SPCC 101

40 CFR Part 112 Short Course

2/24/2021 8-12 PST

2021 CUPA Annual

Training Conference

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Legal Disclaimer

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 February 2021. This presentation may be revised periodically without public notice.

Agenda

8:00 am –9:10 am – Mark

9:10 am – 9:20 am - Break

9:20 am – 10:30 am - Pete

10:30 am – 10:40 am - Break

10:40 am – 11:45 am – Janice open Q&A

11:45 am – 12:00 pm – Janice open Q&A

Please feel free to take a break as needed

Please feel free to ask questions at the end of each part before the break

There is no bad question…

Instructor Introductions

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Part I: Introduction to the SPCC Rule

Intro to SPCC Rule: Agenda

1. Purpose of SPCC Rule
2. Rule Organization
3. History
4. Current Status
5. Compliance Dates

Please note that this presentation will not cover every SPCC provision

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

Purpose of SPCC Rule

- Requirements help prevent oil discharges from reaching navigable waters or adjoining shorelines.
- Certain facilities are required to **develop SPCC Plans** that describe equipment, workforce, procedures, and training to prevent, control, and provide adequate countermeasures to a discharge of oil.
- Promulgated under the authority of the Clean Water Act (CWA) §311(j)(1)(C).

What does the SPCC rule require?

- Requires facilities to develop and implement a **site-specific SPCC Plan** to address:
  - Containment and procedures to *prevent* oil discharge (tank testing);
  - *Control* measures to keep an oil discharge from entering navigable waters (containment); and
  - *Countermeasures* to contain, clean up, and mitigate any oil discharge that affects navigable waters (spill response measures).
- Performance-based rule designed to implement the Congressional policy of “no oil discharges” to waters of the United States

Rule Organization

Rule Section	***Topics***
Subpart A	Applicability, definitions, and general requirements for all facilities and all types of oil
Subpart B	Requirements for petroleum oils and non-petroleum oils, except those covered in Subpart C
Subpart C	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
Subpart D	Response requirements (FRP rule)

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

40 CFR 112 Structure (continued)

Appendix A	Memorandum of understanding between the Secretary of Transportation and the Administrator of the Environmental Protection Agency
Appendix B	Memorandum of understanding among the Secretary of the Interior, Secretary of Transportation, and Administrator of the Environmental Protection Agency
Appendix C	Substantial harm criteria
Appendix D	Determination of a worst case discharge panning volume
Appendix E	Determination and evaluation of required response resources for facility response plans
Appendix F	Facility-specific response plan
Appendix G	Tier I template

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**
2. **oil** and **oil products**; and
3. Is **non-transportation-related** (i.e. facility is not exclusively covered by DOI or DOT); and
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; and
5. Meets **capacity thresholds**
    - Aboveground storage > 1,320 gallons; or
    - Completely buried storage > 42,000 gallons

§112.1

Changes to “Facility” Definition

- The 2008 Amendments revise the definition of facility to:
  - clarify that the definition of facility alone governs SPCC applicability
  - clarify that non-contiguous parcels may be considered separate facilities
  - include terms “property”, “parcel”, and “lease” and to clarify what can be used in determining facility boundaries
    - These are terms that are familiar to production and farm sectors
  - add the qualifier “oil” before the term “waste treatment”

2008 Amendments

What is a Facility?

Rule definition (§112.2):

Facility means any mobile or fixed, onshore or offshore building, property, parcel, lease, structure, installation, equipment, pipe, or pipeline (other than a vessel or a public vessel) used in oil well drilling operations, oil production, oil refining, oil storage, oil gathering, oil processing, oil transfer, oil distribution, and oil waste treatment, or in which oil is used, as described in Appendix A to this part. The boundaries of a facility depend on several site-specific factors, including but not limited to, the ownership or operation of buildings, structures, and equipment on the same site and types of activity at the site. Contiguous or non-contiguous buildings, properties, parcels, leases, structures, installations, pipes, or pipelines under the ownership or operation of the same person may be considered separate facilities. Only this definition governs whether a facility is subject to this part.

§112.2

What the definition means…

- The extent of a “facility” depends on site-specific circumstances. Factors include:
  - Ownership, management, and operation of the buildings, structures, equipment, installations, pipes, or pipelines on the site;
  - Similarity in functions, operational characteristics, and types of activities occurring at the site;
  - Adjacency; or
  - Shared drainage pathways (e.g., same receiving water bodies)

Applicability Criterion #1

1

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

Drilling

Criterion #1: Oil-Related Activities

Criterion #1: Oil-Related Activities

Criterion #1: Oil-Related Activities

Criterion #1: Oil-Related Activities

Processing

Criterion #1: Oil-Related Activities

Criterion #1: Oil-Related Activities

Transferring

Criterion #1: Oil-Related Activities

Distributing

Criterion #1: Oil-Related Activities

Using

Criterion #1: Oil-Related Activities

Consuming

Criterion #1: Oil-Related Activities

Applicability Criterion #2

2

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

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)

Criterion #3: Non-Transportation Related

EOs and MOUs

- **Executive Order 11548** delegated responsibilities for regulating oil discharges (later superceded 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

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

Criterion #3: Non-Transportation Related

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

Criterion #3: Non-Transportation Related

Applicability Criterion #4

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

WOTUS Update

October 2020

The Navigable Waters Protection Rule: Definition of "Waters of the United States"

Background and NWPR Overview

“Waters of the United States” and the Clean Water Act

- “Waters of the United States” (WOTUS) is a threshold term in the Clean Water Act and establishes the scope of federal jurisdiction under the Act.
- Clean Water Act regulatory programs address “navigable waters,” defined in the statute as “the waters of the United States, including the territorial seas.”
- The Clean Water Act does not define WOTUS; Congress left further clarification to the agencies.
- The EPA and the Department of the Army (Army) have defined WOTUS by regulation since the 1970s.

Final Rule: 4 Categories of WOTUS

- Territorial seas and traditional navigable waters - (a)(1)
- Tributaries - (a)(2)
- Lakes and ponds, and impoundments of jurisdictional waters - (a)(3)
- Adjacent wetlands - (a)(4)

(a)(1) Territorial seas and traditional navigable waters (TNW):

The territorial seas, and waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including waters which are subject to the ebb and flow of the tide.

Key changes from the 2019 Rule:

- Combines the categories of traditional navigable waters and territorial seas.
- No substantive changes to definition of TNW.

Traditional navigable waters include those waters used for interstate commerce, like Lake Winnebago in Wisconsin.

(a)(2) Tributaries:

- Contributes surface water flow to an (a)(1) water in a typical year, either directly or through one or more (a)(2)-(4) waters. A tributary must be **perennial or intermittent** in a typical year.
- Does not lose its jurisdictional status if it **contributes surface water flow** to a downstream jurisdictional water in a typical year through a channelized non-jurisdictional surface water feature (*e.g.,* an ephemeral stream).
- The alteration or relocation of a tributary does not modify its jurisdictional status as long as it continues to satisfy the flow conditions of the definition.

Tributaries include those perennial or intermittent streams that flow in response to snowpack melt, like Hayes Creek in Colorado that contributes surface flow to the Crystal River.

Key Definitions in the Final Rule for Tributaries

Perennial:

- The term *perennial* means surface water flowing continuously year-round.

Intermittent:

- The term *intermittent* means surface water flowing continuously during certain times of the year and more than in direct response to precipitation (*e.g.*, seasonally when the groundwater table is elevated or when snowpack melts).

Ephemeral:

- The term *ephemeral* means surface water flowing or pooling only in direct response to precipitation (*e.g.*, rain or snow fall).

Snowpack:

- The term *snowpack* means layers of snow that accumulate over extended periods of time in certain geographic regions or at high elevation (*e.g.,* in northern climes or mountainous regions).

Definition of "Typical Year"

The term *typical year* means: "when precipitation and other climatic variables are within the normal periodic range (*e.g.,* seasonally, annually) for the geographic area of the applicable aquatic resource based on a rolling thirty-year period."

"Typical year" is a key concept in the NWPR for establishing jurisdiction based on surface water flow between a relatively permanent body of water (*i.e.,* a perennial or intermittent surface water channel, a standing body of open water) and TNWs, and between wetlands and other jurisdictional waters.

Application of the typical year concept ensures that the hydrologic flows and surface water connections necessary to establish jurisdiction are characterized based on normal climatic conditions (*i.e.,* neither too wet or too dry).

(a)(3) Lakes and ponds, and impoundments of jurisdictional waters:

- The term means **standing bodies of open water** that contribute surface water flow to an (a)(1) water in a typical year either directly or through one or more (a)(2)-(4) waters.
- Does not lose its jurisdictional status if it **contributes surface water flow** to a downstream jurisdictional water in a typical year through a channelized non-jurisdictional surface water feature (*e.g.,* an ephemeral stream).
- A lake, pond, or impoundment is also jurisdictional if it is **inundated by flooding** from an (a)(1)-(3) water in a typical year.

Lakes, ponds, and impoundments of jurisdictional waters include open bodies of surface water that contribute surface flow to a traditional navigable water, like Christian Pond in Wyoming.

(a)(4) Adjacent wetlands:

The term means wetlands that:

- abut, meaning to touch at least at one point or side of, a paragraph (a)(1)-(3) water;
- are inundated by flooding from a paragraph (a)(1)-(3) water in a typical year;
- are physically separated from a paragraph (a)(1)-(3) water only by a natural berm, bank, dune, or similar natural feature; or
- are physically separated from a paragraph (a)(1)-(3) water only by an artificial dike, barrier, or similar artificial structure so long as that structure allows for a direct hydrologic surface connection in a typical year through a culvert, flood or tide gate, pump, or similar artificial feature.

Adjacent wetlands include wetlands with manmade structures that allow for a direct hydrologic surface connection to an (a)(1-(3) water in a typical year, like these wetlands in the Mississippi river Delta region of Louisiana.

What Is a Ditch?

- A constructed or excavated channel used to convey water.
- Ditches are not a standalone category of jurisdictional waters.
- Ditches are jurisdictional where they are:
  - TNWs, including those subject to the ebb and flow of the tide (*i.e.,* are (a)(1) waters);
  - Either **constructed in or relocate a tributary**, or are constructed in an adjacent wetland, and satisfy the flow conditions of the tributary definition (*i.e.,* are (a)(2) waters); or
  - Constructed in an adjacent wetland and develop **wetland characteristics** (*i.e.,* are (a)(4) waters).

Waters/Features Excluded from Final WOTUS Definition [33 CFR 328.3(b)]

1) Waters not listed as WOTUS
2) Groundwater
3) Ephemeral features
4) Diffuse stormwater run-off
5) Ditches not identified as WOTUS
6) Prior converted cropland (PCC)
7) Artificially irrigated areas
8) Artificial lakes and ponds
9) Water-filled depressions incidental to mining or construction activity
10) Stormwater control features
11) Groundwater recharge, water reuse, and wastewater recycling structures
12) Waste treatment systems

Key Elements of Exclusions

Upland:

- The term *upland* means any land area that under normal circumstances does not satisfy all three wetland factors (*i.e.,* hydrology, hydrophytic vegetation, hydric soils) identified in paragraph (c)(16) and does not lie below the ordinary high-water mark or the high tide line of a jurisdictional water.
- Features constructed or excavated in upland or in non-jurisdictional waters must be constructed/excavated wholly in upland or non-jurisdictional waters to meet applicable exclusions.

Exclusions needing to be in upland or in non-jurisdictional waters:

- (b)(8) Artificial lakes and ponds
- (b)(9) Water-filled depressions incidental to mining or construction activity
- (b)(10) Stormwater control features
- (b)(11) Groundwater recharge, water reuse, and wastewater recycling structures

Key Elements of Exclusions

Exclusions as surface water connections:

- Certain excluded features may convey surface water flow to a downstream jurisdictional water in a typical year, thereby serving as a connection for upstream and downstream jurisdictional tributaries, lakes, ponds, and impoundments. This does not include groundwater or diffuse stormwater runoff/overland sheet flow.

- Excluded features that convey surface water flow between jurisdictional waters in a typical year do not become WOTUS themselves.

CWA Programs and the NWPR

CWA Programs Evaluated in Rulemaking

- Section 303: Water Quality Standards
- Section 303(d) and Total Maximum Daily Loads (TMDLs)
- **Section 311: Oil Spill Prevention, Preparedness, and Response**
- Section 401: Water Quality Certifications
- Section 402: NPDES Permitting
- Section 404: Dredged and Fill Permitting
- Financial Assistance Programs

Section 311 Oil Spill Prevention, Preparedness, and Response

- A reduction in jurisdictional waters may reduce the applicability of the section 311 program and the associated Oil Spill Liability Trust Fund (OSLTF).
- The OSLTF may not be not available to reimburse costs incurred by states or tribes to clean up spills or costs related to business and citizen impacts (e.g., lost wages and damages) for spills affecting waters that are not subject to CWA jurisdiction.
- All states have some form of mechanism for oil spill cleanup reimbursement from responsible parties.
- If there is no longer a reasonable expectation that an oil discharge from a facility could reach a water subject to CWA jurisdiction, then CWA 311 spill prevention and preparedness plan and implementation requirements would no longer apply to this facility. *Note:* R6 has received 5 FRP requests for reconsideration so far (west TX & east NM).

NWPR Toolbox

Determination of Typical Year: Antecedent Precipitation Tool (APT)

- COE is using and link is available from their website; EPA working to develop training on this.
- COE began training field staff in October 2020.

Determining Perennial or Intermittent Flow Classifications: Streamflow Duration Assessment Tools (SDAMs)

- Field work underway in Arid West
- See: https://www.epa.gov/streamflow-duration-assessment/streamflow-duration-assessment-method-sdam-status-region

Implementation Memos (TNW, PCC, Ditch Exemption): Goal is to improve coordination between COE and EPA.

See the following for more information on implementation tools: https://www.epa.gov/nwpr/training-and-implementation-materials

For Further Information

Visit https://www.epa.gov/nwpr for more information about the final rule, including the *Federal Register* notice of the final rule, supporting analyses, and fact sheets.

View the public webcast at https://www.youtube.com/watch?v=dt_OoxYU0-M&feature=youtu.be

Additional questions may be directed to the EPA at: CWAwotus@epa.gov or to the Corps at: USACE_CWA_Rule@usace.army.mil.

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

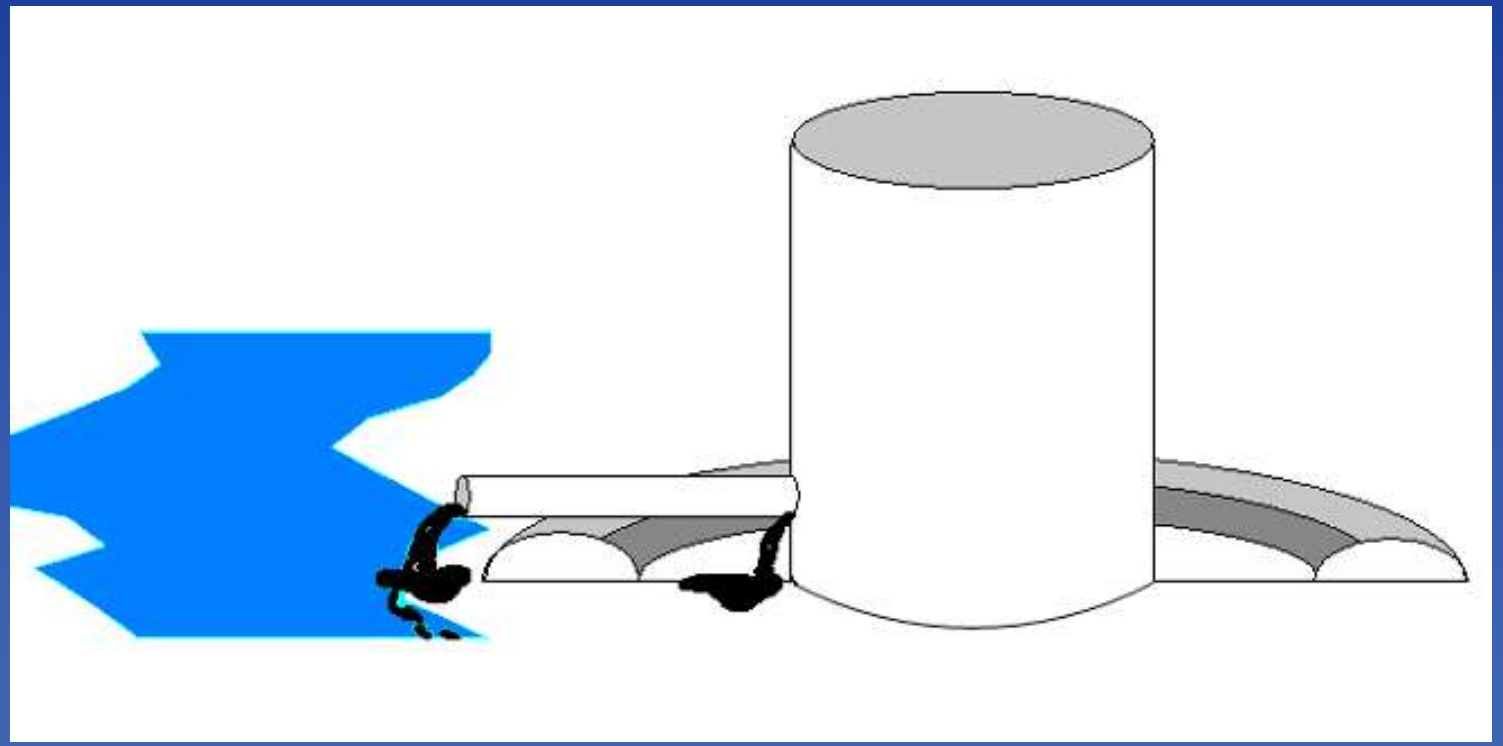
Discharge as described in §112.1(b)

- 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

…so what's the difference?

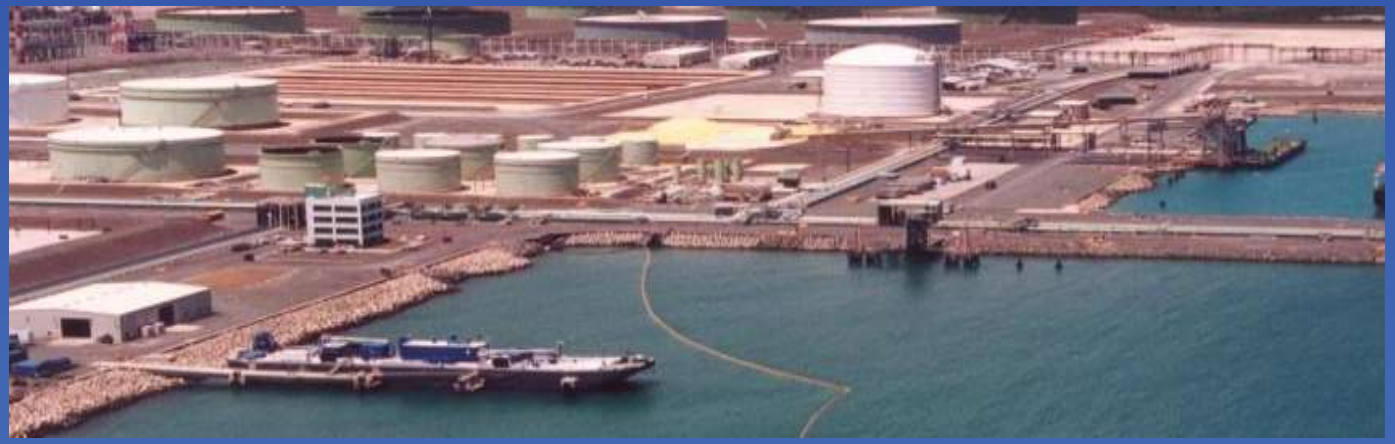
- A discharge as described in §112.1(b) is a violation of Section 311 of the Clean Water Act
  - Reportable to NRC and may trigger SPCC reporting requirements
  - May impact ability to self certify an SPCC plan
- A §112.2 discharge that does not impact a navigable water or adjoining shoreline (e.g., a spill into a dike or other secondary containment structure) is not a violation of Section 311 of the Clean Water Act
  - Not reportable to the NRC under the 40 CR part 110
  - Mat trigger certain SPCC requirements to remove oil
  - However may be a violation or reportable under State or local regulatory requirements

Discharge Types



“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.

Applicability Criterion #5

5 Meets storage capacity thresholds

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

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

Criterion #5: Storage Capacity ***§112.1(d)***

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

Exemptions to SPCC Applicability

- Current exemptions to the SPCC rule include
  - Underground storage tanks subject to UST tech requirements
  - Wastewater treatment facilities
  - Motive power containers
- 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

§112.1(d)

Underground Storage Tanks

- SPCC rule exempts:
  - Underground storage tanks that are completely buried and regulated under 40 CFR 280 and 281
  - Connected underground piping
  - Underground ancillary equipment and containment systems

  When such tanks are subject to all of the technical requirements of 40 CFR part 280 or a state program approved under 40 CFR part 281
- These tanks must still be marked on the facility diagram if the facility is otherwise subject to the SPCC rule (§112.7(a)(3))
- Airport Hydrant Furling Systems AST or UST?
  - If 10% or more of system's capacity underground? UST regulated except AST portions which subject to the SPCC rules.
  - If less than 10% of system's capacity underground? SPCC Regulated only.
- Complementary Regulation of Partially Buried Tanks (UST and SPCC)
  - Partially buried (also called partially covered) field-constructed tanks may be regulated by both this final UST regulation and the SPCC regulation. See 80 FR 41597

§112.1(d)(4)

Wastewater Treatment Exemption

- Excludes from the SPCC requirements:
  - Facilities or parts of facilities that are used exclusively for wastewater treatment, and that are not used to meet 40 CFR part 112 requirements
- Does not exclude:
  - Production, recovery, or recycling of oil
  - A wastewater treatment facility or part thereof that is used:
    - To store oil
    - To meet a 40 CFR part 112 requirement (e.g., general secondary containment)

§112.1(d)(6)

Motive Power

- Any onboard bulk storage container used primarily to power the movement of a motor vehicle, or ancillary onboard oil-filled operational equipment
- Examples: automotive, airplane, or truck fuel tanks
- An onboard bulk storage container which is used to store or transfer oil for further distribution is not a motive power container

§112.2

Motive Power Containers

- Motive power containers are exempted from SPCC rule
- Oil transfer activities occurring within an SPCC-regulated facility continue to be regulated
  - Transfer of oil from an otherwise SPCC regulated facility's AST gas pump into an automobile
  - Transfer of oil from an otherwise SPCC regulated facility's airport mobile refueler into an airplane

§112.1(d)(2)(ii) and (d)(7)

Hot-Mix Asphalt

- Hot-Mix Asphalt (HMA) and HMA containers are exempt from the SPCC rule.
  - Includes general rule applicability and capacity calculation requirement

- HMA is unlikely to reach navigable waters or adjoining shorelines.
  - EPA never intended HMA to be included as part of a facility's SPCC Plan
- The RA would continue to have the authority to require an SPCC Plan, if necessary.

§112.1(d)(2) and (8)

2008 Amendments

Pesticide Application Equipment

- Pesticide application equipment and related mix containers are exempt.
- Pesticide application equipment includes:
  - Ground boom applicators
  - Airblast sprayers,
  - Specialty aircraft that are used to apply measured quantities of pesticides to crops and/or soil.
  - Related mix containers
- Related mix containers are those used to mix pesticides with water and, as needed, adjuvant oils, just prior to loading into application equipment.

§112.1(d)(2) and (10)

Residential Heating Oil

- Residential heating oil containers at single-family residences are exempt from the SPCC rule.
  - Includes general rule applicability and capacity calculation requirement
- Applies to containers that are:
  - Aboveground or completely buried
  - Located at a farm or other single-family residences
  - Used solely to store heating oil used to heat the residence

- SPCC requirements continue to apply to oil containers used to heat other non-residential buildings within a facility.

§112.1(d)(2) and (9)

2009 Amendments

Underground Storage Tanks at Nuclear Power Generation Facilities

- EPA is exempting USTs that:
  - are deferred under 40 CFR part 280,
  - supply emergency diesel generators at nuclear power generation facilities licensed by Nuclear Regulatory Commission (NRC), and
  - meet the NRC design criteria and quality assurance criteria.
- This exemption includes both tanks that are completely buried and tanks that are below-grade and vaulted (but can't be visually inspected).
- NRC sets certain criteria to cover the design, fabrication, installation, testing and operation of structure, systems, and components.
  - Requirements may be similar or more stringent than those associated with the SPCC rule.
- Certain actions necessary to comply with SPCC rule could be impracticable at NRC facilities.
- This exemption was finalized in 2008, and the 2009 amendment made technical corrections to the language related to this exemption.

§112.1(d)(2) and (4)

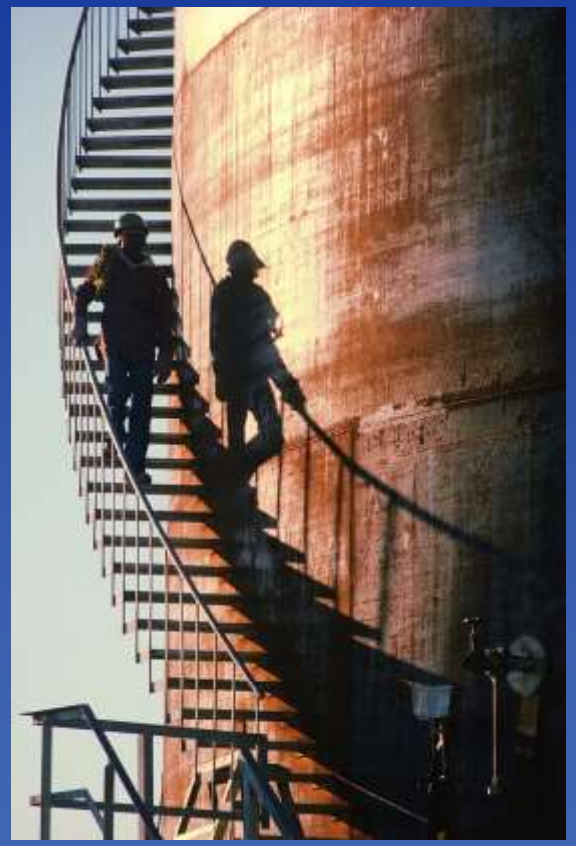

10
Minute
Break

Pete

Part III: 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

A facility, including a mobile or portable facility, starting operation…	**Would be required to…**
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.

- The compliance date extension was signed by the Administrator on October 7, 2010

Mobile Facilities

- Onshore and offshore mobile facilities must prepare, implement, and maintain a Plan as required by the rule
  - Amend and implement a Plan, if necessary to ensure compliance with the rule, on or before July 1, 2009
  - Can be a general Plan; a new Plan is not required each time a facility moves to a new site.

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 during Qualified Facilities
    - ➢ Some states do not allow self-certification of SPCC Plans

PE Attestation

- In the certification, the PE attests that:
  - He is familiar with the rule requirements
  - He or his agent visited and examined the facility
  - The Plan has been prepared in accordance with good engineering practice, including the consideration of applicable industry standards, and with the requirements of 40 CFR part 112
  - Procedures for required inspections and testing have been established
  - The Plan is adequate for the facility
  - If applicable, for a produced water container subject to §112.9(c)(6), any procedure to minimize the amount of free-phase oil is designed to reduce the accumulation of free-phase oil and the procedures and frequency for required inspections, maintenance and testing have been established and are described in the Plan.

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

Plan Location

- Maintain a complete copy of the Plan:
  - At the facility if it is attended at least 4 hours per day
  - At the nearest field office if the facility is attended for less than 4 hours per day
- Have the Plan available for on-site review during normal working hours

§112.4 Amendment of SPCC Plan by Regional Administrator

Notify Regional Administrator

- Submit specific information to the RA if the facility discharged:
  - More than 1,000 gallons of oil in a single discharge as described in §112.1(b)
  - More than 42 gallons of oil in each of two discharges as described in §112.1(b) within a 12-month period
  - The gallon amount (42 or 1,000) refers to the amount of oil that reaches navigable waters which is reportable under 40 CFR 110
- No action necessary until one of the above triggering events
- Still required to report to NRC in accordance with 40 CFR part 110

Plan Amendment by RA

- Amend Plan as required by the RA
  - To meet the requirements of the rule
  - Prevent and contain discharges from facility
- Decision based on:
  - Review of information facility submits
  - Review of information from state agency
  - On-site review of Plan or inspection

Amendment of SPCC Plan by Regional Administrator ***§112.4(d)***

§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

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
- Amend Plan within 6 months to include more effective prevention and control technology
- Implement ASAP, but no later than 6 months of amendment

Amendment of SPCC Plan by Owner or Operator ***§112.5(b) and (c)***

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 under 112.3(g)

- Facilities must first qualify for this option
  - Clean spill History
  - 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
  - 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 cant use the template)
- Self certification issues
  - State Law
  - The attestation for facilities

Eligibility Criterion #1: Storage Capacity

- Facility must have **10,000 gallons or less** in aggregate aboveground oil storage capacity
- Will lose eligibility if facility increases capacity > 10,000 gallons

1. Tier II Eligibility Criterion #1: Storage Capacity ***§112.3(g) & §112.6(b)(2)***

Eligibility Criterion #2: Reportable Discharge History

- For the 3 years prior to Plan certification, or since becoming subject to the rule if it has operated for less than 3 years, the facility must not have had:
  - A single discharge of oil to navigable waters or adjoining shorelines exceeding 1,000 U.S. gallons, or
  - Two discharges of oil to navigable waters or adjoining shorelines each exceeding 42 U.S. gallons within any 12-month period.

1. Tier II Eligibility Criteria #2: Reportable Discharge History ***§112.3(g)***

What is counted?

- When determining the applicability of this criterion, the gallon amount(s) specified (either 1,000 or 42) refers to the amount of oil discharge that actually reaches navigable waters or adjoining shorelines, not the total amount of oil spilled.
- Oil discharges that result from natural disasters, acts of war, or terrorism are not included.
- Oil discharges that result from vandalism are included.

What if they have a spill?

- Facilities that have a reportable oil discharge after self-certifying the SPCC Plan do not automatically lose eligibility
  - However, the Regional Administrator has the authority to require a Plan amendment

How often is this determined?

**** Discharge history criterion is a one-time determination! ****

(A "snap shot" of a facility's compliance history)

Facilities do not require a re-assessment of eligibility following a technical change to the Plan or 5-year review.

Self-Certification

- In lieu of a PE-certification, the owner/operator must self-certify the facility's SPCC Plan.
- Owner/operator attests that he/she is familiar with the SPCC rule and has visited and examined the facility.

Self-Certification Attestation

- Owner/operator also certifies that:
  - The Plan has been prepared in accordance with accepted and sound industry practices and standards and with the rule requirements.
  - Procedures for required inspections and testing have been established.
  - The Plan is being fully implemented.
  - The facility meets the qualifying criteria.
  - The Plan does not deviate from rule requirements except as allowed and as certified by a PE.
  - Management approves the Plan and has committed resources to implement it.

Technical Amendments

- Owner/operator may self-certify technical amendments as long as a PE has not certified the portion being changed.
- If a PE certified the affected portion of the Plan (i.e., for a hybrid Plan), then a PE must certify the technical amendment.

Tier I Qualified Facilities

- EPA's 2008 amendments create a subset of Qualified Facilities.
  - Facilities meeting the criteria described earlier are "Tier II" qualified facilities.
  - Facilities meeting additional criterion are "Tier I" qualified facilities and are subject to further streamlined requirements.
- The 2009 rule amendments provide clarifications to the rule language associated with this set of facilities, and corrections of typographical and formatting errors in the Tier I template.

2008 Amendments

Eligibility Criteria Review

- Meet the Tier II qualified facility eligibility criteria:
  - 10,000 gallons or less in aggregate aboveground oil storage capacity
  - For the 3 years prior to Plan certification, or since becoming subject to the rule if it has operated for less than 3 years, the facility must not have had:
    - A single discharge of oil to navigable waters exceeding 1,000 U.S. gallons, or
    - Two discharges of oil to navigable waters each exceeding 42 U.S. gallons within any 12-month period

- AND -

- Maximum individual oil storage container capacity of 5,000 U.S. gallons

Streamlined Requirements

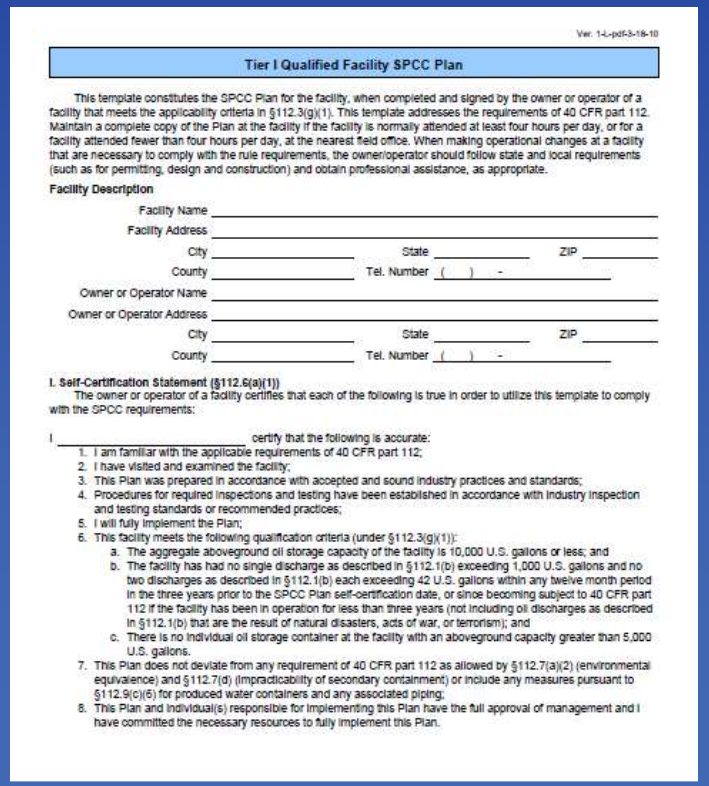
- A Tier I qualified facility would have the option to complete an SPCC Plan template (in Appendix G to 40 CFR part 112) in lieu of a full SPCC Plan.
- The choice for Tier I or Tier II is optional if the qualifying criteria are met.
- The 2009 rule amendments provided corrections of typographical and formatting errors on the Tier I template, and removed language on the template associated with the provisions that were removed from the rule.

Template

- Template is designed to be a simple SPCC Plan.
  - Includes only the requirements that should apply to this tier of regulated facilities.
  - Eliminates and/or modifies certain requirements and provisions that generally do not apply to facilities that store or handle smaller volumes of oil.
- Template is found in Appendix G to the SPCC rule.

Tier I Template

- Available at:
  http://www.epa.gov/osweroe1/content/spcc/tier1temp.htm



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Tier I Qualified Facility SPCC Plan

This template constitutes the SPCC Plan for the facility, when completed and signed by the owner or operator of a facility that meets the applicability criteria in §112.3(g)(1). This template addresses the requirements of 40 CFR part 112. Maintain a complete copy of the Plan at the facility if the facility is normally attended at least four hours per day, or for a facility attended fewer than four hours per day, at the nearest field office. When making operational changes at a facility that are necessary to comply with the rule requirements, the owner/operator should follow state and local requirements (such as for permitting, design and construction) and obtain professional assistance, as appropriate.

Facility Description

Facility Name _____

Facility Address _____

City _____ State _____ ZIP _____

County _____ Tel. Number ( ) -

Owner or Operator Name _____

Owner or Operator Address _____

City _____ State _____ ZIP _____

County _____ Tel. Number ( ) -

I. Self-Certification Statement (§112.6(a)(1))

The owner or operator of a facility certifies that each of the following is true in order to utilize this template to comply with the SPCC requirements:

I _____ certify that the following is accurate:

1. I am familiar with the applicable requirements of 40 CFR part 112;
2. I have visited and examined the facility;
3. This Plan was prepared in accordance with accepted and sound industry practices and standards;
4. Procedures for required inspections and testing have been established in accordance with industry inspection and testing standards or recommended practices;
5. I will fully implement the Plan;
6. This facility meets the following qualification criteria (under §112.3(g)(1)):
   a. The aggregate aboveground oil storage capacity of the facility is 10,000 U.S. gallons or less; and
   b. The facility has had no single discharge as described in §112.1(b) exceeding 1,000 U.S. gallons and no two discharges as described in §112.1(b) each exceeding 42 U.S. gallons within any twelve month period in the three years prior to the SPCC Plan self-certification date, or since becoming subject to 40 CFR part 112 if the facility has been in operation for less than three years (not including oil discharges as described in §112.1(b) that are the result of natural disasters, acts of war, or terrorism); and
   c. There is no individual oil storage container at the facility with an aboveground capacity greater than 5,000 U.S. gallons.
7. This Plan does not deviate from any requirement of 40 CFR part 112 as allowed by §112.7(a)(2) (environmental equivalence) and §112.7(d) (impracticability of secondary containment) or include any measures pursuant to §112.9(c)(6) for produced water containers and any associated piping;
8. This Plan and individual(s) responsible for implementing this Plan have the full approval of management and I have committed the necessary resources to fully implement this Plan.

“The Hybrid Plan”

- An owner/operator may not use environmentally equivalent measures and make impracticability determinations,
  - *unless reviewed and certified by a PE*
- This is referred to as a “hybrid” Plan

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

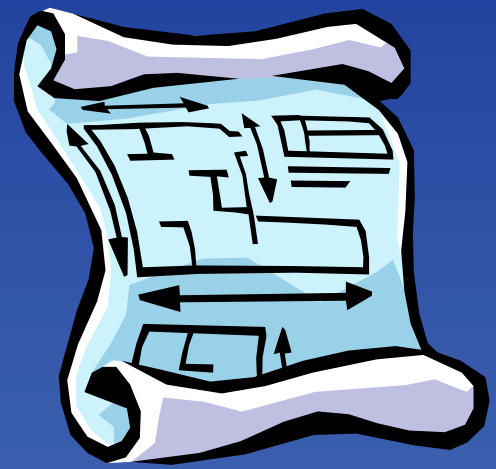
§112.7 General Requirements for SPCC Plans

Plan Format

- Prepare in writing and according to good engineering practice
- Approval of management with authority to commit resources to fully implement the Plan
- For procedures, methods, and equipment that are not yet fully operational:
  - Discuss in separate paragraphs
  - Explain separately the details of installation and start-up

Alternate Plan Formats

- If a Plan does not follow the sequence specified in the rule, an equivalent Plan may be prepared:
  - Acceptable to the Regional Administrator
  - Meets all applicable requirements in rule
  - Provide a cross-reference that shows the location of each of the SPCC requirements



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."

Eligible Provisions

- Provisions subject to EE include, but are not limited to:
  - Facility security: §112.7(g)
  - Loading/unloading racks: §112.7(h), except for secondary containment in subparagraph (1)
  - Brittle fracture evaluation: §112.7(i)
  - Subparts B and C, except the secondary containment requirements

Provisions Not Eligible

- Secondary containment provisions are NOT subject to EE
  - General: §112.7(c)
  - Loading/unloading rack: §112.7(h)(1)
  - Bulk storage containers: §112.8(c)(2), §112.9(c)(2)
  - Onshore Oil Drilling and Workover Facilities: §112.10(c)
- If secondary containment is not practicable, owner/operator must meet the requirements of §112.7(d)

Provisions Not Eligible (continued)

- Also NOT Subject to EE:
  - General administrative requirements (e.g., definitions, requirement to have a Plan): §112.1 through §112.5
  - Description of the facility (e.g., facility diagram): §112.7(a)(3)
  - Documentation / Recordkeeping: §112.7(e)
  - Discussion of conformance with applicable more stringent state rules, regulations, and guidelines: §112.7(j)
  - Training
    - Employee training, identity of person accountable for discharge prevention at the facility: §112.7(f)

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

General Requirements for SPCC Plans ***§112.7(a)(3)***

Facility Diagram

- Supplements facility description, which may include facility location, type, size, and proximity to navigable waters, etc.
- Include completely buried tanks that are otherwise exempted from the rule
- Provide enough detail to undertake prevention activities, perform inspections, and take response measures

Facility Diagram

Required elements:

- The location and contents of oil containers (>55 gallons)
- Completely buried tanks otherwise exempt
- Connecting piping
- Transfer stations

Recommended elements:

- Secondary containment
- Storm drain inlets and surface waters
- Direction of flow in the event of a discharge
- Legend – scale and symbols
- Location of response kits and firefighting equipment
- Location of valves or drainage system controls
- Compass direction
- Topographical information and area maps

2008 Amendments

Facility Diagram Requirement

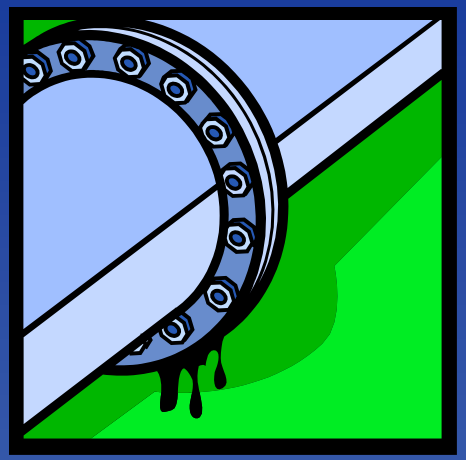
- Revision clarifies that the facility diagram must include all *fixed* (i.e., not mobile or portable) containers.
- For mobile or portable containers, the diagram must:
  - Identify a storage area on the facility diagram (e.g., a drum storage area).
  - Include a separate description of the containers in the storage area in the Plan, or reference facility inventories that can be updated by facility personnel.
  - Provide an estimate of the potential number of containers, types of oil, and anticipated capacities

Exempt Containers and Piping

- Certain containers and piping, exempted from SPCC requirements in the 2008 amendments, must be identified on the facility diagram and marked as “exempt.” Includes:
  - Underground storage tanks at nuclear power generation facilities; and
  - Intra-facility gathering lines subject to the requirements of 49 CFR part 192 or 195

Failure Analysis

- Where experience indicates reasonable potential for equipment failure
  - Tank loading or unloading equipment
  - Tank overflow, rupture, or leakage
  - Any other equipment known to be a source of a discharge
- Predict for each type:
  - Direction
  - Rate of flow
  - Total quantity of oil which could be discharged



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

2008 Amendments

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

2008 Amendments

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

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

Examples include:

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

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

Sufficiently Impervious *(continued)*

- “A complete description of how secondary containment is designed, implemented, and maintained to meet the standard of sufficiently impervious is necessary” (67 FR 47102)
- Based on good engineering practice
- Consider site-specific factors
- The plan should describe how the design effectively contains oil until cleanup occurs

Impracticability Provision

- If a facility owner or operator finds that 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

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

General Requirements for SPCC Plans ***§112.7(f)***

Security Requirements

- Security requirements for all applicable* facilities are now consistent with requirements for qualified facilities as finalized in December 2006.
  - More streamlined, performance-based
  - Tailored to the facility's specific characteristics and location

* Production facilities have no security requirements

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

2008 Amendments

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.**

Loading Racks

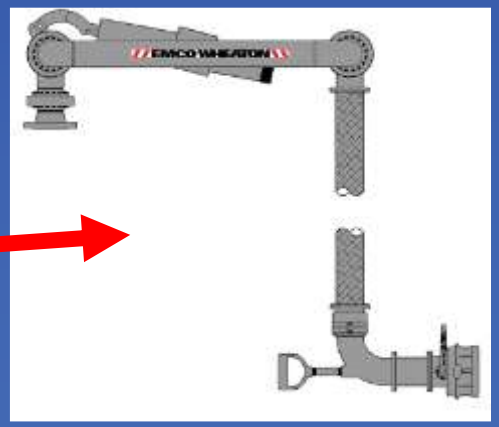
- Loading Rack Requirements
  - Secondary containment to hold at least the maximum capacity of any single compartment of a tank car or tank truck loaded or unloaded at the facility.
  - Provide interlocked warning lights or physical barrier system, warning signs, wheel chocks or vehicle break interlock 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

Modifications to Loading Rack Provision

- Term "rack" replaces "area" throughout §112.7(h) requirement.
  - Provides clarity on applicability of the provision.

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

4.2.1 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)

4.2.1 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)

4.2.1 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)


10
Minute
Break

Janice

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

Construction Requirements

- Do not use a container for the storage of oil unless its material and construction are compatible with the material stored and conditions of storage such as pressure and temperature.


NAME THAT TANK….FOR $1,000
Convert-a-zontals

Regularly Scheduled Integrity Testing

- Applies to:
  - Large (field-constructed or field-erected) and small (shop-built) aboveground bulk storage containers
  - Aboveground bulk storage containers on, partially in (partially buried, bunkered, or vaulted tanks) and off the ground wherever located
  - Aboveground bulk storage containers storing any type of oil
    - Examples: mobile/portable containers, drums, totes

*What containers at a facility are **not** subject to integrity testing provisions?*

Integrity Testing

- Provides flexibility in complying with bulk storage container inspection and integrity testing requirements. Requires owner/operator to:
  - Test/inspect each aboveground container for integrity on a regular schedule and whenever material repairs are made.
  - Determine, in accordance with industry standards, the appropriate qualifications of personnel performing tests and inspections and the frequency and type of testing and inspections, which take into account container size, configuration, and design
- Establishing a baseline
- SP001 and API 653
- Visual inspection is a separate requirement
- Requirements for inspection of foundations and supports


YOU FIX THE AST…

Completely (and Partially) Buried Metallic Tanks

- Protect completely buried metallic storage tanks installed on or after January 10, 1974 from corrosion using:
  - Coatings or Cathodic protection
- Ensure that corrosion protection is compatible with local soil conditions
- **Conduct regular leak tests on metallic tanks**

§§112.8(c)(4) and 112.12(c)(4)

- Do not use partially buried or bunkered metallic tanks unless you protect the buried section from corrosion (see above methods)

Internal Heating Coils

- Control leakage through defective internal heating coils by:
  - Monitoring steam return and exhaust lines for contamination from internal heating coils that discharge into open watercourse; or
  - Pass steam return or exhaust lines through settling tank, skimmer, or other separation or retention system

Overfill Protection

- Follow good engineering practices to avoid discharges from container installations
- Provide at least one of the following devices:
  - High liquid level alarms
  - High liquid level pump cutoff
  - Direct audible or code signal communication between container gauger and pumping station
  - Fast-response system for determining liquid level of each bulk storage container, with person present to monitor
- Regularly test liquid level sensing devices (follow manufacturers specifications)


25 15:26

Effluent Treatment Facilities

- Frequently observe effluent treatment facilities to detect possible system upsets that could cause a discharge

Piping Installations

- Buried piping installed after August 16, 2002 must be:
  - Protectively wrapped and cathodically protected; or
  - Satisfy the corrosion protection provisions for piping in 40 CFR parts 280 or 281 (state program)

- Requirement applies to all soil conditions
- Exposed piping must be inspected for corrosion
- Take corrective action if corrosion damage

Piping Installations (continued)

- Conduct regular inspections of all aboveground valves, piping, and appurtenances
  - Assess general condition of items such as flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces
- Conduct integrity and leak testing of buried piping at time of installation, modification, construction, relocation, or replacement
- Cap or blank-flange piping
- Signs to prevent pipe strikes
- Properly designed piping supports


UNLEADED
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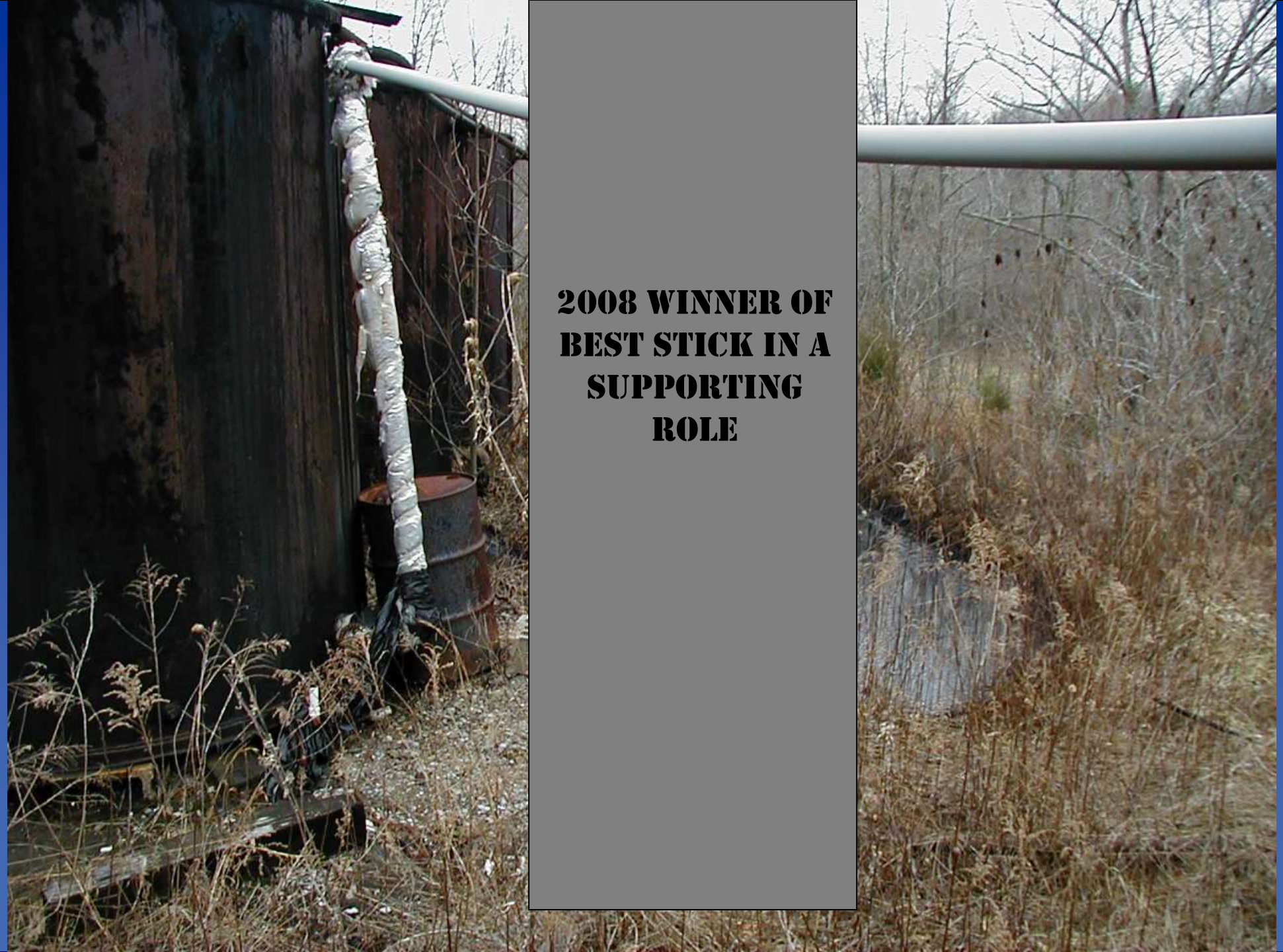
ALARM



2008 WINNER OF BEST STICK IN A SUPPORTING ROLE

Animal Fats and Vegetable Oils (§112.12)

§112.12 Animal Fats and Vegetable Oils

- Outlines specific requirements (in addition to general requirements in §112.7) for facilities with animal fats and oils and greases, and fish and marine mammal oils; and for vegetable oils, including oils from seeds, nuts, fruits, and kernels regarding:
  - Facility drainage
  - Bulk storage containers
  - Facility transfer operations, pumping, and facility process

2008 Amendments

Differentiated Integrity Testing Requirements for AFVOs

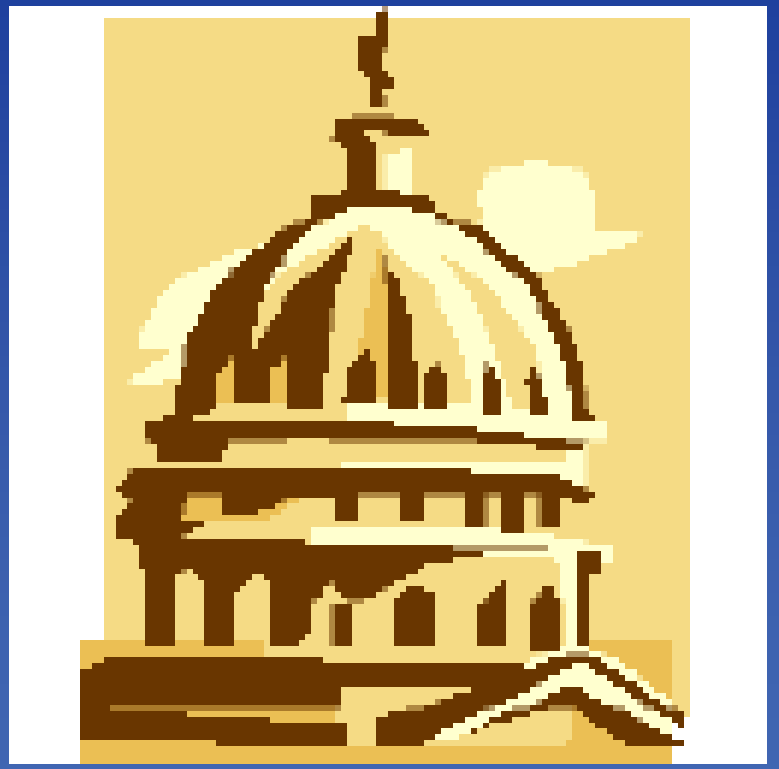
- Facility owner or operator is required to document procedures for inspections and testing in the SPCC Plan.
- Flexibility to use a visual inspection program for integrity testing that is appropriate for containers that store AFVOs that meet certain criteria

Eligibility Criteria

- Differentiated integrity testing requirements apply to bulk storage containers that:
  - Are subject to the applicable sections of the Food and Drug Administration (FDA) regulation 21 CFR part 110, *Current Good Manufacturing Practice in Manufacturing, Packing or Holding Human Food;*
  - Are elevated;
  - Are made from austenitic stainless steel;
  - Have no external insulation; and
  - Are shop-built.
- AFVO containers that meet the eligibility criteria already have environmentally equivalent measures in place for integrity testing.
  - Owners/operators do not need to state reasons for nonconformance with the current integrity testing requirements.

SPCC Requirements for AFVOs ***§112.12(c)(6)***

What to Expect from an EPA Inspection



Overview of the Inspection Process

Triggering Events Initiating Inspections

Referrals (State or Local)

Spills

Multi-Media Inspections

Facility Incident

Targeted Outreach with Compliance Monitoring

Routine 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
- Offsite Compliance Monitoring (OfCM)

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
  - OfCM is typically announced

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

Oil Discharge (spill) Reporting

Reporting of Oil Spills (Discharges)
SPCC Terminology

Or Discharges as Described in §112.1(b) in the SPCC Rule

- 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
- Reflects full geographic scope of CWA

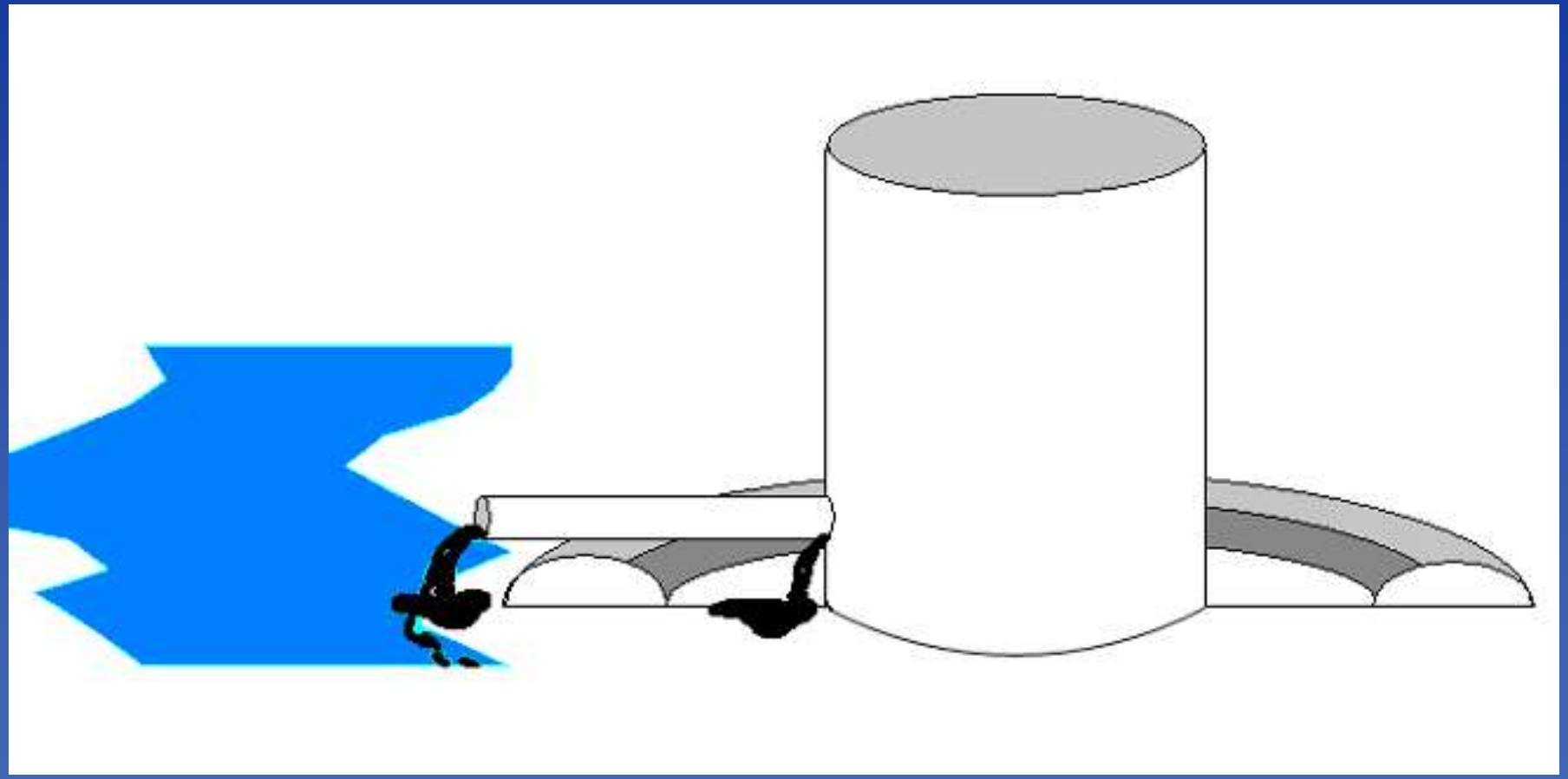
Discharge

- Discharge includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, or dumping of oil…see §112.1 for the full definition.

Reporting of Oil Spills (Discharges) Terminology under 40 CFR Part 112

- Difference between “discharge” and “discharge as described in §112.1(b)” relative to the SPCC rule:
  - A discharge as described in §112.1(b) is a violation of Section 311 of the Clean Water Act
  - A §112.2 discharge that does not impact a navigable water or adjoining shoreline (e.g., a spill into a dike or other secondary containment structure) is not a violation of Section 311 of the Clean Water Act

Discharge Types



Reporting of Oil Spills (Discharges) 40 CFR Part 110

- Oil Reportable Quantity - Oil in a harmful quantity, as described in 40 CFR part 110, that reaches navigable waters or adjoining shorelines (WOTUS)
- 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

How do you handle releases (discharges) inside the containment versus outside containment?

EPA

SPCC Plan Holder Oil Discharge (Spill) Reporting Requirements in Addition to the NRC requirement

- Report certain information 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
  - **Report to the State also required**

§112.4

EPA

Any Questions?

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

Oil Program Website: https://www.epa.gov/oil-spills-prevention-and-preparedness-regulations

Report Oil Spills to the NRC at 800-424-8802 or 202-426-2675