

US EPA ARCHIVE DOCUMENT

**ECA Workshop for Kentucky  
Corrections Facilities  
Frankfort, KY  
July 15, 2009**



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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**
6. **Overview of *SPCC Guidance Document for Regional Inspectors***

# USEPA Office of Emergency Management: “Oil Pollution Prevention” Functions

- 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, Louisville, KY, Jackson, TN, & Raleigh, NC
- 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

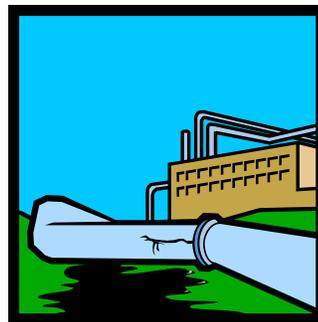
- **Spill, Prevention, Control, and Countermeasure (SPCC)** regulation (40 CFR 112) requires the preparation and implementation of site-specific plans to prevent oil discharges that could affect navigable waters
- **Authority:** CWA § 311(j)(1)(C) and 501, and codified under 40 CFR Part 112

# 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?**

56070

















# 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
- 2008 Final SPCC Rule Amendments published 12/5/08**
- 2009 Final 12/5/08 SPCC Rule amendments delayed – Will become effective 1/14/2010**
- 2009 Compliance Date Extension Issued 6/19/09**



# SPCC History: Ashland Oil Spill



*Photos courtesy of  
NOAA Office of Response and Restoration, National Ocean Service*

# 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



Note: E85 and bio-diesel are oils for SPCC purposes.

# 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)

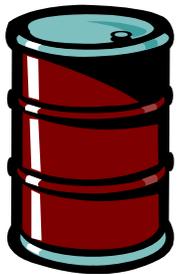
# Oil-Filled Operational Equipment

- 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 (i.e. facility is not exclusively covered by DOI or DOT); 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)

*§112.1*



## Exemptions from SPCC (§112.1(d))

- Containers less than 55-gallons
- Completely buried USTs regulated by 40 CFR Part 280 or 281
- Permanently Closed Containers
- Waste water treatment tanks and process vessels (i.e., flow-through ww treatment units)
- Motive power containers (e.g., fuel cells on trucks, heavy equipment)





ALDRIDGE  
CTIONS



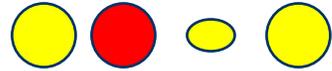
Unnamed Tributary ↑ (Fish Kill)

Street

Dispenser Island

Service Station

Truck Transfer Area →



ASTs

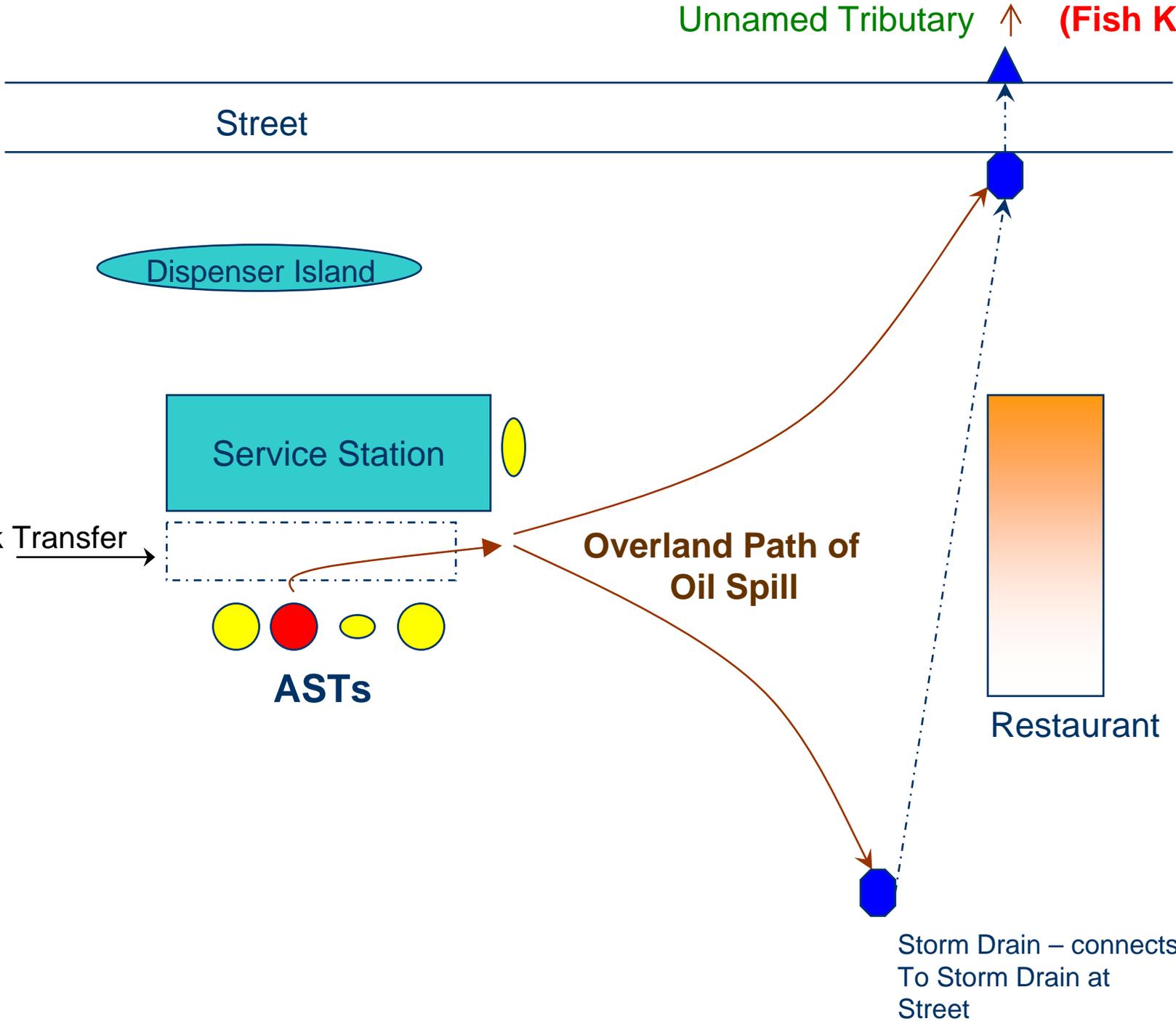
Overland Path of Oil Spill

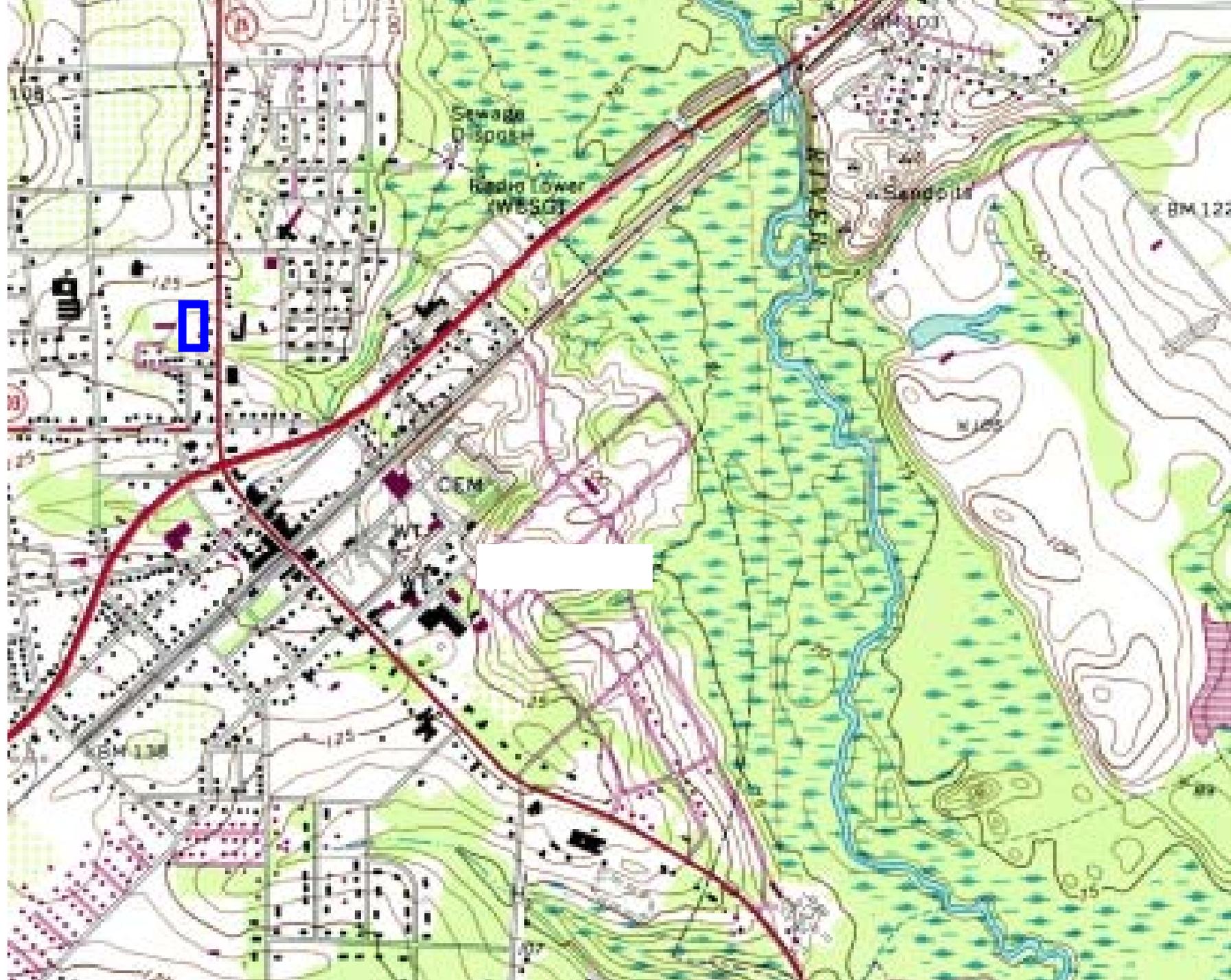


Restaurant



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><b>A facility starting operation...</b></i>	<i><b>Would...</b></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!

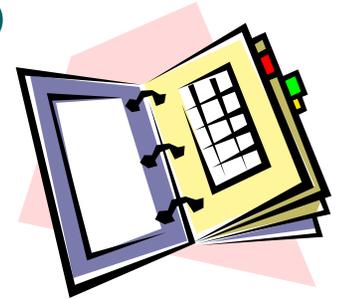
# Requirements for Preparation of SPCC Plans



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

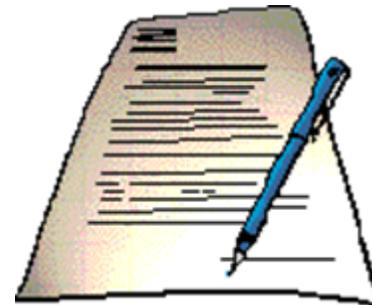
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- PE certification of Plan (112.3(d))
  - Facility with 10,000 gallons or less can self-certify Plan (112.6)
- Management approval of Plan (112.7)
- List all containers including oil type and volume (112.7(a)(3))
- Site diagram (112.7(a)(3))
- Analysis 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))

# 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)

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- Provide general secondary containment per § 112.7(c) **OR**
- Implement a monitoring program in-lieu of containment per § 112.7(k)
  - 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 02





8.27.06



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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10 3'8 1















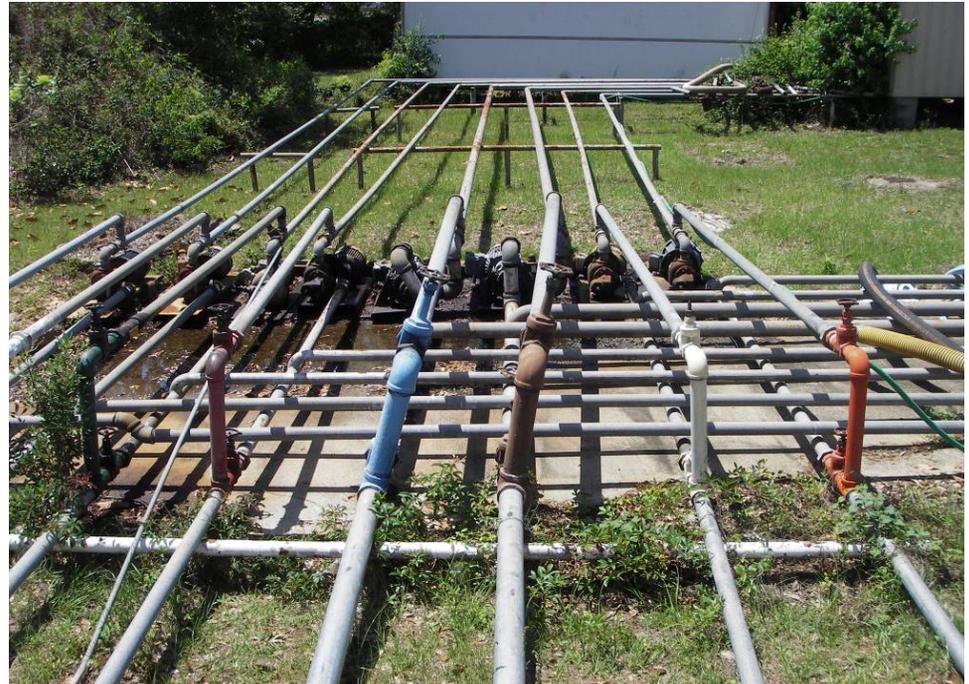




# Piping Requirements – 112.7(c) and 112.8(d)

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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

# The Spill Prevention, Control, and Countermeasure (SPCC) Guidance for Regional Inspectors



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# SPCC Guidance Document

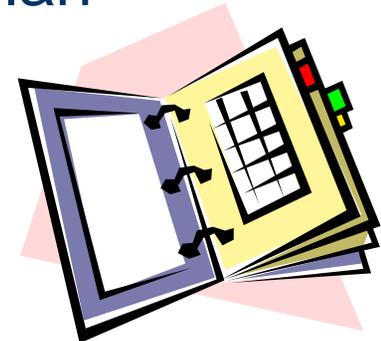
- The full document is available at [www.epa.gov/oilspill](http://www.epa.gov/oilspill)
- The document is evergreen and comments will always be accepted via the website

# Guidance Document Contents

- Chapter 1: Introduction
- Chapter 2: Applicability of the SPCC Rule
- Chapter 3: Environment Equivalence
- Chapter 4: Secondary Containment and Impracticability Determinations
- Chapter 5: Oil/Water Separators
- Chapter 6: Facility Diagrams
- Chapter 7: Inspection, Evaluation, and Testing
- Appendices

# Appendices

- A. Text of CWA 311(j)(1)(c)
- B. Text of 40 CFR Part 112
- C. Summary of Revised Rule Provisions
- D. Sample Bulk Storage Facility SPCC Plan**
- E. Sample Production Facility SPCC Plan
- F. Sample Contingency Plan
- G. SPCC Inspection Checklists**
- H. Other Policy Documents



# 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



Tank You!!!

