

Compliant Spill Control



By Glen Carter

The U.S. Environmental Protection Agency (EPA) is responsible for administering regulations to prevent oil discharges into inland bodies of water and to protect adjoining shorelines from contamination.

SPCC Rule changes and green solutions

ARTICLE SUMMARY

Challenge: The SPCC Rule requires owners and operators to demonstrate the importance of secondary containment solutions for containers 55 gal and larger.

Solution: Specially constructed pallets with leakproof sumps often are used to store large containers that hold hazardous liquids.

Conclusion: The pallets protect groundwater supplies, and their construction materials can offer environmental benefits.

In 1973, under the authority of the Federal Water Pollution Control Act and the Clean Water Act, the Spill Prevention Control and Countermeasure (SPCC) Rule was initiated and published in the Federal Register. Taking effect in 1974, the SPCC Rule required facilities to develop and implement SPCC plans, establishing procedures, methods and equipment requirements.

The SPCC Rule is mandated for facilities with 1,320 gal of aboveground storage or 42,000 gal of buried storage of petroleum oils and non-petroleum oils; animal fats, oils and greases; fish and marine mammal oils; and vegetable oils (including oils from seeds, nuts, fruits and kernels). The following are regulated: petroleum or non-petroleum oils, asphalt, aviation gasoline, bunker fuel, crude oil, cutting oil/machine coolants, dielectric fluid, diesel fuel, heating oil, gasoline, greases, hydraulic oil, jet fuel, lubricating oil, mineral spirits, motor oil, naphtha, natural gas condensate, oil refuse, oily wastes, Stoddard solvent, synthetic oils, tall oil, turpentine, residual fuels and used oil.

Legislative Timeline

The last major modification to the rule was made in 2002. The EPA amended 40 CFR – 112, making significant changes. Since then, additional

amendments have been proposed. In 2005, two separate proposals were published in the Federal Register. In 2006, a final rule was signed. In 2008, the Federal Register published EPA amendments of clarification. According to the EPA website:

“On Nov. 5, 2009, the EPA Administrator signed a notice amending certain requirements of the SPCC rule in order to address additional areas of regulatory reform that have been raised by the regulated community. This action promulgates revisions to the December 2008 amendments as a result of the EPA’s review of comments and consideration of all relevant facts. EPA is either taking no action or providing minor technical corrections on the majority of the December 2008 provisions. However, this action modifies the December 2008 rule by removing provisions to: exclude farms and oil production facilities from the loading/unloading rack requirements; exempt produced water containers at an oil production facility; and provide alternative qualified facilities eligibility criteria for an oil production facility.

Additionally, because of the uncertainty surrounding the final amendments to the Dec. 5, 2008, rule and the delay of the effective date, EPA will propose to extend the compliance date. This rule is effective Jan. 14, 2010.”

As a result of the 2002 revisions, the rule stipulates oil storage equipment as being any container capable of holding 55 gal or more. This includes tanks, drums and similar containers. In addition, electrical equipment such as large transformers, circuit breakers, cooling systems, hydraulic apparatus and lubrication machinery must comply with SPCC rules.

It is important to recognize that SPCC plans are not oil spill contingency plans that address spill cleanup measures after a spill has occurred. Rather, SPCC plans ensure that facilities establish containment and other countermeasures that prevent oil spills that could reach navigable waters.

The plan must address:

- Operating procedures the facility implements to prevent oil spills;
- Control measures installed to prevent oil from entering navigable waters (i.e., secondary containment); and
- Countermeasures to contain, clean up and mitigate the effects of oil spills.

Secondary Containment

The SPCC Rule requires an owner and operator to demonstrate in their SPCC plans considerations for secondary containment solutions for containers 55 gal and larger. Each secondary containment must hold the entire capacity of the largest container and have sufficient free board to hold precipitation. Free board refers to the lowest point of overflow. Pallets that are sheltered do not require free board to hold precipitation.

A specially constructed pallet commonly is used to store 55-gal drums that contain hazardous liquids. This type of pallet is designed with a leakproof sump that captures leaks from a damaged drum or a spill that might occur when filling or pumping out of the drum. Therefore, the sump keeps the hazardous liquid from going down a factory floor drain, protecting against groundwater contamination and keeping waterways clean. This equipment assists a user of hazardous chemicals, or one temporarily storing hazardous waste on site, to comply with relevant regulations.

Spill control pallets are available in

different capacities and configurations. Select from one-, two-, three- or four-drum capacities with square or rectangular shapes. Some pallets are designed to accommodate intermediate bulk containers, and modular accumulation centers may be considered as well.

Environmental 'Double-Good'

Manufacturers have been searching for ways to be more helpful while enhancing international environmental objectives. As an example, Justrite Mfg. Co. uses a recycled resin in molding spill control pallets, resulting in a "double-good" hit for the environment. The pallets protect against groundwater contamination, and their material of construction offers a green benefit to the environment.

The recycled polyresin is purchased from carefully selected and approved suppliers. Both the resin and products have undergone an extensive review process and obtained recycled content validation by recognized third-party auditor UL Environment. This validation assures customers that a product claiming to be green really is.

Green Validation

Underwriters Laboratories (UL), which got its start in product safety more than 115 years ago, launched a new subsidiary—UL Environment—in early 2009, with a mission to encourage respect for and stewardship of our environment and to meet the need for an independent and trusted source for the validation of claims. The UL Environment validation on a product adds a high level of confidence to customers who are making a true green choice versus the many self-declared manufacturer claims that are surfacing in today's growing green-conscious world.

Why use recycled materials? Consider this: One ton of recycled plastic saves 16.3 barrels of oil, 5,774 kWh of electricity and 30 cu yd of landfill space. WWD

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