

**SPCC PLAN - REGULATION CHANGE - SUMMARY AND NEW REGULATIONS
EFFECTIVE AUGUST 16, 2005**

**ENVIRONMENTAL PROTECTION AGENCY
40 CFR Part 112
Oil Pollution Prevention and Response;
Non-Transportation-Related Onshore and Offshore Facilities;
Final Rule with Revised Compliance Dates**

July 2004

EXECUTIVE SUMMARY

New federal SPCC regulations are effective on August 16, 2005. Most facilities with aboveground storage tanks and drum storage areas are affected as follows:

- §112.3(d): No SPCC Plan is effective to satisfy the requirements of the SPCC rule unless it has been reviewed and certified by a PE. The revised rule adds specificity to the PE's attestation. The specificity includes a requirement that the PE consider applicable industry standards and certify that the Plan is prepared in accordance with part 112 requirements. The revised rule allows an agent of the PE to visit and examine the facility in place of the PE, but the PE must review the agent's work, and certify the Plan.
- § 112.5(c): This section requires that a Professional Engineer certify any technical amendments to an SPCC Plan.
- The revised rule allows differing formats for the Plan, other than the one format now specified. If you use another format, such as the PADEP format for PPC Plans, you must cross-reference its provisions to the requirement listed in the SPCC rule.
- §112.7(d): When it is not practicable to install secondary containment at your facility, this section requires that you explain why and provide a strong oil spill contingency plan in your SPCC Plan. You must also conduct periodic integrity testing of the containers; and, conduct periodic integrity and leak testing of the valve and piping.
- The owner or operator must schedule and conduct discharge prevention briefings for oil-handling personnel at least once a year.
- The revised rule requires that an owner or operator test aboveground containers (which includes tanks) for integrity on a regular schedule, and when material repairs are done.
- The revised rule requires that all buried piping that is installed or replaced on or after August 16, 2002 must 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, for all soil conditions.
- You must protect any completely buried metallic storage tank installed on or after January 10, 1974 from corrosion by coatings or cathodic protection compatible with local soil conditions. You must regularly leak test such completely buried metallic storage tanks.
- You now need to test each aboveground container (and tank) for integrity on a regular schedule, and whenever you make material repairs. The frequency of and type of testing must take into account container size and design (such as floating roof, skid-mounted, elevated, or partially buried). You must combine visual inspection with another testing technique such as hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emissions testing, or another system of nondestructive shell testing. You must keep comparison records and you must also inspect the container's supports and foundations. In addition, you must frequently inspect the outside of the container for signs of deterioration, discharges, or accumulation of oil inside diked areas. Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph.
- Control leakage through defective internal heating coils by monitoring the steam return and exhaust lines for

contamination from internal heating coils that discharge into an open watercourse, or pass the steam return or exhaust lines through a settling tank, skimmer, or other separation or retention system.

- Engineer or update each container installation in accordance with good engineering practice to avoid discharges. You must provide at least one of the following devices:
 - (i) High liquid level alarms with an audible or visual signal at a constantly attended operation or surveillance station. In smaller facilities an audible air vent may suffice.
 - (ii) High liquid level pump cutoff devices set to stop flow at a predetermined container content level.
 - (iii) Direct audible or code signal communication between the container gauger and the pumping station.
 - (iv) A fast response system for determining the liquid level of each bulk storage container such as digital computers, telepulse, or direct vision gauges. If you use this alternative, a person must be present to monitor gauges and the overall filling of bulk storage containers
 - (v) You must regularly test liquid level sensing devices to ensure proper operation.
- Cap or blank-flange the terminal connection at the transfer point and mark it as to origin when piping is not in service or is in standby service for an extended time.
- Properly design pipe supports to minimize abrasion and corrosion and allow for expansion and contraction.
- Regularly inspect all aboveground valve, piping, and appurtenances. During the inspection you must assess the general condition of items, such as flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces. You must also conduct integrity and leak testing of buried piping at the time of installation, modification, construction, relocation, or replacement.
- Warn all vehicles entering the facility to be sure that no vehicle will endanger aboveground piping or other oil transfer operations.

If you have not already, you should update your current Contingency Plan or prepare an SPCC Plan by August 17, 2005. Professional Engineering inspections should be completed in advance of that date. Many facilities will also need to upgrade a number of their practices by February 18, 2006 to be in compliance with these new EPA rules.

REGULATION SUMMARY

§112.1(b): Explains that **the SPCC rule applies to owners or operators of facilities that drill, produce, gather, store, process, refine, transfer, distribute, use, or consume oil and oil products**, and might reasonably be expected to discharge oil in quantities that may be harmful into or upon navigable waters of the United States or adjoining shorelines, or waters of the contiguous zone, or in connection with activities under the Outer Continental Shelf Land Act of Deepwater Port Act, or affecting certain natural resources.

The revised rule clarifies that users of oil are also subject to the rule.

The revised rule provides that completely buried tanks subject to all of the technical requirements of parts 280 or 281 do not count in the calculation of the 42,000 gallon threshold. It also clarifies that permanently closed tanks do not count in the calculation of that threshold.

§112.1(d)(2)(ii): The second criterion found in §112.1(d)(2)(ii) is: the aboveground storage capacity of the facility is 1,320 gallons or less of oil. For purposes of this exemption, only containers of oil with a capacity of 55 gallons or greater are counted. The aboveground storage capacity of a facility does not include the capacity of containers that are "permanently closed," as defined in 112.2. The threshold applies to storage capacity contained in operating equipment as well as to storage capacity in containers.

* **Bolded important sections highlighted by RT**

The revised rule raises the threshold for aboveground storage capacity by eliminating the provision that triggers the requirement to prepare and implement an SPCC Plan if any single container has a capacity greater than 660 gallons. It maintains the greater than 1,320 gallon threshold. Only containers with a capacity of 55 gallons or

greater are counted in the calculation of aboveground storage capacity. The threshold continues to apply to storage capacity contained in operating equipment as well as to storage capacity in containers.

Completely buried storage tanks subject to all of the technical requirements of 40 CFR part 280 or a State program approved under 40 CFR part 281 are no longer required to comply with SPCC provisions, except for the facility diagram. EPA estimates that under this new rule, most gasoline service stations will drop out of the SPCC program.

*EPA has established a minimum size container for purposes of the regulatory threshold. **Containers with a storage capacity of less than 55 gallons of oil are exempt from all SPCC requirements.***

A facility or part thereof used exclusively for wastewater treatment will no longer be subject to prevention planning unless it is used to meet Part 112 requirements.

§112.2 - definition of facility: “Facility” is defined as any mobile or fixed, onshore or offshore building, structure, installation, equipment, pipe, or pipeline used in oil well drilling operations, oil production, oil refining, oil storage, oil gathering, oil transfer, oil distribution, and waste treatment, or in which oil is used...”

definition of facility: The revised rule clarifies that a facility may be as small as a piece of equipment, for example, a tank, or as large as a military base.

*§112.3(a): For those facilities already in operation on the effective date of the rule, an owner or operator of a facility subject to the rule must prepare an SPCC Plan within the current time frame of six months. He may take up to an additional six months to implement the Plan. The revised rule extends this same time frame to amendments necessary to bring the Plan into compliance with rule revisions. **An owner or operator of a facility becoming operational after August 16, 2002 through February 18, 2006 must prepare and implement a Plan not later than February 18, 2006.***

*§112.3(b): **The owner or operator of a facility that becomes operational after February 18, 2006 must now prepare and implement an SPCC Plan before beginning operations.** The time frame in the current rule is up to 6 months for Plan preparation and up to 6 months more for Plan implementation.*

§112.3(d): No SPCC Plan is effective to satisfy the requirements of the SPCC rule unless it has been reviewed and certified by a PE.

*The revised rule adds specificity to the PE’s attestation. **The specificity includes a requirement that the PE consider applicable industry standards and certify that the Plan is prepared in accordance with part 112 requirements. The revised rule allows an agent of the PE to visit and examine the facility in place of the PE, but the PE must review the agent’s work, and certify the Plan.***

The revised rule requires the facility owner or operator to maintain a copy of the Plan at the facility if it is attended at least 4 hours a day, in contrast to the current requirement to maintain it at the facility if it is attended at least 8 hours a day.

§112.4(a): Whenever an SPCC facility has: (1) discharged more than 1,000 U.S. gallons of oil in a single discharge as described in §112.1(b), or (2) discharged more than 42 U.S. gallons of oil, as described in §112.1(b), in each of 2 discharges, within any 12-month period, the owner or operator of the facility must submit to the RA, within 60 days from the time the facility becomes subject to this section, 8 different items of information, plus additional information pertinent to the Plan if the RA requests it.

We have revised the geographic scope of the rule in accordance with the CWA amendments, by using the phrase “discharge as described in §112.1(b).” We also raised the threshold for reporting two discharges as described in §112.1(b), from a “reportable” quantity under the Clean Water Act, to a threshold of more than 42 U.S. gallons, or 1 barrel, in each of those discharges. The 1,000 gallon threshold for a single discharge as described in §112.1(b) remains unchanged.

The revised rule changes the period of review for SPCC Plans from 3 to 5 years. It also requires documentation of completion of the review and evaluation.

§112.5(c): **This section requires that a Professional Engineer certify any technical amendments to an SPCC Plan.**

The revised rule clarifies that a Professional Engineer must certify only technical amendments. PE certification is not required for non-technical amendments, like changes to phone numbers, names, etc.

§112.7: This section specifies that a Plan must be prepared in accordance with good engineering practices, and have the full approval of management at a level with authority to commit the necessary resources. The SPCC Plan must follow the sequence specified in the rule, and include a discussion of the facility's conformance with the requirements of the rule. If you do not follow the sequence specified in the rule, you must prepare an equivalent prevention Plan acceptable to the Regional Administrator that meets all applicable requirements, and you must supplement it with section cross-referencing the location of requirements listed in the SPCC rule to the equivalent requirements in the other prevention plan.

The revised rule allows differing formats for the Plan, other than the one format now specified. If you use another format, you must cross-reference its provisions to the requirement listed in the SPCC rule. Also, if you use another format, you must ensure that the format includes all applicable SPCC requirements, or you must supplement that format to include all applicable SPCC requirements.

The facility diagram must include completely buried tanks exempted from other SPCC requirements.

The revised rule maintains the current standard that dikes, berms, or retaining walls must be "sufficiently impervious" to contain oil. We withdrew the proposed standard that such secondary containment must be impermeable for 72 hours.

§112.7(d): **When it is not practicable to install secondary containment at your facility, this section requires that you explain why and provide a strong oil spill contingency plan in your SPCC Plan. You must also conduct periodic integrity testing of the containers; and, conduct periodic integrity and leak testing of the valve and piping.**

The revised rule adds new requirements for periodic integrity testing of containers, and periodic integrity and leak testing of valves and piping.

The revised rule allows use of usual and customary business records to serve as a record of tests or inspections, instead of keeping duplicate records. It also allows the owner or operator to keep those records as an appendix to the Plan, or in a separate log, etc., with the Plan, rather than requiring that those records be a part of the Plan. The rule also acknowledges that the certifying engineer, as well as the owner or operator, has a role in the development of inspection procedures.

§112.7(f): The owner or operator of a facility, at a minimum, must train oil-handling personnel in the operation and maintenance of equipment to prevent the discharge of oil; discharge procedure protocols; applicable pollution control laws, rules, and regulations; general facility operations; and, the contents of the facility Plan. An owner or operator must designate a person at each facility who is accountable for oil discharge prevention and who reports to facility management. **An owner or operator must schedule and conduct discharge prevention briefings for oil-handling personnel at least once a year** to assure adequate understanding of the SPCC Plan for that facility. Such briefings must highlight and describe known discharges as described in §112.1(b), or failures, malfunctioning components, and recently developed precautionary measures.

The revised rule mandates training only for oil-handling employees, instead of all employees. It specifies additional topics for the training of these employees. It also specifies that discharge prevention briefings must be conducted at least once a year, instead of at "intervals frequent enough to assure adequate understanding of the SPCC Plan for that facility."

§112.7(i): This section requires evaluation for field-constructed aboveground containers undergoing repair, alteration, reconstruction, or change in service that might affect the risk of a discharge or failure due to fracture or other catastrophe. It also requires such evaluation when there has actually been a discharge or failure due to brittle fracture or other catastrophe.

The revised rule allows records required by NPDES permit regulations to record stormwater bypass events to be used for SPCC purposes in lieu of events records specifically prepared for purpose.

The revised rule requires that an owner or operator test aboveground containers for integrity on a regular schedule, and when material repairs are done. Usual and customary business records may be used for the purpose of integrity testing, instead of records specifically created for this purpose.

The revised rule requires that all buried piping that is installed or replaced on or after August 16, 2002 must 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, for all soil conditions.

Excerpts from the Rules and Regulations

§112.3 Requirement to prepare and implement a Spill Prevention, Control and Countermeasure Plan

The owner or operator of an onshore or offshore facility subject to this section must prepare a Spill Prevention, Control, and Countermeasure Plan (hereafter "SPCC Plan" or "Plan"), in writing, and in accordance with §112.7 and any other applicable section of this part.

(a) If your onshore or offshore facility was in operation on or before August 16, 2002, you must maintain your Plan, but must amend it, if necessary to ensure compliance with this part, on or before August 17, 2005, and must implement the amended Plan as soon as possible, but not later than February 18, 2006.

§112.8 Spill Prevention, Control, and Countermeasure Plan requirements for onshore facilities (excluding production facilities).

If you are the owner or operator of an onshore facility (excluding a production facility), you must:

(a) Meet the general requirements for the Plan listed under §112.7, and the specific discharge prevention and containment procedures listed in this section.

(b) **Facility drainage.** (1) Restrain drainage from diked storage areas by valves to prevent a discharge into the drainage system of facility effluent treatment system, except where facility systems are designed to control such discharge. You may empty diked areas by pumps or ejectors; however, you must manually activate these pumps or ejectors and must inspect the condition of the accumulation before starting, to ensure no oil will be discharged.

(2) Use valves of manual, open-and-closed design, for the drainage of diked areas. You may not use flapper-type drain valves to drain diked areas. If your facility drainage drains directly into a watercourse and not into an on-site wastewater treatment plant, you must inspect and may drain uncontaminated retained stormwater, as provided in paragraphs (c)(3)(ii), (iii), and (iv) of this section.

(3) Design facility drainage systems from undiked areas with a potential for a discharge (such as where piping is located outside containment walls or where tank truck discharges may occur outside the loading area) to flow into ponds, lagoons, or catchment basins designed to retain oil or return it to the facility. You must not locate catchment basins in areas subject to periodic flooding.

(4) If facility drainage is not engineered as in paragraph (b)(3) of this section, equip the final discharge of all ditches inside the facility with a diversion system that would, in the event of an uncontrolled discharge, retain oil in the facility.

(5) Where drainage waters are treated in more than one treatment unit and such treatment is continuous, and pump transfer is needed, provide two "lift" pumps and permanently install at least one of the pumps. whatever techniques you use, you must engineer facility drainage systems to prevent a discharge as described in §112.1(b) in case there is an equipment failure or human error at the facility.

(c) **Bulk storage containers.** (1) Not use a container for the storage of oil unless its material and construction are compatible with the material stored and conditions of storage such as pressure and temperature.

(2) Construct all bulk storage container installations so that you provide a secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation. You must ensure that diked areas

are sufficiently impervious to contain discharge oil. Dikes, containment curbs, and pits are commonly employed for this purpose. You may also use an alternative system consisting of a drainage trench enclosure that must be arranged so that any discharge will terminate and be safely confined in a facility catchment basin or holding pond.

(3) Not allow drainage of uncontaminated rainwater from the diked area into a storm drain or discharge of an effluent into an open watercourse, lake, or pond, bypassing the facility treatment system unless you:

- (i) Normally keep the bypass valve sealed closed.
- (ii) Inspect the retained rainwater to ensure that its presence will not cause a discharge as described in §112.1(b).
- (iii) Open the bypass valve and reseal it following drainage under responsible supervision; and
- (iv) Keep adequate records of such events, for example, any records required under permits issued in accordance with §§122.41(j)(2) and 122.41(m)(3) of this chapter.

(4) Protect any completely buried metallic storage tank installed on or after January 10, 1974 from corrosion by coatings or cathodic protection compatible with local soil conditions. You must regularly leak test such completely buried metallic storage tanks.

(5) Not use partially buried or bunkered metallic tanks for the storage of oil, unless you protect the buried section of the tank from corrosion. You must protect partially buried and bunkered tanks from corrosion by coatings or cathodic protection compatible with local soil conditions.

(6) Test each aboveground container for integrity on a regular schedule, and whenever you make material repairs. The frequency of and type of testing must take into account container size and design (such as floating roof, skid-mounted, elevated, or partially buried). **You must combine visual inspection with another testing technique** such as hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emissions testing, or another system of nondestructive shell testing. You must keep comparison records and you must also inspect the container's supports and foundations. In addition, you must frequently inspect the outside of the container for signs of deterioration, discharges, or accumulation of oil inside diked areas. Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph.

(7) Control leakage through defective internal heating coils by monitoring the steam return and exhaust lines for contamination from internal heating coils that discharge into an open watercourse, or pass the steam return or exhaust lines through a settling tank, skimmer, or other separation or retention system.

(8) Engineer or update each container installation in accordance with good engineering practice to avoid discharges. You must provide at least one of the following devices:

- (i) High liquid level alarms with an audible or visual signal at a constantly attended operation or surveillance station. In smaller facilities an audible air vent may suffice.**
- (ii) High liquid level pump cutoff devices set to stop flow at a predetermined container content level.**
- (iii) Direct audible or code signal communication between the container gauger and the pumping station.**
- (iv) A fast response system for determining the liquid level of each bulk storage container such as digital computers, telepulse, or direct vision gauges. If you use this alternative, a person must be present to monitor gauges and the overall filling of bulk storage containers.**
- (v) You must regularly test liquid level sensing devices to ensure proper operation.**

(9) Observe effluent treatment facilities frequently enough to detect possible system upsets that could cause a discharge as described in §112.1(b).

(10) Promptly correct visible discharges which result in a loss of oil from the container, including but not limited to seams, gaskets, piping, pumps, valves, rivets, and bolts. You must promptly remove any accumulations of oil in diked areas.

(11) Position or locate mobile or portable oil storage containers to prevent a discharge as described in §112.1(b). You must furnish a 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.

(d) Facility transfer operation, pumping, and facility process. (1) Provide buried piping that is installed or replaced on or after August 16, 2002, with a protective wrapping and coating. You must also cathodically protect such buried piping installations or otherwise satisfy the corrosion protection standards for piping in part 280 of this chapter or a State program approved under part 281 of this chapter. If a section of buried line is exposed for any reason, you must carefully inspect it for deterioration. If you find corrosion damage, you must undertake additional examination and corrective action as indicated by the magnitude of the damage.

(2) Cap or blank-flange the terminal connection at the transfer point and mark it as to origin when piping is not in service or is in standby service for an extended time.

(3) Properly design pipe supports to minimize abrasion and corrosion and allow for expansion and contraction.

(4) Regularly inspect all aboveground valve, piping, and appurtenances. during the inspection you must assess the general condition of items, such as flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces. You must also conduct integrity and leak testing of buried piping at the time of installation, modification, construction, relocation, or replacement.

(5) Warn all vehicles entering the facility to be sure that no vehicle will endanger aboveground piping or other oil transfer operations.

A May 25, 2004 *Federal Register* notice clarified several issues, as follows:

Loading Racks

1. A loading rack is an area with loading arms, pipes and permanent elevated structures used to fill or discharge from a tank car or tank truck. If you have a conventional loading rack at your facility, a specific sized secondary containment is required for that area (112.7(h)).

2. If you do not have a conventional loading rack and only have a loading or unloading area, then EPA is considering rulemaking to address containment in these areas.

3. If you have both conventional loading racks and loading areas collocated, the more stringent rules apply and secondary containment of the area is required.

Cost and Impracticability

1. Secondary containment may not be considered impracticable solely because a Contingency Plan is cheaper.

2. Impracticability is based on geographic limitations, local zoning ordinances, fire prevention standards, or other good engineering practice reasons.

The other two issues made final in this Notice relates to another issue the clarification of a "Facility" versus a "Production Facility." One issue that is not resolved is the definition of navigable water as it relates to the applicability of SPCC.

Compliance Dates

Most manufacturing and many commercial facilities will need to update or prepare SPCC Plans by **August 17, 2005**. Professional Engineering inspections should be required in advance of that date. Many facilities will need to upgrade their practices by **February 18, 2006** to be in compliance with these EPA rules.

– Gary Brown