

TITLE 45  
DIVISION OF ENVIRONMENTAL PROTECTION  
OFFICE OF AIR QUALITY

SERIES 11  
PREVENTION OF AIR POLLUTION EMERGENCY EPISODES

Series 11. Prevention of Air Pollution Emergency Episodes

§45-11-1. General.

1.1. It is the intent of the Commission to provide a mechanism to prevent the buildup of air pollutant concentrations during periods of adverse meteorological conditions in which air pollutants may accumulate, thereby preventing the occurrence of an emergency due to the effects of these pollutants on health. To achieve this purpose, three (3) stages of criteria (pollutant concentration levels) have been established and specific emission reduction plans will be developed which will be initiated at each criteria stage to prevent further deterioration of the air supply in any air quality region or substantial portion thereof.

1.2. 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. - March 25, 1990

1.4. Effective Date. - April 25, 1990

1.5. Type.

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

§45-11-2. Definitions.

2.1. "Air Pollution Episode" means the occurrence of adverse meteorological conditions during which air pollutants accumulate, so that the population is exposed to an elevated concentration of airborne contaminants.

2.2. "Commission" means the West Virginia Air Pollution Control Commission.

2.3. "Director" means the director of the West Virginia Air Pollution Control Commission.

2.4. "Particulate Matter" means any material, except uncombined water, that exists in a finely divided form as a liquid or solid.

2.5. "PM10" means particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers.

2.6. "Standard Conditions" means, for the purposes of this regulation, a temperature of 25 degrees C and a pressure of 760 millimeters of mercury column.

2.7. "Region" means a Federal Air Quality Control Region designated by the Administrator of the Environmental Protection Agency.

2.8. "Person" 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.

2.9. "Priority" means the numerical classification assigned to each Air Quality Control Region by the Environmental Protection Agency as follows:

Table A

	POLLUTANT				
					Photo-
	Chemical	Sulfur	Carbon	Nitrogen	Oxidants
Hydro-					

REGION Carbons	Particulate	Oxides	Monoxide	Dioxide	(Ozone)
Region I* III	I	I	III	III	III
Region II* III	I	II	III	III	III
Region III* III	I	III	III	III	III
Region IV III	I	III	III	III	III
Region V III	III	III	III	III	III
Region VI III	I	III	III	III	III
Region VII* III	I	I	III	III	III
Region VIII III	III	III	III	III	III
Region IX III	III	III	III	III	III
Region X III	III	III	III	III	III

\* Interstate Regions

### §45-11-3. Episode Criteria.

3.1. Conditions justifying the proclamation of an Air Pollution Alert or Air Pollution Warning shall exist whenever the Director and/or Commission determines that the accumulation of air pollutants in any place is attaining or has attained levels which could, if such levels are exceeded, lead

to an Air Pollution Emergency. In making this determination the Director and/or Commission shall be guided by the following criteria:

a. Air Pollution Forecast. An internal watch by the West Virginia Air Pollution Control Commission will be actuated by a National Weather Service advisory that an Atmospheric Stagnation Advisory is in effect or by the issuance of any equivalent local forecast stagnant atmospheric conditions by the Commission.

b. Alert. An alert shall be declared by the Director and/or Commission when any one of the following levels is reached at any monitoring site and meteorological conditions are such that pollutant concentrations can be expected to remain at these levels for twelve (12) or more hours or increase unless control actions are taken:

Sulfur Dioxide

800 micrograms per cubic meter (0.3 parts per million), 24-hour average

Pm10

350 micrograms per cubic meter, 24-hour average

Carbon Monoxide

17 milligrams per cubic meter (15 parts per million), 8-hour average

Ozone (O<sub>3</sub>)

400 micrograms per cubic meter (0.2 parts per million), 1-hour average

Nitrogen Dioxide

1,130 micrograms per cubic meter (0.6 parts per million), 1-hour average

282 micrograms per cubic meter (0.15 parts per million), 24-hour average.

c. Air Pollution Warning. A warning shall be declared by the Commission when any one of the following levels is reached at any monitoring site and meteorological conditions are such that pollutant concentrations can be expected to remain at these levels for twelve (12) or more hours or increase unless control actions are taken:

Sulfur Dioxide

1600 micrograms per cubic meter (0.6 parts per million), 24-hour average

PM10

420 micrograms per cubic meter, 24-hour average

Carbon Monoxide

34 milligrams per cubic meter (30 parts per million), 8-hour average

Ozone (O<sub>3</sub>)

800 micrograms per cubic meter (0.4 parts per million), 1-hour average

Nitrogen Dioxide

2,260 micrograms per cubic meter (1.2 parts per million), 1-hour average

565 micrograms per cubic meter (0.3 parts per million), 24-hour average

d. Air Pollution Emergency. Conditions justifying the proclamation of an Air Pollution Emergency shall exist whenever the Commission determines that the accumulation of air pollutants in any place has attained levels which require immediate action for the protection of the public health. The emergency level indicates that air quality is continuing to degrade and is approaching a level that should never be reached, and that the most stringent control actions are necessary. In making this determination, the Commission shall declare any emergency when any one of the following levels is reached at any monitoring site and meteorological conditions are such that this condition can be expected to continue for twelve (12) or more hours:

Sulfur Dioxide

2100 micrograms per cubic meter (0.8 parts per million), 24-hour average

PM10

500 micrograms per cubic meter, 24-hour average

Carbon Monoxide

46 milligrams per cubic meter (40 parts per million), 8-hour average

Ozone (O<sub>3</sub>)

1000 micrograms per cubic meter (0.65 parts per million), 1-hour average

Nitrogen Dioxide

3,000 micrograms per cubic meter (1.6 parts per million), 1-hour average

750 micrograms per cubic meter (0.4 parts per million), 24-hour average

An air pollution emergency will be declared by an order entered by the Commission with the written approval of the Governor.

e. Termination. Once declared, any status reached by application of these criteria will remain in effect until the criteria for that level are no longer met. At such time, the next lower status will be assumed.

3.2. The episode criteria presented in Section 3.1. of this Regulation establish the basis for emission control action to be initiated to prevent an Air Pollution Emergency Episode. The stringent control actions required in §WV Code 45-11-6. when the emergency stage has been declared are designed to prevent air pollutant concentrations from reaching levels which, in the judgment of the Commission, could constitute imminent and substantial endangerment to health.

§45-11-4. Methods of Measurement.

4.1. PM<sub>10</sub> concentrations shall be measured in the ambient air as particulate matter with an aerodynamic diameter less than or equal to 10 micrometers by:

- a. Reference method based on Appendix J of 40 CFR 50, or
- b. An equivalent method designated in accordance with 40 CFR 53.

4.2. Sulfur dioxide concentrations shall be measured in ambient air as sulfur dioxide by:

- a. Reference method based on Appendix A of 40 CFR 50, or
- b. An equivalent method designated in accordance with 40 CFR 53.

4.3. Carbon monoxide concentrations shall be measured in ambient air as carbon monoxide by:

a. Reference method based on Appendix C of 40 CFR 50, or

b. An equivalent method designated in accordance with 40 CFR 53.

4.4. Nitrogen dioxide concentrations shall be measured in ambient air as nitrogen dioxide by:

a. Reference method based on Appendix F of 40 CFR 50, or

b. An equivalent method designated in accordance with 40 CFR 53.

4.5. Ozone concentrations shall be measured in the ambient air as ozone by:

a. Reference method based on Appendix D of 40 CFR 50, or

b. An equivalent method designated in accordance with 40 CFR 53.

#### §45-11-5. Preplanned Reduction Strategies.

5.1. Any person responsible for the operation of a stationary source of air pollutants emitting 100 tons (90.7 metric tons) per year or more in a region classified Priority I or II for any pollutant, shall prepare standby plans for reducing the emission of air pollutants during periods of an Air Pollution Alert, Air Pollution Warning, and Air Pollution Emergency. Standby plans shall be designed to reduce or eliminate emission or air pollutants in accordance with the objectives set forth in Tables I, II, and III of this Regulation.

5.2. Any person responsible for the operation of a source of air pollutants not set forth under Section 5.1. of this Regulation shall, when requested by the Commission, prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Table I, II, and III of this Regulation.

5.3. Standby plans as required under Section 5.1. and 5.2. shall be in writing and shall include, but not be limited to, identification of the sources of air pollutants, the approximate amount of reduction of pollutants, and a brief description of the manner in which the reduction will be achieved during an Air Pollution Alert, Air Pollution Warning, and Air Pollution Emergency. Such information shall be filed on forms and in a manner acceptable to the Director.

5.4. During a condition of Air Pollution Alert, Air Pollution Warning, or Air Pollution Emergency, standby plans as required by this section shall also be made available on the premises to the Director or his duly authorized representative.

5.5. Standby plans as required by this section shall be submitted to the Director upon request within sixty (60) days of the receipt of such request. All standby plans shall be subject to review and approval by the Commission. If, in the opinion of the Commission, a standby plan does not effectively carry out the objectives as set forth in Tables I, II, and III of this Regulation, the Commission may disapprove it, state its reason for disapproval, and order the preparation of an amended standby plan within the time period specified in the order.

#### §45-11-6. Emission Reduction Plans.

6.1. Air Pollution Forecast. When the National Weather Service issues a public announcement that an Atmospheric Stagnation Advisory is in effect or the equivalent local forecast of stagnant atmospheric conditions is issued by the West Virginia Air Pollution Control Commission, no open burning shall be conducted.

6.2 Air Pollution Alert. When an Air Pollution Alert is declared in the manner provided in Section 3.1.b. of this Regulation, any person responsible for the operation of a source, who is required under §WV Code 45-11-5. to have standby plans, shall put into effect the preplanned abatement strategy for an Air Pollution Alert when notified by the Director or his duly authorized representative. All other persons responsible for the operation of sources of air pollution shall take actions as required in Table I of this Regulation.

6.3 Air Pollution Warning. When an Air Pollution Warning is declared in the manner provided in Section 3.1.c. of this Regulation, any person responsible for the operation of a source, who is required under §WV Code 45-11-5. to have standby plans, shall put into effect the preplanned abatement strategy for an Air Pollution Warning when notified by the Director or his duly authorized representatives. All other persons responsible for the operation of sources of air pollutants shall take actions as required in Table II of this Regulation.

6.4 Air Pollution Emergency. When an Air Pollution Emergency is declared in the manner provided in Section 3.1.d. of this Regulation, any person responsible for the operation of a source, who is required under §WV Code 45-11-5. to have standby plans, shall put into effect the preplanned abatement strategy for an Air Pollution Emergency when notified by the Director or his duly authorized representative of such emergency. All other persons responsible for the operation of sources of air pollutants shall take actions as required in Table III of this Regulation.

6.5 When the Director and/or Commission determines that a specified criteria level has been reached at one or more monitoring sites solely because of emissions from a limited number of sources, the Director shall notify such source(s) that the preplanned abatement strategies of Tables I, II, and of this Regulation III or the standby plans are required, insofar as it applies to such source(s), and shall be put into effect until the criteria of the specified level are no longer met.



TABLE I - EMISSION REDUCTION PLANS

Alert Level

Part A. General

1. There shall be no open burning by any persons of tree waste, vegetation, refuse, or debris in any form.
2. The use of incinerators for the disposal of any form of solid waste shall be limited to the hours between 12 noon and 4 p.m.
3. Persons operating motor vehicles should eliminate all unnecessary operations.
4. Persons operating fuel-burning equipment which requires boiler lancing or soot blowing shall perform such operations only between the hours of 12 noon and 4 p.m.

Part B. Source Curtailment

Any person responsible for the operation of a source of air pollutants listed below shall take all required control actions for this Alert Level:

Source of Air Pollution		Control Action	
1.	Coal or oil-fired electric power generating facilities	a.	Substantial reduction by utilization of fuels having low ash and sulfur content.
		b.	Substantial reduction by diverting electric power generation to facilities outside of Alert Area.

- c. Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing.
  
- 2. Coal and oil-fired process steam generating facilities
  - a. Substantial reduction by utilization of fuels having low ash and sulfur content.
  - b. Substantial reduction of steam load demands consistent with continuing plant operations.
  - c. Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing.
  
- 3. Manufacturing industries of the following characteristics: Primary Metals Industry Petroleum Refining Operations Chemical Industries Mineral Processing Industries Paper
  - a. Substantial reduction of air pollutants from manufacturing operations by curtailing, postponing, or deferring production and allied operations.

and Allied Products Grain

Industry

- b. Maximum reduction by deferring trade waste disposal operations which emit solid particles, gases vapors, or malodorous substances.
- c. Maximum reduction of heat load demands for processing.
- d. Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing.

## TABLE II - EMISSION REDUCTION PLANS

Warning Level

Part A. General

1. There shall be no open burning by any persons of tree waste, vegetation, refuse, or debris in any form.
2. The use of incinerators for the disposal of any form of solid waste or liquid waste shall be prohibited.

3. Persons operating motor vehicles must reduce operations by the use of car pools and increased use of public transportation and elimination of unnecessary operation.

4. Persons operating fuel-burning equipment which requires boiler lancing or soot blowing shall perform such operations only between the hours of 12 noon and 4 p.m.

5. The operation of coal or wood stoves should be limited to daylight hour use only except in homes or buildings where the stoves are the sole source of heat.

#### Part B. Source Curtailment

Any person responsible for the operation of a source of air pollutants listed below shall take all required control actions for this Warning Level:

Source of Air Pollution		Control Action	
1.	Coal or oil-fired electric power generating facilities	a.	Maximum reduction by utilization of fuels having lowest ash and sulfur content.
		b.	Maximum reduction by diverting electric power generation to facilities outside of Warning Area.
		c.	Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing.

2. Coal and oil-fired process steam generating facilities
  - a. Maximum reduction by utilization of fuels having lowest available ash and sulfur content.
  - b. Substantial reduction of steam load demands consistent with continuing plant operations.
  - c. Making ready for use a plan of action to be taken if an emergency develops.
  - d. Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing.
  
3. Manufacturing industries which require considerable lead time for shut-down including the following classifications:
  - a. Maximum reduction of air contaminants from manufacturing operations by, if necessary, assuming reasonable economic hardships by postponing production and allied operations.
  - b. Maximum reduction by deferring trade waste disposal operations
    - Petroleum Refining Chemical Industries
    - Primary Metals

Industries Glass Industries

Paper and Allied Products

which emit solid particles,

gases, vapors, or malodorous

substances.

c. Maximum reductions of heat load demands for processing.

d. Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing.

4. Manufacturing industries

which require relatively

short lead times for

shut-down including the

following classifications:

a. Elimination of air pollutants

from manufacturing operations by

ceasing, curtailing, postponing,

or deferring production and

allied operations to the extent

possible without causing injury

to persons or damage to

equipment.

Primary Metals Industries

b. Elimination of air pollutants

Chemical Industries Mineral

from trade waste disposal

Processing Industries Grain

processes which emit solid

Industry

particles, gases, vapors, or

malodorous substances.

c. Maximum reduction of heat load demands for processing.

d. Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing.

### TABLE III - EMISSION REDUCTION PLANS

Emergency Level

Part A. General

1. There shall be no open burning by any persons of tree waste, vegetation, refuse, or debris in any form.

2. The use of incinerators for the disposal of any form of solid or liquid waste shall be prohibited.

3. All places of employment described below shall immediately cease operations:

a. Mining and quarrying of nonmetallic minerals.

b. All construction work except that which must proceed to avoid emergent physical harm.

c. All manufacturing establishments except those required to have in force an air pollution emergency plan.

d. All wholesale trade establishments, i.e., places of business primarily engaged in selling merchandise to retailers, or industrial, commercial, institutional or professional users, or to other wholesalers, or acting as agents in buying merchandise for or selling merchandise to such persons or companies, except those engaged in the distribution of drugs, surgical supplies and food.

e. All offices of local, county, and State government including authorities, joint meetings, and other public bodies except such agencies which are determined by the chief administrative officer of local, county, or State government, authorities, joint meetings and other public bodies to be vital for public safety and welfare and the enforcement of the provisions of this order.

f. All retail trade establishments except pharmacies, surgical supply distributors, and stores primarily engaged in the sale of food.

g. Banks, credit agencies other than banks, securities and commodities brokers, dealers, exchanges and services; offices of insurance carriers, agents and brokers, real estate offices.

h. Wholesale and retail laundries, laundry services and cleaning and dyeing establishments; photographic studios; beauty shops, barber shops, shoe repair shops.

i. Advertising offices; consumer credit-reporting, adjustment and collection agencies; duplicating, addressing, blueprinting, photocopying, mailing, mailing list and stenographic services; equipment rental services, commercial testing laboratories.

j. Automobile repair, automobile services, garages.

k. Establishments rendering amusement and recreational services including motion picture theaters.

l. Elementary and secondary schools, colleges, universities, professional schools, junior colleges, vocational schools, and public and private libraries.

4. All commercial and manufacturing establishments not included in this order will institute such actions as will result in maximum reduction of air pollutants from their operation by ceasing, curtailing, or postponing operations which emit air pollutants to the extent possible without causing injury to persons or damage to equipment.

5. The use of motor vehicles is prohibited except in emergencies with the approval of local or State police.

6. The operation of coal or wood stoves is discouraged except in homes where the stoves are the sole source of heat.



Part B. Source Curtailment

Any person responsible for the operation of a source of air pollutants listed below shall take all required control actions for this Emergency Level:

	Source of Air Pollution		Control Action
1.	Coal or oil-fired electric power generating facilities	a.	Maximum reduction by utilization of fuels having lowest ash and sulfur content.
		b.	Maximum reduction by diverting electric power generation to facilities outside of Emergency Area.
		c.	Maximum utilization of mid-day atmospheric turbulence for boiler (12 noon to 4 p.m.) lancing and soot blowing.
2.	Coal and oil-fired process steam generating facilities	a.	Maximum reduction by reducing heat and steam demands to absolute necessities consistent with

preventing equipment damage.

called for in b. Taking the action  
the emergency plan.

c. Maximum utilization of mid-day  
(12 noon to 4 p.m.) atmospheric  
turbulence for boiler lancing and  
soot blowing.

3. Manufacturing industries of the following classifications:
- a. Elimination of air pollutants from manufacturing operations by ceasing, curtailing, postponing, or deferring production and allied operations to the extent possible without causing injury to persons or damage to equipment.

Primary Metals Industries

Petroleum Refining

Chemical Industries

Mineral Processing

Industries

Grain Industry

Paper and Allied Products

air pollutants  
b. Elimination of  
from trade waste disposal processes which  
emit solid

gases, vapors, or particles,  
malodorous  
substances.

c. Maximum  
reduction of heat load  
demands for  
processing.

d. Maximum  
utilization of mid-day  
(12 noon to 4 p.m.)

atmospheric

turbulence for boiler lancing and  
soot blowing.

§45-11-7. Air Pollution Emergencies; Contents of Order; Hearings; Appeals.

7.1 As is provided in §WV Code 16-20-10, as amended, if the Commission, with the written approval of the Governor, enters an order declaring an Air Pollution Emergency, as provided in Section 3.1d. of this Regulation hereof, it shall, in such order, direct what action shall be taken by the Director to bring about the reduction or prevention of emissions substantially contributing to said Emergency. In such order the Commission shall also fix a time (which shall be not later than twenty-four (24) hours from the time of entry of such order) and place for a hearing to be held by the

Commission for the purpose of investigating and determining the factors bearing upon the existence of and contribution to the alleged Emergency.

7.2 A true copy of any such order shall be served upon all persons whose interests are directly prejudiced by such order in the same manner as a summons in a civil action may be served, and a true copy shall also be posted on the front door of the courthouse of the county in which the alleged emergency conditions originated. All persons whose interests are prejudiced or affected in any manner by any such order shall have the right to appear in person or by counsel at such hearing and to present relevant evidence. Within twenty-four (24) hours after the completion of the hearing, the Commission shall affirm, modify or set aside said order in accordance and consistent with the evidence adduced at such hearing.

7.3 Any person aggrieved by any such final action of the Commission may thereafter exercise the rights of judicial review and appeal which are set forth in the statute hereinabove cited.

#### §45-11-8. Inconsistency Between Regulations.

8.1 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 more stringent provision, term condition, method, rule or regulation.