

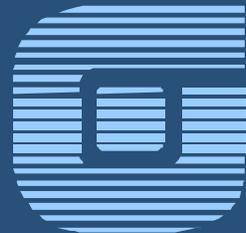


Compliance with the “New” SPCC Rule

**Is your installation meeting
the requirements?**

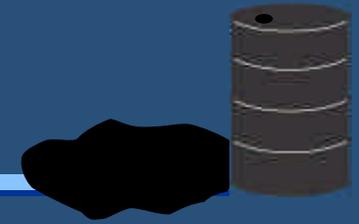
*Randy S. Waibel
Managing Associate*

April 8, 2003



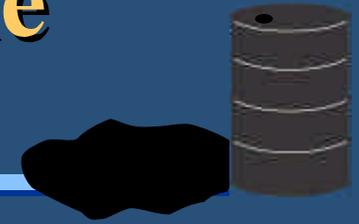
O'BRIEN & GERE
ENGINEERS, INC.

Introduction



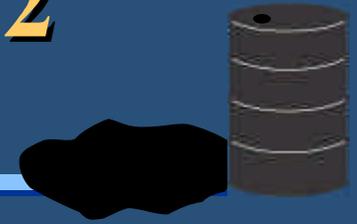
- Background:
 - ◆ The Oil Pollution Prevention Regulations, commonly known as the “SPCC Regulations,” contained at 40 CFR Part 112, were promulgated under the Clean Water Act (CWA) by the USEPA on December 11, 1973 (38 FR 34164)
- Purpose:
 - ◆ To address the potential environmental threat posed by petroleum and non-petroleum oils, the U.S. Environmental Protection Agency (USEPA) has established regulations designated to prevent oil spills

Three Primary Goals of the SPCC Regulations:



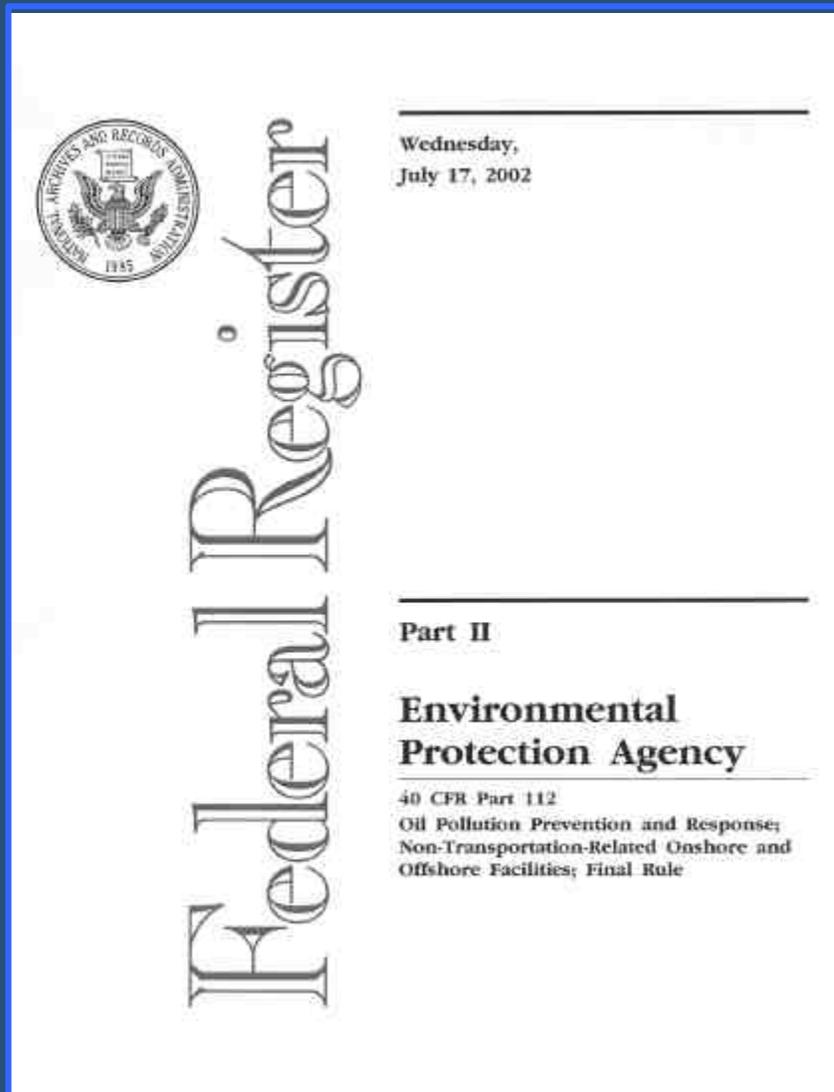
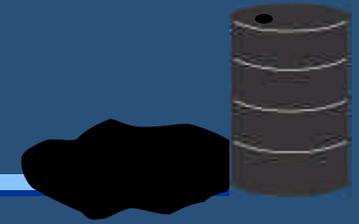
- To prevent oil spills
- To prevent spilled oils from reaching navigable waters or adjoining shorelines
- To prepare for responding to an oil spill

What does 40 CFR Part 112 require facilities to do?



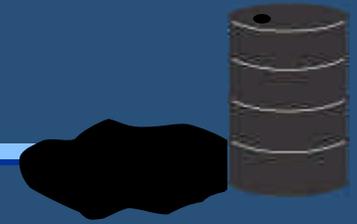
- The regulations primarily require that all subject facilities prepare and implement a Spill Prevention, Control and Countermeasure (SPCC) Plan
- An SPCC Plan is a detailed, facility-specific written document that describes how a facility's operations comply with the requirements of the regulations

Regulatory Background



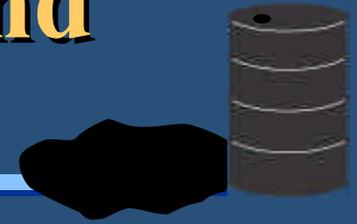
- The USEPA proposed changes to 40 CFR Part 112 on:
 - ◆ October 22, 1991
 - ◆ February 17, 1993
 - ◆ December 2, 1997
- On June 28, 2002 the USEPA amended the SPCC rule, which was published in the Federal Register (67 Fed. Reg. 47042) on July 17, 2002.
- The SPCC rule amendments became effective on August 16, 2002

SPCC Rule Applicability



- Non-Transportation Related Facilities that:
 - ◆ Due to their location, could reasonably be expected to discharge oil into or upon navigable waters of the U.S of adjoining shorelines, and
 - ◆ Have an aggregate aboveground oil storage capacity of >1,320 gallons, **or**
 - ◆ Have a total underground oil storage capacity of >42,000 gallons (includes USTs that are not subject to all the technical requirements of Part 280 or 281.

Comparison of the “Old” and “New” SPCC Rule



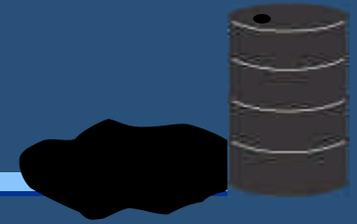
- The “New” (actually revised) Rule:
 - ◆ changes should/shall to must
 - ◆ exempts USTs (completely buried) if they are subject to ALL of 40 CFR Part 280 or 281
 - ◆ establishes a de minimis container size of 55-gallons
 - ◆ maintains the aggregate aboveground storage capacity of 1,320 gallons, but eliminates the former 660 gallon single container threshold
 - ◆ applies to the storage and operational use of oil

Comparison of the “Old” and “New” SPCC Rule (cont’d)



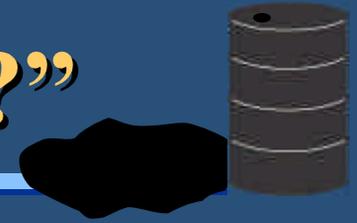
- The “New” (actually revised) Rule:
 - ◆ establishes a spill volume of 42 gallons (related to SPCC reporting requirement)
 - ◆ provides for a flexible SPCC plan format – as long as a cross-reference matrix is provided
 - ◆ plan review period is extended from once every 3 years to once every 5 years
 - ◆ allows deviations of most of the requirements when “equivalent environmental protection” can be provided.

General Applicability and Jurisdiction



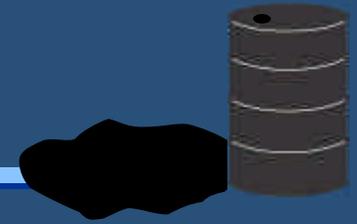
- “Old” Rule – applied to owners or operators of facilities that “drill, produce, gather, refine transfer, distribute, or consume oil or oil products”
- “New” Rule – now applies to facility owners or operators that “use oil in quantities that may be harmful”

What's considered an "Oil?"



- “Oil” means oil of any kind or in any form, including but not limited to:
 - ◆ Fats, oils or greases of animal, fish, or marine mammal origin
 - ◆ Vegetable oils, including oils from seeds, nuts, fruits or kernels
 - ◆ Other oils and greases, including petroleum, fuel oil, sludge, synthetic oils, mineral oils, oil refuse, or oils mixed with wastes other than dredged spoil.

General Applicability – Thresholds

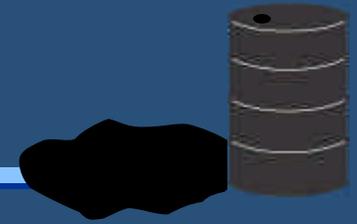


- Revised regulations [Part 112.1(d)(2)] regulates facilities with:
 - ◆ An aboveground storage capacity of greater than 1,320 gallons
 - ◆ USTs that are not subject to all the technical requirements of Part 280 or 281 (i.e., heating oil tanks)



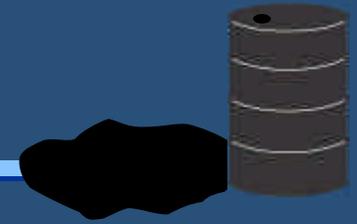
When USTs are exempt from the SPCC requirements the tank locations must be presented on the “facility diagram” as required by Part 112.7(a)(3)

General Applicability – Thresholds (cont'd)



- Aboveground storage capacity excludes:
 - ◆ The capacity of “permanently closed” containers (as defined in 112.2)
 - ◆ Containers, equipment, reservoirs, etc. with storage capacities of less than 55 gallons

General Applicability – 40 CFR Part 112.1(d)(2)



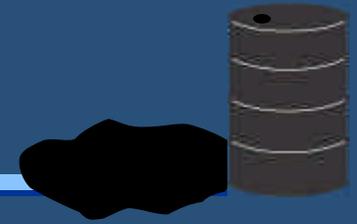
- Here's some examples to consider:
 - ◆ 2,000-gal AST capacity + 5,000-gal UST (not subject to Part 280) = SPCC Plan is required and must address the 2,000-gals and the 5,000 gal UST
 - ◆ 2,000-gal AST capacity + 5,000-gal UST (subject to Part 280) = SPCC Plan is required and must address the 2,000-gals only
 - ◆ 1,300-gal AST capacity + 60,000-gal UST (subject to Part 280) = SPCC Plan is not required

Wastewater Treatment Facilities



- Publicly Owned Treatment Works (POTWs) and industrial facilities treating oil wastewater are now exempt
- However, “any oil storage capacity associated with or incidental to wastewater treatment facilities or parts thereof continues to be subject to Part 112”

Wastewater Treatment Facilities (cont'd)

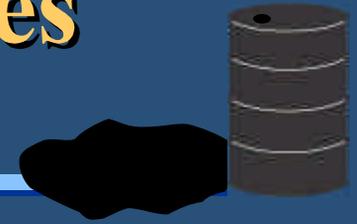


- Examples of regulated treatment processes include:
 - ◆ “Bulk storage containers, hydraulic equipment associated with the treatment process, containers used to store oil which supply an emergency generator associated with the treatment process, and slop tanks or other containers used to store oil resulting from treatment.”
 - ◆ Oil/water separators that have an oil storage capacity would therefore be subject to the SPCC requirements



A mixture of wastewater and oil is still considered an “oil” under the statutory and regulatory definition of the term

“New” SPCC Rule Deadlines (At least as of today)



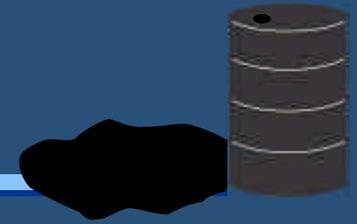
- July 17, 2002 Requirement:
 - ◆ Existing facilities – review/update SPCC Plans before *February 17, 2003* and implement by *August 18, 2003*
- January 9, 2003 Interim Requirement (60-Day Extension):
 - ◆ Existing facilities – review/update SPCC Plans before *April 17, 2003* and implement by *October 18, 2003*
- January 9, 2003 Proposed Requirement (One Year Extension):
 - ◆ Existing facilities – review/update SPCC Plans before *February 17, 2004* and implement by *August 18, 2004*

“New” SPCC Rule Reorganization – 40 CFR Part 112



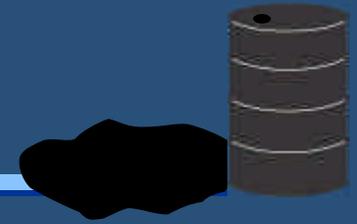
- Subpart A – Part 112.7: Applicable to all subject facilities
- Subpart B – Parts 112.8-112.11: Applicable to facilities that use/store petroleum and non-petroleum oils, excluding animal or vegetable oils
- Subpart C – Parts 112.12-112.15: Applicable to facilities that use/store animal fats, oils and greases, fish and marine mammal oils, or oils of vegetable origin including oils from seeds, nuts, fruits, and kernels

SPCC Plan Certification



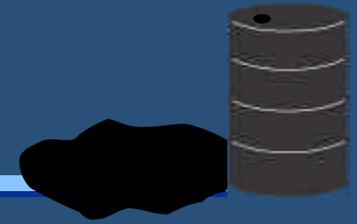
- “Old” requirement – Part 112.3(d), a P.E. must have “examined” the facility and being familiar with the provisions of Part 112, attested that the SPCC Plan had been prepared “in accordance with good engineering practices.”

SPCC Plan Certification



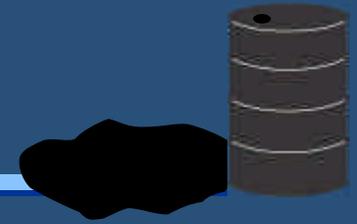
- “New” requirement – Part 112.3(d), by certification, the P.E. attests that:
 - ◆ Familiar with the requirements of the SPCC rule
 - ◆ His/her agent has visited and examined the facility
 - ◆ The Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards, and with the requirement of the SPCC rule
 - ◆ Procedures for required inspections and testing have been established, and
 - ◆ The Plan is adequate for the facility

SPCC Plan – General Requirements



- Old requirements:
 - ◆ SPCC Plan must be prepared in accordance with good engineering practice, and have the full approval of management at a level with authority to commit the necessary resources
 - ◆ SPCC Plan must follow the sequence specified in the rule, and include a discussion of the facility's conformance with the requirements of the SPCC rule
- New requirements:
 - ◆ SPCC Plan may follow the sequence specified in the rule, however, if another format is used a cross-reference must be provided.
 - ◆ Must include a discussion of facility's conformance with the requirements

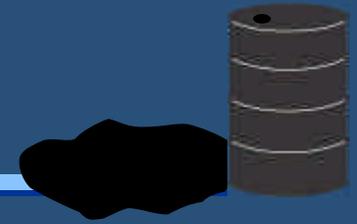
SPCC Plan – General Requirements (cont'd)



➤ Facility Diagram

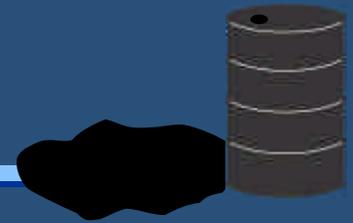
- ◆ As a new requirement, a “facility diagram” must now be prepared, and must present the following:
 - Location and description of the contents of each subject container, equipment, reservoir, including tanks, 55-gallon drums, transformers, oil-filled operational equipment, and exempted USTs
 - All associated transfer areas and connecting pipelines

SPCC Plan – General Requirements (cont'd)



- Deviations:
 - ◆ The USEPA allows for the deviations from the substantive requirements of Part 112 (except for the secondary containment requirements), if the facility explains the reason for such nonconformance, and provides “equivalent environmental protection” with an alternative measure

SPCC Plan – General Requirements (cont'd)

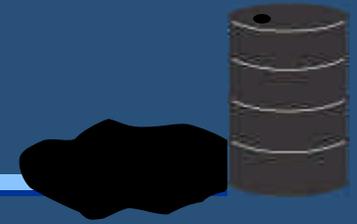


- Hardcopy vs. Electronic SPCC Plans
 - ◆ SPCC Plans are allowed to be maintained electronically, such as on a facility's intranet environmental management system, FMIS or GIS, but a backup copy (signed/sealed) must always be available for use in the event of an emergency



At least one hardcopy SPCC Plan must be prepared in English for comprehension by an EPA inspector

SPCC Plan – General Requirements (cont'd)

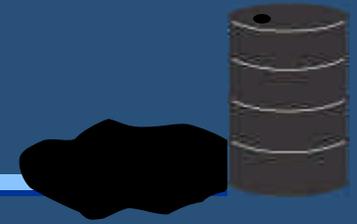


- Written Procedures
 - ◆ Old Requirement – Part 112.7(e)(8):
 - Must conduct required inspections in accordance with written procedures
 - Must maintain written procedures, including a signed record of inspections, within the SPCC Plan for a period of 3 years
 - ◆ New Requirement – Part 112.7(e)(8):
 - Must conduct required inspections and tests in accordance with written procedures
 - Must maintain written procedures, including a signed record of inspections and tests, within the SPCC Plan for a period of 3 years



Facility's may now use customary business records to eliminate redundant records

SPCC Plan – Technical Requirements

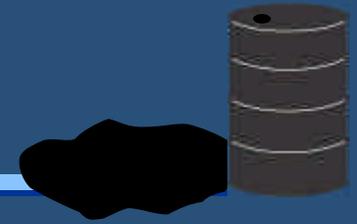


- “Field-Constructed” Aboveground Containers – Part 112.7(i)
 - ◆ Facility’s must evaluate field-constructed aboveground containers for brittle fracture when:
 - such containers undergoes repair, alteration, reconstruction, or change in service
 - a discharge or failure has occurred due to brittle fracture or other catastrophic tank failure



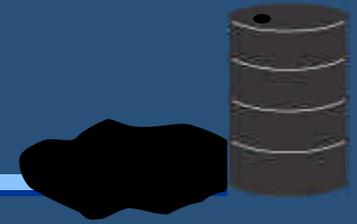
The presence or absence of secondary containment does not eliminate the need for brittle fracture evaluation

SPCC Plan – Technical Requirements (cont'd)



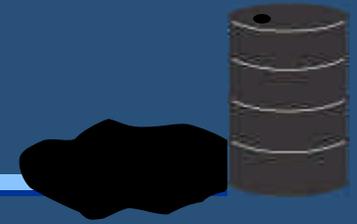
- Aboveground Container Integrity Testing Requirements
 - ◆ Old Requirement – Part 112.7(e)(2)(vi):
 - Aboveground containers are subject to periodic integrity testing using visual inspection, hydrostatic testing, or nondestructive shell thickness testing
 - Keep records for comparison purposes
 - Periodically inspect containers for signs of deterioration, leaks, etc.
 - ◆ New Requirement – Part 112.8(c)(6):
 - Test containers for integrity on a regular schedule, and when repairs are performed
 - Include tank supports and foundations in inspections
 - Combine visual inspection + another testing technique
 - Keep records for comparison purposes

SPCC Plan – Technical Requirements (cont'd)



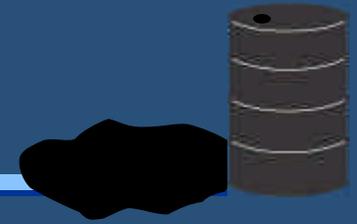
- Aboveground Container Integrity Testing Requirements (*continued*)
 - ◆ Small containers (i.e., 55-gal drums)
 - can be inspected by visual methods only, provided all sides can be seen and no sides are in contact with the ground
 - a deviation, such as only providing visual inspections, must be documented, as required by 40 CFR Part 112.7(a)(2)

SPCC Plan – Technical Requirements (cont'd)



- Aboveground Container Integrity Testing Requirements
(continued)
 - ◆ P.E. Requirement – P.E. must work with facility to develop inspection and testing schedule and methodology based on state/ local requirements, industry standards, and manufacturer recommendations
 - Part 112.7(d) – Periodic Integrity Inspections for Containers, Pipes, Valves
Example: API Standard 653, Tank Inspection Repair, Alteration, and Reconstruction
 - Part 112.8(c)(6) – Bulk Storage Containers
Example: API Standard 650, Welded Steel Tanks for Oil Storage

SPCC Plan – Technical Requirements (cont'd)

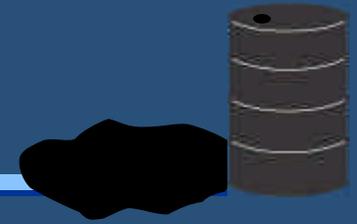


➤ Loading Rack Areas

◆ Old Requirement – Part 112.7(e)(4)(ii):

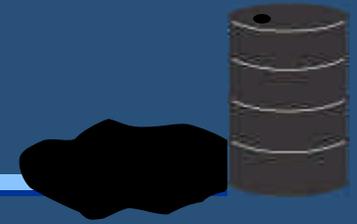
- “Where rack area drainage does not flow into a catchment basin or treatment facility designed to handle spills, a quick drainage system **should** be used for tank truck loading and unloading areas. The containment system should be designed to hold at least the maximum capacity of any single compartment of tank car or tank truck loaded or unloaded in the plant.”

SPCC Plan – Technical Requirements (cont'd)



- Loading Rack Areas
 - ◆ New Requirement – Part 112.7(h)(1):
 - “Where loading/unloading area drainage does not flow into a catchment basin or treatment facility designed to handle discharges, use a quick drainage system for tank car or tank truck loading and unloading areas. You **must** design any containment system to hold at least the maximum capacity of any single compartment of a tank car or tank truck loaded or unloaded at the facility.”

SPCC Plan – Technical Requirements (cont'd)

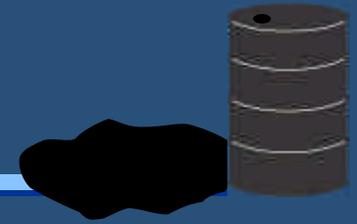


➤ Loading Rack Areas

◆ Preamble – Part 112.7(h)(1): *Response to comments*

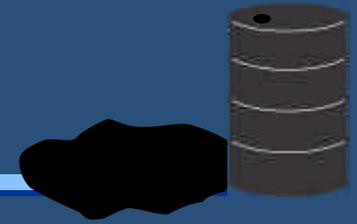
- “This section is applicable to **any** non-transportation-related or terminal facility where oil is loaded or unloaded from or to a tank car or tank truck. It applies to... **all** facilities, large or small. All of these facilities have a risk of discharge from transfers.”
- “We disagree that the section regulates activities already under the purview of the U.S. DOT. We regulate the environmental aspects of loading/unloading transfers at non-transportation-related facilities, which are legitimately part of a prevention plan. DOT regulates other aspects of those transfers, such as safety measures.”

SPCC Plan – Technical Requirements (cont'd)



- Loading Rack Areas (Actually, what is a “Loading Rack Area?”)
 - ◆ Communications received from USEPA have indicated that the definition of “loading rack area” will be identified in the near future
 - ◆ USEPA may change the current applicability of all unloading/loading areas to only those areas where containers share common fillports or dispensing pipes

Recap



- Regulations now allow greater flexibility to achieve compliance – performance oriented
- Compliance deadlines
 - ◆ Update SPCC Plans (next week, April 17, 2003)
 - ◆ Implement SPCC Plans (October 18, 2003)
 - ◆ One year extension?
- Language change from “should/shall” to must = “NEW” Requirements for some facilities
- Greater responsibility of the certifying P.E.
- Lots of confusion/Pending litigation

