SPCC 40 CFR Part 112 Overview

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Compliance Assistance Conference
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This presentation is meant to provide an overview to EPA inspectors, owners and operators of facilities of regulated, and the general public on the implementation of the Spill Prevention, Control, and Countermeasure (SPCC) rule (40 CFR Part 112). This presentation seeks to promote nationally-consistent implementation of the SPCC rule. The statutory provisions and EPA regulations described in this presentation contain legally binding requirements. This presentation does not substitute for those provisions or regulations, nor is it a regulation itself. In the event of a conflict between the discussion in this presentation and any statute or regulation, this presentation is not controlling. This presentation does not impose legally binding requirements on EPA or the regulated community, and might not apply to a particular situation based upon the circumstances. The word “should” as used in this presentation is intended solely to recommend or suggest an action, and is not intended to be viewed as controlling. Examples in this presentation are provided as suggestions and illustrations only. While this presentation indicates possible approaches to assure effective implementation of the applicable statute and regulations, EPA retains the discretion to adopt approaches on a case-by-case basis that differ from this presentation where appropriate. Any decisions regarding compliance at a particular facility will be made based on the application of the statute and regulations. References or links to information cited throughout this presentation are subject to change. Rule provisions and internet addresses provided in this guidance are current as of August 2016. This presentation may be revised periodically without public notice.
Today’s Agenda

I. Introduction to the SPCC Rule
II. Applicability
III. SPCC Rule Overview
IV. Intro to your R5 Coordinator and what to expect during an inspection
V. National Issues and Trends
VI. Questions & Answers
   (AKA Stump the regulator)

Please note that this presentation will not cover every SPCC provision
Part I: Introduction to the SPCC Rule
Oil Regulations

• 40 CFR part 112 - Oil Pollution Prevention regulation
  – Specifies requirements for prevention of, preparedness for, and response to oil discharges
    • Spill Prevention, Control, and Countermeasure (SPCC)
  – Includes requirements for Facility Response Plans (FRPs)
• 40 CFR part 110 – Discharge of Oil (sheen rule)
  – Prohibition of oil discharge
  – Reporting requirements
  – Establishes harmful quantity

1. Purpose of SPCC Rule
Compliance Date Amendments

- EPA extended the compliance dates for facilities to update (or for new facilities to prepare) and implement an SPCC Plan
  - Eight times, 2003-2011
  - Guidance summarizes each of these extensions.
- New production facilities have six months to develop and implement their SPCC Plan
- All compliance dates are in the past.
  - If the owner or operator of a facility does not have an SPCC Plan, must develop a Plan immediately.
  - Plan must comply with all amendments to the rule.

<table>
<thead>
<tr>
<th>All other facilities starting operation...</th>
<th>Must...</th>
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<tbody>
<tr>
<td>On or before August 16, 2002</td>
<td>Maintain its existing SPCC Plan Amend and implement the amended SPCC Plan no later than November 10, 2011</td>
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<tr>
<td>After August 16, 2002 through November 10, 2011</td>
<td>Prepare and implement an SPCC Plan no later than November 10, 2011</td>
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<tr>
<td>After November 10, 2011 (excluding oil production facilities)</td>
<td>Prepare and implement an SPCC Plan before beginning operations</td>
</tr>
<tr>
<td>After November 10, 2011 (oil production facilities)</td>
<td>Prepare and implement an SPCC Plan within six months after beginning operations.</td>
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§112.3
Part II: Applicability
SPCC Rule Applicability

The SPCC rule applies to a facility that meets the following criteria:

1. Drills, produces, gathers, stores, processes, refines, transfers, distributes, uses, or consumes oil and oil products; and
2. Is non-transportation-related (i.e. facility is not exclusively covered by DOI or DOT); and
3. Can reasonably be expected to discharge oil in quantities that may be harmful into or upon the navigable waters of the U.S. or adjoining shorelines; and
4. Meets capacity thresholds
   - Aboveground storage > 1,320 gallons; or
   - Completely buried storage > 42,000 gallons
Part III: SPCC Requirements Overview
Professional Engineer Certification

- A licensed PE must review and certify a Plan and technical amendments.
- The certification does not relieve the owner/operator of his duty to prepare and fully implement a Plan.
- Qualified facilities may opt to self-certify Plans in lieu of PE-certification.
  - This will be discussed in Part IV: Focus on Qualified Facilities.
  - Some states do not allow self-certification of SPCC Plans.

Prepare and Implement a Plan  §§112.3(d) and 112.5(c)
Tier Options for Qualified Facilities Self-Certification

- Facilities must first qualify for this option
  - Clean spill History (back three years, 2-42 gallon or 1000)
  - 10,000 gallons or less of AST facility capacity
- Tier II
  - All qualified facilities are Tier II
  - Full SPCC with no PE certification of Plan (self cert)
  - EPA can request a PE Plan
- Tier I
  - Qualified facilities that have no AST larger than 5,000 gallons
  - Facilities can use the rule’s Appendix G template
  - Reduced requirements (Tier II can’t use the template)
- Self certification issues
  - State Law
  - The attestation for facilities
General Requirements for SPCC Plans (§112.7) and Secondary Containment Provisions
Environmental Equivalence

“Your Plan may deviate from the […] technical requirements […]], except the secondary containment requirements […] if you provide equivalent environmental protection by some other means of spill prevention, control, or countermeasure.”
Items to Address in the Plan

- Type of oil in each container and its storage capacity
- Discharge prevention measures including procedures for routine handling of products
- Discharge or drainage controls
- Countermeasures for discharge discovery, response, and cleanup
- Methods of disposal of recovered materials
- Contact list and phone numbers (including NRC)
- If no FRP, then:
  - Information for reporting
  - Organize portions of the Plan describing procedures for when a discharge occurs to make them readily available during emergency
Other General Requirements

• Facility Diagram
• Failure Analysis
• Recordkeeping
• Training
• Loading and Unloading Racks
  – Containment and other requirements
• Security for Non Production Facilities
• Brittle Fracture
• Oil Filled Operational Equipment
General Secondary Containment Requirement

- Requires secondary containment for all areas with the potential for a discharge
- Requires appropriate containment and/or diversionary structures to prevent a discharge that may be harmful (a discharge as described in §112.1(b))
- This is the minimum expectation for containment
  - General facility requirement with no sizing or freeboard requirements
Revision to General Secondary Containment Requirement

This revision:

- Clarifies that the general secondary containment requirement is intended to address the most likely oil discharge from any part of a facility

New text: “… In determining the method, design, and capacity for secondary containment, you need only to address the typical failure mode, and the most likely quantity of oil that would be discharged. Secondary containment may be either active or passive in design.”

- Modifies §112.7(c) to expand the list of example prevention systems for onshore facilities
  - Additional examples: drip pans, sumps, and collection systems
Impracticability Provision

• If a facility owner or operator finds that any containment methods are “impracticable,” he or she may substitute a combination of other measures in place of secondary containment.

• When a facility owner/operator is incapable of installing secondary containment by any reasonable method

• Considerations include:
  – Space and geographical limitations
  – Local zoning ordinances
  – Fire codes
  – Safety
  – Other good engineering practice reasons that would allow for secondary containment
SPCC Requirements for Onshore Bulk Storage Facilities (§112.8)
§112.8 SPCC Requirements for Onshore Facilities

- Outlines specific requirements (in addition to general requirements in §112.7) for onshore facilities (excluding production facilities) regarding:
  - Facility drainage
  - Bulk storage containers
  - Containment drainage requirements
  - Facility transfer operations, pumping, and facility process
Specific (Sized) Secondary Containment Requirements

- Areas where certain types of containers, activities, or equipment are located may be subject to additional, more stringent, containment requirements.
- Sized to largest tank or tanker compartment with freeboard for a rain event.
- EPA does not specify a freeboard requirement – 110% rule of thumb and 25 year 24 hour storm event.
- Specific minimum size requirement for secondary containment for the following areas:
  - Loading/unloading racks (no freeboard requirements) per 112.7
  - Bulk storage containers
  - Mobile or portable bulk storage containers.
SPCC Requirements for Onshore Production Facilities (§112.9)
§112.9 SPCC Requirements for Onshore Production Facilities

- Outlines specific requirements (in addition to general requirements in §112.7) for onshore production facilities regarding:
  - Facility drainage
  - Bulk storage containers
  - Containment drainage requirements
  - Facility transfer operations
Overview of Rule Revisions Related to Oil Production Facilities

- EPA streamlined, tailored, and clarified requirements for oil production facilities including:
  - Definition of Production Facility
  - SPCC Plan Preparation and Implementation Timeframe
  - Flowlines and Intra-facility Gathering Lines
  - Flow-through Process Vessels
  - Produced Water Containers
  - Oil and Natural Gas Pipeline Facilities
  - Definition of “Permanently Closed”
Specific Secondary Containment Requirements for Production

- Secondary containment sized to the capacity of the largest single container with sufficient freeboard to contain precipitation

- Applies to bulk storage containers at the tank battery, separation and treatment facilities, including, but not limited to:
  - Stock tanks,
  - Produced water containers,*
  - Separation equipment* (e.g., heater-treaters and separators)

- If facility drainage is used as secondary containment for bulk storage containers, then drainage from undiked areas must be safely confined in a catchment basin or holding ponds

* The SPCC rule includes alternative measures for certain production equipment in lieu of sized secondary containment
Reporting Spills
40 CFR Part 110

- Report all oil discharges to navigable waters of the U.S. or adjoining shorelines to NRC at 1-800-424-8802
- Federal government's centralized reporting center, which is staffed 24 hours a day by U.S. Coast Guard personnel
- Any person in charge of a vessel or an onshore or offshore facility must notify NRC immediately after he or she has knowledge of the discharge
- NRC relays information to EPA or U.S. Coast Guard depending on the location of the incident
- An On-Scene Coordinator evaluates the situation and decides if federal emergency response action is necessary
Specific SPCC Spill Reporting Requirements 40 CFR part 112

- Report to the EPA Regional Administrator (RA) when there is a discharge of:
  - More than 1,000 U.S. gallons of oil in a single discharge to navigable waters of the U.S. or adjoining shorelines
  - More than 42 U.S. gallons of oil in each of two discharges to navigable waters of the U.S. or adjoining shorelines within a 12-month period
  - When making this determination it is the amount of the discharge in gallons that reaches navigable waters of the U.S. or adjoining shorelines
  - An owner/operator must report the discharge(s) to the EPA Regional Administrator within 60 days
EPA Region 5

Regional Office: Chicago, IL

Satellite Offices
- Grosse Ile, Michigan
- Cleveland, OH

Outstationed On-Scene Coordinators
- Southern IL
- Indianapolis, IN
- Traverse City, MI
- Minneapolis/St. Paul, MN
- Cincinnati, OH
- Green Bay, WI
Region 5 Oil Contacts

**Oil Program Manager**
Matt Mankowski: 312-886-1842 or mankowski.matthew@epa.gov

**SPCC Coordinator**
Jaime Julian: 312-886-9402 or julian.jaime@epa.gov

**FRP Coordinator**
Alex Tzallas: 312-886-0622 or tzallas.alexander@epa.gov

**Oil On-Scene Coordinator**
Jon Gulch: 734-692-7686 or gulch.jon@epa.gov

**Ohio Enforcement Specialist**
Ellen Riley: 312-886-9497 or riley.ellen@epa.gov
### Regional SPCC Inspections

<table>
<thead>
<tr>
<th>Regional Priorities</th>
<th>Inspections Across the Region</th>
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<tbody>
<tr>
<td>Large, non-FRP facilities: 500,000-999,999 gallons</td>
<td>Performed by trained inspectors, including enforcement staff and On-Scene Coordinators.</td>
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<tr>
<td>Facilities with a history of spills</td>
<td>~40-50 inspections per year</td>
</tr>
<tr>
<td>Facilities of concern as observed by our On-Scene Coordinators</td>
<td>10-15 per year in Ohio</td>
</tr>
<tr>
<td>Facilities not inspected in the last 5 years</td>
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- **Inspections Across the Region**
  - Performed by trained inspectors, including enforcement staff and On-Scene Coordinators.
  - ~40-50 inspections per year
  - 10-15 per year in Ohio
Overview of the Inspection Process
Triggering Events Initiating Inspections
Referrals (State or Local)
Spills
Multi-Media Inspections
Facility Incident
Targeted Outreach with Compliance Monitoring
Yep...you have won the inspection lottery

And your friendly EPA inspector shows up at your door...
Inspection Process
Roles of the Inspector

- Official Agency representative
- Fact finder
- Technical authority
- Enforcement case developer (in some cases)
- Enforcement presence
- Technical educator
General Categories of Inspections

- Routine compliance (part of planned inspection program)
- “For cause” in response to suspected spill or violation
- Case development support or follow-up
- Multi-media and technical assistance
Inspection Notice Types

• **Unannounced Inspections**
  • Knock Knock! Who’s there? EPA. EPA Who?
  • EPA Inspectors are authorized to enter any facility during normal business hours
  • Legal basis for entry under 40 CFR part 112 is Clean Water Act (Sections 308 and 311[m])
  • May be longer due to onsite Plan review

• **Announced Inspections**
  • May request of SPCC Plan in advance
  • Facilitates coordination and cooperation
  • Allows for applicable records to be available for review at time of inspection
What to expect during a SPCC Inspection

Overview

- Opening conference
- Discussion of facility operations and site specific SPCC elements
- Use of detailed SPCC checklist
- Review of Plan onsite
- Records review
- Facility walk-through
- Closing conference
- Follow-up
- In certain cases, enforcement
Post Inspection

- SPCC reporting on compliance monitoring observations
- Facility found in compliance
  - Follow up and case closure
- Facility found to out of compliance
  - Facility provided notice
    - Issuance of post inspection letter
    - Notice of Deficiencies
    - Notice of Violations
  - Expedited Settlement Agreements
  - EPA Orders under FWPCA 311c and 311 e
  - Enforcement Actions (covered later in detail)
    - Class I and Class II penalty actions
    - DOJ referrals
  - Compliance Action Enforcement/follow up
  - Case Closure
National Issues and Trends
WRRDA Changes for Farms

- Water Resources Reform and Development Act (WRRDA) of 2014 was signed into law by the President on June 10, 2014

- Section 1049 of the Act
  - changes certain applicability provisions of the SPCC rule for farms, and
  - modifies the criteria under which a farmer may self-certify an SPCC Plan

- EPA posted a factsheet addressing the SPCC impacts of the WRRDA on farms

- The factsheet can be found at the EPA Agriculture webpage
  - http://www.epa.gov/emergencies/content/spcc/spcc_ag.htm
Applicability

Under WRRDA, a farm is not required to have an SPCC Plan if it has:
- An aggregate aboveground storage capacity less than 2,500 gallons OR
- An aggregate aboveground storage capacity greater than 2,500 gallons and less than 6,000* gallons; and
- No reportable discharge history.
  - WRRDA defines “reportable oil discharge history” as:
    - a single oil discharge as described in section 112.1(b) of the SPCC rule that exceeds 1,000 gallons, or 2 oil discharges, that each exceed 42 gallons within any 12-month period
      - (i) in the 3 years prior to the certification date of the SPCC Plan (as described in section 112.3 of the SPCC rule); or
      - (ii) since becoming subject to the SPCC rule (40 CFR part 112), if the facility has been in operation for less than 3 years.

What is considered a farm?
- “a facility on a tract of land devoted to the production of crops or raising of animals, including fish, which produced and sold, or normally would have produced and sold, $1,000 or more of agricultural products during a year.”
Capacity Calculations

When calculating a farm's *aggregate aboveground oil storage capacity* – Do **not** count:

- All containers on separate parcels that have a capacity that is 1,000 gallons or less;
- Containers holding animal feed ingredients approved for use in livestock feed by the Commissioner of the Food and Drug Administration (FDA);
- Containers storing heating oil used solely at a single-family residence (e.g., your personal residence as the farm owner or operator);
- Pesticide application equipment or related mix containers (with adjuvant oil);
- Any milk and milk product container and associated piping and appurtenance;
- Completely buried oil tanks (underground storage tanks or USTs) and associated piping and equipment that are subject to all of the technical requirements under EPA’s underground storage tank regulations at 40 CFR part 280 or 281;
A farmer can self-certify the SPCC Plan if the farm has:

- An aggregate aboveground storage capacity greater than 6,000* gallons but less than 20,000 gallons;
- No individual tank with a capacity greater than 10,000 gallons; and
- No reportable discharge history.

*This 6,000-gallon threshold may be adjusted by EPA, following a study to determine the appropriate exemption.

Thus, a farmer must have a licensed Professional Engineer (PE) certify the SPCC Plan if the farm has:

- An individual tank with an aboveground storage capacity greater than 10,000 gallons; OR
- An aggregate aboveground storage capacity greater than or equal to 20,000 gallons; OR
- A reportable discharge history.
Next Steps

- WRRDA required EPA to work with USDA to conduct a study to determine the appropriate applicability threshold for farms, based on a significant risk of discharge to water.
- Based on the study EPA can adjust the 2,500–6,000 conditional threshold.
- According to the WRRDA, the threshold quantity must be not more than 6,000 gallons and not less than 2,500 gallons.
- The study was completed June 2015, recommending a 2,500 gallon threshold
- EPA will then promulgate a rule:
  - Amending the SPCC requirements to adjust the applicability thresholds for farms (Late spring/summer proposal)
  - Revising the SPCC rule consistent with the WRRDA amendments
Inspection Trends
Where are we inspecting?

- High Risk facilities
  - Refineries, terminals, and bulk oil storage
- Production operations on and offshore
- Railroad yards
- Terminals
- Industrial facilities with large amounts of oil storage
- Animal Fat and Vegetable Oil (AFVO) facilities
- Alternative fuels facilities (Biodiesel)
- Facilities that have discharged oil into WOTUS
Common SPCC Plan Violations

- Inadequate cross reference
- Inadequate facility diagrams
  - facility and diagram don’t match, missing piping and loading areas
- Plans not addressing spill trajectory requirement
- Inadequate discharge notification form (quantity of discharged to water and media impacted)
- Missing 112.7(a) elements (the mini response plan)
Other Common SPCC Plan Violations (cont.)

- Inadequate contingency plan (40 CFR Part 109)
- Lack of contingency plan when required
- Notification section incomplete (or dated)
- Generic/non-specific information
- Plan just repeats the rule requirements and not specific to implementation at the facility
- Missing information (leads to questions)
- Still seeing PE plans using the pre 2002 rule format
- No Plan!
Common Implementation Violations

- No secondary containment for the loading rack or loading area
- Inadequate or inappropriate pipe support
- Tank overfill protection not present, not functional or not inspected
- No inspection records
- No integrity testing program or schedule for implementation
- Improper application of visual only inspection regime
Common Implementation Violations

- Active containment methods cannot be implemented as described in Plan
- Double walled tank non-compliance issues including not inspecting interstice
- Actual drainage at the facility does not support the containment strategies in the Plan
- Post certification modifications, alterations or construction impacts implementation
- Containment and inspection of mobile portable container not implemented
- Using building for containment does not account for actual drainage conditions
Additional Guidance
SPCC Guidance

• EPA issued Version 2.0 of the SPCC guidance on **August 28, 2013**

• Update of the 2005 document

• Some major policy changes

• Incorporated rules and policy post 2002 rulemaking

• Includes the updated checklists
For More Information

- Guidance for Regional Inspectors
  - http://www.epa.gov/emergencies/content/spcc/spcc_guidance.htm

- Complete Oil Pollution Prevention regulation (40 CFR part 112)
  - http://www.gpoaccess.gov/cfr
  - http://www.epa.gov/emergencies/lawsregs.htm

- EPA 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
Any Questions?

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