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REGULATION V

CONTROL OF AIR POLLUTION FROM VOLATILE ORGANIC COMPOUNDS AND CARBON MONOXIDE

Rule 501. Regulation V shall apply only in the following counties: Bexar, Dallas, El Paso, Galveston, Harris, Nueces, and Travis. Other counties of the State will be added by the Texas Air Control Board if excessive levels of oxidants are indicated. Counties listed in Rule 501 may be deleted by the Texas Air Control Board if adequate monitoring data indicates that oxidant levels throughout the county are acceptable.

Rule 502. Storage of Volatile Organic Compounds.

502.1 No person shall place, store, or hold in any stationary tank, reservoir, or other container of more than 50,000 gallons capacity any volatile organic compounds unless such tank, reservoir, or other container is a pressure tank capable of maintaining working pressures sufficient at all times to prevent vapor or gas loss to the atmosphere or is designed and equipped with one of the following vapor loss control devices:

502.11 A floating roof, consisting of a pontoon type, double deck type roof, or internal floating cover, which will rest on the surface of the liquid contents and be equipped with a closure seal or seals to close the space between the roof edge and tank wall. This control equipment shall not be permitted if the volatile organic compounds have a vapor pressure of 11.0 pounds per square inch absolute or greater under actual storage conditions. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

502.12 A vapor recovery system, consisting of a vapor gathering system capable of collecting the volatile organic compound vapors and gases discharged and a vapor disposal system capable of processing such volatile organic vapors and gases so as to prevent their emission to the atmosphere and with all tank gauging and sampling devices gas-tight except when gauging or sampling is taking place.

502.13 Other equipment or means as may be approved by the Executive Secretary of the Texas Air Control Board.

502.2 No person shall place, store, or hold in any new stationary storage vessel of more than 1,000 gallons capacity, any volatile organic compound unless such vessel is equipped with a permanent submerged fill pipe or is a pressure tank as described in 502.1 or is fitted with a vapor recovery system as described in 502.12.

502.3 Crude oil and condensate storage containers are exempt from Rule 502.

Rule 503. Volatile Organic Compounds Loading Facilities.

503.1 No person shall permit the loading of volatile organic compounds from any loading facility having 20,000 gallons, or more throughput per day, averaged over any 30-day period, unless such facility is equipped with a vapor collection and disposal system, or its equivalent approved by the Executive Secretary of the Texas Air Control Board, properly installed, in good working order and in operation.

When loading is effected through the hatches of a tank truck or trailer or railroad tank car with a loading arm equipped with a vapor collecting adaptor, pneumatic, hydraulic, or other mechanical means shall be provided to force a vapor-tight seal between the adaptor and the hatch. A means shall be provided to prevent liquid drainage from the loading device when it is removed from the hatch of any tank truck, trailer, or railroad tank cars, or to accomplish complete drainage before such removal. When loading is effected through means other than hatches, all loading and vapor lines shall be equipped with fittings which make vapor-tight connections and which close automatically when disconnected.

503.2 All loading facilities for ships, barges and crude oil are exempt from Rule 503.

Rule 504. Volatile Organic Compound - Water Separation.

504.1 No person shall use any compartment of any single or multiple compartment volatile organic compound water separator which compartment receives 200 gallons or more of volatile organic compounds a day from any equipment processing, refining, treating, storing, or handling volatile organic compounds unless such compartment is equipped with one of the following vapor loss control devices, properly installed, in good working order, and in operation:

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

504.12 A container equipped with a floating roof, or internal floating cover, which will rest on the surface of the contents and be equipped with a closure seal or seals to close the space between the roof edge and tank wall. All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

504.13 A container equipped with a vapor recovery system, consisting of a vapor gathering system capable of collecting the volatile organic compound vapors and gases discharged and a vapor disposal system capable of processing such volatile organic compound vapors and gases so as to prevent their emission to the atmosphere and with all tank gauging and sampling devices gas-tight except when gauging or sampling is taking place.

504.14 Other equipment or means as may be approved by the Executive Secretary of the Texas Air Control Board.

504.2 Volatile organic compound-water separators used exclusively in conjunction with the production of crude oil are exempt from Rule 504.

Rule 505. Waste Gas Disposal.

505.1 No person shall emit a waste gas stream from any ethylene producing plant into the atmosphere under normal operating conditions unless the waste gas stream is burned properly at a temperature equal to or greater than 1300^{o}F in a smokeless flare or a direct-flame incinerator.

505.2 No person shall emit a waste gas stream from any catalyst regeneration of a petroleum cracking system, basic oxygen furnace, or fluid-coking unit into the atmosphere unless the waste gas stream is properly burned at a temperature equal to or greater than 1300^{o}F in a direct-flame incinerator or boiler.

505.3 No person shall emit a waste gas stream from any iron cupola into the atmosphere unless the waste gas stream is properly

burned at a temperature equal to or greater than 1300°F in an afterburner having a retention time of at least one fourth (¼) of a second, and having a steady flame that is not affected by the cupola charge and relights automatically if extinguished.

505.4 Waste gas streams from blast furnaces shall be burned in a smokeless flare or be used in one or more of the following ways:

505.41 To preheat the blast air before injection into the furnace through the tuyeres;

505.42 For steam generation;

505.43 For the heating of soaking pits;

505.44 For the underfiring of coke ovens;

505.45 For other miscellaneous heating uses.

505.5 Other methods of reducing emissions of volatile organic compounds and carbon monoxide from waste gas streams may be approved by the Executive Secretary of the Texas Air Control Board.

Rule 506. The Executive Secretary, after consultation with appropriate local agencies, may exempt specific volatile organic compounds from the application of this Regulation if it can be demonstrated that the emissions from the compound are relatively non-reactive in the formation of photochemical oxidants.

Rule 507. Persons affected by this regulation shall be in compliance with the provisions contained herein no later than December 31, 1973. Not later than 6 months after the effective date of this regulation, any person affected by this regulation shall submit to the Texas Air Control Board a written report on his compliance status, including but not limited to, the minimum time required to design, procure, install and test abatement equipment or procedures. Progress reports shall be submitted to the Board every four months commencing in September of 1972 until compliance is achieved.

Date Adopted: January 26, 1972

Date Filed with Secretary of State: February 4, 1972

Date Effective: March 5, 1972