.

6.5 Evacuation

(b) (7)(F), (b) (3)

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

When the alarm is sounded or a signal to evacuate is given all personnel should:

Evacuation Checklist		
(b) (7)(F), (b) (3) [redacted]		

PHMSA 00010207

Tremley Point Terminal
Overview Map

(b) (7)(F), (b) (3)

[redacted]

PHMSA 00010208

Tremley Point Terminal
Overview Map

(b) (3)

(b) (7)(F), (b) (3)

[redacted]

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

[redacted]

(b) (7)(F), (b) (3)

[redacted]

(b) (7)(F), (b) (3)

[redacted]

(b) (7)(F), (b) (3)

[redacted]

ConocoPhillips
Pipe Line Company

LINDEN HARBOR TO TREMLEY PRODUCT LINE

(b) (7)(F), (b) (3)

[redacted]

6.7 Response Forms

Incident Report Form

ICS 201-1 Incident Briefing Map

ICS 201-2 Incident Briefing – Summary of Current Actions

ICS 201-3 Incident Briefing – Current Organization

ICS 201-4 Incident Briefing – Resources Summary

ICS 201-5 Incident Briefing – Site Safety Plan (Short Form)

Weather Report

ICS 202 Response Objectives

ICS 203-Organizational Assignment List

ICS 211p-Check In List – Personnel

ICS 211e Check In List – Equipment

Spill Trajectory Report Form

TRANSPORTATION – HEALTH & SAFETY

EPR&S PREP – COMPANY 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: 3010 Briarpark Dr; PWC 07-7330-34 Address: _____
City, State, Zip: Houston, TX 77042 City, State, Zip: _____
County/Parish: _____ Hwy or River Mile Marker: _____
Section-Township-Range: _____ Latitude _____ Longitude _____
Dist./Dir. to Nearest City: _____ Facility Storage Capacity: _____ (bbls)
Container Type (☐ AST/ ☐ UST) _____ Container Capacity _____ (bbls)
Site Supervisor/Contact: _____ Call Back #: _____

III. INCIDENT DESCRIPTION & IMPACTS

Date/Time Discovered: _____ Discovered by: _____
Material Released: _____ Quantity Released: _____ (bbls/lbs)
Duration of the Release: _____ Weather Conditions: _____
Quantity to Surface Water: _____ Temperature: _____ °F Humidity: _____
Off Company Property? ☐ Yes ☐ No Wind Speed: _____ Direction: _____
Evacuations: ☐ Yes ☐ No # Evacuated: _____ Name of Surface Water _____
Fire: ☐ Yes ☐ No # Hospitalized: _____ Distance to Water: _____ (ft/mi)
Explosion: ☐ Yes ☐ No # of Injuries: _____ # of Fatalities _____ Media coverage expected? ☐Yes ☐ No
If Operator error, has Drug and Alcohol program been initiated? ☐Yes ☐ No **DOT jurisdiction event?** ☐Yes ☐ No

If DOT event, list those completing Drug and Alcohol testing? _____

Incident description (Including Source and or Cause of the Incident) _____

Impacted area description _____

Damage description and estimate ($, days down, etc.) _____

Actions taken to correct, control or mitigate (Change in Security Level, FSP and/or ERP Implemented, etc.) _____

Agency/Person Contacted	Notified By	Office Phone	Cell Phone	Other Phone	Date & Time Notified	Log #	Comments
IV. EMERGENCY NOTIFICATIONS - LOG							
Duty Officer/		800-231-2551					Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No

Agency/Person Contacted	Notified By	Office Phone	Cell Phone	Other Phone	Date & Time Notified	Log #	Comments
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No

V. ADDITIONAL INFORMATION

** Alternate NRC contact information: Fax: 202-267-2165, TDD: 202-267-4477, or e-mail: lst-nrcinfo@comdt.uscg.mil

VI. PREPARED BY AND DISTRIBUTION

Prepared by: _____ **Date:** _____ **IMPACT Entry Complete:** ☐ Yes ☐ No

* Notify the appropriate Company DOT Coordinator to complete the *PHMSA FORM F 7000-1*, as applicable.

ICS 201-1 Incident Briefing Map/Sketch	
Incident:	**Prepared By:** at
Period:	**Version Name:**

ICS 201-1 Incident Briefing Map/Sketch	© 1997-2012 TRG/dbSoft, Inc.

ICS 201-2 – Summary of Current Actions	
Incident:	**Prepared at:** **By:**
Period: to	**Version Name:**

Incident Information

Initial Incident Objectives

Summary of Current Actions	
Date/Time	**Action/Note**

ICS 201-2 Summary of Current Actions			**© 1997-2012 TRG/dbSoft, Inc.**

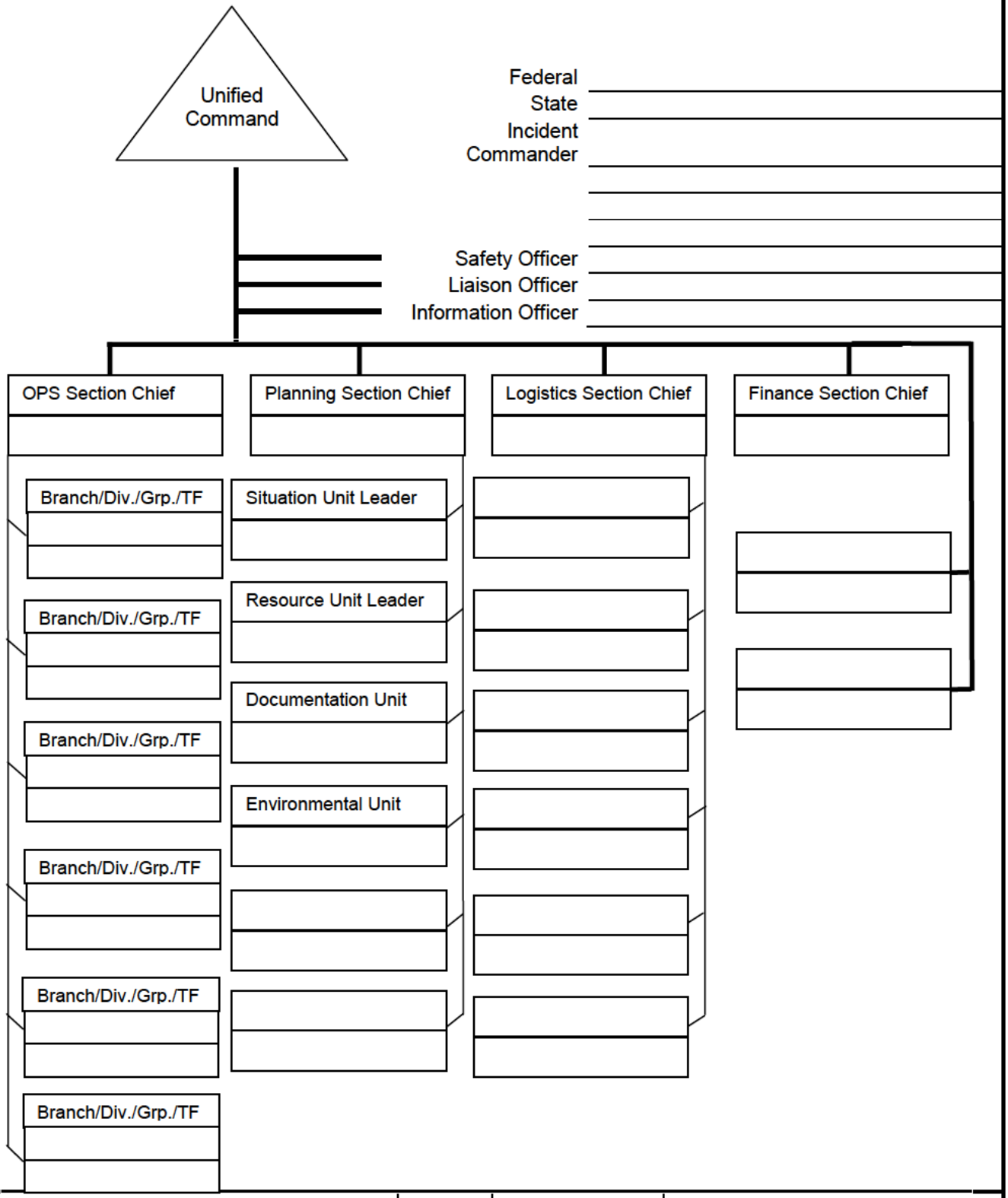
ICS 201-2 – Summary of Current Actions	
Incident:	Prepared at: By:
Period: to	Version Name:

Summary of Current Actions	
Date/Time	Action/Note

ICS 201-2 Summary of Current Actions			© 1997-2012 TRG/dbSoft, Inc.

ICS 201-3 Current Organization

Incident:	**Prepared By:** **at:**
Period:	**Version Name:**



ICS 201-3 – Current Organization			**© 1997-2012 TRG/dbSoft, Inc.**

ICS 201-4 – Resource Summary

Incident:					Period:			
ID	Supplier	Resource Type	Descriptio n	Quantity	Size	Area of Operation	Status	Status Date/Time
ICS 201-4 Resource Summary						© 1997-2012 TRG/dbSoft, Inc.		

ICS 201-5 Site Safety and Control Analysis

Incident:	**Prepared By:** **at:**
Period:	**Version Name:**

Site Control

1. Is Site Control set up? ☐ Yes ☐ No	2. Is there an on-scene command post? ☐ Yes ☐ No If so, where?
3. Have all personnel been accounted for? ☐ Yes ☐ No ☐ Don't Know	Injuries: Fatalities: Unaccounted: Trapped:
4. Are observers involved, or rescue attempts planned? Observers: ☐ Yes ☐ No Rescuers: ☐	5. Are decon areas setup? ☐ Yes ☐ No If so, where?

Hazard identification, immediate signs of: (if yes, explain in Remarks)

1. Electrical line(s) down or overhead? ☐ Yes ☐ No	2. Unidentified liquid or solid products visible? ☐ Yes ☐ No
3. Wind direction across incident: ☐ Towards your position Wind Speed ☐ Away from	4. Is a safe approach possible? ☐ Yes ☐ No
5. Odors or smells? ☐ Yes ☐ No	6. Vapors visible? ☐ Yes ☐ No
7. Holes, ditches, fast water, cliffs, etc. nearby? ☐ Yes ☐ No	8. Fire, sparks, sources of ignition nearby? ☐ Yes ☐ No
9. Is local traffic a potential problem? ☐ Yes ☐ No	10. Product placards, color codes visible? ☐ Yes ☐ No
11. Other Hazards? ☐ Yes ☐ No	12. As you approach the scene from the upwind side, do you note a change in the status of any of the above? ☐ Yes ☐ No

Hazard Mitigation: have you determined the necessity for any of the following?

1. Entry Objectives:

2. Warning sign(s), barriers, color codes in place? ☐ Yes ☐ No

3. Hazardous material being monitored? ☐ Yes ☐ No
   - 3a. Sampling Equipment:
   - 3b. Sampling location(s):
   - 3c. Sampling frequency:
   - 3d. Personal exposure monitoring:

4. Protective gear / level:
   - 4a. Gloves:
   - 4b. Respirators:
   - 4c. Clothing:
   - 4d. Boots:
   - 4e. Chemical cartridge change frequency:

5. Decon
   - 5a. Instructions:
   - 5b. Decon equipment and materials:

6. Emergency escape route established? ☐ Yes ☐ No
   Route?

7. Field responders briefed on hazards? ☐ Yes ☐ No

8. Remarks:

ICS 201-5 Site Safety and Control Analysis	**© 1997-2012 TRG/dbSoft, Inc.**

Weather Report

Incident:	**Prepared By:** at
Period:	**Version Name:**

Present Conditions

Wind Speed:		Wave Height:	
Wind Direction From The:		Wave Direction:	
Air Temperature:		Swell Height:	
Barometric Pressure:		Swell Interval:	
Humidity:		Current Speed:	
Visibility:		Current Direction Toward:	
Ceiling:		Water Temperature:	
Next High Tide (Time):		Next Low Tide (Time):	
Next High Tide (Height):		Next Low Tide (Height):	
Sunrise:		Sunset:	

Notes:

24 Hour Forecast

Sunrise:		Sunset:	
High Tide (Time):		High Tide (Time):	
High Tide (Height):		High Tide (Height):	
Low Tide (Time):		Low Tide (Time):	
Low Tide (Height):		Low Tide (Height):	

Notes:

48 Hour Forecast

Sunrise:		Sunset:	
High Tide (Time):		High Tide (Time):	
High Tide (Height):		High Tide (Height):	
Low Tide (Time):		Low Tide (Time):	
Low Tide (Height):		Low Tide (Height):	

Notes:

Weather Report			© 1997-2012 TRG/dbSoft, Inc.

ICS 202 - General Response Objectives		
Incident:	**Prepared By:**	**at:**
Period:	**Version Name:**	

Overall and Tactical Objectives	Assigned to:	Status
1. Ensure the Safety of Citizens and Response Personnel		
☐ 1a. Identify hazard(s) of spilled material		
☐ 1b. Establish site control (hot zone, warm zone, cold zone, & security)		
☐ 1c. Consider evacuations if needed		
☐ 1d. Establish vessel and/or aircraft restrictions		
☐ 1e. Monitor air in impacted areas		
☐ 1f. Develop site safety plan for personnel & ensure safety briefings are conducted		
2. Control the Source of the Spill		
☐ 2a. Complete emergency shutdown		
☐ 2b. Conduct firefighting		
☐ 2c. Initiate temporary repairs		
☐ 2d. Transfer and/or lighter product		
☐ 2e. Conduct salvage operations, as necessary		
3. Manage a Coordinated Response Effort		
☐ 3a. Complete or confirm notifications		
☐ 3b. Establish a unified command organization and facilities (command post, etc.)		
☐ 3c. Ensure local and tribal officials are included in response organizations		
☐ 3d. Initiate spill response Incident Action Plans (IAP)		
☐ 3e. Ensure mobilization & tracking of resources & account for personnel & equip		
☐ 3f. Complete documentation		
4. Maximize Protection of Environmentally-Sensitive Areas		
☐ 4a. Implement pre-designated response strategies		
☐ 4b. Identify resources at risk in spill vicinity		
☐ 4c. Track oil movement and develop spill trajectories		
☐ 4d. Conduct visual assessments (e.g., overflights)		
☐ 4e. Development/implement appropriate protection tactics		

ICS 202 General Response Objectives **© 1997-2012 TRG/dbSoft,**

ICS 202 - GENERAL RESPONSE OBJECTIVES

Incident:	**Prepared By:**	**at:**
Period:	**Version Name:**	

Overall and Tactical Objectives

	Assigned to:	Status
5. Contain and Recover Spilled Material		
☐ 5a. Deploy containment boom at the spill site & conduct open-water skimming		
☐ 5b. Deploy containment boom at appropriate collection areas		
☐ 5c. Evaluate time-sensitive response technologies (e.g., dispersants, in-situ burning)		
☐ 5d. Develop disposal plan		
6. Recover and Rehabilitate Injured Wildlife		
☐ 6a. Establish oiled wildlife reporting hotline		
☐ 6b. Conduct injured wildlife search and rescue operations		
☐ 6c. Setup primary care unit for injured wildlife		
☐ 6d. Operate wildlife rehabilitation center		
☐ 6e. Initiate citizen volunteer effort for oiled bird rehabilitation		
7. Remove Oil from Impacted Areas		
☐ 7a. Conduct appropriate shoreline cleanup efforts		
☐ 7b. Clean oiled structures (piers, docks, etc.)		
☐ 7c. Clean oiled vessels		
8. Minimize Economic Impacts		
☐ 8a. Consider tourism, vessel movements, & local economic impacts		
☐ 8b. Protect public and private assets, as resources permit		
☐ 8c. Establish damage claims process		
9. Keep Stakeholders and Public Informed of Response Activities		
☐ 9a. Provide forum to obtain stakeholder input and concerns		
☐ 9b. Provide stakeholders with details of response actions		
☐ 9c. Identify stakeholder concerns and issues, and address as practical		
☐ 9d. Provide timely safety announcements		
☐ 9e. Establish a Joint Information Center (JIC)		
☐ 9f. Conduct regular news briefings		
☐ 9g. Manage news media access to spill response activities		
☐ 9h. Conduct public meetings, as appropriate		
ICS 202 General Response Objectives	**© 1997-2012 TRG/dbSoft, Inc.**	

ICS 203 - Organization Assignment

Incident:	**Prepared By:** **at:**
Period:	**Version Name:**

Command Staff

Title	Name	Mobile	Pager	Other	Radio
Federal (FOSC)		( ) -	( ) -	( ) -	
State (SOSC)		( ) -	( ) -	( ) -	
RP(s)		( ) -	( ) -	( ) -	
Incident Commander		( ) -	( ) -	( ) -	
Deputy Incident Commander		( ) -	( ) -	( ) -	
Safety Officer		( ) -	( ) -	( ) -	
Information Officer		( ) -	( ) -	( ) -	
Liaison Officer		( ) -	( ) -	( ) -	
Intelligence Officer		( ) -	( ) -	( ) -	

Operations Section

Title	Name	Mobile	Pager	Other	Radio
Operations Section Chief		( ) -	( ) -	( ) -	
Deputy Operations Section Chief		( ) -	( ) -	( ) -	
Staging Area Manager		( ) -	( ) -	( ) -	
Recovery & Prot. Branch Director		( ) -	( ) -	( ) -	
Emergency Resp. Branch Director		( ) -	( ) -	( ) -	
Air Ops Branch Director		( ) -	( ) -	( ) -	
Wildlife Branch Director		( ) -	( ) -	( ) -	
Branch Director		( ) -	( ) -	( ) -	
Division/Group Supervisor		( ) -	( ) -	( ) -	
Disposal Group Supervisor		( ) -	( ) -	( ) -	

Planning Section

Title	Name	Phone	Fax	Other	Radio
Planning Section Chief		( ) -	( ) -	( ) -	
Deputy Planning Sec ion Chief		( ) -	( ) -	( ) -	
Situation Unit Leader		( ) -	( ) -	( ) -	
Resource Unit Leader		( ) -	( ) -	( ) -	
Documentation Unit Leader		( ) -	( ) -	( ) -	
Technical Specialist		( ) -	( ) -	( ) -	
Demobilization Unit Leader		( ) -	( ) -	( ) -	
Check In Recorder		( ) -	( ) -	( ) -	

ICS 203 Organization Assignment	**© 1997-2012 TRG/dbSoft, Inc.**

ICS 203 - Organization Assignment (Continued)

Incident:	**Prepared By:** at
Period:	**Version Name:**

Logistics section

Title	Name	Phone	Fax	Other	Radio
Logis ics Section Chief		( ) -	( ) -	( ) -	
Deputy Logistics Section Chief		( ) -	( ) -	( ) -	
Service Branch Director		( ) -	( ) -	( ) -	
Medical Unit Leader		( ) -	( ) -	( ) -	
Food Unit Leader		( ) -	( ) -	( ) -	
Communication Unit Leader		( ) -	( ) -	( ) -	
Support Branch Director		( ) -	( ) -	( ) -	
Supply Unit Leader		( ) -	( ) -	( ) -	
Facilities Unit Leader		( ) -	( ) -	( ) -	
Ground Support Unit Leader		( ) -	( ) -	( ) -	
Vessel Support Unit Leader		( ) -	( ) -	( ) -	
		( ) -	( ) -	( ) -	
		( ) -	( ) -	( ) -	
		( ) -	( ) -	( ) -	

Finance Section

Title	Name	Phone	Fax	Other	Radio
Finance Section Chief		( ) -	( ) -	( ) -	
Deputy Finance Section Chief		( ) -	( ) -	( ) -	
Time Unit Leader		( ) -	( ) -	( ) -	
Procurement Unit Leader		( ) -	( ) -	( ) -	
Compensa ion/Cla ims Unit Leader		( ) -	( ) -	( ) -	
Cost Unit Leader		( ) -	( ) -	( ) -	
		( ) -	( ) -	( ) -	
		( ) -	( ) -	( ) -	

Source Control Section

Title	Name	Phone	Fax	Other	Radio
Salvage/Source Control Group		( ) -	( ) -	( ) -	
		( ) -	( ) -	( ) -	
		( ) -	( ) -	( ) -	
		( ) -	( ) -	( ) -	

ICS 203 Organizational Assignment	**© 1997-2012 TRG/dbSoft, Inc.**

ICS 211p – Check-In List (Personnel)					
Incident:			Prepared By:		at:
Period:			Version Name:		
Check-In Location - - ☐ Command Post ☐ Staging Area ☐ Other --> Location Name:					
Personnel Check-In Information					
Name (Last, First) & Contact Information	Classification & Company/Agency	Assigned Section & Position	Quantity & UOM	Check-In Date/Time	Check-Out Date/Time Destination
ICS 211P Check-In List (Personnel)					© 1997-2012 TRG/dbSoft, Inc.

ICS 211e – Check-In List (Equipment)					
Incident:			Prepared By:		at:
Period:			Version Name:		
Check-In Location:	☐ Command Post	☐ Staging Area	☐ Other	-->	Location Name:

Equipment Check-In Information					
Equipment Description & Identifier	Supplier & Contact Information	Quantity & UOM	Size & UOM	Check-In Date/Time & Assignment	Check-Out Date/Time & Destination

ICS 211e Check-In List (Equipment)			© 1997-2012 TRG/dbSoft, Inc.

Spill Trajectory Form

The Response Group
Emergency Response / Pre-Planning & Support

Spill Trajectory Request Form

THE RESPONSE GROUP	OFFICE: (281) 880-5000	EFAX: (281) 596-6976
FAX: (281) 880-5005	EMAIL ADDRESS: trajectory@responsegroupinc.com	

COMPANY INFORMATION

Company Name: _____

Company Contact Name: _____

Phone #: _____ Fax #: _____

Alternante # (i.e.: Mobile, Pager): _____

Email Address: _____

SPILL SITE INFORMATION

Source Type (Circle): Platform/Well Pipeline Vessel Facility

Source Name & Location (Name/Area/Block): _____

Latitude: ____ ° ____ ' ____ " | Longitude: ____ ° ____ ' ____ "

Date & Time of Incident (mm/dd/yy): ____/____/____ ____:____ (Military)

Type of Product (i.e.: Medium Crude): _____ | API Gravity: _____

Estimated Volume of Release: _____ Barrels or Gallons

Continues Release Rate: _____ bbls/hr How Long: _____ hrs.

WEATHER CONDITIONS

Wind Direction (From the): _____	Wind Speed: MPH or Knots
Current Direction (Toward): _____	Current Speed: MPH or Knots
Air Temperature: _____ °	Water Temperature: _
High Tide: ____:____ (Military)	Low Tide: ____:____ (Military)

Weather Forecast:

OVERFLIGHT INFORMATION

Date & Time of Overflight (mm/dd/yy): ____/____/____ ____:____ (Military)

Leading Edge Location: Latitude: ____ ° ____ ' ____ " Longitude: ____ ° ____ ' ____ "

Trailing Edge Location: Latitude: ____ ° ____ ' ____ " Longitude: ____ ° ____ ' ____ "

Length: _____ Feet / Yards / Miles | Width: _____ Feet / Yards / Miles

Slick Appearance (Percent & Estimated Length & Width)

Barely Visible: ____ % L x W: _____	Silvery: ____ % L x W: _____
Slight Color: ____ % L x W: _____	Bright Color: ____ % L x W: _____
Dull: ____ % L x W: _____	Dark: ____ % L x W: _____

THE RESPONSE GROUP 13939 TELGE ROAD CYPRESS, TX 77429