

SPILL PREVENTION, CONTROL & COUNTERMEASURE (SPCC)

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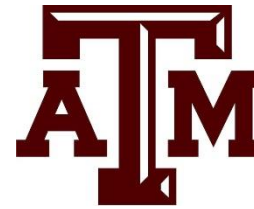
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Speaker Introduction

Max Cook, CAPM

- ▶ Senior Project Manager at Ranger Environmental Services, Inc.
- ▶ Ranger for 14+ years
- ▶ Manage the Phase I and SPCC programs
- ▶ Graduated from Texas A&M University, Class of 2003
 - ▶ Bachelor of Science
 - ▶ Minor in Business



SPCC - What is it?

Spill Prevention, Control & Countermeasure (SPCC) rule

- ▶ Per the EPA website, the purpose of the rule is:

“the prevention of, and preparedness for, and response to oil discharges at specific non-transportation related facilities. The goal of the regulation is to prevent oil from reaching navigable waters and adjoining shorelines, and to contain discharges of oil.”



I still don't get it.....

If you have a spill (oil), make sure you prevent the spill from impacting surface waters!!!!

SPCC - Purpose

The SPCC rule is designed to protect public health, public welfare, and the environment from potential harmful effects of oil discharges to navigable waters and adjoining shorelines



History & Boring Stuff.....

SPCC rule is regulated by EPA

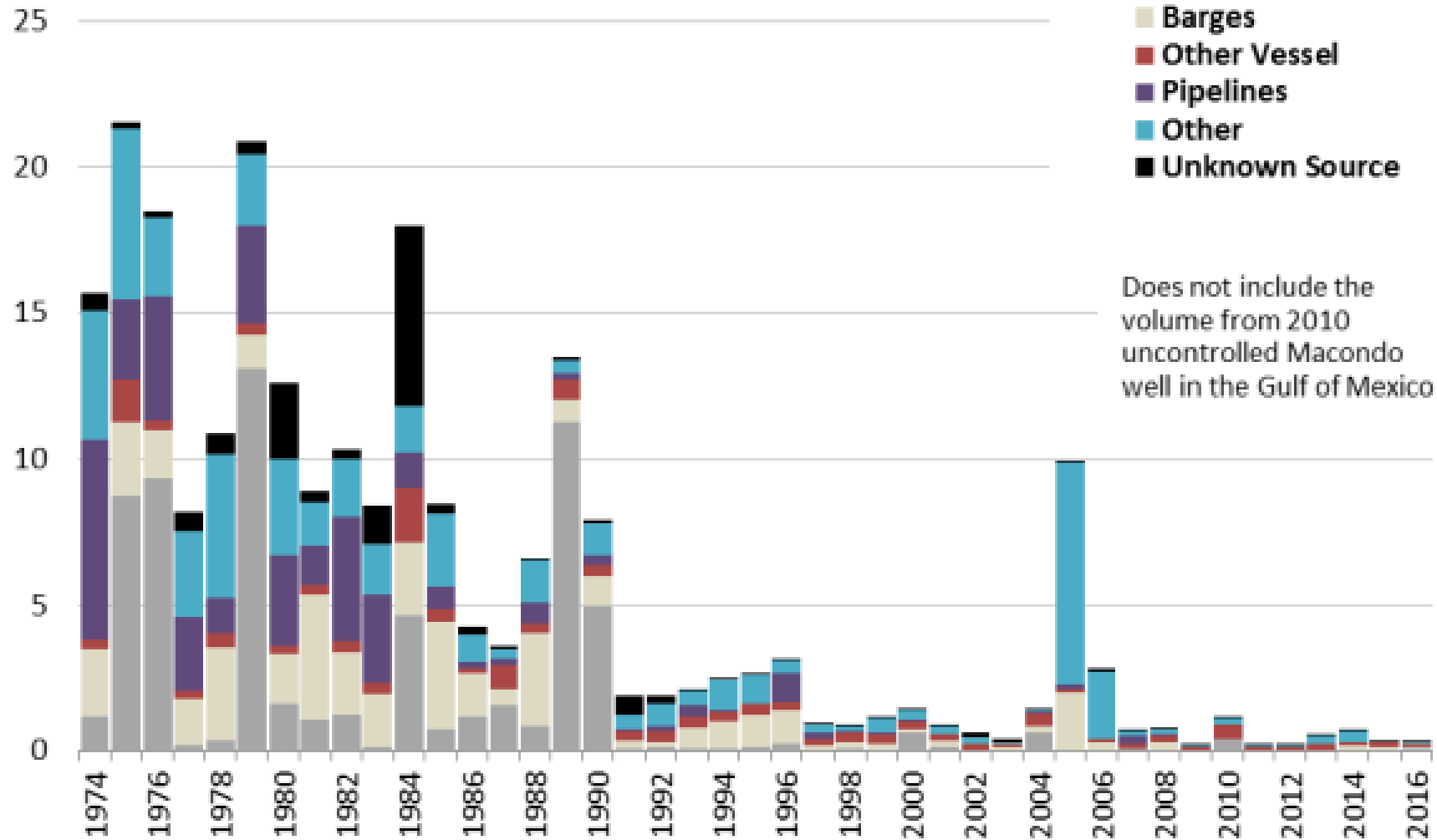
- ▶ Started off under authority of Clean Water Act in 1973
- ▶ Was amended by the Oil Pollution Act in 1990
- ▶ Further amended in 2002 to include most of the provisions we see today

SPCC requirements listed in 40 CFR 112



Clean Water Act Success

Millions of Gallons



SPCC - Who needs it?

A facility is required to have an SPCC plan if it has an aggregate aboveground storage capacity of oil greater than 1,320 gallons or a completely buried storage capacity greater than 42,000 gallons

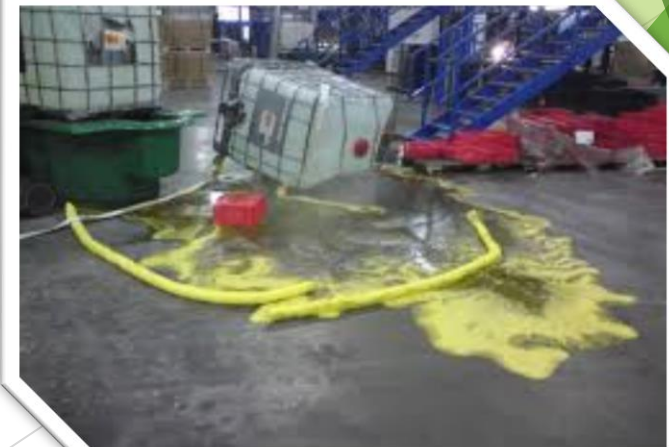
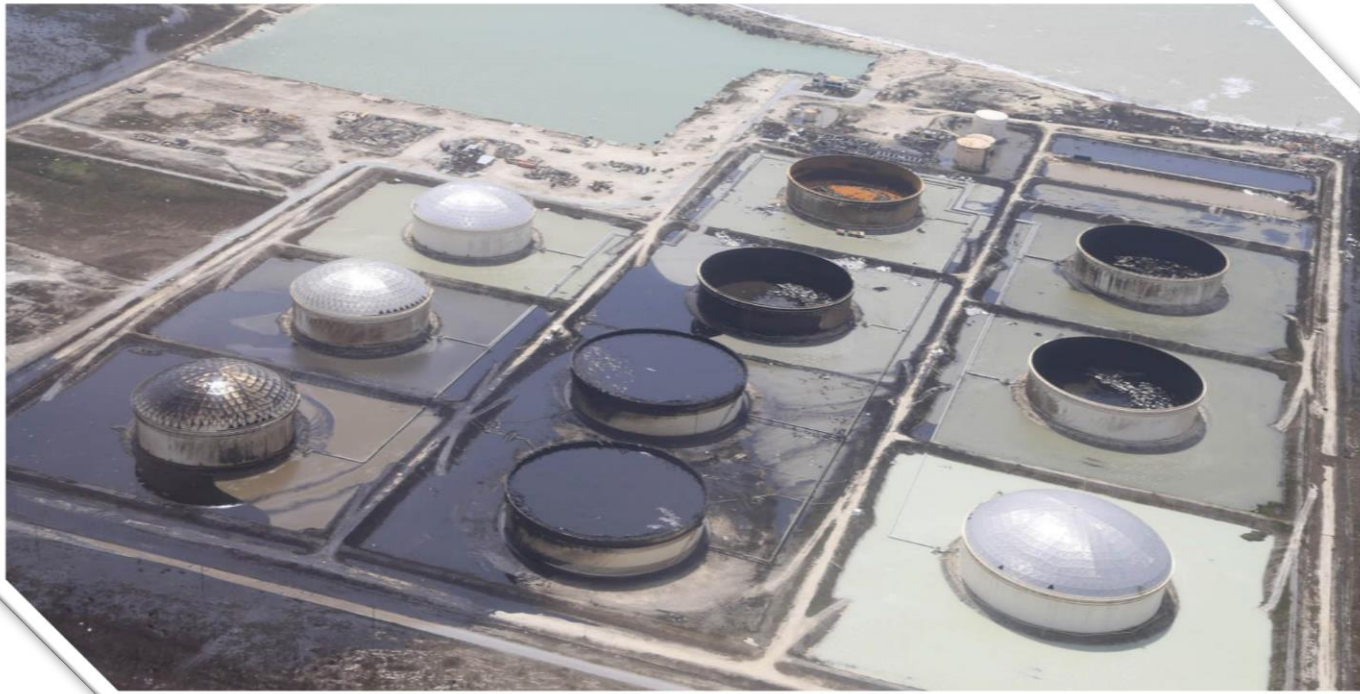
- ▶ Includes Facilities with:
 - ▶ Aboveground tanks
 - ▶ Completely buried tanks
 - ▶ Temporary storage tanks
 - ▶ Bunkered tanks
 - ▶ Mobile re-fuelers
 - ▶ Ancillary equipment tanks



Oil Tanks



Can be
trouble!



What is oil?

Oil is defined by the Clean Water Act as “oil of any kind or in any form including, but not limited to, petroleum, fuel oil, sludge, oil refuse and oil mixed with wastes other than dredged spoil and oily mixtures.” Under the SPCC rule and regulatory direction, oil includes the following:

- ▶ Petroleum & non-petroleum based oils (hydraulic oil, synthetic oil)
- ▶ Fuel (gasoline, diesel, aviation)
- ▶ Crude oil
- ▶ Refined products
- ▶ Animals fats, oils, greases, and vegetable oils

What is navigable water?



Good luck figuring it out!!!

Term includes all interstate waters and wetlands, intrastate rivers, streams, intermittent streams, mudflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, natural ponds, conveyances to water such as storm drains, dry ditches, any water used for recreation, commerce or other purposes including fishing or industrial use



Is this navigable water?



Is this navigable water?



Is this navigable water?



Do I Need an SPCC?

Applicability Flowchart

Is facility non-transportation related?

NO

YES

Is facility engaged in drilling, producing, gathering, storing, processing, refining transferring, distributing, using, or consuming oil?

NO

YES

Could facility reasonably be expected to discharge oil into navigable waters or adjoining shorelines?

NO

YES

Is the total aggregate capacity of aboveground oil storage containers greater than 1,320 gallons or completely buried containers 42,000 gallons?

NO

YES

Facility is not subject to SPCC

Facility is subject to SPCC

Ok, so I probably need an SPCC plan.....should I really worry about getting one though?



Types of SPCC Plans (Onshore)

Tier 1

- ▶ Facilities with an aggregate capacity of less than 10,000 gallons with no one storage container greater than 5,000 gallons

Tier 2

- ▶ Facilities with an aggregate capacity of less than 10,000 gallons but have a storage container with a capacity greater than 5,000 gallons

Bulk Storage Facilities

- ▶ Facilities that have an aggregate capacity of greater than 10,000 gallons

Written SPCC Plan Requirements

SPCC plans must be maintained at your facility and should address the following mandatory information:

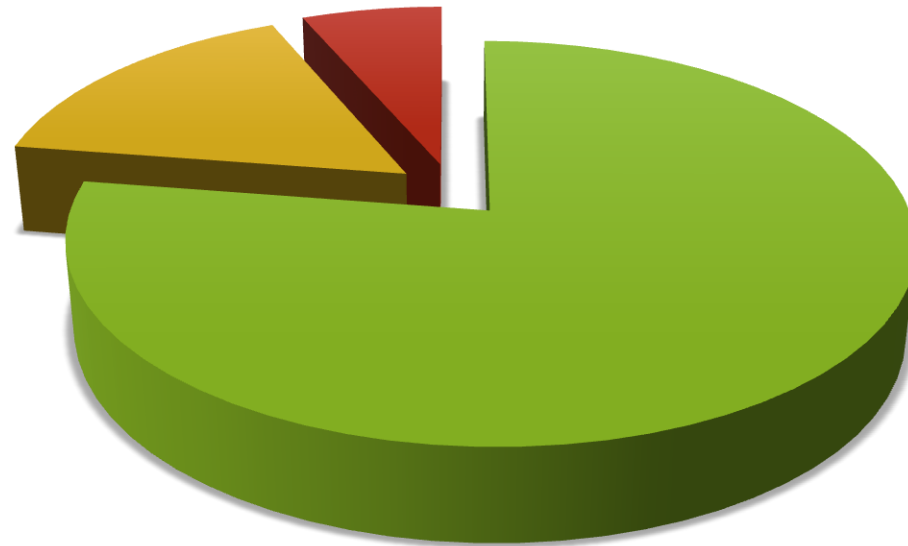
- ▶ Company certification and approval
- ▶ Location and description of storage tanks, secondary containment, and equipment
- ▶ Potential release scenarios and spill control materials
- ▶ Facility drainage
- ▶ Inspection schedules
- ▶ Security
- ▶ Personnel training
- ▶ Notification and reporting
- ▶ Reportable spill record



SPCC Plan Focus

Spill prevention should be the main focus at any facility that requires an SPCC Plan

SPCC Plan Elements



■ Prevention ■ Control ■ Countermeasure

Spill Prevention

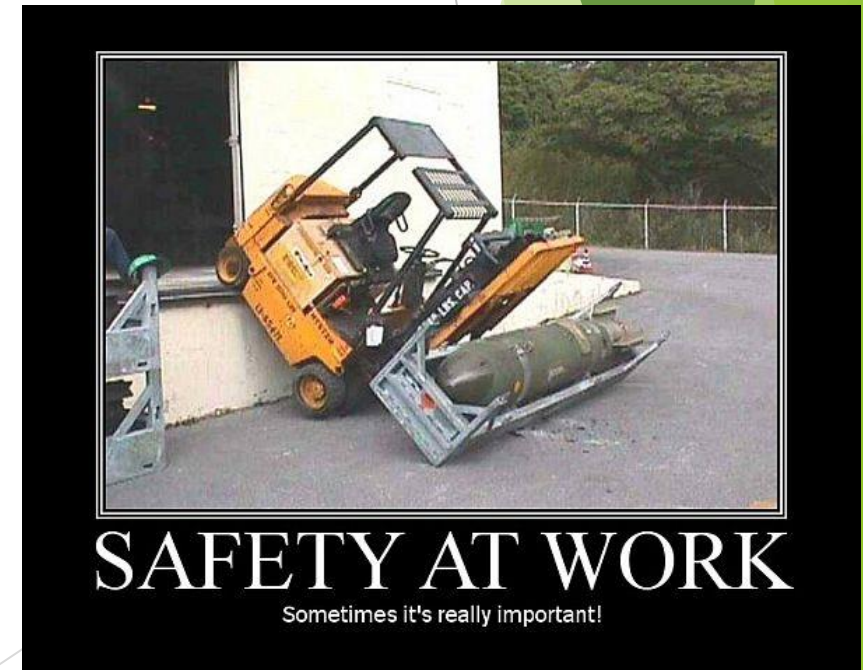
Spill prevention starts with having standard operating procedures and company policies for oil handling oversight



Spill Prevention

Spill prevention is reinforced with proper employee training

- ▶ Facilities with SPCC plans are required to have documented annual SPCC training
 - ▶ Everyone responsible for spill prevention and control should be at the training



Spill Prevention

Spill prevention is maintained by regular inspections

- ▶ Formal facility inspections should be conducted on a monthly basis to ensure oil storage and equipment are performing in an efficient manner
 - ▶ Monthly inspections documented utilizing inspection checklist
 - ▶ Deficiencies should be addressed immediately
- ▶ A more thorough annual inspection is also required to be conducted
- ▶ All inspections should be kept with the SPCC plan or digitized for potential review by regulator



Spill Prevention

Spill prevention is sustained by common sense practices

- ▶ Keep container lids securely fastened
- ▶ Maintain oil containers within containment
- ▶ Protect oil sources from damage by moving equipment
- ▶ Keep dike valves closed
- ▶ Loading and unloading of oil products shall be attended at all times



Spill Control

Adequate secondary containment or diversionary structures need to be provided for all oil storage containers and ancillary equipment. If tanks are stored outside, secondary containment needs to account for freeboard.

- ▶ Double-wall tanks
- ▶ Concrete/engineered containment berms
- ▶ Earthen berms
- ▶ Containment pans/vessels
- ▶ Spill Pallets
- ▶ Oil/water separators



Double-wall tanks



Concrete/engineered containment berms



Containment pans/vessels



Spill pallets



Spill Countermeasures

If a spill occurs, standard operating procedures should be well documented in the SPCC plan to address the release.

Countermeasures should include:

- ▶ Identify release source
- ▶ Determine spill volume (minor vs spill emergency)
- ▶ Notify appropriate personnel/officials
- ▶ Identify & Mitigate Hazards
- ▶ Clean up spill
- ▶ Document spill

Spill Countermeasures

Determining whether the spill is a minor spill versus a spill emergency crucial to taking the appropriate next steps

Minor Spill

- ▶ Typically <25 gal
- ▶ Can be addressed in house
- ▶ Easily contained



Spill Emergency

- ▶ Typically >25 gal
- ▶ Cannot be addressed in house
- ▶ Cannot be contained
- ▶ Potential to reach surface water
- ▶ May need to alert local authorities
- ▶ May need to remove employees from area



Spill Countermeasures

Who do we need to notify when a spill occurs?

Minor Spill

- ▶ Designated personnel accountable for discharge prevention



Spill Emergency

- ▶ Designated personnel accountable for discharge prevention
- ▶ Local authorities as necessary (911)
- ▶ Regulatory branch if required
 - ▶ EPA
 - ▶ TCEQ
 - ▶ Texas Railroad Commission
 - ▶ County Officials



Spill Countermeasures

When a spill occurs, understanding potential hazards are important in determining how to proceed forward



Spill Countermeasures

Once potential hazards are determined, how can we mitigate



Spill Countermeasures

What can we use to clean up an oil spill?

Minor Spill

- ▶ Items kept within a spill kit
 - ▶ Granular absorbent
 - ▶ Absorbent pads/booms
 - ▶ Drain covers/blockers



Spill Emergency

- ▶ Call professionals experienced in spill cleanup



Granular absorbent



Absorbent pads and booms



What if I decide not to get an SPCC plan even though I need one?

Could incur administrative violations or punitive damages

Failure to notify Federal/State authority

- ▶ \$250,000 individual fine
- ▶ \$500,000 organizational fine
- ▶ Potential criminal charges if gross negligence cited



Administrative penalties for rule violations

- ▶ Class 1: \$10,000 per violation
- ▶ Class 2: \$10,000 per day

Judicial penalties for rule violations

- ▶ \$25,000 per day or \$1,000 per barrel spilled



Common SPCC Violations

Why did I get a NOV when I got audited even though I had an SPCC plan?

- ▶ Failure to report a spill
- ▶ Lack of an adequate SPCC Plan or containment
- ▶ Lack of proper record keeping
- ▶ Lack of controls to prevent a spill from entering the environment

VIOLATION



Is anyone still awake?

