

WEST VIRGINIA
SECRETARY OF STATE
KEN HECHLER
ADMINISTRATIVE LAW DIVISION

Form #1

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1990 APR -6 AM 9 30
OFFICE OF WEST VIRGINIA
SECRETARY OF STATE

NOTICE OF PUBLIC HEARING ON A PROPOSED RULE

AGENCY: WV Air Pollution Control Commission TITLE NUMBER: 45

RULE TYPE: Legislature; CITE AUTHORITY W.V. Code §16-20-5

AMENDMENT TO AN EXISTING RULE: YES NO

IF YES, SERIES NUMBER OF RULE BEING AMENDED: 24

TITLE OF RULE BEING AMENDED: To Prevent and Control Air Pollution
From the Emission of Volatile Organic Compounds From Petroleum Refinery
Sources

IF NO, SERIES NUMBER OF NEW RULE BEING PROPOSED: _____

TITLE OF RULE BEING PROPOSED: _____

DATE OF PUBLIC HEARING: June 5, 1990 TIME: 9:15 am

LOCATION OF PUBLIC HEARING: Office Building Conference Room
WV Air Pollution Control Commission
1558 Washington Street, East
Charleston, WV 25311

COMMENTS LIMITED TO: ORAL , WRITTEN , BOTH

COMMENTS MAY ALSO BE MAILED TO THE FOLLOWING ADDRESS: Same

The Department requests that persons wishing to make comments at the hearing make an effort to submit written comments in order to facilitate the review of these comments.

The issues to be heard shall be limited to the proposed rule.

ATTACH A **BRIEF** SUMMARY OF YOUR PROPOSAL


Director

FILED

1979 APR -6 AM 9:30

**[PROPOSED]
45CSR24**

OFFICE OF POST-YEAR-END
SECRETARIAT OF STATE

SUMMARY

45CSR24 was promulgated by the commission on May 8, 1979 and became effective on October 27, 1979. The regulation provides a mechanism to control emissions of volatile organic compounds from petroleum refinery sources. The regulation is being revised to address EPA's identified deficiencies and the requirement to provide a greater degree of equity and national consistency among all states and localities that received post-1987 ozone SIP calls. The areas affected were expanded to include additional counties that were identified as nonattainment of the ozone standards after 1979.

[PROPOSED]
45CSR24

FILED
1990 APR -6 AM 9:30
OFFICE OF WEST VIRGINIA
REGULATORY STATE

TITLE 45
LEGISLATIVE RULES
WEST VIRGINIA AIR POLLUTION CONTROL COMMISSION

SERIES 24
REGULATIONS TO PREVENT AND CONTROL
AIR POLLUTION FROM THE EMISSION OF VOLATILE ORGANIC COMPOUNDS
FROM PETROLEUM REFINERY SOURCES

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FILED

1930 APR -6 AM 9:30

[PROPOSED]
45CSR24

OFFICE OF THE ATTORNEY GENERAL
DEPARTMENT OF STATE

TITLE 45
LEGISLATIVE RULES
WEST VIRGINIA AIR POLLUTION CONTROL COMMISSION

SERIES 24
REGULATIONS TO PREVENT AND CONTROL
AIR POLLUTION FROM THE EMISSION OF VOLATILE ORGANIC COMPOUNDS
FROM PETROLEUM REFINERY SOURCES

§45-24-1. General.

1.1. Scope. — It is the intent of the commission that all persons engaged in the operation of vacuum producing systems, wastewater separators, and process unit turnarounds at petroleum refining sources control the emission of volatile organic compounds through the application of reasonably available control technology.

1.2. Authority. — W.V. Code §16-20-5.

1.3. Filing Date. —

1.4. Effective Date. —

§45-24-2. Area Affected.

This regulation applies to sources located in ~~West Virginia Air Quality Control Region IV (Putnam County, Kanawha County, and Valley Magisterial District of Fayette County), Wood County, Cabell County, Wayne County, and Greenbrier County.~~

§45-24-3. Definitions.

3.1. "Accumulator" shall mean the reservoir of a condensing unit receiving the condensate from the condenser.

3.2. "Air Pollution", 'statutory air pollution' shall have has the meaning ascribed to it in ~~chapter sixteen, Article twenty~~ article twenty, chapter sixteen, of the ~~Code of West Virginia~~ W.V. Code, as amended.

3.3. "Approved" shall mean approved by the designated official of the West Virginia Air Pollution Control Commission.

3.4. "Commission" shall mean the West Virginia Air Pollution Control Commission.

3.5. "Condensate" shall mean hydrocarbon liquid separated from natural gas which condenses due to change in temperature and/or pressure and remains liquid at standard conditions.

3.6. "Condenser" shall mean any heat transfer device used to liquefy vapors by removing their latent heats of vaporization. Such devices include, but are not limited to, shell and tube, coil, surface, or contact condensers.

3.7. "Construction" shall mean commencement of onsite fabrication, erection, or installation of an emission source, air pollution control equipment, or a facility.

3.8. "Control Device" shall mean equipment (incinerator, adsorber, or the like) used to destroy or remove air pollutant(s) prior to discharge to the ambient air.

3.9. "Day" shall mean a 24-hour period beginning at midnight.

3.10. "Director" shall mean the director of the West Virginia Air Pollution Control Commission.

3.11. "Emission" shall mean the release or discharge, whether directly or indirectly, of any air pollutant into the ambient air from any source.

3.12. "Facility" shall mean any building, structure, installation, or combination thereof which contains a stationary source of air pollutants.

3.13. "Firebox" shall mean the chamber or compartment of a boiler or furnace in which materials are burned but does not mean the combustion chamber of an incinerator.

3.14. "Forebays" shall mean the primary sections of a wastewater separator.

3.15. "Hot Well" ~~Shall~~ means the reservoir of a condensing unit receiving the warm condensate from the condenser.

~~3.16. "Hydrocarbon." -- Shall mean any organic compound of carbon and hydrogen only.~~

~~3.17. "Organic Material." -- Shall mean a chemical compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates and ammonium carbonate.~~

~~3.18-~~3.16. "Owner or Operator" ~~Shall~~ means any person who owns, leases, controls, operates or supervises a facility, an emission source, or air pollution control equipment.

~~3.19-~~3.17. "Person" ~~Shall~~ means any and all persons, natural or artificial, including any municipal, public or private corporation organized or existing under the laws of this or any other state or country, and any firm, partnership, or association of whatever nature.

~~3.20-~~3.18. "Petroleum Liquids" ~~Shall~~ means crude oil, condensate, and any finished or intermediate products manufactured or extracted in a petroleum refinery.

~~3.21-~~3.19. "Petroleum Refinery" ~~Shall~~ means any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through distillation, cracking, extraction, or reforming of unfinished petroleum derivatives.

~~3.22-~~3.20. "Petroleum Refinery Source" ~~Shall~~ means and includes vacuum producing systems, wastewater separators, and processing units at petroleum refineries.

~~3.23-~~3.21. "Reasonably Available Control Technology" (also denoted as RACT) ~~Shall~~ means the lowest emission limit that a particular source is capable of meeting by the application of control technology that is reasonably available considering

technological and economic feasibility. It may require technology that has been applied to similar, but not necessarily identical, source categories.

~~3.24~~-3.22. "Refinery Fuel Gas" shall mean any gas which is generated by a petroleum refinery process unit and which is combusted, including any gaseous mixture of natural gas and fuel gas.

~~3.25~~-3.23. "Standard Conditions" shall mean a temperature of twenty degrees C (20 degrees C) [sixty-eight degrees F (68 degrees F)] and pressure of seven hundred sixty millimeters (760 millimeters) of mercury, twenty-nine point ninety-two inches (29.92 inches) of mercury).

~~3.26~~-3.24. "Turnaround" shall mean the procedure of shutting a refinery unit down after a run to do necessary maintenance and repair work and putting the unit back on stream.

~~3.27~~-3.25. "Vacuum Producing System" shall mean any reciprocating, rotary, or centrifugal blower or compressor, or any jet ejector or device that takes suction from a pressure below atmospheric and discharges against atmospheric pressure.

~~3.28~~-3.26. "Vapor Control System" shall mean a system that prevents release to the atmosphere of volatile organic compounds material emitted during the operation of any transfer, storage, or process equipment.

~~3.29~~-3.27. "Volatile Organic Compound" (also denoted as VOC) ~~shall mean any compound of carbon that has a vapor pressure greater than point one millimeters (0.1 millimeter) of mercury at standard conditions excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides, or carbonates, and ammonium carbonate.~~ means any organic compound which participates in atmospheric photochemical reactions. This includes any organic compound other than the following compounds: methane, ethane, methyl chloroform (1,1,1-trichloroethane), CFC-113 (trichlorotrifluoroethane), methylene chloride, CFC-11 (trichlorofluoromethane), CFC-12 (dichlorodifluoromethane), CFC-22

(chlorodifluoromethane), FC-23 (trifluoromethane), CFC-114 (dichlorotetrafluoroethane), CFC-115 (chloropentafluoroethane). These compounds have been determined to have negligible photochemical reactivity. For purposes of determining compliance with emission limits, VOC will be measured by the approved test methods. Where such a method also inadvertently measures compounds with negligible photochemical reactivity, an owner or operator may exclude these negligibly reactive compounds when determining compliance with an emissions standard.

~~3.20-~~3.28. "Wastewater (Oil/Water) Separator" ~~shall~~ means any device or piece of equipment, other than a treatment lagoon, which utilizes the difference in density between oil and water to remove oil and associated chemicals from water, or any device, such as a flocculation tank, clarifier, etc., which removes petroleum derived compounds from waste water.

~~§45-24-4.~~ Control and Prevention of Emissions.

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

(b) The emission limit under paragraph (a) of this ~~Subsection~~ shall be achieved by:

(1) piping the noncondensable vapors to a firebox or incinerator; or,

(2) compressing the vapors and adding them to the refinery fuel gas; ~~or,~~

~~(3) installing an equally effective alternative control system, approved by the commission.~~

4.2. The owner or operator of a petroleum refinery with any wastewater (oil/water) separators shall:

(a) Provide approved covers or seals ~~approved by the director~~ on all separators and forebays; and, ~~equip all openings in covers, separators, and forebays with lids or seals such that the lids or seals are in the closed position at all times except when in actual use; or,~~

(b) ~~Install an equally effective alternative control system approved by the commission.~~ Equip all openings in covers, separators, and forebays with lids or seals such that the lids or seals are in the closed position at all times except when in actual use.

4.3. The owner or operator of a petroleum refinery shall minimize and record VOC emissions during process unit turnarounds by:

(a) Depressurization venting of the process unit or vessel to a vapor control system, flare or firebox; and,

(b) Preventing emissions of volatile organic compounds from a process unit or vessel unless its internal pressure is one hundred thirty-six (136) kilo Pascals (nineteen and seven tenths (19.7) psia) or less; and,

(c) Record keeping of the following items:

(1) every date that each process unit or vessel is shut down; and,

(2) the approximate vessel volatile organic compound concentration when the volatile organic compounds were discharged to the atmosphere; and,

(3) the approximate total quantity of volatile organic compounds emitted to the atmosphere.

~~4.4. (a) Realizing that compliance with the provisions of this Section may, in some cases, be technologically infeasible, the commission may, upon specific application by the owner or operator of a petroleum refinery source, grant exemptions from these provisions. However, the petition must be submitted in writing in a manner approved by the director and must contain:~~

~~(1) --- a detailed description of the proposed alternative operational and/or equipment controls, the magnitude of volatile organic compound emission reduction which will be achieved, and the quantity and composition of volatile organic compounds which will be emitted if the alternative operational and/or equipment controls are instituted; and,~~

~~(2) --- a plan, which will be instituted in addition to the proposed alternative operational and/or equipment controls, to reduce volatile organic compound emissions from other source operations, not required under this regulation, such that aggregate volatile organic compound emissions from the facility will in no case be greater through application of the alternative control than would be permitted through conformance with this Section; and,~~

~~(3) --- a schedule for the installation and/or institution of the alternative operational and/or equipment controls.~~

~~(b) --- From time to time the commission shall review such exemptions to determine if they are still warranted. If the commission revises or terminates an exemption, the owner or operator of the affected petroleum refinery source shall be notified by certified mail. Such revision or terminations shall not become effective for at least ninety (90) days after the receipt of notification by the owner or operator.~~

4.4. If a source becomes subject to any requirement in this regulation because it exceeds an exemption level, the source shall continue to be subject to all applicable requirements, regardless of whether the source falls below the exemption level in the future.

§45-24-5. Registration.

5.1. Within thirty (30) days after the effective date of this regulation all persons owning and/or operating a petroleum refinery source(s) subject to this regulation and not previously registered shall have registered such source(s) with the commission.

The information required for registration shall be determined and provided in the manner specified by the director. Registration forms should be requested from the director by the owner or operator of such source(s).

5.2. The owner or operator of such a petroleum refinery source that is under construction or on which construction is initiated within thirty (30) days after the effective date of this regulation shall register such source(s) within this thirty (30) day period.

§45-24-6. Permits.

After the effective date of this regulation, no person shall construct or modify any petroleum refinery source subject to this regulation without first obtaining a permit for such construction or modification. Applications for permits shall be made upon forms available from the director and shall be filed no less than ninety (90) days prior to the construction or modification. These forms shall include such information as in the judgment of the director will enable him to determine whether such source will be so designed as to operate in conformance with the provisions of this regulation and the ~~Code of West Virginia~~ W.V. Code, and will not cause or contribute to the violation of air quality standards. Within ninety (90) days of the receipt of an application the director shall issue or deny such permit in accordance with the provisions of ~~Chapter sixteen, Article twenty~~ section eleven-b, article twenty, chapter sixteen, of the ~~Code of West Virginia~~ W.V. Code, as amended, and ~~Series 13 of this agency~~ 45CSR13.

§45-24-7. Reports and Testing.

7.1. At such reasonable times as the director may designate, the owner or operator of any petroleum refinery source subject to this regulation may be required to conduct or have conducted approved tests to determine the compliance of such source(s) with the limitations of section 4 of this regulation. The director, or his duly authorized representative, may at his option witness or conduct such tests. Should the

director exercise his option to conduct such tests, the owner or operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the director may require, power for test equipment, and the required safety equipment to comply with generally accepted good safety practices.

7.2. ~~The director, or his duly authorized representative, may conduct such other tests as he may deem necessary to evaluate air pollution emissions other than those noted in Section 4.~~ The owner or operator of a petroleum refinery source shall maintain and make available to the commission any records which are determined by the director to be necessary to document the compliance of such refinery source(s) with the provisions of this regulation. Such records shall be kept for at least two years and include, but not be limited to the items listed in section 4.3. of this regulation.

7.3. The commission may publish, and from time to time revise, detailed test procedures and reporting instructions implementing the provisions of this regulation.

§45-24-8. Compliance Programs and Schedules.

8.1. In the event that a petroleum refinery having a source(s) of volatile organic compounds subject to this regulation and in existence prior to the adoption of this regulation does not meet the limitations of section 4 of this regulation, and acceptable program to fully comply with this regulation shall be developed and offered to the commission by the person responsible for said source. This program shall be submitted upon the request of, and within such time as shall be fixed by the commission. The owner and/or operator of such source shall not be in violation of this regulation so long as the approved or amended program is observed.

8.2. In the event that an owner or operator of a petroleum refinery having such source(s) of volatile organic compounds fails to submit a program or an acceptable program and schedule, the commission shall, by order, determine the compliance program and schedule.

§45-24-9. Variance.

If the provisions of section 4 of this regulation cannot be satisfied due to unavoidable malfunction of equipment, the director may permit the owner or operator of a petroleum refinery source subject to this regulation to continue to operate said source for periods not to exceed ten (10) days upon specific application to the director. Such application shall be made within twenty-four (24) hours of the equipment malfunction. In cases of major equipment failure, additional time periods may be granted by the commission provided a corrective program has been submitted by the owner or operator and approved by the commission.

§45-24-10. Inconsistency Between Regulations.

In the event of any inconsistency between this regulation and any other regulation of the commission, the resolution of such inconsistency shall be resolved by the determination of the director and such determination shall be based upon the application of the more stringent provision, term, condition, method, rule or regulation.

West Virginia



DEPARTMENT OF COMMERCE,
LABOR & ENVIRONMENTAL RESOURCES
OFFICE OF THE SECRETARY

FILED

1990 APR -6 AM 9:28

OFFICE OF WEST VIRGINIA

State Capitol

Charleston, West Virginia 25305

304/348-3255

April 2, 1990

Mr. Dale Farley
Secretary
West Virginia Air Pollution
Control Commission
1558 Washington Street, East
Charleston, WV 25311

Dear Mr. Farley:

Pursuant to the workplan that I previously filed with U. S. EPA - Region III to address nonattainment of the National Ambient Air Quality Standard for ozone, I hereby authorize the Air Pollution Control Commission to proceed with hearings and to propose amendments to the following legislative rules:

Regulation 21 (45CSR21) - "To Prevent and Control Air Pollution From the Emission of Volatile Organic Compounds From the Storage of Petroleum Liquids in Fixed Roof Tanks"

Regulation 23 (45CSR23) - "To Prevent and Control Air Pollution From the Emission of Volatile Organic Compounds From Bulk Gasoline Terminals"

Regulation 24 (45CSR24) - "To Prevent and Control Air Pollution From the Emission of Volatile Organic Compounds From Petroleum Refinery Sources".

Sincerely yours,

A handwritten signature in black ink, appearing to read "Leonard A. Harvey".

Leonard A. Harvey
Secretary

LAH/tlm