

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR QUALITY DIVISION

PART 6. EMISSION LIMITATIONS AND PROHIBITIONS— EXISTING SOURCES OF VOLATILE ORGANIC COMPOUND EMISSIONS

R 336.1623 Storage of petroleum liquids having a true vapor pressure of more than 1.0 psia, but less than 11.0 psia, in existing external floating roof stationary vessels of more than 40,000-gallon capacity.

Rule 623. (1) A person shall not store any petroleum liquid having a true vapor pressure of more than 1.0 psia, but less than 11 psia, at actual storage conditions in any existing external floating roof stationary vessel of more than 40,000-gallon capacity, unless the provisions of subrules (2) to (11) of this rule are met or unless an equivalent control method, as approved by the department, is implemented.

(2) Any stationary vessel subject to the provisions of this rule shall be equipped with a floating roof to which a continuous rim-mounted secondary seal has been attached.

(3) The secondary seal, as required by subrule (2) of this rule, shall meet all of the following requirements:

(a) There shall be no visible holes, tears, or other nonfunctional openings in the seal or seal fabric.

(b) The seal shall be intact and uniformly in place around the circumference of the floating roof between the floating roof and the vessel wall.

(c) For vessels equipped with vapor-mounted primary seals, the accumulated area of gaps exceeding 1/8 of an inch in width between the secondary seal and the vessel wall shall not exceed 1.0 square inch per foot of tank diameter.

(4) All openings in the external floating roof in any stationary vessel subject to the provisions of this rule, except for automatic bleeder vents, rim space vents, and leg sleeves, shall be equipped with both of the following:

(a) Covers, seals, or lids that shall remain in the closed position, except when the openings are in actual use.

(b) Projections into the vessel that remain below the liquid surface at all times.

(5) All automatic bleeder vents in any stationary vessel subject to the provisions of this rule shall be closed at all times, except when the floating roof is floated off or landed on the roof leg supports.

(6) All rim vents in any stationary vessel subject to the provisions of this rule shall be set to open only when the floating roof is being floated off the leg supports or at the manufacturer's recommended setting.

(7) All emergency floating roof drains in any stationary vessel subject to the provisions of this rule shall be provided with slotted membrane fabric covers, or equivalent covers, that cover not less than 90% of the area of the opening.

(8)) A person who is responsible for the operation of a stationary vessel subject to the provisions of this rule shall comply with all of the following requirements:

(a) Perform a semiannual routine inspection to ensure compliance with all provisions of subrules (2) to (7) of this rule, with the exception of subrule (3)(c) of this rule.

(b) For vessels equipped with a vapor-mounted primary seal, perform an annual inspection to document compliance with the provisions of subrule (3)(c) of this rule.

(c) Maintain a record of the results of the inspections performed as required by this subrule. This record shall be made available to any representative of the department and shall be kept for a minimum of 2 years.

(d) The provisions of this subrule may, upon written notice, be modified by the department if considered necessary to accomplish the purpose of this rule.

(9) The provisions of subrules (2) and (3) of this rule do not apply to any of the following external floating roof stationary vessels:

(a) Vessels that are used to store waxy, heavy-pour crude oil.

(b) Vessels of less than 420,000-gallon capacity that are used to store produced crude oil and condensate before lease custody transfer.

(c) Vessels of welded construction which are equipped with a primary seal consisting of a metallic-type shoe seal, a liquid-mounted foam seal, or a liquid-mounted, liquid-filled-type seal and which contain a petroleum liquid that has a true vapor pressure of less than 4.0 psia.

(d) Vessels that are used to store jet naphtha (jet b or jp-4).

(10) A person who is responsible for the operation of a stationary vessel that meets 1 of the exemption provisions of subrule (9) of this rule shall maintain records that include all of the following information:

(a) The type of vessel and, for a stationary vessel that meets the exemption provisions of subrule (9)(c) of this rule, the type of primary seal.

(b) The capacity of the stationary vessel.

(c) The contents of the stationary vessel.

(d) For a stationary vessel that meets the exemption provisions of subrule (9)(c) of this rule, the true vapor pressure of the petroleum liquid in the stationary vessel.

(11) The provisions of subrules (2) to (8) of this rule do not apply to any existing floating roof stationary vessel that contains a petroleum liquid which has a true vapor pressure of less than 1.5 psia. A person who is responsible for such stationary vessel shall maintain a record that includes all of the following information:

(a) Average monthly stored liquid temperature.

(b) Type of petroleum liquid.

(c) Reid vapor pressure of the petroleum liquid.

The record that is required by this subrule shall be made available to any representative of the department and shall be kept for a minimum of 2 years.

History: 1979 ACS 7, Eff. Aug. 22, 1981; 1993 MR 4, Eff. Apr. 28, 1993; 2002 MR 5, Eff. Mar. 19, 2002