The Revised SPCC Regulations

OSC Readiness Training
Phoenix, Arizona
Thursday, November 18, 2004

U.S. Environmental Protection Agency
Office of Emergency Management
Oil Program
www.epa.gov/oilspill
Agenda

- Purpose of 40 CFR part 112
- Background and overview of revisions to SPCC regulations
- Section-by-section description of changes
- Litigation clarifications
- Scenarios and case studies
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Purpose of 40 CFR part 112
Purpose of 40 CFR Part 112

- To prevent oil discharges from reaching navigable waters of the U.S. or adjoining shorelines
- To ensure effective response to a discharge of oil
- To ensure that proactive measures are used in response to an oil discharge
Prevention Requirements

- SPCC regulations require site-specific plans to prevent oil discharges that could affect navigable waters
- Originally promulgated on December 10, 1973, and effective starting January 10, 1974
- Authority: CWA §§ 311(j)(1)(C) and 501, and codified under 40 CFR part 112
Response Plan Requirements

- FRP regulations require certain facilities to prepare and submit to EPA plans to respond to discharges of various sizes

- Basis: 1990 OPA amendments to CWA

- Authority: CWA §§ 311(j)(5) and 501, and codified under 40 CFR §§112.20-112.21

- Effective Date: August 30, 1994
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Background
and
Overview
Background of SPCC Revisions

- Proposed changes to SPCC rule:
  - October 22, 1991
  - February 17, 1993
  - December 2, 1997

- Final rule published on July 17, effective August 16, 2002

- 18-month compliance extension published on April 17, 2003

- Second 18-month compliance extension published on August 11, 2004

- Plans must be prepared by February 17, 2006
Overview of SPCC Revisions

- Implements structural and editorial changes to clarify regulatory intent
- Reduces burden on the regulated universe
- Establishes placeholders for possible future differentiations based on the Edible Oil Regulatory Reform Act (EORRA)
Structural and Editorial Changes

- Incorporates plain language
- Changes *should* to *shall* to *must*
- Includes new definitions to clarify scope of requirements
- Clarifies applicability to storage and operational *use* of oil
- Includes new subparts to reflect different requirements based on types of oil
EORRA Requirements

- Consider differences in properties and environmental effects between edible oils and other oils and greases, including petroleum

- Take differences into account in the application of the rule
EPA Response to EORRA

- EPA has determined that animal fats and vegetable oils are covered by 40 CFR part 112.
- In April 1999, EPA proposed revisions to FRP rule to provide revised response planning for facilities storing, transporting, or handling animal fats or vegetable oil.
- Revised SPCC rule establishes placeholders for future requirements based on EORRA.
Burden Reduction

- Establishes new exemptions under §112.1(d)
- Allows flexible plan format, provided it cross-references all requirements
- Allows deviations in certain circumstances, when equivalent environmental protection is provided
- Result of revisions to SPCC rule:
  - 40-percent reduction in regulatory paperwork burden by third year
  - 55,000 fewer facilities subject to rule
Proposed Revisions Not Finalized

Final revisions to SPCC regulations do not:

- Require notification that a facility is subject to part 112
- Include a 72-hour impermeability standard
- Change frequency of inspections from periodic to monthly
- Require PE to be registered or licensed in the state in which the facility is located
- Require PE to visit a facility (but somebody must visit)
- Prohibit certification by a PE employed by a facility or with a financial interest in the facility
### Overview of Events After Rule Publication in July 2002

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
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| 2002 | **Final Rule: SPCC Rule Amendments**<br>
Incorporates many of the proposed modifications. |
| 2003 | **Final Rule: Compliance Date Extension**<br>
Provides additional time to prepare and update SPCC Plans. |
| 2004 | **Notice: Litigation Settlement Agreement**<br>
Published clarifications of the rule as agreed upon with litigants. |
|      | **Final Rule: Compliance Date Extension**<br>
Provides additional time to understand published clarifications. |
|      | **Notices of Data Availability: Certain Facilities & Oil-Filled and Process Equipment**<br>
Request for comments on alternate regulatory initiatives. |
Extension to Compliance Deadlines

- Compliance dates for the SPCC amendments were extended in 2003 and 2004 (§§112.3(a) and (b)).
  - Provides additional time for regulated community to update or prepare Plans, especially following the litigation settlement (2004 extension).
  - Alleviates the need for individual extension requests.
- The 2004 extension also amended the compliance deadlines for onshore and offshore mobile facilities (§112.3(c)).
Deadlines to Amend or Prepare and Implement SPCC Plan

<table>
<thead>
<tr>
<th>A facility starting operation...</th>
<th>Must...</th>
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</table>
| On or before 8/16/02           | Maintain existing Plan  
  Amend Plan no later than 2/17/06  
  Implement Plan no later than 8/18/06 |
| After 8/16/02 through 8/18/06  | Prepare and implement a Plan no later than 8/18/06 |
| After 8/18/06                  | Prepare and implement a Plan before beginning operations |

Onshore and offshore mobile facilities must prepare, implement, and maintain a Plan as required by the rule. A facility must amend and implement the Plan, if necessary to ensure compliance with the rule, on or before 8/18/06.

NOTE: Facilities subject to 40 CFR part 112 and in operation before August 16, 2002, and without an existing Plan, must immediately prepare and implement a Plan and are considered in violation until Plan implementation. Additionally, a 5-year statute of limitations is in effect with respect to old rule.
Litigation

Lawsuits were filed by American Petroleum Institute, Petroleum Marketers Association of America, and Marathon Oil.

Litigation Issues:
- Loading racks
- Impracticability
- Produced water and wastewater treatment
- Integrity testing
- Security
- Facility
- Navigable waters *(not resolved through settlement)*
EPA is considering alternative approaches to ensure protection from oil spills for:

- Facilities that handle oil below a certain threshold amount
- Oil-filled and process equipment

EPA Published Notices in the Federal Register on September 20, 2004.

Information is available for public review and comment.

EPA is receiving comments, including data and analyses, to help assess the merit of these alternatives.
Small Business Administration
Small Facility Initiative

- Responds to complaints that PE certification would be too expensive for small facilities.
- Tiered requirements based on facility oil storage capacity:

<table>
<thead>
<tr>
<th>Tier 1</th>
<th>No written SPCC Plan.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,321 - 5,000 gal</td>
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</table>

<table>
<thead>
<tr>
<th>Tier 2</th>
<th>Written SPCC Plan, but not PE certified.</th>
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<tr>
<td>5,001 - 10,000 gal</td>
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</table>

<table>
<thead>
<tr>
<th>Tier 3</th>
<th>SPCC Plan with PE certification.</th>
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<tbody>
<tr>
<td>Greater than 10,000 gal</td>
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</table>
Utility Solid Waste Activities Group proposes amendments to oil-filled electrical equipment.

Two recommendations:

- Base regulatory threshold for oil-filled operating equipment on storage capacity of each piece of equipment, rather than aggregate capacity of facility.
- Establish tiered requirements based on the oil storage capacity.
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Section-By-Section Description of Changes
Subpart A  All facilities and all types of oil
Subpart B  Petroleum oils and non-petroleum oils
            *Except those oils covered in Subpart C.*
Subpart C  Animal fats and oils and greases, and fish and marine mammal oils; and vegetable oils from seeds, nuts, fruits, and kernels
Subpart D  Response requirements
General Applicability (§112.1)

- Regulated entities
- Discharges as described in §112.1(b)
- Exemptions
  - Completely buried storage and aboveground storage capacity
  - *De minimis* containers
  - Wastewater treatment
- Regional Administrator (RA) authority
Regulated Entities (§112.1(b))

- **Old rule:** Applied to owners or operators of facilities that drill, produce, gather, store, process, refine, transfer, distribute, or consume oil and oil products.

- **Revised rule:** Maintains scope, but clarifies applicability to users of oil.
Discharges as Described in §112.1(b)

- Differs from general definition of “discharge”
- Incorporates “sheen rule” of 40 CFR part 110
- Refers now to quantities that may be harmful
  - Consistent with CWA amendments
  - Broadens scope to include discharges not only harmful to the *public health or welfare*, but also to the *environment*
- Reflects full geographic scope of CWA
Discharge Types
Old rule: Covered navigable waters of the United States or adjoining shorelines

Revised rule: Expands scope to include –

- Waters of the contiguous zone
- Activities in connection with the Outer Continental Shelf Lands Act or the Deepwater Port Act of 1974
- Activities that may affect certain natural resources
New Exemptions Under §112.1(d)

- Aggregate aboveground storage capacity of less than 1,320 gallons (removing 660-gallon threshold for single container)
- Storage capacity of completely buried storage tanks subject to all technical requirements 40 CFR part 280 or 281
- Container sizes less than 55 gallons
- Facility or part thereof used exclusively for wastewater treatment and not used to satisfy any requirement of 40 CFR 112
Regulatory Thresholds (§112.1(d)(2))

- **Old rule:** Regulated facilities with –
  - Completely buried storage capacity of more than 42,000 gallons of oil; OR
  - Storage capacity, which is not buried, of more than 1,320 gallons of oil; OR
  - Single unburied container with more than 660 gallons of oil.

- **Revised rule:** Eliminates lower threshold of 660 gallons for a single container and establishes exclusions from storage capacity
§112.1(d)(4) exempts completely buried storage tanks and associated piping, ancillary equipment, and containment systems when they are subject to all technical requirements of:

- 40 CFR part 280; or
- State program approved under 40 CFR part 281
Exclusions from Completely Buried Storage Capacity (§112.1(d)(4)) (continued)

- Requires that such tanks and piping be marked on the facility diagram under §112.7(a)(3)

- Loading racks associated with exempt UST systems are also exempt
Factors Affecting UST Exemption

- Definition of UST
- Exemptions from 40 CFR part 280
- Deferred tanks
- More stringent state programs under 40 CFR part 281
Applicability of 40 CFR part 280

- Any one or combination of tanks (including associated underground pipes) used to contain an accumulation of regulated substances; and

- Volume (including the volume of underground pipes connected thereto) is 10 percent or more beneath the surface of the ground. (40 CFR 280.12)

- Some USTs are considered ASTs under SPCC regulations – UST system must be completely buried
Is This Tank Regulated?
Exemptions from 40 CFR part 280

- Part 280 does **not** apply to:
  - Farm or residential tanks of 1,100 gallons or less capacity used for storing motor fuel for noncommercial purpose
  - Tanks used for storing heating oil for consumptive use on the premises where stored
  - Septic tanks
  - Pipeline facilities (including gathering lines) subject to certain regulations
  - Non-petroleum oils
Examples of Deferrals

- Wastewater treatment tank systems
- UST systems containing radioactive material regulated under the Atomic Energy Act
- UST systems part of emergency generator systems at nuclear power generation facilities
- Airport hydrant fuel distribution systems
- UST systems with field-constructed tanks
Aboveground Storage Capacity

- **Includes:**
  - Capacity of containers with a capacity of 55 gallons or greater
  - Storage capacity of operating equipment

- **Excludes:**
  - Capacity of containers that are “permanently closed” (see §112.2)
Exclusions from Facility Capacity: *De Minimis* Containers (§112.1(d)(5))

- **Revised rule:** exempts containers with a storage capacity of less than 55 gallons of oil from all SPCC requirements
Counted

55-gallon drum

Not Counted

5-gallon container

30-gallon drum
Exclusions from Facility Capacity: Wastewater Treatment (§112.1(d)(6))

- **Revised rule:** exempts any facility or part thereof used *exclusively* for wastewater treatment

- Exemption does not apply to:
  - Any facility or part thereof used to satisfy requirements of 40 CFR part 112
  - Production, recovery, or recycling of oil
RA Authority (§112.1(f))

- RA may require an SPCC Plan (or any part thereof) for any facility subject to EPA jurisdiction under section 311(j) of the Clean Water Act (CWA)
  - Includes facilities otherwise exempt under §112.1(d)
  - Provides for notice and appeal of such RA actions
Key Definitions (§112.2)

- Alteration and repair
- Breakout tank
- Bulk storage container
- Discharge
- Facility
- Navigable waters
- Oil
- Permanently closed container
- Storage capacity
Alteration and Repair

- **Alteration**: any work on a container involving cutting, burning, welding, or heating operations that changes the physical dimensions of the container.

- **Repair**: any work necessary to maintain or restore a container to safe operation, other than ordinary day-to-day maintenance and actions that weaken the container.
Breakout Tank

- Container used to:
  - Relieve surges in an oil pipeline system or
  - Receive and store oil transported by a pipeline for reinjection and continued transportation by pipeline.

- Frequently in-line

- May be regulated by EPA and/or DOT (i.e., complex)

- Jurisdiction established in MOU between EPA and DOT
Bulk Storage Container

- Any container used to store oil
- Containers considered *used*:
  - Prior to use
  - While being used
  - Prior to further distribution in commerce
- Operational equipment are not considered bulk storage containers under SPCC rule
Discharge

- Includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, or dumping

- Excludes discharges of oil permitted under CWA section 402 (40 CFR §112.2)

- More general than “discharges as described in §112.1(b)”
Facility

- Any mobile or fixed, onshore or offshore building, structure, installation, equipment, pipe, or pipeline used in:
  - oil well drilling operations
  - oil production
  - oil refining
  - oil storage
  - oil gathering
  - oil processing
  - oil transfer
  - oil distribution
  - waste treatment
  - or in which oil is used
Extent of Facility

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

- Waters that are, have been, or may be used in interstate or foreign commerce, including all waters subject to tidal activity
- Interstate waters (e.g., interstate wetlands)
- Intrastate waters (e.g., interstate lakes, streams, mudflats, sandflats, wetlands, wet meadows, or ponds), the use, degradation, or destruction of which could affect interstate or foreign commerce
Navigable Waters (continued)

- Impoundments of waters otherwise defined as waters of U.S.
- Tributaries of waters identified above
SWANCC

- Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers (U.S. Supreme Court decision – 1/9/01)

- Dealt specifically with CWA §404 permitting, migratory birds, and link between isolated waters (wetlands) and navigable waters
  - Effectively leaves protection of isolated waters to state and local governments
  - “Isolated” waters are intrastate waters not connected or adjacent to interstate waters or waters that are navigable in fact
Oil

Includes *oil of any kind or in any form* such as:

- Petroleum and fuel oils
- Sludge
- Oil refuse
- Oil mixed with wastes other than dredged spoil
- Animal fats, oils, and greases
- Vegetable oils
- Other oils
Permanently Closed

- Covers containers or facilities no longer capable of storing or using oil

- Requires:
  - No liquid and sludge
  -Disconnected lines and piping
  - Closed and locked valves (except for ventilation)
  - Conspicuous signs on each container
    - “Permanently closed container”
    - Date of closure
“Permanently closed” aboveground storage tank

Labeled “Out of Service”
Storage Capacity

◆ Refers to the **shell capacity** of the container

◆ Captures the total capacity, regardless of actual volume of oil stored or used

◆ Does not include:
  - Containers with volumes less than 55 gallons
  - Certain wastewater treatment systems
  - Containers used for secondary containment
  - Certain USTs
Requirement to Prepare and Implement an SPCC Plan (§112.3)

- Applicability of requirement
- Professional Engineer (PE) certification and accompanying attestations
- Plan location
- Extensions to prepare and implement a Plan
Requirement to Prepare and Implement an SPCC Plan (§112.3(a))

◆ **Old rule:** required owners or operators to prepare and implement written SPCC Plans for:
  
  - Onshore or offshore facilities that have had a discharge to navigable waters or adjoining shorelines
  
  - Facilities that, due to their locations, could reasonably be expected to have such a discharge

◆ **Revised rule:** applies to facilities that could reasonably be expected to cause a discharge as described in §112.1(b)
Old Rule:  
PE Certification (§112.3(d))

- PE examined the facility and is familiar with the provisions of the SPCC rule; and
- Plan had been prepared in accordance with good engineering practice.
Revised Rule:
PE Certification (§112.3(d))

- PE is familiar with SPCC requirements;
- PE, or his or her agent, has visited and examined the facility;
- Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards, and with SPCC requirements;
- Procedures for required inspections and testing have been established; and
- Plan is adequate for the facility.
Plan Location (§112.3(e))

- **Old rule:** Required an owner or operator to maintain a complete copy of the Plan –
  - At the facility, if the facility is attended at least 8 hours per day; or
  - At the nearest field office, if the facility is not so attended.

- **Revised rule:** Changes the 8-hour threshold to 4 hours

- Plan must be available to RA for on-site review during normal working hours
Extensions to Prepare and Implement an SPCC Plan (§112.3(f))

- **Old rule:** RA could authorize an extension upon finding that an owner/operator could not fully comply as a result of –
  - Non-availability of qualified personnel; or
  - Delays in construction or equipment delivery beyond the control and without the fault of the owner/operator or his or her agents or employees

- **Revised rule:** Expands RA authority to include extensions for amendments
SPCC Plan Amendment Required by RA (§112.4)

- Trigger for reporting spills to RA
- Information submitted to RA
- Information submitted to state
- Timing of RA requirement for amendment

Note: An owner/operator is no longer required to submit entire Plan.
Old Rule:
Trigger for Reporting Spills to RA

§112.4(a) required an owner/operator to submit specified information to the RA when the facility has:

- Discharged more than 1,000 gallons of oil in a single discharge; or
- Discharged oil in harmful quantities in each of two discharges reportable under CWA §311(b)(5), within any 12-month period.
Revised Rule:

Trigger for Reporting Spills to RA

- Raises threshold for reporting two discharges as described in §112.1(b) to volumes greater than **42 gallons**
- Maintains threshold for reporting single discharges as described in §112.1(b) to volumes greater than **1,000 gallons**
- Reduces the amount of information submitted to RA from 11 to 9 items
## Information Submitted to RA

<table>
<thead>
<tr>
<th>Item</th>
<th>Old Rule</th>
<th>Revised Rule</th>
</tr>
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<tbody>
<tr>
<td>(1) Name of facility</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>(2) Name(s) of owner/operator</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>(3) Location of facility</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>(4) Date/year of initial operations</td>
<td>✓</td>
<td>×</td>
</tr>
<tr>
<td>(5) Maximum storage/handling capacity and normal daily throughput</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>(6) Description of facility</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>(7) Complete SPCC Plan, amendments</td>
<td>✓</td>
<td>×</td>
</tr>
<tr>
<td>(8) Cause(s) of discharge and analysis</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>(9) Corrective actions, countermeasures</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>(10) Preventative measures</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>(11) Other relevant information</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
Old rule: Required information submitted to EPA under §112.4(a) also be sent to the state agency in charge of water pollution control activities where the facility is located.

Revised rule: Allows for multiple state agencies and specify oil pollution control as the relevant type of state agency activity.
Timing of RA Requirement for Amendment (§112.4(d))

- **Old rule:** Allows an RA to require an amendment after review of materials the owner or operator submits under §112.4(a) and (c)

- **Revised rule:** Expands authority to allow an RA to require an amendment after on-site review of a Plan
SPCC Plan Amendment by Owner or Operator (§112.5)

- Trigger for SPCC Plan amendment
- Timing of amendment implementation
- Frequency of SPCC Plan reviews
- PE certification of amendments
Trigger for SPCC Plan Amendment (§112.5(a))

- Change in the facility design, construction, operation, or maintenance that materially affects its potential for a discharge as described in §112.1(b)

- Examples:
  - commissioning or decommissioning containers
  - replacement, reconstruction, or movement of containers or piping systems
  - construction/demolition that might alter secondary containment structures
  - certain changes of product or service
  - revision of standard operation/maintenance procedures
Timing of Amendment Implementation

◆ **Old rule:** Required that amendments be fully implemented as soon as possible, no later than six months after material change.

◆ **Revised rule:**
  - Requires preparation of amendment within six months of material change.
  - Requires implementation as soon as possible, no later than six months following amendment.
Frequency of SPCC Plan Reviews (§112.5(b))

Old rule:

- Required review of a Plan at least every three years from the date the facility becomes subject to the rule
- Required updates to account for new technology
Frequency of SPCC Plan Reviews (§112.5(b)) (continued)

◆ Revised rule:
  - Reduces frequency of review to at least every five years
  - Requires documentation of review
  - Owner/operator conducts review and provides documentation
Example documentation

Example of sufficient documentation:

“I have completed review and evaluation of the SPCC Plan for (name of facility) on (date), and will (will not) amend the Plan as a result.”
PE Certification of Amendments (§112.5(c))

- **Old rule:** Required that a PE certify any amendment to an SPCC Plan

- **Revised rule:** Clarifies that a PE must certify any technical amendments to an SPCC Plan.

- Non-technical amendments include changes to phone numbers or names.
SPCC Plan General Requirements (§112.7)

- Format of SPCC Plan
- Environmental Equivalent Deviations
- Facility diagram and other required details
- Secondary containment requirements
- Written procedures
- Training
- Field-constructed aboveground containers
- Stormwater drainage
- Integrity testing for aboveground containers
- Buried piping
Format of SPCC Plan (§112.7)

◆ **Old rule:** Required that a Plan follow the sequence specified in the rule and discuss the facility’s conformance with the requirements

◆ **Revised rule:** Allows alternative formats for a Plan, provided that the owner/operator cross-reference its provisions to the requirement listed in the SPCC rule
Environmental Equivalent Deviations in SPCC Plan (§112.7(a)(2))

- **Revised rule:** Allows Plan to deviate from most of the substantive requirements, provided that the owner/operator –
  - Explains reason for nonconformance; and
  - Provides equivalent environmental protection with an alternate measure.

- **Prohibits deviations from secondary containment requirements**

- **Allows RA to require amendment if equivalent environmental protection is questioned**
Facility Diagram (§112.7(a)(3))

- **Revised rule:** requires owner or operator to describe physical layout of the facility and include a facility diagram in the Plan.

- **Diagram must:**
  - Mark location and contents of each container.
  - Include completely buried tanks otherwise exempt under §112.1(d)(4).
  - Include all transfer stations and connecting pipes.
Other Required Details (§112.7(a)(3))

- Type of oil in each container and its storage capacity
- Discharge prevention measures (e.g., loading and unloading)
- Discharge/drainage controls (e.g., secondary containment for bulk containers)
Other Required Details (§112.7(a)(3)) (con't)

- Countermeasures for discharge discovery, response, and cleanup
- Methods of disposal of recovered materials
- Contact list and phone numbers
Contents of Contact List (§112.7(a)(3))

- Facility response coordinator
- National Response Center
- Cleanup contractors with whom the owner/operator has an agreement for response
- All appropriate federal, state, and local agencies who must be contacted
Additional Requirements for Non-FRP Facilities

- Sections 112.7(a)(4) and (5) require SPCC facilities without FRPs to:
  - Provide spill reporting procedures in the Plan
  - Organize relevant portions of the Plan to make them readily usable in an emergency (equivalent to an ERAP)
Secondary Containment Requirements (§112.7(c))

- Secondary containment is required areas with a potential for a discharge.

- **Revised rule:** Specifies that the entire containment system (including walls and floor) –
  - Must be capable of containing oil
  - Prevent escape of discharges from the containment system before cleanup occurs
§112.7(c) General containment requirement

§112.8(b)(3) and (4)

§112.8(c)(2)

§112.8(c)(11)

Mobile or portable storage containers

Loading and unloading

Facility drainage, undiked areas

Bulk storage containers

Sections in red font indicate provisions with specific sizing requirements.
Everything is subject to §112.7(c)

For piping, if impracticable

** Subject to 112.7(c) and more specific sizing requirements as applicable. If 112.7(c) is impracticable, 112.7(d) applies
† Examples of areas with potential for discharge may include: Piping and Flowlines, Oil-filled electrical, Operating, Process or Manufacturing Equipment, and Loading/Unloading Areas.
Examples of Secondary Containment

For onshore facilities:

- Dikes, berms, or retaining walls sufficiently impervious to contain oil
- Curbing
- Culvertting, gutters, or other drainage systems
- Weirs, booms, or other barriers
- Spill diversion ponds
- Sorbent materials
Examples of Secondary Containment (con’t)

◆ For off-shore facilities:
  • Curbing or drip pans
  • Sumps and collection systems
Required, when secondary containment is not practicable –

- Explanation of why containment is impracticable
- Contingency plan that follows 40 CFR part 109
- Written commitment of manpower, equipment, and materials to control and remove harmful quantity of oil discharged
Revised Rule: Impracticability (§112.7(d))

- Adds requirement for bulk storage containers:
  - Conduct periodic integrity testing of containers
  - Conduct periodic integrity and leak testing of valves and piping
Written Procedures (§112.7(e))

♦ Old rule:
  • Required inspections in accordance with written procedures
  • Required maintenance of written procedures and a signed record of inspections as part of the SPCC Plan for a period of three years

♦ Revised rule:
  • Expands requirements to include tests, in addition to inspections
  • Allows use of records kept per usual and customary business practices
Old Rule: Training (§112.7(e)(10))

- Required owner/operator to –
  - Instruct personnel in the operation and maintenance of equipment to prevent oil discharges and applicable pollution control laws, rules, and regulations
  - Designate a person at each facility who is accountable for spill prevention and who reports to line management
  - Schedule and conduct discharge prevention briefings at intervals frequent enough to assure adequate understanding of the facility’s SPCC Plan
Revised Rule:
Training (§112.7(f))

❖ Revises training requirements to specify that an owner/operator must:
   - Train only oil handling personnel
   - Conduct discharge prevention briefings at least once a year

❖ Maintains requirement to designate person at each facility who is accountable
Revised rule: Creates new requirement that an owner/operator must evaluate field-constructed aboveground containers –

- Undergoing repair, alteration, reconstruction, or change in service that might affect the risk of discharge or failure due to brittle fracture or other catastrophe
- When there has been a discharge or failure due to brittle fracture or other catastrophe

Owner/operator must take appropriate action, if necessary, to address findings
Old Rule:
Stormwater Drainage (§112.7(e)(2)(iii))

Allowed drainage of rainwater from diked areas that by-passed in-plant treatment if:

- Bypass valve is normally sealed closed
- Inspection of runoff rainwater ensures compliance with applicable water quality standards and avoids harmful discharge
- Bypass valve is opened and resealed following drainage under responsible supervision
- Adequate records are kept of such events
Revised Rule:
Stormwater Drainage (§112.8(c)(3))

- Maintains substantive requirements of §112.7(e)(2)(iii) in the old rule
- States that records required under NPDES permits are sufficient for recording stormwater bypass events
Old Rule: Integrity Testing ($\S112.7(e)(2)(vi)$)

- Required periodic testing of aboveground containers using such techniques as:
  - Hydrostatic testing
  - Visual inspection
  - Nondestructive shell thickness testing

- Required comparison records, where appropriate

- Required periodic inspection of containers for signs of deterioration, leaks, or accumulation of oil inside diked areas
Revised Rule: Integrity Testing (§112.8(c)(6))

- Requires owner or operator to:
  - Test aboveground containers on a regular schedule, and when material repairs are done;
  - Take into account container size and design when deciding test frequency and type;
  - Combine visual inspection with another testing technique; and
  - Keep comparison records and include tank supports and foundations in these inspections.
Revised Rule: Integrity Testing (§112.8(c)(6)) (continued)

- Applies even to 55-gallon drums
- Allows use of customary business records, and environmental equivalency can be applied
Onshore Facilities (Non-Production): Buried Piping Installations

- **Old rule:** §112.7(e)(3)(i) requires that buried piping installations be protectively wrapped and cathodically protected, if soil conditions warrant

- **Revised rule:** §112.8(d)(1) requires that buried piping installed after August 16, 2002:
  - Be protectively wrapped and cathodically protected; or
  - Otherwise satisfy the corrosion protection provisions for piping in 40 CFR part 280 or a state program approved under 40 CFR part 281
Onshore Oil Production Facilities: Stormwater Drainage

- **Revised rule:** §112.9(b)(1) revises §112.7(e)(5)(ii) in the old rule, specifying that records must be kept for stormwater drainage events at onshore oil production facilities.

- Allows records required by NPDES regulations to record stormwater bypass events to be used for SPCC Plan purposes.
Onshore Oil Production Facilities: Secondary Containment

- **Old rule:** §112.7(e)(5)(iii)(B) required secondary containment for onshore production facilities

- **Revised rule:** §112.9(c)(2) revises §112.7(e)(5)(iii)(B) in the old rule, specifying that secondary containment is sized to the largest container, including sufficient freeboard to contain precipitation
Litigation Clarifications
Litigation Settlement Clarifications

- Lawsuits were filed by American Petroleum Institute, Petroleum Marketers Association of America, and Marathon Oil.
- Litigation Issues:
  - Loading racks
  - Impracticability
  - Produced water and wastewater treatment
  - Integrity testing
  - Security
  - Facility
  - Navigable waters (not resolved through settlement)
The agency did not intend to interpret the term “loading/unloading rack” in the preamble of the July 2002 rule.

EPA interprets (§112.7(h) to apply only to loading and unloading “racks” at all types of facilities.

The language challenged by the litigants on “loading/unloading area drainage” was clarified to apply only to activities associated with tank car and tank truck loading/unloading racks.
Clarification in litigation settlement:
“The Agency did not intend...to opine broadly on the role of costs in determinations of impracticability. Instead, the Agency intended to make the narrower point that secondary containment may not be considered impracticable solely because a contingency plan is cheaper.”
Litigants asked whether produced water tanks at dry gas facilities were eligible for the wastewater treatment exemption.

- Dry gas production facilities are facilities that produce natural gas from a well from which the facility does not also produce condensate or crude oil that can be drawn off.

The Agency determined that a dry gas production facility would not be excluded from the exemption based on the view that it constitutes an “oil production, oil recovery, or oil recycling facility.”
The Agency generally believes that visual inspection plus elevation of a shop-built container in a manner that decreases corrosion potential and makes all sides of the container, including the bottom, visible during inspection would be considered “equivalent.”

The Agency also generally believes an approach that combines visual inspection with placement of a barrier between the container and the ground, designed and operated in a way to ensure that any leaks are immediately detected, to be considered “equivalent.”
Security
Litigation Settlement Clarifications

PMAA requested clarifications from EPA on two specific sets of circumstances with respect to environmentally equivalent protection:

- Area of facility directly involved in the handling, processing and storage of oil is adequately fenced.
- Facility is equipped with a “pump house” or “pump shack,” which contains, among other things, a master disconnect switch from which all power to pumps and containers is cut off when the facility is unattended.
The Agency was asked whether the definition of “facility” or “production facility” as defined in §112.2 applied to the terminology used in §112.20(f)(1).

According to the Agency, the definition of “facility,” not “production facility,” governs the meaning of “facility” as it is used in §112.20(f)(1).
Discussion Scenario #1

◆ Manufacturing facility
  - 3,500 gallons of oil stored in aboveground tanks and containers of various sizes
  - 1,000-gallon aboveground slop tank to store oil skimmed from 3,000 gallon flow-through wastewater treatment tank

◆ 200 yards from intermittent stream

◆ Complete and accurate records, no violations
Discussion Scenario #2

- Large industrial facility that produces olive oil
- Completely buried 50,000-gallon underground storage tank for olive oil storage
- 3,000-gallon partially buried tank used to contain oil for an emergency power generator
Discussion Scenario #3

- New electric utility service center facility
- Two 330-gallon ASTs for storage of #2 fuel oil
- Three 55-gallon drums and two 42-gallon totes of lube oils
- Hydraulic lift with 75 gallons of hydraulic oil
- Up to ten transformers containing 70 gallons of mineral oil each
- Yard fork lift with fuel capacity of 30 gallons of gasoline
- Commence operations on September 1, 2006
Discussion Scenario #4

- Large university
- Three partially exposed USTs used to store heating oil for consumptive use (total capacity of 60,000 gallons) and twenty-four 275-gallon ASTs (total capacity of 6,600 gallons)
- State regulates consumptive use tanks under 40 CFR part 281
- Existing SPCC plan calls for:
  - Annual inspections of USTs by tank testing contractor, who provides written report
  - Integrity testing for USTs every 10 years
  - Monthly inspections of ASTs by trained university staff
LARGE UNIVERSITY

20,000-gallon heating oil
  x 3

275-gal heating oil
  x 24
Discussion Scenario #5

- Small commercial airport
- Three 10,000-gal ASTs in tank farm; 50,000-gal oil in other ASTs and USTs at airport
- Tank farm and fueling operations leased to contractor, who maintains fleet of four 1,000-gal capacity tank trucks (not registered with DOT)
- 9,000-gal capacity tanker trucks deliver aviation fuel to loading rack at tank farm and return to offsite location
- Airport regularly receives heating oil from offsite vendor
Aviation Fuel Tank Farm
30,000 gallons aggregate

Refueling Tank Trucks
1000-gal capacity each

Aviation Fuel Delivery Truck
9,000-gal capacity

SMALL COMMERCIAL AIRPORT

50,000 gallons aggregate oil for heating, emergency generators, etc.
Case Study 1: All-Clean Oil Company

- Small oil recycling company
- **Underground storage capacity:** 5,000-gallon settling tank used to hold post-separator oil/water emulsions
- **Aboveground storage capacity:** 3 tanks, each with capacity of 1,200 gallons
- Owner believes facility is exempt from 40 CFR Part 112
  - “Operations really amount to wastewater treatment.”
  - “Anyway, they’re in a lull right now so two of the aboveground tanks are ‘closed.’”
Case Study 2: Old MacDonald’s Farm

- 5,000-acre agricultural business
- North Quadrant: 3,000-gallon aboveground tank for heating oil
- South Quadrant: fueling station
  - Fleet of 10 trucks, used for one daily run and then parked at drivers’ homes each night
  - 5,000-gallon bunkered tank
  - Small vehicle service shop with various lubricants for truck maintenance and repair
- East Quadrant: product-loading station
  - Two 500-gallon tanks for storing and loading processed organic canola oil
Case Study 3: Johnny-on-the-Spot Portable Fueling Company

- Supplier of portable fuel tanks under contract to construction sites
- Current two-year contract with New Horizons: supply fuel, portable fuel tanks, and fuel tank maintenance
- Total container capacity supplied at any one time: not to exceed 1,000 gallons