



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

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OFFICE OF
SOLID WASTE AND EMERGENCY
RESPONSE

OSWER 9360.8-38

MEMORANDUM

SUBJECT: Use of Alternative Secondary Containment Measures at Facilities Regulated under the Oil Pollution Prevention Regulation (40 CFR Part 112)

FROM: Marianne Lamont Horinko
Assistant Administrator

Michael Stypinski
for

TO: Oil National Policy Managers, Regions 1-10

PURPOSE

This memorandum amends the guidance issued on April 29, 1992 (i.e., Use of Alternative Secondary Containment Measures at Facilities Regulated under the Oil Pollution Regulation (40 CFR Part 112), (OSWER 9360.8-37) concerning the potential use of certain double-wall aboveground storage tanks (ASTs) for secondary containment purposes. A copy is attached for your reference. This guidance also clarifies when shop-built double-walled ASTs satisfy the applicable secondary containment requirements in the Spill Prevention, Control, and Countermeasure (SPCC) rule, found at 40 CFR part 112. We take this step because larger shop-built ASTs that use the protective measures described in the 1992 guidance are generally protective of the environment under certain circumstances.

BACKGROUND

On April 29, 1992, EPA issued guidance on how certain shop-built double-wall ASTs may comply with the secondary containment requirements of §112.7(c). The guidance discussed compliance with §112.7(c) only, and did not discuss compliance with other applicable SPCC provisions. We said at the time that "there should be many situations in which protection of navigable waters substantially equivalent to that provided by the secondary containment systems listed in section 112.7(c) could be provided by alternative AST systems that have capacities generally less than 12,000 gallons and are installed and operated with protective measures other than secondary containment dikes."

DISCUSSION

SPCC secondary containment requirements. Section 112.7(c) requires that the owner or operator:

“Provide appropriate containment and/or diversionary structures or equipment to prevent a discharge as described in §112.1(b). The entire containment system, including walls and floor, must be capable of containing oil and must be constructed so that any discharge from a primary containment system, such as a tank or pipe, will not escape the containment system before cleanup occurs. At a minimum, you must use one of the following preventive systems or its equivalent:

- (1) For onshore facilities:
 - (i) Dikes, berms or retaining walls sufficiently impervious to contain oil;
 - (ii) Curbing;
 - (iii) Culverting, gutters or other drainage systems;
 - (iv) Weirs, booms or other barriers;
 - (v) Spill diversion ponds;
 - (vi) Retention ponds; or
 - (vii) Sorbent materials.
- (2) For offshore facilities:
 - (i) Curbing, drip pans; or
 - (ii) Sumps and collection systems.”

After nearly a decade of evaluation of the construction, performance, and use of certain shop-built double-wall ASTs, we believe that they may serve as an “equivalent” preventive system for purposes of §112.7(c).

In 1992, we recognized that a shop-built double-wall AST with a capacity “generally less than 12,000 gallons” that was installed and operated with protective measures other than a secondary containment dike might meet the secondary containment requirements of §112.7(c). We described those protective measures as “when the inner tank is an Underwriters’ Laboratory-listed steel tank, the outer wall is constructed in accordance with nationally accepted industry standards (e.g., those codified by the American Petroleum Institute, the Steel Tank Institute, and the American Concrete Institute), the tank has overfill prevention measures that include an overfill alarm and an automatic flow restrictor or flow-shutoff, and all product transfers are constantly monitored.”

Today, after nearly a decade of experience in which we have seen the construction, performance, and use of shop-built double-wall ASTs, we note a low

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occurrence of discharges from such tanks, including tanks with a capacity of 12,000 gallons or more. In some cases, such tanks provide secondary containment where none existed before, or superior environmental protection to alternative containment systems previously used. We believe that a 12,000 gallon limitation on the use of certain shop-built double-wall ASTs is therefore no longer necessary, and believe that shop-built double-wall ASTs that use the protective measures described in 1992 generally satisfy the secondary containment requirements found in §112.7(c).

Bulk storage secondary containment requirements (§112.8(c)(2)); inspection requirements (§112.8(c)(6)). For the same reasons outlined above, we also believe that shop-fabricated double-wall AST, regardless of size, may generally satisfy not only the secondary containment requirements of §112.7(c), but also the bulk storage secondary containment requirements found at §112.8(c)(2). Section 112.8(c)(6) requires the owner or operator to conduct integrity testing on a regular schedule and whenever he makes repairs. The owner or operator must also frequently inspect the outside of the container for signs of deterioration, discharges, or accumulation of oil inside diked areas. To comply with the requirement to frequently inspect the outside of the tank, an owner or operator must inspect the inner wall and interstitial spaces of a shop-built double-wall AST. We recommend the use of automatic detection devices to detect discharges into the interstitial space. Owners or operators should conduct this integrity testing and inspection in accordance with industry standards, when practicable. One industry standard presently available is "SP001-00, Standard for Inspection of In-Service Shop-Fabricated Aboveground Tanks for Storage of Combustible and Flammable Liquids." Other applicable standards may be developed in the future.

Other applicable SPCC requirements. While shop-fabricated double-wall ASTs may satisfy the requirements of §112.7(c) and §112.8(c)(2), such tanks must also continue to satisfy all other applicable SPCC requirements. For example, the facility owner or operator must satisfy §112.7(h) requirements for tank car and tank truck loading/unloading racks if he transfers oil in bulk to those tanks from highway vehicles or railroad cars. If such transfers occur, where loading/unloading area drainage does not flow into a catchment basin or treatment facility designed to handle spills, a quick drainage system must be used. The containment system must be designed to hold at least the maximum capacity of any single compartment of a tank car or tank truck loaded or unloaded at the facility.

Additionally, any piping, equipment, or device not contained within a double-wall AST is subject to the requirements of §112.8(b)(3) and (4), if such piping, equipment, or device is in an undiked area.

CONCLUSION/IMPLEMENTATION Should you have any questions concerning this memorandum, please contact Hugo Fleischman, of my staff, at 703-603-8769.

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Attachment

cc: Michael B. Cook
Elaine Davies
Andrew Gordon
David Drelich
Oil Removal Managers
OERR Records Manager, IMC 5202G
OERR Documents Coordinator, HOSC 5202G
Jeff Josephson, Superfund Lead Region Coordinator, USEPA Region 2
NARPM Co-Chairs
Doug Kodama, Oil Lead Region Coordinator, USEPA Region 2