

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 71 - CRUDE OIL AND REACTIVE ORGANIC COMPOUND LIQUIDS

(Adopted 6/20/78; Revised 3/27/79, 7/10/79, 10/4/88, 9/26/89, 9/11/90, 6/8/93, 12/13/94, X/X/21)

A. Applicability

The provisions of this rule shall apply to the production, gathering, separation and processing of crude oil and natural gas, and the storage and transfer of petroleum material and reactive organic compound (ROC) liquids.

B. Definitions

The following definitions apply to Rules 71.1, 71.2, 71.3, 71.4, and 71.5.

1. "Appropriate analyzer": A hydrocarbon analyzer that meets the requirements of EPA Reference Method 21 and is calibrated with methane.
2. "Automatic Bleeder Vent": A floating roof vent that automatically vents air only during initial filling operations and during subsequent landings of the roof.
3. "Background": A reading expressed as methane on a portable instrument that is taken at least three meters upwind from any components to be inspected and that is not influenced by any specific emission point.
43. "Bottom-Loaded": An ROC liquid delivery vessel shall be considered to be bottom-loaded when the liquid transfer and vapor return lines have separate, independent, and dedicated attachments on the truck or tank, when the inlet is flush with the container bottom, and when the truck and trailer hatches remain closed during liquid transfer.
54. "Containment berm": A structure used solely as secondary containment for emergency spills from a tank or other device.
65. "Crude oil": Any naturally occurring, unrefined petroleum liquid.
76. "Custody transfer": The transfer of produced crude oil and/or condensate, after separation and/or treatment in production operations, from storage tanks or automatic transfer facilities to pipelines or any other form of transportation.
87. "Drilling operations pit": A pit used to receive rock cuttings, waste drilling fluids, and water run off from around a drilling rig (DOP Reserve Pit) or a pit used to accept well production for up to 48 hours until the well is brought on stream (DOP Temporary Pit).

98. "Emergency Pit": A pit used less than thirty (30) days per year to contain emergency releases of petroleum material. An emergency pit is dry when not in use.
109. "First stage production sump": A sump that receives a stream of petroleum material directly from wells or a field gathering system.
1140. "Flash tank": A flash tank or separator is used in a gas dehydration unit to desorb hydrocarbon gases from the rich glycol stream by changing the pressure and temperature. The hydrocarbon gases separated by the flash tank are mostly methane, ethane, and propane.
1244. "Gasoline": Any petroleum distillate having a Reid vapor pressure of 4.0 pounds per square inch or greater, which is sold or intended for sale for use in motor vehicles or engines and is commonly or commercially known or sold as gasoline.
1342. "Glycol dehydrator": A glycol dehydrator consists of equipment which uses a type of glycol to dehydrate natural gas. The glycol contacts and absorbs the water vapor in the gas and becomes "rich" glycol. This glycol is then regenerated by distilling the water. The distilled or "lean" glycol is then recycled back to the absorber.
1413. "Glycol regenerator vent": The glycol regenerator vent exhausts the water vapor, aromatic hydrocarbons and other reactive organic compounds from the rich glycol distillation unit. This unit is called a regenerator because it regenerates the rich glycol into lean glycol so that the glycol can be used in the absorber to dehydrate the gas.
1544. "Leak":
- a. On or before December 31, 2022, a leak exists when a reading in excess of 10,000 ppm, as methane, above background, is obtained using an appropriate portable hydrocarbon analyzer and when sampling is performed according to the procedures specified in EPA Method 21 - Appendix A 40 CFR ~~section 3.2.1.~~, or
 - b. On or before December 31, 2022, a leak exists when the dripping of liquid containing reactive organic compounds at a rate of more than three (3) drops per minute is observed, or-
 - c. ~~On or after January 1, 2023, any major gas leak, minor gas leak, major liquid leak, or minor liquid leak.~~

A "leak" is not a gaseous emission from pressure relief devices on tanks or ROC delivery vessels when the process pressure exceeds the limit specified for the device. Any equipment with a minor gas leak identified by the source that is not

regulated by Rule 74.10 shall be tagged and repaired within 10 days. If the repair is not completed within the 10-day period a breakdown notification shall be submitted to the District.

1645. "Lean glycol": Lean glycol is glycol that has been regenerated in a distillation unit and has a low moisture content.
1746. "Loading Facility": Any aggregation or combination of organic liquid loading equipment which is located so that all the organic liquid loading outlets for such aggregation or combination of loading equipment can be encompassed within any circle of 300 feet in diameter.
18. "Major Gas Leak": The detection of total gaseous hydrocarbons equal to or in excess of 10,000 ppm as methane above background measured using EPA Method 21. A major gas leak from a pressure relief valve means the detection of total gaseous organic compounds equal to or in excess of 10,000 ppmv, as methane above background measured using EPA Method 21, unless the process pressure exceeds the limit setting specified for the device. If the process pressure exceeds the limit setting of the pressure relief valve, then this emission to the atmosphere is considered to be a "pressure release."
19. "Major Liquid Leak": A visible mist or a continuous flow of liquid that is not seal oil or other similar lubricant. Sampling of process fluids into containers shall not be considered a leak.
20. "Minor Gas Leak": The detection of total gaseous hydrocarbons equal to or in excess of 1,000 ppm as methane above background measured using EPA Method 21.
21. "Minor Liquid Leak": Any liquid leak, except seal oil or other similar lubricant, that is not a major leak and drips liquid at a rate of more than three drops per minute. Sampling of process fluids into containers shall not be considered a leak.
2247. "Modified Reid vapor pressure": The Reid vapor pressure measured at tank storage temperatures using Test Method for Vapor Pressure for Petroleum Products, ASTM D 323-82.
2348. "Natural gas": Any produced or marketed gas which contains the following: methane, ethane, propane, butane, or other petroleum-related gases.
2419. "Petroleum material": Liquids resulting from petroleum production operations that contain more than 5 milligrams per liter of reactive organic compound (ROC) material. This definition does not include refined petroleum liquids such as lube oils or gasoline.

2520. "Petroleum production permit unit": Any aggregation of equipment used exclusively for the production, gathering and separation of crude oil and natural gas which is included on a single Permit to Operate issued by the Air Pollution Control Officer or is defined as a single stationary source.
2621. "Pit": A receptacle, formed primarily of earthen materials, although it may be lined with artificial materials, used to receive intermittent flows of petroleum material or crude oil. Neither a sample box of less than two (2) square feet in horizontal surface area nor a containment berm shall be considered a pit.
2722. "Pond": A receptacle, formed primarily of earthen materials, although it may be lined with artificial materials, used to contain produced water from petroleum production processes for disposal or re-use. Ponds are not used for oil/water separation or evaporation.
2823. "Produced water": Water associated with the production, gathering, separation and processing of crude oil.
2924. "Reactive organic compound (ROC) liquid": Any reactive organic compound as defined in Rule 2 of these Rules.
3025. "Rich glycol": Rich glycol is glycol which has absorbed water in the absorber or contactor of a dehydration unit prior to being distilled in the regenerator.
3126. "ROC Liquid Delivery Vessel": A truck, trailer or railroad car with a storage container carrying ROC liquid or ROC liquid vapors used to transport ROC liquids including petroleum products. A vacuum truck that transfers less than 7,000 gallons of ROC liquid per load using a vacuum created by a pump permanently installed on the truck tractor or trailer shall not be considered to be an ROC delivery vessel.
3227. "Second and third stage sump": A sump that receives a stream from one or more previous stage separation processes.
3328. "Separator": A device, unit, or equipment used to separate a gas, liquid, or solid stream from a multicomponent stream.
3429. "Smokeless flare": A smokeless flare is one which does not have any visible smoke.
3530. "Storage tank": Any storage container, reservoir or tank used for the storage of organic liquids
3631. "Submerged fill pipe": Any fill pipe or discharge nozzle which meets any of the following conditions:

- a. The discharge opening is entirely submerged when the liquid level is six (6) inches above the bottom of the container.
- b. When applied to a container which is loaded from the side, the discharge opening is entirely submerged when the liquid level is 18 inches above the bottom of the container.
- c. When applied to a container which is loaded from the bottom, the discharge opening is entirely submerged when the liquid level is six (6) inches above the bottom of the container.

3732. "Sump": A receptacle, formed primarily of earthen materials, although it may be lined with artificial materials, in continuous use for separating oil, water, sand or other material in petroleum production operations.

3833. "Tank": A container, constructed primarily of nonearthen materials, used for the purpose of storing or holding petroleum material, or for the purpose of separating water and/or gas from petroleum material.

3934. "Tank battery": Any tank, or any aggregation of tanks. An aggregation of tanks will be considered a tank battery only if the tanks are located so that no one tank is more than 150 feet from any other tank, edge to edge.

4035. "Vapor loss control efficiency": A comparison of controlled emissions to those emissions which would occur from a geometrically similar fixed or cone roof tank in the same product service without a vapor control system. Base line emissions shall be calculated by using the criteria outlined in EPA document AP-42.

4136. "Vapor recovery system": Any reactive organic compound vapor control system which is designed to prevent the release or venting of reactive organic compound gases to the atmosphere under normal operating conditions.

4237. "Wash tank": Any tank used for the purpose of the primary separation of crude oil from petroleum material.

4338. "Wastewater separator": Any mechanical device used to separate crude oil and other material from produced water in petroleum production operations.

4439. "Well cellar": A lined or unlined area around one or more oil wells, allowing access to the wellhead components for servicing and/or installation of blowout prevention equipment.