

US EPA ARCHIVE DOCUMENT

**ECA Workshop for Florida  
Corrections Facilities  
Tallahassee, FL  
March 17, 2010**



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**SPCC Review**





# Outline

1. **Background**
2. **Applicability**
3. **Written SPCC Plan Requirements**
4. **Implementation of SPCC Requirements**
5. **Oil Spill Reporting**



# USEPA Office of Emergency Management: Oil Pollution Prevention

- Prevention
  - SPCC
- Preparedness
  - Facility Response Plans (FRP)
  - Area Contingency Plans
- Response
  - National Contingency Plan
  - Local, State, Federal (EPA & USCG), Responsible Party





# USEPA - Region 4 Emergency Response Program

- Cadre of 32 Federal On-Scene Coordinators (OSCs)
  - Based in Atlanta, GA. Outpost locations in Mobile, AL; Tallahassee, FL; Louisville, KY; Raleigh, NC; Jackson, TN
- 24/7 On-Call Status
- Respond to releases of hazardous substances and oil spills;
- All environmental hazards response (air, water, land,);
- Federal disaster and WMD/CT response capability;
- Planning and Preparedness (Drills)
- **Oil Pollution Prevention (SPCC and FRP Inspections)**



# USEPA – Region 4

For oil and hazardous substance responses, EPA and U.S. Coast Guard (USCG) geographical boundaries are defined by the Region 4 “Memorandum of Understanding” (MOU).



Inland Responses



Coastal Responses



# Oil Pollution Prevention Regulations – SPCC Rule – 40 CFR 112

- **Spill, Prevention, Control, and Countermeasure (SPCC)** regulation (40 CFR 112) requires the preparation and implementation of site-specific plans to prevent oil discharges that could affect navigable waters
- **Authority:** CWA § 311(j)(1)(C) and 501, and codified under 40 CFR Part 112



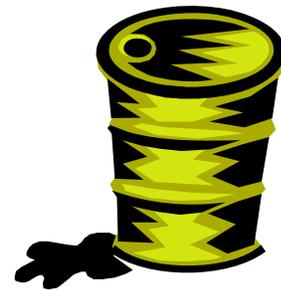
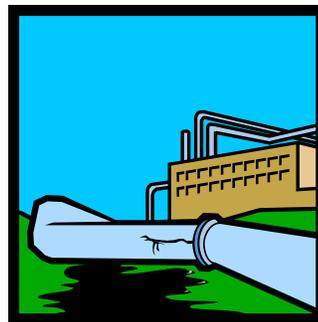
# Oil Pollution Prevention Regulations – FRP Rule - 40 CFR 112.20

- **Facility Response Plan (FRP)** regulations require certain facilities to prepare and submit to EPA plans to respond to discharges of various sizes
  - Only applies to a subset of SPCC regulated facilities
- Basis: 1990 OPA amendments to CWA
- Authority: CWA §§ 311(j)(5) and 501, and codified under 40 CFR §§112.20-112.21



# Purpose SPCC - (40 CFR Part 112)

- To prevent oil discharges from reaching the navigable waters of the U.S. or adjoining shorelines;
- To ensure effective and proactive measures are used in response to an oil spill;





**Purpose of SPCC?**





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# Tanks ??



# History of Oil Pollution Prevention Regulations

- 1972 Federal Water Pollution Control Act Amendments
- 1974 Original SPCC Rule Published**
- 1988 Ashland Oil Spill** – SPCC Task Force formed
- 1989 Exxon Valdez in Alaska
- 1990 Oil Pollution Act
- 1991 Proposed SPCC Rule - complete revision of existing rule
- 1993 Proposed SPCC Rule - amendments
- 1994 Final Facility Response Plan (FRP) Rule published**
- 1997 Additional proposed SPCC amendments
- 2001 Draft Final SPCC Rule – remanded to OMB
- 2002 Final “revised” SPCC rule published 7/17/02**
- 2003 SPCC compliance date extension
- 2004 SPCC litigation settlement and compliance date extension
- 2005 Proposed SPCC Rule amendments 12/05
- 2006 Compliance Date Extension issued 2/06
- 2006 Final SPCC Rule Amendments published 12/26/06**
- 2007 Compliance Date Extension issued 5/07; Proposed Amendments 10/07
- 2008 Final SPCC Rule Amendments published 12/5/08**
- 2009 12/5/08 SPCC Rule amendments delayed on 2/3/09 & 4/1/09**
- 2009 Compliance Date Extension Issued 6/19/09
- 2009 **Final SPCC Rule Amendments signed 11/5/09 – EFFECTIVE 1/14/10**



# SPCC History: Ashland Oil Spill



# Applicability of SPCC



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# Key Definitions – Oil (§112.2)

- Includes *oil of any kind or in any form* such as:
  - Petroleum and fuel oils
  - Mineral oils
  - Sludge
  - Synthetic oils
  - Oil mixed with wastes other than dredged spoil
  - Animal fats, oils, and greases
  - Vegetable oils
  - Other oils



# Key Definitions: Bulk Storage Containers (§112.2)

- Any container used to store oil; used for purposes including, but not limited to, the storage of oil prior to use, while being used, or prior to further distribution in commerce
- Oil filled operational equipment is not a bulk storage container



# Key Definitions: Oil-Filled Operational Equipment (§112.2)

- **Equipment that includes an oil storage container (or multiple containers) in which the oil is present solely to support the function of the apparatus or the device**
- **Not considered a bulk storage container**
- Piping might be considered a component of oil-filled operational equipment:
  - Yes, if it is inherent to the equipment and used solely to facilitate operation of the device
  - No, if it is not intrinsic to the equipment (i.e., flowlines, transfer piping or piping associated with a process)



# Oil-Filled Operational Equipment

- Examples: hydraulic systems, lubricating systems, gear boxes, machining coolant systems, heat transfer systems, transformers, circuit breakers, electrical switches, other systems containing oil solely to enable the operation of the device



# Facility “Oil storage capacity”

- “Facility capacity” includes the shell capacity of all containers that are 55-gallons and greater, such as:
  - Tanks and portable tanks;
  - Oil filled equipment;
  - 55-gallon drums and;
  - Empty containers ( $\geq 55$ -gal capacity) that may be used to store oil and are not permanently taken out of service



# Navigable waters



## Navigable Waterways could include:

- **Traditional navigable waters**
  - Rivers
  - Lakes
- **Tributaries**
  - Creeks & Streams
  - Wetlands



## Consider conduits to navigable waters

- Storm drains, storm sewers
- Ditches
- Wetlands



# General 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; and
- 4 Due to location, could 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\***

(\*Note: many USTs are exempt from the SPCC Rule)





# Exemptions from SPCC (§112.1(d))

- Containers less than 55-gallons
- Completely buried USTs regulated by 40 CFR Part 280 or 281 and subject to ALL of the technical requirements of § 280 or § 281
- Waste water treatment tanks and process vessels (i.e., flow-through wastewater treatment units)
- Motive power containers (e.g., fuel cells on trucks, heavy equipment)
- Permanently Closed Containers
- Hot Mix Asphalt Containers
- Pesticide application equipment and associated containers
- USTs deferred under 40 CFR 280 and vaulted tanks at nuclear power facilities
- Heating oil containers at single-family residences







ALDRIDGE  
CTIONS





Unnamed Tributary ↑ (Fish Kill)

Street

Dispenser Island

Service Station

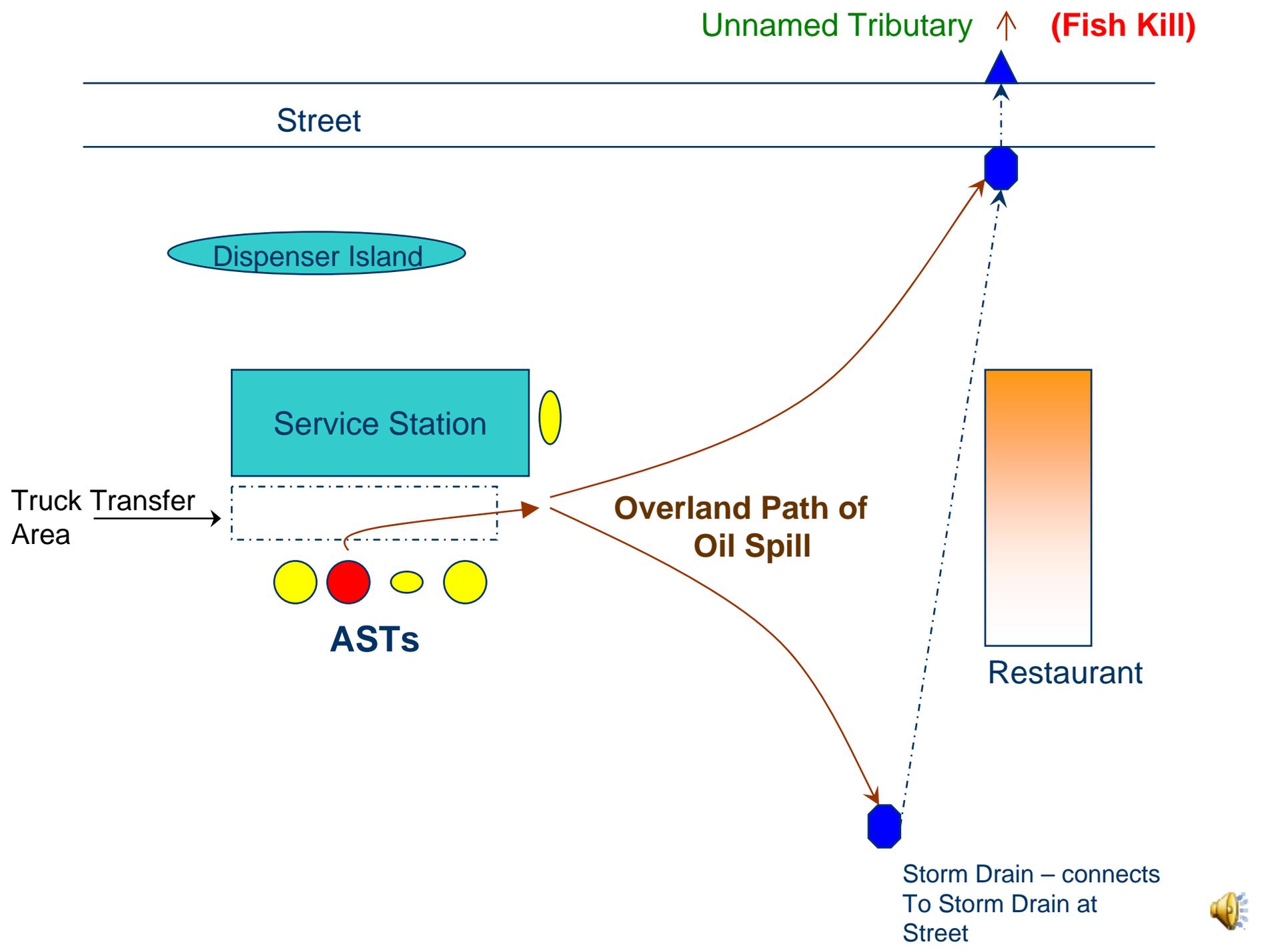
Truck Transfer Area →

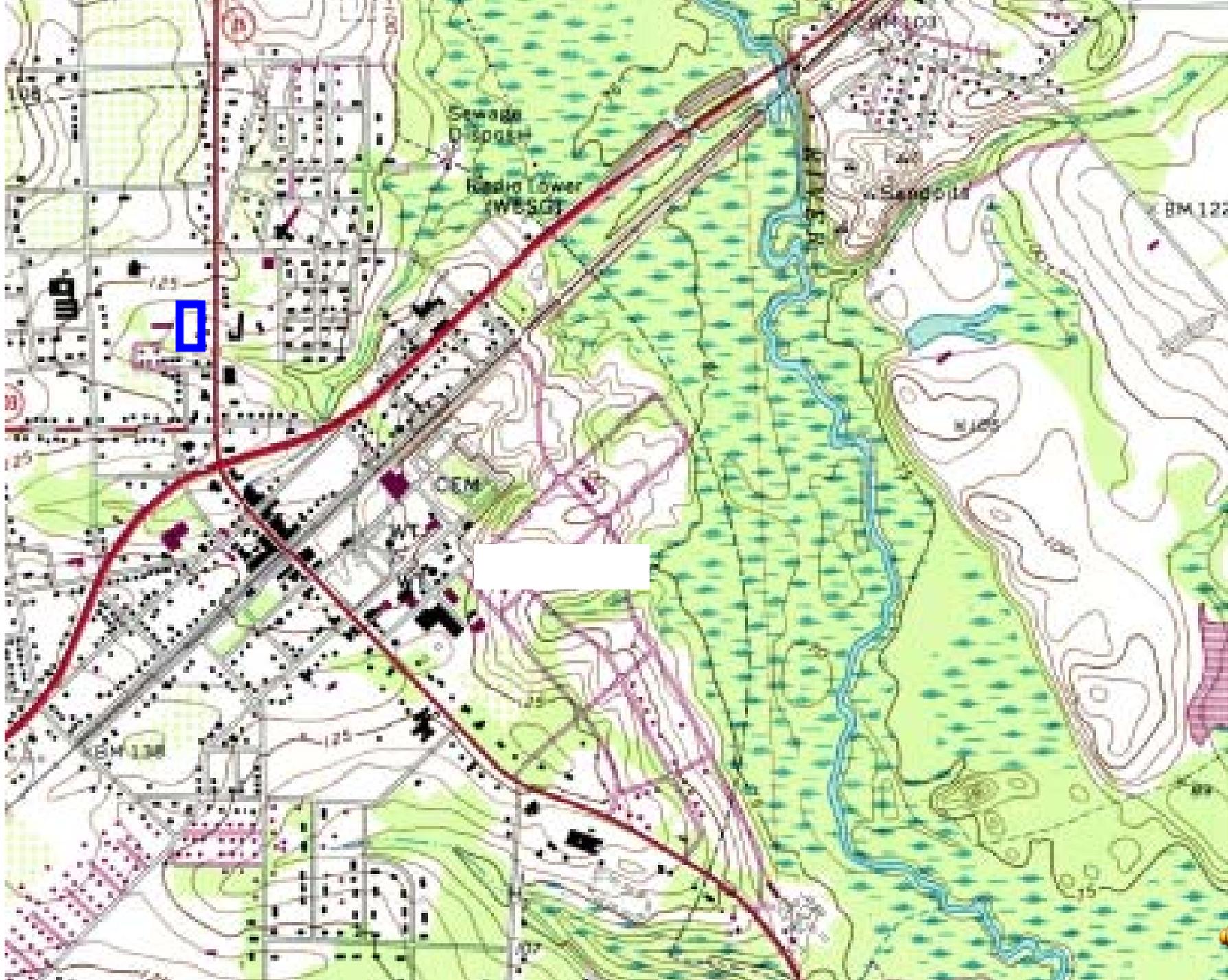
Overland Path of Oil Spill

ASTs

Restaurant

Storm Drain – connects To Storm Drain at Street





# Current Compliance Dates



- Current compliance deadlines Published June 19, 2009
- Extends the dates in §112.3(a), (b), and (c) by which a facility must amend and implement its SPCC Plan in accordance with the August 2002 Revisions

<i>A facility starting operation...</i>	<i>Would...</i>
<b>On or before 8/16/02</b>	<b><u>Maintain existing Plan.</u> Amend and implement Plan no later than 11/10/2010.</b>
<b>After 8/16/02 through 11/10/2010</b>	<b>Prepare and implement Plan no later than 11/10/2010.</b>
<b>After 11/10/2010</b>	<b>Prepare and implement Plan before beginning operations.</b>

●**Note:** Facilities regulated and in operation prior to 8/16/02 **DO NOT HAVE** until 11/10/10 to prepare/implement their SPCC Plan for the first time – if currently do not have a SPCC Plan, must prepare SPCC ASAP!



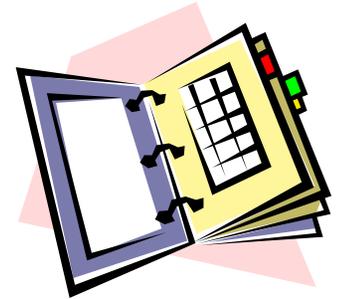
# Requirements for Preparation of SPCC Plans



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# 40 CFR 112 Structure

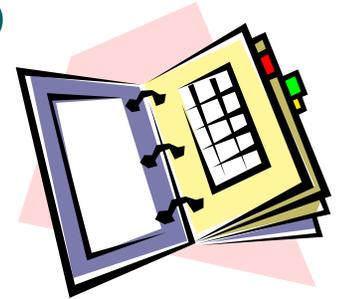


- §112.1 General applicability of the rule
- §112.2 Definitions of terms used in the rule
- §112.3 Requirement to prepare an SPCC Plan
- §112.4 Amendment of SPCC Plan by RA
- §112.5 Amendment of SPCC Plan by owner or operator
- §112.6 Qualified Facilities
- §112.7 General requirements for all facilities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



# Overview of information required to be in your written SPCC Plan

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- PE certification of Plan (112.3(d))
  - Facility with 10,000 gallons or less can self-certify Plan (112.6)
- Management approval of Plan (112.7)
- List all containers including oil type and volume (112.7(a)(3))
- Site diagram (112.7(a)(3))
- Analysis of spill volumes, rates, pathways/directions (112.7(b))
- Discuss secondary containment structures for tanks (112.8(c)(2))
- Discuss containment methods for: tanker truck loading/unloading areas, piping, & oil filled equipment (112.7(c) & 112.8(b)(3))
  - If utilized, discuss monitoring method for oil filled op equip (112.7(k))
- Discuss inspection methods and procedures (112.7(e), 112.8(c)(6)/(d)4)
- Discuss training (112.7(f), Discuss security (112.7(g))
- Discuss overfill safeguards on tanks (112.8(c)(8))
- Discuss procedures for the drainage of rainwater from containment structures (112.8(b) & 112.8(c)(3))
- Discuss piping requirements (112.8(d))



# Amendments to SPCC Plan (§ 112.5)

- SPCC Plan must be amended within 6-months of any change in facility design or construction which affects the facility's potential to discharge oil.
- Technical Amendments **MUST** be certified by a PE  
**{Qualified facilities may self-certify any amendments}**
- Amendments must be implemented within 6-months of plan change.



# Qualified Facilities – (§ 112.6) (optional)

If the facility has...	And...	And the facility has...	Then:
<p>10,000 U.S. gallons or less aggregate aboveground oil storage capacity;</p>	<p>Within any twelve-month period, three years prior to the Plan certification date, or since becoming subject to the SPCC rule if in operation for less than three years, there has been:</p> <p>(1) No single discharge of oil to navigable waters or adjoining shorelines exceeding 1,000 U.S. gallons; and</p> <p>(2) No two discharges of oil to navigable waters or adjoining shorelines each exceeding 42 U.S. gallons in any 12 -month period</p>	<p>No individual aboveground oil containers greater than 5,000 U.S. gallons;</p>	<p><b>Tier I:</b> Complete and self-certify <b>Plan template</b> (Appendix G to 40 CFR part 112) in lieu of a full PE-certified Plan.</p>
		<p>Any individual aboveground oil container greater than 5,000 U.S. gallons;</p>	<p><b>Tier II:</b> Prepare self-certified Plan in accordance with all applicable requirements of §112.7 and subparts B and C of the rule, in lieu of a PE-certified Plan.</p>



# Last Word on your Written SPCC Plan

- Include discussions on each section and subsection of the regulation in your Plan.
- **Include site specific details!**
  - **Regurgitating the regulation is not adequate**



# Implementation of SPCC Requirements



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# Implementation Requirements

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- **Secondary containment for bulk storage containers – 112.8(c)(2)**
  - Containment for bulk storage containers must be sufficiently impervious
- **Secondary containment for oil filled operational equipment – (112.7(c))**
  - Monitoring program option for such equipment – 112.7(k)
- **Secondary containment for truck loading/unloading areas – 112.7(c)**
- **Secondary containment for piping – 112.7(c)**
- **Control dike drainage; keep dike valves closed; inspect rainwater before drainage event; keep records of drain events - 112.8(c)(3)**
- **Inspect and integrity test bulk storage containers – 112.8(c)(6)**
- **Liquid level sensors, alarms, gauges, devices to prevent tank overflows – 112.8(c)(8)**
- **Correct leaks/drips from tanks, piping, valves; cleanup accumulations of oil in diked areas – 112.8(c)(10)**



# Implementation Requirements

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- **Inspect piping and valves – 112.8(d)**
- **Provide proper pipe supports – 112.8(d)**
- **Warn vehicular traffic of aboveground piping – 112.8(d)**
- **Secure facility – 112.7(g)**
- **Train oil-handling personnel on SPCC – 112.7(f)**
- **Review SPCC Plan at least once every 5 years – 112.5(b)**
- **Amend SPCC Plan as needed – 112.5(a & c)**
- **Maintain records of inspections and tests for 3-years – 112.7(e)**



# Secondary Containment

- Rule requires containment and/or diversionary structures to prevent a discharge
- Containment methods:
  - **Dikes, berms or retaining walls;**
  - **Curbing, culverting, gutters, or other drainage systems;**
  - **Weirs, booms, or other barriers;**
  - **Spill diversion ponds; Retention ponds;**
- Containment methods for piping, loading/unloading areas, and oil filled equipment should be designed to contain the most likely discharge per § 112.7(c)
- Containment for **bulk storage containers** must hold the entire capacity of the largest tank, including freeboard for rain, and must be sufficiently impervious to the material stored (**§ 112.8(c)(2)**)



# Secondary Containment Provisions

<i>Type of Facility</i>	<i>Secondary Containment</i>	<i>Rule Section(s)</i>
<b>All Facilities</b>	<b>General containment (areas with potential for discharge, e.g. piping, oil-filled operating* and manufacturing equipment, and non-rack related transfer areas)</b>	<b>112.7(c) {112.8(b)(3)}</b>
	<b>Loading/unloading racks</b>	<b>112.7(h)(1)</b>
<b>Onshore Storage</b>	<b>Bulk storage containers</b>	<b>112.8(c)(2)/ 112.12(c)(2)</b>
	<b>Mobile or portable oil containers</b>	<b>112.8(c)(11)/ 112.12(c)(11)</b>
<b>Onshore Production</b>	<b>Bulk storage containers, including tank batteries, separation, and treating facility installations</b>	<b>112.9(c)(2)</b>
<b>Onshore Oil Drilling and Workover</b>	<b>Mobile drilling or workover equipment</b>	<b>112.10(c)</b>
<b>Offshore Oil Drilling Production and Workover</b>	<b>Oil drilling, production, or workover equipment</b>	<b>112.7(c)</b>

**\*There is an “in-lieu of” secondary containment option for oil filled operational equipment**



# Oil filled Operational Equipment – Implementation Options – § 112.7(c) **or** § 112.7(k)

- Provide general secondary containment per § 112.7(c) **OR**
- Implement a monitoring program in-lieu of containment per § 112.7(k)
  - Requires a monitoring program
  - Requires an Oil spill contingency Plan
  - Requires a written commitment to clean-up an oil spill
  - NOTE: this in-lieu option is only available for oil filled operational equipment
  - NOTE: bulk storage containers are **NOT** oil-filled operational equipment









# Bulk Storage Containers (§112.8(c))

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Note: Rule requirements listed at 112.8(c) are ONLY applicable for bulk storage containers (includes ASTs and mobile/portable tanks).





6 11 17







8.27.05





DO NOT OVER FILL

DO NOT OVER FILL

1993

DO NOT OVER FILL

1993

NO PARKING TOW AWAY

EMPLOYEE PARKING ONLY





18 3'93





**Double-walled ASTs**



# Mobile/Portable Containers – § 112.8(c)(11) (55-gallon drums, totes, skid tanks)

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## Mobile/portable containers require secondary containment (§ 112.8(c)(11))











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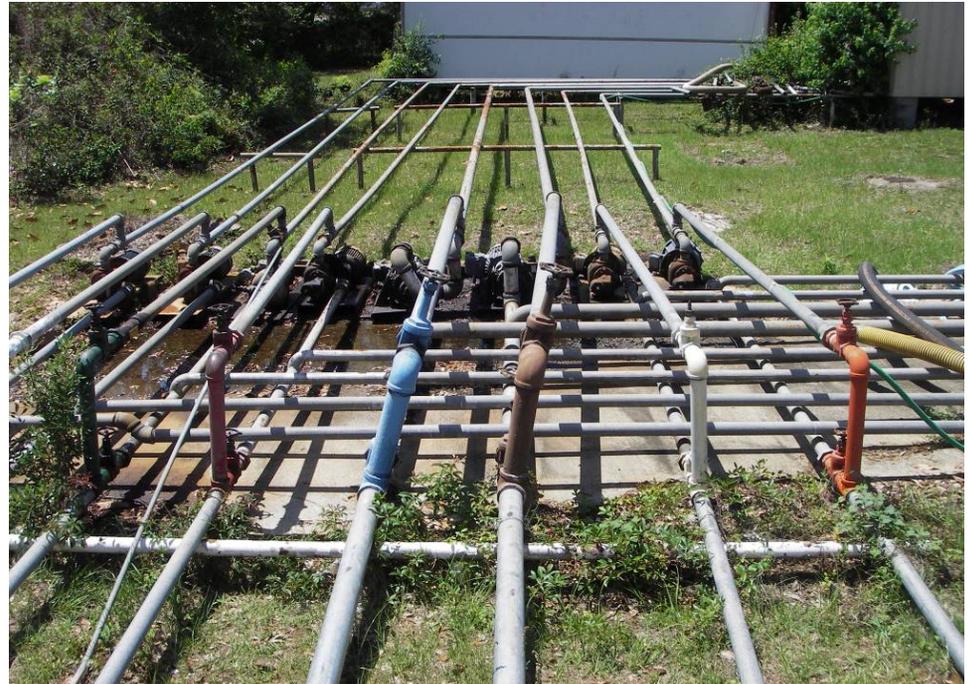




# Piping Requirements – 112.7(c) and 112.8(d)

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- Provide general secondary containment per 112.7(c)
  - Design containment methods to contain the most likely discharge in these areas
- Provide buried piping with coating/wrapping and cathodic protection
- Provide proper pipe supports
- Inspect aboveground piping for leaks, corrosion
- Cap or blank flange the terminal connections
- Warn vehicular traffic of aboveground piping





01.13.2007 15:25





**IF YOU ARE  
SMOKING YOUR  
ASS BETTER  
BE ON FIRE!**



# Tanker truck loading/unloading areas

- Areas where tanker trucks load/unload oil are SPCC regulated areas
- Such areas require a secondary containment method per 112.7(c)
  - Design containment methods to contain the most likely discharge in these areas
  - Active containment methods may work
    - However such active methods may be risky
- Loading/unloading RACK areas require sized containment per 112.7(h)
  - Unlikely that a correctional facility would have a loading/unloading rack





**Loading/Unloading Area**





**Loading/Unloading Area**



# Oil Spill Reporting



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# OIL SPILL REPORTING

## *When to Notify?*



- **Notification required**: When you have an oil spill (a discharge) in a **harmful quantity**

40 CFR 110.3 defines “**harmful quantity**” as:

- Causes a film or sheen upon or discoloration of the surface of the water or adjoining shorelines OR
- Causes a sludge or emulsion beneath the surface of the water or upon adjoining shorelines OR
- Violates water quality standards



# OIL SPILL REPORTING – *Who To Notify?*



- National Response Center (NRC), at 1-800-424-8802 Immediately
- Check with your state for other requirements!



# SPCC Spill Reporting

- If your **SPCC** facility has a discharge above the thresholds in §112.4, SPCC regulation requires the submission of **additional reporting** (i.e., in addition to notifying the NRC) information to EPA
- Triggers for such SPCC reporting information:
  - Single 1,000 gallon spill in a year
  - Two 42 gallon spills in a year
- Reporting information must be submitted within 60-days of spill



# For Additional Information

- Ted Walden EPA R4      404-562-8752  
[walden.ted@epa.gov](mailto:walden.ted@epa.gov)
- [www.epa.gov/oilspill](http://www.epa.gov/oilspill)
- National SPCC/RCRA Hotline  
1-800-424-9346



Thank You!!!

