

Chapter 129 -- Standards for Sources

SOURCES OF VOCs

§ 129.55. Petroleum refineries--specific sources.

(a) Wastewater separators. No person may permit the use of a compartment of a single or multiple compartment volatile organic compound wastewater separator which compartment receives effluent water containing 200 gallons a day or more of any volatile organic compound from equipment processing, refining, treating, storing, or handling volatile organic compounds unless the compartment is equipped with one of the following vapor loss control devices--properly installed, in good working order, and in operation--as follows:

(1) A container having all openings sealed and totally enclosing the liquid contents. Gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

(2) A container equipped with a floating roof--consisting of a pontoon-type roof, double-deck-type roof, or internal floating cover--which will rest on the surface of the contents and be equipped with closure seal or seals to close the space between the roof edge and container wall. Gauging and sampling devices shall be gas tight except when gauging or sampling is taking place.

(b) Pumps and compressors. All pumps and compressors handling volatile organic compounds with a vapor pressure of greater than 1.5 psi (10.3 kilopascals) at actual conditions shall have mechanical seals. For the purpose of determining vapor pressure, a temperature no greater than 100°F (37.8°C) shall be used.

(c) Vacuum-producing systems. Vacuum producing systems shall conform with the following.

(1) The owner or operator of any vacuum-producing system at a petroleum refinery may not permit the emission of any volatile organic compounds from the condensers, hot wells, or accumulators of the system.

(2) The emission limit under paragraph (1) of this subsection shall be achieved by one of the following:

(i) piping the vapors to a firebox or incinerator.

(ii) compressing the vapors and adding them to the refinery fuel gas.

(iii) any method approved by the Department which recovers no less than 90%

by weight of uncontrolled volatile organic compounds that would otherwise be emitted to the atmosphere.

(d) Process unit turnarounds. Purging of volatile organic compounds during depressurization of reactors, fractionating columns, pipes, or vessels during unit shut-down, repair, inspection, or startup shall be performed in such a manner as to direct the volatile organic vapors to a fuel gas system, flare, or vapor recovery system until the internal pressure in such equipment reaches 19.7 psia (136 kilopascals).