WEST VIRGINIA

SECRETARY OF STATE

KEN HECHLER

ADMINISTRATIVE LAW DIVISION

Form #1

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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: Legislative ; CITE AUTHORITY Chapter 16, Article 20, Section 5

AMENDMENT TO AN EXISTING RULE: YES____ NO X

IF YES, SERIES NUMBER OF RULE BEING AMENDED: _____

TITLE OF RULE BEING AMENDED: _____

IF NO, SERIES NUMBER OF NEW RULE BEING PROPOSED: Series 27

TITLE OF RULE BEING PROPOSED: "To Prevent and Control the Emissions of Toxic Air Pollutants."

EXTENSION OF PUBLIC COMMENT PERIOD - 2nd PUBLIC HEARING

DATE OF PUBLIC HEARING: July 31, 1989 TIME: 9:15 a.m.

LOCATION OF PUBLIC HEARING: WV Air Pollution Control Commission
1558 Washington Street, East
Charleston, West Virginia 25311

COMMENTS LIMITED TO: ORAL____, WRITTEN____, BOTH X

COMMENTS MAY ALSO BE MAILED TO THE FOLLOWING ADDRESS: Same as Above

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

Regulation 27

Proposed Regulation 27 was re-drafted (amended) in response to substantial comment during the original public comment period. This re-draft was filed June 1, 1989. The Commission has provided an extension to the period for both written and oral comments to provide an opportunity for comments on the amendments to the re-drafted proposed regulation.

ABSTRACT

Regulation 27 (1988) was adopted by the Commission on the _____ day of _____, _____ and became effective _____, _____, _____, and was filed with the Secretary of State _____, _____, _____.

WEST VIRGINIA ADMINISTRATIVE REGULATIONS

Subject: Regulation 27 - "To Prevent and Control the Emissions of Toxic Air Pollutants".

Index.

WEST VIRGINIA ADMINISTRATIVE REGULATIONS
Air Pollution Control Commission

Chapter 16-20
Series 27
(1988)

Subject: Regulation 27 - "To Prevent and Control the Emissions of Toxic Air Pollutants".

Section 1. **General.**

1.1. **Scope.**

The purpose of Regulation 27 is to prevent and control the discharge of toxic air pollutants.

1.2. **Authority.**

This regulation is issued under the authority of the West Virginia Code, Chapter 16, Article 20, Section 5. This regulation relates to West Virginia Code, Chapter 16, Article 20, Sections 1 through 13 inclusive.

1.3. **Filing Date.**

This regulation was promulgated or last amended on the _____ day of _____, _____, was filed with the office of the Secretary of State the _____ day of _____, _____. Further, this regulation was filed pursuant to West Virginia Code, Chapter 29A, Article 2, Section 5 on the _____ day of _____, _____ in the office of the Secretary of State.

1.4. **Effective Date.**

The effective date of this regulation is the _____ day of _____, _____.

1.5. **Type.**

This regulation is a legislative rule as defined in West Virginia Code, Chapter 29A, Article 2.

Section 2. **Definitions.**

2.1. "Air Pollution", 'statutory air pollution' shall have the meaning ascribed to it in Section 2, of Chapter 16, Article 20 of the Code of West Virginia, as amended.

2.2. "Air Pollution Control Device" shall mean any equipment used for the purpose of preventing, reducing, or controlling the emission of toxic air pollutants into the open air.

2.3. "BAT", 'Best Available Technology' shall mean an emissions limitation requiring the application of the maximum degree of reduction and control which the Director, on a case-by-case basis, determines is achievable for each toxic air pollutant which would be emitted from any stack, pipe, air pollution control device, or similar equipment.

2.4. "Chemical Processing Unit" shall mean an assembly of reactors, tanks, distillation columns, heat exchangers, vaporizers, compressors, dryers, decanters, incinerators and other similar equipment used to treat, store, manufacture, incinerate or use toxic air pollutants.

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

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

2.7. "Person" shall mean any and all persons, natural or artificial, including the State of West Virginia or any other state, the United States of America, any municipal, statutory, 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.

2.8. "Stack", for the purpose of this regulation, shall mean, but not be limited to, any stack, vent, duct, control equipment exhaust, or similar apparatus, from which a toxic air pollutant is or may be emitted into the open air.

2.9. "Toxic Air Pollutant" shall mean any of the following chemicals: Acrylonitrile, Allyl chloride, Benzene, 1,3-Butadiene, Carbon tetrachloride, Chloroform, Ethylene chloride, Ethylene oxide, Formaldehyde, Methylene chloride, Propylene oxide, Trichloroethylene, Vinyl chloride, and Vinylidene chloride.

2.10. "Toxic Air Pollutant Service" shall mean for the purpose of this regulation that a piece of equipment such as a valve or flange contains or contacts a process fluid containing a toxic air pollutant.

Section 3. **Chemical Processing Units.**

3.1. No person shall operate a chemical processing unit that discharges or may discharge a toxic air pollutant(s) into the open air that is not equipped and operated with BAT.

3.2. All chemical processing units shall be properly instrumented to alert the operator of process upsets, leaks, and other discharges of toxic air pollutants into the air and to record all such incidents.

Section 4. **Fugitive Emissions of Toxic Air Pollutants Shall be Prevented and Controlled by the Use of the Following Equipment:**

4.1. Pumps.

a. To prevent leakage of toxic air pollutants into the air, each pump shall be totally enclosed or must be equipped with a dual mechanical seal and include a nontoxic barrier fluid system where the barrier fluid is at a pressure that is at all times greater than the pump stuffing box pressure; or is equipped with a barrier fluid degassing reservoir that is connected by a closed-vent system to a BAT control

device; or is equipped with a system that purges the barrier fluid into a process stream with zero emissions into the atmosphere. Each barrier fluid system must be equipped with a sensor that will detect the failure of both the seal system and the barrier fluid system; or

b. Each pump must be of sealless design (canned or diaphragm); or

c. Each pump must utilize a closed vent system with venting to a control device that is BAT to completely contain and control all toxic air pollutant emissions.

4.2. Compressors.

a. Each compressor shall be equipped with a seal system that includes a barrier fluid system that prevents leakage of toxic air pollutants into the air. Each compressor seal system shall operate with the nontoxic barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or is equipped with a nontoxic barrier fluid system that is connected by a closed-vent system to a BAT control device; or equipped with a system that purges the barrier fluid into a process stream with zero emissions into the atmosphere; or

b. Each compressor must utilize a closed vent system with venting to a control device representing BAT to completely contain and control all toxic air pollutant emissions.

4.3. Pressure Relief Valves. All pressure relief valves shall vent to a control device or shall have a rupture disc installed in line ahead of the pressure relief valve. The rupture disc shall be equipped with alarms to alert the operator and record a failure of the rupture disc.

4.4. Valves.

a. Chemical processing units shall employ to the maximum extent possible bellow seal valves, diaphragm valves or other valve designs that do not have

an external actuating mechanism in contact with process fluids containing a toxic air pollutant.

b. If an owner or operator of a chemical process unit can demonstrate to the Director that the valve design prescribed in Sub-section 4.4.a. cannot be employed in all or part of a chemical processing unit the following shall apply:

A. An alternative packing valve design must be employed which is demonstrated to effectively minimize leaking of toxic air pollutants; and

B. A leak detection and repair program meeting the requirements of 40 CFR 60 Subpart VV must be employed.

4.5. Sampling Connections. Each sampling connection system shall be equipped with a closed-purge system or closed vent system. Each closed-purge system or closed-vent system shall return the purged process gas and/or fluid directly to the process line with zero emissions to atmosphere; or collect and recycle the purged process gas and/or fluid with zero emissions to atmosphere; or be designed and operated to capture and transport all the purged process gas and/or fluid to a BAT control device.

4.6. Open-ended Valves or Lines. Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve to seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.

Section 5. **Flanges.**

a. All chemical processing units shall employ flange/gasket designs which minimize emissions of toxic air pollutants. Chemical process units newly contructed or modified after the effective date of this regulation must employ a design which minimizes the number of flanges employed; and

b. A flange leak detection and repair program, approved by the Director on a case-by-case basis, shall be employed in all chemical processing units.

Flange leak detection and repair programs would be required only for those flanges in toxic air pollutant service to satisfy the valve leak detection and repair programs requirements of this regulation.

Section 6. **Tanks.**

6.1. Working and filling losses of toxic air pollutants from tanks shall be controlled by routing such tank emissions to BAT control devices.

Section 7. **Wastewater from Chemical Processing Units.**

7.1. Toxic air pollutants shall be removed from the wastewater of chemical process units by the destruction of at least 99 percent of the toxic air pollutants at the source or through the application of BAT at the wastewater treatment plant or unit to prevent air stripping or evaporation of toxic air pollutants into the air.

Section 8. **Loading and Unloading Barges, Railcars and Truck Tanks.**

8.1. All loading and unloading of barges, railcars, and truck tanks with toxic air pollutants shall employ BAT to prevent the discharge of toxic air pollutants into the open air.

Section 9. **Registration.**

9.1. Ninety (90) days after the effective date of this regulation all persons owning and/or operating an existing chemical processing unit(s) which discharges or may discharge a toxic air pollutant shall register such chemical processing vent with the Commission. The information required for registration shall be determined by the Director, and shall be provided in the manner specified by the Director.

Section 10. **Permits.**

10.1. No person shall construct, modify, or relocate chemical processing unit(s) without first obtaining a permit in accordance with the provisions of Section 2,

Chapter 16, Article 20, Paragraph 11b of the Code of West Virginia, as amended, and all applicable regulations of this agency.

Section 11. **Reports, Records and Testing.**

11.1. At such reasonable times as the Director may designate, the operator of any chemical processing unit may be required to conduct or have conducted tests to determine the compliance with this regulation. Such tests shall be conducted in such manner as the Director may specify and be filed on forms and in a manner specified by the Director. The Director, or his duly authorized representative, may at this option witness or conduct such tests. Should the Director exercise his option to conduct such tests, the 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 such as scaffolding, railings, and ladders to comply with generally accepted good safety practices.

11.2. The Director, or his duly authorized representative, may conduct such other tests as he may deem necessary to evaluate toxic air pollutant emissions.

11.3. Written records shall be maintained that identify all pumps, compressors, pressure valves, relief valves, sampling connections, open-ended valves or lines, and flanges of a chemical processing unit. These records shall record the results of all inspections and the nature, timing, and results of repair efforts.

11.4. The abnormal or accidental release, spill or emission of any toxic air pollutant and any period of failure or inoperability of air pollution control equipment required by this regulation shall be reported within 24-hours of any such occurrence. The owner or operator shall file a written report with the Director of the details of all such incidents within seven (7) days of the occurrence.

Section 12. **Compliance Programs and Schedules.**

12.1. In the event that a chemical processing unit is in existence prior to the adoption of this regulation does not meet the emission limitations, or equipment specifications of this regulation, set forth herein, an acceptable program to fully comply with the regulation shall be developed and offered to the Commission by the owner or operator. Such program shall be submitted upon the request of and within such time as shall be fixed by the Commission. Once this program has been approved by the Commission, the owner and/or operator of such chemical processing unit shall not be in violation of this regulation so long as the approved or amended program is observed. Any compliance programs and schedules that have previously been approved by the Commission shall remain in effect.

Section 13. **Variance.**

13.1. Due to unavoidable malfunction of equipment, emissions exceeding those provided for in this regulation may be permitted by the Director 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 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.

Section 14. **Inconsistency Between Regulations.**

14.1. In the event of any inconsistency between this regulation and any other regulation of the Commission, 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 regulations.

Carl G. Beard, II
Secretary
West Virginia Air Pollution Control Commission