US EPA ARCHIVE DOCUMENT

ECA Workshop for Alabama Corrections Facilities
Selma, AL
May 12, 2009

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

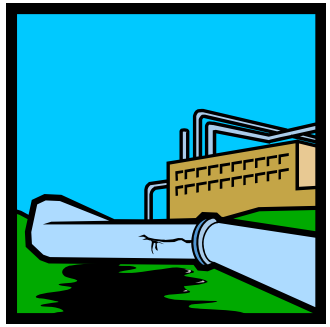
- **Spill, Prevention, Control, and Countermeasure** (**SPCC**) regulation (**40 CFR 112**) requires the preparation and implementation of site-specific plans to prevent oil discharges that could affect navigable waters
- **Authority:** CWA § 311(j)(1)(C) and 501, and codified under 40 CFR Part 112

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?

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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
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 ??????**

SPCC History: Ashland Oil Spill

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

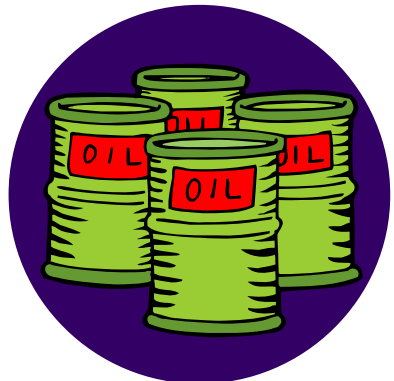
Applicability of SPCC

Oil Program

PREVENT • PREPARE • RESPOND

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**
  - **<u>Animal fats, oils, and greases</u>**
  - **<u>Vegetable oils</u>**
  - **Other oils**



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

Key Definitions: Bulk Storage Containers (§112.2)

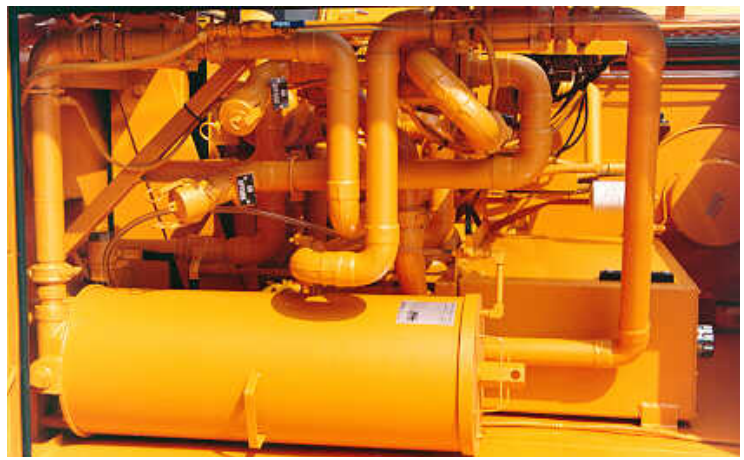
- Any container used to store oil; used for purposes including, but not limited to, the storage of oil prior to use, while being used, or prior to further distribution in commerce
- Oil filled operational equipment is not a bulk storage container

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



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**

SPCC Regulated Entities (§112.1(b))

Facility is subject to the regulation:

- If it is a **non-transportation-related** facility that distributes, drills, gathers, produces**,** processes, refines, **stores**, transfers, uses, *or* consumes oil and oil products; **and**

- **due to its location could reasonably be expected to discharge oil into navigable waters of the U.S.** or adjoining shorelines **AND**

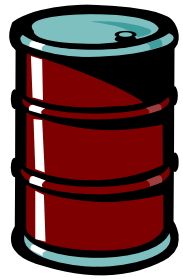
SPCC Regulated Entities

- Meets at least one of the following capacity thresholds:
  - **Aggregate total of more than 1,320 gallons of oil in aboveground containers**

    (*only counting containers of 55-gallons or greater*); **or**
  - More than 42,000 gallons of oil in underground tanks
    - (Note: most USTs now exempt from SPCC)

SPCC Regulated Entities (cont.)

- "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 (>=55-gal capacity) that may be used to store oil and are not permanently taken out of service**

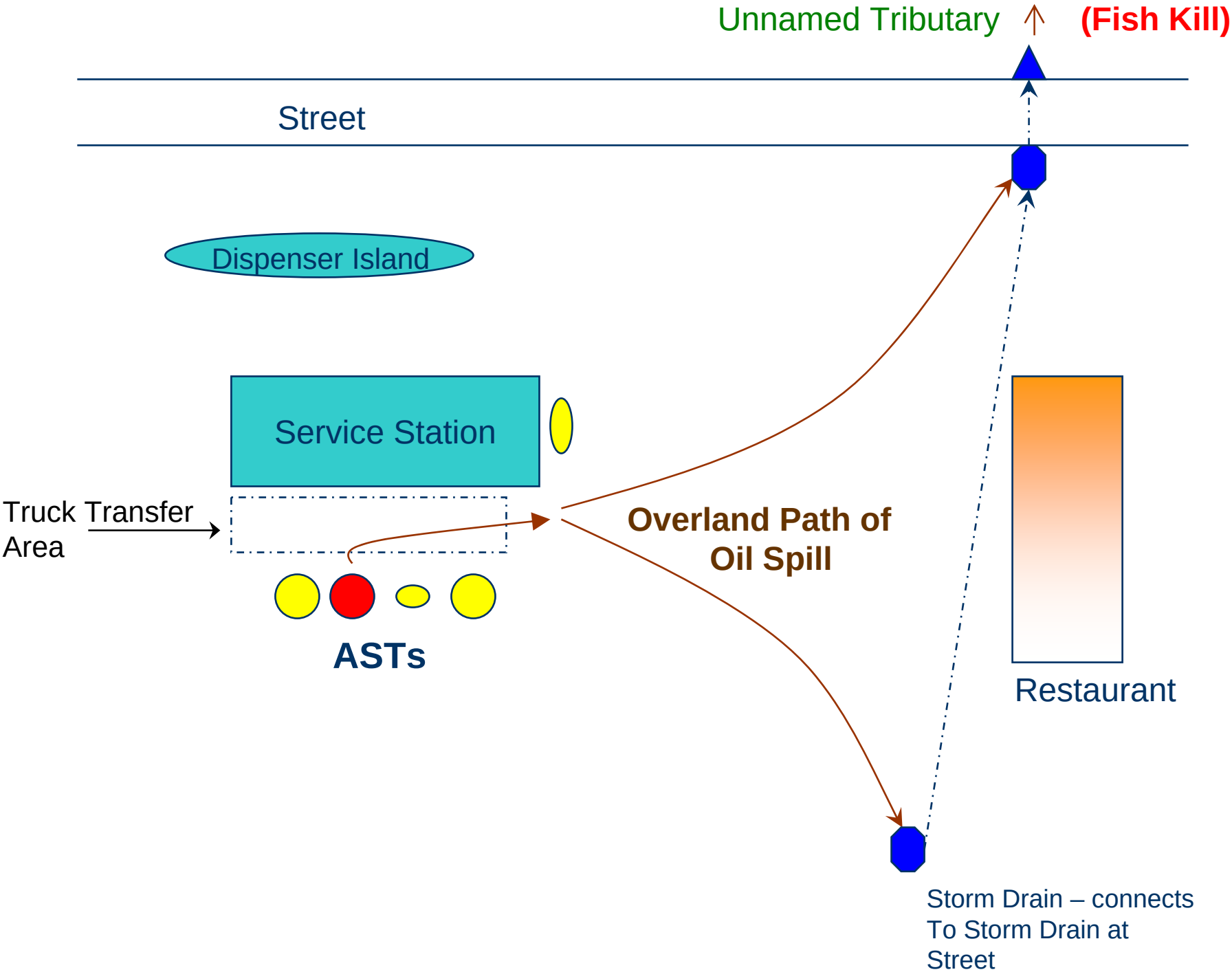


Exemptions from SPCC (§112.1(d))

- Containers less than 55-galllons
- 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
TIONS

ICE


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 May 16, 2007
- 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 and December 2006 revisions
- **Note: Facilities regulated and in operation prior to 8/16/02 <u>DO NOT HAVE</u> until 7/1/09 to prepare/implement their SPCC Plan for the first time – if currently do not have a SPCC Plan, must prepare SPCC ASAP!**

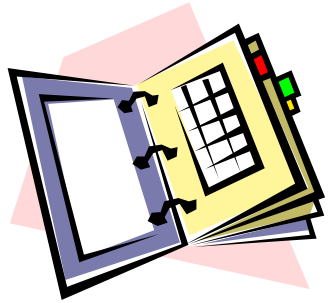
A facility (other than a farm) starting operation…	***Would…***
On or before 8/16/02	**<u>Maintain existing Plan.</u> Amend and implement Plan no later than 7/1/09.**
After 8/16/02 through 7/1/09	**Prepare and implement Plan no later than 7/1/09.**
After 7/1/09	**Prepare and implement Plan before beginning operations.**

Requirements for Preparation of SPCC Plans

Oil Program

PREVENT • PREPARE • RESPOND

Overview of information required to be in your written SPCC Plan



- 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)

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

Oil Program

PREVENT • PREPARE • RESPOND

Implementation Requirements

- **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

- **Inspect piping and valves –** 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 (112.7(c))
- 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 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

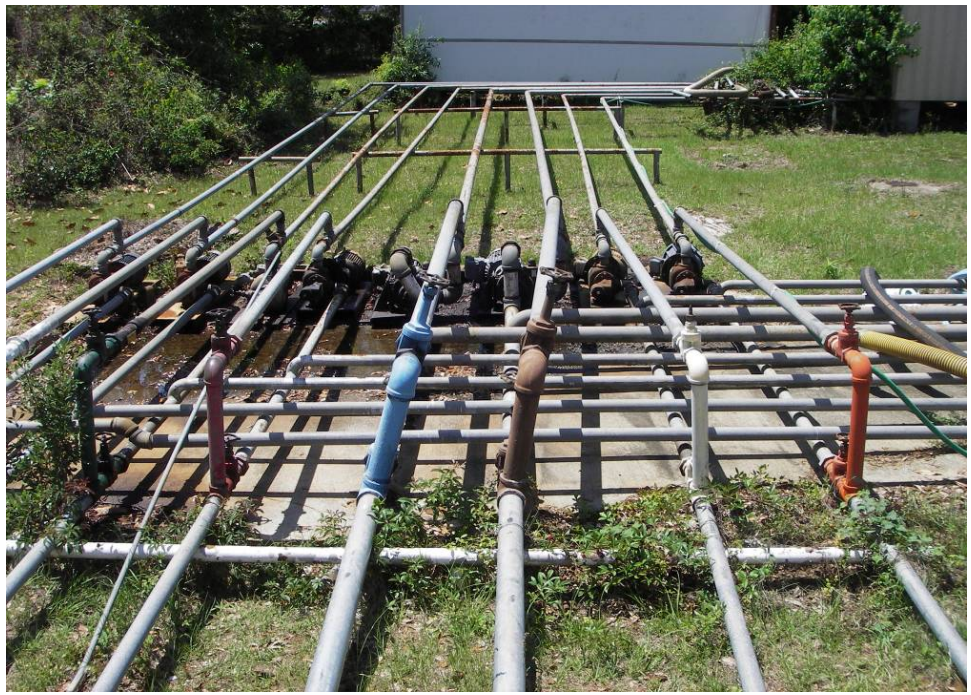
Type of Facility	*Secondary Containment*	*Rule Section(s)*
All Facilities	General containment (areas with potential for discharge, e.g. piping, oil-filled operating* and manufacturing equipment, and non-rack related transfer areas) Loading/unloading racks	112.7(c) {112.8(b)(3)} 112.7(h)(1)
Onshore Storage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

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

Secondary containment for oil filled equipment and piping (112.7(c)

Oil Filled Operational Equipment*

Piping



*Note: Monitoring program can be implemented in-lieu of containment for oil filled operational equipment (112.7(k)

Bulk Storage Containers (§112.8(c))

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

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)

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

26 15:26

IF YOU ARE
SMOKING YOUR
ASS BETTER
BE ON FIRE!

01.13.2007 15:25

Loading/Unloading Area

Loading/Unloading Area

Oil Spill Reporting

Oil Program

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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** information to EPA
- Reporting information must be submitted within 60-days of spill

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

Oil Program

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SPCC Guidance Document

- The full document is available at **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

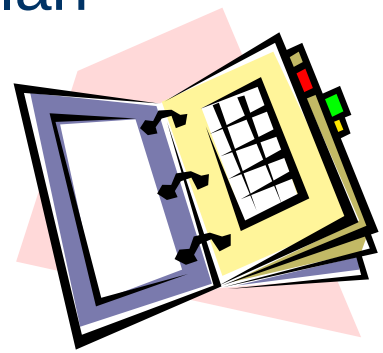
D. <u>Sample Bulk Storage Facility SPCC Plan</u>

E. Sample Production Facility SPCC Plan

F. Sample Contingency Plan

G. <u>SPCC Inspection Checklists</u>

H. Other Policy Documents



For Additional Information

- **Ted Walden EPA R4 404-562-8752**
  walden.ted@epa.gov

- **www.epa.gov/oilspill**

- **National SPCC/RCRA Hotline**
  1-800-424-9346

Tank You!!!