Spill Prevention, Control, and Countermeasure Rule Update

U.S. Environmental Protection Agency Region Six Dallas, Texas





NON-TRANSPORTATION RELATED FACILITIES

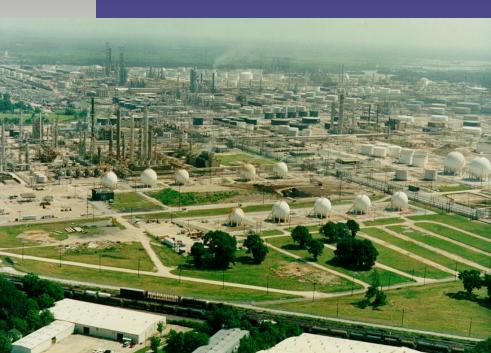
- Regulations apply to:
 - Drilling
 - Producing
 - Gathering
 - Storing
 - Processing

- Refining
- Transferring
- Distributing
- Using
- Consuming













SPCC Applicability

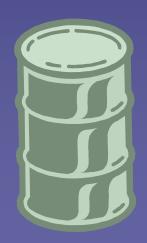
- You must have an SPCC plan if your facility meets both of following criteria:
 - 1. It can reasonably be expected to discharge oil to "navigable waterways of the U.S. and adjoining shorelines", and
 - 2. It has over aboveground capacity of 1320 gallons of oil, or has over 42,000 gallons underground storage capacity

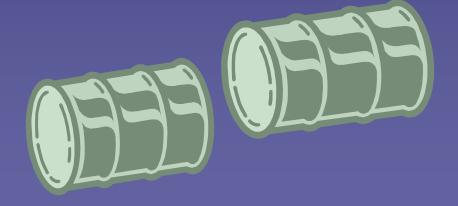


PART 112 - DOES APPLY

- SPCC-regulated facilities are those that meet the following capacity threshold:
- > 1320 gallons of oil in a single aboveground container

>1320 gallons aboveground in aggregate







PART 112 - DOES APPLY

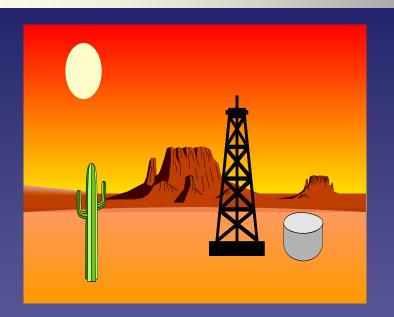




 Non-transportation related facilities which, due to their location could reasonably be expected to discharge oil into or upon the navigable waters of the United States or adjoining shorelines.



PART 112 - DOES NOT APPLY





 Non-transportation related facilities which, due to their location could not reasonably be expected to discharge oil into or upon the navigable waters of the United States or adjoining shorelines.



SPCC Applicability

- Owner/operator makes the decision on applicability of SPCC regulations to the facility
 - Does the facility meet the two thresholds (oil & waterway)?
- No requirement to submit SPCC plan to EPA
- EPA does not formally "approve" or disapprove of SPCC plan
- Plan required upon inspection



Bulk Storage Container

- Any container used to store oil
- Containers are used for purposes including, but not limited to, the storage of oil:
 - Prior to use
 - While being used
 - Prior to further distribution in commerce
- Operational equipment are not considered bulk storage containers under SPCC rule



Facility

- Any mobile or fixed, onshore or offshore building, structure, installation, equipment, pipe, or pipeline used in:
- oil well drilling operations
- oil production
- oil refining
- oil storage
- oil gathering

- oil processing
- oil transfer
- oil distribution
- waste treatment
- or in which oil is used



Extent of Facility

- Boundaries depend on site-specific factors
- Consider ownership or operation of buildings, structures, and equipment
- Evaluate types of activity at the site
- Determination made by owner/operator or PE



Shop built vs. Field Constructed





Field Constructed Tanks





Technical Guidelines Facility Drainage

- Drainage from diked storage areas should be:
 - Restrained by valves or other positive means; and
 - Emptied by pumps or ejectors that are manually activated and inspected before starting to verify that no oil will be discharged into navigable waters.
- Flapper-type drain valves should not be used to drain diked areas.
- Valves used should be manual and open-and-closed in design.



Technical Guidelines Facility Drainage (cont.)

- Drainage from undiked areas should flow into:
 - Ponds;
 - Lagoons; or
 - Catchment basins designed to retain oil or return it to the facility.
- Catchment basins should not be located in areas subject to periodic flooding.
- If plant drainage is not engineered as above, the final discharge of all in-plant ditches should be equipped with a diversion system that could, in the event of an uncontrolled spill, return the oil to the plant.









Tank Truck Loading/Unloading Rack

- Secondary Containment is required for a loading rack – always has been.
- Loading Rack (112.7(h)) requirement has specific size volume containment (volume of the single largest compartment)
- Physical barrier system, wheel chocks, warning signs, etc. required
- •Examination of lowermost drains, outlets





Technical Guidelines Bulk Storage Containers

- No container should be used for the storage of oil unless its material and construction are compatible with the material stored and the conditions of storage, such as pressure and temperature, etc.
- Secondary means of containment required for the entire contents of the largest single tank plus sufficient freeboard to allow for precipitation. Diked areas should be sufficiently impervious to contain spilled oil.



SPCC Rule Changes Overview

- Oil Pollution Prevention and Response regulation (40 CFR 112)
 - Outlines requirements for prevention of, preparedness for, and response to oil discharges
 - Prevention requirements called the "SPCC rule"
 - Includes requirements for Facility Response Plans (FRPs)
- Requirements help prevent oil discharges from reaching navigable waters or adjoining shorelines
- Requires specific facilities to develop SPCC Plans
 - Details equipment, workforce, procedures, and training to prevent, control, and provide adequate countermeasures to a discharge of oil



New Streamlined Requirements for...

- Facilities with an oil storage capacity of 10,000 gallons or less ("qualified facilities")
- Oil-filled operational equipment
- Mobile refuelers



The rule also...

- Exempts motive power containers
- Eliminates certain requirements for animal fats and vegetable oils
- Provides compliance date extension for farms



Qualified Facilities

- Must meet eligibility criteria to use alternative option
- Streamlined regulatory requirements
 - Self-certified SPCC Plan instead of one reviewed and certified by a Professional Engineer
 - Streamlined integrity testing requirements
 - Streamlined facility security requirements
- May also use qualified oil-filled operational equipment option since an impracticability determination by a PE is not necessary



Self-Certification

- Owner/operator attests that he/she is familiar with the rule and has visited and examined the facility
- Owner/operator also certifies that:
 - The Plan has been prepared in accordance with accepted and sound industry practices and standards and with the rule requirements
 - Procedures for required inspections and testing have been established
 - The Plan is being fully implemented
 - The facility meets the qualifying criteria
 - The Plan does not deviate from rule requirements except as allowed and as certified by a PE
 - Management approves the Plan and has committed resources to implement it



Alternative Measures

- May use environmentally equivalent measures and make impracticability determinations
 - <u>if</u> reviewed and certified by a PE
- Rule provides alternative requirements for integrity testing and security
 - do not need to be reviewed and certified by a PE



Technical Amendments

- May self-certify technical amendments as long as a PE has not certified the portion being changed
- If a PE certified the affected portion of the Plan, then a PE must certify the technical amendment



Alternative Integrity Testing Requirements for Qualified Facilities

- Test and inspect each aboveground container for integrity on a regular schedule and whenever material repairs are made
- Flexibility to determine, in accordance with industry standards:
 - Appropriate qualifications for personnel performing tests and inspections
 - Frequency and type of testing and inspections that take into account container size, configuration, and design
 - No longer specifically requires both visual inspection and another testing method



Alternative Facility Security Requirements for Qualified Facilities

- To prevent acts of vandalism and assist in the discovery of oil discharges, owners/operators of qualified facilities may describe how they:
 - Control access to the oil handling, processing and storage areas
 - Secure master flow and drain valves and out-of-service and loading/unloading connections of oil pipelines
 - Prevent unauthorized access to starter controls on oil pumps
 - Address the appropriateness of security lighting



Qualified Facilities - Summary

If a facility	And the facility	Then the owner/operator of the facility
has 10,000 gallons or less in aggregate aboveground oil storage capacity	meets the oil discharge history criteria described below	may prepare a self-certified SPCC Plan instead of one reviewed and certified by a Professional Engineer (PE)
		may meet tailored facility security and tank integrity inspection requirements without PE certification
		may prepare a plan which includes PE-certified environmentally equivalent measures or impracticability determinations that would require PE certification for only the portions dealing with environmental equivalence and impracticability determinations. The remaining portions of the plan could be self-certified by the facility owner/operator.

To use these alternatives a facility must meet requirements for its reportable discharge history. The facility must <u>not</u> have had (1) a single discharge of oil to navigable waters exceeding 1,000 U.S. gallons or (2) two discharges of oil to navigable waters each exceeding 42 U.S. gallons within any twelve-month period, in the three years prior to the SPCC Plan certification date, or since becoming subject to 40 CFR part 112 if operating for less than three years.



Oil-Filled Operational Equipment: Definition

- Equipment that includes an oil storage container (or multiple containers) in which the oil is present solely to support the function of the apparatus or the device
- Not considered a bulk storage container
- Does not include oil-filled manufacturing equipment (flowthrough process)
- Piping might be considered a component of oil-filled operational equipment:
 - Yes, if it is inherent to the equipment and used solely to facilitate operation of the device
 - No, if it is not intrinsic to the equipment (i.e., flowlines, transfer piping or piping associated with a process)



Oil-Filled Operational Equipment

• Examples: hydraulic systems, lubricating systems, gear boxes, machining coolant systems, heat transfer systems, transformers, circuit breakers, electrical switches, other systems containing oil solely to enable the operation of the device







Oil-Filled Operational Equipment

- Alternative to the general secondary containment requirements for qualified oil-filled operational equipment:
 - Prepare an oil spill contingency plan and a written commitment of manpower, equipment, and materials
 - Have an inspection or monitoring program to detect equipment failure and/or a discharge
- Individual impracticability determination for each piece of equipment is not required



Contingency Plan

- Detailed oil spill response and removal plan to control, contain, and recover an oil discharge in quantities that may be harmful to navigable waters/adjoining shorelines
- Elements outlined in 40 CFR 109.5:
 - Authorities, responsibilities, and duties of all persons, organizations, or agencies involved in oil removal operations
 - Notification procedures for the purpose of early detection and timely notification of an oil discharge
 - Provisions to ensure that full resource capability is known and can be committed during an oil discharge
 - Provisions for well-defined and specific actions to be taken after discovery and notification of an oil discharge
 - Procedures to facilitate recovery of damages and enforcement measures
- A sample contingency plan is available in the SPCC Guidance for Regional Inspectors available at www.epa.gov/oilspill



Written Commitment

- Facilities must be able to implement the contingency plan
- Owner/operator must provide a written commitment of manpower, equipment, and materials to expeditiously control and remove any quantity of oil discharged that may be harmful
- Elements also included in 40 CFR 109.5



Inspections and Monitoring Program Requirements

- Develop an appropriate set of procedures for inspections or a monitoring program for equipment
- Written description of the inspection or monitoring program included in SPCC Plan
- Keep a record of inspections and tests, signed by the appropriate supervisor or inspector, for three years



Oil-Filled Operational Equipment -Summary

If the facility	And the equipment	Then the owner/operator of the facility
has oil-filled operational equipment	meets the oil discharge history criteria described below	may implement an inspection and monitoring program, develop an oil spill contingency plan, and provide a written commitment of resources to control and remove oil discharged, for qualified equipment in lieu of secondary containment for the oil-filled operational equipment
		does not need to make an impracticability determination for each piece of equipment

To use this alternative, a facility's oil-filled operational equipment must meet requirements for its reportable discharge history. The facility's oil-filled operational equipment must <u>not</u> have had (1) a single discharge of oil to navigable waters exceeding 1,000 U.S. gallons or (2) two discharges of oil to navigable waters each exceeding 42 U.S. gallons within any twelve-month period, in the three years prior to the SPCC Plan certification date, or since becoming subject to 40 CFR part 112 if operating for less than three years.



Mobile Refuelers: Definition

- Bulk storage container onboard a vehicle or towed, that is designed or used solely to store and transport fuel for transfer into or from an aircraft, motor vehicle, locomotive, vessel, ground service equipment, or other oil storage container
- Include vehicles of various sizes equipped with a bulk storage container that is used to fuel or defuel aircraft, motor vehicles, locomotives, tanks, vessels, or other oil storage containers



Mobile Refuelers

- Owners and operators of mobile refuelers at a non-transportation-related facility will no longer need to provide <u>sized</u> secondary containment
 - Sufficient to contain the capacity of the largest single compartment or container with enough volume to contain precipitation
- Does not apply to vehicles that are used primarily to store oil in a stationary location
- General secondary containment requirements still apply!



General Secondary Containment Requirements

- General secondary containment should be designed to address the most likely discharge from the container
 - Requires appropriate containment and/or diversionary structures or equipment to prevent a discharge to navigable waters or adjoining shorelines
 - Allows for the use of certain types of active containment measures that prevent a discharge to navigable waters or adjoining shorelines.



Active Measures

- Active containment measures require deployment or other specific action by the owner or operator
- May be appropriate for discharges that occur during manned activities if it:
 - Can contain the volume and rate of oil
 - Is properly constructed
 - Is deployed in a timely manner







Motive Power Container: Definition

- Any onboard bulk storage container used primarily to power the movement of a motor vehicle, or ancillary onboard oil-filled operational equipment
- Examples: automotive, airplane, or truck fuel tanks
- An onboard bulk storage container which is used to store or transfer oil for further distribution is not a motive power container
- Definition does not include oil drilling or workover equipment, including rigs
 - But fuel tanks on trucks, automobiles, bulldozers, seismic exploration vehicles, or other earth-moving equipment at drilling or workover facilities are considered to be "motive power" containers



Animal Fats and Vegetable Oils

- Removed sections for facilities with animal fats and vegetable oils that are not appropriate:
 - Onshore oil production (§112.13)
 - Onshore oil drilling and workover facilities (§112.14)
 - Offshore oil drilling, production, or workover facilities (§112.15)
- EPA examining if differentiated SPCC requirements for animal fats and vegetable oils are appropriate



Compliance Dates — Facilities other than Farms (Current)

Extension for facilities

A facility (other than a farm) starting operation	Must
On or before 8/16/02	Maintain existing Plan. Amend and implement Plan no later than 11/10/2010.
After 8/16/02 through 11/10/2010	Prepare and implement Plan no later than 11/10/2010.
After 11/10/2010	Prepare and implement Plan before beginning operations.



For More Information

- SPCC rule amendment (71 FR 77266)
 - http://www.gpoaccess.gov/fr/
- Oil Pollution Prevention regulation (40 CFR part 112)
 - http://www.gpoaccess.gov/cfr/
- EPA Office of Emergency Management Web site
 - www.epa.gov/emergencies
 - www.epa.gov/oilspill
- Superfund, TRI, EPCRA, RMP, and Oil Information Center
 - (800) 424-9346 or (703) 412-9810
 - TDD (800) 553-7672 or (703) 412-3323
 - www.epa.gov/superfund/resources/infocenter



Questions and Answers



