

SPILL PREVENTION,
CONTROL, AND
COUNTERIMEASURE (SPCC)
REGULATION

40 CFR part 112

A Facility Owner/Operator's Guide to Oil Pollution Prevention





## **OIL POLLUTION PREVENTION**

Oil spills endanger public health, impact drinking water, devastate natural resources, and disrupt the economy. In the United States we use vast quantities of oils to heat our homes, provide fuel for automobiles, and operate various pieces of equipment. During storage, transport, or as the result of energy exploration and production activities, oil and other oil-based products are sometimes spilled onto land or into waterways. When this occurs, human health and environmental quality are put at risk. Every effort must be made to prevent oil spills and to clean them up promptly once they occur. The costs associated with spill prevention are often much less than the costs associated with spill clean up, fines, and other civil liabilities. As the old adage states, "an ounce of prevention is worth a pound of cure."

The purpose of the Spill Prevention, Control, and Countermeasure (SPCC) rule is to help facilities prevent a discharge of oil into navigable waters or adjoining shorelines. This rule is part of the U.S. Environmental Protection Agency's oil spill prevention program and was published under the

authority of Section 311(j)(1)(C) of the Federal Water Pollution Control Act (Clean Water Act) in 1974. The rule may be found at Title 40, Code of Federal Regulations, Part 112.

# 1. Who is covered by the SPCC Rule?

A facility is covered by the SPCC rule if it has an aggregate aboveground oil storage capacity greater than 1,320 U.S. gallons or a completely buried storage capacity greater than 42,000 U.S. gallons and there is a reasonable expectation of an oil discharge into or upon navigable waters of the U.S. or adjoining shorelines.



# 2. What types of oil are covered?

Oil of any type and in any form is covered, 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 oil from seeds, nuts, fruits, or kernels; and other oils and greases, including synthetic oils and mineral oils.

### 3. What kinds of facilities are covered?

A facility that stores, processes, refines, uses or consumes oil and is non-transportation-related is potentially subject to the SPCC rule. Operations that are intended to move oil from one location to another, i.e. transportation-related, are not included. Here are some examples of covered facilities and operations:



Oil Drilling

- Onshore and offshore oil well drilling facilities;
- Onshore and offshore oil production facilities (including separators and storage facilities);
- Oil refining or storage facilities;
- Industrial, commercial, agricultural, or public facilities using or storing oil;
- Certain waste treatment facilities;
- Loading racks, transfer hoses, loading arms, and other equipment;
- Vehicles (e.g. tank trucks) and railroad cars used to transport oil exclusively within the confines of a facility; and
- Pipeline systems used to transport oil exclusively within the confines of a facility.



Oil Production



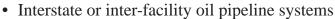
Oil Storage



**Power Generators** 

# What kinds of activities are typically not covered?

Here are some examples of transportation-related activities or equipment typically not covered by the SPCC rule:



- Oil transported in vessels (e.g. ships, barges)
- Oil transported between facilities by rail car or tanker truck



**Construction Sites** 



Oil Refineries

Airports



**Marinas** 



**Fish Canneries** 



Power Transmission and Distribution



Farms and Ranches

# 4. How do I calculate oil storage capacity?

Use the shell capacity of the container (maximum volume) and not the actual amount of product stored in the container (operational volume) to determine whether the SPCC rule applies to you. Count only containers with storage capacity equal to or greater than 55 U.S. gallons.

Simply add up the container oil storage capacities and compare your total facility capacity to the SPCC threshold:

- A total aboveground oil storage capacity greater than 1,320 U.S. gallons; or
- A completely buried oil storage capacity greater than 42,000 U.S. gallons.

Examples of oil storage containers at a facility that *do* count toward facility storage capacity:

**Bulk storage containers:** Aboveground storage tanks (either shop-built or field-erected tanks); certain completely buried tanks; partially buried tanks; tanks in vaults; bunkered tanks; and mobile or portable containers such as drums, totes, non-transportation-related tank trucks, and mobile refuelers.

Oil-filled equipment: May include electrical or operating equipment such as hydraulic systems, lubricating systems (e.g., those for pumps, compressors and other rotating equipment, including pumpjack lubrication systems), gear boxes, machining coolant systems, heat transfer systems, transformers, circuit breakers, and electrical switches; or manufacturing equipment such as process vessels,

or other equipment used in the alteration, processing or refining of crude oil and other non-petroleum oils, including animal fats and vegetable oils.

# 5. How do I determine if my facility could reasonably discharge oil into or upon navigable waters or adjoining shorelines?



You can determine this by considering the geography and location of your facility relative to nearby navigable waters (such as streams, creeks and other waterways). Additionally, you should determine if ditches, gullies, storm sewers or other drainage systems may transport an oil spill to nearby streams. Estimate the volume of oil that could be spilled in an incident and how that oil might drain or flow from your facility and the soil conditions or geographic features that might affect the flow toward waterways. Also you may want to consider whether precipitation runoff could transport oil into navigable waters or adjoining shorelines. You may not take into account manmade features, such as dikes, equipment, or

other structures that might prevent, contain, hinder, or restrain the flow of oil. Assume these manmade features are not present when making your determination. If you consider the applicable factors described above and determine a spill can reasonably flow to a waterway, then you must comply with the SPCC rule.

# 6. What do covered facilities have to do?

A facility that meets the criteria described above must comply with the SPCC rule by preventing oil spills and developing and implementing an SPCC Plan.

Prevent oil spills: Steps that a facility owner/operator can take to prevent oil spills include:

- Using containers suitable for the oil stored. For example, use a container designed for flammable liquids to store gasoline;
- Providing overfill prevention for your oil storage containers. You could use a high-level alarm or audible vent:
- Providing sized secondary containment for bulk storage containers, such as a dike or a remote impoundment. The containment needs to hold the full capacity of the container plus possible rainfall. The dike may be constructed of earth or concrete. A double-walled tank may also suffice;
- Providing general secondary containment to catch the most likely oil spill where you transfer oil to and from containers and for mobile refuelers and tanker trucks. For example, you may use sorbent materials, drip pans or curbing for these areas; and

• Periodically inspecting and testing pipes and containers. You need to visually inspect aboveground pipes and oil containers according to industry standards; buried pipes need to be leak tested when they are installed or repaired. Include a written record of inspections in the Plan.

Prepare and implement an SPCC Plan: The owner or operator of the facility must develop and implement an SPCC Plan that describes oil handling operations, spill prevention practices, discharge or drainage controls, and the personnel, equipment and resources at the facility that are used to prevent oil spills from reaching navigable waters or adjoining shorelines. Although each SPCC Plan is unique to the facility, there are certain elements that must be described in every Plan including:

- Operating procedures at the facility to prevent oil spills;
- Control measures (such as secondary containment) installed to prevent oil spills from entering navigable waters or adjoining shorelines; and
- Countermeasures to contain, cleanup, and mitigate the effects of an oil spill that has impacted navigable waters or adjoining shorelines.

# Did you know

A spill of only *one* gallon of oil can contaminate a *million* gallons of water.



Every SPCC Plan must be prepared in accordance with good engineering practices. Every SPCC Plan must be certified by a Professional Engineer unless the owner/operator is able to, and chooses to, self-certify the Plan (see section 7).

No matter who certifies your SPCC Plan, remember that ultimately the owner or operator is responsible for complying with the rule. A copy of the rule is available at <a href="www.epa.gov/oilspill">www.epa.gov/oilspill</a>. You may also call or write to the nearest EPA office listed in section 11.

#### Important Elements of an SPCC Plan:

- · Facility diagram and description of the facility
- Oil discharge predictions
- Appropriate secondary containment or diversionary structures
- Facility drainage
- Site security
- Facility inspections
- Requirements for bulk storage containers including inspections, overfill, and integrity testing requirements
- Transfer procedures and equipment (including piping)
- Requirements for qualified oil-filled operational equipment
- Loading/unloading rack requirements and procedures for tank cars and tank trucks
- Brittle fracture evaluations for aboveground field constructed containers
- Personnel training and oil discharge prevention briefings
- Recordkeeping requirements
- Five-year Plan review
- · Management approval
- Plan certification (by a Professional Engineer (PE) or in certain cases by the facility owner/operator)

## 7. Who can certify the SPCC Plan?

Preparation of the SPCC Plan is the responsibility of the facility owner or operator, who <u>may also be eligible to self-certify</u> the SPCC Plan if the facility meets the following eligibility criteria for a qualified facility:

- 1. Total aboveground oil storage capacity of 10,000 U.S. gallons or less, and
- 2. In the 3 years prior to the date the SPCC Plan is certified, the facility has had no single discharge of oil to navigable waters or adjoining shorelines exceeding 1,000 U.S. gallons, or no two discharges of oil to navigable waters or adjoining shorelines each exceeding 42 U.S. gallons within any 12-month period.<sup>1</sup>

If the facility does not meet the above criteria, the SPCC Plan must be certified by a licensed Professional Engineer (PE). By certifying the SPCC Plan, the PE confirms that:

- 1. He is familiar with the requirements of the rule;
- 2. He or an agent has visited and examined the facility;
- 3. The SPCC Plan has been prepared in accordance with good engineering practices, including consideration of applicable industry standards, and with the requirements of the rule;

<sup>&</sup>lt;sup>1</sup>Not including discharges that are the result of natural disasters, acts of war, or terrorism. When determining the applicability of this SPCC reporting requirement, the gallon amount(s) specified (either 1,000 or 42) refers to the amount of oil that actually reaches navigable waters or adjoining shorelines not the total amount of oil spilled. EPA considers the entire volume of the discharge to be oil for the purposes of these reporting requirements.

- 4. Procedures for required inspections and testing have been established; and
- 5. The SPCC Plan is adequate for the facility.

When self-certifying a facility's SPCC Plan, the owner/operator makes a similar statement. See §112.6 of the rule for other qualified facility SPCC Plan requirements.

# 8. How do I ask for an extension of time to prepare and implement an SPCC Plan?

If you are unable to prepare or amend and fully implement your SPCC Plan by the compliance date due to either non-availability of qualified personnel, or delays in construction or equipment delivery beyond the control of the owner or operator, then you may request an extension from your EPA Regional Administrator (RA). A list of EPA Regional Offices is available in section 11.

Submit a written request for an extension to your RA. Your request must include:

- A full explanation of the cause for any such delay and the specific aspects of the SPCC Plan affected by the delay;
- A full discussion of actions being taken or contemplated to minimize or mitigate such delay;
   and
- A proposed time schedule for the implementation of any corrective actions being taken or contemplated, including interim dates for completion of tests or studies, installation and operation of any necessary equipment, or other preventive measures.

You may present additional oral or written statements in support of your extension request. The extension request does not relieve you of your obligation to comply with the requirements of the rule. The RA may request a copy of your SPCC Plan to evaluate the extension request.

If the RA approves an extension of time for particular equipment or other specific aspects of the SPCC Plan, you must still comply with SPCC requirements not covered by the extension.

# 9. Do I need to submit the SPCC Plan to EPA?

No, SPCC Plans should be maintained at any facility normally attended at least four hours per day or at the nearest field office if the facility is not so staffed. Submit your Plan to EPA only when requested.

## 10. What should I do if I have a spill?

If your facility discharges oil to navigable waters or adjoining shorelines, you are required to follow certain federal reporting requirements. Any person in charge of an onshore or offshore facility must notify the National Response Center (NRC) immediately after he or she has knowledge of the discharge. Oil discharges that reach navigable waters must be reported to the NRC at 1-800-424-8802 or 1-202-426-2675. The NRC is the federal government's centralized reporting center, which is staffed 24 hours per day by U.S. Coast Guard personnel.

A common misunderstanding is that by reporting to the NRC you have met state and local reporting requirements. The report to the NRC only satisfies your federal reporting requirements under the Clean



Water Act. Additional state and local reporting requirements may apply. In most cases it makes sense to call 911 in the event of an oil spill, particularly in the case of flammable or combustible oil spills0

Any owner or operator of a facility regulated by the SPCC rule must also report the discharge to EPA when:

- More than 1,000 U.S. gallons of oil is discharged to navigable waters or adjoining shorelines in a single event; or
- More than 42 U.S. gallons of oil in each of two discharges to navigable waters or adjoining shorelines occurs within any twelve-month period.

*Note:* The gallon amount(s) specified (either 1,000 or 42) refers to the amount of oil that actually reaches navigable waters or adjoining shorelines, not the total amount of oil spilled. EPA considers the entire volume of the discharge to be oil for the purposes of these reporting requirements.

After the NRC has been notified, the owner/operator must provide the following information to the RA:

- Name and location of the facility
- Owner/operator name
- Maximum storage/handling capacity of the facility and normal daily throughput
- Corrective actions and countermeasures taken, including descriptions of equipment repairs and replacements
- Adequate description of the facility, including maps, flow diagrams, and topographical maps, as necessary
- Cause of the discharge to navigable waters, including a failure analysis
- Failure analysis of the system where the discharge occurred
- Additional preventive measures taken or planned to take to minimize discharge reoccurrence

The RA may require additional information. You must also send a copy of this information to the agency or agencies in charge of oil pollution control activities in the state in which the SPCC-regulated facility is located.

## 11. Who should I contact for more information?

- Visit the Office of Emergency Management's Web site at <a href="www.epa.gov/emergencies">www.epa.gov/emergencies</a>.
- See the Government Printing Office website at <u>www.gpoaccess.gov/cfr</u> to access the current CFR.
- See the *SPCC Guidance for Regional Inspectors* for more detailed guidance on specific SPCC provisions, at <a href="http://www.epa.gov/emergencies/content/spcc/spcc\_guidance.htm">http://www.epa.gov/emergencies/content/spcc/spcc\_guidance.htm</a>.

Call our hotline, the Superfund, TRI, EPCRA, RMP, and Oil Information Center (800) 424-9346 or (703) 412-9810 TDD (800) 553-7672 or (703) 412-3323 (Mon-Thurs 10:00 am to 3:00 pm ET except Federal Holidays) or see <a href="http://www.epa.gov/superfund/contacts/infocenter/index.htm">http://www.epa.gov/superfund/contacts/infocenter/index.htm</a>

#### You can also call or write:

#### U.S. EPA Headquarters

Office of Emergency Management Ariel Rios Building – Mail Code 5104A 1200 Pennsylvania Avenue Washington, DC 20460 202-564-8600

#### U.S. EPA Region I

One Congress Street, Suite 1100 Boston, MA 02114-2023 617-918-1111 CT, ME, MA, NH, RI, and VT

#### U.S. EPA Region II

2890 Woodbridge Avenue Building 209 (MS211) Edison, NJ 08837-3679 732-321-6654 NJ, NY, PR, and USVI

#### U.S. EPA Region III

1650 Arch Street (3HS61) Philadelphia, PA 19103-2029 800-438-2474 DE, DC, MD, PA, VA, and WV

#### U.S. EPA Region IV

61 Forsyth Street Atlanta, GA 30365-3415 404-562-9900 AL, FL, GA, KY, MS, NC, SC, and TN

#### U.S. EPA Region V

77 West Jackson Boulevard (SE-5J) Chicago, IL 60604-3590 312-353-2000 *IL, IN, MI, MN, OH, and WI* 

#### U.S. EPA Region VI

1445 Ross Avenue (6SF-RO) Dallas, TX 75202-2733 214-665-6444 AR, LA, NM, OK, and TX

#### U.S. EPA Region VII

901 North 5th Street Kansas City, KS 66101 913-551-7050 IA, KS, MO, and NE

#### U.S. EPA Region VIII

1595 Wynkoop Street (8EPR-ER) Denver, CO 80202-1129 800-227-8917 CO, MT, ND, SD, UT, and WY

#### U.S. EPA Region IX

75 Hawthorne Street (SFD-9-4) San Francisco, CA 94105 415-972-3052 or 415-972-3089 AZ, CA, HI, NV, AS, and GU

#### U.S. EPA Region X

1200 6th Avenue (ECL-116) Seattle, WA 98101 800-424-4372 AK, ID, OR, and WA

#### U.S. EPA Alaska Operations Office

222 West 7th Avenue, #19 Anchorage, AK 99513-7588 907-271-5083

To report an oil or chemical spill, call the National Response Center at (800) 424-8802.



United States Environmental Protection Agency

Office of Solid Waste and Emergency Response

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