Understanding the Flexibility Associated with the SPCC Rule

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What is SPCC?

- Spill Prevention Control and Countermeasure (SPCC) rule - 40 CFR part 112
- Requires facilities to develop and implement SPCC Plan:
  - Operating procedures to Prevent an oil discharge;
  - Control measures to prevent an oil discharge from entering navigable waters; and
  - Countermeasures to contain, clean up, and mitigate the effects of any oil discharge that affects navigable waters.
Is SPCC New?

- Originally promulgated December 11, 1973
  - Effective: January 10, 1974
- Revised rule published July 17, 2002
  - Effective: August 16, 2002
Today’s Objectives

● Performance-based provisions of the rule
  ● Environmental Equivalence
  ● Secondary Containment & Impracticability

● Documentation in the SPCC Plan

● Discuss the role of the EPA Inspector during a Plan review
Performance-Based

- Flexibility to comply with rule requirements
  - Allows for consideration of special circumstances
  - Use of protective industry practices and technologies
- Determinations made on a site-specific basis
- Requires consideration of good engineering practices by a Professional Engineer (PE)
Environmental Equivalence (EE)

- Allows for deviations from specific rule requirements (§112.7(a)(2))

- Owner/operator responsible to select, document and implement alternate measure

- PE certifies the SPCC Plan in accordance with good engineering practices, including consideration of industry standards
What is involved in EE?

- **Owner/Operator:**
  - Identify reason to deviate from rule requirement
  - Determine an alternate, environmentally equivalent method of spill prevention, control or countermeasure
    - *Goal is to achieve the same desired outcome* - need not be mathematical equivalence

- **SPCC Plan includes:**
  - Reason for nonconformance in Plan
  - Describe in detail the alternate methods and how it achieves equivalent environmental protection

- The EPA Regional Administrator has authority to require an amendment of the Plan
Eligibility for EE

Eligible:

- Most technical elements of rule §§112.7-112.12
- Security
- Loading/Unloading Rack
- Facility Drainage
- Bulk Storage Container
- Piping

NOT Eligible:

- Secondary Containment
- General recordkeeping
- Training provisions
- Administrative provisions §§112.1-112.5
  - Includes definitions
### Requirements eligible for environmental equivalence, by facility type

From: Table 3-1 (page 3-4).

<table>
<thead>
<tr>
<th>Facility Type/Provision</th>
<th>Sections Petroleum Oils and Non-Petroleum Oils</th>
<th>Animal Fats and Vegetable Oils</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All regulated facilities</strong></td>
<td></td>
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<tr>
<td>Security</td>
<td>112.7(g)</td>
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<tr>
<td>Loading and unloading racks</td>
<td>112.7(h)(2) and 112.7(h)(3)</td>
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<tr>
<td>Brittle fracture evaluation</td>
<td>112.7(i)</td>
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<tr>
<td><strong>Onshore Facilities</strong></td>
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<tr>
<td>Facility drainage/undiked areas</td>
<td>112.8(b), 112.9(b), 112.10(b) and 112.11(b)</td>
<td>112.12(b)</td>
</tr>
<tr>
<td>Type of bulk storage container</td>
<td>112.8(c)(1) and 112.9(c)(1)</td>
<td>112.12(c)(1)</td>
</tr>
<tr>
<td>Drainage of diked areas</td>
<td>112.8(c)(3)</td>
<td>112.12(c)(3)</td>
</tr>
<tr>
<td>Corrosion protection of buried storage tanks</td>
<td>112.8(c)(4) and 112.8(c)(5)</td>
<td>112.12(c)(4) and 112.12(c)(5)</td>
</tr>
<tr>
<td>Integrity testing and/or container inspection</td>
<td>112.8(c)(6) and 112.9(c)(3)</td>
<td>112.12(c)(6)</td>
</tr>
<tr>
<td>Monitoring internal heating coils</td>
<td>112.8(c)(7)</td>
<td>112.12(c)(7)</td>
</tr>
<tr>
<td>Engineering of bulk container installation (overfill prevention)</td>
<td>112.8(c)(8) and 112.9(c)(4)</td>
<td>112.12(c)(8)</td>
</tr>
<tr>
<td>Monitoring treatment/disposal facilities</td>
<td>112.8(c)(9) and 112.9(d)(2)</td>
<td>112.12(c)(9)</td>
</tr>
<tr>
<td>Removal of oil in diked areas and production facility drainage</td>
<td>112.8(c)(10)</td>
<td>112.12(c)(10)</td>
</tr>
<tr>
<td>Piping</td>
<td>112.8(d), 112.9(d)(1), and 112.9(d)(3)</td>
<td>112.12(d)</td>
</tr>
<tr>
<td><strong>Oil drilling and workover facilities</strong></td>
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<tr>
<td>Facility drainage/undiked areas (rig position)</td>
<td>112.10(b)</td>
<td>N/A</td>
</tr>
<tr>
<td>Blowout prevention and well control system</td>
<td>112.10(d)</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Offshore Facilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Offshore oil drilling and workover facilities</td>
<td>112.11(b) through 112.11(p)</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Overview of Secondary Containment

● **General Provision, §112.7(c)**
  - Addresses the potential for oil discharges from all regulated parts of a facility
  - Containment method, design, and capacity are determined by good engineering practice to contain an oil discharge until clean-up occurs
  - Intended to address most likely discharge

● **Specific Provisions**
  - Address the potential of oil discharges from specific parts of a facility where oil is stored or handled
  - Containment design, sizing, and freeboard requirements are specified by the SPCC rule to address a major container failure
## SPCC Secondary Containment Provisions

<table>
<thead>
<tr>
<th>Type of Facility</th>
<th>Secondary Containment</th>
<th>Rule Section(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Facilities</td>
<td>General containment (areas with potential for discharge, e.g. piping, oil-filled operating and manufacturing equipment, and non-rack related transfer areas) Loading/unloading racks</td>
<td>112.7(c)</td>
</tr>
<tr>
<td>Onshore Storage</td>
<td>Bulk storage containers</td>
<td>112.8(c)(2)/112.12(c)(2)</td>
</tr>
<tr>
<td>Onshore Oil Drilling and Workover</td>
<td>Mobile or portable oil containers</td>
<td>112.8(c)(11)/112.12(c)(11)</td>
</tr>
<tr>
<td>Onshore Production</td>
<td>Bulk storage containers, including tank batteries, separation, and treating facility installations</td>
<td>112.9(c)(2)</td>
</tr>
<tr>
<td>Offshore Oil Drilling Production and Workover</td>
<td>Mobile drilling or workover equipment</td>
<td>112.10(c)</td>
</tr>
<tr>
<td>Offshore Oil Drilling Production and Workover</td>
<td>Oil drilling, production, or workover equipment</td>
<td>112.7(c)</td>
</tr>
</tbody>
</table>
Secondary Containment Methods

Examples of methods to provide secondary containment in §112.7(c)

- Dikes, berms, or retaining walls
- Curbing
- Culverting, gutters, or other drainage systems
- Weirs
- Booms
- Barriers
- Spill diversion ponds and retention ponds
- Sorbent materials
- Drip pans
- Sumps and collection systems
Secondary Containment Flexibility

- Passive and Active Measures
  - **Passive measures**
    - Permanent installations
    - Do not require deployment or action by the owner operator
  - **Active containment measures**
    - Require deployment or other specific action
    - Used when permanent containment is not feasible
Active Measures

- Active measures can include:
  - Placing storm drain cover over a drain to contain a potential discharge, prior to transfer activity
  - Placing storm drain cover over a drain after discharge, but before the oil reaches the drain
  - Using spill kits in the event of an oil discharge
  - Use of spill response capability in the event of an oil discharge-spill response teams
  - Closing gate valve that controls area drainage prior to a discharge
Impracticability Provision (§112.7(d))

- **Document** in Plan why secondary containment is impracticable

- For bulk storage containers:
  - Conduct periodic integrity testing of containers; and
  - Periodic integrity testing and leak testing of valves and piping associated with containers

- Unless facility has submitted a Facility Response Plan (FRP) under §112.20:
  - An oil spill contingency plan in accordance with 40 CFR 109; and
  - A written commitment of manpower, equipment, and materials required to control and remove any quantity of oil discharged that may be harmful
Impracticability of Secondary Containment

● When a facility owner/operator is incapable of providing secondary containment:
  ● Space and geographical limitations
  ● Local zoning ordinances
  ● Fire codes
  ● Safety
  ● Other good engineering practice reasons

● Economic cost may be considered
  ● Not the only determining factor in claiming impracticability
Active Measures vs. Contingency Plan

- **Active secondary containment measures**
  - Requires a deployment action;
  - Put in place prior to or immediately upon discovery of oil discharge

  **Purpose of active measures:**
  - To contain an oil discharge *before it reaches* navigable waters or adjoining shorelines

- **Contingency plan**
  - Detailed oil spill response plan developed when secondary containment is impracticable

  **Purpose of contingency planning:**
  - Outline response capability or countermeasures to limit the quantity of a discharge reaching navigable waters or adjoining shorelines, and
  - Address response to a discharge of oil *after it has reached* navigable waters or adjoining shorelines
Documentation

- Critical that the SPCC Plan includes detailed description for environmental equivalent alternatives
- Use of active secondary containment must also be fully described
  - Active measures cannot often be visually identified—inspector will rely on description in Plan
- Plan must clearly explain determination of impracticability
  - If no FRP, address additional requirements for oil spill contingency plan and written commitment of resources
Role of the EPA Inspector

- Gather information and data to determine whether a facility is compliant with SPCC requirements
- Check that measures described in the SPCC Plan are implemented at the facility and Plan is certified by PE
- Fully document all observations and other pertinent information
Role of the EPA Inspector

- If measures documented in the SPCC Plan:
  - Do not meet the standards of common sense
  - Appear to be at odds with recognized industry standards
  - Does not meet overall objective of oil spill response/prevention, or
  - Appears inadequate for the facility then…

  …appropriate follow-up action may be warranted.
Summary

- There is flexibility in the SPCC rule
  - Environmental Equivalence for technical provisions
  - Impracticability for secondary containment provisions
- Requires good engineering practices
- Documentation is critical
- Inspectors will review Plans for proper documentation and compare to implementation at the facility
SPCC Guidance for Regional Inspectors

Released in December 2005

Available on EPA website at [www.epa.gov/oilspill](http://www.epa.gov/oilspill)

- Clarifies role of the inspector in reviewing implementation of performance-based provisions
- Is a “living document” and may be updated or revised
- Does not address all aspects of the SPCC rule
For More Information

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EPA Oil Program Website: http://www.epa.gov/oilspill

Superfund, TRI, EPCRA, RMP and Oil Information Center:
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