Overview
Spill Prevention, Control, and Countermeasure

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Legal Disclaimer

This presentation is meant to provide an overview to EPA inspectors, owners and operators of regulated facilities, 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 November 2018. This presentation may be revised periodically without public notice.
Today’s Agenda

I. Introduction to the SPCC Rule and Applicability
II. SPCC Rule Requirement Overview
III. General Requirements
IV. Regional Contacts and Guidance
V. What to expect during an inspection

Please note that this presentation will not cover every SPCC provision

Part I: Introduction to the SPCC Rule and Applicability
Purpose of the Rule

• Requirements to help prevent oil discharges from reaching navigable waters or adjoining shorelines
  – Containment and procedures to *prevent* oil discharge (e.g., tank testing);
  – *Control* measures to keep an oil discharge from entering navigable waters (i.e., containment); and
  – *Countermeasures* to contain, clean up, and mitigate any oil discharge that affects navigable waters (i.e., spill response measures)
• Promulgated under the authority of the Clean Water Act (CWA) §311(j)(1)(C)

Specific 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
Applicability Criterion #1

1. Drills, produces, gathers, stores, processes, refines, transfers, distributes, uses, or consumes oil and oil products

Criterion #1: Oil-Related Activities

Drilling
Criterion #1: Oil-Related Activities

Producing

Gathering
Criterion #1: Oil-Related Activities

Storing

Processing

Criterion #1: Oil-Related Activities
Refining

Transferring
Distributing

Criterion #1: Oil-Related Activities

Using

Criterion #1: Oil-Related Activities
Consuming

Criterion #1: Oil-Related Activities

Drills, produces, gathers, stores, processes, refines, transfers, distributes, uses, or consumes oil and oil products

Applicability Criterion #2

2 Drills, produces, gathers, stores, processes, refines, transfers, distributes, uses, or consumes oil and oil products

Criterion #2: Oil and Oil Products §112.1
What is Oil?

• “Oil,” defined in §112.2 includes oil of any kind or in any form including, but not limited to:
  – Petroleum
  – Sludge
  – Synthetic Oils
  – Mineral Oils
  – Oil refuse
  – Oil Mixed with wastes other than dredged spoil
  – Animal fats, oils, and greases
  – Vegetable oils

Applicability Criterion #3

3 Facility is non-transportation-related.

(It is not exclusively regulated by DOI or DOT.)
Types of Facilities

- Facilities are divided into three categories:
  - Transportation-related facilities
  - Non-transportation-related facilities
  - Complexes
- Established through a series of Executive Orders (EOs) and Memoranda of Understanding (MOUs)
  - Executive Order 11548 delegated responsibilities for regulating oil discharges (later superseded by E.O. 11735 and 12777)
    - EPA: Non-transportation-related facilities
    - DOT: Transportation-related facilities
  - EPA-DOT MOU (1971) defines transportation- and non-transportation-related
    - EPA Announced in a recent proposal that it will revisit portions of this MOU. working with DOT to revise the document
  - DOT-DOI-EPA MOU (1994) establishes responsibilities for offshore facilities, including pipelines

Criterion #3: Non-Transportation Related

Non-Transportation Related Facilities (EPA Jurisdiction)

- Fixed or mobile onshore and offshore oil drilling and production facilities
- Oil refining and storage facilities
- Industrial, commercial, agricultural, and public facilities that use and store oil
- Waste treatment facilities
- Loading racks, transfer hoses, loading arms, and other equipment used to transfer oil in bulk to or from highway vehicles or railroad cars
- Highway vehicles, railroad cars, and pipelines used to transport oil within confines of non-transportation-related facility

Criterion #3: Non-Transportation Related
Transportation Related Facilities
(DOT Jurisdiction)

- Onshore and offshore terminal facilities, including transfer hoses, loading arms, and other equipment used to transfer oil in bulk to or from a vessel, including storage tanks and appurtenances for the reception of oily ballast water or tank washings from vessels
- Transfer hoses, loading arms, and other equipment appurtenant to a non-transportation-related facility used to transfer oil in bulk to or from a vessel
- Interstate and intrastate onshore and offshore pipeline systems
- Highway vehicles and railroad cars that are used for the transport of oil

Complexes
(EPA and DOT Jurisdiction)

- A facility with both transportation-related and non-transportation-related activities is a “complex facility” and is subject to the dual jurisdiction of EPA and DOT
Applicability Criterion #4

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

Definition of “Discharge”
(at §112.2)

- Includes any spilling, leaking, pumping, pouring, emitting, emptying, or dumping of any amount of oil no matter where it occurs
  - Excludes certain discharges associated with §402 of the CWA and §13 of the River and Harbor Act of 1899
Discharge as described in §112.1(b)

- Refers to quantities that may be harmful, as described in 40 CFR part 110 ("sheen rule")
  - Discharge violates applicable water quality standards; or
  - Discharge causes a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or causes a sludge or emulsion to be deposited beneath the surface of the water or upon the adjoining shorelines
- Includes discharges harmful not only to public health or welfare, but also to the environment

"Reasonable Expectation" of Discharge

- This determination must be based solely upon consideration of the geographical and locational aspects of the facility
- Must exclude manmade features such as dikes, equipment or other features which would restrain, hinder, contain or otherwise prevent a discharge as described in §112.1(b)
“Reasonable Expectation” of Discharge

• Factors an owner operator may consider (SPCC Guidance):
  - Whether a past discharge of oil reached a navigable water or adjoining shoreline;
  - Whether the facility is adjacent to navigable waters;
  - On-site conduits, such as sewer lines, storm sewers, certain underground features (e.g., power or cable lines, or groundwater);
  - Unique geological or geographic features;
  - Whether the facility is near a watercourse and intervening natural drainage;
  - Whether precipitation runoff could transport oil into navigable waters; and
  - The quantity and nature of oil stored.

Criterion #4: Discharge in Harmful Quantities

Applicability Criterion #5

Meets storage capacity thresholds

Criterion #5: Storage Capacity
Thresholds

• SPCC rule applies to a facility with greater than:
  – 1,320 gallons of aggregate aboveground oil storage capacity, or
  – 42,000 gallons of completely buried oil storage capacity

Definition of Storage Capacity

• Storage capacity of a container means the shell capacity of the container.
• If a certain portion of a container is incapable of storing oil because of its integral design, then the storage capacity is the volume the container might hold
• The shell capacity is the rated design capacity rather than the working/operational capacity
• EPA tank rerating guidance
• Floating Roof tanks
**Permanently Closed**

- SPCC rule exempts any oil storage container that is permanently closed.
- **Permanently closed** means any container or facility for which:
  - (1) All liquid and sludge has been removed from each container and connecting line; and
  - (2) All connecting lines and piping have been disconnected from the container and blanked off, all valves (except for ventilation valves) have been closed and locked, and conspicuous signs have been posted on each container stating that it is permanently closed and noting the date of closure.
- Definition of "permanently closed" does not require a container to be removed from a facility.
  - Permanently closed containers may be brought back into use as needed for variations in production rates and economic conditions.
- Permanent closure requirements under the SPCC rule are separate and distinct from the closure requirements in regulations promulgated under Subtitle C of RCRA.
- Preamble regarding new containers never containing oil

**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
Exemptions to SPCC Applicability

• Current exemptions to the SPCC rule include
  – Underground storage tanks subject to UST tech requirements
  – Wastewater treatment facilities (exemption does not include production, recovery, or recycling of oil)
  – Motive power containers (e.g., automotive, airplane, or truck fuel tanks, unless transfer occurring within an SPCC regulated facility)

• Exemptions in the 2008 amendments include
  – Hot-mix asphalt (HMA)
  – Residential heating oil containers (ASTs and USTs)
  – Pesticide application equipment
  – USTs at nuclear power generation facilities
  – Intra-facility gathering lines subject to the requirements of 49 CFR part 192 or 195

Part II: SPCC Requirements Overview
§112.3 Prepare and Implement a Plan

- The facility owner/operator must prepare an SPCC Plan:
  - In writing
  - In accordance with §112.7 and any other applicable sections of 40 CFR Part 112
- Compliance dates to prepare, amend, and implement an SPCC Plan

Current Compliance Dates

<table>
<thead>
<tr>
<th>A facility, including a mobile or portable facility, starting operation...</th>
<th>Would be required to...</th>
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</table>
| On or before August 16, 2002 | • Maintain its existing SPCC Plan  
• Amend and implement the SPCC Plan no later than Nov. 10, 2011 |
| After August 16, 2002 through Nov. 10, 2011 | • Prepare and implement the SPCC Plan no later than Nov. 10, 2011 |
| After Nov. 10, 2011 (excluding production facilities) | • Prepare and implement a SPCC Plan before beginning operations |
| After Nov. 10, 2011 (production facilities) | • Prepare and implement a SPCC Plan within six months after beginning operations * |

* Owners or operators of new oil production facilities must prepare and implement an SPCC Plan six months after the start of operations.
# Rule Organization

<table>
<thead>
<tr>
<th>Rule Section</th>
<th>Topics</th>
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<td>Subpart A</td>
<td>Applicability, definitions, and general requirements for all facilities and all types of oil</td>
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<tr>
<td>Subpart B</td>
<td>Requirements for petroleum oils and non-petroleum oils, except those covered in Subpart C</td>
</tr>
<tr>
<td>Subpart C</td>
<td>Requirements for animal fats and oils and greases, and fish and marine mammal oils, and vegetable oils, including oils from seeds, nuts, fruits, and kernels</td>
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<tr>
<td>Subpart D</td>
<td>Response requirements (FRP rule)</td>
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## 40 CFR 112 Structure

- §112.1 General applicability of the rule
- §112.2 Definitions of terms used in the rule
- §112.3 Requirement to prepare an SPCC Plan
- §112.4 Amendment of SPCC Plan by RA
- §112.5 Amendment of SPCC Plan by owner or operator
- §112.6 Qualified Facilities [2006 amendment]
- §112.7 General requirements of all facilities
- §§112.8 – 112.12 Additional specific requirements for different types of facilities and different types of oils
- §112.20 Facility Response Plans
- §112.21 Facility response training and drills/exercises
## Plan Review

- **Complete review and evaluation of Plan**
  - Once every 5 years from the date facility becomes subject to the rule
  - If a facility was in operation on or before 8/16/2002, five years from the date of your last review required by the rule
  - Does not always require a PE
    - More to come...

### 40 CFR 112 Structure (continued)

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<th>Appendix</th>
<th>Description</th>
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<td>Appendix B</td>
<td>Memorandum of understanding among the Secretary of the Interior, Secretary of Transportation, and Administrator of the Environmental Protection Agency</td>
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<td>Appendix C</td>
<td>Substantial harm criteria</td>
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<td>Appendix D</td>
<td>Determination of a worst case discharge panning volume</td>
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<td>Appendix E</td>
<td>Determination and evaluation of required response resources for facility response plans</td>
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<td>Appendix F</td>
<td>Facility-specific response plan</td>
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<td>Appendix G</td>
<td>Tier I template</td>
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</table>
§112.5 Amendment of SPCC Plan by Owners or Operators

- For changes in facility design, construction, operation, or maintenance that materially affect the potential for a discharge as described in §112.1(b)
  - Commissioning and decommissioning containers
  - Replacement, reconstruction, or movement of containers
  - Reconstruction, replacement, or installation of piping systems
  - Construction or demolition that might alter secondary containment structures
  - Changes in product or service
  - Revision of operating or maintenance procedures
- Amend within 6 months; implement ASAP, but no later than 6 months after amendment

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.
  - Some states do not allow self-certification of SPCC Plans

Prepare and Implement a Plan

§§112.3(d) and 112.5(c)
PE Attestation (continued)

- PEs do not need to be licensed in the state in which the facility is located for Federal compliance
- State’s may have laws that require a PE to be licensed in the state and may prohibit self certification
- PEs can be employees of the facility

Prepare and Implement a Plan §112.3(d)(1)

Qualified Facility – An Overview

- A qualified facility is a smaller oil storage facility that is eligible for streamlined regulatory requirements in 112.6
  - Self-certified SPCC Plan instead of one reviewed and certified by a Professional Engineer
  - Streamlined integrity testing requirements
  - Streamlined facility security requirements
- Must meet eligibility criteria in 112.3(g)
- EPA divided this group of facilities into tiers
  - Requirements described here would apply to “Tier II” facilities
  - Additional relief would be provided to “Tier I”
Tier Options for Qualified Facilities Self-Certification

- Facilities may qualify for Tier I or Tier II self-certification if they meet the following criteria:
  - No single discharge exceeding 1,000 gallons or no two discharges exceeding 42 gallons in any 12-month period in the last 3-years
  - 10,000 gallons or less of AST facility capacity

- **Tier II**
  - All facilities meeting criteria are Tier II
  - May choose to self-certify full SPCC (no PE certification of Plan required)
    - Can include environmentally equivalent measures when a PE certifies the alternative measures in accordance with 112.6(b)(3)(1) and 112.6(b)(4).

- **Tier I**
  - Facility has no AST larger than 5,000 gallons
  - Option to complete and implement a self-certified Plan template (found in Appendix G) in lieu of a full SPCC Plan to comply with the SPCC regulation.
    - Tier II cannot use the template

- EPA can request a PE Plan

Qualified Facilities and Self-Certification §§112.3(g)(2) and 112.6

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Part III:
General Requirements for SPCC Plans (§112.7) and Secondary Containment Provisions
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

Example Methods of Secondary Containment listed in §112.7(c)

Examples include:

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

Active or Passive

• The revision clarifies that the use of both active and passive secondary containment measures is allowed.
• Active containment measures are those that require deployment or other specific action by the operator.
  – These may be deployed either before an activity involving the handling of oil starts, or in reaction to a discharge.
• Passive measures are permanent installations and do not require deployment or action by the owner or operator.
Active Measures vs. Contingency Plan

- **Active secondary containment** requires a deployment action; it is put in place prior to or immediately upon discovery of an oil discharge
  - The purpose of these measures is to contain an oil discharge before it reaches navigable waters or adjoining shorelines
- **A contingency plan** is a detailed oil spill response plan developed when any form of secondary containment is determined to be impracticable
  - The purpose of a contingency plan should be both to outline response capability or countermeasures to limit the quantity of a discharge reaching navigable waters or adjoining shorelines, and to address response to a discharge of oil that has reached navigable waters or adjoining shorelines

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)
  - Bulk storage containers
  - Mobile or portable bulk storage containers
  - Production facility bulk storage containers, including tank batteries, separation, and treating vessels/equipment

Containment Requirements for SPCC Plans §§112.7(h), 112.8(c)(2)&(11), 112.9(c)(2)
Sufficiently Impervious

- §112.7(c): Secondary containment system “must be capable of containing oil and must be constructed so that any discharge ... will not escape containment system before cleanup occurs”

- §§112.8(c)(2) and 112.12(c)(2): Diked areas must be “sufficiently impervious to contain oil”

- EPA does not specify permeability or retention time for these provisions

- The PE and owner/operator have flexibility in determining how best to design secondary containment to meet these requirements

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
Recordkeeping

• Written procedures of tests and inspections
• Keep record of procedures and record of inspections/tests
  – Signed by appropriate supervisor or inspector
  – With SPCC Plan
  – Period of three years
  – Records of inspection/tests kept under usual and customary business practices suffice

§112.7(e) General Requirements for SPCC Plans

Personnel Training

• Train oil-handling personnel
  – Operation/maintenance of prevention equipment
  – Discharge procedure protocols
  – Applicable pollution control laws, rules, and regulations
  – General facility operations
  – Contents of the facility SPCC Plan
• Designate person accountable for discharge prevention and who reports to facility mgmt
• Schedule/conduct at least one briefing/year:
  – Known discharges and failures, malfunctioning components, new precautionary measures

§112.7(f) General Requirements for SPCC Plans
Facility Security

• To prevent acts of vandalism and assist in the discovery of oil discharges, 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

Loading Racks

• Loading Rack Requirements
  – Secondary containment to hold at least the maximum capacity of any single compartment of a tank car or tank truck loaded or unloaded at the facility.
  – Provide interlocked warning lights or physical barrier system, warning signs, wheel chocks or vehicle break interlock system
  – Closely inspect for discharge the lowermost drain and all outlets of vehicle prior to filling and departure

• Requirements only apply when loading racks are present
• Production facilities typically do not have loading racks
Definition of Loading/Unloading Rack

**Loading/unloading rack** means a fixed structure (such as a platform, gangway) necessary for loading or unloading a tank truck or tank car, which is located at a facility subject to the requirements of this part. A loading/unloading rack includes a loading or unloading arm, and may include any combination of the following: piping assemblages, valves, pumps, shut-off devices, overfill sensors, or personnel safety devices.

General Requirements for SPCC Plans

§112.2

Loading Arm

Look for the loading arm
Brittle Fracture

- Field-constructed aboveground container must be evaluated for risk of discharge or failure due to brittle fracture if:
  - Container undergoes a repair, alteration, reconstruction, or change in service that might affect risk of discharge or failure due to brittle fracture or other catastrophe, or
  - Container has discharged oil or failed due to brittle fracture failure or other catastrophe

Qualified Oil-Filled Operational Equipment

**Determining eligibility:**
- The facility owner/operator determines if he is eligible to use the alternative measures in §112.7(k)

**Must answer “no” to the following to be eligible:**

In the three years before the SPCC Plan is certified, has the facility had any discharges to navigable waters or adjoining shorelines from oil-filled operational equipment as described below:

- A single discharge of oil greater than 1,000 gallons?
- Two discharges of oil each greater than 42 gallons within any 12-month period?

§112.7(k)
Qualified Oil-Filled Operational Equipment

• **Alternative measures** in lieu of meeting general secondary containment requirements:
  – Establish and document an *inspection or monitoring program* to detect equipment failure and/or a discharge.
  – Prepare an *oil spill contingency plan* and provide a *written commitment* of manpower, equipment, and materials (unless the facility has submitted an FRP).

• No impracticability determination needed for the qualified oil-filled operational equipment.

• Use of alternative measures is optional.
  – The owner/operator can provide secondary containment.

§112.7(k)

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Qualified Oil-Filled Operational Equipment

**Other information:**

• Owners/operators of Qualified Facilities may use these alternative measures.
  – No impracticability determination, no PE needed

• Oil-filled operational equipment does not include oil-filled manufacturing equipment (flow-through process).
  – Manufacturing equipment is more complicated and **is not** defined as *oil-filled operational equipment*
  – Manufacturing equipment **is** considered *oil-filled equipment* and therefore **is not** a bulk container
    • General containment 112.7(c) applies but there are no sized containment requirements
    • No integrity testing
    • No overfill requirements

§112.7(k)
### 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
Part IV: Regional Contacts and Guidance

Feeling Overwhelmed?

Try not to... We’re here to help!

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

- SPCC Coordinator – Grosse Ile Office
  Kim Churchill: 734-692-7816 or churchill.kimberly@epa.gov

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

- Oil On-Scene Coordinator – Grosse Ile Office
  Jon Gulch: 734-692-7686 or gulch.jon@epa.gov

- Ohio Enforcement Officer – Chicago Office
  Ellen Riley: 312-886-9497 or riley.ellen@epa.gov
SPCC Guidance Document

• In August 2013, EPA revised the *Spill Prevention, Control, and Countermeasure (SPCC) Guidance for Regional Inspectors*, which was originally issued on December 2, 2005. The Guidance is designed to assist EPA inspectors in:
  – implementing the SPCC rule requirements,
  – understanding SPCC applicability, and
  – to help clarify the role of the inspector in reviewing a facility's implementation of the performance-based provisions of the rule.

• The guidance is designed to facilitate nationally consistent implementation and interpretation of the SPCC rule. It is also available to owners and operators of facilities that may be subject to the requirements of the SPCC rule, and to the general public on how EPA intends the SPCC rule to be implemented.

SPCC Guidance

• All owner/operators should have a copy
• Includes the updated checklists used for inspections
• [https://www.epa.gov/oil-spills-prevention-and-preparedness-regulations](https://www.epa.gov/oil-spills-prevention-and-preparedness-regulations)
SPCC Guidance Document Chapters

- **Chapter 1: Introduction** discusses the purpose and scope of 40 CFR part 112 and the regulatory history, including all SPCC rule amendments. Also includes the Table of Contents, disclaimer, EPA Oil Program contacts, and acronyms list.

- **Chapter 2: SPCC Rule Applicability** clarifies the facilities, activities, and equipment that are regulated under the SPCC rule by providing an in-depth discussion of the applicability criteria and relevant scenarios.

SPCC Guidance Document Chapters

- **Chapter 3: Environmental Equivalence** discusses the use of the environmental equivalence provision, lists the substantive requirements eligible for environmental equivalence, clarifies certain policy areas, provides examples of proper documentation, and describes the role of the EPA inspector in reviewing deviations based on environmental equivalence.

- **Chapter 4: Secondary Containment and Impracticability Determinations** describes the various secondary containment requirements and demonstrates how these requirements apply to specific equipment and activities at an SPCC-regulated facility. This chapter also discusses:
  - the impracticability determination provision of the rule,
  - the additional requirements that accompany an impracticability determination, and
  - the documentation needed to support such a determination.
  - The role of the EPA inspector in reviewing and evaluating secondary containment requirements and impracticability determinations is also discussed.
SPCC Guidance Document Chapters

• **Chapter 5: Oil/Water Separators** addresses the applicability of the SPCC rule to various scenarios involving oil/water separators and other equipment.

• **Chapter 6: Facility Diagram and Description** provides guidelines on the necessary level of detail for the facility description and facility diagrams included in an SPCC Plan. This chapter also includes example facility diagrams for different types of facilities.

SPCC Guidance Document Chapters

• **Chapter 7: Inspections, Evaluation, and Testing** provides an overview of the SPCC inspection, evaluation, and testing requirements, as well as how environmental equivalence may apply for these requirements. This chapter also discusses:
  – the role of the EPA inspector in determining a facility's compliance with the inspection, evaluation, and testing rule requirements;
  – and a summary of industry standards, code requirements, and recommended practices that apply to different types of equipment.
SPCC Guidance Document Appendices

• Appendix A: CWA 311(j)(1)(c)
• Appendix B: Selected Regulations
• Appendix C: Summary of Revised Rule Provisions
• Appendix D: Sample Bulk Storage Facility Plan
• Appendix E: Sample Production Facility Plan
• Appendix F: Sample Contingency Plan
• **Appendix G: SPCC Inspection Checklists**
  – VERY IMPORTANT AND BENEFICIAL
• Appendix H: Other Policy Documents

**Appendix G – Checklist**

**ONSHORE FACILITIES (EXCLUDING OIL DRILLING, PRODUCTION AND WORKOVER)**

[Checklist image]
SPCC Plan Review

- All SPCC plans are reviewed utilizing the SPCC checklist
- The checklist includes boxes for “Yes”, “No,” or “NA” (Not Applicable)
- During the plan review, the reviewer must check one of the boxes for each item on the checklist
  – So if something is missing from the plan or not discussed, the reviewer will check “No”
  – If something is not applicable you must include it in the plan, otherwise the reviewer will select “No”

Checklist has a Plan and Field Section

<table>
<thead>
<tr>
<th>112.7(a)(3) Plan describes physical layout of facility and includes a diagram that identifies:</th>
<th>PLAN</th>
<th>FIELD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location and contents of all regulated fixed oil storage containers</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Storage areas where mobile or portable containers are located</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Completely buried tanks otherwise exempt from the SPCC requirements marked as “exempt”</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Transfer stations</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Connecting pipes, including intra-facility gathering lines that are otherwise exempt from the requirements of this part under §112.1(i)(11)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Plan addresses each of the following:

(i) For each fixed container, type of oil and storage capacity (see Attachment A of this checklist). For mobile or portable containers, type of oil and storage capacity for each container or an estimate of the potential number of mobile or portable containers, the types of oil, and anticipated storage capacities

(ii) Discharge prevention measures, including procedures for routine handling of products (loading, unloading, and facility transfers, etc.)

(iii) Discharge or drainage controls, such as secondary containment around containers, and other structures, equipment, and procedures for the control of a discharge

(iv) Countermeasures for discharge discovery, response, and cleanup (both facility’s and contractor’s resources)

(v) Methods of disposal of recovered materials in accordance with applicable legal requirements

(vi) Contact list and phone numbers for the facility response coordinator, National Response Center, cleanup contractors with an agreement for response, and all Federal, State, and local agencies who must be contacted in the case of a discharge as described in §112.1(b)
### Plan Portion of Checklist

- Includes all rule requirements and organized following sequence of rule
  - If your plan does not follow sequence of rule it must contain a cross-walk or cross-reference
- Plan should state if any portions of the rule are not applicable to the facility and state why if necessary
  - e.g., The statement “Facility does not utilize internal heating coils” answers two items on the checklist. If statement was not provided it would be marked "No" rather than "NA".
- If your Plan does not include a narrative for all of the items on the checklist your plan is deficient

### Field Portion of Checklist

The Field Portion of the checklist has several roles:

- To ensure information in the Plan is implemented
- To check whether there are portions of the rule that are “Not Applicable” to the facility, that the facility did not declare in their Plan
- To identify any items, equipment, activities, etc., at the facility that are not identified in the Plan
Checklist to Ensure Plan and Practice Are the Same

Part V: Inspections
Roles of the Inspector

- Official Agency Representative
- Fact Finder
- Technical Authority
- Enforcement Case Developer or Enforcement Presence
- **Technical Educator**
- **Compliance Assistance**

Types of SPCC Inspections

- **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**
  - Will most likely request copy 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 an Inspection

- Opening conference
- Discussion of facility operations and site specific SPCC elements
- Review of Plan onsite using detailed SPCC checklist
  - More detail to follow.
- Records review
- Facility walk-through
  - Photos may be requested to be taken by inspector
- Closing conference
- Follow-up (if applicable)

Plan and Checklist Overview

- Most inspectors will review your Plan with you by utilizing the SPCC Checklist and going over each item
- Most inspectors will note items in the checklist that could not be completed (i.e., marked “No”) while reviewing plan
  - This gives the facility the opportunity to show the inspector where the information can be found in the plan (if it is indeed included) or provide additional or clarifying information
- Most inspectors will note deficiencies found in your Plan
  - Inspectors are not required to detail all deficiencies noted in the plan during the inspection and their review is subject to change after the inspection
Checklist Overview

• Once the Plan and Checklist have been reviewed, the inspector will either ask to review documents or conduct a facility walk-through
  – Note that the order of tasks performed during an inspection may vary
  – Note also, some inspections may take place over the course of multiple days or will require a return visit from the inspector

Completion of Field Portion of Checklist

<table>
<thead>
<tr>
<th>1127(c)</th>
<th>Appropriate containment and/or diversionary structures or equipment are provided to prevent a discharge as described in §112.10(c), except as provided in §112.7(k) of this section for certain qualified operational equipment. The entire containment system, including walls and floors, are capable of containing oil and are constructed to prevent escape of a discharge from the containment system before cleanup occurs. The method, design, and capacity for secondary containment address the typical failure mode and the most likely quantity of oil that would be discharged. See Attachment A of this checklist. For onshore facilities, one of the following or its equivalent:</th>
<th>PLAN</th>
<th>FIELD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1127(c)</td>
<td>Appropriate containment and/or diversionary structures or equipment are provided to prevent a discharge as described in §112.10(c), except as provided in §112.7(k) of this section for certain qualified operational equipment. The entire containment system, including walls and floors, are capable of containing oil and are constructed to prevent escape of a discharge from the containment system before cleanup occurs. The method, design, and capacity for secondary containment address the typical failure mode and the most likely quantity of oil that would be discharged. See Attachment A of this checklist. For onshore facilities, one of the following or its equivalent:</td>
<td><img src="image" alt="Table" /></td>
<td><img src="image" alt="Table" /></td>
</tr>
<tr>
<td>Identify which of the following are present at the facility and if appropriate containment and/or diversionary structures or equipment are provided as described above:</td>
<td><img src="image" alt="Table" /></td>
<td><img src="image" alt="Table" /></td>
<td></td>
</tr>
<tr>
<td>Bulk storage containers</td>
<td>Yes</td>
<td>No</td>
<td>NA</td>
</tr>
<tr>
<td>Mobile/transportable containers</td>
<td>Yes</td>
<td>No</td>
<td>NA</td>
</tr>
<tr>
<td>Oil-filled operational equipment (as defined in 112.2)</td>
<td>Yes</td>
<td>No</td>
<td>NA</td>
</tr>
<tr>
<td>Other oil-filled equipment (i.e., manufacturing equipment)</td>
<td>Yes</td>
<td>No</td>
<td>NA</td>
</tr>
<tr>
<td>Staging and related appurtenances</td>
<td>Yes</td>
<td>No</td>
<td>NA</td>
</tr>
<tr>
<td>Mobile refiners or non-transportation-related tank cars</td>
<td>Yes</td>
<td>No</td>
<td>NA</td>
</tr>
<tr>
<td>Transfer areas, equipment and activities</td>
<td>Yes</td>
<td>No</td>
<td>NA</td>
</tr>
<tr>
<td>Identify any other equipment or activities that are not listed above:</td>
<td>Yes</td>
<td>No</td>
<td>NA</td>
</tr>
</tbody>
</table>
How does the implementation match up with the Plan?

**ATTACHMENT A: SPCC FIELD INSPECTION AND PLAN REVIEW TABLE**

Documentation of Field Observations for Containers and Associated Requirements

Inspectors should use this table to document observations of containers as needed.

**Containers and Piping**

- **Check containers for leaks** specifically looking for: drip marks, discoloration of tanks, puddles containing spilled or leakaged material, corrosion, cracks, and localized dead vegetation, and standards/specifications of construction.
- **Check aboveground container foundation** for cracks, discoloration, and puddles containing spilled or leakaged material, settling, gaps between container and foundation, and damage caused by vegetation roots.
- **Check piping** for: drips, leaks, discolored, or discoloring of pipe between supports, evidence of stored material seepage from valves or seals, evidence of leaks, and localized dead vegetation. For all aboveground piping, include the general condition of flange joints, valve glands and bodies, drip pans, pipe supports, bleeder and gauge valves, and other such items (Document in comments section of §112.1(b) or 112.2(d))

**Secondary Containment (Active and Passive)**

- **Check secondary containment** for: containment system (including walls and floor) ability to contain oil such that oil will not escape the containment system before cleanup occurs, proper sizing, cracks, discoloration, presence of spilled or leakaged material (standing liquid), erosion, corrosion, penetrations in the containment system, and valve conditions.
- **Check dike or berm systems** for: level of precipitation in dike/available capacity, operational status of drainage valves (closed), dike or berm impermeability, debris, erosion, impermeability of the earthen floor/walls of dike area, and localization status of pipes, inlets, drainage around and beneath containers, presence of oil discharges within dike area.
- **Check drainage systems** for: an accumulation of oil that may have resulted from any small discharge, including field drainage systems (such as drainage ditches or road ditches), and oil traps, sumps, or skimmers. Ensure any accumulations of oil have been promptly removed.
- **Check retention and drainage ponds** for: erosion, available capacity, presence of spilled or leakaged material, debris, and stressed vegetation.
- **Check active measures (countermeasures)** for: amount indicated in plan is available and appropriate; deployment procedures are realistic; material is located so that they are readily available; efficacy of discharge detection; availability of personnel and training; appropriateness of measures to prevent a discharge as described in §112.10(b).

<table>
<thead>
<tr>
<th>Container ID</th>
<th>General Condition</th>
<th>Storage Capacity and Type of Oil</th>
<th>Type of Containment/Drainage Control</th>
<th>Overfill Protection and Testing &amp; Inspections</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Abandoned or Burned Tank</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Records Review

Inspector may request to review records such as:

- Integrity Testing
- Oil-Filled Operational Equipment Monitoring
- Personnel Training
- Drainage Logs
- Leak Testing
- Visual Inspections

Common SPCC Plan Deficiencies or Violations

- No PLAN!
- Inadequate or missing cross reference
  - Which also makes reviewing your plan difficult for the inspector (not off to a great start)
- Inadequate facility diagrams
  - Or facility description and diagram don’t match – missing piping and loading areas
  - Or upon inspection, find drum(s) not noted in plan
- Plans doesn’t address spill trajectory requirement
  - If it spills where is it going?
- Inadequate discharge notification form
  - Quantity of discharged to water and media impacted
**Other Common SPCC Plan Deficiencies or Violations**

- Missing 112.7(a) elements
  - The mini response plan
- Inadequate contingency plan (40 CFR Part 109) or lack of contingency plan when required
- Notification section incomplete (or outdated)
  - Emergency Numbers out of service or incorrect
- Generic/Non-Specific Information
  - Plan just repeats the rule requirements and not specific to implementation at the facility
- Missing information (leads to questions)
  - Again, include the negative

**Common Implementation Deficiencies or 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 Deficiencies or 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

Closing Conference

- After the inspection is complete the inspector will conduct a closing conference
- The closing conference can vary in length from a few minutes to longer if necessary
- Inspector will re-cap what information was collected and give the facility the opportunity to provide any additional information or documentation
After the Inspection

- Facilities can expect a copy of the inspection report to be mailed ~ 60 days AFTER the inspection
  - Inspector will not provide a copy of their draft inspection report at the time of the inspection
- EPA will make a determination whether or not the facility is in compliance with the SPCC Rule
  - In Compliance
    - YAY!

Out of Compliance

- Ultimate goal is to get the facility “back into compliance” or BIC
- Follow-up action dependent on the nature and type of deficiencies or violations
  - Options for Compliance Assistance where EPA works with facility to address deficiencies and get back into compliance
  - Options for Enforcement for more serious or multiple violations and deficiencies
Still feeling overwhelmed?

• It's ok. We're still here to help
• Even more online resources
  – https://www.epa.gov/oil-spills-prevention-and-preparedness-regulations
• Can’t reach the R5 Coordinator (me) and need help ASAP?
  – Call the Call Center (M-F 10:00-5:00ET)
    • 800-424-9346

Any Questions?

USEPA Region 5
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734-692-7618

U.S. EPA Office of Emergency Management
Regulations and Policy Development Division
http://www.epa.gov/emergencies

Oil Information Center:
(800) 424-9346 or TDD (800) 553-7672