

# Compliance with the SPCC Regulations

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Environmental Technologies Panel (SP-1)  
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# Overview

## ➤ Introduction:

- ◆ SPCC regulations (key components)
- ◆ Applicability
- ◆ General requirements
- ◆ SPCC compliance timeline
- ◆ Notices of Data Availability (update)

## ➤ Technical review:

- ◆ Litigation ⇒ May 25, 2004 clarifications
- ◆ FAQs
- ◆ Example scenarios
- ◆ Common SPCC violations
- ◆ Summary



# Introduction

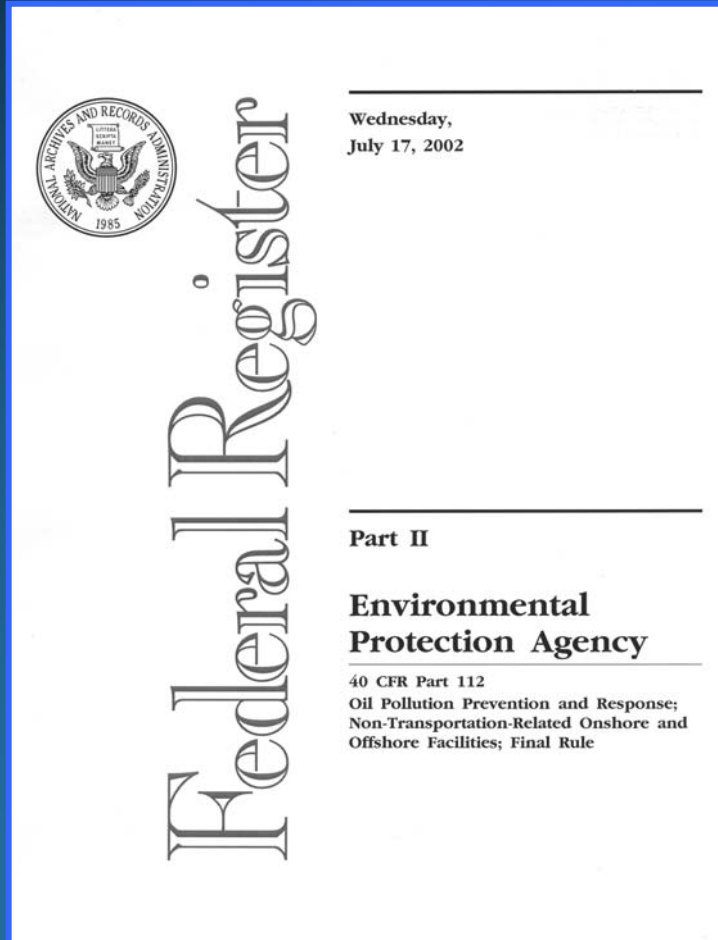
## ➤ Purpose:

- ◆ To address the potential threats posed by petroleum and non-petroleum oils released to the environment, the U.S. Environmental Protection Agency (USEPA) has revised regulations to aid in the prevention and control of oil spills
- ◆ The Oil Pollution Prevention Regulation, commonly known as the “SPCC rule,” contained in 40 CFR Part 112, was promulgated under the Clean Water Act (CWA) by the USEPA on December 11, 1973 (38 FR 34164)





# Regulatory Background

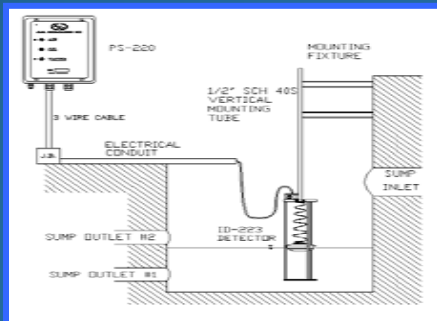


- On June 28, 2002, USEPA amended the SPCC rule, which was published in the Federal Register on July 17, 2002 (67 Fed. Reg. 47042)
- The SPCC rule amendments became **effective on August 16, 2002**
- Several key deadlines in the revised SPCC rule have been extended to February 2006 and August 2006 (discussed later)



# Three Primary Goals of the SPCC Rule:

- **PREVENT**...discharges of oil from reaching navigable waters through proactive measures
- **PREPARE**...effective oil spill containment and discharge response procedures
- **RESPOND**...rapidly to an oil discharge with effective containment measures





# What does 40 CFR Part 112 Require Facilities to Do?

- The SPCC rule primarily requires that all facilities covered under the regulation **prepare and implement a Spill Prevention, Control and Countermeasure (SPCC) Plan**
- An **SPCC Plan** is a detailed, facility-specific written document that describes how a facility's operations comply with the requirements of the regulation
- The **SPCC Plan** is the cornerstone of the Oil Pollution Prevention Regulation and must be developed for all facilities covered under the SPCC rule



# SPCC Rule Applicability

- As stated in 40 CFR Part 112, the SPCC rule applies to the following:
  - ◆ Non-transportation-related facilities (not related to the transport of oil), and
  - ◆ Facilities, due to their location, could reasonably be expected to discharge oil into or upon navigable waters of the U.S or adjoining shorelines, and
  - ◆ Have an aggregate aboveground oil storage capacity of **>1,320 gallons**, or
  - ◆ Have a total underground oil storage capacity of **>42,000 gallons** includes underground storage tanks (USTs) that are not subject to all the technical requirements of 40 CFR Parts 280 and/or 281 (UST regulations)



# SPCC Rule Applicability

- As defined in the SPCC rule, “**navigable waters**” and adjoining shorelines include all of the following:
  - ◆ All waters of the United States and its Territorial Seas used in interstate and foreign commerce, including all waters subject to the ebb and flow of the tide;
  - ◆ All other waters, such as interstate lakes, rivers, streams, mud flats, wetlands, and channels whose degradation or destruction could affect interstate and foreign commerce;
  - ◆ All tributaries of waters associated with the water bodies identified above

## Notes:

- (1) Currently, the USEPA will make the general assumption that a facility can impact a navigable watercourse in some way, so it is often difficult to justify the opposite
- (2) Based on information received from the USEPA, it is anticipated that guidance related to “navigable waters” will be provided in the near future. This will likely, however, not affect the SPCC applicability at most facilities



# SPCC Rule Applicability

- The aggregate aboveground oil storage capacity of 1,320 gallons refers to the combined storage capacity of petroleum and non-petroleum oils in the following containers and/or equipment:
  - ◆ Drums, totes, tanks, generator units, oil-filled electrical transformer units, hydraulic presses and equipment, oil water separators (storage reservoirs), portable pumps, and any other equipment or storage container that stores or otherwise contains oil products, located at a facility

**Note:** This list is not “all-inclusive” and only containers or equipment reservoirs with a capacity  $\geq 55$  gallons of oil are included when assessing a facility’s aggregate aboveground oil storage capacity.



# General Requirements

## Part 112.7 - General requirements for SPCC Plans

(a)	<p>General facility description, including:</p> <ul style="list-style-type: none"><li>• Type of oil and storage capacity, physical layout, and diagram</li><li>• Discharge prevention measures</li><li>• Discharge and drainage controls</li><li>• Countermeasures for discharge discovery, response, and cleanup</li><li>• Methods of disposal of recovered materials</li><li>• Contact list and phone numbers</li></ul>
(b)	Description of potential discharges from equipment failure
(c)	Appropriate secondary containment (for ALL)



# General Requirements

## Part 112.7 - General requirements for SPCC Plans (continued)

(d)	Impracticability of secondary containment
(e)	Inspections, tests, and records
(f)	Personnel, training, and discharge prevention procedures
(g)	Security measures
(h)	Facility tank car and tank truck loading/unloading rack
(i)	Evaluation of containers for brittle fracture or other catastrophe
(j)	Conformance with other applicable state requirements and procedures



# General Requirements

- SPCC Plan format requirement:
  - ◆ The SPCC Plan can follow the sequence specified in the rule
    - However, if another format is used, a cross-reference system must be provided
  - ◆ Must include a discussion of the facility's conformance with ALL of the requirements of 40 CFR Part 112.7 (Subpart A) and any other applicable Subpart of Part 112 (Subparts B, C and/or D)  
**Note: Are other non-petroleum oils (*i.e.*, cooking oils) stored at the facility?**



# General Requirements

➤ Facility Diagram:

- ◆ A “facility diagram” must be prepared, and must include the following:
  - Location and description of the contents of each subject container/equipment; including oil-filled container, equipment, and/or reservoir, tanks, 55-gallon drums, transformers, oil-filled operational equipment, and exempted USTs
  - All associated transfer areas and connecting pipelines



# General Requirements

- Conformance with other State programs - Part 112.7(j):
  - ◆ Need to describe in your Plan your facility's conformance with any "more stringent" State rule, regulations, and guidelines for oil spill prevention and response.
  - ◆ In short, USEPA requires you to discuss any more restrictive or comparable State-level programs applicable to oil spill prevention and response.

**Note:** In Virginia, applicable facilities with ASTs are also required to comply with the Virginia Dept. of Environmental Quality's (DEQ's) Facility and AST Regulation (9 VAC 25-91-10 *et seq*). If located in Virginia, and if your facility stores more than 25,000-gallons of petroleum, other pollution prevention requirements may be applicable. Additionally, the preparation of an Oil Discharge Contingency Plan (ODCP) may be required.



# General Requirements

- Deviations from requirements:
  - ◆ The SPCC rule allows facilities to deviate from the substantive requirements of Part 112 (except for the secondary containment requirements) - see Part 112.7(a)(2):
    - 1) if the facility explains the reason for the deviation(s)
    - 2) provides “**equivalent environmental protection**” with an alternative measure

**Example:** A facility may deviate from the fencing requirements of Part 112.7(g)(1) by utilizing another approach for providing security, such as surveillance cameras, etc.



# General Requirements

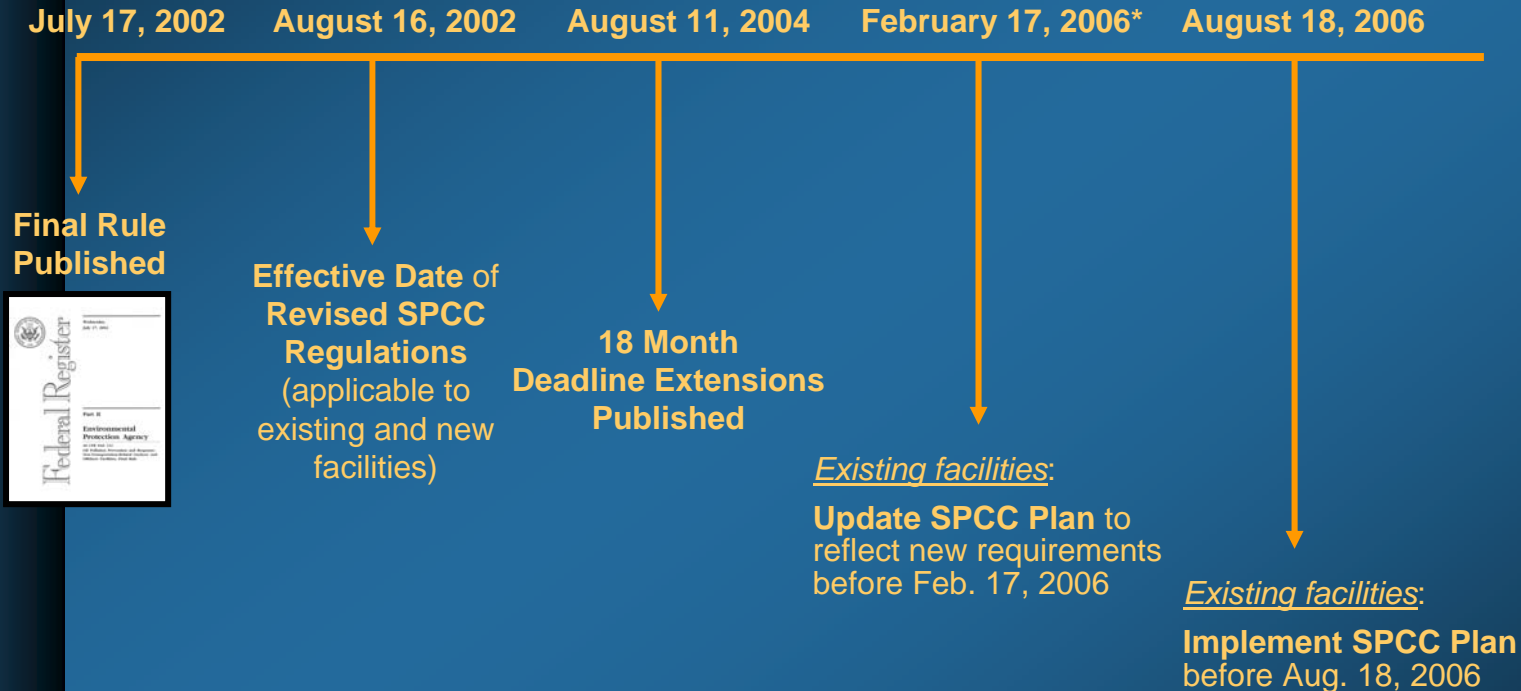
- Written oil spill reporting requirements:
  - ◆ Facilities must submit a written report to the National Response Center (NRC) **within sixty (60) days**, if one or both of the following criteria is met:
    - facility has had a “*single discharge of 1,000 or more gallons of oil into or upon navigable waters of the U.S. or adjoining shorelines,*” or
    - facility has “*discharged more than 42 U.S. gallons of oil in each of two discharges, occurring within any twelve month period.*”



**Note:** An immediate telephone call to the NRC at **(800) 424-8802** is also required if the discharge causes an oil sheen.



# SPCC Compliance Time Line



\* **Note:** Where a facility has been subject to the requirements of the SPCC rule and has been in operation without an SPCC Plan (out of compliance) , the facility must now be in conformance with the requirements of the “revised” SPCC rule and **is not granted the extension deadlines identified above.**



# Notices of Data Availability (NODA)

- As a result of recent litigation, USEPA is considering alternative approaches to ensure protection from oil spills
  - ◆ Facilities that handle oil below a certain threshold amount
  - ◆ Oil-filled and process equipment
- Published two notices (**OPA-2004-0007** and **OPA-2004-0008**) in the *Federal Register* on September 20, 2004 for public review and comment
  - ◆ Comment period ended November 19, 2004
  - ◆ For more - see <http://docket.epa.gov/edkpub/index.jsp>



# Notices of Data Availability (NODA)

- Summary of OPA-2004-0007
  - ◆ The USEPA has proposed to change the regulations to make more facility specific. The proposed changes are as follows:

<b>Tier 1</b> 1,321 - 5,000 gal	No written SPCC Plan
<b>Tier 2</b> 5,001 - 10,000 gal	Written SPCC Plan, but not PE certified
<b>Tier 3</b> Greater than 10,000 gal	SPCC Plan with PE certification



# Notices of Data Availability (NODA)

## ➤ Summary of OPA-2004-0008

The USEPA is considering an initiative that would provide more focused regulation for facilities with **oil-filled and process equipment**. The Agency believes that as long as “protection of human health and the environment is maintained,” alternatives/options that accomplish the objectives of the SPCC regulations should be considered. The Agency requested comments to describe *streamlined alternatives* that could replace parts of the existing regulations for this type of equipment.



# Notices of Data Availability (NODA)

- Summary of OPA-2004-0008 (continued):
  - ◆ Comments received include proposed amendments for oil-filled electrical equipment (*i.e.*, transformers).
  - ◆ Two recommendations:
    - Base regulatory threshold for oil-filled operating equipment on storage capacity of each piece of equipment, rather than aggregate capacity of facility.
    - Establish tiered requirements based on the oil storage capacity.



# Notices of Data Availability (NODA)

## ➤ Current Status

- ◆ The USEPA is currently reviewing public comments. The following presents the Agency's proposed schedule as related to these two initiatives:
  - Proposed rule relating to “certain facilities” and oil-filled and process equipment to be issued in August 2005
  - Final rule related to the NODA initiatives to be published in February 2006
  - Proposed rule for SPCC regulatory revisions (to address NODA initiatives) in June 2006
  - Final rule to revise SPCC regulations (7/2002) published in June 2007.



# Technical Review

- Lawsuits filed by American Petroleum Institute, Petroleum Marketers Association of America, and Marathon Oil
- Terms of partial settlement published in Federal Register on May 25, 2004
- Litigation Issues:
  - ◆ Loading/unloading racks
  - ◆ Impracticability
  - ◆ Produced water and wastewater treatment
  - ◆ Integrity testing
  - ◆ Security
  - ◆ Facility
  - ◆ Navigable waters  
*(Not resolved through settlement)*



# Technical Review

## ➤ USEPA Clarifications

- ◆ As published by the USEPA in the May 25, 2004 Federal Register, the Agency will now allow for an “equivalent environmental inspection” in place of integrity testing for aboveground storage containers. *Visual inspections of the ASTs will now qualify for “shop built” ASTs that are 30,000 gallons or less, as long as the following requirements are met:*



- the tank must be elevated in a manner as to prevent corrosion (i.e., no contact with the soil); and
- all sides of the tank must be visible, including the bottom, during the inspection



# Technical Review

## ➤ Integrity Testing Requirements

### ◆ Part 112.8(c)(6):

- Test containers for integrity on a regular schedule, and when repairs are performed
- Include tank supports and foundations in inspections
- Combine visual inspection plus another testing technique, such as hydrostatic testing, ultrasonic testing, or another non-destructive shell test
- Keep records for comparison purposes



# Technical Review

## ➤ Integrity Testing Requirements (continued)

### ◆ Small containers (*i.e.*, 55-gal drums, totes, and other reasonably small-size containers)

- can be inspected by visual methods only, provided all sides can be seen and no sides are in contact with the ground.
- any deviation, such as only providing visual inspections, must be documented, as required by 40 CFR Part 112.7(a)(2).



**Note:** As an alternative, the combination of a visual inspection and placement of a barrier between the container and the ground, designed and operated in a way that ensures that any leaks are immediately detected, would also be considered "equivalent" by the USEPA.



# Technical Review

## ➤ Loading/Unloading Rack Areas

### ◆ Requirement - Part 112.7(h)(1):

- *“Where loading/unloading area drainage does not flow into a catchment basin or treatment facility designed to handle discharges, use a drainage system for tank car or tank truck loading and unloading areas”*
- *“You must design any containment system to hold at least the maximum capacity of any single compartment of a tank car or tank truck loaded or unloaded at the facility”*





# Technical Review

## ➤ Loading/Unloading Rack Areas - USEPA Clarifications

On May 25, 2004, the USEPA clarified the requirements related to Part 112.7(h). The USEPA explained “ *we interpret 112.7(h) only to apply to loading and unloading racks. Under this interpretation, if a facility does not have a loading or unloading rack, 112.7(h) does not apply.*”

For additional information, see the Federal Register at the following link:  
<http://www.epa.gov/oilspill/pdfs/fr052404.pdf>



# Technical Review

- Loading/Unloading Rack Areas:
  - ◆ *What is a “Loading/Unloading Rack Area?”*
    - Currently, the USEPA has not defined a “loading/unloading rack area”



Not a loading/unloading rack area



Loading/unloading rack area



# Technical Review

- *What is a “Loading/Unloading Rack Area?” (continued)*
  - ◆ As most SPCC regulated facilities do not have “Loading/Unloading Rack” Areas - what is required, if anything?
  - Currently, for facilities with truck oil unloading areas, you must still meet the general secondary containment requirements of Part 112.7(c), and/or the undiked area drainage requirements in Part 112.8(b)(3-4)





# Technical Review

- “Secondary Containment” Part 112.7(c)
  - ◆ Must provide appropriate containment and/or diversionary structures or equipment to prevent a discharge
  - ◆ The entire containment system, including the walls and floor, must be capable of containing oil. Must be constructed so spill will not escape the containment system before cleanup can occur



**Note:** The secondary containment provisions listed in Part 112.7(c) **apply to all** subject bulk storage containers and oil-filled equipment (*i.e.*, oil-filled electrical transformer units, hydraulic presses and other equipment). It is required that you prevent any discharged oil from these units into navigable waters. Many facilities have responded to this requirement by installing secondary containment structures in areas with high risk or potential to impact storm water drainage pathways in the event of a spill or release of oil from these units. [See additional containment requirements for bulk storage containers under Part 112.8(c)(2)]



# Technical Review

- If it is not practical to install secondary containment:
  - ◆ Must explain why in the SPCC Plan,
  - ◆ Prepare a Spill Contingency Plan in accordance with 40 CFR Part 109,
  - ◆ Provide a written commitment of manpower, equipment, and materials required to control and removal discharged, and
  - ◆ Conduct “periodic” integrity testing of the containers, valves, and piping (frequency of testing depends on a number of factors)



# Technical Review

## ➤ Frequently Asked Questions (FAQs):

- ◆ Common FAQs - Good source found at *USEPA, Region III, SPCC Plan Information Guide* - see link below:  
(<http://www.epa.gov/reg3hwmd/oil/spcc/infoguide.pdf>)
- ◆ Specific questions:

Question: How do you address fuel-powered waterfront cranes with 500 to 2,000-gal tank capacities? How do you “test” them?

Answer: Part 1 - Assuming that the cranes are mobile, compliance with Part 112.8(c)(11) is required. This means that the cranes must be positioned or located (while not in use) to prevent a discharge as described in Part 112.1(b). You must provide secondary means of containment, such as a dike or catchment basin, sufficient to contain the capacity of the largest single compartment or container with sufficient freeboard to contain precipitation.



# Technical Review

➤ Specific questions:

Question: How do you address fuel-powered waterfront cranes with 500 to 2,000-gal tank capacities? How do you “test” them?

Answer: Part 2 - Assuming “test” is related to the performance of integrity testing, such testing may not be required. First, it is important to determine if the “tank” (associated with each crane) is considered a “bulk storage container?” [Remember that oil-filled electrical, operating, or manufacturing equipment is not a bulk storage container].

- ◆ If not a “bulk storage container,” then the integrity testing requirements DO NOT apply.
- ◆ If considered a “bulk storage container,” does it qualify for USEPA’s exemptions for integrity testing?



# Technical Review

➤ Specific questions:

Question: Is bilge water from ships considered oily waste?  
If so, what are the requirements?

Answer: Probably. If the bilge water contains an “oil,” as broadly defined in the regulations, any bulk storage container (mobile or stationary) used to temporarily store the oily wastewater is subject to the applicable requirements of Part 112.7 and 112.8.



Question: What about oil/water separators?

Answer: Depends. If system has a compartment designed to store oil, then it would be subject.



# Technical Review

➤ Specific questions:

Question: “What about fuel powered emergency electric generators, both fixed and portable (but not on wheels), where the fuel supply (capacity) is greater than 55-gals? What type of inspections are necessary?”

**Answer:** Remember that oil-filled electrical, operating, or manufacturing equipment is not a “bulk storage container;” therefore, the integrity inspection requirements do not apply.

Although the SPCC regulations do not specifically identify the frequency for performing visual inspections of such equipment, it is highly recommended . If inspections are performed on oil-filled equipment, the inspection should be documented. Remember - if you don't document, you can not demonstrate compliance.





# Example Scenarios

## ➤ Example One:

- ◆ XYZ Ship Building Company currently has 10 ASTs on-site that each receive fuel from tanker trucks. Does the tanker truck refueling at each tank location require secondary containment?

## ➤ Example Two:

- ◆ XYZ Ship Building Company currently owns three oil-filled electrical transformers (each greater than 55-gals), which are located on-site. Is secondary containment required?

## ➤ Example Three:

- ◆ XYZ Ship Building Company has two USTs that are each used for refueling facility vehicles. What are the SPCC requirements associated with these tanks?



# Example Scenarios

## ➤ Example Four:

- ◆ XYZ Ship Building Company currently has two temporarily out-of-service ASTs (1,000 and 3,000-gals). Should these containers be included in the facility's SPCC Plan?

## ➤ Example Five:

- ◆ XYZ Ship Building Company currently has an on-going construction project. A number of contractors have brought on-site their temporary fuel storage tanks and equipment. Are these construction-related tanks and equipment subject to the SPCC regulations? Who's responsible?



# Common SPCC Violations

- No SPCC Plan (or not current)
- Failure to address all required components in the SPCC Plan (*i.e.*, PE certification, Substantial Harm Criteria form)
- Failure to implement SPCC Plan
- Inadequate recordkeeping (inspections/testing)
- SPCC Plan does not include all oil storage containers and equipment (*i.e.*, transformers, hydraulic systems, emergency generators, non-petroleum oils)
- SPCC Plan does not identify spill pathways, spill rates, and/or receptors.



# Summary

## ➤ Compliance Tips:

- ◆ Be diligent!
- ◆ Watch for guidance (OBG's *e-Alerts*) and updates on the web
- ◆ Review the regulations closely - ask questions
- ◆ Show good faith effort
- ◆ Use creative and innovative approach to address issues
- ◆ Be thorough and consistent
- ◆ Document everything
- ◆ Be ready



# For More Information

## USEPA Oil Program

<http://www.epa.gov/oilspill/>

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