

# SPCC Guidance for Regional Inspectors

Office of Emergency Management

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#### Revision History since August 28, 2013 Publication

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<u>Chapter 2 – Navigable waters</u>: Replaced the reference to Rapanos guidance with a link to the Office of water page on Waters of the US. (http://water.epa.gov/lawsregs/guidance/wetlands/CWAwaters.cfm).

<u>Chapter 5 – Figure 5-7</u>: Revised the representation of the OWS in the diagram.

<u>Chapter 6 – Section 6.3</u>: Added a reference to 40 CFR 110.6 regarding notification requirements and an excerpt of the regulation.

<u>Chapter 7 – Section 7.5.2</u>: Changed the subsection heading to "No Applicable Industry Standard- Hybrid Inspection Program Established"

<u>Chapter 7 – Figure 7-4</u>: Revised the summary of integrity testing and inspection program documentation to add cross-references to footnote in the figure.

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The text of the guidance identifies these revisions with the symbol  $\mathbb{Z}$ .

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# **List of Abbreviations**

AC Asphalt cement

API American Petroleum Institute
AFVO Animal Fats and Vegetable Oils

ASME American Society of Mechanical Engineers

ASNT American Society for Non-Destructive Testing

AST Aboveground storage tank

ASTM American Society for Testing and Materials

ATG Automatic Tank Gauge

BMP Best management practice

BOEM Bureau of Ocean Energy Management

BSEE Bureau of Safety and Environmental Enforcement

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

CFR Code of Federal Regulations

CRDM Continuous release detection method

CWA Clean Water Act

DOI U.S. Department of the Interior

DOT U.S. Department of Transportation

E&P Extraction and production

EO Executive Order

EORRA Edible Oil Regulatory Reform Act

EPA U.S. Environmental Protection Agency

ERNS Emergency Response Notification System

FAA Federal Aviation Administration

FDA Food and Drug Administration

FIFRA Federal Insecticide, Fungicide, and Rodenticide Act

FR Federal Register

FRP Facility Response Plan

FTPI Fiberglass Tank and Pipe Institute

FWPCA Federal Water Pollution Control Act

GAO Government Accountability Office

HMA Hot Mix Asphalt

IBC Intermediate Bulk Container

LACT Lease automatic custody transfer

MIC Microbial Influenced Corrosion

MFL Magnetic Flux Leakage

MMS Minerals Management Service

MOU Memorandum of Understanding

MSO Marine Safety Office

MTR Marine transportation-related [facility]

NACE National Association of Corrosion Engineers

NASS National Agricultural Statistics Service

NEPA National Environmental Policy Act

NCP National Contingency Plan

NDE Non-destructive examination

NFPA National Fire Protection Association

NODA Notice of Data Availability

NPDES National Pollutant Discharge Elimination System

NRC National Response Center

NRC Nuclear Regulatory Commission

OEM Office of Emergency Management

OMB Office of Management and Budget

OPA Oil Pollution Act of 1990 (OPA)

OSHA Occupational Safety and Health Administration

OWS Oil/water separator

PE Professional Engineer

PEI Petroleum Equipment Institute

PMAA Petroleum Marketers Association of America

PMO Pasteurized Milk Ordinance

POTW Publicly owned treatment work

PSM Process Safety Management

RBI Risk-based inspection

RCRA Resource Conservation and Recovery Act

RA Regional Administrator
RP Recommended Practice

RPDD Regulatory and Policy Development Division

SCADA Supervisory Control and Data Acquisition [system]

SPCC Spill Prevention, Control, and Countermeasure

STI Steel Tank Institute

UIC Underground Injection Control

UL Underwriters Laboratories

ULC Underwriters Laboratories of Canada

UN United Nations

USCG U.S. Coast Guard

UST Underground storage tank

UT Ultrasonic Testing

UTS Ultrasonic Thickness Scan

UTT Ultrasonic Thickness Testing

WQIA Water Quality Improvement Act

### Disclaimer

This document provides guidance to EPA inspectors, to owners and operators of facilities that may be subject to the requirements of the Spill Prevention, Control, and Countermeasure (SPCC) rule (40 CFR Part 112) and to the general public on how EPA intends the SPCC rule to be implemented. The guidance is designed to facilitate nationally-consistent implementation of the SPCC rule.

The statutory provisions and EPA regulations described in this guidance document contain legally binding requirements. This guidance document does not substitute for those provisions or regulations, nor is it a regulation itself. In the event of a conflict between the discussion in this document and any statute or regulation, this document would not be controlling. The guidance does not impose legally binding requirements on EPA or the regulated community, and might not apply to a particular situation based upon the circumstances. The word "should" as used in this guidance is intended solely to recommend or suggest, in contrast to "must" or "shall" which are used when restating regulatory requirements. Similarly, model SPCC Plans in Appendices D, E, and F, as well as examples of SPCC Plan language in the guidance, are provided as suggestions and illustrations only. While this guidance document indicates EPA's preferred approach to assure effective implementation of legal requirements, EPA retains the discretion to adopt approaches on a case-by-case basis that differ from this guidance where appropriate. Any decisions regarding a particular facility will be made based on the statute and regulations.

References or links to information cited throughout this guidance are subject to change. Rule provisions and addresses provided in this guidance are current as of August 2013. This guidance is a living document and may be revised periodically without public notice. This document will be revised, as necessary, to reflect any relevant future regulatory amendments. Interested parties are free to raise questions and objections about the substance of this guidance and the appropriateness of the application of this guidance to a particular situation. EPA welcomes public comments on this document at any time and will consider those comments in any future revision of this guidance document.

## **EPA Oil Program Contacts**

For more information on the Spill Prevention, Control, and Countermeasure rule, or to contact U.S. EPA headquarters and regional offices about this guidance or related issues, please refer to the following contact information.

Contact information is also provided for the National Response Center, the sole national point of contact for reporting all oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories.

#### Superfund, TRI, EPCRA, RMP and Oil Information Center

The Superfund, TRI, EPCRA, RMP and Oil Information Center is a publicly accessible service that provides up-to-date information on several EPA programs. The Information Center does not provide regulatory interpretations, but maintains up-to-date information on the availability of publications and other resources. The Information Center is open Monday – Friday from 10:00 a.m. - 5:00 p.m. Eastern Time (except federal holidays).

Toll free: (800) 424-9346

In the Washington, DC, area: (703) 412-9810

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http://www.epa.gov/superfund/contacts/infocenter/index.htm

#### **U.S. EPA Headquarters**

The EPA Office of Emergency Management (OEM) is responsible for EPA's emergency prevention, preparedness, and response duties, including the Oil Program.

Office of Emergency Management

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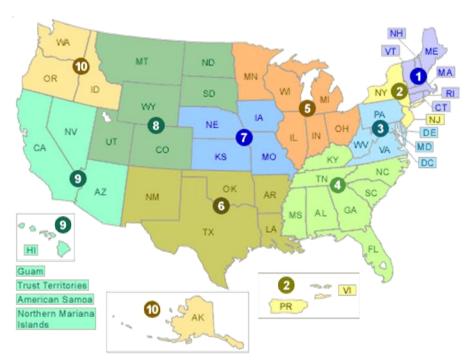
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#### **National Response Center**

The National Response Center (NRC) is the sole federal point of contact for reporting oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories. The NRC operates 24 hours a day, 7 days a week, 365 days a year.

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### Chapter 1 Introduction

In accordance with the Oil Pollution Prevention regulation at 40 CFR part 112, the U.S. Environmental Protection Agency (EPA) requires certain facilities to prepare, amend, and implement Spill Prevention, Control, and Countermeasure (SPCC) Plans. The regulation is largely performance-based, which allows flexibility in meeting the rule requirements to prevent discharges of oil to navigable waters or adjoining shorelines. The SPCC rule was promulgated in 1973, with significant amendments published in 2002. EPA finalized additional revisions in 2006, 2008, 2009, and 2011. EPA developed this guidance to assist regional inspectors in implementing the SPCC program and in understanding its applicability, and to help clarify the role of the inspector in reviewing a facility's implementation of performance-based flexibility provisions, such as environmental equivalence and impracticability.

This chapter provides a basic introduction to the SPCC rule and is organized as follows:

- **Section 1.1** describes the rule and its statutory framework.
- **Section 1.2** describes the rule's regulatory history, including the amendments since 2002 and compliance dates.
- **Section 1.3** provides further detail on each of the amendments.
- **Section 1.4** provides the reader with tips on how to use this guidance.

#### 1.1 SPCC Background

The Oil Pollution Prevention regulation promulgated under the authority of §311 of the Federal Water Pollution Control Act, or Clean Water Act (CWA) sets forth requirements for prevention of, preparedness for, and response to oil discharges at specific non-transportation-related facilities. To prevent oil from reaching navigable waters or adjoining shorelines, and to contain discharges of oil, the regulation requires these facilities to develop and implement SPCC Plans and establishes procedures, methods, and equipment requirements.

#### §112.2

Spill Prevention, Control, and Countermeasure Plan; SPCC Plan, or Plan means the document required by §112.3 that details the equipment, workforce, procedures, and steps to prevent, control, and provide adequate countermeasures to a discharge.

Note: The above text is an excerpt of the SPCC rule. Refer to 40 CFR part 112 for the full text of the rule.

EPA uses the phrase "navigable waters or adjoining shorelines" throughout this Guidance as shorthand for the jurisdiction description in Section 311(b)(1) of the Clean Water Act which prohibits the discharge of oil "into or upon the navigable waters of the United States, adjoining shorelines, or into or upon the waters of the contiguous zone, or in connection with activities under the Outer Continental Shelf Lands Act or the Deepwater Port Act of 1974, or which may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States (including resources under the Magnuson-Stevens Fishery Conservation and Management Act of 1976)."

#### 1.1.1 Purpose and Scope

Subparts A through C of 40 CFR part 112 are often referred to as the "SPCC rule." Focusing primarily on facility-related oil spill prevention, preparedness, and response, the SPCC rule is designed to protect public health, public welfare, and the environment from potential harmful effects of oil discharges to navigable waters or adjoining shorelines. The rule requires certain facilities that could reasonably be expected to discharge oil in quantities that may be harmful into navigable waters of the United States or adjoining shorelines to develop and implement SPCC Plans. The Plans ensure that these facilities put in place containment, controls, and countermeasures that will prevent oil discharges. The requirements to develop, implement, and revise the SPCC Plan, as well as train employees to carry it out, allow owners and operators to achieve the goal of preventing, preparing for, and responding to oil discharges that threaten navigable waters and adjoining shorelines.

Part 112 also includes requirements for Facility Response Plans (FRPs) that address oil discharge preparedness requirements for a subset of SPCC-regulated facilities. These requirements define who must prepare and submit an FRP and what must be included in the Plan, and are found in Subpart D of 40 CFR part 112 (and related appendices). These requirements are often referred to as the "FRP rule." Although the SPCC and FRP rules are related, this guidance specifically covers the prevention requirements of the SPCC rule (40 CFR part 112, subparts A, B, and C).

The SPCC rule implements EPA's authority under CWA §311, as delegated through various Executive Orders. Pursuant to Executive Order 11548, EPA was delegated the authority to regulate non-transportation-related onshore and offshore facilities that could reasonably be expected to discharge oil into navigable waters of the United States or adjoining shorelines (35 FR 11677, July 22, 1970). Executive Order 11548 was superseded by Executive Orders 11735 and 12777, respectively (38 FR 21243, August 7, 1973; 56 FR 54757, October 22, 1991). These Executive Orders delegated authority to the U.S. Department of Transportation (DOT)<sup>3</sup> over transportation-related onshore facilities, deepwater ports, and vessels. A Memorandum of Understanding (MOU) between the Secretary of Transportation and the EPA Administrator, dated November 24, 1971 (36 FR 24080, December 18, 1971), defines non-transportation-related facilities and transportation-related facilities. A portion of this MOU is included as Appendix A to 40 CFR part 112. In addition, the U.S. Department of the Interior (DOI) regulates specific offshore facilities, including associated pipelines. The jurisdictional responsibilities of EPA, DOT, and DOI in relation to offshore facilities are further discussed in another Memorandum of Understanding, dated November 8, 1993. (This MOU is included as Appendix B to 40 CFR part 112.)

The FRP rule applies to a subset of SPCC facilities, which are those that (1) have 42,000 gallons or more of oil storage capacity and transfer oil over water to or from vessels; or (2) have 1,000,000 gallons or more of oil storage capacity and lack secondary containment, are located at a distance such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments or shut down a public water intake, *or* have experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years. See 40 CFR part 112.20.

DOT delegated authority over transportation-related facilities and vessels to the U.S. Coast Guard (USCG).

#### FYI - Jurisdiction

EPA, USCG, DOT and DOI share responsibility for establishing spill prevention and response planning regulations under the Clean Water Act following the jurisdictional boundaries established in Executive Orders and MOUs.

However, EPA and USCG regulatory jurisdiction may differ from EPA and USCG response authority jurisdiction.

#### 1.1.2 Statutory Framework

The Federal Water Pollution Control Act (FWPCA) of 1972, as amended, commonly known as the Clean Water Act (CWA), is the principal federal statute for protecting navigable waters, adjoining shorelines, and the waters of the contiguous zone from pollution.<sup>4</sup> Section 311 of the CWA addresses the control of oil and

hazardous substance discharges, and provides the authority for promulgation of a regulation to prevent, prepare for, and respond to such discharges. Specifically, §311(j)(1)(C) mandates regulations establishing procedures, methods, equipment, and other requirements to prevent discharges of oil from vessels and facilities and to contain such discharges. (See Appendix A of this guidance for the text of CWA §311(j)(1)(C).)

Under CWA §311(a)(1), "oil" is defined to mean "oil of any kind or in any form..." In 1975, EPA published a notice on the applicability of the SPCC rule to non-petroleum oils. The notice affirmed that all facilities processing and storing non-petroleum oils (such as animal fats and vegetable oils or AFVOs) in the quantities and under the circumstances set out

#### §112.2

Oil means oil of any kind or in any form, including, but not limited to: fats, oils, or greases of animal, fish, or marine mammal origin; vegetable oils, including oils from seeds, nuts, fruits, or kernels; and, other oils and greases, including petroleum, fuel oil, sludge, synthetic oils, mineral oils, oil refuse, or oil mixed with wastes other than dredged spoil.

Note: The above text is an excerpt of the SPCC rule. Refer to 40 CFR part 112 for the full text of the rule.

in 40 CFR part 112 are required to prepare and implement an SPCC Plan in accordance with that part (40 FR 28849, July 9, 1975). EPA stated that the broad and comprehensive definition of "oil" in the CWA is consistent with the expressed congressional intent to strengthen federal law for the prevention, control, and cleanup of oil spilled in the aquatic environment. Both EPA and the U.S. Coast Guard<sup>5</sup> have consistently interpreted and administered §311 as applicable to spills of non-petroleum-based oils, particularly because of the common physical and chemical properties of AFVOs and petroleum oils as well as their common potential for adverse environmental impact when discharged into water.

FWPCA was enacted in 1948 and was amended on April 3, 1970 (Public Law 91-224) by the Water Quality Improvement Act (WQIA) of 1970. The WQIA amended the prohibitions on discharges of oil to allow such discharges only when consistent with regulations to be issued by the President and where permitted by Article IV of the 1954 International Convention for the Prevention of Pollution of the Sea by Oil (33 U.S.C. 1321). In issuing regulations, the President was authorized to determine quantities of oil which would be harmful to the public health or welfare of the U.S., including, but not limited to, fish, shellfish, and wildlife, as well as public and private property, shorelines and beaches.

DOT delegated authority over transportation-related facilities and vessels to the U.S. Coast Guard. In March 2003, the Coast Guard formally transferred from the DOT to the Department of Homeland Security, but retains this CWA authority (Executive Order 13286, 68 FR 10619, March 5, 2003).

The Oil Pollution Act of 1990 (OPA) streamlined and strengthened EPA's ability to prepare for and respond to catastrophic oil discharges. Specifically, OPA expands prevention and preparedness activities, improves response capabilities, ensures that shippers and owners or operators of facilities that handle oil pay the costs associated with discharges that do occur, expands research and development programs, and establishes an Oil Spill Liability Trust Fund. OPA §4202(a)(6) amended CWA §311(j) to require promulgation of regulations to require owners or operators of certain vessels and facilities to prepare and submit Facility Response Plans (FRPs) for responding to a worst-case discharge of oil and to a substantial threat of such a discharge (CWA §311(j)(5)). EPA published the FRP rule on July 1, 1994, as an amendment to 40 CFR part 112. The FRP requirement for onshore facilities applies to any facility that, "because of its location, could reasonably be expected to cause substantial harm to the environment by discharging into or on the navigable waters, adjoining shorelines, or the exclusive economic zone."

OPA defined oil under §1001 differently than the CWA §311(a)(1) definition. Under OPA, "oil" means "oil of any kind or in any form, including petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil, but does not include any substance which is specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. 9601) and which is subject to the provisions of that Act." The OPA definition did not amend the original CWA definition of oil and therefore was not incorporated into 40 CFR part 112.

While OPA did not result in revisions to the SPCC rule, OPA section 4113(a) required that the President conduct a study to determine whether liners or other secondary means of containment should be used to prevent leaking or aid in leak detection at onshore facilities used for the bulk storage of oil located near navigable waters. Executive Order 12777 tasked EPA with conducting this study.

The resulting study was completed in May 1996<sup>6</sup> and focused on the technical feasibility of using liners<sup>7</sup> and related systems to detect oil leaking from aboveground storage tanks (ASTs) and to prevent the leaking oil from contaminating soil and navigable waters. EPA assessed the technical feasibility of installing liners made from synthetic materials as well as earthen materials within secondary containment structures and under ASTs (i.e., undertank liners). EPA also assessed the feasibility of installing double bottoms on vertical ASTs as "other secondary means of containment," which could be used in place of undertank liners. The agency examined other technologies to aid in leak detection and looked at available data on liner costs. The study concluded that existing sources of information evaluated by EPA did indicate that a significant number of ASTs may be leaking or spilling oil. The study also showed that each of the different types of liners, such as impervious soil, coated or uncoated concrete, and geomembrane liners, can be effective in preventing groundwater contamination and in detecting leaks if properly installed and maintained. However, poor maintenance can significantly reduce the effectiveness of certain types of liners. The study resulted in EPA's recommendation to initiate a voluntary program to prevent leaks and spills, rather than a regulatory amendment. In the preamble to the 2002 SPCC rule

EPA Liner Study: Report to Congress, Section 4113(a) of the Oil Pollution Act of 1990. May 1996. OSWER 9380.0-24, EPA 540/R95/041, PB95-963538. See Appendix H.

For purposes of the study, EPA defined a liner as "an engineered system that makes secondary containment structures more impervious."

amendments, EPA clarified that it is not necessary for facility owner and operators to install liners in order to comply with the SPCC rule: "'effective containment' does not mean that liners are required for secondary containment areas. Liners are an option for meeting the secondary containment requirements, but are not required by the rule." (July 17, 2002, 67 FR 47102).

In 1995, Congress enacted the Edible Oil Regulatory Reform Act (EORRA). The statute mandates that most federal agencies<sup>8</sup> differentiate among and establish separate classes for various types of oils, specifically, animal fats and oils and greases, fish and marine mammal oils, oils of vegetable origin, and other oils and greases (including petroleum). In differentiating among these classes of oils, EORRA directed federal agencies to consider differences in these oils' physical, chemical, biological, and other properties, and in their environmental effects. On August 12, 1994, several agricultural organizations submitted to EPA a Petition for Reconsideration of the FRP rule as it applies to facilities that handle, store, or transport AFVOs.<sup>9</sup> On October 20, 1997, EPA denied the petition to amend the FRP rule (62 FR 54508) because it did not substantiate the petitioners' claims that AFVOs differ from petroleum oils in properties and effects. EPA concluded that the facts did not support a further differentiation between these groups of oils under the FRP rule. Instead, EPA found that a worst-case discharge or substantial threat of a discharge of AFVOs to navigable waters, adjoining shorelines, or the exclusive economic zone could reasonably be expected to cause substantial harm to the environment, including wildlife that may be killed by the discharge.

However, in amendments to the FRP rule on June 30, 2000, in response to EORRA requirements, EPA promulgated a separate approach for calculating planning volumes for a worst-case discharge in the FRPs for animal fat and vegetable oil facilities (65 FR 40776). EPA also published an advanced notice of proposed rulemaking requesting ideas from the public on how to differentiate among the SPCC requirements for facilities storing or using various categories of oil (64 FR 17227, April 8, 1999). In the 2002 revision of the SPCC rule, EPA established new subparts to facilitate differentiation among categories of oil listed in EORRA; however, the actual requirements in each of the subparts were identical. As discussed in *Section 1.3.3* of this chapter, EPA later removed and reserved certain sections that are not applicable to facilities that store or handle AFVOs. The 2008 SPCC rule amendments provided differentiated requirements for AFVOs in the form of revised integrity testing requirements at §112.12(c)(6) that are applicable to containers that meet specific criteria. *Chapter 7: Inspection, Evaluation, and Testing* discusses the differentiated integrity testing requirements for AFVO containers in detail.

#### 1.2 Regulatory History

The SPCC rule was initially promulgated in 1973, with a few early revisions, and further modifications to the SPCC requirements were proposed for public comment on several occasions. EPA finalized many aspects of three proposals resulting in final revisions in the Federal Register (FR) in July 2002. In 2006, EPA amended the SPCC rule to streamline the requirements for a subset of facilities. In December 2008, EPA again amended the

The Food and Drug Administration and the Food Safety and Inspection Service are exempted from the requirements of EORRA.

<sup>&</sup>quot;Petition for Reconsideration and Stay of Effective Date," August 12, 1994, submitted on behalf of the American Soybean Association, the Corn Refiners Association, the National Corn Growers Association, the Institute of Shortening & Edible Oils, the National Cotton Council, the National Cottonseed Products Association, and the National Oilseed Processors Association.

rule to provide increased clarity, to tailor requirements to particular industry sectors, and to streamline certain requirements. EPA promulgated revisions to the December 2008 amendments in November 2009 and finalized one additional amendment to the SPCC rule in April 2011. Throughout this time, EPA extended the compliance dates in the SPCC rule for amending and implementing existing SPCC Plans. EPA also extended the compliance dates for developing and implementing new Plans developed under 40 CFR part 112.

#### 1.2.1 Initial Promulgation and Early Amendments

The SPCC rule was originally proposed in the *Federal Register* on July 19, 1973 (38 FR 19334). The final rule was published on December 11, 1973 and became effective on January 10, 1974 (38 FR 34164). The regulation established oil discharge prevention procedures, methods, and equipment requirements for non-transportation-related facilities with an aboveground (non-buried) oil storage capacity greater than 1,320 U.S. gallons (or greater than 660 U.S. gallons aboveground in a single tank) or a buried underground oil storage capacity greater than 42,000 U.S. gallons. Regulated facilities were also limited to those that, because of their location, could reasonably be expected to discharge oil into the navigable waters of the United States or adjoining shorelines. The rule included sections on general applicability, relevant definitions, and requirements for preparation of SPCC Plans; provisions for SPCC Plan amendments; civil penalty provisions; and requirements for the substance of the SPCC Plans.

Two early revisions were made to the original SPCC rule. On August 29, 1974, the regulation was amended (39 FR 31602) to set out EPA's policy on civil penalties for violation of the CWA §311 requirements. On March 26, 1976, the rule was again amended (41 FR 12657), primarily to clarify the criteria for determining whether or not a facility is subject to the regulation. Specifically, EPA clarified that manmade structures may not be used in the applicability determination relating to a facility's reasonable expectation of an oil discharge to navigable waters or adjoining shorelines when they restrain, hinder, contain or otherwise prevent a discharge to navigable waters or adjoining shorelines. This rulemaking also clarified that SPCC Plans must be in writing and specified procedures for mobile facilities to develop and implement Plans.<sup>10</sup>

On May 20, 1980 (45 FR 33814), amendments were proposed to reflect the changes in the jurisdiction of section 311 of the CWA that were brought about by the 1977 amendments to that Act. The notice also proposed amendments to the applicability criteria, requirements for new facilities, availability of SPCC Plans for review by EPA personnel, review of SPCC Plans by owners or operators, and other SPCC Plan requirements.

#### 1.2.2 SPCC Task Force and GAO Recommendations

In January 1988, the shell plates of a reconstructed four-million gallon aboveground storage tank in Floreffe, Pennsylvania, experienced a brittle fracture failure. Brittle fracture is a type of structural failure in aboveground steel tanks, characterized by rapid crack formation that can cause sudden tank failure. The tank split apart, collapsed, and discharged approximately 3.8 million U.S. gallons of diesel fuel. Of this amount, approximately 750,000 U.S. gallons were discharged into the Monongahela River. The spill temporarily

Some examples of mobile facilities include onshore drilling or workover rigs, barge-mounted offshore drilling or workover rigs, and portable fueling facilities.

For more information on brittle fracture evaluations see Chapter 7: Inspection, Evaluation, and Testing.

contaminated drinking water sources, damaged the ecosystems of the Monongahela and Ohio Rivers, and negatively affected private property and local businesses. Following the discharge, an SPCC Task Force was formed to examine federal regulations governing discharges from aboveground storage tanks. The Task Force, consisting of representatives from EPA headquarters and regions as well as other federal and state agencies, issued its findings and recommendations in May 1988. The findings focused on the prevention of catastrophic discharges and recommended changes to the SPCC program. Specifically, the Task Force recommended that EPA establish additional technical requirements for SPCC Plan preparation and implementation, including:

- Adopting industry standards for new and relocated tanks;
- Differentiating SPCC requirements based on facility size;
- Modifying timeframes for SPCC Plan preparation, implementation, and review;
- Requiring strengthened integrity testing and periodic inspection of tanks and secondary containment;
- Requiring a more stringent attestation for a Professional Engineer to certify an SPCC Plan;
- Ensuring that employees undergo response training; and
- Modifying definitions and providing additional preamble discussion.

The Task Force also recommended that EPA expand the scope of the regulation to include requirements for facility-specific contingency planning and to specify countermeasures to be employed if a discharge should extend beyond the site in an uncontrolled manner. To better identify violations and enforce compliance, the Task Force recommended that EPA strengthen its facility inspection program. The Task Force also found that EPA did not have an adequate inventory of facilities subject to the regulation, and that improvements in national response coordination may be possible. Finally, the Task Force commented on the role of state and local resources and other federal agencies in oil discharge prevention and response efforts, and also recommended funding research on the development of oil discharge removal and control technology.



Figure 1-1: Aboveground storage tank in Floreffe, Pennsylvania.

In response to both the Monongahela River spill and an

U.S. EPA, "The Oil Spill Prevention, Control, and Countermeasures Program Task Force Report," Interim Final Report, May 13, 1988) Available in EPA docket OPA-1991-0001.

oil spill that occurred at an oil refinery in Martinez, California in April 1988, the U.S. General Accounting Office (which is now referred to as the U.S. Government Accountability Office, or GAO) examined the adequacy of the federal regulations of aboveground oil storage tanks and the extent to which they addressed the unique problems of inland oil discharges. GAO's report, "Inland Oil Spills: Stronger Regulation and Enforcement Needed to Avoid Future Incidents," contained recommendations on regulations, inspections, enforcement, and government response that were similar to those of the SPCC Task Force (February 1989, GAO/RCED-89-65). To amend the SPCC regulation, GAO recommended that EPA require:

- Aboveground oil storage tanks to be built and tested in accordance with industry and other specified standards;
- Facilities to plan how to react to a spill that overflows facility boundaries; and
- Stormwater drainage systems to be designed and operated to prevent oil from escaping through them. (Oil escaped through the drainage system during the oil spill in Martinez, California).

For inspections, GAO recommended that EPA (1) strengthen its aboveground oil storage facility inspection program by coordinating with state and local authorities, developing procedures for conducting and documenting inspections, defining and implementing minimum training procedures for inspectors, and establishing a national policy for fining violators; and (2) consider advantages and disadvantages of supplementing EPA inspection resources with state and local inspection resources, and require that facilities obtain certification from independent engineers indicating that facilities are in compliance with the regulations. Finally, the report included a recommendation to Congress that it amend the CWA to explicitly authorize the federal government to recover the costs of monitoring oil spill cleanups performed by private responsible parties, and suggested that it consider re-establishing the oil spill research and development program.

#### 1.2.3 Proposed Revisions - 1991, 1993, and 1997

Following the Monongahela River and Martinez, California spills and recommendations of the SPCC Task Force and GAO, EPA proposed substantive revisions to the SPCC requirements on three occasions (1991, 1993, and 1997) and solicited public comment on these revisions. Specifically:

- On October 22, 1991 (56 FR 54612), EPA proposed changes in the applicability of the SPCC rule
  and in the required procedures for completing SPCC Plans, as well as the addition of a facility
  notification provision. The proposed rule also reflected changes in the jurisdiction of CWA §311
  made by the 1977 and 1978 amendments to the Act.
- On February 17, 1993 (58 FR 8824), EPA published an additional proposed rule to incorporate new requirements added by OPA that directed facility owners and operators to prepare plans for responding to a worst-case discharge of oil and to a substantial threat of such a discharge (the FRP rule). EPA promulgated the FRP rule on July 1, 1994 (59 FR 34070). The 1993 proposed rule also included revisions to the SPCC requirements, including (1) a requirement for an SPCC

Available at <a href="https://www.regulations.gov">www.regulations.gov</a>, docket ID: EPA-HQ-OPA-1991-0001-0042.

Plan to address training and methods of evaluating containers for protection against brittle fracture; (2) provisions for Regional Administrators to require amendments to an SPCC Plan and to require a Plan from an otherwise exempt facility when necessary to achieve the goals of the CWA; and (3) a requirement for Plan submission if an owner or operator invokes a waiver to certain technical requirements of the SPCC rule.

On December 2, 1997 (62 FR 63812), EPA proposed further revisions to the SPCC rule in an effort to reduce the information collection burden without creating an adverse impact on public health or the environment. The proposed revisions were intended to give facility owners and operators flexibility to use alternative formats for SPCC Plans; to allow the use of certain records maintained pursuant to usual and customary business practices, or pursuant to the National Pollutant Discharge Elimination System (NPDES) program, in lieu of records mandated by the SPCC requirements; to reduce the information required to be submitted after certain discharges; and to extend the interval between SPCC Plan reviews by the facility owner/operator. At this time, EPA also proposed amendments to the FRP requirements, which were finalized on June 30, 2000 (65 FR 40776).

#### **1.2.4 2002 Amendments**

On July 17, 2002, EPA published a final rule amending the Oil Pollution Prevention regulation (67 FR 47042). The final rule became effective on August 16, 2002, and incorporated many of the proposed revisions from the 1991, 1993, and 1997 proposals. As a performance-based regulation, the amendments provided flexibility to the regulated community in meeting many of the oil discharge prevention requirements and the overall goal of preventing oil spills that may impact navigable waters or adjoining shorelines. In addition, the final rule included new subparts outlining the requirements for various classes of oil (pursuant to EORRA), revised the applicability of the regulation, amended the requirements for completing SPCC Plans, and made other modifications. The final rule also contained a number of provisions designed to decrease regulatory burden on facility owners and operators subject to the rule. The specific amendments to the SPCC rule are discussed in more detail in *Section 1.3*, *Revised Rule Provisions*, below, as well as in *Appendix C* to this guidance, *Summary of Revised SPCC Rule Provisions*.

In response to the final SPCC amendments, several members of the regulated community filed legal challenges to certain aspects of the rule. <sup>14</sup> Settlement discussions between EPA and the plaintiffs led to an agreement on all issues except the definition of navigable waters. On May 25, 2004, EPA published a notice in the *Federal Register* (69 FR 29728) clarifying specific provisions of the SPCC rule to reflect settlement agreements. The *Federal Register* notice clarified statements regarding loading/unloading racks and impracticability that were challenged by the plaintiffs. In addition, EPA clarified aspects of a wastewater treatment exemption and specified which definition of "facility" applies when determining applicability of the FRP rule under §112.20(f)(1). EPA also announced the availability of a letter from EPA to the Petroleum

See *American Petroleum Institute* v. *Leavitt* et al., No. 1;102CV02247 PLF and consolidated cases (D.D.C. filed November 14, 2002). Lead plaintiffs in the cases were the American Petroleum Institute, Marathon Oil Co., and the Petroleum Marketers Association of America.

Marketers Association of America (PMAA), which provided additional guidance on equivalent environmental protection with respect to requirements for integrity testing, security, and loading racks.<sup>15</sup>

#### 1.2.5 Additional Amendments to Streamline the SPCC Rule

On September 20, 2004, EPA published two Notices of Data Availability (NODAs). The first NODA solicited comments on letters or other documents submitted to EPA that requested more focused or streamlined requirements for facilities subject to the SPCC rule that handle oil below a certain threshold amount, referred to as "certain facilities" (69 FR 56182). The second NODA solicited comments on whether alternate regulatory requirements would be appropriate for facilities with oil-filled and process equipment (69 FR 56184). In December 2005, based on the comments received on the NODAs as well as other information received, EPA proposed to amend the SPCC rule. The proposed amendments addressed a number of issues, including requirements pertaining to a subset of smaller facilities, oil-filled operational equipment meeting certain qualifying criteria, motive power containers, airport mobile refuelers, animal fats and vegetable oils, and the compliance date for farms (70 FR 73524, December 12, 2005). EPA finalized revisions in December 2006 (71 FR 77266, December 26, 2006). The 2006 final rule provided more streamlined, alternative approaches for compliance with oil spill prevention requirements for these entities. Its goal was to streamline the regulation in an effort to improve compliance, resulting in greater environmental protection.

The December 2006 SPCC rule amendments addressed only certain areas of the SPCC requirements and specific issues and concerns raised by the regulated community. The EPA Regulatory Agenda and the 2005 Office of Management and Budget (OMB) report on "Regulatory Reform of the U.S. Manufacturing Sector" highlighted other areas where further changes may be appropriate. Accordingly, in October 2007, EPA proposed additional amendments to the SPCC rule to address these changes (72 FR 58378, October 15, 2007).

EPA finalized these revisions in December 2008 (73 FR 74236, December 5, 2008), with modifications finalized in November 2009 (74 FR 58784, November 13, 2009); both of these actions became effective on January 14, 2010. Additionally, in response to legal challenges filed by members of the regulated community, EPA announced the vacatur of the July 2002 definition of "navigable waters", restoring the 1973 definition of "navigable waters" (73 FR 71941, November 26, 2008).

Finally, in April 2011, EPA published a final rule to exempt milk and milk product containers, associated piping and appurtenances from the SPCC regulation (76 FR 21652, April 18, 2011). The specific amendments to the SPCC rule are discussed in more detail in *Section 1.3: Revised Rule Provisions*, below, as well as in *Appendix C* to this guidance, *Summary of Revised SPCC Rule Provisions*.

#### 1.2.6 Compliance Date Amendments

The compliance date is the date by which the owner or operator must have a Plan that complies with the revised rule requirements. On eight occasions following the 2002 final rule, EPA extended the compliance dates in §112.3 for facilities to update (or for new facilities to prepare) and implement an SPCC Plan that

The Federal Register notice and letter to PMAA are available on the EPA Web site, at <a href="http://www.epa.gov/emergencies/lawsregs.htm#froppr">http://www.epa.gov/emergencies/lawsregs.htm#froppr</a> and <a href="http://www.epa.gov/emergencies/content/spcc/spccref.htm#letter">http://www.epa.gov/emergencies/content/spcc/spccref.htm#letter</a>, respectively.

complies with the revised requirements. All of these extensions alleviated the need for individual extension requests from owners and operators:

- On January 9, 2003 (68 FR 1348), EPA extended the compliance date by 60 days to allow time to consider comments on a proposed one-year extension that was published concurrently in the Federal Register.
- On April 17, 2003 (68 FR 18890), EPA extended the compliance dates by one year, to provide sufficient time for the regulated community to undertake the actions necessary to update (or prepare) their plans in accordance with the 2002 amendments.
- On August 11, 2004 (69 FR 48794), EPA extended the compliance dates by an additional 18 months, to provide members of the regulated community with sufficient time to understand clarifications related to a partial settlement of litigation involving the July 2002 amendments, and to be able to incorporate these clarifications, as appropriate, in preparing and updating their SPCC Plans.
- On February 17, 2006 (71 FR 8462), EPA extended the compliance dates to allow the agency time to take final action on the proposed amendments to the SPCC requirements before owners and operators were required to prepare, amend, and implement their SPCC Plans (to allow owners and operators to take advantage of any modifications that would be provided by a final SPCC amendment rule); to allow the regulated community the opportunity to understand the material presented in this guidance; and to provide time for facilities that might have difficulty meeting the compliance dates because they were adversely affected by recent hurricanes.

Additionally, the 2006 SPCC rule amendments (71 FR 77266, December 26, 2006) specifically extended the compliance dates for the owner or operator of a farm to prepare or amend and implement the farm's SPCC Plan until the effective date of a rule addressing whether to provide differentiated requirements for farms.

In this notice, EPA eliminated the six-month interim period in §112.3(a) between the compliance dates for Plan amendment and implementation.

- On May 16, 2007 (72 FR 27443), EPA extended the compliance dates to allow the agency time to promulgate further revisions to the SPCC rule before owners and operators are required to prepare or amend, and implement their SPCC Plans.
- On June 19, 2009 (74 FR 29136), EPA extended the compliance dates to provide the owner or operator of a facility the opportunity to fully understand all of the regulatory amendments offered by revisions to the SPCC rule promulgated since July 2002 and to provide sufficient time for the agency to review comments on the December 2008 amendments and to promulgate any additional revisions that result from this review.

These compliance date amendments established the same compliance date for farms as for all other SPCC-regulated facilities.

- On October 14, 2010 (75 FR 63093), EPA extended the compliance date an additional year to allow owners and operators sufficient time to amend and implement their SPCC Plans. The extension applied to all facilities, except for oil drilling, production or workover facilities that are offshore or that have an offshore component and onshore facilities required to have and submit FRPs. The compliance date for these offshore facilities and FRP-subject facilities remained November 10, 2010.
- On October 18, 2011 (76 FR 72120), EPA published a direct final rule that extended the compliance date by an additional 18 months for the owners or operators of farms, who because of their unique nature, were disproportionately affected by severe weather conditions in the continental United States. The extension allowed additional time for owners and operators of farms to prepare and implement SPCC Plans. The agency confirmed the compliance date extension in a final rule published November 22, 2011 (76 FR 72120).

It should be noted that all compliance dates are in the past. If the owner or operator of a facility did not comply with the SPCC rule and does not have an SPCC Plan, the owner or operator must develop a Plan immediately in accordance with the amendments to the rule from 2002 forward.

The current compliance dates under §112.3(a) and (b) apply to all SPCC-regulated facilities, as follows:

A farm, starting operation	Must
On or before August 16, 2002	Maintain its existing SPCC Plan Amend and implement the amended SPCC Plan no later than May 10, 2013
After August 16, 2002 through May 10, 2013	Prepare and implement an SPCC Plan no later than May 10, 2013
After May 10, 2013	Prepare and implement an SPCC Plan <i>before</i> beginning operations

An oil drilling, production or workover facility, including a mobile or portable facility, located offshore or with an offshore component; or an onshore facility that is required to have and submit FRPs starting operation	Must
On or before August 16, 2002	Maintain its existing SPCC Plan Amend and implement the amended SPCC Plan no later than November 10, 2010
After August 16, 2002 through November 10, 2010	Prepare and implement an SPCC Plan no later than November 10, 2010
After November 10, 2010 (excluding oil production facilities)	Prepare and implement an SPCC Plan before beginning operations
After November 10, 2010 (oil production facilities)	Prepare and implement an SPCC Plan within six months after beginning operations.

The December 2008 rule amendments (73 FR 74236, December 5, 2008) allow new oil production facilities a period of six months after the start of operations to prepare and implement an SPCC Plan. A "new" oil production facility is one that becomes operational after the applicable compliance date, not an existing oil production facility (in operation prior to the compliance date) that has changed name, owner, operator, or equipment.

All other facilities starting operation	Must
On or before August 16, 2002	Maintain its existing SPCC Plan Amend and implement the amended SPCC Plan no later than November 10, 2011
After August 16, 2002 through November 10, 2011	Prepare and implement an SPCC Plan no later than November 10, 2011
After November 10, 2011 (excluding oil production facilities)	Prepare and implement an SPCC Plan before beginning operations
After November 10, 2011 (oil production facilities)	Prepare and implement an SPCC Plan within six months after beginning operations.

The compliance date amendments described above affected only requirements of the rule amendments (67 FR 47042, July 17, 2002; 71 FR 77266, December 26, 2006; 73 FR 74236, December 5, 2008; and 74 FR 58784, November 13, 2009) that imposed new or more stringent compliance obligations than did the original 1973 SPCC rule. Provisions in these amendments that provide regulatory relief were not affected by these compliance date amendments because they would not typically require amendments to existing Plans "to ensure compliance" (see §112.3). Provisions in these amendments that provide regulatory relief to facilities were applicable as of the effective date of the amendment.

Furthermore, where certain dates appear as part of the rule text in provisions other than §112.3, as listed below, these dates are not affected by, or replaced by, the compliance date:

- §112.5(b) requires the owner/operator to complete a review and evaluation of the SPCC Plan at least once every five years from the date the facility becomes subject to this part; or, if your facility was in operation on or before August 16, 2002, five years from the date your last review was required under this part.
- §§112.8(d)(1) and 112.12(d)(1) require that buried piping that is installed or replaced on or after August 16, 2002 have protective wrapping and coating and cathodic protection, or otherwise satisfy the corrosion protection provisions for piping in 40 CFR part 280 or a State program approved under 40 CFR part 281.
- §§112.8(c)(4) and 112.12(c)(4) require the owner/operator to protect any completely buried metallic storage tank installed on or after January 10, 1974 from corrosion by coatings or cathodic protection, and regularly leak test such tanks.

#### 1.3 Revised Rule Provisions

The 2002 revision to the SPCC rule clarified the language and organization of the regulation, made technical changes, and reduced regulatory burden in certain areas of the rule. The 2006 final rule amended the SPCC rule to streamline the requirements for a subset of facilities. The 2008 final rule amended the SPCC rule to provide increased clarity with respect to specific regulatory requirements, tailor requirements to particular industry sectors, and streamline certain rule requirements. Finally, the 2009 amendments removed certain provisions that were finalized in 2008, and provided minor technical corrections, as discussed in more detail below. This section provides an overview of the current rule's organization and highlights some of the more substantive changes made to the rule in 2002 through 2009.

For the inspector's reference, *Appendix B* of this guidance includes the Oil Pollution Prevention regulation, 40 CFR part 112, in its entirety and current as of the publication of this guidance. Since the regulation is subject to change, the appendix is provided for informational purposes only. The *Federal Register* – the official daily publication for rules, proposed rules, and notices of federal agencies and organizations – is available electronically from the U.S. Government Printing Office Web site at http://www.gpoaccess.gov/fr/. General and permanent rules published in the *Federal Register* are codified in the *Code of Federal Regulations* (CFR), available electronically at <a href="http://www.gpoaccess.gov/cfr/">http://www.gpoaccess.gov/cfr/</a>. Each volume of the CFR is updated once each calendar year and is issued on a quarterly basis. For a more frequently updated version of the CFR, refer to the *Electronic Code of Federal Regulations* (e-CFR) at <a href="http://www.gpoaccess.gov/ecfr/">http://www.gpoaccess.gov/ecfr/</a>. The e-CFR is updated daily but is not an official legal edition of the CFR. Inspectors implementing the SPCC program should always consult the aforementioned resources (or their equivalent) to obtain the current version of the SPCC rule.

#### 1.3.1 Rule Organization

The Oil Pollution Prevention regulation at 40 CFR part 112 is divided into four subparts. Subparts A, B, and C address oil discharge prevention requirements and are commonly referred to as the "SPCC rule." Subpart D, commonly referred to as the "FRP rule," addresses facility response planning requirements in the event of an oil discharge, and includes the FRP requirements and facility response training and drill requirements.

The regulation is organized as follows:

Subpart A	Applicability, definitions, and general requirements for all facilities and all types of oils
Subpart B	Requirements for petroleum oils and non-petroleum oils, except those covered in Subpart C
Subpart C	Requirements for animal fats and oils and greases, and fish and marine mammal oils; and for vegetable oils, including oils from seeds, nuts, fruits, and kernels
Subpart D	Response requirements

Pertaining to all oil and facility types, subpart A contains the following key sections of the SPCC rule:

§112.1	General Applicability
§112.2	Definitions
§112.3	Requirement to Prepare and Implement an SPCC Plan
§112.4	Amendment of an SPCC Plan by Regional Administrator
§112.5	Amendment of an SPCC Plan by Owners or Operators
§112.6	Qualified Facilities
§112.7	General Requirements for SPCC Plans

Additional requirements for specific facility types are given in §§112.8 through 112.12, <sup>16</sup> and are found within subparts B and C. These facility types and their corresponding sections of the rule are as follows:

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The 2002 SPCC rule included requirements within subpart C that are not applicable or are inappropriate for animal fats and vegetable oils (§§112.13 through 112.15). These sections were promulgated because EPA had not proposed differentiated SPCC requirements for public notice and comment, and were removed and reserved by rulemaking on December 26, 2006 (71 FR 77266).

§112.8	Onshore Facilities (excluding oil production facilities)
§112.9	Oil Production Facilities (onshore)
§112.10	Oil Drilling and Workover Facilities (onshore)
§112.11	Oil Drilling, Production, or Workover Facilities (offshore)
§112.12	Onshore Facilities (requirements for AFVOs)

The Oil Pollution Prevention regulation also contains several appendices, including Memoranda of Understanding, information referenced in the FRP rule (Substantial Harm Criteria, Determination of a Worst Case Discharge Planning Volume, Determination and Evaluation of Required Response Resources for Facility Response Plans, and a model Facility-Specific Response Plan) and an SPCC Plan template for certain qualified facilities.

Appendix C to part 112 - Substantial Harm Criteria provides guidance for determining FRP applicability. However, in accordance with Section 3.0 of Appendix C, an SPCC-regulated facility owner/operator must complete and maintain a copy of Attachment C-II "Certification of the Applicability of the Substantial Harm Criteria" at the facility when the facility does not meet the substantial harm criteria listed in Attachment C-I "Flowchart of Criteria for Substantial Harm." Copies of Attachment C-I and C-II are included in Appendix C of 40 CFR 112 and in Appendix H of this Guidance.

Figure 1-2 illustrates the organization of 40 CFR part 112, highlighting sections that pertain to the SPCC and FRP requirements. Note that all FRP-regulated facilities are also subject to the SPCC requirements and must develop and implement an SPCC Plan.

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Many facility owner/operators include a copy of Attachment C-II "Certification of the Applicability of the Substantial Harm Criteria as an appendix to the SPCC Plan.

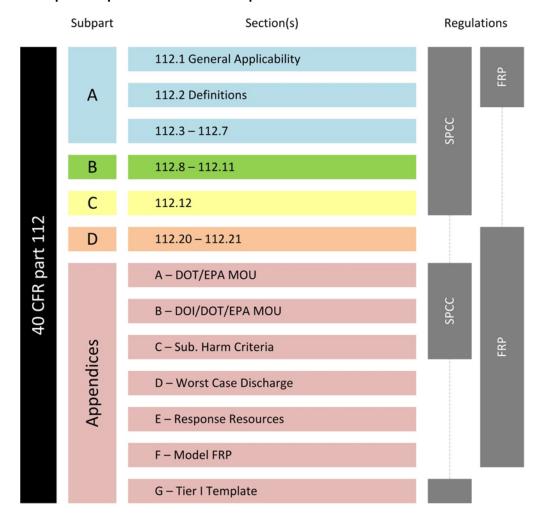


Figure 1-2: Graphical representation of 40 CFR part 112 sections.

Note that Section 3.0 of Appendix C requires an SPCC-regulated facility owner/operator to complete and maintain a copy of Attachment C-II at the facility when the facility does not meet the substantial harm criteria outlined in Attachment C-I of the appendix.

## 1.3.2 Summary of Major 2002 Revisions

The 2002 amendments shifted the SPCC rule to a more performance-based regulation that allows owners, operators, and the certifying Professional Engineer (PE) flexibility in meeting many of the prevention requirements. The "environmental equivalence" provision, in particular, allows facilities to deviate from specified substantive requirements of the SPCC rule (except secondary containment provisions and certain administrative provisions) by implementing alternate measures, certified by a PE, that provide equivalent environmental protection. Deviations are not allowed for the administrative provisions of the rule, §§112.1 through 112.5, and for certain additional requirements in §112.7, such as recordkeeping and training.

Additionally, in situations where secondary containment is not practicable, the owner/operator must (1) clearly explain the reason for the determination in the SPCC Plan; (2) for bulk storage containers, conduct periodic integrity testing of containers and associated valves and piping; and (3) prepare an oil spill contingency plan and a written commitment of manpower, equipment, and materials to expeditiously control and remove any quantity of oil discharged that may be harmful (§112.7(d)).

The 2002 rule amendments also revised many other rule provisions, both to provide regulatory relief and to make technical changes. Specifically, the amendments exempted many completely buried underground storage tanks (USTs), containers that store less than 55 U.S. gallons, and certain wastewater treatment operations/facilities. The amendments also increased the oil capacity threshold for the applicability of the rule, and both reduced information required after a discharge and raised the regulatory trigger for its submission. In addition, the rule amendments decreased the frequency of Plan review from every three years to every five years.

Technical amendments to the rule include requiring brittle fracture evaluation for field-constructed aboveground containers; strengthening the integrity testing requirements; finalizing additional general requirements for spill planning, preparedness, and reporting; adding a requirement for a facility diagram; clarifying the rule's applicability to the operational use of oil; and making the PE certification and associated attestation more specific. Also, the rule allows alternative formats for SPCC Plans with a cross-reference and mandates specific time frames for employee training.

The specific amendments to each section of the SPCC rule finalized in 2002 are highlighted in *Appendix C* of this guidance, *Summary of Revised SPCC Rule Provisions*.

# 1.3.3 Summary of 2006 Revisions

In 2006, EPA amended the SPCC rule to streamline the regulatory requirements for a subset of facilities. The revisions specifically addressed certain "qualified facilities," oil-filled operational equipment, motive power, s, animal fats and vegetable oils, and farms. Each of these topics is discussed below. The specific amendments to each section of the SPCC rule finalized in 2006 are also highlighted in *Appendix C* of this guidance, *Summary of Revised SPCC Rule Provisions*.

## **Qualified Facilities**

The 2006 amendments provided an option to allow the owner or operator of a facility that meets qualifying criteria (a "qualified facility") to self-certify the facility's SPCC Plan in lieu of review and certification by a licensed Professional Engineer (PE). The 2008 amendments further streamlined and tailored SPCC rule requirements for a subset of qualified facilities (see *Section 1.3.4*). While this section briefly describes the associated regulatory requirements, separate guidance is available for qualified facilities at <a href="http://www.epa.gov/oem/content/spcc/spcc\_qf.htm">http://www.epa.gov/oem/content/spcc/spcc\_qf.htm</a>.

To be eligible to take advantage of the qualified facility self-certification option, a facility must meet the following criteria:

- 1. In the three years before the SPCC Plan is certified, (or since becoming subject to the SPCC rule if the facility has been in operation for less than three years), the facility has had no discharges to navigable waters or adjoining shorelines as described below:
  - A single discharge greater than 1,000 U.S. gallons, or
  - Two discharges as each greater than 42 U.S. gallons within any 12-month period; and
- 2. The facility has an aggregate aboveground oil storage capacity of 10,000 U.S. gallons or less.

Facilities that meet these criteria were later designated as Tier II qualified facilities in the 2008 amendments (see *Section 1.3.4*). Discharges to navigable waters or adjoining shorelines (i.e., discharges as described in §112.1(b)) that are the result of natural disasters, acts of war, or terrorism do not disqualify a facility from using the self-certification option. When determining spill history, the U.S. gallon amount specified in the criterion (either 1,000 or 42) refers to the amount of oil that actually reaches navigable waters or adjoining shorelines and not the total amount of oil spilled. The entire volume of the discharge is considered to be oil for the purpose of these reporting requirements.

Self-certified Tier II qualified facility Plans can include alternative methods that provide environmental equivalence when each alternate method has been reviewed and certified in writing by a PE<sup>18</sup> (§112.6(d)). Because the flexibility offered by the use of environmental equivalence (discussed in detail in *Chapter 3: Environmental Equivalence*) is not available for Plans without review and certification by a PE, the 2006 rule provided streamlined requirements for security requirements and bulk storage container inspections. Similarly, self-certified Tier II Plans may include a determination that secondary containment is impracticable and use alternative provisions in lieu of secondary containment, when the determination and alternative provisions are reviewed and certified in writing by a PE.

The self-certification is optional for qualified facilities. The owner or operator of an otherwise-qualified facility may choose to prepare a Plan in accordance with the general Plan requirements (§112.7) and applicable requirements in subparts B and C, and have the Plan certified by a PE as required under §112.3(d) rather than self-certify the SPCC Plan.

## **Oil-Filled Operational Equipment**

The 2006 final rule amended §112.7 to provide an alternative option for facilities with qualified oil-filled operational equipment. Oil-filled operational equipment includes equipment with an oil storage container (or multiple containers) in which the oil is present solely to support the function of the apparatus or the device.

A self-certified Plan with PE-certified portions is called a "hybrid Plan."

"Qualified" oil-filled operational equipment are those that have had no discharges to navigable waters or adjoining shorelines in the three years prior to the SPCC Plan certification date (or since the facility became subject to 40 CFR part 112 if it has been in operation for less than three years), as described below:<sup>19</sup>

- A single discharge greater than 1,000 U.S. gallons, or
- Two discharges as each greater than 42 U.S. gallons within any 12-month period;

In lieu of general secondary containment for qualified oil-filled operational equipment, facility owners or operators may establish and document the facility procedures for inspections or a monitoring program to detect equipment failure and/or a discharge, develop an oil spill contingency plan, and provide a written commitment of manpower, equipment, and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful.

If an owner/operator submitted an FRP to EPA in accordance with the requirements in §§112.20 and 112.21, the owner/operator does not need to develop an oil spill contingency plan and provide a written commitment of resources. Facilities do not have to make an impracticability determination for each piece of qualified oil-filled operational equipment. *Chapter 2: SPCC Rule Applicability* provides more detail on the definition of oil-filled operational equipment (see *Section 2.10.4*) and *Chapter 4: Secondary Containment and Impracticability* (see *Section 4.2.1*) describes the alternative requirements for qualified oil-filled operational equipment.

## **Motive Power**

The 2006 amendments exempted motive power containers from the SPCC rule. Motive power containers are onboard bulk storage containers used primarily to power the movement of a motor vehicle, or ancillary onboard oil-filled operational equipment. The provision was included under the general applicability section, §112.1(d). This exemption of motive power containers is discussed in more detail in *Chapter 2: SPCC Rule Applicability* (see *Section 2.8.6*).

#### **Mobile Refuelers**

The 2006 amendments exempted mobile refuelers from the requirements of §§112.8(c)(2) and (11) and 112.12(c)(2) and (11). EPA defines a mobile refueler as "a bulk storage container, onboard a vehicle or towed, that is designed or used solely to store and transport fuel for transfer into or from an aircraft, motor vehicle, locomotive, vessel, ground service equipment, or other oil storage container." Mobile refuelers are discussed in more detail in *Chapter 2: SPCC Rule Applicability* (see *Section 2.5.1*) and *Chapter 4: Secondary Containment and Impracticability* (see *Section 4.7.6*). Additionally, in the 2008 amendments, this exemption from sized secondary containment requirements was expanded to include similar tanker trucks not storing a fuel, as explained below in *Section 1.3.4* in the paragraph titled "*General Secondary Containment for Non-Transportation-Related Tank Trucks.*"

Unlike the qualified facility criteria there is no capacity criterion for oil-filled operational equipment.

#### Animal Fats and Vegetable Oils (AFVOs)

The 2006 rule removed and reserved three sections of Subpart C of the regulation because they were not appropriate for animal fats and vegetable oils (AVFOs). These sections included requirements for onshore oil production facilities (§112.13), requirements for onshore oil drilling and workover facilities (§112.14), and requirements for offshore oil drilling, production, or workover facilities (§112.15). This change has generated a common misconception that AFVOs are no longer regulated under the SPCC requirements. This is incorrect; AFVOs continue to be regulated under the SPCC rule and have specific requirements in §112.12.

#### **Farms**

A farm is defined as a facility on a tract of land devoted to the production of crops or raising of animals, including fish, which produced and sold, or normally would have produced and sold, \$1,000 or more of agricultural products during a year (§112.2). In 2006, EPA extended the compliance date for farms until the agency promulgated a rule specifically addressing how farms should be regulated under the SPCC rule. The 2006 compliance date extension was superseded by the 2009 rule that established November 10, 2010 as the compliance date for farms (74 FR 29136, June 19, 2009). The compliance date was later extended to May 10, 2013 due to severe weather conditions in the continental United States that had a disproportionate effect on the agricultural sector (76 FR 64245, October 18, 2011).

# 1.3.4 Summary of 2008 Revisions

On December 5, 2008, EPA amended the SPCC rule to address a number of issues and concerns raised by the regulated community. The amendments were intended to increase clarity, streamline the requirements to which facility owners and operators must adhere, and modify the requirements for specific industry sectors, including farms and oil production facilities. Specific topics addressed by the 2008 rule revisions are discussed below, and are also highlighted in *Appendix C* of this guidance, *Summary of Revised SPCC Rule Provisions*.

#### Hot-mix Asphalt (HMA)

The 2008 amendments exempted hot-mix asphalt (HMA) and HMA-containers from the rule requirements by modifying §112.1(d)(2) and adding paragraph §112.1(d)(8). HMA is typically asphalt cement (AC) mixed with aggregate. The capacity of HMA containers is not counted toward the facility's oil storage capacity calculation because this material is unlikely to flow as a result of the entrained aggregate. Therefore, there would be very few circumstances, if any, in which a discharge of HMA would have the potential to reach navigable waters or adjoining shorelines. However, AC, asphalt emulsions, and cutbacks, that are not entrained with aggregates and are thus not HMAs, continue to be subject to SPCC regulation. This exemption is discussed further in *Chapter 2: SPCC Rule Applicability* (see *Section 2.2.4*).

## **Pesticide Application Equipment**

The 2008 amendments exempted all pesticide application equipment and related mix containers regardless of ownership or where used when crop oil or adjuvant oil is added to the pesticide formulation (§112.1(d)(10)). EPA also modified §112.1(d)(2) so that the capacity of pesticide application equipment and

related mix containers is not counted toward the facility's oil storage capacity calculation. This exemption is discussed further in *Chapter 2: SPCC Rule Applicability* (see *Section 2.8.9*).

## **Residential Heating Oil Containers**

The 2008 rule amended §112.1(d) and added paragraph §112.1(d)(9) to exempt from SPCC applicability containers (both aboveground and completely buried) that are used to store oil for the sole purpose of heating single-family residences (including at a farm). Furthermore, the capacity of such containers does not count toward the facility aggregate oil storage capacity. This exemption is discussed further in *Chapter 2: SPCC Rule Applicability* (see *Section 2.8.8*).

# **Definition of Facility**

The 2008 amendments modified the definition of the term "facility" under §112.2 and clarified that this definition alone governs the applicability of 40 CFR part 112. The amendments also clarified that the owner or operator has the discretion to identify which contiguous or non-contiguous buildings, properties, parcels, leases, structures, installations, pipes or pipelines make up the facility. The amendments also clarified that a facility owner/operator may determine that s/he is no longer subject to the SPCC requirements. However, the revisions note that owners and operators may not characterize a facility so as to simply avoid applicability of the rule. This amendment is discussed in more detail in *Chapter 2: SPCC Rule Applicability* (see *Section 2.4*).

## **Facility Diagram**

The 2008 final rule amended §112.7(a)(3) to clarify that the facility diagram must include all fixed containers (that is, those that are not mobile or portable). For any mobile or portable containers (such as drums or totes), a facility owner or operator must mark the storage area on the facility diagram for these containers. The owner or operator may mark the number of containers, contents, and capacity of each container either on the facility diagram or in a separate description in the SPCC Plan. Also, the amendment requires that certain intra-facility piping (i.e., gathering lines) exempted from the SPCC requirements in the December 2008 action be identified on the facility diagram and marked as "exempt." This amendment is discussed in more detail in *Chapter 6: Facility Diagram and Description* (See *Sections 6.4.5, 6.4.6* and *6.4.8*).

#### **Loading/Unloading Racks**

The 2008 final rule defined the term "loading/unloading rack", which governs whether a facility's oil transfer equipment and areas are subject to §112.7(h). Under §112.2, loading/unloading rack means "a fixed structure (such as a platform, gangway) necessary for loading or unloading a tank truck or tank car, which is located at a facility subject to the requirements of this part. A loading/unloading rack includes a loading or unloading arm and may include any combination of the following: piping assemblages, valves, pumps, shut-off devices, overfill sensors, or personnel safety devices." This definition and amendment is discussed in more detail in *Chapter 4: Secondary Containment and Impracticability* (see *Section 4.7.3*).

The 2008 amendments excluded oil production facilities and farms from the loading/unloading rack requirements at §112.7(h); however, this provision was removed in the 2009 final rule.

#### **Qualified Facilities**

The 2008 amendments designated a subset of qualified facilities (Tier I qualified facilities) as those that meet the current qualified facility eligibility criteria and that have no oil storage containers with an individual aboveground storage capacity greater than 5,000 U.S. gallons. Under §112.6, the owner or operator of a Tier I qualified facility has the option to complete and implement a self-certified SPCC Plan template (found in Appendix G to 40 CFR part 112) in lieu of a full SPCC Plan to comply with the SPCC regulation. The template is comprised of a set of streamlined SPCC rule requirements. The rule designated all other qualified facilities as Tier II qualified facilities.

## **General Secondary Containment Requirements**

The 2008 amendments modified the general secondary containment requirements under §112.7(c) by clarifying that the scope of the general secondary containment requirements takes into consideration the typical failure mode and most likely quantity of oil that would be discharged. The amendment clarified that general secondary containment requirements allow for use of both active and passive secondary containment measures and provided additional examples of prevention systems for onshore facilities. This amendment is discussed in more detail in *Chapter 4: Secondary Containment and Impracticability* (see *Section 4.2*).

#### **General Secondary Containment for Non-Transportation-Related Tank Trucks**

The 2008 amendments extend the 2006 exemption from sized secondary containment requirements provided to mobile refuelers to non-transportation-related tank trucks at facilities subject to the SPCC rule (§§112.6(a)(3)(ii), 112.8(c)(2), 112.8(c)(11), 112.12(c)(2), and 112.12(c)(11)). The general secondary containment requirements in §112.7(c) apply to non-transportation-related tank trucks. This amendment is discussed in more detail in *Chapter 4: Secondary Containment and Impracticability* (see *Section 4.7.6*).

#### **Facility Security Requirements**

The 2008 rule amended the facility security requirements at §112.7(g) to be performance-based and allow an owner or operator of a facility to tailor its security measures to suit the facility's characteristics and location. The facility owner or operator is required to document in the SPCC Plan how these security measures are implemented. This amendment is discussed in more detail in *Chapter 3: Environmental Equivalence* (see *Section 3.3.6*).

#### **Bulk Storage Container Integrity Testing Requirements**

The 2008 final rule amended the requirements at §§112.8(c)(6) and 112.12(c)(6) to provide flexibility in complying with the bulk storage container integrity testing requirements. The amendment allows an owner or operator to consult and rely on industry standards to determine the appropriate qualifications for tank inspectors/testing personnel, and the type and frequency of integrity testing required for a particular container size, configuration, and design. These requirements are discussed in more detail in *Chapter 7: Inspection*, *Evaluation*, and *Testing*.

# **Integrity Testing Requirements for Animals Fats and Vegetable Oils**

The 2008 SPCC rule amendments differentiate the integrity testing requirements at §112.12(c)(6) for an owner or operator of a facility that handles Animal Fats and Vegetable Oils (AFVOs). Under this amendment, the PE or the owner or operator self-certifying an SPCC Plan is provided the flexibility to use a visual inspection program for integrity testing for containers that store AFVOs and that meet certain criteria identified in §112.12(c)(6)(ii). This requirement is discussed in more detail in *Chapter 7: Inspection, Evaluation, and Testing* (see *Section 7.2.4*).

#### **Oil Production Facilities**

The 2008 amendments tailored several requirements for oil production facilities which are discussed in more detail in *Chapter 2: SPCC Rule Applicability* and *Chapter 4: Secondary Containment and Impracticability*, including:

- Amending the definition of "production facility" in §112.2 to be consistent with the amendments to the definition of "facility" (see Section 2.4.3);
- Providing new oil production facilities with additional time to prepare and implement their SPCC
   Plans;
- Providing an alternative option for flow-through process vessels (such as separators and heater-treaters) at oil production facilities to comply with the general secondary containment requirement and additional oil spill prevention measures in lieu of sized secondary containment (see Section 4.8.1);
- Exempting certain intra-facility gathering lines (see Section 2.8.10);
- Providing a compliance alternative for produced water containers to comply with the general secondary containment requirement and additional oil spill prevention measures in lieu of sized secondary containment (see Section 4.8.2);
- Establishing a minimum set of requirements for flowline and intra-facility gathering line
  maintenance programs and providing a compliance alternative to secondary containment for
  this piping (see Sections 3.3.5 and 4.2.2); and
- Clarifying the definition of "permanently closed" as it applies to oil production facilities and containers present at an oil production facility (see *Section 2.8.1*).

The 2008 amendments also included several provisions that were removed from the rule in 2009, including an exclusion for oil production facilities from the loading/unloading rack requirements at §112.7(h); an exemption for certain produced water containers; and alternative qualified facilities eligibility criteria for oil production facilities to be eligible to self-certify SPCC Plans.

#### **Man-made Structures**

The 2008 amendments to the SPCC rule clarified that manmade features such as drainage control structures and dikes cannot be used to conclude that there is no reasonable expectation that a discharge from a facility will reach navigable waters or adjoining shorelines (§112.1(d)(1)(i)). However, it may be appropriate for a facility owner or operator to consider man-made structures (for example, dikes, equipment, buildings, basements or other containment structures) to determine how to comply with the SPCC rule secondary containment and integrity testing requirements. This provision is addressed further in *Chapter 4: Secondary Containment and Impracticability* (see *Section 4.4.4*).

#### Wind Turbines

The 2008 amendments clarified that wind turbines meet the definition of oil-filled operational equipment adopted in the December 2006 rule amendments. Therefore, the alternative compliance option for qualified oil-filled operational equipment in §112.7(k) may be available for SPCC-regulated wind turbines that meet the qualifying criteria for oil-filled operational equipment.

#### **Underground Emergency Diesel Generator Tanks at Nuclear Power Stations**

The 2008 amendments exempted underground oil storage tanks deferred from regulation under 40 CFR part 280, as originally promulgated, that supply emergency diesel generators at nuclear power generation facilities licensed by Nuclear Regulatory Commission (NRC) and that meet the NRC design criteria and quality assurance criteria. This exemption, under §§112.1(d)(2)(i) and 112.1(d)(4), includes both tanks that are completely buried and certain tanks that are below-grade and vaulted. This exemption is discussed further in *Chapter 2: SPCC Rule Applicability* (see *Section 2.8.4*).

## 1.3.5 Summary of Navigable Waters Ruling

On November 26, 2008 (73 FR 71941), the Federal Register published EPA's direct final rule to amend a CWA section 311 regulation that defines the term "navigable waters." In this action, EPA announced the vacatur of the July 17, 2002, revisions to the definition of "navigable waters" in accordance with an order, issued by the United States District Court for the District of Columbia (D.D.C.) in American Petroleum Institute v. Johnson, 571 F.Supp.2d 165 (D.D.C. 2008), invalidating those revisions. The court decision also restored the regulatory definition of "navigable waters" promulgated by EPA in 1973; consequently, EPA amended the definition of "navigable waters" in part 112 to comply with that decision (see *Section 2.6.4*).

#### 1.3.6 Summary of the 2009 Amendments to the 2008 Rule

On November 13, 2009, EPA promulgated revisions to the December 2008 amendments (74 FR 58784). In this action, EPA removed the following provisions from the SPCC rule: the exclusion of farms and oil production facilities from the loading/unloading rack requirements under §112.7(h), the exemption of certain produced water containers at oil production facilities, and the alternative qualified facilities eligibility criteria for oil production facilities. These amendments also retained or provided minor technical corrections to the December 2008 provisions.

#### 1.3.7 Effective Date of the 2008 and 2009 Amendments

EPA twice delayed the effective date of the 2008 amendments. The effective date for the 2008 amendments was originally scheduled for February 3, 2009. However, on February 3, 2009 (74 FR 5900), the effective date was delayed by 60 days, until April 4, 2009, in accordance with the January 20, 2009, White House memorandum entitled "Regulatory Review" (74 FR 4435, January 26, 2009) and the memorandum from the Office of Management and Budget entitled "Implementation of Memorandum Concerning Regulatory Review" (M-09-08, January 21, 2009). EPA took that action to ensure that the final rule reflected proper consideration of all relevant facts. In the February 3, 2009 notice, EPA requested public comment on the extension of the effective date and its duration, and on the regulatory amendments contained in the final rule. As a result of public comment, EPA further delayed the April 4, 2009 effective date until January 14, 2010 to allow sufficient time to properly address public comments. These public comments were addressed in the November 2009 final amendments to the SPCC rule (74 FR 58784, November 13, 2009), which also became effective on January 14, 2010. Modifications to the effective date did not affect the compliance date for preparing or updating an SPCC Plan.

# FYI – Effective date and compliance date

The effective date is the date that amendments in the rule document affect the current Code of Federal Regulations (CFR). The current CFR consists of the rules published in the latest CFR volume and any effective amendments published in the Federal Register since the revision date of the latest CFR volume. The effective date is not the same as the rule's compliance date.

The compliance date is the date that the affected person (that is, the owner or operator) must comply with the revised rule requirements.

# 1.3.8 Summary of the Milk and Milk Product Container Exemption

On January 15, 2009, the agency published a proposal to exempt from SPCC requirements milk containers and associated piping and appurtenances provided they are constructed according to current applicable 3-A Sanitary Standards, and are subject to the current applicable Grade "A" Pasteurized Milk Ordinance (PMO) or a State dairy regulatory requirement equivalent to the current applicable PMO (74 FR 2463).

EPA modified the proposed rule language and exempted milk and milk product containers, associated piping and appurtenances on April 18, 2011 (76 FR 21652). EPA believes that the combination of these specific construction and sanitation standards address the prevention of oil discharges in quantities that may be harmful.

The capacity of the exempt milk and milk product containers, piping and appurtenances is excluded from the calculation of a facility's total oil storage capacity when determining if the facility is subject to the SPCC rule. This exemption is addressed further in Chapter 2: SPCC Rule Applicability (see Section 2.8.11).

#### 1.4 **Using This Guidance**

SPCC Guidance for Regional Inspectors is intended to assist regional EPA inspectors in implementing the revised SPCC rule, including environmental equivalence, impracticability, and integrity testing, as well as the role of the inspector in the review of these provisions. It is also intended to establish a nationally consistent understanding among regional EPA inspectors on how certain provisions of the rule may be applied. Finally, the guidance also provides the regulated community, including PEs and qualified facility owner/operators, with information that is valuable for the development and implementation of SPCC Plans. This guidance does not

address all aspects of the SPCC rule, nor is it a substitute for the regulation itself. Additional guidance is available for qualified facility owners/operators at

http://www.epa.gov/oem/content/spcc/spcc\_qf.htm.

Many of the terms used in this guidance have specific regulatory definitions in 40 CFR 112.2; however, other regulatory programs may define some of these terms differently. Please refer to §112.2 of the rule and associated preamble of the July 2002, December 2006, December 2008,

Excerpts of the SPCC rule relevant to a particular section of this guidance are provided in text boxes. This information is provided for informational purposes only. The reader should always refer to the full text of the current 40 CFR part 112 rule for the applicable regulatory language, available from the Government Printing Office Web site at <a href="http://www.gpoaccess.gov/fr/">http://www.gpoaccess.gov/fr/</a>.

and November 2009 *Federal Register* publications for clarification of defined terms in the SPCC rule. An acronyms list, provided at the beginning of this document, defines all acronyms used throughout the guidance.

This guidance is divided into seven main chapters and includes several appendices for the reader's reference, as follows:

- **Chapter 1: Introduction** discusses the purpose and scope of 40 CFR part 112, the regulatory history, and the 2002, 2006, 2008, 2009, and 2011 rule amendments.
- **Chapter 2: SPCC Rule Applicability** clarifies the facilities, activities, and equipment that are subject to the SPCC rule through an in-depth discussion of the rule and relevant scenarios.
- Chapter 3: Environmental Equivalence discusses the use of the "environmental equivalence" provision, which allows facilities to implement alternate measures based on site-specific considerations, as long as the measures provide equivalent environmental protection, in accordance with good engineering practice and as determined by a PE.
- **Chapter 4: Secondary Containment and Impracticability** discusses the secondary containment requirements and explains when an impracticability determination can be made and how the determination should be documented.
- **Chapter 5: Oil/Water Separators** addresses various scenarios involving oil/water separators with respect to the SPCC rule requirements.
- Chapter 6: Facility Diagram and Description provides guidelines on the necessary level of detail
  for facility diagrams included in SPCC Plans. This section also includes example facility diagrams
  for different types of facilities.

• **Chapter 7: Inspection, Evaluation, and Testing** explains the inspection, evaluation, and testing requirements for facilities subject to the SPCC rule, as well as how "environmental equivalence" may apply for the integrity testing requirements of the SPCC rule.

The appendices include a complete copy of the relevant sections of the statutory authority from the Clean Water Act; the Oil Pollution Prevention regulation (40 CFR part 112); the Discharge of Oil regulation (40 CFR part 110); the Criteria for State, Local and Regional Oil Removal Contingency Plans (40 CFR part 109); a summary of revised rule provisions; model SPCC Plans; a model contingency plan; inspector checklists; and a collection of other SPCC policy documents.