

WAC 16-201-031 Secondary containment of liquid bulk fertilizers—Floors and linings—Alternative procedures. A floor and/or liner need not be installed directly under a storage container having a capacity of one hundred thousand gallons or more which has been constructed on site and put into use prior to March 1, 1994: Provided, That one of the following alternative procedures are complied with, certified to in writing by an official of the company which owns the storage container, and the certificate is filed with the department:

(1) Alternative 1 is as follows:

(a) A second bottom made of steel shall be constructed for the storage container. The second bottom shall be placed over the original bottom and separated from the original bottom by a support medium designed to provide for leak detection between the two bottoms and properly support the new bottom. This support layer may consist of gravel, sand, concrete (grooved to provide leak detection), steel or other grillage, wire mesh, etc. as dictated by good engineering practice.

(b) The original bottom of the storage container shall be tested for leaks before the support layer and second bottom are installed. A record of the test shall be kept on file at the permanent storage facility or at the nearest local office from which the permanent storage facility is administered.

(c) The newly constructed bottom shall be tested for leaks before any liquid fertilizer is stored on the newly constructed bottom. A record of the test shall be kept on file at the permanent storage facility or at the nearest local office from which the permanent storage facility is administered.

(d) There shall be a system to readily detect leaks through the newly constructed bottom into the support layer. Leak tests should be conducted at not more than six-month intervals with a record of such tests to be kept at the permanent storage facility or at the nearest local office from which the permanent storage facility is administered.

(2) Alternative 2 is as follows:

(a) The storage container shall be emptied, cleaned, and tested for leaks. The walls and floor of the storage container shall be tested to assure that welds and thickness of steel plates are sound and adequate to contain the fertilizers. A record of the inspection, test results, and of any repairs made shall be submitted to the department and maintained by the owner or operator.

(b) The interior floor and twelve inches up the wall of the storage container shall be coated with a liner to inhibit corrosion. A record of this procedure shall be submitted to the department and maintained by the owner or operator.

(c) A test for leaks and liner deterioration or metal corrosion shall be conducted every five years thereafter. A record of the test findings and of indicated repairs and maintenance shall be maintained by the owner or operator.

(3) Alternative 3 is as follows:

(a) Monitoring devices shall be installed in angled borings under each storage container. These monitoring devices shall constitute a leak detection system for each storage container in advance of the point at which any leak would reach groundwater.

(b) The number, length, and depth of each boring shall be determined on the basis of site characteristics. The array of monitoring devices under each storage container shall constitute the best practical early warning detection system for storage container leakage.

(c) Each monitoring plan under alternative 3 shall be implemented only upon review and written approval of the department and shall include inspection/monitoring schedules.

[Statutory Authority: RCW 15.54.800. WSR 00-23-075, § 16-201-031, filed 11/17/00, effective 12/18/00.]