

SHIP PRODUCTION COMMITTEE
FACILITIES AND ENVIRONMENTAL EFFECTS
SURFACE PREPARATION AND COATINGS
DESIGN/PRODUCTION INTEGRATION
HUMAN RESOURCE INNOVATION
MARINE INDUSTRY STANDARDS
WELDING
INDUSTRIAL ENGINEERING
EDUCATION AND TRAINING

December 1997
NSRP 0498

THE NATIONAL SHIPBUILDING RESEARCH PROGRAM

Template for Developing an Integrated Contingency Plan

U.S. DEPARTMENT OF THE NAVY
CARDEROCK DIVISION,
NAVAL SURFACE WARFARE CENTER

in cooperation with
National Steel and Shipbuilding Company
San Diego, California

Report Documentation Page

*Form Approved
OMB No. 0704-0188*

Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

1. REPORT DATE DEC 1997	2. REPORT TYPE N/A	3. DATES COVERED -			
4. TITLE AND SUBTITLE The National Shipbuilding Research Program, Template for Developing an Integrated Contingency Plan		5a. CONTRACT NUMBER			
		5b. GRANT NUMBER			
		5c. PROGRAM ELEMENT NUMBER			
6. AUTHOR(S)		5d. PROJECT NUMBER			
		5e. TASK NUMBER			
		5f. WORK UNIT NUMBER			
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Surface Warfare Center CD Code 2230-Design Integration Tower Bldg 192, Room 128 9500 MacArthur Blvd Bethesda, MD 20817-5700		8. PERFORMING ORGANIZATION REPORT NUMBER			
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)		10. SPONSOR/MONITOR'S ACRONYM(S)			
		11. SPONSOR/MONITOR'S REPORT NUMBER(S)			
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release, distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT		
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified	SAR	18. NUMBER OF PAGES 133	19a. NAME OF RESPONSIBLE PERSON

DISCLAIMER

These reports were prepared as an account of government-sponsored work. Neither the United States, nor the United States Navy, nor any person acting on behalf of the United States Navy (A) makes any warranty or representation, expressed or implied, with respect to the accuracy, completeness or usefulness of the information contained in this report/manual, or that the use of any information, apparatus, method, or process disclosed in this report may not infringe privately owned rights; or (B) assumes any liabilities with respect to the use of or for damages resulting from the use of any information, apparatus, method, or process disclosed in the report. As used in the above, "Persons acting on behalf of the United States Navy" includes any employee, contractor, or subcontractor to the contractor of the United States Navy to the extent that such employee, contractor, or subcontractor to the contractor prepares, handles, or distributes, or provides access to any information pursuant to his employment or contract or subcontract to the contractor with the United States Navy. ANY POSSIBLE IMPLIED WARRANTIES OF MERCHANTABILITY AND/OR FITNESS FOR PURPOSE ARE SPECIFICALLY DISCLAIMED.

FINAL REPORT

**TEMPLATE FOR DEVELOPING
AN INTEGRATED CONTINGENCY PLAN**

Prepared By
Collier, Shannon, Rill & Scott, PLLC
Attorneys-at-Law
3050 K Street, N.W., Suite 400
Washington, D.C. 20007

For

NATIONAL STEEL AND SHIPBUILDING COMPANY
Harbor Drive and 28th Street
Post Office Box 85278
San Diego, CA 92186-5278

In Behalf Of
SNAME SPC PANEL SP-1
on
FACILITIES AND ENVIRONMENTAL EFFECTS

Under the
NATIONAL SHIPBUILDING RESEARCH PROGRAM

September 1997

BACKGROUND

This report provides a template for shipyards to use in developing facility-specific integrated contingency plans ("ICPs") for responding to emergencies. Collier, Shannon, Rill & Scott, PLLC ("CSR&S") created this guidance for the National Shipbuilding Research Program pursuant to an Environmental Studies and Testing project number approved by the Society of Naval Architects and Marine Engineers ("SNAME") SP-1 Panel.

PROJECT SUMMARY

Shipyards and other industrial facilities are subject to numerous statutes and regulations that require emergency response planning. Such requirements include the following federal regulations:

- U.S. Coast Guard ("USCG") Facility Response Plan, 33 C.F.R. Part 154, subpart F;
- Occupational Safety and Health Administration ("OSHA") Emergency Action Plans, 29 C.F.R. § 1910.38(a);
- OSHA Process Safety Management Plan, 29 C.F.R. § 1910.119;
- OSHA Hazardous Waste and Emergency Response Plan, 29 C.F.R. § 1910.120;
- U.S. Environmental Protection Agency ("EPA") Clean Air Act ("CAA") Risk Management Program, 40 C.F.R. part 68;
- EPA Resource Conservation and Recovery Act ("RCRA") Hazardous Waste Contingency Plan, 40 C.F.R. part 264, subpart D; 40 C.F.R. part 265, subpart D; and 40 C.F.R. § 279.52;
- EPA Oil Pollution Prevention Regulation (Spill Prevention Control and Countermeasure Plan ("SPCC") and Facility Response Plan Requirements), 40 C.F.R. §§ 112.7(d) and 112.20-21; and
- Department of Transportation ("DOT") Research and Special Programs Administration ("RSPA") Pipeline Response Plan Regulation, 49 C.F.R. part 194.

These regulations are intended to minimize hazards to human health and the environment from fires, explosions, or any unplanned release of hazardous waste to air, soil or surface water.

The volume of paper associated with these plans, however, may make a swift and effective response in an actual emergency situation all but impossible. Recognizing this administrative duplication and inefficiency, the inter-agency National Response Team ("NRT") -- consisting of EPA, the Department of the Interior, the Department of Labor, and the DOT -- published guidance on the creation of an ICP. *See* 61 Fed. Reg. 28642 (June 5, 1996).

By following the ICP template, shipyards may develop a facility-specific plan tailored to address local conditions. To prepare this template, federal statutes and regulations were reviewed by CSR&S to develop an inventory of emergency planning requirements applicable to shipyards. The guidance provided by the NRT assisted in arranging these regulatory requirements into a coherent model integrated plan. The result is a template that provides a mechanism for consolidating the manifold, required emergency plans into one more effective document.¹

If you have any questions or comments related to the ICP template or emergency response planning in general, please do not hesitate to call John Wittenborn at (202) 342-8514 or Joseph Green at (202) 342-8849.

¹Facility-specific ICPs also should address state and local regulations, as appropriate.

SECTION I: INTRODUCTION

A. PURPOSE AND SCOPE OF PLAN COVERAGE

This section should provide a brief overview of facility operations and describe in general the physical area, and nature of hazards or events to which the plan is applicable. This brief description should help plan users quickly assess the relevancy of the plan to a particular type of emergency in a given location.

- Briefly outline the facility's operations and physical area, as well as the types of hazards or emergency events that may arise to which the plan will be applicable.

- Identify the numerous statutes and regulations that require shipyards to engage in emergency response planning. Any applicable state or local emergency response planning requirements should be identified, as well as the following federal regulations:
 - U.S. Coast Guard ("USCG") Facility Response Plan, 33 C.F.R. part 154;
 - Occupational Safety and Health Administration ("OSHA") Emergency Action Plans, 29 C.F.R. §1910.38(a);
 - OSHA Process Safety Management Plan, 29 C.F.R. §1910.119;
 - OSHA Hazardous Waste and Emergency Response Plan, 29 C.F.R. §1910.120;
 - Environmental Protection Agency ("EPA") Clean Air Act ("CAA") Risk Management Program, 40 C.F.R. part 68;
 - EPA Resource Conservation and Recovery Act ("RCRA") Hazardous Waste Contingency Plan, 40 C.F.R. part 264, subpart D, 40 C.F.R. part 265, subpart D, and 40 C.F.R. §279.52;
 - EPA's Oil Pollution Prevention Regulation (Spill Prevention Control and Countermeasure Plan ("SPCC")¹ and Facility Response Plan Requirements), 40 C.F.R. §§112.7(d) and 112.20-21; and

¹Under section 112.7(d) of EPA's SPCC, a facility may be required to develop an oil spill contingency plan. The integrated contingency plan discussed below may satisfy this requirement of the SPCC regulations. Note, however, that the non-contingency planning aspects of this regulation (e.g., the detailed prevention provisions) require a specified format and must be satisfied separately. See 61 Fed. Reg. 28642, 28663 n.10-11 (June 5, 1996).

•Department of Transportation (“DOT”) Research and Special Programs Administration’s (“RSPA’s”) Pipeline Response Plan Regulation, 49 C.F.R. part 194.

•Briefly explain the format and structure of the integrated contingency plan (“ICP”).

[This ICP has been created to satisfy the requirements of each of the federal emergency response regulations noted above, as well as applicable state regulations.² The ICP is a highly functional document, divided into three sections: an introduction, the core plan elements, and a series of detailed annexes. At the end of the ICP are Regulatory Compliance and Cross-Reference Matrices that document the sections of the plan in which various federal and state regulations are satisfied. The core plan is the heart of the ICP, listing, in a user-friendly way, the steps necessary to initiate, conduct, and terminate an emergency response action. The annexes provide supporting details and instructions for implementing an emergency response under the core plan.

This ICP is designed to minimize hazards to human health and the environment from fires, explosions, or any unplanned release of hazardous waste or hazardous waste constituents to air, soil or surface water. Various discharge scenarios are considered and appropriate response detailed for each. The provisions of the ICP must be carried out immediately whenever one of these emergency events occur which could threaten human health or the environment. The ICP also covers the actions employers and employees must take to ensure employee safety in an emergency. Note that, in several sections of the ICP, requirements specific to an oil spill response are detailed.

²This template ICP was developed in accordance with guidance issued by the inter-agency National Response Team (“NRT”) -- consisting of EPA, the Department of Labor, the Department of the Interior, and the Department of Transportation. *See* 61 Fed. Reg. 28642.

[Note that the template ICP does not include reference to applicable state regulations. Facility-specific ICPs should address state and local regulations, as appropriate.]

The ICP should also allow coordination of facility plans with plans that are maintained by local emergency planning committees (“LEPCs”), Area Committees, cooperatives, and mutual aid organizations.³]

(RCRA, 40 C.F.R. §§ 264.51, 264.52(a), 265.51, 265.52(a), 279.52(b)(1),(2)(i); OSHA, 29 C.F.R. §§ 1910.38(a), 1910.119(n), 1910.120(q)(1))

³LEPC plans are developed by LEPCs in coordination with facility emergency response coordinators under section 303 of the Emergency Planning and Community Right-to-Know Act. Area Contingency Plans (“ACPs”) are developed by Area Committees pursuant to section 4202(a)(6) of the Oil Pollution Act of 1990 (“OPA”).

B. TABLE OF CONTENTS

The following are the sections and subsections of the ICP. *Markers identifying each section listed should be provided.*

I. Introduction

- A. Purpose and Scope of Plan Coverage
- B. Table of Contents
- C. Current Revision Date
- D. General Facility Identification Information
(including Facility name; Owner / Operator/ Agent; Physical address and directions; Mailing address; Other identifying information; Key contact(s) for plan development and maintenance; Phone number for key contact(s); Facility phone number; Facility fax number)

II. Core Plan Elements

- A. Discovery
 - 1. Discharge detection by personnel
 - a. During regular operations
 - b. After-hours operations
 - 2. Automated discharge detection systems
- B. Initial Response
 - 1. Procedures for internal and external notifications
 - 2. Establishment of a response management structure
 - 3. Preliminary assessment
 - 4. Establishment of objectives and priorities for response
 - b. Mitigation actions
 - c. Response resources
 - d. Provision of emergency medical treatment, evacuation plans, and other safety considerations
 - 5. Implementation of tactical plan
 - 6. Mobilization of resources
- C. Sustained Actions
- D. Termination and Follow-up Actions

III. Annexes

A. Facility and Locality Information

1. Facility maps
2. Facility drawings
3. Facility description / layout

B. Notification

1. Internal
2. Community
3. Federal and state agency

C. Response Management Structure

1. General
2. Command structure
 - a. Emergency coordinator
 - b. Information
 - c. Safety
 - d. Liaison
3. Operations
 - a. Response objectives
 - b. Discharge or release control
 - c. Assessment / monitoring
 - d. Containment
 - e. Disposal and recovery
 - f. Decontamination
 - g. Non-responder medical needs
 - h. Salvage plans
4. Planning
 - a. Hazard assessment
 - b. Protection
 - c. Coordination with natural resources trustees
 - d. Waste management
5. Logistics
 - a. Medical needs
 - b. Site security
 - c. Communications
 - d. Transportation
 - e. Personnel support
 - f. Equipment maintenance and support
6. Finance / Procurement / Administration
 - a. Resource list

- b. Personnel
- c. Response equipment
- d. Support equipment
- e. Contracting
- f. Claims procedures
- g. Cost documentation

D. Incident Documentation

- 1. Post-accident investigation
- 2. Incident history

E. Training and Exercises / Drills

- 1. Training
- 2. Exercises / drills

F. Response Critique and Plan Review and Modification Process

G. Prevention

H. Regulatory Compliance and Cross-Reference Matrices

(EPA, 40 C.F.R. § 112.20(h), App. F; USCG, 33 C.F.R. §§ 154.1030(b), 154.1035(a)(4); RSPA, 49 C.F.R. part 194, App. A)

C. CURRENT REVISION DATE

This ICP is current as of [date of last revision]. Previous amendments occurred on _____, _____, and _____.

See Annex F for a record of changes that provides detailed information on plan updates.

(EPA, 40 C.F.R. part 112, App. F1.2; USCG, 33 C.F.R. § 154.1035(a)(6))

D. GENERAL FACILITY INFORMATION

<u>FACILITY INFORMATION FORM</u>	
Date of Last Update: _____	
Facility Name: _____	
Location (Street Address): _____	
City: _____	State: _____ Zip: _____
County: _____	
Phone Number: () _____	
Fax Number: () _____	
Latitude: _____	Degrees _____ Minutes _____ Seconds
Longitude: _____	Degrees _____ Minutes _____ Seconds
Owner: _____	
Owner Location (Street Address): _____	
(if different from Facility Address)	
City: _____	State: _____ Zip: _____
County: _____	Phone Number: () _____ Fax: () _____
Operator (if not Owner): _____	
Emergency Coordinator(s): (attach additional sheets)	
Name: _____	
Position: _____	
Work Address: _____	
Home Address: _____	
Emergency Phone Number: () _____ Fax: () _____	
Alternate Emergency Coordinator(s):	
Name: _____	
Position: _____	
Work Address: _____	
Home Address: _____	
Emergency Phone Number: () _____ Fax: () _____	

FACILITY INFORMATION FORM (cont.)

Wellhead Protection Area: _____

For Pipelines, Describe Response Zone(s) (the area along a pipeline for which the operator must plan for the deployment of and provide spill response capabilities): _____

List Line Sections for Each Pipeline Contained in the Response Zone(s) (identify by milepost, survey station number, or other designation): _____

Identify Pipeline Sections That May Cause Significant and Substantial Harm to the Environment in the Event of a Discharge: _____

Date of Oil Storage Start-Up: _____

Hazardous Substances Stored or Used at Facility: _____

Current Operations (include Standard Industry Classification ("SIC") code): _____

Date(s) and Type(s) of Substantial Expansions: _____

Key Contact(s) for Plan Development, Maintenance, Planning and Coordination: (attach additional sheets if more than one)

Name: _____

Position: _____

Home Address: _____

Work Address: _____

Phone Number: () _____ Fax: () _____

(Attach additional sheets if necessary)

(EPA, 40 C.F.R. §§ 112.20(h)(2), App. F1.2, 1.9, 2.0, 2.1; USCG, 33 C.F.R. §§ 154.1030(b), 154.1035(a)(1)-(4),(6), 154.1035(e); OSHA, 29 C.F.R. §§ 1910.38(a)(2)(vi), 1910.120(q)(2)(i),(ii); RSPA, 49 C.F.R. §§ 194.103, 194.107(d), 194.113, App. A)

Site Plan Diagram: *See* Annex A.1

Site Drainage Plan Diagram: *See* Annex A.1

Site Evacuation Plan Diagram: *See* Annex A.1

(EPA, 40 C.F.R. part 112, App. F1.9)

SECTION II: CORE PLAN ELEMENTS

A. DISCOVERY

This section should address the initial action the person(s) discovering an incident will take to assess the problem at hand and access the response system. Recognition, basic assessment, source control (as appropriate), and initial notification of proper personnel should be addressed in a manner that can be easily understood by everybody in the facility. The use of checklists or flowcharts is highly recommended.

1. Discharge Detection by Personnel

In subsections a and b that follow, describe the basic responsibilities of facility personnel to initiate a response and supervise response resources pending the arrival of the emergency coordinator. A flow-chart or simple outline of actions to be taken should appear at the front of this section for ease of reference during an emergency.

a. During regular operations

- Describe Discharge Detection Procedures, including emergency recognition procedures.

- Outline Initial Response Actions upon detection.
- Identify Detection Personnel by name and position, include work address and phone number.

- Discuss procedure for Facility Inspections.

b. After-hours operations

- Describe Discharge Detection Procedures, including emergency recognition procedures.
- Outline Initial Response Actions upon detection.
- Identify Detection Personnel by name and position, include work address and phone number.
- Discuss procedure for Facility Inspections.

2. Automated Discharge Detection Systems

- Identify Automated Spill Detection Equipment (including overfill alarms, secondary containment sensors, etc.).

- Describe Plans to Verify an Automated Alarm.

- Outline Actions to be Taken Upon Verification.

(EPA, 40 C.F.R. §§ 112.20(h)(6), App. F1.6.1, F1.6.2; USCG, 33 C.F.R. § 1035(b)(3)(i); OSHA, 29 C.F.R. §§ 1910.119(n), 1910.120(q)(2)(iii); CAA, 40 C.F.R. § 68.95(a)(1)(iii); RSPA, 49 C.F.R. § 194.107(d), App. A)

B. INITIAL RESPONSE

This section should provide for activation of the response system following discovery of the incident. It should include an established 24-hour contact point (i.e., that person and alternate who is called to set the response in motion) and instructions for that person on whom to call and what critical information to pass. Plan drafters should consider the need for bilingual notification. It is important to note that different incident types require that different parties be notified. Appropriate federal, state, and local notification requirements should be reflected in this section of the ICP. Detailed notification lists may be included here or in Annex B, depending upon the variety of notification schemes that a facility may need to implement. For example, the release of an extremely hazardous substance will require more extensive notifications (i.e., to State Emergency Response Commissions (“SERCs”) and LEPCs) than a discharge of oil. Even though no impacts or awareness are anticipated outside the site, immediate external notifications are required for releases of CERCLA and EPCRA substances. Again, the use of forms, such as flowcharts, checklists, and call-down lists, is recommended.

This section should instruct personnel in the implementation of a response management system for coordinating the response effort. More detailed information on specific components and functions of the response management system (e.g., detailed hazard assessment, resource protection strategies) may be provided in annexes to the ICP.

This part of the plan should then provide information on problem assessment, establishment of objectives and priorities, implementation of a tactical plan, and mobilization of resources. In establishing objectives and priorities for response, facilities should perform a hazard assessment using resources such as Material Safety Data Sheets (“MSDSs”) or the Chemical Hazard Response Information System (“CHRIS”) manual. Hazardous Materials Emergency Planning Guide (“NRT-1”) developed by the NRT to assist community personnel with emergency response planning, provides guidance on

developing hazard analyses. If a facility elects to provide detailed hazard analysis information in a response annex, then a reference to that annex should be provided in this part of the core plan.

Mitigating actions must be tailored to the type of hazard present. For example, containment might be applicable to an oil spill (i.e., use of booming strategies) but would not be relevant to a gas release. The plan preparer is encouraged to develop checklists, flowcharts, and brief descriptions of actions to be taken to control different types of incidents. Relevant questions to ask in developing such materials include:

- What type of emergency is occurring?*
- What areas/resources have been or will be affected?*
- Do we need an exclusion zone?*
- Is the source under control?*
- What type of response resources are needed?*

The following section describes the prioritized response actions to be carried out by facility personnel under this response plan to ensure the safety of the facility and its employees and to mitigate or prevent small, medium and worst-case discharges.

Personnel responsible for performing specified mitigation, prevention and cleanup procedures are identified by job title. This section describes, in an easy to understand fashion, the following:

- (1) Specific procedures to shut down affected operations;
- (2) Response resources for small, medium, and worst-case discharges;
- (3) Initial containment and drainage procedures;
- (4) Responsibilities of facility personnel to initiate a response and supervise response resources pending the arrival of the emergency coordinator;
- (5) Emergency alerting and escape procedures and route assignments;
- (6) Procedures to be followed by employees who remain to operate critical plant
- (7) Specific duties of the emergency coordinator; and

(8) Procedures and time frame in which to update the plan after a discharge event.

In addition, with regard to oil, this section describes the actions to be taken by facility personnel in the event of a discharge, potential discharge, or emergency involving the following equipment and scenarios: (a) failure of manifold, mechanical loading arm, other transfer equipment, or hoses; (b) tank overfill; (c) tank failure; (d) piping rupture; (e) piping leak, both under pressure and not; (f) explosion or fire; and (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).

(EPA, 40 C.F.R. §§ 112.20(h)(7)(i), App. F1.3.6, F1.7; USCG, 33 C.F.R. §§ 154.1035(b)(2)(ii), 154.1035(b)(3)(i),(ii); 29 C.F.R. §§ 1910.38(a)(2)(i),(ii), 1910.119(n), 1910.120(q)(2)(ix); CAA, 40 C.F.R. § 68.95(a)(1)(iii))

1. Procedures for Internal and External Notifications

(RSPA, 49 C.F.R. § 194.107(d), App. A)

(1) *Activate Internal Employee Alarm System*

•Identify and explain briefly the preferred means of reporting emergencies, such as manual pull box alarms, public address systems, radio or telephones.

[The employer shall explain the preferred means of and procedures for reporting emergencies to the employees. Employers shall post emergency telephone numbers near telephones, employee notice boards, and other conspicuous locations when telephones serve as a means of reporting emergencies. Where a communication system also serves as the employee alarm system, all emergency messages shall have priority over other messages.]

See Annex B for detailed information on employee alarm system requirements.

(RCRA, 40 C.F.R. §§ 264.56(a)(1); 265.56(a)(1); 279.52(b)(6)(i)(A); OSHA, 29 C.F.R. §§ 1910.38(a)(3), 1910.165, 1910.120(q)(2)(ix), 1910.38(a)(2)(v))

(2) *Notify Emergency Coordinator*

[At all times, there must be at least one employee either on the facility premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures. The “emergency coordinator” must be available on a 24-hour basis, located in the United States, fluent in English, and trained in the responsibilities of the position. The emergency coordinator must be thoroughly familiar with all aspects of the facility's contingency plan, all operations and activities at the facility, the location and characteristics of wastes handled, the location of all records within the facility, and the facility layout. Provide the emergency coordinator with a document identifying them as the “emergency coordinator” and specifying their authority to: (1) activate and engage in contracting with oil spill removal organization(s); (2) act as liaison with the predesignated Federal On-Scene Coordinator (“OCS”); and (3) obligate funds required to carry out response activities.]

(RCRA, 40 C.F.R. §§ 264.55, 265.55, 279.52(b)(5); USCG, 33 C.F.R. § 154.1026; RCRA, 40 C.F.R. § 264.52(d), 265.52(d), 279.52(b)(2)(iv); RSPA, 49 C.F.R. § 194.113, App. A)

Primary Emergency Coordinator: Name: _____ Position: _____ Home Address: _____ Work Address: _____ Phone Number: () _____ Fax: () _____
Alternate Emergency Coordinator (s): (attach additional sheets if more than one) Name: _____ Position: _____ Home Address: _____ Work Address: _____ Phone Number: () _____ Fax: () _____

(3) Notify the Following Additional Persons

•Include a prioritized list identifying the person(s), including name, telephone number, and their role in the plan, to be notified of a discharge or spill or substantial threat of a discharge or spill. Also indicate information that should be reported.

<u>EMERGENCY NOTIFICATION PHONE LIST WHOM TO NOTIFY</u>	
Date of Last Update: _____	
Reporter's Name / Position: _____	
Date: _____	
Facility Name: _____	
Owner Name: _____	
Facility Identification Number: _____	
Date and Time of each National Response Center Notification: _____	

ORGANIZATION	PHONE NUMBER
1. National Response Center ("NRC")	1-800-424-8802
2. Emergency Coordinator Alternate(s)	Day: Evening: Pager: Day: Evening: Pager:
3. Facility Response Team Personnel: (prioritized list) Name/ role in the response:	Day: Evening: Pager:
4. Discharge / Spill Management Team: (prioritized list) Name / Role in response:	Day: Evening: Pager:
5. Hazardous Substance / Oil Removal Organizations: (provide for each organization) Name / Contact:	Day: Evening: Pager:
6. Federal On-Scene Coordinator ("OSC") and/or Regional Response Center ("RRC")	Day: Evening: Pager:
7. Local Response Team (Fire Dept./ Cooperatives)	

8. Fire Marshall	Day: Evening: Pager:
9. State Emergency Response Commissioner ("SERC")	Day: Evening: Pager:
10. State Police	
11. Local Emergency Planning Committee ("LEPC")	Day: Evening:
12. Local Water Supply System	Day: Evening:
13. Weather Report	
14. Local Television/Radio Station for Evacuation Notification	
15. Hospitals	

(EPA, 40 C.F.R. §§ 112.20(h)(3)(iii), App. F1.3.1; RCRA, 40 C.F.R. §§ 264.56(a)(2), 265.56(a)(2), 279.52(b)(6)(i)(B); USCG, 33 C.F.R. §§ 154.1035(b)(1)(i), 154.1035(e)(2); RSPA, 49 C.F.R. § 194.107(d), App. A)

(4) Report the following Information to Response Personnel

<u>SPILL OR RELEASE RESPONSE NOTIFICATION FORM</u>		
Reporter's Name:	_____	
Position:	_____	
Phone Number(s):	_____	
Day: ()	_____	Evening: () _____
Company:	_____	
Organization Type:	_____	
Address:	_____	
City:	State: _____	Zip: _____
Were Materials Discharged?	_____(Y/N)	Confidential? _____(Y/N)
Type of Materials Discharged:	_____	Estimated Volume of Discharge: _____
Meeting Federal Obligations to Report?	_____(Y/N)	Date Called: _____
Calling for Responsible Party?	_____(Y/N)	Time Called: _____
<i>INCIDENT DESCRIPTION</i>		
Source and/or Cause of Incident:	_____	

Date of Incident:	_____	
Time of Incident:	_____ AM/PM	
Incident Address/Location:	_____	

Nearest City:	State: _____	
County:	Zip: _____	
Distance from City:	Units of Measure: _____	
Direction from City:	_____	
Section:	Township: _____	Range: _____
Borough:	_____	
Container Type:	Tank Oil Storage Capacity: _____	
Units of Measure:	_____	
Above ground (Y/N)	Below ground (Y/N)	Unknown
Facility Oil Storage Capacity:	Units of Measure: _____	
Facility Latitude:	Degrees _____	Minutes _____ Seconds
Facility Longitude:	Degrees _____	Minutes _____ Seconds

MATERIAL

CHRIS Code	Discharged Quantity	Unit of Measure	Material Discharged in Water	Quantity	Unit of Measure

RESPONSE ACTION

Actions Taken to Correct, Control or Mitigate Incident:

-

IMPACT

Number of Injuries: _____ Number of Deaths: _____
Were there Evacuations? _____ (Y/N) Number Evacuated: _____
Was there any Damage? _____ (Y/N)
Damage in Dollars (approximate): _____
Medium Affected: _____
Description: _____
More Information about Medium: _____

Additional Information:

Caller Notifications:

USCG EPA State Other

(EPA, 40 C.F.R. part 112, App. F1.3.1, § 112.20(h)(3)(iv))

Note in ICP: **Do not delay notification in order to collect all information.**

General facility information, including the name and telephone number of the facility owner and operator is provided in Section I.D above.

(5) Procedure for Contacting the Facility Owner

- Provide the name, address and procedure for contacting the facility owner or operator on a 24-hour basis.

(USCG, 33 C.F.R. § 154.1035(a)(3))

(6) Notification Responsibilities of the Emergency Coordinator

- Activate internal facility alarms or communications systems to notify facility personnel.

- Notify State or local agencies with designated response roles if their help is needed.

(EPA, 40 C.F.R. §§ 264.56(a)(1),(2), 265.56(a)(1),(2), 279.52(b)(6)(i)(A),(B))

If the emergency coordinator determines that the facility has had a release, fire, or explosion which could threaten human health or the environment outside the facility, he must:

- If evacuation of local areas may be advisable, immediately notify appropriate local authorities and be available to help appropriate officials decide whether local areas should be evacuated; and

- Immediately notify the government official designated as on-scene coordinator (“OSC”) for that geographical area (in the applicable regional contingency plan under 40 C.F.R. part 1510) or the National Response Center (800-424-8802). The report must include:

- (i) Name and telephone number of reporter;
- (ii) Name and address of facility;
- (iii) Time and type of incident (e.g., fire, release);
- (iv) Name and quantity of material(s) involved, to the extent known;
- (v) The extent of any injuries; and
- (vi) The possible hazards to human health, or the environment, outside the facility.

(EPA, 40 C.F.R. §§ 264.56(d)(1),(2), 265.56(d)(1),(2), 279.52(b)(6)(iv)(A),(B); CAA, 40 C.F.R. § 68.95(a)(1)(i))

(7) Contact for Further Information or Explanation of Duties Under This Plan

- Provide the names or regular job titles of persons or departments who can be contacted for further information or explanation of duties under this plan.

(OSHA, 29 C.F.R. § 1910.38(a)(2)(vi))

2. Establishment of a Response Management Structure

(1) *Organizational Structure for Response Actions and Lines of Communication*

•Briefly outline the organizational structure for the following areas:

1. Command and control: [All emergency responders and their communications shall be coordinated and controlled through the emergency coordinator assisted by the senior official present for each employer.] (OSHA, 29 C.F.R. § 1910.120(q)(3)(i));
2. Public information;
3. Safety;
4. Liaison with government agencies;
5. Spill operations;
6. Planning;
7. Logistics support; and
8. Finance.

See Annex C for more detailed information on organizational structures.

(USCG, 33 C.F.R. § 154.1035(b)(3)(iii); OSHA, 29 C.F.R. § 1910.120(q)(2)(ii))

•Explain the lines of communication within the response organization and between the various areas.

(OSHA, 29 C.F.R. § 1910.120(q)(2)(ii))

(RSPA, 49 C.F.R. § 194.107(d), App. A)

EMERGENCY RESPONSE CONTRACTORS

Date of Last Update:

Contractor	Phone	Response Time	Contract Responsibility*
1.			
2.			
3.			
4.			

*Evidence of contracts / agreements with response contractors to ensure the availability of personnel and response equipment should be provided in Annex C.

FACILITY RESPONSE TEAM

Date of Last Update:

Team Member	Response Time	Phone or Pager Number (day/evening)
Qualified Individual:		
1.		
2.		
3.		
4.		
5.		
6.		
7.		

(EPA, 40 C.F.R. §§ 112.20(h)(1)(v),(h)(3)(v), App. F1.3.4; RSPA, 49 C.F.R. § 194.107(d), App. A)

(3) *Pre-Emergency Planning and Arrangements with Outside Parties*

•Describe briefly arrangements agreed to by local police and fire departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services.

See Annex C.1 for details of these activities and arrangements.

(RCRA, 40 C.F.R. §§ 264.37, 265.37, 279.52(a)(6), 264.54(c), 264.55(c), 279.52(b)(2)(iii); OSHA, 29 C.F.R. § 1910.120(q)(2)(i))

3. Preliminary Assessment

The various subsections below should present the basic results of the detailed assessments made in Annex C.4.a. and C.3.c. concerning potential hazards, sources of discharge, vulnerable areas, etc. Basic, bullet-point type information to assist expedient assessment in an emergency should be provided.

See Annex C.4.a. for details.

(1) Assessment Upon Release

- Outline procedures by which the emergency coordinator shall identify the character, exact source, amount, and areal extent of any released materials or hazardous substances.

[Whenever there is a release, fire, or explosion, the emergency coordinator, or other individual in charge of the response action, must immediately identify the character, exact source, amount, and areal extent of any released materials or hazardous substances. He may do this by observation, review of facility records or manifests, or chemical analysis.]

- Outline steps for emergency coordinator to take to assess possible hazards to human health or the environment that may result from the release, fire, or explosion.

[Concurrently, the emergency coordinator must assess possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment must consider both direct and indirect effects of the release, fire, or explosion (e.g., the effects of any toxic, irritating or asphyxiating gases that are generated, or the effects of any hazardous surface water run-off from water or chemical agents used to control fire and heat-induced explosions). Such information should be provided to the appropriate Federal, State and local authorities.

(RCRA, 40 C.F.R. §§ 264.56(b),(c), 265.56(b),(c), 279.52(b)(6)(ii),(iii), 112.20(h)(3)(ix); OSHA, 29 C.F.R. § 1910.120(q)(3)(ii); USCG, 33 C.F.R. § 154.1035(b)(3))

(2) *Assessment and Implementation of Initial Emergency Operations*

- Consider engineering controls, exposure limits, handling procedures, and new technologies.

- Assess available escape routes and procedures.

- Discuss procedures to be followed by employees remaining to operate critical plant operations before they evacuate.

[The emergency coordinator also should address the use of engineering controls, maximum exposure limits, hazardous substance handling procedures, and the use of any new technologies. Based on the hazardous substances and/or conditions present, the emergency coordinator, or other person in charge of the response action, shall implement appropriate emergency operations, and assure that the personal protective equipment worn is appropriate for the hazards to be encountered and meets applicable regulatory requirements.]

(OSHA, 29 C.F.R. §§ 1910.120(q)(3)(ii),(iii), 1910.38(a)(2)(i)-(ii))

(3) *Pre-Emergency Assessment and Hazard Evaluation*

This section should summarize the facility's history of discharges reportable under regulatory requirements for the entire life of the facility and should identify areas within the facility where discharges could occur and what the potential effects of the discharges would be on the affected environment. THE INFORMATION PROVIDED HERE SHOULD ASSIST IN HAZARD ASSESSMENT AT THE TIME OF AN EMERGENCY. Through such hazard evaluation the facility owner or operator should seek to develop a complete understanding of potential hazards and the response actions necessary to address these hazards.

The results of a vulnerability analysis also should be summarized in this section. The analysis detailed in Annex C.4.a. should discuss the vulnerability of:

1. *Water intakes (drinking, cooling, or other);*
2. *Schools;*
3. *Medical facilities;*

4. *Residential areas;*
5. *Businesses;*
6. *Wetlands or other sensitive environments;*
7. *Fish and wildlife;*
8. *Lakes and streams;*
9. *Endangered flora and fauna;*
10. *Recreational areas;*
11. *Transportation routes (air, land, and water);*
12. *Utilities; and*
13. *Other areas of economic importance (e.g., beaches, marinas) including terrestrially sensitive environments, aquatic environments, and unique habitats.*

This analysis also should address areas of economic importance and environmental sensitivity as identified in the Area Contingency Plan ("ACP"), which are potentially impacted by a worst case discharge.

- Summarize small, medium, worst-case, average most probable, maximum most probable, and other release scenarios. *See Annex C.4.a. for detailed discussion.* (USCG, 33 C.F.R. § 154.1035(b)(2)(i))

- Summarize the results of the vulnerability analysis detailed in Annex C.4.a.

- Discuss how the results of such pre-emergency assessments have been shared and coordinated with outside parties. (OSHA, 29 C.F.R. § 1910.120(q)(2)(i)) (EPA, 40 C.F.R. §§ 112.20(h)(4), App. F1.4, F1.4.2; USCG, 33 C.F.R. § 154.1035(b)(4)(i))

4. Establishment of Objectives and Priorities for Response

See Annex C.3.a. for details.

This section should identify the basic objectives and priorities of the response action, addressing (1) the immediate goals of the response action, (2) mitigation actions, (3) response resources, and (4) medical and safety considerations. Explain the coordination of the tactical plan and response action with external groups. Consideration should be given to small, medium, worst case, most probable and other discharge scenarios, as appropriate. The responsibilities of response personnel and appropriate equipment should be described accordingly.

a. Immediate Goals

- Describe immediate measures to ensure the safety of the facility and secure the source of the discharge. Include consideration of engineering controls, maximum exposure limits, hazardous substance handling procedures, and the use of new technologies.

- Discuss means by which the emergency coordinator should use their authority to immediately access company funds to initiate cleanup activity.

(EPA, 40 C.F.R. §§ 112.20(h)(1)(vii), (h)(3)(ix); OSHA, 29 C.F.R. § 1910.120(q)(3)(ii))

- Outline immediate oil spill response actions:

1. Stop the product flow: Act quickly to secure pumps, close valves, etc.
2. Warn personnel: enforce safety and security measures.
3. Shut off ignition sources (motors, electrical circuits, open flames, etc.).
4. Initiate containment (around the tank and/or in the water with oil boom).
5. Notify NRC (1-800-424-8802).
6. Notify OSC.
7. Other notifications.]

(EPA, 40 C.F.R. part 112, App. F1.7.1)

b. Mitigation actions

See Annex C.3.d. for details.

- Identify measures to adequately contain and remove the discharged substance.
- Describe plans to dispose of contaminated response resources.
(EPA, 40 C.F.R. § 112.20(h)(7)(iii))
- Identify appropriate equipment and required personnel to protect fish and wildlife and sensitive environments in the ACP for the regulatorily required distances.
(USCG, 33 C.F.R. § 154.1035(b)(4)(iii))
- Immediate measures to contain or drain spilled oil also should be described.

(RSPA, 49 C.F.R. § 194.107(d))

[Specifically, this subsection should outline 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 should be identified by job title. These procedures must address actions to be taken involving the following equipment and scenarios: (1) failure of manifold, mechanical loading arm, other transfer equipment, or hoses, as appropriate; (2) tank overfill; (3) tank failure; (4) piping rupture; (5) piping leak, both under pressure and not under pressure, as applicable; (6) explosion or fire; and (7) 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).]

(USCG, 33 C.F.R. § 154.1035(b)(2))

[This section should briefly describe how to contain and control an oil spill through drainage, including: (1) the available volume of containment; (2) the route of drainage from oil storage and transfer areas; (3) the construction materials used in drainage

troughs; (4) the type and number of valves and separators used in the drainage system; (5) sump pump capacities; (6) the containment capacity of weirs and booms that might be used and their location; and (7) Other cleanup materials.]

(EPA, 40 C.F.R. part 112, App. F1.7.3)

c. Response resources

- List all emergency response equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment). The location and a physical description of each item and a brief outline of its capabilities should be noted. (RCRA, 40 C.F.R. §§ 264.52(e), 265.52(e), 279.52(b)(2)(v); USCG, 33 C.F.R. § 154.1035(b)(2)(iii); RSPA, 49 C.F.R. § 194.107(d), App. A)
- List oil spill response equipment., including: skimmers/pumps, booms, chemicals stored, sorbents, hand tools, communications equipment, fire fighting and personnel protective equipment, and other equipment (e.g., heavy equipment, boats and motors). Specific identification, capability, capacity, amount, and other relevant information should be noted. (EPA, 40 C.F.R. §§ 112.20(h)(1)(iv),(h)(3)(vi), App. F1.3.2; USCG, 33 C.F.R. § 154.1035(b)(2)(iii); RSPA, 49 C.F.R. § 194.107(d), App. A)
- Identify the oil spill removal organizations and the spill management team capable of providing the equipment, supplies, and trained personnel necessary for the first 7 days of response activities. (USCG, 33 C.F.R. § 154.1035(b)(3)(iv)-(v))

[Necessary resources should be determined on the basis of small, medium and worst-case discharge scenarios. Separate equipment lists should be provided for each scenario.] (EPA, 40 C.F.R. part 112, App. F1.7.1; RSPA, 49 C.F.R. § 194.107(d), App. A)

**d. Provision of Emergency Medical
Treatment, Evacuation Plans and Other Safety
Considerations**

- Address provisions for emergency medical treatment and first-aid. (OSHA, 29 C.F.R. § 1910.120(q)(2)(viii))
- Describe evacuation routes and procedures. (OSHA, 29 C.F.R. §§ 1910.120(q)(2)(vi), 1910.38(a)(4))
- Identify necessary protective gear.

[Employees engaged in emergency response and exposed to hazardous substances presenting an inhalation hazard or potential inhalation hazard shall wear positive pressure self-contained breathing apparatus' while engaged in emergency response.]

- Explain role of back-up personnel and their duty to stand by with equipment ready to provide assistance or rescue.
- Explain role of advance first-aid support personnel with medical equipment and transportation capability.
- Identify and explain the duties of the safety official.

[The emergency coordinator shall designate a safety official, who is knowledgeable in the operations being implemented at the emergency response site, with specific responsibility to identify and evaluate hazards and to provide direction with respect to the safety of operations for the emergency.]

(OSHA, 29 C.F.R. §§ 1910.120(q)(3)(iii),(iv),(vi),(vii))

5. Implementation of Tactical Plan

- Outline the duties of the emergency coordinator to implement prompt actions to remove and contain the released substance. (EPA, 40 C.F.R. §§ 112.20(h)(3)(ix)(G), 112.20(h)(7); USCG, 33 C.F.R. § 1035(b)(3); OSHA, 29 C.F.R. § 1910.120(q)(3)(iii))
 - Identify the equipment needed for implementation. (RCRA, 264.52(e), 265.52(e), 279.52(b)(2)(v); USCG, 33 C.F.R. § 154.1035(b)(2)(iii))
 - Identify the appropriate equipment and required personnel to protect fish and wildlife and sensitive environments. (USCG, 33 C.F.R. § 154.1035(b)(4)(iii))
 - Outline measures to coordinate rescue and response actions as previously arranged with external and internal response personnel.
 - Note procedures to be followed by employees who remain to operate critical plant operations before they evacuate should be detailed. (OSHA, 29 C.F.R. § 1910.38(a)(2)(ii))
 - Identify proper personal protective equipment. (OSHA, 29 C.F.R. § 1910.120(q)(3)(iii))
- (RSPA, 49 C.F.R. § 194.107(d), App. A)

6. Mobilization of Resources

- Describe procedures to mobilize proper response personnel and equipment necessary to effectively respond to all identified spill scenarios, including equipment necessary to protect fish and wildlife and sensitive environments.

(RCRA, 40 C.F.R. §§ 264.52(e), 265.52(e), 279.52(b)(2)(v); EPA, 40 C.F.R. § 112.20(h)(7), App. F1.7.1; USCG, 33 C.F.R. §§ 154.1035(b)(2)(iii), (b)(3), (b)(4)(iii); OSHA, 29 C.F.R. § 1910.120(q)(2)(ix); RSPA, 49 C.F.R. § 194.107(d), App. A)

- Identify the response resources available to respond within various times, after discovery of a worst case discharge of oil, or to mitigate the threat of such a discharge, as follows:

	Tier 1	Tier 2	Tier 3
High volume area	6 hours	30 hours	54 hours
All other areas	12 hours	36 hours	60 hours

(RSPA, 49 C.F.R. §194.115)

C. SUSTAINED ACTIONS

This section should address the transition of a response from the initial emergency stage to the sustained action stage where more prolonged mitigation and recovery actions progress under a response management structure. Most incidents are able to be handled by a few individuals without implementing an extensive response management system.

This section should be brief and rely heavily on references to specific annexes to the ICP

- Identify continuing actions to contain, drain and dispose of spilled materials; procedures and measures for sustained response activities. (EPA, 40 C.F.R. §112.20(h)(7); CAA, 40 C.F.R. § 68.95(a)(1)(iii); OSHA, 29 C.F.R. § 1910.120(q)(2)(x); RSPA, 49 C.F.R. § 194.107(d), App. A)
- Outline organization and structure of, and responsibilities of personnel for, sustained response activities. (USCG, 33 C.F.R. § 154.1035(b)(3))
- Include procedures to account for all employees after emergency evacuation has been completed. (OSHA, 29 C.F.R. § 1910.38(a)(2)(iii))
- Briefly describe procedures for post-emergency critique of plan and follow-up. (OSHA, 29 C.F.R. § 1910.38(a)(2)(iii))

D. TERMINATION AND FOLLOW-UP ACTIONS

This section should briefly address the development of a mechanism to ensure that the person in charge of mitigating the incident can, in coordination with the federal or state OSC as necessary, terminate the response. In the case of spills, certain regulations may become effective once the “emergency” is declared over. The section should describe how the orderly demobilization of response resources will occur. In addition, follow-up actions associated with termination of a response (e.g., accident investigation, response critique, plan review, written follow-up reports) also should be outlined. Reference to the relevant ICP annexes may be appropriate.

[Before operations are resumed in the affected area(s) of the facility, the owner or operator must notify the Regional Administrator of EPA, and appropriate State and local authorities, that the emergency coordinator has ensured that: (1) no waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and (2) all emergency equipment listed in the contingency plan is cleaned and fit for its intended use.]

(RCRA, 40 C.F.R. §§ 264.56(i), 265.56(i))

- Describe procedures to terminate response activities, including containment, drainage and disposal actions. (EPA, 40 C.F.R. § 112.20(h)(7); CAA, 40 C.F.R. § 68.95(a)(1)(iii); OSHA, 29 C.F.R. § 1910.120(q)(2)(ix))

- Describe organization and structure of, and responsibilities of personnel for, termination of response activities. (USCG, 33 C.F.R. § 154.1035(b)(3))

- Briefly describe procedures for post-emergency critique of response activities and follow-up. (OSHA, 29 C.F.R. § 1910.120(q)(2)(x))

SECTION III: ANNEXES

ANNEX A: FACILITY and LOCALITY INFORMATION

This annex should provide detailed information to responders on the layout of the facility and the surrounding environment. The use of maps and drawings to allow for quick reference is preferable to detailed written descriptions. These should contain information critical to the response such as the location of discharge sources, emergency shut-off valves and response equipment, and nearby environmentally and economically sensitive resources and human populations (e.g., nursing homes, hospitals, schools). The ACP and LEPC plans may provide specific information on sensitive environments and populations in the area. EPA Regional Offices, Coast Guard Marine Safety Offices, and LEPCs can provide information on the status of efforts to identify such resources. Plan holders may need to provide additional detail on sensitive areas near the facility. In addition, this annex should contain other facility information that is critical to response and should complement but not duplicate information contained in part I.D. of the plan introduction section containing administrative information on the facility.

For basic facility information see the Facility Information Form in Section I.D. above.

(EPA, 40 C.F.R. § 112.20(h)(2), App. F1.2; USCG, 33 C.F.R. §§ 154.1035(a)(1)-(3),(6), 154.1035(e); OSHA, 29 C.F.R. §§ 1910.38(a)(2)(vi))

- Describe the location of the facility. (EPA, 40 C.F.R. § 112.20(h)(2))

- Identify the sizes, types, and number of vessels that the facility can transfer oil to or from simultaneously.

- Identify the first valve(s) on facility piping separating the transportation-related portion of the facility from the non-transportation-related portion, if any.

- Provide information on the oil(s) and hazardous material handled, stored, or transported at the facility in bulk, including generic or chemical name, description of the appearance and odor, physical and chemical characteristics, hazards involved in handling, list of firefighting procedures and extinguishing agents effective with fires involving the oil(s) and hazardous materials. Note the type of oil handled by the facility and volume that could be involved in a worst case discharge.

- Include a statement identifying which pipeline sections in a response zone can be expected to cause significant and substantial harm to the environment in the event of a discharge of oil into or on the navigable waters or adjoining shorelines, as defined in 40 C.F.R. §194.103(c). Explain the basis for the determination.

- Provide any other information relevant to a spill response. (USCG, 33 C.F.R. § 154.1035(e)(1))

(EPA, 40 C.F.R. § 112.20(h)(2); RSPA, 49 C.F.R. §§ 194.107(d)(1), 194.113, 194.103, App. A)

1. Facility Maps

•Include a Map of the facility and a map that identifies the location of the facility in the surrounding community / state. The Map also should clearly show the following:

- The location and extent of the worst case discharge; and
 - The distance between each pipeline section in the response zone and (i) each potentially affected public drinking water intake, lake, river, and stream within a radius of five miles of the line section, and (ii) each potentially affected environmentally sensitive area within a radius of one mile of the line section.

(RSPA, 49 C.F.R. part 194, App. A)

2. Facility Drawings

This section should include (1) a Site Plan Diagram, (2) a Site Drainage Plan Diagram, and (3) a Site Evacuation Plan.

•The **Site Plan Diagram** of the facility should identify:

- (1) the entire facility to scale;
- (2) above and below ground bulk oil storage tanks;
- (3) the contents and capacities of bulk oil storage tanks;
- (4) the contents and capacities of drum oil storage areas;
- (5) the contents and capacities of surface impoundments;
- (6) process buildings;
- (7) transfer areas;
- (8) location and capacity of secondary containment systems;
- (9) structures where hazardous materials are stored or handled, including materials stored and capacity of storage;
- (10) location of communication and emergency response equipment;
- (11) location of electrical equipment which contains oil; and
- (12) for complexes only, the interface(s) (i.e., valve or component), as defined by the regulations, between the portion of the facility regulated by EPA and the portion(s) regulated by other Agencies.

(EPA, 40 C.F.R. § 112.20(h)(1)(viii), App. F1.9)

•The **Site Drainage Plan Diagram** should identify:

- (1) major sanitary and storm sewers, manholes, and drains;
- (2) weirs and shut-off valves;
- (3) surface water receiving streams;
- (4) fire fighting water sources;
- (5) other utilities;
- (6) response personnel ingress and egress;
- (7) response equipment transportation routes; and
- (8) direction of spill flow from discharge points.

•The **Site Evacuation Plan** should include:

(1) the Site Plan Diagram with evacuation route(s) identified; and

(2) location of evacuation regrouping areas.

(EPA, 40 C.F.R. §§ 112.20(h)(1)(viii), (h)(9), App. F1.9; USCG, 33 C.F.R. § 154.1035(e))

•Also include a piping diagram and plan-profile drawing of each line section. (RSPA, 49 C.F.R. part 194, App. A)

3. Facility Description / Layout

- Describe the type of the facility. (EPA, 40 C.F.R. § 112.20(h)(2))
- Provide a physical description of the facility.
- Provide any further descriptive documents, diagrams, etc. (EPA, 40 C.F.R. part 112, App. F1.9)

- Include a map or chart showing the location of those fish and wildlife and sensitive environments which are potentially impacted by a discharge. The map or chart also should depict each response action that the facility anticipates taking to protect these areas. A legend of activities must be included with the map. (USCG, 33 C.F.R. § 154.1035(b)(4))

ANNEX B: NOTIFICATION

This annex should detail the process of making people aware of an incident (i.e., whom to call, when the call must be made, and what information / data to provide on the incident). The emergency coordinator is responsible for ensuring that notifications are carried out in a timely manner, but is not necessarily responsible for making the notifications. ACPs, Regional Contingency Plans (“RCPs”), and LEPC plans should be consulted and referenced as a source of information on the roles and responsibilities of external parties that are to be contacted. This information is important to help company responders understand how external response officials fit into the picture. Call-down lists must be readily accessible to ensure rapid response. Notification lists provided in the core plan need not be duplicated here but need to be referenced.

For basic information on the emergency coordinator and alternate(s), see Section I.D. above.

(RCRA, 40 C.F.R. §§ 264.52(d), 265.52(d), 279.52(b)(2)(iv); RSPA, 49 C.F.R. § 194.107(d), App. A)

(1) Notification Responsibilities of the Emergency Coordinator

[Whenever there is an imminent or actual emergency situation, the emergency coordinator (or his designee when the emergency coordinator is not present at the facility) must immediately:

1. Activate internal facility alarms or communications systems to notify facility personnel.
2. Notify appropriate State or local agencies with designated response roles if their help is needed.

(RCRA, 40 C.F.R. §§ 264.56(a)(1),(2), 265.56(a)(1),(2), 279.52(b)(6)(i)(A),(B); OSHA, 29 C.F.R. § 1910.120(q)(2)(ix); CAA, 40 C.F.R. § 68.95(a)(1)(i))

If the emergency coordinator determines that the facility has had a release, fire, or explosion which could threaten human health or the environment outside the facility, he must:

1. If evacuation of local areas may be advisable, immediately notify appropriate local authorities and be available to help appropriate officials decide whether local areas should be evacuated; and
2. Immediately notify either the government official designated as the on-scene coordinator ("OCS") for that geographical area (in the applicable regional contingency plan under 40 C.F.R. part 1510) or the National Response Center (800-424-8802). The report must include:
 - (i) Name and telephone number of reporter;
 - (ii) Name and address of facility;
 - (iii) Time and type of incident (e.g., fire, release);
 - (iv) Name and quantity of material(s) involved, to the extent known;
 - (v) The extent of any injuries; and
 - (vi) The possible hazards to human health, or the environment, outside the facility.]

(RCRA, 40 C.F.R. §§ 264.56(d)(1),(2), 265.56(d)(1),(2), 279.52(b)(6)(iv)(A),(B); CAA, 40 C.F.R. § 68.95(a)(1)(i))

(2) *Individuals and Organizations to Contact*

•Identify individuals and organizations to be contacted in the event of a discharge so that immediate communications between the emergency coordinator and the appropriate Federal officials and the persons providing response personnel and equipment can be ensured.

(EPA, 40 C.F.R. § 112.20(h)(1)(ii))

(3) *Employee Alarm System*

•Identify and explain in detail the preferred means of reporting emergencies, such as manual pull box alarms, public address systems, radio or telephones.

[The employer shall explain the preferred means of and procedures for reporting emergencies to the employees. Employers shall post emergency telephone numbers near telephones, employee notice boards, and other conspicuous locations when telephones

serve as a means of reporting emergencies. Where a communication system also serves as the employee alarm system, all emergency messages shall have priority over other messages.

General Requirements: The employee alarm shall provide warning for necessary emergency action as called for in the emergency action plan, or for reaction time for safe escape of employees from the workplace or the immediate area, or both. It shall be capable of being perceived above ambient noise or light levels by all employees in the affected portions of the workplace. Tactile devices may be used to alert those employees who would not otherwise be able to recognize the audible or visual alarm. The employee alarm shall be distinctive and recognizable as a signal to evacuate the work area or to perform actions designated under the emergency action plan. If the employee alarm system is used for alerting fire brigade personnel, or for other emergency purposes, a distinctive signal should be used for each purpose.

Installation and restoration: The employer shall assure that all devices, components, combinations of devices or systems constructed and installed to comply with the regulatory standard are approved. Steam whistles, air horns, strobe lights or similar lighting devices, or tactile devices meeting the regulatory requirements are considered to meet the approval requirement. The employer shall assure that all employee alarm systems are restored to normal operating condition as promptly as possible after each test or alarm. Spare alarm devices and components subject to wear or destruction shall be available in sufficient quantity and locations for prompt restoration of the system.

Maintenance and testing: The employer shall assure that all employee alarm systems are maintained in operating conditions except when undergoing repairs or maintenance. A test of the reliability and adequacy of non-supervised employee alarm systems shall be made every two months. A different actuation device shall be used in each test of a multi-actuation device system so that no individual device is used for two

consecutive tests. Power supplies should be maintained or replaced as necessary to assure a fully operational condition. Back-up means of alarm, such as employee runners or telephones, shall be provided when systems are out of service. Alarm circuitry installed after January 1, 1981 which is capable of being supervised, shall be supervised and positive notification shall be provided to assigned personnel whenever a deficiency exists in the system. All supervised employee alarm systems shall be tested at least annually for reliability and adequacy. Servicing, maintenance and testing of employee alarms is to be done by persons trained in the designed operation and functions necessary for reliable and safe operation of the system.

Manual operation: Manually operated actuation devices for use in conjunction with employee alarms are to be unobstructed, conspicuous and readily accessible.]
(EPA, 40 C.F.R. §§ 264.56(a)(1), 265.56(a)(1), 279.52(b)(6)(i)(A); OSHA, 29 C.F.R. §§ 1910.38(a)(3), 1910.165(b), 1910.119(n), 1910.120(q)(2)(ix))

1. Internal Notifications

•Describe employee alarm system that provides warning for necessary emergency action as called for in the plan, or for reaction time for safe escape of employees, or both. (OSHA, 29 C.F.R. §§ 1910.165(b)(1), 1910.119(n), 1910.120(q)(2)(ix))

•Provide the identity and telephone numbers of facility response personnel to be contacted in the event of a discharge to ensure immediate communications with the emergency coordinator. This section 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 spill or substantial threat of a discharge or spill.

<u>EMERGENCY NOTIFICATION PHONE LIST: INTERNAL NOTIFICATIONS</u>	
Date of Last Update: _____	
Reporter's Name / Position: _____	
Date: _____	
Facility Name: _____	
Owner Name: _____	
Facility Identification Number: _____	

INDIVIDUAL / ORGANIZATION	PHONE NUMBER
1. Emergency Coordinator Alternate(s)	Day: Evening: Pager: Day: Evening: Pager:
2. Facility Response Team Personnel: (prioritized list) Name/role in response:	Day: Evening: Pager:
3. Discharge / Spill Management Team: Name: (provide for each team member)	Day: Evening: Pager:
4. Hazardous Substance / Oil Removal Organizations: Name / Contact: (provide for each organization)	Day: Evening: Pager:

(EPA, 40 C.F.R. § 112.20(h)(3)(iii), App. F1.3.1; RCRA, 40 C.F.R. §§ 264.56(a)(2), 265.56(a)(2), 279.52(b)(6)(i)(B); USCG, 33 C.F.R. §§ 154.1035(b)(1)(i), 154.1035(e)(2)(ii); RSPA, 49 C.F.R. § 194.107(d), App. A)

SPILL OR RELEASE RESPONSE NOTIFICATION FORM

Reporter's Name: _____
Position: _____
Phone Number(s): _____
Day: () _____ Evening: () _____

Company: _____
Organization Type: _____
Address: _____
City: _____ State: _____ Zip: _____

Were Materials Discharged? ____ (Y/N) Confidential? ____ (Y/N)
Meeting Federal Obligations to Report? ____ (Y/N) Date Called: _____
Calling for Responsible Party? ____ (Y/N) Time Called: _____

INCIDENT DESCRIPTION

Source and/or Cause of Incident: _____

Date of Incident: _____
Time of Incident: _____ AM/PM
Incident Address/Location: _____

Nearest City: _____ State: _____
County: _____ Zip: _____
Distance from City: _____ Units of Measure: _____
Direction from City: _____
Section: _____ Township: _____ Range: _____
Borough: _____

Container Type: _____ Tank Oil Storage Capacity: _____
Units of Measure: _____
Above ground (Y/N) Below ground (Y/N) Unknown

Facility Oil Storage Capacity: _____ Units of Measure: _____
Facility Latitude: _____ Degrees _____ Minutes _____ Seconds
Facility Longitude: _____ Degrees _____ Minutes _____ Seconds

MATERIAL

CHRIS Code	Discharged Quantity	Unit of Measure	Material Discharged in Water	Quantity	Unit of Measure

RESPONSE ACTION

Actions Taken to Correct, Control or Mitigate Incident:

-

IMPACT

Number of Injuries: _____ Number of Deaths: _____
Were there Evacuations? _____ (Y/N) Number Evacuated: _____
Was there any Damage? _____ (Y/N)
Damage in Dollars (approximate): _____
Medium Affected: _____
Description: _____
More Information about Medium: _____

Additional Information:

Caller Notifications: USCG EPA State Other

(EPA, 40 C.F.R. part 112, App. F1.3.1)

2. Community Notifications

•Emergency Coordinator shall notify and provide necessary information (from the Spill or Release Response Information Form found in Annex B.1 above) to the individuals and organizations in the Emergency Notification Phone List. [Prominently display this statement: **NOTIFICATION MUST NOT BE DELAYED PENDING COLLECTION OF ALL INFORMATION.**]

<u>EMERGENCY NOTIFICATION PHONE LIST: COMMUNITY NOTIFICATIONS</u>	
Date of Last Update: _____	
Reporter's Name/Position: _____	
Date: _____	
Facility Name: _____	
Owner Name: _____	
Facility Identification Number: _____	

ORGANIZATION	PHONE NUMBER
1. Local Response Team (Fire Dept./ Cooperatives)	
2. Fire Marshall	Day: Evening: Pager:
3. Local Emergency Planning Committee ("LEPC")	Day: Evening:
4. Local Water Supply System	Day: Evening:
5. Weather Report	
6. Local Television/Radio Station for Evacuation Notification	
7. Hospitals	

(EPA, 40 C.F.R. § 112.20(h)(3)(iii), App. F1.3.1; USCG, 33 C.F.R. §§ 154.1035(b)(1)(i)-(ii), 154.1035(e)(2); OSHA, 29 C.F.R. §§ 1910.119(n), 1910.120(q)(2)(i)-(ii),(ix); RSPA, 49 C.F.R. § 194.107(d), App. A)

3. Federal and State Agency Notifications

•Emergency Coordinator should ensure notification of the appropriate Federal and state agencies. Provide with information from the Spill or Release Response Information Form found in Annex B.1 above.

<u>EMERGENCY NOTIFICATION PHONE LIST: FEDERAL AND STATE NOTIFICATIONS</u>	
Date of Last Update: _____	
Reporter's Name / Position: _____	
Date: _____	
Facility Name: _____	
Owner Name: _____	
Facility Identification Number: _____	
Date and Time of each National Response Center Notification: _____	

ORGANIZATION	PHONE NUMBER
1. National Response Center ("NRC")	1-800-424-8802
2. Federal On-Scene Coordinator ("OSC") and/or Regional Response Center ("RRC")	Day: Evening: Pager:
3. State Emergency Response Commissioner ("SERC")	Day: Evening: Pager:
4. State Police	

(EPA, 40 C.F.R. § 112.20(h)(3)(iii), App. F1.3.1; USCG, 33 C.F.R. § 154.1035(b)(1)(i)-(ii), 154.1035(e)(2); OSHA, 29 C.F.R. §§ 1910.120(q)(2)(i)-(ii),(ix); RSPA, 49 C.F.R. § 194.107(d), App. A)

ANNEX C: RESPONSE MANAGEMENT STRUCTURE

This annex should contain a general description of the facility's response management system as well as contain specific information necessary to guide or support the actions of each response management function (i.e., command, operations, planning, logistics, and finance) during a response.

This annex details (1) the command structure and lines of communications for response actions; (2) operational aspects of the response, including control, assessment, decontamination, and safety procedures; (3) pre-emergency planning and coordination; (4) logistical plans; and (5) response resource procurement, finance and administration.

(USCG, 33 C.F.R. § 154.1035(b)(3)(iii); OSHA, 29 C.F.R. § 1910.120(q)(2)(ii))

Description of Response Personnel Capabilities, Duties and Response Times

- Identify Emergency Response Personnel, including name, telephone number (to be used when not on-site), response time, responsibility during response action, and the type and date of response training. [NOTE: The description of personnel responsibilities and other information should be DETAILED in this section.]

- Identify Emergency Response Contractors and detail their responsibilities. Provide evidence of contracts / agreements with response contractors to ensure the availability of personnel and response equipment.

- Identify the Facility Response Team, including the emergency coordinator and team members, their response time in minutes, and day and evening phone and pager numbers. Responsibilities should be detailed.

(EPA, 40 C.F.R. §§ 112.20(h)(1)(v),(h)(3)(v), App. F1.3.4; USCG, 33 C.F.R. § 154.1035(b)(3)(iii))

1. General

If facility owners or operators choose to follow the fundamental principles of the National Interagency Incident Management System (“NIIMS”) Incident Command System (“ICS”),⁴ then they may adopt NIIMS ICS by reference rather than having to describe the response management system in detail in the plan. In this section of Annex C, planners should briefly address either (1) basic areas where their response management system is at variance with NIIMS ICS or (2) how the facility’s organization fits into the NIIMS ICS structure. This may be accomplished through a simple organizational diagram.

If facility owners or operators choose not to adopt the fundamental principles of NIIMS ICS, this section should describe in detail the structure of the facility management system. Regardless of the response management system used, this section of the annex should include the following information:

- Organizational chart;*
- Specific job description for each position;*
- A detailed description of information flow; and*
- Description of the formation of a unified command within the response*

management system.

•Provide an overview of the entire organizational structure of the plan and explain the interaction between the various areas; a brief outline of responsibilities should be included (details of each area are provided in following subsections of this Annex):

1. Command and control: All emergency responders and their communications shall be coordinated and controlled through the emergency coordinator assisted by the senior official present for each employer. (OSHA, 29 C.F.R. § 1910.120(q)(3)(i))

⁴NIIMS ICS is a system commonly used in emergency responses by federal, state, local and private emergency response organizations. As it provides a familiar framework for effective interaction among response personnel, organizing the ICP along the lines of the NIIMS ICS will allow the plan to dovetail with established response management practices.

2. Public information;
3. Safety;
4. Liaison with government agencies;
5. Spill operations;
6. Planning;
7. Logistics support; and
8. Finance.

(USCG, 33 C.F.R. § 154.1035(b)(3)(iii); OSHA, 29 C.F.R. § 1910.120(q)(3)(i))

•Briefly note arrangements agreed to by local police and fire departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services. Annex C.2.d below provides further detail.

(RCRA, 40 C.F.R. §§ 264.37, 265.37, 279.52(a)(6), 264.54(c), 264.55(c), 279.52(b)(2)(iii); OSHA, 29 C.F.R. § 1910.120(q)(2)(i))

2. Command Structure

This section of Annex C should describe the command aspects of the response management system that will be used (i.e., reference NIIMS ICS or detail the facility's response management system). The location(s) of predesignated command posts also should be identified.

[Response personnel should be familiar with the details of the command structure, in the event of a reportable spill.] (EPA, 40 C.F.R. § 112.20(h)(3)(iv))

a. Emergency Coordinator

• Explain the duties, requirements and role of the emergency coordinator.

[At all times, there must be at least one employee either on the facility premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures. This “emergency coordinator” must be thoroughly familiar with all aspects of the facility’s contingency plan, all operations and activities at the facility, the location and characteristics of waste handled, the location of all records within the facility, and the facility layout. In addition, this person must have the authority to commit the resources needed to carry out the contingency plan.]

Primary Emergency Coordinator:

Name: _____

Position: _____

Home Address: _____

Work Address: _____

Phone Number: () _____ Fax: () _____

Alternate Emergency Coordinator (s): (attach additional sheets if more than one)

Name: _____

Position: _____

Home Address: _____

Work Address: _____

Phone Number: () _____ Fax: () _____

(EPA, 40 C.F.R. § 112.20(h)(1)(i), App. F1.2.5; RCRA, 40 C.F.R. §§ 264.55, 265.55, 279.52(b); OSHA, 29 C.F.R. § 1920.120(q)(3)(i); RSPA, 49 C.F.R. part 194, App. A)

Requirements for the Emergency Coordinator: The emergency coordinator must be:

1. Available on a 24-hour basis and be able to arrive at the facility in a reasonable time;
2. Located in the United States;
3. Fluent English;
4. Familiar with the implementation of the facility response plan; and
5. Trained in the responsibilities of the position under the response plan.

Authority: The facility owner or operator shall provide each emergency coordinator and alternate identified in the plan with a document designating them as a qualified individual and specifying their full authority to:

1. Activate and engage in contracting with hazardous waste and oil spill removal organizations;
2. Act as a Liaison with the predesignated Federal On-Scene Coordinator ("OSC"); and
3. Obligate funds required to carry out response activities.

Limitation on Responsibility: The emergency coordinator is not responsible for:

1. The adequacy of response plans prepared by the owner or operator; or
2. Contracting or obligating funds for response resources beyond the authority contained in their designation from the owner or operator of the facility.]

(USCG, 33 C.F.R. § 154.1026)

b. Information

This section of Annex C should address how the facility will disseminate information internally (i.e., to facility / response employees) and externally (i.e., to the public). For example, this section might address how the facility would interact with local officials to assist with public evacuation and other needs. Items to consider in developing this section include press release statement forms, plans for coordination with the news media, community relations plan, needs of special populations, and plans for families of employees.

•*Communications Plan:* 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. All communications shall be coordinated and controlled by the emergency coordinator.

(USCG, 33 C.F.R. § 154.1035(e)(4); OSHA, 29 C.F.R. § 1910.120(q)(3)(i))

•Describe procedures and organizational structure for providing relevant emergency information to: (1) facility personnel; (2) Federal, state and/or local agencies; and (3) individuals or organizations that will provide necessary response equipment and personnel.

[Whenever there is an imminent or actual emergency situation, the emergency coordinator (or his designee when the emergency coordinator is not present at the facility) must immediately:

1. Activate internal facility alarms or communications systems to notify facility personnel;
2. Notify appropriate Federal, State or local agencies with designated response roles if their help is needed;
3. Contact individuals or organizations identified in Annex 2 above so that immediate communication between the emergency coordinator and the appropriate officials and persons providing response equipment and personnel can be ensured.]

(RCRA, 40 C.F.R. §§ 264.56(a)(1),(2), 265.56(a)(1),(2), 279.52(b)(6)(i)(A),(B); EPA, 40 C.F.R. § 112.20(h)(3)(iii); USCG, 33 C.F.R. § 154.1035(b)(3)(iii); RSPA, 49 C.F.R. § 194.107(d), App. A)

•Review of Plan with Employees: Describe procedures to review with each employee upon initial assignment those parts of the plan which the employee must know to protect the employee in the event of an emergency. [The written plan shall be kept at the workplace and made available for employee review.]
(OSHA, 29 C.F.R. § 1910.38(a)(5)(iii))

•Provide contact name and/or regular job title for further information about the plan, or explanation of duties under the plan.
(OSHA, 29 C.F.R. § 1910.38(a)(2)(vi))

c. Safety

This section of Annex C should include a process for ensuring the safety of responders. Facilities should reference responsibilities of the safety officer, federal / state requirements, and safety provisions of the ACP. Procedures for protecting facility personnel should be addressed (i.e., evacuation signals and routes, sheltering in place).

- Describe the organizational structure for Safety activities, including coordination of evacuation and other employee and community safety response.

- Describe procedure by which the emergency coordinator shall designate a safety official, who is knowledgeable in the operations being implemented at the emergency response site, with specific responsibility to identify and evaluate hazards and to provide direction with respect to the safety of operations for the emergency at hand.

[When activities are judged by the safety official to be immediately or imminently dangerous to life or human health, the safety official shall have the authority to alter, suspend, or terminate those activities. The safety official shall immediately inform the emergency coordinator of any actions needed to be taken to correct these hazards at the emergency scene.]

(USCG, 33 C.F.R. § 154.1035(b)(3)(iii); OSHA, 29 C.F.R. §§ 1910.120(q)(3)(vii)-(viii))

- Detail a site-specific Safety and Health Plan. (USCG, 33 C.F.R. § 154.1035(e)(5))
- Describe the Facility Evacuation Plan.

[Describe signal to be used to begin evacuation, evacuation routes, and alternate evacuation routes (in cases where the primary routes could be blocked by releases of hazardous waste or fires). Evacuation escape procedures and emergency escape route assignments also should be included. Safe distances and places of refuge must be identified. Evacuation routes must be shown on the diagram of the facility in Annex 1. Special consideration must be given in the plan to evacuation of certain parts of the facility that are at a high risk of exposure in the event of a spill or other release. The following factors should be considered in development of the plan:

- Location of stored materials;
- Hazard imposed by spilled material;
- Spill flow direction;
- Prevailing wind direction and speed;
- Water currents, tides, or wave conditions (if applicable);

- Arrival route of emergency response personnel and equipment;
- Evacuation routes;
- Alternative routes of evacuation;
- Transportation of injured personnel to nearest emergency medical facility;
- Location of alarm/notification systems;
 - The need for a centralized check-in area for evacuation validation (roll call);
- Selection of a mitigation command center; and
- Location of shelter at the facility as an alternative to evacuation.

Procedures to account for all employees after emergency evacuation should be included.

Different types of evacuation may be necessary depending on the emergency scenario.] (EPA, 40 C.F.R. part 112, App. F1.3.5; OSHA, 29 C.F.R. §§ 1910.38(a)(2)(i),(iii), (a)(4); OSHA, 29 C.F.R. §§ 1910.120(q)(2)(iv),(vi))

•Reference or describe community evacuation plans, if appropriate. (RCRA, 40 C.F.R. §§ 264.52(f), 265.52(f), 279.52(b)(2)(vi); EPA, 40 C.F.R. §§ 112.20(h)(1)(vi), 112.20(h)(3)(vii),(viii))

•Describe rescue and medical duties for those employees who are to perform them. (OSHA, 29 C.F.R. § 1910.38(a)(2)(iv))

d. Liaison

This section of Annex C should address the process by which the internal and external emergency response teams will interact. Given that parallel mobilization may be occurring by various response groups, the process of integration (i.e., unified command) should be addressed. This includes a process for communicating with local emergency management especially where safety of the general public is concerned.

- Describe the organizational structure for Liaison with Federal, state and local governmental authorities and/or agencies.

- Pre-Emergency Planning and Arrangements with Outside Parties:* Describe arrangements agreed to by local police and fire departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services.

[The organizational structure of the plan and how it will function as a whole should be explained, as appropriate, to outside parties. The owner or operator must arrange to familiarize police and fire departments and State and local response teams with the layout of the facility, properties of hazardous waste handled at the facility and associated hazards, places where facility personnel normally would be working, entrances to and roads inside the facility, and possible evacuation routes. Where more than one police or fire department might respond to an emergency, agreements designating primary authority to a specific police or fire department and agreements with other departments to provide support should be arranged. Local hospitals should be familiarized with the properties of hazardous substances handled at the facility and the types of injuries or illnesses which could result from fires, explosions, or releases at the facility. Personnel roles, lines of authority, training, and communication should be addressed.]

(RCRA, 40 C.F.R. §§ 264.37, 265.37, 279.52(a)(6), 264.54(c), 264.55(c), 279.52(b)(2)(iii); OSHA, 29 C.F.R. § 1910.120(q)(2)(i)-(ii); USCG, 33 C.F.R. § 154.1035(b)(3)(iii))

•Provide the name or regular job titles of persons or departments who can be contacted for further information or explanation of Liaison procedures under the plan. (OSHA, 29 C.F.R. § 1910.38(a)(2)(vi))

3. Operations

This section of Annex C should contain a discussion of specific operational procedures to respond to an incident. It is important to note that response operations are driven by the type of incident. That is, a response to an oil spill will differ markedly from a response to a release of a toxic gas to the air. Plan drafters should tailor response procedures to the particular hazards in place at the facility. A facility with limited hazards may have relatively few procedures. A larger more complex facility with numerous hazards is likely to have a series of procedures designed to address the nuances associated with each type of incident.

- Describe the organizational structure for spill/discharge response operations to be implemented, based on the hazardous substances and/or conditions present, by the emergency coordinator.

(USCG, 33 C.F.R. § 154.1035(3)(iii); OSHA, 29 C.F.R. § 1910.120(q)(3)(iii))

- Describe procedures to be followed by employees who remain to operate critical plant operations before they evacuate.

- Describe evacuation procedures and route assignments, including procedures to account for all employees after emergency evacuation is completed.

- Describe rescue and medical duties for those employees who are to perform them.

(OSHA, 29 C.F.R. §§ 1910.38(a)(2)(i)-(iv))

- Describe procedures by which the emergency coordinator, based on the hazardous substances and/or conditions present, shall assure that the personal protective equipment worn is appropriate for the hazards to be encountered.

[Personal protective equipment shall meet, at a minimum, the criteria contained in 29 C.F.R. 1910.156(e) when worn while performing fire fighting operations beyond the incipient stage for any incident.] (OSHA, 29 C.F.R. § 1910.120(q)(3)(iii))

- Describe duty of, and means by which, the emergency coordinator shall limit the number of emergency response personnel at the emergency site, in those areas of potential or actual exposure to incident or site hazards, to those who are actively performing emergency operations.

[Operations in hazardous areas shall be performed using the “buddy system” in groups of two or more.] (OSHA, 40 C.F.R. § 1910.120(q)(3)(v))

a. Response objectives

[The objectives of the response is to ensure mitigation of a variety of discharge scenarios, including worst-case, small, medium, average most probable, etc., as appropriate.]

- List equipment and the responsibilities of facility personnel to mitigate an average most probable discharge, and other scenarios.

- For a worst case discharge scenario, also identify appropriate equipment and required personnel, available by contract or other approved means, to protect fish and wildlife and sensitive environments which fall within the relevant distances, as determined by the regulations.

(USCG, 33 C.F.R. §§ 154.1035(b)(2)(iii),(b)(4)(iii))

- Detail actions employers and employees must take to ensure employee safety from fire and other emergencies. [In part, this includes assuring that the proper personal protective equipment is worn, as detailed above.]

(OSHA, 29 C.F.R. §§ 1910.38(a)(1), 1910.120(q)(3)(iii))

b. Discharge or release control

- Identify the personnel and equipment necessary to remove to the maximum extent practicable a worst case discharge and other discharges of oil or other hazardous substances, and to mitigate or prevent a substantial threat of a discharge. [To identify necessary response resources, owners or operators should consult Appendix E to 40 C.F.R. part 112.]

- Describe immediate measures to secure the source of the discharge and measures to provide adequate containment and drainage of spill oil or other hazardous substances.

(EPA, 40 C.F.R. §§ 112.20(h)(3)(i), (h)(7)(iv), (h)(1)(vii))

- Describe measures to be taken during an emergency by the emergency coordinator to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous waste at the facility. [These measures must include, where applicable, stopping processes and operations, collecting and containing release waste, and removing or isolating containers.]

(RCRA, 40 C.F.R. §§ 264.56(e), 265.56(e), 279.52(b)(6)(v))

- Describe the volume(s) and oil groups that would be involved in the --

(A) Average most probable discharge;

(B) Maximum most probable discharge;

(C) Worst case discharge; and

(D) Where applicable, the worst case discharge from the non-transportation-related portion of the facility.

- Outline 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. [These procedures must address actions to be taken involving the following equipment and scenarios: (1) failure of manifold, mechanical loading arm, other transfer equipment, or hoses, as appropriate; (2) tank overfill; (3) tank failure; (4) piping rupture; (5) piping leak, both under pressure and not under pressure, as applicable; (6) explosion or fire; and (7) 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).]

- Facility personnel responsible for performing specified procedures to mitigate or prevent any discharge or potential discharge should be identified by job title.

[A copy of these procedures should be maintained at the facility operations center.]

(RSPA, 49 C.F.R. § 194.107(d), App. A; USCG, 33 C.F.R. § 154.1035(b)(2))

c. Assessment / Monitoring

•Describe procedures by which the emergency coordinator shall assess the hazards resulting from a discharge and appropriate response.

[Whenever there is a release, fire, or explosion, the emergency coordinator must immediately identify the character, exact source, amount, and areal extent of any released materials or hazardous substances. He may do this by observation or review of facility records or manifests, and, if necessary, by chemical analysis.

Concurrently, the emergency coordinator must assess possible hazards (substances or conditions present) to human health or the environment that may result from the release, fire, or explosion. This assessment must consider both direct and indirect effects of the release, fire, or explosion (e.g., the effects of any toxic, irritating or asphyxiating gases that are generated, or the effects of any hazardous surface water run-off from water or chemical agents used to control fire and heat-induced explosions). Such information should be provided to the appropriate Federal, state and local authorities.

The emergency coordinator also should conduct, as appropriate, site analysis, use of engineering controls, maximum exposure limits, hazardous substance handling procedures, and the use of any new technologies.] (OSHA, 29 C.F.R. § 1910.120(q)(3)(ii))

•Describe duty, if the emergency coordinator determines that the facility has had a release, fire, or explosion which could threaten human health or the environment outside the facility, to:

1. If necessary, alert fire brigade members or other response personnel through the employee alarm system, and assess need to evacuate employees;
2. If evacuation of local areas may be advisable, immediately notify appropriate local authorities and be available to help appropriate officials decide whether local areas should be evacuated; and
3. Immediately notify either the government official designated as the on- scene coordinator ("OSC") for that geographical area (in the applicable regional contingency plan under 40 C.F.R. part 1510) or the National Response Center (800-424-8802).

[The report must include: (i) Name and telephone number of reporter; (ii) Name and address of facility; (iii) Time and type of incident (e.g., fire, release); (iv) Name and quantity of material(s) involved, to the extent known; (v) The extent of any injuries; and (vi) The possible hazards to human health, or the environment, outside the facility.]

- Describe duty of the emergency coordinator, if the facility stops operations in response to fire, explosion, or release, to monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.

(RCRA, 40 C.F.R. §§ 264.56(b),(c),(d),(f), 265.56(b),(c),(d),(f), 279.52(b)(6)(ii),(iii),(iv),(vi); EPA, 40 C.F.R. § 112.20(h)(3)(ix), App. F1.7.1; OSHA, 29 C.F.R. §§ 1910.120(q)(3)(ii), 1910.38(a)(3)(ii),(4))

- Assess need for equipment and personnel necessary to mitigate any release. In particular, for a worst case discharge scenario, assess the need for equipment and personnel necessary to protect fish, wildlife and environmentally sensitive areas. (USCG, 33 C.F.R. §§ 154.1035(b)(2)(iii), (b)(3), (b)(4)(iii))

d. Containment

- Identify measures, where applicable, to stop processes and operations, collect and contain release waste, and remove or isolate containers.

[During an emergency, the emergency coordinator must take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous waste at the facility.] (RCRA, 40 C.F.R. §§ 264.56(e), 265.56(e), 279.52(b)(6)(v))

- Identify the personnel and equipment necessary to remove to the maximum extent practicable a worst case discharge and other discharges of oil or other hazardous substances, and to mitigate or prevent a substantial threat of a worst case discharge. [To identify necessary response resources, owners or operators should consult Appendix E to 40 C.F.R. part 112.]

- Describe immediate measures to secure the source of the discharge and measures to provide adequate containment and drainage of spill oil or other hazardous substances. (EPA, 40 C.F.R. §§ 112.20(h)(3)(i), (h)(7)(iv), (h)(1)(vii))

[A proper plan to contain and control an oil spill through drainage may limit the threat of harm to human health and the environment. This section shall describe how to contain and control an oil spill through drainage, including: (1) the available volume of containment (consider the containment volume associated with each tank and/or oil transfer point at the facility; capacities must be listed for each individual unit -- tanks, slumps, drainage traps, and ponds -- as well as the facility total); (2) the route of drainage from oil storage and transfer areas; (3) the construction materials used in drainage troughs; (4) the type and number of valves and separators used in the drainage system; (5) sump pump capacities; (6) the containment capacity of weirs and booms that might be used and their location; and (7) other cleanup materials.]

- Address the inspection and monitoring requirements for drainage contained in 40 C.F.R. § 112.7(e). [A copy of the containment and drainage plans that are required in 40 C.F.R. § 112.7(e) may be inserted in this section, including any diagrams in those plans.] (EPA, 40 C.F.R. part 112, App. F1.7.3)

- List equipment and responsibilities of facility personnel to mitigate an average most probable discharge and other discharges. (USCG, 33 C.F.R. § 154.1035(b)(2)(iii))

- Identify the oil spill removal organizations and the spill management team capable of providing the (1) equipment and supplies, and (2) trained personnel necessary for containment purposes. Detail job descriptions, including responsibilities and duties, for each spill management team member in a response action. (USCG, 33 C.F.R. § 154.1035(b)(3)(iv))

- For a worst case discharge, identify appropriate equipment and required personnel, available by contract or other approved means, to protect fish and wildlife and sensitive environments which fall within the areas covered by the plan. (USCG, 33 C.F.R. § 154.1035(b)(4)(iii))

(RSPA, 49 C.F.R. § 194.107(d))

e. Disposal and Recovery

•Identify the personnel and equipment necessary to remove to the maximum extent practicable a worst case discharge and other discharges of oil or other hazardous substances, and to mitigate or prevent a substantial threat of a worst case discharge. [To identify necessary response resources, owners or operators should consult Appendix E to 40 C.F.R. part 112.]

(EPA, 40 C.F.R. § 112.20(h)(3)(i))

•Describe how and where the facility intends to recover or reuse 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. Materials that must be accounted for in the disposal plan, as appropriate, include: (1) recovered product; (2) contaminated soil; (3) contaminated equipment and materials, including drums, tank parts, valves, and shovels; (4) personnel protective equipment; (5) decontamination solutions; (6) adsorbents; and (7) spent chemicals. These plans must be prepared in accordance with Federal, State, and local regulations, where applicable.]

Material	Disposal Facility	Location	RCRA permit/manifest
1.			
2.			
3.			
4.			

(EPA, 40 C.F.R. § 112.20(h)(7)(iii), App. F1.7.2)

•List equipment and responsibilities of facility personnel to dispose of or recover an average most probable discharge. (USCG, 33 C.F.R. § 154.1035(b)(2)(iii))

•Identify the oil spill removal organizations and the spill management team capable of providing the (1) equipment and supplies, and (2) trained personnel necessary for disposal and recovery purposes. Detail job descriptions, including responsibilities and duties, for each spill management team member involved in the recovery. (USCG, 33 C.F.R. § 154.1035(b)(3)(iv))

•For a worst case discharge, identify appropriate equipment and required personnel, available by contract or other approved means, to protect fish and wildlife and sensitive environments which fall within the areas covered by the plan. (USCG, 33 C.F.R. § 154.1035(b)(4)(iii))

(RSPA, 49 C.F.R. § 194.107(d))

f. Decontamination

- Describe how and where the facility intends to decontaminate employees and materials after a discharge has taken place.
- Address duty of the emergency coordinator to ensure that, in the affected area(s) of the facility, all emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed. (RCRA, 40 C.F.R. §§ 264.56(h)(2), 265.56(h)(2), 279.52(b)(6)(viii)(B))
- Develop a decontamination procedure.

[This procedure shall be communicated to employees and implemented before any employees or equipment may enter areas on site where potential for exposure to hazardous substances exists. Procedures: (1) Standard operating procedures shall be developed to minimize employee contact with hazardous substances or with equipment that has contacted hazardous substances. (2) All employees leaving a contaminated area shall be appropriately decontaminated; all contaminated clothing and equipment leaving a contaminated area shall be appropriately disposed of or decontaminated. (3) Decontamination procedures shall be monitored by the site safety and health supervisor to determine their effectiveness. When such procedures are found to be ineffective, appropriate steps shall be taken to correct any deficiencies. Location: Decontamination shall be performed in geographical areas that will minimize the exposure of uncontaminated employees or equipment to contaminated employees or equipment. Equipment and solvents: All equipment and solvents used for decontamination shall be decontaminated or disposed of properly. Personal protective clothing and equipment: (1) Protective clothing and equipment shall be decontaminated, cleaned, laundered, maintained or replaced as needed to maintain their effectiveness. (2) Employees whose non-impermeable clothing becomes wetted with hazardous substances shall immediately remove that clothing and proceed to shower. The clothing shall be disposed of or decontaminated before it is removed from the work zone. Unauthorized employees:

Unauthorized employees shall not remove protective clothing or equipment from change rooms. Commercial laundries or cleaning establishments: Commercial laundries or cleaning establishments that decontaminate protective clothing or equipment shall be informed of the potentially harmful effects of exposures to hazardous substances.

Showers and change rooms: Where the decontamination procedure indicates a need for regular showers and change rooms outside of a contaminated area, they shall be provided and meet the requirements of 29 C.F.R. 1910.141. If temperature conditions prevent the effective use of water, then other effective means for cleansing shall be provided and used.

|

(OSHA, 29 C.F.R. §§ 1910.120(k), (q)(2)(vii), (3)(ix))

(EPA, 40 C.F.R. § 112.20(h)(7)(iii); App. F1.7.2)

(RSPA, 49 C.F.R. § 194.107(d))

g. Non-responder medical needs

- Describe the safety and health plans implemented to address the medical needs of individuals not involved in the emergency response (i.e., other facility employees, residents of the surrounding community or affected areas, etc.).

[The plan should discuss procedures for emergency medical treatment and first aid necessary to treat accidental exposures to hazardous substances at the facility. Include a description of the rescue and medical duties for those employees who are to perform them.]

(USCG, 33 C.F.R. § 154.1035(e)(5); OSHA, 29 C.F.R. §§ 1910.38(a)(2)(iv), 1910.120(q)(2)(viii); CAA, 40 C.F.R. § 68.95(a)(1)(ii))

h. Salvage plans

- Describe any plans to salvage facility operating equipment during or after the emergency response.

(RSPA, 49 C.F.R. § 194.107(d))

4. Planning

[An emergency response plan must be developed and implemented to handle anticipated emergencies prior to the commencement of emergency response operations. The plan should cover those actions employers and employees must take to ensure employee safety from fire and other emergencies. In particular, the types of evacuation to be used in emergency circumstances should be considered, including emergency alerting and response procedures. Pre-emergency planning and coordination with outside parties must be addressed.] (OSHA, 29 C.F.R. §§ 1910.38(a)(1),(4), 1910.120(q)(1),(q)(2)(i),(ix); RSPA, 49 C.F.R. § 194.107(a), App. A)

a. Hazard assessment

This section of Annex C should present a detailed assessment of all potential hazards present at the facility, an analysis of vulnerable receptors (e.g., human populations, both workers and the general public, environmentally sensitive areas, and other facility specific concerns) and a discussion of which risks deserve primary consideration during an incident. NRT-1 contains guidance on conducting a hazard analysis. Also, ACPs and LEPC plans may provide information on environmentally sensitive and economically important areas, human populations, and protection priorities. Plan drafters should address the full range of risks present at the facility. By covering actions necessary to respond to a range of incident types, plan holders can be prepared for small, operational discharges and large catastrophic releases. One approach is to develop planning scenarios for certain types and sizes of releases (i.e., worst-case discharge). Facilities may address such planning scenarios and associated calculations in this section of Annex C or as part of a separate annex depending on the size and complexity of the facility.

- Discuss the facility's history of discharges reportable under regulatory requirements for the entire life of the facility and identify areas within the facility where discharges could occur and what the potential effects of the discharges would be on the affected environment.

[Through such hazard evaluation the facility owner or operator should seek to develop a complete understanding of potential hazards and the response actions necessary to address these hazards.] (EPA, 40 C.F.R. § 112.20(h)(4))

- Complete analyses of worst-case, medium, small and other hazardous release scenarios.

[This information is crucial to enable the emergency coordinator to quickly and effectively assess possible hazards and necessary response actions. (EPA, 40 C.F.R. § 112.20(h)(3)(ix)) To address multi-level planning requirements, consider various types of facility-specific spill or release scenarios that may contribute to a worst-case discharge, as well as small and medium discharges, at the facility.]

•Worst-case release scenario analysis: *see* 40 C.F.R. § 68.25 (attached) (detailing number of scenarios to be addressed; determination of release quantities; toxic gas scenarios; toxic liquids scenarios; flammables scenarios; consideration of passive mitigation; other factors) Report worst-case release analyses for regulated toxic substances from each regulated process. As part of these analyses, list all fish and wildlife and sensitive environments which are potentially impacted by a discharge. Include a map or chart showing the location of these environments. (USCG, 33 C.F.R. § 154.1035(b)(4)(ii))

For Oil, the worst-case discharge is not less than (a) where applicable, the loss of the entire capacity of all in-line and break out tank(s) needed for the continuous operation of the pipelines used for the purposes of handling or transporting oil, in bulk, to or from a vessel regardless of the presence of secondary containment; plus (b) the discharge from all piping carrying oil between the marine transfer manifold and the non-transportation-related portion of the facility.⁵ (USCG, 33 C.F.R. § 154.1029)

For Oil Pipelines, determine the worst-case discharge for each response zone and provide the methodology, including calculations, used to determine volume. The worst-case discharge is the largest volume, in barrels, as determined under 49 C.F.R. §194.105(b). Identify the type of oil(s) involved. (RSPA, 49 C.F.R. §§ 194.105, 194.113, 194.107(d))

•The scenarios should account for all the operations that take place at the facility, including: (1) loading and unloading of surface transportation; (2) facility maintenance; (3) facility piping; (4) pumping stations and sumps; (5) oil storage tanks; (6) vehicle refueling; and (7) age and condition of facility components. The

⁵The discharge from each pipe is calculated as follows: The maximum time to discover the release from the pipe in hours, plus the maximum time to shut down flow from the pipe in hours multiplied by the maximum flow rate expressed in barrels per hour plus the total line drainage volume expressed in barrels for the pipe between the marine manifold and the non-transportation-related portion of the facility.

scenarios also should consider factors that affect the response efforts required by the facility, including: (1) size of the spill; (2) proximity to downgradient wells, waterways, and drinking water intakes; (3) proximity to fish and wildlife and sensitive environments; (4) likelihood that the discharge will travel offsite (i.e., topography, drainage); (5) location of the material spilled (i.e., on a concrete pad or directly on the soil); (6) material discharged; (7) weather or aquatic conditions (i.e., river flow); (8) available remediation equipment; (9) probability of a chain reaction of failures; and (10) direction of spill pathway. (EPA, 40 C.F.R. part 112, App. F1.5.1, 1.5.2)

- For oil spills, in addition to the worst-case scenario, develop scenarios to (1) address a discharge of 2,100 gallons or less, provided that this amount is less than the worst-case discharge amount, and (2) 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, provided that this amount is less than the worst-case discharge amount. (EPA, 40 C.F.R. § 112.20(h)(5))

- Alternative release scenario analysis: *see* 40 C.F.R. § 68.28 (attached) (addressing the number and type of alternative scenarios). Identify at least one alternative release scenario for each regulated toxic substance held in regulated processes and at least one alternative release scenario to represent all flammable substances held in regulated processes. Depending on the substance, as appropriate, alternative scenarios may include: small and medium discharge; average most probable and worst most probable; etc.

- Offsite consequence analysis parameters: *see* 40 C.F.R. § 68.22 (attached) (addressing endpoints (toxics and flammables); wind speed/atmospheric stability class; ambient temperature/humidity; height of release; surface roughness; dense or neutrally buoyant gases; temperature of released substance).

- Defining offsite impacts -- population and environment: *see* 40 C.F.R. §§ 68.30, 68.33 (attached).]

- Review and update the release analyses at least once every five years; or, if changes in processes, quantities stored or handled, or any other aspect of the stationary source might reasonably be expected to increase or decrease the distance to an endpoint by a factor of two or more, the owner or operator shall complete a revised analysis within six months of the change and submit a revised risk management plan as provided in 40 C.F.R. §68.190. (CAA, 40 C.F.R. § 68.36)

- Conduct a review of the hazards associated with regulated substances, process, and procedures.

[The review should be appropriate to the complexity of the process and shall identify the following: (1) hazards associated with the process and regulated substances; (2) opportunities for equipment malfunctions or human errors that could cause an accidental release; (3) safeguards used or needed to control the hazards or prevent equipment malfunction or human error; and (4) any steps used or needed to detect or monitor releases. Checklists developed by persons or organizations knowledgeable about the process and equipment may be used as a guide in conducting the review. Ensure that process and equipment are designed, fabricated, and operated in accordance with applicable regulations or standards. Document review results and ensure that identified problems are resolved in a timely manner. The review should be updated at least once every five years. Reviews also should be conducted whenever a major change in process occurs; all issues identified in the review shall be resolved before startup of the changed process.]

(CAA, 40 C.F.R. §§ 68.50, 68.67)

determined; (3) the secondary containment volume associated with each tank and/or transfer point at the facility; containment areas should be identified by the numbering scheme described above; capacities must be listed for each individual unit (tanks, slumps, drainage traps, and ponds), as well as the facility total; (4) normal daily throughput for the facility and any effect on potential discharge volumes that a negative or positive change in that throughput may cause. (EPA, 40 C.F.R. part 112, App. F1.4.1)

•Analysis of the Potential for an Oil Spill: Analyze the probability of a spill occurring at the facility, incorporating factors such as oil spill history, horizontal range of a potential spill, and vulnerability to natural disaster, and other factors (e.g., tank age), as appropriate. This analysis will provide information for developing discharge scenarios for a worst-case discharge and small and medium discharges and aid in the development of techniques to reduce the size and frequency of spills. (EPA, 40 C.F.R. part 112, App. F1.4.3)

•Prepare a vulnerability analysis, addressing the vulnerability of:

1. Water intakes (drinking, cooling, or other);
2. Schools;
3. Medical facilities;
4. Residential areas;
5. Businesses;
6. Wetlands or other sensitive environments;
7. Fish and wildlife;
8. Lakes and streams;
9. Endangered flora and fauna;
10. Recreational areas;
11. Transportation routes (air, land, and water);
12. Utilities; and
13. Other areas of economic importance (e.g., beaches, marinas) including terrestrially sensitive environments, aquatic environments, and unique habitats. This analysis also should address areas of economic importance and environmental sensitivity as identified in the Area Contingency Plan ("ACP"), which are potentially impacted by a worst case discharge.

(EPA, 40 C.F.R. § 112.20(h)(4), App. F1.4, F1.4.2; USCG, 33 C.F.R. § 154.1035(b)(4)(i))

- Describe and list the equipment to be used for each response scenario.
(EPA, 40 C.F.R. § 112.20(h)(7)(ii); RSPA, 49 C.F.R. §194.115, App. A)
- Detail evacuation plans in light of the various release scenarios.
(OSHA, 29 C.F.R. § 1910.38(a)(4))
- Determine appropriate personal protective equipment in light of the various release scenarios.
(OSHA, 29 C.F.R. § 1910.120(q)(3)(iii))

b. Protection

This section of Annex C should present a discussion of strategies for protecting the vulnerable receptors identified through the hazard analysis. Primary consideration should be given to minimizing those risks identified as a high priority. Activities to be considered in developing this section include: population protection; protective booming; dispersant use, in situ burning, bioremediation; water intake protection; wildlife recovery / rehabilitation; natural remediation; vapor suppression; and monitoring, sampling, and modeling. ACPs and LEPC may contain much of this information.

•Describe plans, based on the above scenarios, to be carried out by facility or contracted personnel to ensure the safety of the facility and to mitigate or prevent discharges. Include measures to provide adequate containment and drainage of spilled oil. (EPA, 40 C.F.R. §§ 112.20(h)(7)(i),(iv), App. F.1.7.1)

[Containment and Drainage Planning: A proper plan to contain and control an oil spill through drainage may limit the threat of harm to human health and the environment. This section shall describe how to contain and control an oil spill through drainage, including: (1) the available volume of containment (consider the containment volume associated with each tank and/or oil transfer point at the facility; capacities must be listed for each individual unit -- tanks, slumps, drainage traps, and ponds -- as well as the facility total); (2) the route of drainage from oil storage and transfer areas; (3) the construction materials used in drainage troughs; (4) the type and number of valves and separators used in the drainage system; (5) sump pump capacities; (6) the containment capacity of weirs and booms that might be used and their location; and (7) other cleanup materials.

In addition, facility owners or operators must meet the inspection and monitoring requirements for drainage contained in 40 C.F.R. § 112.7(e). A copy of the containment and drainage plans that are required in 40 C.F.R. § 112.7(e) may be inserted in this section, including any diagrams in those plans.] (EPA, 40 C.F.R. part 112, App. F1.7.3)

•Demonstrate accessibility to the proper response personnel and equipment to effectively respond to all identified scenarios. (EPA, 40 C.F.R. part 112, App. F1.7.1)

- Identify safe distances and places of refuge. (OSHA, 29 C.F.R. § 1910.120(q)(2)(iv))
- Describe site security and control. (OSHA, 29 C.F.R. § 1910.120(q)(2)(v))
- Detail evacuation routes and procedures. (OSHA, 29 C.F.R. § 1910.120(q)(2)(vi))
- Identify appropriate personal protective equipment for each scenario. (OSHA, 29 C.F.R. § 1910.120(q)(3)(iii))
- Identify areas of economic importance and environmental sensitivity, identified in the ACP, which are potentially impacted by a worst-case discharge. The applicable ACP should be used to designate fish and wildlife and sensitive environments. For a worst-case discharge, describe all the response actions that the facility anticipates taking to protect these fish and wildlife and sensitive environments. Include a map or chart showing the location of these environments. The map or chart also should depict each response action that the facility anticipates taking to protect these areas. For a worst-case discharge, identify appropriate equipment and required personnel to protect fish and wildlife and sensitive environments which fall within the distances as calculated by the regulations. (USCG, 33 C.F.R. § 154.1035(b)(4))

c. Coordination with natural resources trustee

This section should address coordination with government natural resource trustees. In their role as managers of and experts in natural resources, trustees assist the federal OSC in developing or selecting removal actions to protect these resources. In this role, they serve as part of the response organization working for the federal OSC. A key area to address is interaction with facility response personnel in protection of natural resources.

Natural resource trustees also are responsible to act on behalf of the public to present a claim for and recover damages to natural resources injured by an oil spill or hazardous substance release. The process followed by the natural resource trustees, natural resource damage assessment (“NRDA”), generally involves some data collection during emergency response. NRDA may be carried out in cooperation with the responsible party. Thus, the facility may wish to plan for how that cooperation will occur, including designation of personnel to work with trustees in NRDA.

[The plan should be consistent with the requirements of the National Oil and Hazardous Substance Pollution Contingency Plan (“NCP”) (40 C.F.R. part 300) and applicable Area Contingency Plans (“ACPs”) prepared pursuant to section 311(j)(4) of the Clean Water Act. The plan should be coordinated with the local emergency response plan developed by the local emergency planning committee under section 303 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (42 U.S.C. §§ 11001 et seq.). A copy of the plan should be provided to the local emergency planning committee or State emergency response commission, upon request. Review the relevant portions of the NCP and applicable ACPs annually and, if necessary, revise the plan to ensure consistency.] (EPA, 40 C.F.R. § 112.20(g); USCG, 33 C.F.R. § 154.1030(f))

- Provide certification that the NCP and applicable ACPs have been reviewed and that the response plan is consistent with them.

- Discuss coordination with natural resource trustee(s) in devising appropriate responses to protect natural resources. Also (optional) discuss procedure to provide natural resources trustee(s) with information necessary to assess damages to natural resources in the event of an emergency.

(RSPA, 49 C.F.R. §194.107(c))

d. Waste management

This section should address procedures for the disposal of contaminated materials

in accordance with federal, state, and local requirements.

•Develop plans to ensure that, immediately after an emergency, the emergency coordinator can provide for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility. The plans also should ensure that, in the affected area(s) of the facility, no waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed.

(RCRA, 40 C.F.R. §§ 264.56(g),(h)(1), 265.56(g),(h)(1), 279.52(b)(6)(vii),(viii)(A))

•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. (USCG, 33 C.F.R. § 154.1035(b)(5))

•Describe how and where the facility intends to recover, reuse, decontaminate, or dispose of materials after a discharge has taken place.

(RSPA, 49 C.F.R. § 194.107(d))

[The appropriate permits required to transport or dispose of recovered materials according to local, State, and Federal requirements must be addressed. Materials that must be accounted for in the disposal plan, as appropriate, include: (1) recovered product; (2) contaminated soil; (3) contaminated equipment and materials, including drums, tank parts, valves, and shovels; (4) personnel protective equipment; (5) decontamination solutions; (6) adsorbents; and (7) spent chemicals. These plans must be prepared in accordance with Federal, State, and local regulations, where applicable.]

(EPA, 40 C.F.R. § 112.20(h)(7)(iii), App. F1.7.2)

Material	Disposal Facility	Location	RCRA permit/manifest
1.			
2.			

5. Logistics

This section of Annex C should address how the facility will provide for the operational needs of response operations in the following areas: (1) medical needs of responders; (2) site security; (3) communications (internal and external resources); (4) transportation (air, land, water); (5) personnel support (e.g., meals, housing, equipment); and (6) equipment maintenance and support. (USCG, 33 C.F.R. § 154.1035(b)(3)(iii))

To avoid duplication, emergency response organizations may use the local or state emergency response plans as part of their response plan. (OSHA, 29 C.F.R. § 1910.120(q)(2)(xii))

a. Medical needs

•Describe and document the means by which the proper emergency medical treatment and first aid will be provided.

(USCG, 33 C.F.R. § 154.1035(e)(5); OSHA, 29 C.F.R. § 1910.38(a)(2)(iv), 1910.120(q)(2)(viii); CAA, 40 C.F.R. § 68.95(a)(1)(ii))

b. Site security

•Describe facility security systems, including: (1) emergency cut-off locations (automatic or manual valves); (2) enclosures (e.g., fencing, etc.); (3) guards and their duties, day and night; (4) lighting; (5) valve and pump locks; and (6) pipeline connection caps.

(EPA, 40 C.F.R. § 112.20(h)(10), App. F1.10; OSHA, 29 C.F.R. § 1910.120(q)(2)(v))

c. Communications

- Explain responsibility and authority of the emergency coordinator to coordinate and control all communications among emergency responders. (OSHA, 29 C.F.R. § 1910.120(q)(3)(i))

- Describe all communications equipment, its location and testing (include primary and secondary operating frequency and channel and/or cellular phone numbers).

COMMUNICATION EQUIPMENT -- OPERATIONAL STATUS

Type and Year	Quantity	Storage location/number	Testing

(EPA, 40 C.F.R. §§ 112.20(h)(1)(iv),(3)(vi), App.F1.3.2; USCG, 33 C.F.R. § 154.1035(e)(3); RSPA, 49 C.F.R. § 194.107(d))

- Describe engineering and administrative controls that provide early warning of releases, as applicable to the hazards identified above.

(OSHA, 29 C.F.R. § 1910.119(e)(3)(iii))

- Describe the employee alarm system or other means of communicating to employees in the event of an emergency.

(OSHA, 29 C.F.R. § 1910.38(a)(3); RSPA, 49 C.F.R. part 194, App. A)

[The employee alarm shall provide warning for necessary emergency action as called for in the emergency action plan, or for reaction time for safe escape of employees from the workplace or the immediate area, or both. It shall be capable of being perceived above ambient noise or light levels by all employees in the affected portions of the workplace. Tactile devices may be used to alert those employees who would not otherwise be able to recognize the audible or visual alarm. The employee alarm shall be distinctive and recognizable as a signal to evacuate the work area or to perform actions designated under the emergency action plan. If the employee alarm system is used for alerting fire brigade personnel, or for other emergency purposes, a distinctive signal should be used for each purpose. (OSHA, 29 C.F.R. § 1910.165(b))]

d. Transportation

•Describe how the facility will provide air, land, and water transportation necessary for response operations.

e. Personnel support

•Describe the management of response personnel.

•Describe how the facility will provide sufficient operational and administrative space for response operations.

•Identify provisions for meals and the overnight accommodation of response personnel.

(EPA, 40 C.F.R. § 112.20(h)(3)(i)-(ii); OSHA, 29 C.F.R. § 1910.120(q)(2)(ii))

•Describe emergency procedures to ensure the safety of response personnel. Identify, and document the availability of, necessary evacuation and other back-up response personnel and equipment. The responsibilities and duties of evacuation and other support personnel should be detailed. Back-up personnel roles, lines of authority, training and communications should be documented as well. Describe and document the means and methods of evacuation of the facility and reference community evacuation plans.

(EPA, 40 C.F.R. §§ 112.20(h)(1)(v)-(vi), (h)(3)(v),(vii), App. F1.3.5; OSHA, 29 C.F.R. § 1910.120(q)(2)(ii))

[Back-up personnel shall stand by with equipment ready to provide assistance or rescue. Advance first-aid, as a minimum, also shall stand by with medical equipment and transportation capability. The number of emergency response personnel shall be limited to those who are actively performing emergency operations. (OSHA, 29 C.F.R. §§

1910.120(q)(3)(v),(vi)]

•Describe actions to designate and train a sufficient number of persons to assist in the safe and orderly emergency evacuation of employees. Training of volunteer response personnel also should be considered.

(OSHA, 29 C.F.R. § 1910.38(a)(5)(i))

f. Equipment maintenance and support

•Identify response equipment and its location for purposes of maintenance. (EPA, 40 C.F.R. §§ 112.20(h)(1)(iv),(3)(vi))

•Describe plan for inspections and tests that conform to recognized and generally accepted good engineering practices. (RSPA, 49 C.F.R. § 194.107(d))

[The frequency of inspections and tests shall be consistent with applicable manufacturers' recommendations and good engineering practices, or more frequently if necessary. Document each inspection and test, identifying date, name of person performing inspection or test, serial number or other identifier of the equipment, description of the inspection or test, and results. Correct any discovered deficiencies before further use.] (OSHA, 29 C.F.R. §§ 1910.119(j)(4)- (5); CAA, 40 C.F.R. § 68.95(a)(2))

<p>RESPONSE EQUIPMENT TESTING AND DEPLOYMENT DRILL LOG Date of Last Update: _____</p> <p>Last Inspection or Response Equipment Test Date: _____ Inspection Frequency: _____ Last Deployment Drill Date: _____ Deployment Frequency: _____ Oil Spill Removal Organization Certification (if applicable): _____</p>

(EPA, 40 C.F.R. part 112, App. F1.3.3)

•Include a checklist and record of inspections for tanks, secondary containment, and response equipment.

(EPA, 40 C.F.R. § 112.20(h)(8))

TANK INSPECTION CHECKLIST	
1.	Check tanks for leaks, specifically looking for: <ul style="list-style-type: none">A. drip marks;B. discoloration of tanks;C. puddles containing spilled or leaked material;D. corrosion;E. cracks; andF. localized dead vegetation.
2.	Check foundation for: <ul style="list-style-type: none">A. cracks;B. discoloration;C. puddles containing spilled or leaked material;D. settling;E. gaps between tank and foundation; andF. damage caused by vegetation roots.
3.	Check piping for: <ul style="list-style-type: none">A. droplets of stored material;B. discoloration;C. corrosion;D. bowing of pipes between supports;E. evidence of stored material seepage from valves orF. localized dead vegetation.

•Ensure that containment booms, skimmers, vessels, and other major equipment listed or referenced in the plan are periodically inspected and maintained in good operating condition, in accordance with manufacturer's recommendations and best commercial practices. Document all inspection and maintenance and maintain records for 3 years. The Coast Guard may verify the above and inspect as appropriate.

(USCG, 33 C.F.R. § 154.1057)

•Ensure that all employee alarm systems are maintained in operating conditions except when undergoing repairs or maintenance.

[A test of the reliability and adequacy of non-supervised employee alarm systems shall be made every two months. A different actuation device shall be used in each test of a multi-actuation device system so that no individual device is used for two consecutive tests. Power supplies should be maintained or replaced as necessary to assure a fully operational condition. Back-up means of alarm, such as employee runners or telephones,

shall be provided when systems are out of service. Alarm circuitry installed after January 1, 1981 which is capable of being supervised, shall be supervised and positive notification shall be provided to assigned personnel whenever a deficiency exists in the system. All supervised employee alarm systems shall be tested at least annually for reliability and adequacy. Servicing, maintenance and testing of employee alarms is to be done by persons trained in the designed operation and functions necessary for reliable and safe operation of the system. (OSHA, 29 C.F.R. § 1910.165(d))]

- Identify and describe facility and contracted equipment necessary for the emergency response. Provide evidence of contracts to ensure availability of such equipment. Also identify available personal protective and emergency equipment.

(EPA, 40 C.F.R. §§ 112.20(h)(1)(iv),(3)(vi); OSHA, 29 C.F.R. § 1910.120(q)(2)(xi))

- Identify oil spill removal organizations and the spill management team capable of providing necessary equipment and supplies.

(USCG, 33 C.F.R. § 154.1035(b)(3)(iv))

- List and identify the location of the equipment required to respond to an average most probable discharge.

- List and identify the location of all major equipment identified in the plan as belonging to an oil spill removal organization(s) that is available, by contract or other approved means, to respond to a maximum worst probable or worst case discharge.⁶

[Equipment that must be listed includes: skimmers; booms; dispersant application, in- situ burning, bioremediation equipment and supplies, and other equipment used to apply other chemical agents on the NCP Product Schedule (if applicable); firefighting, and beach cleaning equipment; boats and motors; disposal and storage equipment; and heavy equipment. For each piece of equipment, the list must include: (1) the type, make, model, and year of manufacture listed on the nameplate of

⁶It is not necessary to list response equipment from oil spill removal organizations that have been classified by the Coast Guard and their capacity has been determined to equal or exceed the response capability needed by the facility. The Coast Guard classification must be noted, however.

the equipment; (2) for oil recovery devices, the effective daily recovery rate; (3) for containment boom, the overall boom height (draft and freeboard) and type of end connectors; (4) the spill scenario in which the equipment will be used or for which it is contracted; (5) the total daily capacity for storage and disposal of recovered oil; (6) location of the equipment; and (7) the date of the last inspection by the oil spill removal organization.

(USCG, 33 C.F.R. § 154.1035(e)(3))]

6. Finance / Procurement / Administration

This section of Annex C should address the acquisition of resources (i.e., personnel and equipment) for the response and monitoring of incident-related costs. Lists of available equipment in the local and regional area and how to procure such equipment as necessary should be included. Information on previously established agreements (e.g., contracts) with organizations supplying personnel and equipment (e.g., oil spill removal organizations) also should be included. This section also should address methods to account for resources expended and to process claims resulting from the incident.

- Describe the means by which the emergency coordinator may immediately access company funding to initiate cleanup activities. (EPA, 40 C.F.R. § 112.20(h)(3)(ix))

- Detail the organizational structure for Finance activities. (USCG, 33 C.F.R. § 154.1035(b)(3)(iii))

- In order to document the availability of response resources, provide the following:

- (1) a written contractual agreement with an oil spill removal organization, identifying and ensuring the availability of specified personnel and equipment required under the plan within stipulated response times in the specified geographic areas;

- (2) certification by the facility owner or operator that specified personnel and equipment required under the plan are owned, operated, or under the direct control of the facility owner or operator, and are available within stipulated response times in the specified geographic area;

- (3) active membership in a local or regional oil spill removal organization that has identified personnel and equipment required under this plan that are available to respond to a discharge within stipulated response times in the specified geographic area;

- (4) a document which (a) identifies the personnel, equipment, and services capable of being provided by the oil spill removal organization within stipulated response times in the specified geographic area; (b) sets out the parties' acknowledgment that the oil spill removal organization intends to commit the resources in the event of a response; (c) permits the Coast Guard to verify the availability of the identified response resources through tests, inspections, and drills; and (d) is referenced in the response plan; or

(5) the identification of an oil spill removal organization with specified equipment and personnel available within stipulated response times in the specified geographic area; the organization must provide written consent to being identified in the plan.

[The contracts and documents required in this section must be retained at the facility and available for review upon request.]

(USCG, 33 C.F.R. § 154.1028)

a. Resource list

- List and describe facility's response personnel and equipment (for response and support), including their location, a physical description of each item, and a brief outline of capabilities.

[Appendix C to 33 C.F.R. part 154 should be consulted to assist in determinations of the response resources necessary for various discharge scenarios.]

- Demonstrate accessibility of each resource.
- If applicable, identify the oil spill removal organization and spill management team capable of providing the resource.

(RCRA, 40 C.F.R. §§ 264.52(e), 265.52(e), 279.52(b)(2)(v); EPA, 40 C.F.R. §§ 112.20(h)(1)(iv),(3)(vi), App. F1.3.2, App. F1.7.1; USCG, 33 C.F.R. §§ 154.1035(b)(3)(iv), (e)(3))

b. Personnel

- Describe the acquisition of response personnel and the related cost. If applicable, identify the oil spill removal organization and spill management team capable of providing the personnel.

(EPA, 40 C.F.R. §§ 112.20(h)(1)(v),(h)(3)(v), App. F1.3.4; USCG, 33 C.F.R. § 154.1035(b)(3)(iv))

c. Response equipment

- Describe the acquisition of response equipment and its related cost.
- Demonstrate accessibility of each piece of equipment.

- If applicable, identify the oil spill removal organization and spill management team capable of providing the piece of equipment.
- Specifically identify and demonstrate the accessibility of equipment to protect fish and wildlife and sensitive environments.
- Document the accessibility of personal protective equipment.

(RCRA, 40 C.F.R. §§ 264.52(e), 265.52(e), 279.52(b)(2)(v); EPA, 40 C.F.R. §§ 112.20(h)(1)(iv),(3)(vi), App. F1.3.2, App. F1.7.1; USCG, 33 C.F.R. §§ 154.1035(b)(2)(ii), (b)(4)(iii), (e)(3), App. C; OSHA, 29 C.F.R. § 1910.120(q)(2)(xi))

d. Support equipment

- Describe acquisition of the facility's evacuation and other support equipment and its location. Demonstrate accessibility of each piece of equipment. If applicable, identify the oil spill removal organization and spill management team capable of providing the piece of equipment.

(RCRA, 40 C.F.R. §§ 264.52(e), 265.52(e), 279.52(b)(2)(v); EPA, 40 C.F.R. part 112, App. F1.3.2, App. F1.7.1; USCG, 33 C.F.R. § 154.1035(e)(3), App. C)

e. Contracting

- Describe procedures for contracting to ensure the availability of response personnel and equipment.

(EPA, 40 C.F.R. § 112.20(h)(3)(ii); USCG, 33 C.F.R. §§ 154.1028(a)(1), 154.1035(e)(3))

- Provide information on contracts with organizations providing personnel and equipment. (RSPA, 49 C.F.R. §194.115)

f. Claims procedures

- Describe methods to process claims resulting from the incident.

g. Cost documentation

- Describe methods to account for resources expended as a result of the incident.

ANNEX D: INCIDENT DOCUMENTATION

This annex should describe the company's procedures for conducting a follow-up investigation of the cause of the accident, including coordination with federal, state, and local officials. This annex also should contain an accounting of incidents that have occurred at the facility, including information on cause, amount released, resources impacted, injuries, response actions, etc. This annex should include information that may be required to prove that the facility met its legal notification requirements with respect to a given incident, such as a signed record of initial notifications and certified copies of written follow-up reports submitted after a response.

- Identify any previous incident which had a likely potential for catastrophic consequences in the workplace. (OSHA, 29 C.F.R. § 1910.119(e)(3)(ii))
- Provide documentation of incident response and follow-up critiques. (OSHA, 29 C.F.R. § 1910.120(q)(2)(x))
- Document the accounting of all employees after completion of emergency evacuation. (OSHA, 29 C.F.R. § 1910.38(a)(2)(iii))

1. Post-Accident Investigation

•Describe procedures for investigation of each incident which resulted in, or could reasonably have resulted in, a catastrophic release of hazardous substances in the workplace or implementation of the contingency plan.

[Initiate investigation within 48 hours of the incident. Establish an incident investigation team that consists of at least one person knowledgeable in the process involved, including a contract employee if the incident involved work of the contractor, and other persons with appropriate knowledge and experience to thoroughly investigate and analyze the incident.]

•Describe incident report procedures and format, including: the time and date of the incident; date of investigation; details of the incident; factors that contributed to the incident; and recommendation resulting from the investigation. Document resolutions and corrective actions taken as a result of the investigation. Findings shall be reviewed with all affected personnel whose job tasks are affected by the findings. Retain investigation summaries for five years.

•Within 15 days after an incident, a written report must be submitted to the Regional Administrator which includes: (1) name, address, and telephone number of the owner or operator; (2) name, address, and telephone number of the facility; (3) date, time, and type of incident; (4) name and quantity of material(s) involved; (5) the extent of injuries, if any; (6) an assessment of actual or potential hazards to human health or the environment, where applicable; and (7) estimated quantity and disposition of recovered material that resulted from the incident.

(RCRA, 40 C.F.R. §§ 264.56(j), 265.56(j), 279.52(b)(6)(ix); OSHA, 29 C.F.R. §§ 1910.119(m), 1910.120(q)(2)(x); CAA, 40 C.F.R. §§ 68.60, 68.81)

2. Incident History

- Include a five-year history of accidents involving processes covered under 40 C.F.R. part 68, addressing the following: (1) date, time, and approximate duration of release; (2) chemical(s) released; (3) estimated quantity released in pounds; (4) type of release event and its source; (5) weather conditions; (6) on-site impacts; (7) known offsite impacts; (8) initiating event and contributing factors; and (10) operational or process changes that resulted from investigation of the release. (CAA, 40 C.F.R. § 68.42)

- Identify any previous incidents which had a likely potential for catastrophic consequences in the workplace. (OSHA, 29 C.F.R. § 1910.119(e)(3)(ii))

- Discuss the facility's known or reasonably identifiable history of reportable oil discharges for the entire life of the facility. (EPA, 40 C.F.R. § 112.20(h)(4)) For oil spills, the facility's discharge history report should include: (1) date of discharge(s); (2) list of discharge causes; (3) material(s) discharged; (4) amount discharged in gallons; (5) amount of discharge that reached navigable waters; (6) effectiveness and capacity of secondary containment; (7) clean-up actions taken; (8) steps taken to reduce possibility of recurrence; (9) total oil storage capacity of the tank(s) or impoundment(s) from which the material discharged; (10) enforcement actions; (11) effectiveness of monitoring equipment; and (12) description of how each oil spill was detected.

(EPA, 40 C.F.R. part 112, App. F1.4.4)

ANNEX E: TRAINING and EXERCISES / DRILLS

This annex should contain a description of the training and exercise program conducted at the facility as well as evidence (i.e., logs) that required training and exercises have been conducted on a regular basis. Facilities may follow appropriate training or exercise guidelines (e.g., National Preparedness for Response Exercise program Guidelines) as allowed under the various regulatory requirements.

•Describe facility (1) training program and (2) drill/exercise program.

1. Training

General Training: Each employee involved in operating a process must be trained before beginning being involved in the operation. Training shall include specific safety and health hazards, emergency operations including shutdown, and safe work practices applicable to the employee's job tasks. Review the plan with each employee (1) initially when the plan is developed, (2) whenever the employee's responsibilities or designated actions under the plan change, and (3) whenever the plan is changed.

Response Plan Training: The training program should be sufficient to train those personnel involved in response activities. Training should be in accordance with the following levels, as detailed in 29 C.F.R. §1910.120(q)(6):

(1) *First responder awareness level*: Individuals likely to witness or discover a hazardous substance and who are trained to initiate emergency responses by notifying the proper authorities only. Must be competent in: (a) an understanding of what hazardous substances are, and associated risks; (b) understanding potential outcomes associated with emergency created when hazardous substances are present; (c) ability to recognize the presence of hazardous substances in an emergency; (d) ability to identify the hazardous substances; (e) understanding of the first responder awareness individual's role; and (f) ability to realize the need for additional resources, and to make appropriate notifications to the communications center;

(2) *First responder operations level*: Individuals who respond to releases or potential releases of hazardous substances as part of the initial response to the site for purposes of protecting nearby persons, property, or the environment. They are trained to respond in a defensive fashion without actually trying to stop the release. Their function is to contain the release, keep it from spreading, and prevent exposures. Must receive at least eight hours training or have had sufficient experience to demonstrate competency in the following areas in addition to those listed for the awareness level: (a) knowledge of the basic hazard and risk assessment techniques; (b) know how to select and use proper personal protective equipment; (c) an understanding of basic hazardous materials terms; (d) know how to perform basic control, containment and/or confinement operations; (e) know how to implement basic decontamination procedures; and (f) an understanding of the relevant standard operating procedures and termination procedures;

(3) *Hazardous materials technician*: Individuals who respond to releases or potential releases for the purpose of stopping the release. They will approach the point of release in order to plug, patch or otherwise stop the release of a hazardous substance. Must receive at least 24 hours of training equal to the first responder operations level and in addition have competency in the following areas: (a) know how to implement the facility emergency response plan; (b) know the classification, identification and verification of known and unknown materials by using field survey instruments and equipment; (c) be able to function within an assigned role in the ICS; (d) know how to select and use proper specialized chemical personal protective equipment; (e) understand hazard and risk assessment techniques; (f) be able to perform advance control, containment and/or confinement operations; (g) understand and implement decontamination procedures; (h) understand termination procedures; and (i) understand basic chemical and toxicological terminology and behavior;

(4) *Hazardous materials specialist*: Individuals who respond with and provide support to hazardous materials technicians. However, their duties require a more directed or

specific knowledge of the various substances they may be called upon to contain. Also act as the site liaison with Federal, state, local and other government authorities in regards to site activities. Must receive at least 24 hours of training equal to the technician level and in addition have competency in the following areas: (a) know how to implement the local emergency response plan; (b) understand classification, identification and verification of known and unknown materials by using advanced survey instruments and equipment; (c) know of the state emergency response plan; (d) be able to select and use proper specialized chemical personal protective equipment; (e) understand in-depth hazard and risk techniques; (f) be able to perform specialized control, containment and/or confinement operations; (g) be able to determine and implement decontamination procedures; (h) have the ability to develop a site safety and control plan; and (i) understand chemical, radiological and toxicological terminology and behavior; and (5) *On scene emergency coordinator*: Emergency coordinators, who will assume control of the incident scene, must have at least 24 hours of training equal to the first responder operations level and also demonstrate competency in the following areas: (a) know and be able to implement facility's ICP; (b) know how to implement the facility's emergency response plan; (c) know and understand the hazards and risks associated with employees working in chemical protective clothing; (d) know how to implement the local emergency response plan; (e) know of the state emergency response plan and of the Federal Regional Response Team; and (f) know and understand the importance of decontamination procedures.

Oil Spill Training: For oil spill responses, it is recommended that the program be based on the USCG's Training Elements for Oil Spill Response. Instruction should address response procedures and applicable oil spill response laws, rules, and regulations. Training should be functional in nature according to job tasks for both supervisory and non-supervisory operational personnel. Trainers should develop specific lesson plans on

relevant subject areas. Where applicable, ensure that an oil spill removal organization identified in the response plan maintains records sufficient to document its training.

- Personnel response training logs and discharge prevention meeting logs should be included.

PERSONNEL RESPONSE TRAINING LOG

Name	Response training: date and number of hours	Prevention training: date and number of hours

DISCHARGE PREVENTION MEETING LOG

Date: _____

Attendees: _____

Subject/Issue identified	Required action	Implementation date

- Training plans should identify key skill areas and the training that is required to ensure that the individual identified will be capable of performing the duties prescribed to them. It also should describe how the training will be delivered to them. The following elements should be addressed in the training program, as appropriate for different personnel:

- (1) notification requirements and procedures;
- (2) communication system(s) used for notifications;
- (3) procedures to mitigate or prevent any discharge or a substantial threat of a discharge of oil resulting from (a) failure of manifold, mechanical loading arm, or other transfer equipment or hoses; (b) tank overfill; (c) tank rupture; (d) piping rupture; (e) piping leak, both under pressure and not; (f) explosion or fire; (g) equipment failure;
- (4) procedures for transferring responsibility for direction of response activities from facility personnel to the spill management team;

- (5) familiarity with the operational capabilities of the contracted oil spill removal organizations and the procedures to notify and activate such organizations;
- (6) familiarity with the contracting and ordering procedures to acquire oil spill removal organization resources;
- (7) familiarity with the ACP(s);
- (8) familiarity with the organizational structures that will be used to manage the response actions;
- (9) responsibilities and duties of the spill management team members in accordance with designated job responsibilities;
- (10) responsibilities and authority of the qualified individual as described in the facility response plan and company response organization;
- (11) responsibilities of designated individuals to initiate a response and supervise response resources;
- (12) actions to take, in accordance with designated job responsibilities, in the event of a transfer system leak, tank overflow, or suspected cargo tank or hull leak;
- (13) information on the cargoes handled by the vessel or facility;
- (14) the characteristics and hazards of the oil(s) and/or substance(s) discharged;
- (15) the conditions that are likely to worsen emergencies, including the consequences of facility malfunctions or failures, and the appropriate corrective actions;
- (16) the steps necessary to control any accidental discharge of oil or a hazardous substance and to minimize the potential for fire, explosion, toxicity, or environmental damage;
- (17) the proper firefighting procedures and use of equipment, fire suits, and breathing apparatus; and
- (18) OSHA requirements for worker health and safety.

(OSHA, 29 C.F.R. § 1910.120; RSPA, 49 C.F.R. §194.117, 119.107(d), App. A)

2. Exercises / Drills

•A program of exercises and drills also should be described, including procedures for evaluation.

[A program that follows the National Preparedness for Response Exercise Program (“PREP”) is recommended. The PREP Guidelines specify that the facility conduct internal and external drills/exercises. Internal exercises include:

- (1) emergency coordinator notification drills (quarterly);
- (2) spill management team tabletop exercises (annually). In a three-year period, at least one of these exercises must include a worst-case discharge scenario;
- (3) equipment deployment exercises: semiannually for facility owned and operated equipment, annually for oil spill removal organization equipment;
- (4) emergency procedures exercises (optional);
- (5) annually, at least one of the exercises listed in (2)-(4) must be unannounced. The objectives of the unannounced exercises will be to test notifications and equipment deployment for response to the average most probable discharge.

External exercises include Area Exercises. All components of the response plan must be exercised at least once every 3 years. Emergency Coordinator Notification drill and Spill Management Team Tabletop Drill logs should be provided.]

EMERGENCY COORDINATOR NOTIFICATION DRILL LOG	
Date:	_____
Company:	_____
Qualified Individual(s):	_____
Emergency Scenario:	_____

Evaluation:	_____

Changes to be implemented:	_____

Time table for implementation:	_____

SPILL MANAGEMENT TEAM TABLETOP EXERCISE LOG	
Date:	_____
Company:	_____
Qualified Individual(s):	_____
Emergency Scenario:	_____

Evaluation:	_____

Changes to be implemented:	_____

Time table for implementation:	_____

(EPA, 40 C.F.R. §§ 112.20(h)(8), 112.21, App. F1.8.2, F1.8.3; USCG, 33 C.F.R. §§ 154.1035(c), 154.1050, 154.1055, App. D; OSHA, 29 C.F.R. §§ 1910.38(a)(5), 1910.119(g)(1)(i), 1910.120(q)(6); CAA, 40 C.F.R. § 68.95(a)(3); RSPA, 49 C.F.R. § 194.107(d), App. A)

ANNEX F: RESPONSE CRITIQUE and PLAN REVIEW and MODIFICATION PROCESS

This annex should describe procedures for modifying the plan based on periodic plan review or lessons learned through an exercise or a response to an actual incident.

Procedures to critique an actual simulated response should be part of the discussion. A list of plan amendments (i.e., history of updates) also should be contained in this annex.

Plan modification should be viewed as a part of a facility's continuous improvement process.

- Describe procedures for post-discharge / post-emergency review and update of the plan, as well as assessment of the plan's effectiveness.

(USCG, 33 C.F.R. § 154.1035(d); OSHA, 29 C.F.R. § 1910.120(q)(2)(x))

- The plan must be reviewed, and immediately amended, if necessary, whenever: (1) the facility permit is revised; (2) the plan fails in an emergency; (3) the facility (or pipeline) changes -- in its design, construction, operation, maintenance, or other circumstances -- in a way that materially increases the potential for fire, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency; (4) the list of emergency coordinator changes; or (5) the list of emergency equipment changes.

(RCRA, 40 C.F.R. §§ 264.54, 265.54, 279.52(b)(4); EPA, 40 C.F.R. § 112.20(g))

- In addition, review must take place annually and all findings must be documented. Determine and document an appropriate response to each finding in the review, and document that deficiencies have been corrected. Review must 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.

[All reviews and evaluations of the plan must be conducted by at least one person knowledgeable in the process under review and the plan itself.

Revisions must be submitted to the appropriate regulatory authorities for information or approval, as appropriate (i.e., the Captain of the Port ("COTP"), RSPA). Submissions should include a cover letter listing all revisions. If no revisions are required,

indicate completion of the review on the record of changes page. The COTP or other regulatory authorities may require additional revisions which must be entered in the plan and noted on the record of changes page.

Revisions also must be submitted within 30 days, whenever there is: (1) a change in the facility or pipeline configuration that significantly affects the information in the plan; (2) a change in the type of oil handled, stored, or transported that affects the required response resources; (3) a change in the name(s) or capabilities of the oil spill removal organization; (4) a change in the facility's emergency response procedures; (5) a change in the facility's operating area that includes ports or geographic area(s) not covered by the previously approved plan; or (6) any other changes that significantly affect the implementation of the plan.]

- Evaluate and certify compliance with the emergency response plan provisions at least every three years to verify that the procedures and practices developed under the standard are adequate and are being followed. (USCG, 33 C.F.R. § 154.1065; OSHA, 29 C.F.R. § 1910.119(o)(1); CAA, 40 C.F.R. § 68.95(a)(4))

- Describe written procedures to manage changes to process chemicals, technology, equipment, and procedures; and changes to facilities that affect covered processes. The procedures should address the impact of the change on safety and health and appropriate modifications to operating and emergency procedures as a result of those impacts. Employees whose ordinary or emergency job tasks are affected by such changes should be informed of, and trained in, the change in advance.

(OSHA, 29 C.F.R. § 1910.119(l))

- Include a record of plan updates and changes to the plan. (USCG, 33 C.F.R. § 154.1035(a)(6))

(RSPA, 49 C.F.R. §§ 194.107(d), 194.111, 194.119, 194.121, App. A)

ANNEX G: PREVENTION

Some federal regulations that primarily address prevention of accidents include elements that relate to contingency planning (e.g., EPA's Risk Management Program under the CAA and SPCC regulations, as well as OSHA's Process Safety Standard). This annex is designed to allow facilities to include prevention-based requirements that are required in contingency planning regulations or that have the potential to impact response activities covered in this ICP. This annex may not need to be submitted to regulatory agencies for review.

- Describe programs regarding the following:
 - emergency recognition and prevention;
 - maintenance;
 - testing;
 - in-house inspections;
 - release detection;
 - site security;
 - containment;
 - fail safe engineering; and
 - other prevention-based measures or equipment required by regulation (i.e., EPA's SPCC regulations, 40 C.F.R. § 112.7).

(OSHA, 29 C.F.R. § 1910.120(q)(2)(iii); EPA, 40 C.F.R. § 112.7)

<ul style="list-style-type: none"> (h) Cleanup procedures: <ul style="list-style-type: none"> (1) Disposal (2) Decontamination (i) Follow-up procedures (j) Follow-up Report 279.52(b)(2) Content of contingency plan: <ul style="list-style-type: none"> (i) Emergency response actions (see 279.52(b)(6)) (ii) Amendments to SPCC plan (iii) Coordination with State and local response parties⁴ (iv) Emergency coordinator(s) (v) Detailed description of emergency equipment on-site (vi) Evacuation plan if applicable (3) Copies of contingency plan (4) Amendment of contingency plan (5) Emergency coordinator (6) Emergency procedures: <ul style="list-style-type: none"> (i) Notification (ii) Emergency identification/characterization (iii) Health/environmental assessment (iv) Reporting (v) Containment (vi) Monitoring (vii) Treatment, storage, or disposal of wastes (viii) Cleanup procedures: <ul style="list-style-type: none"> (1) Disposal (2) Decontamination (ix) Follow-up Report 	<ul style="list-style-type: none"> III.C.4.(d) III.C.3.(f) II.D III.D.1 II.B.2; III.C.1 II.B.1; III.B II.B.4.(c); II.B.5; III.C.6.(a); III.C.6.(c); III.C.6.(d) III.C.2.(c) III.F II.B.1; III.C.2.(a) II.B.1; III.B; III.C.2.(b) II.B.3; III.C.3.(c) II.B.3; III.C.3.(c) II.B.1; III.B; III.C.3.(c) III.C.3.(b); III.C.3.(d) III.C.2.(c); III.C.3.(c) III.C.4.(d) III.C.4.(d) III.C.3.(f) III.D.1
---	--

EPA's Oil Pollution Prevention Regulation (40 C.F.R. Part 112)

	ICP Citation(s)
<p>112.7(d)(1) Strong spill contingency plan and written commitment of manpower, equipment, and materials^{5,6}</p> <p>112.20(g) General response planning requirements</p> <p>112.20(h) Response plan elements</p> <p>(1) Emergency response action plan (Appendix F.1.1):</p> <p>(i) Identity and telephone number of qualified individual (F.1.2.5)</p> <p>(ii) Identity of individuals / organizations to contact if there is a discharge (F1.3.1)</p> <p>(iii) Description of information to pass to response personnel in event of a reportable spill (F1.3)</p> <p>(iv) Description of facility's response equipment and its location (F1.3.2)</p> <p>(v) Description of response personnel capabilities (F1.3.4)</p> <p>(vi) Plans for evacuation of the facility and a reference to community evacuation plans (F1.3.5)</p> <p>(vii) Description of immediate measures to secure the source (F1.7.1)</p> <p>(viii) Diagram of the facility (F1.9)</p> <p>(2) Facility information (F1.2, F2.0)</p> <p>(3) Information about emergency responses:</p> <p>(i) Identity of private personnel and equipment to remove to the maximum extent practicable a worst-case or other discharges (F1.3.2, F1.3.4)</p> <p>(ii) Evidence of contracts or other approved means for ensuring personnel and equipment availability</p> <p>(iii) Identity and telephone of individuals/organizations to be contacted in event of a discharge (F1.3.1)</p> <p>(iv) Description of information to pass to response personnel in event of a reportable spill (F1.3.1)</p> <p>(v) Description of response personnel capabilities (F1.3.4)</p> <p>(vi) Description of response equipment, location of the equipment, and equipment testing (F1.3.2, F1.3.3)</p> <p>(vii) Plans for evacuation of the facility and a reference to community evacuation plans as appropriate (F1.3.5)</p> <p>(viii) Diagram of evacuation routes (F1.9)</p> <p>(ix) Duties of the qualified individual (F1.3.6)</p> <p>(4) Hazard evaluation (F1.4)</p> <p>(5) Response planning levels (F1.5, F1.5.1, (F1.5.2)</p> <p>(6) Discharge detection systems (F1.6, F1.6.1, F1.6.2)</p>	<p>III.C.4.(c); III.F I.B</p> <p>III.C.2.(a)</p> <p>III.B</p> <p>II.B.1</p> <p>II.B.4.(c); III.C.5.(c); III.C.5.(f); III.C.6.(a); III.C.6.(c)</p> <p>II.B.2; III.C; III.C.5.(e); III.C.6.(b)</p> <p>III.C.2.(c); III.C.5.(e)</p> <p>II.B.4.(b); III.C.3.(b); III.C.3.(d)</p> <p>III.A.1-2 I.D.2-4; III.A</p> <p>III.C.3.(b); III.C.3.(d)-(e); III.C.5.(e)</p> <p>III.C.5.(e); III.C.6.(e)</p> <p>II.B.1; III.B.2-4; III.C.2.(b)</p> <p>II.B.1</p> <p>II.B.2; III.C; III.C.5.(e); III.C.6.(b)</p> <p>II.B.4.(c); III.C.5.(c); III.C.5.(f); III.C.6.(a); III.C.6.(c)</p> <p>III.C.2.(c); III.C.5.(e)</p> <p>III.C.2.(c)</p> <p>II.B.3; II.B.4.(a); I.B.5; III.B.2-3; III.C.3.(c); III.C.4.(a); III.C.6</p> <p>II.B.3; III.C.4.(a); III.D.2</p> <p>II.C.4.(a)</p> <p>II.A</p>

<ul style="list-style-type: none"> (7) Plan implementation (F1.7): <ul style="list-style-type: none"> (i) Response actions to be carried out (F1.7.1.1) (ii) Description of response equipment to be used for each scenario (F1.7.1.1) (iii) Plans to dispose of contaminated cleanup materials (F1.7.2) (iv) Measures to provide adequate containment and drainage of spilled oil (F1.7.3) (8) Self-inspection, drills/exercises, and response training (F1.8.1-F1.8.3.2) (9) Diagrams (F1.9) (10) Security systems (F1.10) (11) Response plan cover sheet (F2.0) 112.21 Facility response training and drills / exercises (F1.8.2, F1.8.3) Appendix F Facility-Specific Response Plan:⁷ <ul style="list-style-type: none"> 1.0 Model Facility-Specific Response Plan <ul style="list-style-type: none"> 1.1 Emergency Response Action Plan 1.2 Facility Information: 1.3 Emergency Response Information: <ul style="list-style-type: none"> 1.3.1 Notification 1.3.2 Response Equipment List 1.3.3 Response Equipment Testing / Deployment 1.3.4 Personnel 1.3.5 Evacuation Plans 1.3.6 Qualified Individual's Duties 1.4 Hazard Evaluation <ul style="list-style-type: none"> 1.4.1 Hazard Identification 1.4.2 Vulnerability Analysis 1.4.3 Analysis of the Potential for an Oil Spill 1.4.4 Facility Reportable Oil Spill History 1.5 Discharge Scenarios: <ul style="list-style-type: none"> 1.5.1 Small and Medium Discharges 1.5.2 Worst Case Discharge 1.6 Discharge Detection Systems: <ul style="list-style-type: none"> 1.6.1 Discharge Detection by Personnel 1.6.2 Automated Discharge Detection 1.7 Plan Implementation <ul style="list-style-type: none"> 1.7.1 Response Resources for Small, Medium and Worst Case Spills 1.7.2 Disposal Plans 1.7.3 Containment and Drainage Planning 1.8 Self-Inspection, Drills / Exercises, and Response Training <ul style="list-style-type: none"> 1.8.1 Facility Self-Inspection 1.8.2 Facility Drills / Exercises 1.8.3 Response Training 1.9 Diagrams 1.10 Security 2.0 Response Plan Cover Sheet 	<ul style="list-style-type: none"> II.B.4-6; II.C.; II.D II.B; III.C.4.(b) III.C.4.(a) III.C.3.(e)-(f) III.C.3.(b); III.C.3.(d); III.C.4.(b); III.C.4.(d) III.C.5.(f); III.E III.A.2 III.C.5.(b) III.E I.B I.C; I.D.1; I.D.2-3; I.D.8; II.B.1; III.A II.B.1; III.B.1-3 II.B.4.(c); III.C.5.(c); III.C.6.(a); III.C.6.(c)-(d) III.C.5.(f) II.B.2; III.C; III.C.6.(b) III.C.2.(c); III.C.5.(e) II.B II.B.3 III.A.3; III.C.4.(a) II.B.3; III.C.4.(a) III.C.4.(a) III.D.2 III.C.4.(a) III.C.4.(a) II.A II.A II.B II.B.4.(c); II.B.6; III.C.3.(c); III.C.4.(b); III.C.6.(a); III.C.6.(c)-(d) III.C.3.(e)-(f); III.C.4.(d) II.B.4; III.C.3.(d); III.C.4.(b) III.C.5.(f) III.E III.E I.D; III.A.1-3 III.C.5.(b) I.D.2; I.D.3; I.D.8; III.A
---	---

USCG Facility Response Plan Regulation (33 C.F.R. part 154)

	ICP Citation(s)
154.1026 Qualified individual and alternate qualified individual	II.B.1; III.C.2.(a)
154.1028 Availability of response resources by contract or other means	III.C.6; III.C.6.(e)
154.1029 Worst case discharge	III.C.4.(a)
154.1030 General response plan contents:	
(a) The plan must be written in English	
(b) Organization of the plan (see 154.1035(a)-(g))	I.B
(c) Required contents	
(d) Sections submitted to COTP	
(e) Cross-references	
(f) Consistency with NCP and ACPs	III.C.4.(c)
154.1035 Significant and substantial harm facilities:	
(a) Introduction and plan content	III.A
(1) Facility name, physical and mailing address, county, telephone, and fax	I.D
(2) Description of facility's location in a manner that could aid in locating the facility	I.D
(3) Name, address, and procedures for contacting the owner / operator on 24-hour basis	I.D; II.B.1
(4) Table of contents	I.B
(5) Cross index	
(6) Record of changes to record information on plan updates	I.C; III.F
(b) Emergency Response Action Plan:	
(1) Notification procedures:	
(i) Prioritized list identifying persons, including name, telephone number, and role in plan, to be notified in event of threat or actual discharge	II.B.1; III.B.1-3
(ii) Information to be provided in initial and follow-up notifications to federal, state, and local agencies	III.C.2; III.B.1-3
(2) Facility's spill mitigation procedures ⁸	II.B.4.(b); II.C.3.(b)
(i) Volume of persistent and non-persistent oil groups	
(ii) Prioritized procedures / task delegation to mitigate or prevent a potential or actual discharge or emergencies involving certain equipment / scenarios	II.B
(iii) List of equipment and responsibilities of facility personnel to mitigate an average most probable discharge	II.B.5-6; III.C.6.(c); III.C.3.(a)-(e)

<ul style="list-style-type: none"> (3) Facility response activities⁹ <ul style="list-style-type: none"> (i) Description of facility personnel's responsibilities to initiate / supervise response until arrival of qualified individual (ii) Qualified individual's responsibilities / authority (iii) Facility or corporate organizational structure used to manage response resources (iv) Oil spill response organization(s) / spill management team available by contract or other approved means (4) Fish and wildlife sensitive environments <ul style="list-style-type: none"> (i) Areas of economic importance and environmental sensitivity as identified in the ACP that are potentially impacted by a WCD (ii) List areas and provide maps / charts and describe response actions (iii) Equipment and personnel necessary to protect identified area (5) Disposal plan (c) Training and exercises (d) Plan review and update procedures (e) Appendices <ul style="list-style-type: none"> (1) Facility-specific information (2) List of contacts (3) Equipment lists and records (4) Communications plan (5) Site-specific safety and health plan (6) List of acronyms and definitions (7) A geographic-specific appendix <p>154.1040 Specific requirements for substantial harm facilities</p> <p>154.1041 Specific response information to be maintained on mobile MTR facilities</p> <p>154.1045 Groups I-IV petroleum oils</p> <p>154.1047 Group V petroleum oils</p> <p>154.1050 Training</p> <p>154.1055 Drills</p> <p>154.1057 Inspection and maintenance of response resources</p> <p>154.1060 Submission and approval procedures</p> <p>154.1065 Plan revision and amendment procedures</p> <p>154.1070 Deficiencies</p> <p>154.1075 Appeal Process</p> <p>Appendix C - Guidelines for determining and evaluating required response resources for facility response plans</p> <p>Appendix D - Training elements for oil spill response plans</p>	<p>II.B.3; II.B.5-6; II.C; II.D; III.C.3.(c) II.A; II.B</p> <p>II.B</p> <p>II.B.2; II.C; III.C.1; III.C.2.(b)-(d); III.C.3; III.C.4.(a); III.C.5-6 II.B.4.(c); III.C.3.(d)-(e); III.C.5.(f); III.C.6.(a)-(b); III.C.6.(e)</p> <p>III.A.3; III.C.4.(a)-(b) II.B.3</p> <p>II.B.5-6; III.C.6.(c); III.C.3.(a)-(e)</p> <p>III.C.4.(d) III.E III.F I.D.3; III.A.2 III.A II.B.1; III.B.1-3; III.C.2.(a) III.C.5.(c); III.C.5.(f); III.C.6.(a),(c)-(e) III.C.2.(b) III.C.2.(c); III.C.3.(g); III.C.5.(a)</p> <p>III.E III.E III.C.3.(f)</p> <p>III.F</p> <p>III.C.6.(c)</p> <p>III.E</p>
--	---

DOT / RSPA Facility Response Plan Regulation (49 C.F.R. Part 194)

	ICP Citation(s)
194.101 Operators required to submit plans	I.D; III.A
194.103 Significant and substantial harm: operator’s statement	III.C.4.(a)
194.105 Worst case discharge	III.C.4
194.107 General response plan requirements:	III.C.4.(c)
(a) Resource planning requirements	
(c) Consistency with NCP and ACPs	
(d) Each response plan must include:	
(1) Core Plan Contents	
(i) Information summary (see 194.113)	I.D; III.A
(ii) Immediate notification procedures	II.B.1; III.B
(iii) Spill detection and mitigation procedures	II.A; II.B.4.(b)
(iv) The name, address, and telephone number of the oil spill response organization	III.B.1
(v) Response activities and response resources	II.B.2; II.B.4.(c); II.B.5-6; II.C; III.C; III.C.2.(b); III.C.3.(b); III.C.3.(d)-(f); III.C.3.(h); III.C.4.(d); III.C.5.(c)
(vi) Names and telephone numbers of federal, state, and local agencies operator expects to have pollution control responsibilities/support	III.B.2-3
(vii) Training procedures	III.E
(viii) Equipment testing	III.C.5.(f)
(ix) Drill types, schedules, and procedures	III.E
(x) Plan review and update procedures	III.F
(2) An appendix for each response zone	
194.109 Submission of state response plans	
194.111 Response plan retention	III.F
194.113 Information summary	
(a) Core plan information summary	
(1) Name and address of operator	I.D
(2) Description of each response zone	I.D
(b) Response zone appendix information summary	
(1) Core plan information summary	I.D; III.A
(2) Name, telephone of qualified individual available on a 24-hour basis	I.D; II.B.1; III.B.1
(3) Description of each response zone	I.D
(4) List of line sections for each pipeline	I.D
(5) Significant and substantial harm determination	III.A
(6) Type of oil and volume of worst case discharge	III.C.4.(a)
194.115 Response resources	II.B.6; III.C.4; III.C.6.(e)
194.117 Training	III.E
194.119 Submission and approval procedures	III.F
194.121 Response plan review and update procedures	III.F
Appendix A Recommended guidelines for preparation of response plans	I.B
Section 1 Information summary	I.D.; II.B.1; II.B.6; III.A
Section 2 Notification procedures	II.B.1; III.B; III.C.2.(b); III.C.5.(c)
Section 3 Spill detection and on-scene spill mitigation procedures	II.A; II.B.5-6; III.C.3.(b)
Section 4 Response activities	II.B.2; III.C.2.(a)
Section 5 List of contacts	II.B.1
Section 6 Training procedures	III.E
Section 7 Drill Procedures	III.E
Section 8 Response plan review and update procedures	III.F
Section 9 Response zone appendices	II.B.2; II.C; III.A.1-3; III.C

OSHA Emergency Action Plans (29 C.F.R. §1910.38(a)) and Process Safety (29 C.F.R. §1910.119)

	ICP Citation(s)
<p>1910.38(a) Emergency action plan:</p> <ul style="list-style-type: none"> (1) Scope and applicability (2) Elements: <ul style="list-style-type: none"> (i) Emergency escape procedures and emergency escape route assignments (ii) Procedures to be followed by employees who remain to operate critical plant operations before they evacuate (iii) Procedures to account for all employees after emergency evacuation has been completed (iv) Rescue and medical duties for those employees who are to perform them (v) The preferred means of reporting fires and other emergencies (vi) Names or regular job titles of persons or departments who can be contacted for further information or explanation of duties under the plan (3) Alarm system (see section 1910.165) (4) Evacuation (5) Training <p>1910.119 Process safety management of highly hazardous chemicals:</p> <ul style="list-style-type: none"> (e)(3)(ii) Investigation of previous incidents (e)(3)(iii) Process hazard analysis requirements (g)(1)(i) Employee training in process / operating procedures (j)(4) Inspection / testing of process equipment (j)(5) Equipment repair (l) Management of changes (m) Incident investigation (n) Emergency planning and response (o)(i) Certification of compliance <p>1910.165 Employee alarm systems:</p> <ul style="list-style-type: none"> (b) General requirements (b)(1) Purpose of alarm system (b)(4) Preferred means of reporting emergencies (d) Maintenance and testing 	<p>III.C.3.(a); III.C.4</p> <p>II.B; II.B.3; III.C.2.(c); III.C.3</p> <p>II.B; II.B.3; II.B.5; III.C.3</p> <p>II.B.1; III.C.2.(b)-(c); III.C.3; III.D</p> <p>III.C.2.(c); III.C.3; III.C.3.(g); III.C.5.(a)</p> <p>II.B.1; III.C.2</p> <p>I.D.6; II.B.1; III.C.2.(b); III.C.2.(d)</p> <p>II.B.1; III.C.3.(c); III.C.5.(c) II.B.4; III.C.2.(c); III.C.3.(c); III.C.4; III.C.4.(a) III.C.5.(e); III.E</p> <p>III.D; III.D.2</p> <p>III.C.5.(c)</p> <p>III.E</p> <p>III.C.5.(f)</p> <p>III.C.5.(f)</p> <p>III.E</p> <p>III.D.1</p> <p>I.A; II.A; II.B; II.B.4; III.B; III.B.1; III.B.2</p> <p>III.F</p> <p>III.C.5.(c)</p> <p>III.B; III.B.1</p> <p>III.B</p> <p>III.C.5.(f)</p>

OSHA HAZWOPER (29 C.F.R. 1910.120)

	ICP Citation(s)
<p>1910.120(k) Decontamination</p> <p>1910.120(q) Emergency response to hazardous substance releases:</p> <p>(1) Emergency response plan</p> <p>(2) Elements of an emergency response plan:</p> <p>(i) Pre-emergency planning and coordination with outside parties</p> <p>(ii) Personnel roles, lines of authority, training and communication</p> <p>(iii) Emergency recognition and prevention</p> <p>(iv) Safe distances and places of refuge</p> <p>(v) Site security and control</p> <p>(vi) Evacuation routes and procedures</p> <p>(vii) Decontamination procedures</p> <p>(viii) Emergency medical treatment and procedures</p> <p>(ix) Emergency alerting and response procedures</p> <p>(x) Critique of response and follow-up</p> <p>(xi) PPE and emergency equipment</p> <p>(xii) Response plan coordination and integration</p> <p>(3) Procedures for handling emergency response:</p> <p>(i) The senior emergency response official responding to an emergency shall become the individual in charge of an ICS</p> <p>(ii) The individual in charge shall identify all hazardous substances or conditions present and shall address site analysis, use of engineering controls, maximum exposure limits, hazardous substance handling procedures, and the use of new technologies</p> <p>(iii) Implementation of appropriate emergency operations and use of PPE</p> <p>(iv) Employees engaged in emergency response and exposed to hazardous substances presenting an inhalation hazard or potential inhalation hazard shall wear positive pressure self-contained breathing apparatus while engaged in emergency response</p> <p>(v) The individual in charge of the ICS shall limit the number of emergency response personnel at the emergency site, in those areas of potential or actual exposure to incident or site hazards, to those who are actively performing emergency operations</p> <p>(vi) Backup personnel shall stand by with equipment ready to provide assistance or rescue</p> <p>(vii) The individual in charge shall designate a safety official, who is knowledgeable in the operations being implemented at the emergency response site</p> <p>(viii) When activities are judged by the safety official to be an IDLH condition and/or to involve an imminent danger condition, the safety official shall have authority to alter, suspend, or terminate those activities</p> <p>(ix) After emergency operations have terminated, the individual in charge of the ICS shall implement appropriate decontamination procedures</p> <p>(4) Skilled support personnel</p> <p>(6) Training</p> <p>(9) Medical surveillance and consultation</p> <p>(11) Post-emergency response operations</p>	<p>III.C.3.(f)</p> <p>III.C.1</p> <p>I.D.6; II.B.2; II.B.3; III.B.2; III.B.3; III.C.2.(d); III.C.4</p> <p>I.D.6; II.B.2; III.B.2-3; III.C.2.(d); III.C.5.(d)</p> <p>II.A; III.G</p> <p>III.C.2.(c); III.C.4.(b)</p> <p>III.C.4.(b); III.C.5.(b)</p> <p>II.B.4; III.C.2.(c)</p> <p>III.C.3.(f)</p> <p>II.B.4; III.C.3.(g); III.C.5.(a)</p> <p>II.B; II.B.1,6; II.D; III.B; III.B.1-3; III.C.4</p> <p>II.C; III.D; III.D.1; III.F</p> <p>III.C.5.(f); III.C.6.(c); III.C.4.(b)</p> <p>III.C.5</p> <p>II.B.2; III.C; III.C.1-2; III.C.2.(a)-(b); III.C.5.(c)</p> <p>II.C.3-4; III.C.3.(c)</p> <p>II.C.3-5; III.C.3; III.C.3.(a); III.C.4.(a)-(b)</p> <p>II.B.4</p> <p>III.C.3; III.C.5.(e)</p> <p>II.B.4; III.C.5.(e)</p> <p>II.B.4; III.C.2.(c)</p> <p>III.C.2.(c)</p> <p>III.C.3.(f)</p> <p>III.E</p>

EPA's Risk Management Program (40 C.F.R. part 68)	
	ICP Citation(s)
68.20-36 Offsite consequence analysis	III.C.4.(a)
68.42 Five-year accident history	III.D.2
68.50 Hazard review	III.C.4.(a)
68.60 Incident investigation	III.D.1
68.67 Process hazards analysis	III.C.4.(a)
68.81 Incident investigation	III.D.1
68.95(a) Elements of an emergency response program:	
(1) Elements of an emergency response plan:	
(i) Procedures for informing the public and emergency response agencies about accidental releases	II.B.1; III.B
(ii) Documentation of proper first-aid and emergency medical treatment necessary to treat accidental human exposures	III.C.3.(g); III.C.5.(a)
(iii) Procedures and measures for emergency response after an accidental release of a regulated substance	II.A-D; III.C.1-3
(2) Procedures for the use of emergency response equipment and for its inspection, testing, and maintenance	III.C.5.(f)
(3) Training for all employees in relevant procedures	III.E
(4) Procedures to review and update the emergency response plan	III.F
68.95(b) Compliance with other federal contingency plan regulations	
68.95(c) Coordination with the community emergency response plan	

¹ Facilities should be aware that most states have been authorized by EPA to implement RCRA contingency planning requirements in place of the federal requirements listed. Thus, in many cases state requirements may not track this matrix. Facilities must coordinate with their respective states to ensure an ICP complies with state RCRA requirements.

² Incorporates by reference § 264.37.

³ Incorporates by reference § 265.37.

⁴ Incorporates by reference § 279.52(a)(6).

⁵ Non-response planning parts of this regulation (e.g., prevention provisions) require a specified format.

⁶ If a facility is required to develop a strong oil spill contingency plan under this section, the requirements can be met through the ICP.

⁷ The appendix further describes the required elements in section 120.20(h). It contains regulatory requirements as well as recommendations.

⁸ Note: Sections 154.1045 and 154.1047 contain requirements specific to facilities that handle, store, or transport Group I-IV oils and Group V oils, respectively.

⁹ Ibid.

Additional copies of this report can be obtained from the
National Shipbuilding Research and Documentation Center:

<http://www.nsnet.com/docctr/>

Documentation Center
The University of Michigan
Transportation Research Institute
Marine Systems Division
2901 Baxter Road
Ann Arbor, MI 48109-2150

Phone: 734-763-2465
Fax: 734-936-1081
E-mail: Doc.Center@umich.edu