WAC 173-180-320 Secondary containment requirements for storage tanks. (1) Storage tanks must be located within secondary containment areas. Secondary containment systems must be:

(a) Designed, constructed, maintained, and operated to prevent discharged oil from entering waters of the state at any time during use of the tank system;

(b) Capable of containing oil throughout the entire containment system, including walls and floor;

(c) Constructed to prevent any discharge from a primary containment system (e.g., tank) from escaping the secondary containment system before cleanup occurs;

(d) Constructed with materials that are compatible with stored material to be placed in the tank system;

(e) Soil may be used for the secondary containment system, provided that any spill onto the soil will be sufficiently contained, readily recoverable, and will be managed in accordance with chapter 173-303 WAC;

(f) Constructed with sufficient strength and thickness to prevent failure owing to pressure gradients (including static head and external hydrological forces), physical contact with the fluid stored in the storage tank, climatic conditions, and the stresses of daily operations (including stresses from nearby vehicular traffic);

(g) Placed on a base or foundation capable of providing support to the secondary containment system, resistance to pressure gradients above and below the system, and capable of preventing failure due to settlement, compression, or uplift;

(h) Sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills, or precipitation. Spilled or leaked oil and accumulated precipitation must be removed from the secondary containment system in a manner which will provide the best achievable protection of public health and the environment; and

(i) Visually inspected monthly to confirm secondary containment integrity. Items requiring attention as determined by the visual inspection must be documented.

(2) The secondary containment system must be maintained to prevent a breach of the dike by controlling burrowing animals and weeds.

(3) The secondary containment system must be maintained free of debris and other materials which may interfere with the effectiveness of the system, including excessive accumulated precipitation.

(4) The facility must maintain at least 100 percent of the entire capacity of the largest storage tank within the secondary containment area at all times.

(5) All secondary containment pumps, siphons, and valves must be properly maintained and kept in good working order.

(6) Drainage of water accumulations from secondary containment areas that discharge directly to the land or waters of the state must be controlled by locally operated, positive shutoff valves or other positive means to prevent a discharge. Valves must be kept closed except when the discharge from the containment system is in compliance with chapter 90.48 RCW. Valves must be locked closed when the facility is unattended. Necessary measures must be taken to ensure secondary containment valves are protected from inadvertent opening or vandalism. There must be some means of readily determining valve status by facility personnel such as a rising stem valve or position indicator.

(7) The owner or operator must inspect or monitor accumulated water before discharging from secondary containment to ensure that no oil will be discharged to the waters of the state. All water discharges must comply with state water quality regulations as described in chapter 90.48 RCW.

(8) Ecology may require oil containers less than 10,000 gallons (238 barrels) capacity to have secondary containment when the container is located less than 600 feet from navigable waters of the state or a stormwater or surface drains which may impact navigable waters of the state.

(9) A secondary containment system constructed after May 1994 must be constructed as follows:

(a) Secondary containment systems must be capable of containing 100 percent of the capacity of the largest storage tank within the secondary containment area including sufficient freeboard for stormwater;

(b) Secondary containment systems must be designed to withstand seismic forces;

(c) Drains and other penetrations through secondary containment areas must be minimized consistent with facility operational requirements; and

(d) Secondary containment systems must be designed and constructed in accordance with sound engineering practice and in conformance with the provisions of this section.

(10) A secondary containment system must be installed in accordance with:

(a) The 1993 version of the National Fire Protection Association (NFPA), Flammable and Combustible Code, No. 30, section 2-3.4.3, if constructed after May 1994 and before the effective date of this rule; or

(b) The 2021 version of the NFPA, Flammable and Combustible Code, No. 30, section 22.11.2, Impounding Around Tanks by Open Diking, if constructed after the effective date of this rule.

[Statutory Authority: RCW 88.46.160, 88.46.165, 90.56.005, 90.56.050, 90.56.200, 90.56.220, 90.56.230, and chapter 90.56 RCW. WSR 23-12-077 (Order 21-03), § 173-180-320, filed 6/6/23, effective 7/7/23. Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. WSR 06-20-034 (Order 06-02), § 173-180-320, filed 9/25/06, effective 10/26/06.]