



United States Environmental Protection Agency

# Facility Response Planning

COMPLIANCE ASSISTANCE GUIDE



Many of the terms used in this guide have specific definitions under the Oil Pollution Prevention Regulation. (Definitions can be found in 40 CFR 112.2.) Other regulatory programs may define some of these terms differently. Words or phrases that are specifically defined in the regulation are indicated by **bold italic type** when they first appear in the text of this guide.

### ***About the Compliance Assistance Guides***

This guide is part of a series of compliance assistance guides that the U.S. Environmental Protection Agency (EPA) developed in order to help **owners and operators** of facilities that store or use **oil**, as well as other interested people, to better understand the Federal Oil Pollution Prevention regulation (40 CFR part 112). If you own or operate a **facility** that stores or uses oil, these guides will help you to determine whether the regulation applies to you. They also provide descriptions of some of the basic requirements you will be expected to meet if the regulation does apply to your facility.

*The titles in this series include the following:*

- Introduction and Background to the Oil Pollution Prevention Regulation
- Who's Who: Federal Agency Roles and Responsibilities for Oil Spill Prevention and Response
- What to Expect During an SPCC/FRP Inspection
- Facility Response Planning
- Sample SPCC Plan and Sample Containment Volume Calculations
- SPCC Requirements and Oil Pollution Prevention Practices for Bulk Oil Storage Facilities
- SPCC Requirements and Oil Pollution Prevention Practices for Oil Production, Drilling, and Workover Facilities
- SPCC Requirements and Oil Pollution Prevention Practices for Farms and Ranches
- SPCC Requirements and Oil Pollution Prevention Practices for Mines and Quarries
- SPCC Requirements and Oil Pollution Prevention Practices for Vehicle Service Facilities
- SPCC Requirements and Oil Pollution Prevention Practices for Facilities Conducting Large Volume Transfer Operations
- SPCC Requirements and Oil Pollution Prevention Practices for Marinas and Other Waterside Fueling Facilities
- SPCC Requirements and Oil Pollution Prevention Practices for Airports
- SPCC Requirements and Oil Pollution Prevention Practices for Railroad Facilities
- SPCC Requirements and Oil Pollution Prevention Practices for Electrical Utilities
- Oil Spill Notification, Response, and Recovery
- Industry Standards: A Guide for Owners and Operators of SPCC-regulated Facilities

**K**ee in mind that this guide, and the others in this series, are intended to provide guidance only. You should read the text of the Oil Pollution Prevention regulation carefully if you think it applies to you. It can be found at Title 40, Part 112 of the Code of Federal Regulations (40 CFR part 112). The CFR is available at Federal Depository Libraries around the country, many of which are on the campuses of major colleges and universities. It is also available online at <http://www.gpo.gov>.

You can obtain copies of any of the compliance assistance guides in this series by contacting EPA headquarters or any EPA Regional Office, or by visiting EPA's Oil Spill Program website at <http://www.epa.gov/oilspill>. Contact information for EPA Headquarters and Regional Offices is provided at the end of this guide.

### ***What is the purpose of the Oil Pollution Prevention regulation?***

When oil spills into *navigable waters* or onto adjoining shorelines, it can have harmful impacts on the environment, human health, and economic activity. EPA issued the Oil Pollution Prevention regulation to prevent oil spills and to assure that oil facility personnel are prepared to respond if a spill occurs.

The regulation has two sets of requirements. The first set of requirements is the Spill Prevention, Control, and Countermeasure (SPCC) rule. The SPCC rule is the basis of EPA's oil spill prevention program. The second set of requirements is the Facility Response Plan (FRP) rule. The FRP program is designed to ensure that certain facilities have adequate oil spill response capabilities.

### ***What will I find in this guide?***

This guide, *Facility Response Planning*, describes the preparation and submission of an FRP. Before reading this guide, you should read the *Introduction and Background to the Oil Pollution Prevention Regulation*.

EPA has prepared this guide to help you better understand the FRP rule. It explains what an FRP is, who must prepare one, and what the major components of a response plan are. It also provides a summary of the June 2000 revisions made to the FRP rule. You must comply with these requirements if you meet the applicability provisions set out in the rule. You can find the FRP rule in 40 CFR part 112, subpart D sections 112.20 and 112.21. Information is also available on the EPA Oil Spill Program website <http://www.epa.gov/oilspill>.



*This guidance imposes no separate duties on facility owners or operators other than the requirements contained in the FRP rule. If there appears to be a conflict between what is stated in this guidance and what is stated in the FRP rule (40 CFR 112), the provisions of the FRP rule are the ones to be followed. The statements in this document are intended solely as guidance. This document is not intended and cannot be relied upon to create rights, substantive or procedural, enforceable by any party in litigation with the United States.*

### **What types of oil does the rule address?**

The term oil means oil of any kind or in any form, including, but not limited to:

petroleum; fuel oil; sludge; oil refuse; oil mixed with wastes other than dredged spoil; fats, oils, or greases of animal, fish, or marine mammal origin; vegetable oils, including oils from seeds, nuts, fruits, or kernels; and other oils and greases, including synthetic oils and mineral oils.

### **What is a Facility Response Plan?**

According to the Clean Water Act (CWA), as amended by the Oil Pollution Act (OPA), certain facilities that store and use oil are required to prepare and submit plans to respond to a **worst case discharge** of oil and to a substantial threat of such a discharge. EPA has established regulations that define who must prepare and submit an FRP and what must be included in the plan. An FRP is a plan for responding, to the **maximum extent practicable**, to a worst case discharge, and to a substantial threat of such a discharge, of oil. The Plan also includes responding to small and medium discharges as appropriate.

### **What are the requirements of EPA's Facility Response Plan rule?**

According to OPA, an owner or operator of a “substantial harm” facility must develop and implement an FRP. A “substantial harm” facility is a **facility** that, because of its location, could reasonably be expected to cause substantial harm to the environment by discharging oil into or on navigable waters or adjoining shorelines. EPA’s Facility Response Plan requirements were published as a final rule in the Federal Register on July 1, 1994, and codified at 40 CFR 112.20 and 112.21, including Appendices B through F. EPA published revisions to the rule in the Federal Register on June 30, 2000, which modified the requirements for an owner or operator of a facility handling, storing, or transporting **animal fat** or **vegetable oil** to account for new research findings and to reflect new statutory requirements under the 1995 Edible Oil Regulatory Reform Act and EPA’s Fiscal Year 1999 Appropriation.

### **What is the purpose of a Facility Response Plan?**

The FRP helps an owner or operator develop a response organization and ensure the availability of response resources (i.e., response equipment, trained personnel) needed to respond to an oil **discharge**. The FRP should also demonstrate that the response resources are available in a timely manner, thereby reducing a discharge’s impact and severity. The FRP also helps a facility owner or operator improve discharge prevention measures through the early identification of risks at the facility. In addition, FRPs aid local and regional response authorities to better understand the potential hazards and response capabilities in their area.

## Do I have to prepare a Facility Response Plan?

You should first determine if your facility must comply with the SPCC rule. The *Introduction and Background to the Oil Pollution Prevention Regulation* describes the applicability of the rule. If your **non-transportation-related** facility is SPCC-regulated, and an oil discharge from your facility could reasonably be expected to cause “substantial harm” to the environment from a discharge to navigable waters of the U.S. or the adjoining shoreline, you must prepare an FRP and submit it to the EPA region. The RA will then determine whether your facility is a “significant and substantial harm” facility, which would require the RA to review and approve your FRP. If your facility does not meet the substantial harm criteria discussed in the sections below, you must complete a certification form and maintain it at the facility for review by EPA during facility inspections.

EPA revised the Oil Pollution Prevention regulation in 2002 and some revisions may affect whether you have a substantial harm facility. In some cases your facility may not meet the storage capacity thresholds for the substantial harm criteria, and you may not need to prepare and maintain an FRP. In other cases, you must have an FRP, but you may be able to revise the calculations for worst case discharge planning levels. According to the 2002 rule, effective August 16, 2002, the regulation no longer applies to the following:

- Completely buried tanks that are subject to Underground Storage Tank technical requirements in 40 CFR parts 280 and 281;
- Containers with a storage capacity of less than 55 gallons; and
- Portions of certain facilities used exclusively for wastewater treatment.

## How do I know if my facility may be classified as a substantial harm facility?

The flowchart of criteria for substantial harm (see Figure 1) shows the questions you must answer to determine if your facility can be classified as a substantial harm facility. The classification can be met in one of two ways:

- Your facility meets the substantial harm criteria outlined in 40 CFR 112.20(f)(1); or
- An EPA **Regional Administrator** (RA) determines that your facility poses substantial harm to the environment.

## What are navigable waters of the United States?

*Navigable waters are not only waters on which a craft may be launched. They also include the following types of waters, their tributaries, and adjacent wetlands:*

- 1) *Waters with a past, present, or possible future use in interstate or foreign commerce, including waters subject to the ebb and flow of the tide;*
- 2) *Interstate waters, including interstate wetlands;*
- 3) *All other waters whose use, degradation, or destruction could affect interstate or foreign commerce; these may include intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, playa lakes, or natural ponds;*
- 4) *Impoundments of waters that are defined as waters of the United States; and*
- 5) *Territorial sea.*

*Navigable waters do not include waste water treatment systems or prior converted cropland.*

## ***What are the substantial harm criteria?***

### ***Over Water Transfers***

You can determine whether your facility meets the over water transfer criterion by answering the following question: Does your facility transfer oil over water to or from vessels, and does your facility have a total oil storage capacity greater than or equal to 42,000 gallons?

In order to answer the above question you must first know the following:

- Your facility's total oil storage capacity can be determined by adding the capacities of all oil storage containers (e.g., drums, tanks, electrical equipment), including aboveground containers with a capacity of 55 gallons or more.
- A *vessel* means any type of water craft capable of being used as a means of transportation on water.

If you answered "yes" to the above question, your facility is a substantial harm facility, and you must prepare and submit an FRP to the Regional Administrator.

If you answered "no" to the above question, you must consider whether your facility meets any of the criteria for facilities with 1,000,000 gallons or more of oil storage capacity (please see the next section).

### ***Other Facilities***

You can determine whether your facility meets the oil storage capacity criterion by answering the following question: Does your facility have a total storage capacity greater than or equal to 1,000,000 gallons of oil?

If you answered "yes" to the above question, you need to further evaluate the following criteria:

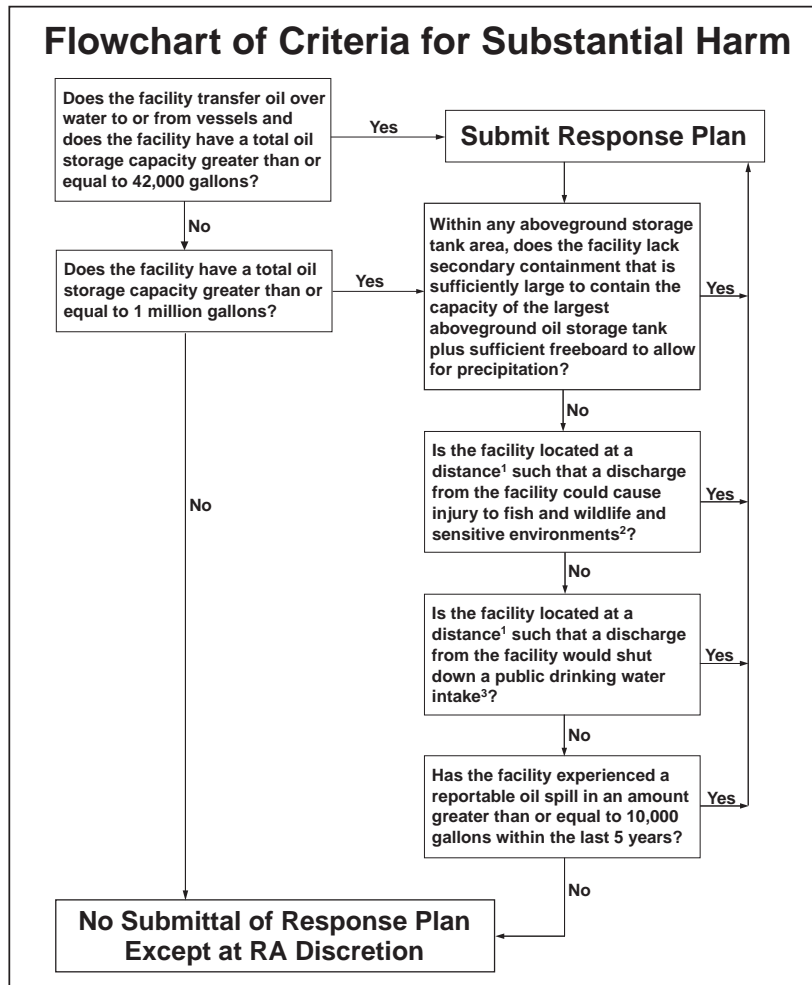
- Lack of secondary containment
- Proximity to fish and wildlife and sensitive environments
- Proximity to public drinking water intakes
- Reportable discharge greater than, or equal to 10,000 gallons within the last five years

If you answered "no" to the above question, you do not have to prepare and submit an FRP except at the discretion of the RA. Instead, you are required to prepare a certification that your facility is not a substantial harm facility (40 CFR part 112, Appendix C, Attachment C-II) and maintain this at your facility along with your SPCC plan.

### ***Secondary Containment***

You can determine whether your facility meets the secondary containment criterion by answering the following question: Do you lack secondary containment at your facility large enough to hold the capacity of the largest aboveground storage tank within each storage area plus sufficient freeboard to allow for precipitation?

If you answered "yes" to the above question, your facility is a substantial harm facility, and you do have to prepare and submit an FRP.



<sup>1</sup> Calculated using the appropriate formulas in Attachment C-III to this appendix or a comparable formula.

<sup>2</sup> For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Plans: Fish and Wildlife and Sensitive Environments" (59 FR 14713, March 29, 1994) and the applicable Area Contingency Plan.

<sup>3</sup> Public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).



**Figure 1:**  
*Flowchart of Criteria for Substantial Harm*

If you answered “no” to the above question, you do not have to prepare and submit an FRP because of the secondary containment criterion. You must consider whether your facility meets other specified factors (please see the next section).

***Fish and Wildlife and Sensitive Environments***

You can determine whether your facility meets the ***fish and wildlife and sensitive environments*** criterion by answering the following question:

Could a discharge from your facility cause injury to fish and wildlife and sensitive environments?

In order to answer the above question, you must first determine the following:

- You must calculate the distance that discharged oil could travel from your facility before it is contained. You should use the planning distance calculations for fish and wildlife and sensitive environments to identify all fish and wildlife and sensitive environments within the planning distance. (See 40 CFR part 112, Appendix C, Attachment C-III.)
- According to 40 CFR 112.2, *injury* means a measurable adverse change, either long- or short-term, in the chemical or physical quality or the viability of a natural resource. The change can result either directly or indirectly from exposure to a discharge of oil; from exposure to a product; or from reactions resulting from a discharge of oil.
- You must check other sources to determine what constitutes an area that is sensitive for fish and wildlife or the environment. These areas are identified by their legal designation, by evaluations conducted by area committee members or members of the federal on-scene coordinator's discharge response structure, or in an Area Contingency Plan (ACP). These areas may be identified either because of sensitivity to the effects of a discharge event, or danger to human health. Examples of these environments include:
  - Wetlands;
  - National and state parks;
  - Critical habitats for endangered species;
  - Wilderness and natural resource areas;
  - Marine sanctuaries and estuarine reserves;
  - Conservation areas;
  - Preserves;
  - Wildlife areas;
  - Wildlife refuges;
  - Wild and scenic rivers;
  - Recreation areas;
  - National forests;
  - Federal and state lands that are research natural areas;
  - Heritage program areas;
  - Land trust areas; and
  - Historical and archeological parks.
- Appendices I, II, and III to Department of Commerce/National Oceanic and Atmospheric Administration's Guidance for Facility and Vessel Response Plans: Fish and Wildlife and Sensitive Environments (59 FR 14713, March 29, 1994) contain additional information concerning fish and wildlife and sensitive environments.

If you answered "yes" to the above question, your facility is a substantial harm facility, and you do have to prepare and submit an FRP.



If you answered “no” to the above question, you do not have to prepare and submit an FRP because of the fish and wildlife and sensitive environments criterion. You must consider whether your facility meets other specified factors (please see the next section).

### ***Public drinking water intakes***

You can determine whether your facility meets the public drinking water intake criterion by answering the following question: Could a discharge from your facility affect public drinking water intakes?

In order to answer the above question, you must first determine the following:

- You must calculate the distance that discharged oil could travel from your facility before it is contained. To do so, you may use the formulas provided in the regulation. (See 40 CFR part 112, Appendix C, Attachment C-III.)
- A system is a public water system if it provides piped water for human consumption and has at least 15 service connections or regularly serves at least 25 individuals.
- Public drinking water systems include collection, treatment, storage, and distribution facilities.
- To locate a downstream public drinking water intake, consult the appropriate ACP, and contact the municipal or county water authority for each area that may be affected by an oil discharge from your facility.

If you answered “yes” to the above question, your facility is a substantial harm facility, and you do have to prepare and submit an FRP.

If you answered “no” to the above question, you do not have to prepare and submit an FRP because of the public drinking water intake criterion. You must consider whether your facility meets other specified factors (please see the next section).

### ***Spill History***

You can determine whether your facility meets the reportable discharges criterion by answering the following question: Has your facility had a reportable discharge in an amount greater than or equal to 10,000 gallons within the last five years?

If you answered “yes” to the above question, your facility is a substantial harm facility, and you do have to prepare and submit an FRP.

### ***Tips for Calculating the Planning Distance***

Appendix C, Attachment C-III of 40 CFR part 112 contains formulas for calculating the planning distance. Did you know:

- You should calculate the planning distance based on the types of transfers and the navigable water conditions applicable to a facility.
- Distance calculation formulas apply to:
  - Moving waters;
  - Still waters;
  - Tidally influenced areas; and
  - Overland.
- Moving waters are based on the velocity of the water body and the time interval for arrival of response resources.
- Still waters are based on the spread of discharged oil over the surface of the water.
- Tidally influenced areas are based on the type of oil spilled and the distance down-current during ebb tides and up-current during flood tides to the point of maximum tidal influence. For more information about oil types, please refer to 40 CFR part 112, Appendix E, Table 2.
- Overland is based on the prospect of a spill on land reaching navigable water.

### **What are the different agencies that may have jurisdiction over components of a complex?**

**EPA** is responsible for non-transportation-related facilities located landward of the coastline (e.g., inland lakes and rivers, including certain piping and coastal areas landward of the low water mark).

The Minerals Management Service of the

**Department of the Interior** handles

**offshore** non-transportation-related facilities located seaward of the coastline, including certain pipelines. (See 30 CFR part 254)

The USCG under **DOT** is responsible for deepwater ports and transportation-related facilities located landward of the coastline. (See 33 CFR part 154, Subpart F)

**DOT's** Office of Pipeline Safety in the Research and Special Programs

Administration handles many onshore pipelines (others are state regulated). (See 49 CFR part 194)

*Note: The term "coastline" is "the line of ordinary low water along the portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters."*

If you answered "no" to the above question, and have followed the sequence of questions to reach this final question, you do not have to prepare and submit an FRP, except at the discretion of the RA. Instead, you are required to complete and maintain a certification (with your SPCC plan) that your facility is not a substantial harm facility.

### **Certification of Non-Substantial Harm**

As described in 40 CFR 112.20(e) and in Appendix C, paragraph 3.0 of part 112, if none of the substantial harm criteria applies to your facility, you must complete and maintain at your facility, with your SPCC Plan, a certification form that indicates that you determined that your facility is not a "substantial harm" facility. If you decide to use an alternative formula (i.e., one that is not described above or in 40 CFR 112.20(f)(1)(ii)(B) or (C)) to determine that your facility does not meet the substantial harm criteria, you must attach documentation to the certification form that demonstrates the reliability and analytical soundness of the comparable formula and you must notify the RA in writing that you used an alternative formula.

### **What is a significant and substantial harm facility?**

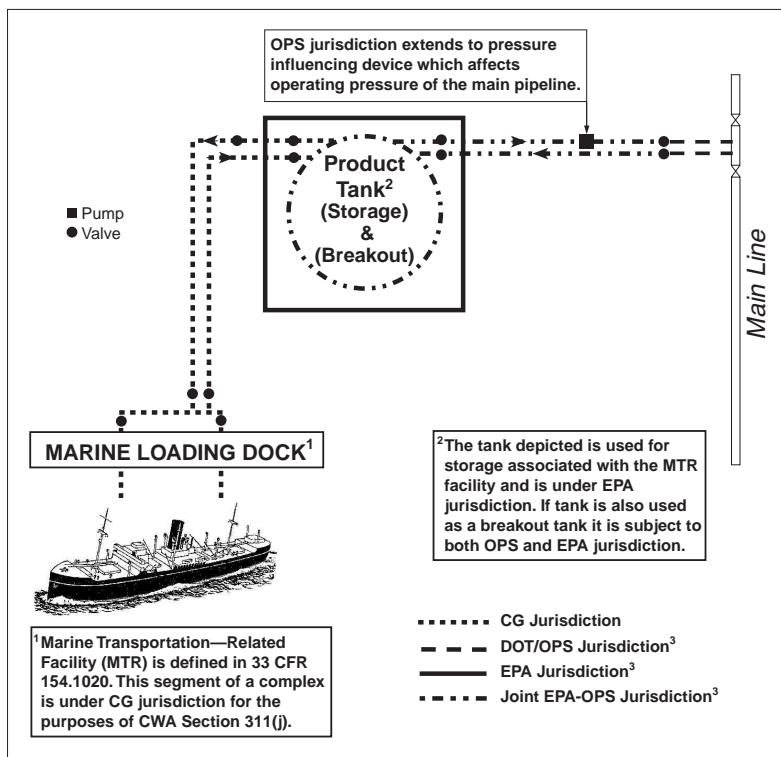
Some substantial harm facilities may meet the criteria for a significant and substantial harm facility. After you have prepared and submitted your FRP, the RA may determine that your facility has the potential, not just for substantial harm, but for significant and substantial harm. If the RA makes that determination, under OPA the RA must *review and approve* your FRP.

### **How do I know if my facility is a significant and substantial harm facility?**

Your facility may be a significant and substantial harm facility if it meets the over water transfer criterion, has a total oil storage capacity of one million gallons or more, and meets one or more of the other substantial harm factors mentioned above. Also, the RA may consider any of the additional significant and substantial harm factors set out in 40 CFR 112.20(f)(3). The additional significant and substantial harm factors include:

- Frequency of past spills;
- Proximity to navigable waters;
- Age of oil storage tanks; and
- Other facility-specific and region-specific information, including local impacts on public health.

## Case Study on Multiple Agency Responsibility



<sup>3</sup>This diagram does not identify the precise location where the change in jurisdiction occurs between EPA and OPS for the purpose of the Clean Water Act, Section 311(j) (33 USC 132(j)). When the pipeline operator and the storage or breakout tank operator remain the same, the change in jurisdiction occurs at the first and last pressure influencing device, meter, valve, or isolation flange, at or inside the facility property line. When the pipeline operator and the storage or breakout tank operator are not the same, the change in jurisdiction occurs at the change in operational responsibility or at the first and last pressure influencing device, valve, or isolation flange, at or inside the facility property line. In either of the above situations, the location of the property line should not solely be used to determine jurisdiction when operational activities (loading/offloading) extend beyond the property line.



**Figure 2:**  
*Description of Multiple Agency Responsibility*

### What is a Complex?

Some facilities must meet the requirements of two or more federal agencies, because they engage in activities that fall under the jurisdiction of those agencies. These agencies include the U.S. Coast Guard, the Department of Transportation's (DOT) Office of Pipeline Safety, and EPA.

A 1971 Memorandum of Understanding (MOU) between EPA and the DOT defines which types of activities are regulated by each agency. You can find the definitions from this MOU in Appendix A to 40 CFR part 112.

According to the MOU, the DOT regulates *transportation-related* activities, while EPA regulates non-transportation-related activities. The activities at many facilities may be entirely non-transportation-related, and therefore only regulated by EPA. A facility with both transportation-related

### **The PREP Guidelines**

You can meet the requirement under 40 CFR 112.21 to develop and implement a program of response drills and exercises, including evaluation procedures, by implementing a program modeled after the National Preparedness for Response Exercise Program (PREP). The PREP guidelines booklet and the Training Reference for Oil Spill Response are available at no charge. To obtain a copy:

Download it from USCG's website at:  
[www.uscg.mil/hq/g-m/nmc/response#PREP](http://www.uscg.mil/hq/g-m/nmc/response#PREP)

Mail or fax a request, including the publication number, to:

TASC Department Warehouse  
3341 Q 75<sup>th</sup> Avenue  
Landover, MD 20785  
301-386-5394 (fax)

and non-transportation-related activities is regulated by both agencies, and as such, it is a **complex** and must comply with all the regulatory requirements of both agencies. For example, a complex may have a transportation-related transfer area regulated by the U.S. Coast Guard (USCG) or a pipeline regulated by the Office of Pipeline Safety under DOT and a non-transportation-related oil storage area regulated by EPA. The owner or operator must compare calculated discharge volumes for the two agencies and plan for whichever quantity is greater. Figure 2 shows which types of activities are regulated by each agency.

### **What key elements should I include in my Facility Response Plan?**

As you prepare your FRP, be sure that your plan includes the following elements:

- Emergency Response Action Plan (an easily accessible stand-alone section of the overall plan) including the identity of a qualified individual with the authority to implement removal actions;
- Facility name, type, location, owner, and operator information;
- Emergency notification, equipment, personnel, evidence that equipment and personnel are available (by **contract or other approved means**), and evacuation information;
- Identification and evaluation of potential discharge hazards and previous discharges;
- Identification of small, medium, and worst case discharge scenarios and response actions;
- Description of discharge detection procedures and equipment;
- Detailed implementation plans for containment and disposal;
- Facility and response self-inspection; training, exercises, and drills; and meeting logs;
- Diagrams of facility and surrounding layout, topography, evacuation paths, and drainage flow paths; and
- Security measures, including fences, lighting alarms, guards, emergency cutoff valves, and locks; and
- Response Plan cover sheet (form with basic information concerning the facility).

### ***What do I need to do to maintain my facility's Facility Response Plan?***

Your FRP must comply with 40 CFR part 112 and any amendments. You must review relevant portions of the National Contingency Plan and applicable ACP annually and, if necessary, revise the FRP to ensure consistency with these plans. You must review and update the FRP periodically to reflect changes at the facility. (Please see 40 CFR 112.20(g)(1), (2), and (3) for more information.) You must submit the revised portions of the response plan within 60 days of each change that may materially affect the response to a worst case discharge. These changes include:

- A change in the facility's configuration that materially alters information in the response plan;
- A change in the type of oil handled, stored, or transferred;
- A material change in capabilities of any ***oil spill removal organization*** that provides equipment and personnel to respond to oil discharges from the facility; or
- A material change in the facility's discharge prevention and response equipment or emergency response procedures.

### ***What recordkeeping requirements must I satisfy?***

You must maintain the response plan at your facility, along with plan updates reflecting material changes. You must also keep a log of response training drills and exercises. Records of inspections of response equipment must be kept for five years.

If you determine that the response planning requirements under 40 CFR 112.20 are inapplicable to your facility, you must complete and maintain at the facility the certification form in 40 CFR part 112 Appendix C Attachment C-II.



## APPENDIX A DESCRIPTION OF REQUIREMENTS SPECIFIC TO FACILITIES THAT HANDLE, STORE, OR TRANSPORT PRIMARILY ANIMAL OR VEGETABLE OILS—JUNE 2000 RULE REVISIONS

### *What are the revisions?*

On June 30, 2000, EPA published revisions to the FRP rule that modify the response planning requirements for facilities that store, handle, or transport animal fats or vegetable oils (please see <http://www.epa.gov/oilspill/64fr.htm>). The FRP regulation remains the same for facilities with *petroleum oil* or *non-petroleum oil* other than animal fats and vegetable oils. This appendix summarizes the revised requirements. In addition, this appendix provides a brief description of the properties of animal fats and vegetable oils versus those of other types of oil.

### *What are the main features of EPA's revised response planning requirements for facilities that handle, store, or transport animal fats and vegetable oils?*

Table 1 compares the requirements in the 1994 and 2000 rules for FRP-regulated facilities that store, handle, or transport animal fats or vegetable oils. Some of the major changes involve the following topics:

**Response Planning Scenarios.** New sections have been added (sections 8.0, 9.0, and 10.0 in Appendix E) to address planning scenarios for facilities with animal fats and vegetable oils. EPA retained the requirement to plan for three specific scenarios for oil discharges: small (2,100 gallons or less), medium (between 2,100 and 36,000 gallons, or 10 percent of the worst case discharge, whichever is less), and worst case. The definition of worst case discharge has not changed since the rule was first published in 1994. Facilities must make a series of calculations based on secondary containment and other factors. Discharges of volumes of animal fats and vegetable oils of various sizes may pose a serious threat to navigable waters or adjoining shorelines, especially from the cumulative effects of several discharges, and can cause other adverse effects. Under the both the 1994 rule and the 2000 revisions, a smaller facility may only need to plan for two scenarios or a single scenario if its worst case discharge falls within one of the specified ranges for small or medium discharges. Furthermore, case-by-case deviations may be allowed if they afford equal environmental protection.

**Calculating Response Planning Volumes and Planning Response Resources.** The primary changes to FRP requirements for animal fat and vegetable oil facilities involve the addition of Section 10.0 and Tables 6 and 7 to Appendix E. These additions constitute a new methodology based on recent scientific studies. Section 10.0 describes the approach for calculating planning volumes for a worst case discharge of animal fats and vegetable oils. Table 6 describes removal capacity planning for the percentage of oil in the water and onshore during a given timeframe. Table 7 provides emulsification factors for groups of animal fats and vegetable oils.

**Revising the Facility Response Plan.** The 2000 modified rule adds a new paragraph (§112.20(a)(4)) describing response plan requirements for animal fat and vegetable oil facilities that specifies the requirements for revising and resubmitting the revised portion of a response plan.

**Definitions.** The 2000 modified rule adds definitions for classes of oils and new oil groups.

**Miscellaneous.** The 2000 modified rule eliminates the terms “non-persistent” and “persistent” as they apply to animal fats and vegetable oils.

### ***If I have a plan for a facility that handles, stores, or transports animal fats or vegetable oils, must I revise it in light of the modified Facility Response Plan rule?***

If you are an owner or operator of a facility that handles, stores, or transports animal fats or vegetable oils with an approved plan, you are not required to revise your plan. However, it may be beneficial to perform a recalculation using the new methodology, because the recalculation may reduce the planned response resources required. If you plan for fewer response resources, you must revise your FRP and submit it to the RA.

If your FRP has been submitted but has not been approved, you must review the FRP to determine if it meets or exceeds the requirements of the modified rule. If the FRP meets or exceeds the applicable provisions, you are not required to revise the plan, but if the FRP does not meet or exceed the applicable provisions, you must prepare and submit a new plan.

### ***Does the revised Facility Response Plan rule for animal fats and vegetable oils affect SPCC Plans?***

The June 2000 Facility Response Plan rule revisions do not affect previous requirements for the spill prevention (SPCC Plans) portion of the rule.

### ***How do the characteristics of animal fats and vegetable oils compare to petroleum oils?***

EPA has found that petroleum oils and animal fats and vegetable oils share common properties and produce similar harmful environmental effects. EPA also found some differences between petroleum oils and animal fats and vegetable oils. For example, unlike some petroleum oils, most animal fats and vegetable oils do not evaporate significantly and usually do not present a fire hazard unless other chemicals or ignition sources are present.

Nearly all of the most devastating environmental effects from oil spills—such as smothering of fish or coating of birds and mammals and their food with oil—are physical effects related to the physical properties of oils and their physical interactions with living systems. While the physical properties of animal fats and vegetable oils are highly variable, most fall within a range that is similar to the physical parameters for petroleum oils. Common properties, such as solubility, specific gravity, and viscosity, are responsible for the similar environmental effects of petroleum and animal fats and vegetable oils.

For further details about the properties of various types of oil, please refer to EPA's Federal Register notice describing the results of various studies related to this issue and responding to commenters requesting revisions to the FRP rule for facilities with animal fats or vegetable oils (62 FR 54508-54543, October 20, 1997).

**TABLE 1**  
**Comparison of Response Planning Requirements for Animal Fats and Vegetable Oils in the 1994 and 2000 Rules**

Requirement	1994 Rule	2000 Rule
Response Planning Scenarios	<p>All facility owners or operators must plan for three specific scenarios for oil discharges:</p> <ul style="list-style-type: none"> <li>• Small (2,100 gallons or less)</li> <li>• Medium (between 2,100 and 36,000 gallons) or 10 percent of the worst case discharge, whichever is less); and</li> <li>• Worst case</li> </ul>	<p>Animal fat and vegetable oil facilities have separate regulatory sections which require the facilities to plan for the same three response planning scenarios (small, medium, and worst case discharge). The requirements for other types of facilities did not change.</p>
<p><i>Note that facilities may plan for one or two scenarios if the worst case discharge falls within one of specified ranges for small or medium discharges.</i></p>		
Calculating the Worst Case Discharge	<p>Facility owners or operators must determine the worst case discharge based on the formulas provided in Appendix D to part 112.</p>	<p>The modifications to the rule do not affect this requirement.</p>
Calculating Response Resources for a Worst Case Discharge	<p>All non-petroleum oil facility owners and operators have broad and flexible requirements for calculating response resources. They do not have to use emulsification or evaporation factors in Appendix E.</p>	<p>All facilities with non-petroleum oils other than animal fats and vegetable oils have the same requirements for calculating response resources as they did in the original rule.</p> <p>Section 10 of Appendix E provides an approach for calculating planning volumes for a worst case discharge of animal fats or vegetable oils.</p> <ul style="list-style-type: none"> <li>• Facility owners or operators may use a worksheet to plan the amount of response resources required. The worksheet uses an approach that is similar to planning for petroleum facilities, except the factors used are more appropriate for animal fats and vegetable oils. For example, certain oil types and facility locations may have different calculations for the percentage of removable oil and for emulsification factors.</li> <li>• The rule retains the flexibility for an owner or operator to use an alternative methodology or approach as long as equivalent environmental protection is provided.</li> </ul>
Calculating planned discharge volumes for different groups of oils	<p>All oils are divided into “persistent” and “non-persistent” oils, and then subdivided into groups based on specific gravity.</p>	<p>Petroleum oils, and non-petroleum oils other than animal fats and vegetable oils, continue to be categorized in the same way.</p> <p>The terms “non-persistent” and “persistent” no longer apply to animal fats and vegetable oils, because these oils may degrade rapidly or remain in the environment for years, depending on environmental conditions and other factors.</p> <p>Animal fats and vegetable oils are classified into new groups of oils termed Group A, B, and C, based on specific gravity.</p>



**TABLE 1**  
**Comparison of Response Planning Requirements for Animal Fats and Vegetable Oils in the 1994 and 2000 Rules**

Requirement	1994 Rule	2000 Rule
Planning Response Resources	Facility owners and operators must meet a series of requirements including determining daily recovery capacity, temporary storage availability, and identification of resources other than oil spill recovery devices, such as boom.	The rule provides animal fat and vegetable oil facilities with new methodology for planning response resources for worst case discharges. The methodology is similar to that in the original rule for petroleum oils, but the factors in the tables are more appropriate for estimating on-water and onshore recovery resource needs for animal fats and vegetable oils. The rule includes worksheets with examples.
Calculation of removable oil percentage	Section 7.7 (sections 7.7.1–7.7.5) of Appendix E outlines the appropriate response plan development and evaluation criteria for facilities that handle, store, or transport non-petroleum oils.	Facility owners and operators handling, storing, or transporting non-petroleum oils other than animal fats and vegetable oils continue to follow the same requirements. Animal fat and vegetable oil facilities have a new table for oil recovery rates. (See Table 6 to Appendix E: Removal Capacity Planning Table for Animal Fats and Vegetable Oils.)
Calculation of emulsification	Non-petroleum oil facility owners or operators use Section 7.7 (sections 7.7.1–7.7.5) of Appendix E to determine appropriate response plan development and evaluation criteria for non-petroleum oils. No specific emulsification factors are required.	Facility owners or operators handling, storing, or transporting non-petroleum oils other than animal fats and vegetable oils continue to follow the same requirements. Owners or operators of animal fat and vegetable oil facilities have a new table for emulsification of animal fats and vegetable oils. (See Table 7 to Appendix E for Emulsification Factors for Animal Fats and Vegetable Oils.)
Revising the Facility Response Plan	According to §112.20(d), an owner or operator of a facility subject to the Facility Response Plan rule is required to revise and resubmit the revised portion of the response plan within 60 days of a facility change that materially may affect the response to a worst case discharge.	A facility owner or operator continues to be required to revise the FRP after making material changes. Under §112.20(a)(4)(i), the owner or operator of an animal or vegetable oil facility with an approved Facility Response Plan would not need to prepare or submit a revised plan, except as otherwise required by paragraphs (b),(c), and (d) of §112.20.
Definitions	Definitions for several pertinent terms are found in the §112.2 and the Appendices to part 112.	The modified rule provides definitions for animal fat, vegetable oil, petroleum oil, and non-petroleum oil in §112.2.

### **How do I contact EPA?**

For more information on the material in this guide, please contact EPA through its headquarters in Washington, DC or through one of its ten Regional offices.

The following list contains the phone numbers and addresses to use when contacting EPA regarding this guide.

### **EPA Headquarters:**

#### **Mailing Address:**

U.S. EPA Headquarters  
Director, Oil Program (5203G)  
Ariel Rios Building  
1200 Pennsylvania Avenue  
Washington, DC 20460  
703-603-8760

**Web Site:** [www.epa.gov/oilspill](http://www.epa.gov/oilspill)

#### **E-mail Inquiries:**

[epacallcenter@bah.com](mailto:epacallcenter@bah.com)

#### **Telephone:**

#### **EPA Oil Program Call Center:**

800-424-9346

#### **National Response Center:**

1-800-424-8802

### **EPA Regional Offices:**

*Region 1—CT, ME, MA, NH, RI, VT*  
SPCC/FRP Coordinator  
U.S. EPA Region I (HBR)  
One Congress Street, Suite 1100  
Boston, MA 02114-2023  
617-918-1260

*Region 2—NJ, NY, PR, USVI*  
SPCC/FRP Coordinator  
U.S. EPA Region II (MS211)  
2890 Woodbridge Avenue  
Building 209  
Edison, NJ 08837-3679  
732-321-6654

*Region 3—DE, DC, MD, PA, VA, WV*  
FRP Coordinator  
U.S. EPA Region III (3HS32)  
1650 Arch Street  
Philadelphia, PA 19103-2029  
215-814-3277

*Region 4—AL, FL, GA, KY, MS, NC, SC, TN,*  
SPCC/FRP Coordinator  
U.S. EPA Region IV  
61 Forsyth Street  
Atlanta, GA 30365-3415  
404-562-8761

*Region 5—IL, IN, MI, MN, OH, WI*  
Oil Program Section Chief  
U.S. EPA Region V (SE5J)  
77 West Jackson Boulevard  
Chicago, IL 60604-3590  
312-353-8200

*Region 6—AR, LA, NM, OK, TX*  
SPCC/FRP Coordinator  
U.S. EPA Region VI (6SF-RO)  
1445 Ross Avenue  
Dallas, TX 75202-2733  
214-665-6489

*Region 7—IA, KS, MO, NE*  
Oil/SPCC Coordinator  
U.S. EPA Region VII (SUPRER+R)  
901 North 5th Street  
Kansas City, KS 66101  
913-551-7050

*Region 8—CO, MT, ND, SD, UT, WY*  
Oil Program Coordinator  
U.S. EPA Region VIII (8EPR-SA)  
999 18th Street, Suite 500  
Denver, CO 80202-2466  
303-312-6839

*Region 9—AZ, CA, HI, NV, AS, GU*  
Oil Team/SPCC Coordinator  
U.S. EPA Region IX (SFD1-4)  
75 Hawthorne Street  
San Francisco, CA 94105  
415-972-3075

*Region 10—AK, ID, OR, WA*  
SPCC/FRP Coordinator  
U.S. EPA Region X (ECL-116)  
1200 6th Avenue  
Seattle, WA 98101  
206-553-1671

Alaska SPCC/FRP Coordinator  
U.S. EPA Alaska Operations Office  
222 West 7th Avenue, #19  
Anchorage, AK 99513-7588  
907-271-5083

United States  
Environmental Protection  
Agency

Office of Emergency  
And Remedial  
Response

EPA 540-K-02-003d  
OSWER 9360.8-46d  
August 2002

---

Oil Program Center