

250-RICR-120-05-10

TITLE 250 – DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

CHAPTER 120 – AIR RESOURCES

SUBCHAPTER 05 – AIR POLLUTION CONTROL

PART 10 – Air Pollution Episodes

10.1 Purpose and Authority

10.1.1 Purpose

The purpose of this regulation is to prevent to excessive buildup of air pollutants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of the pollutants on the health of persons.

10.1.2 Authority

These regulations are authorized pursuant to R.I. Gen. Laws § 42-17.1-2(19) and R.I. Gen. Laws Chapter 23-23, and have been promulgated pursuant to the procedures set forth in the Rhode Island Administrative Procedures Act, R.I. Gen. Laws Chapter 42-35.-

10.2 Application

The terms and provisions of this regulation shall be liberally construed to permit the Department to effectuate the purposes of state laws, goals and policies.-

10.3 Severability

If any provision of this regulation or the application thereof to any person or circumstance, is held invalid by a court of competent jurisdiction, the validity of the remainder of the regulation shall not be affected thereby.

10.4 Definitions

Unless otherwise expressly defined in this section, the terms used in this regulation shall be defined by reference to Part 0 of this Subchapter (General Definitions).

10.5 Episode Criteria

- A. Conditions justifying the proclamation of an air pollution alert, air pollution warning or air pollution emergency shall be deemed to exist whenever the Director determines that the accumulation of air pollutants in any place is attaining or has attained levels which could, if such levels are sustained or exceeded, lead to a substantial threat to the health of persons. In making this determination, the Director will be guided by the following criteria:
1. An air pollution forecast is an internal watch by the Office of Air Resources actuated by a National Weather Service advisory that an Atmospheric Stagnation Advisory is in effect or an equivalent local forecast of a stagnant atmospheric condition is in effect.
 2. The Air Pollution Alert level is that concentration of pollutants at which first stage control actions are necessary. An Alert will be declared 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 the levels specified in §§ 10.5(A)(2)(a) through (e) of this Part for twelve (12) or more hours or increase above these levels unless control actions are taken:
 - a. Sulfur Dioxide or SO₂ - 500 µg/m³ (0.19 ppm), 24-hour average.
 - b. Particulate — 3.0 COHs, 24-hour average. Particulate matter less than 10 microns in diameter or PM₁₀ - 350 µg/m³, 24-hour average.
 - c. ~~SO₂ and Particulate Combined — Product of SO₂ (ppm) for a 24-hour average and Particulate (COHs) for a 24-hour average equal to 0.2.~~
 - d. Oxidant-Ozone (O₃) - 400 µg/m³ (0.2 ppm), 1-hour average.
 - e. Nitrogen Dioxide or NO₂ - 1130 µg/m³ (0.6 ppm), 1-hour average or 282 µg/m³ (0.15 ppm), 24-hour average.
 3. The Air Pollution Warning level indicates that air quality is continuing to degrade and that additional control actions are necessary. A Warning will be declared 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 the levels specified in §§

10.5(A)(3)(a) through (e) of this Part for twelve (12) or more hours or increase above these levels unless control actions are taken:

- a. Sulfur Dioxide or SO₂ - 800-1600 µg/m³ (0.31-6 ppm), 24-hour average.
- b. Particulate — 5.0 COHs, 24 hour average. Particulate matter less than 10 microns in diameter or PM10 - 420 µg/m³, 24-hour average.
- e. ~~SO₂ and Particulate Combined — Product of SO₂ (ppm) for a 24-hour average and Particulate (COHs) for a 24-hour average equal to 0.8.~~
- c. Carbon Monoxide or CO - 34 mg/m³ (30 ppm), 8-hour average.
- d. ~~Oxidant Ozone(O₃) - 800 µg/m³ (0.4 ppm), 1-hour average.~~
- e. Nitrogen Dioxide or NO₂ -- 2260 µg/m³ (1.2 ppm), 1-hour average or 565 µg/m³ (0.3 ppm), 24-hour average.

4. The Air Pollution Emergency level indicates that air quality is continuing to degrade to a level that should never be reached and that the most stringent control actions are necessary. An Emergency will be declared 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 the levels specified in §§ 10.5(A)(4)(a) through (e) of this Part for twelve (12) or more hours or increase above these levels unless control actions are taken:

- a. SO₂ -- 2100-1309 µg/m³ (0.85 ppm), 24-hour average.
- b. Particulate — 7.0 COHs, 24 hour average. Particulate matter less than 10 microns in diameter or PM10 -- 500 µg/m³, 24-hour average.
- e. ~~SO₂ and Particulate Combined — Product of SO₂ (ppm) for a 24-hour average and Particulate (COHs) for a 24-hour average equal to 1.2.~~
- c. Carbon Monoxide or CO - 46 mg/m³ (40 ppm), 8-hour average.
- d. ~~Oxidant Ozone(O₃) - 1200-1000 µg/m³ (0.56 ppm), 1-hour average.~~
- e. Nitrogen Dioxide or NO₂ - 3000 µg/m³ (1.6 ppm), 1-hour average or 750 µg/m³ (0.4 ppm), 24-hour average.

5. 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, or the episode will be declared over.

10.6 Emission Reduction Plans

- A. In the Air Pollution Forecast Stage there is no specific emission reduction plan required, however, the Office will monitor the atmospheric concentrations of the pollutants listed in this regulation and the meteorological conditions on a 24-hour basis.
- B. When the Director declares an Air Pollution Alert, any person responsible for the operation of a source of air pollutants as set forth in §§ 10.6(B)(1) and (2) of this Part shall take all Air Pollution Alert actions as required for such source of air pollutants and shall put into effect the preplanned abatement strategy for the Air Pollution Alert.
 1. General
 - a. There shall be no open burning by any persons of tree waste, vegetation, refuse or debris in any form.
 - b. 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.
 - c. Any person operating fuel-burning equipment shall make maximum use of mid-day (12 noon - 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing.
 - d. Any person operating motor vehicles should eliminate all unnecessary operations.
 2. Source curtailment. Any person responsible for the operation of a source of air pollutants listed below shall take all required control actions for the Air Pollution Alert Level.
 - a. Coal or oil-fired electric power generating facilities
 - (1) Substantial reduction by utilization of fuels having low ash and sulfur content.
 - (2) Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing.

(3) Substantial reduction by diverting electric power generation to facilities outside of Alert Area.

b. Coal and oil-fired process steam generating facilities

(1) Substantial reduction by utilization of fuels having low ash and sulfur content.

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

(3) Substantial reduction of steam load demands consistent with continuing plant operations.

c. Manufacturing industries of the following classifications: Primary Metals Industries; Petroleum Refining Operation; Chemical Industries; Mineral Processing Industries; Paper & Allied Products; Grain Industry.

(1) Substantial reduction of air pollutants from manufacturing operations by curtailing, postponing or deferring production and all operations.

(2) Maximum reduction by deferring trade waste disposal operations which emit solid particles, gas vapors or malodorous substances.

(3) Maximum reduction of heat load demands for processing.

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

C. When the Director declares an Air Pollution Warning, any person responsible for the operation of a source of air pollutants as set forth in §§ 10.6(C)(1) and (2) of this Part shall take all Air Pollution Warning actions as required for such source of air pollutants and shall put into effect the preplanned abatement strategy for the Air Pollution Warning.

1. General

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

b. The use of incinerators for the disposal of any form of solid waste or liquid waste is prohibited.

- c. Any person 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.
 - d. Any person operating motor vehicles must reduce operations by the use of car pools and increased use of public transportation and elimination of unnecessary operation.
2. Source curtailment. Any person responsible for the operation of a source of air pollutants listed below shall take all required control actions for the Air Pollution Warning Level.
- a. For Coal or oil-fired electric power generating facilities:
 - (1) Maximum reduction of emissions by utilization of fuels having lowest ash and sulfur content.
 - (2) Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing.
 - (3) Maximum reduction by diverting electric power generation to facilities outside of Warning Area.
 - b. For oil and oil-fired process steam generating facilities:
 - (1) Maximum reduction by utilization of fuels having lowest available ash and sulfur content.
 - (2) Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing.
 - (3) Making ready for use a plan of action to be taken if an emergency develops.
 - c. For manufacturing industries which require considerable lead time for shut-down including the following classifications: Petroleum Refining; Primary Metals Industries; Glass Industries; Paper & Allied Products; Chemical Industries:
 - (1) Maximum reduction of air contaminants from manufacturing operations by, if necessary, assuming reasonable economic hardships by postponing production and allied operation.
 - (2) Maximum reduction by deferring trade waste disposal operations which emit solid particles, gases, vapors or malodorous substances.

(3) Maximum reduction of heat load demands for processing.

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

d. Manufacturing industries requiring relatively short lead times for shut-down including the following classifications: Primary Metals Industries; Chemical Industries; Mineral Processing Industries; Grain Industry.

(1) 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.

(2) Elimination of air pollutants from trade waste disposal processes which emit solid particulates, gases, vapors, or malodorous substances.

(3) Maximum reduction of heat load demands for processing.

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

D. When the Director declares an Air Pollution Emergency, any person responsible for the operation of a source of air pollutants as set forth in §§ 10.6(D)(1) and (2) of this Part shall take all Air Pollution Emergency actions as required for such source of air pollutants and shall put into effect the preplanned abatement strategy for the Air Pollution emergency.

1. General

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

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

c. All places of employment described below shall immediately cease operations causing emissions of air contaminants:

(1) Mining and quarrying of nonmetallic minerals.

(2) All construction work except that which must proceed to avoid emergent physical harm.

- (3) All manufacturing establishments except those required to have in force an air pollution emergency plan.
- (4) 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.
- (5) All offices of local, county and State government including authorities, joint meetings, and other public bodies excepting 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.
- (6) All retail trade establishments except pharmacies, surgical supply distributors, and stores primarily engaged in the sale of food.
- (7) Banks, credit agencies other than banks, securities and commodity brokers, dealers, exchanges and services; offices of insurance carriers, agents, brokers, real estate offices.
- (8) Wholesale and retail laundries, laundry services and cleaning and dyeing establishments, photographic studios; beauty shops, barber shops, shoe repair shops.
- (9) Advertising offices, consumer credit reporting, adjustment collection agencies, duplicating, addressing, blueprinting, photocopying, mailing, mailing list and stenographic services, equipment rental services, commercial testing laboratories.
- (10) Automobile repair, automobile services, garages.
- (11) Establishment rendering amusement and recreational services including motion picture theaters.

- (12) Elementary and secondary schools, colleges, universities, professional schools, Junior colleges, vocational schools, and public and private libraries.
 - d. 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.
 - e. The use of motor vehicles is prohibited except in emergencies with the approval of local or State Police.
2. 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:
- a. Coal or oil-fired electric power generating facilities
 - (1) Maximum reduction by utilization of fuels having lowest ash and sulfur content.
 - (2) Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing.
 - (3) Maximum reduction by diverting electric power generation to facilities outside of Emergency Area.
 - b. Coal and oil-fired process steam generating facilities
 - (1) Maximum reduction by reducing heat and steam demands to absolute necessities consistent with preventing equipment damage.
 - (2) Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing.
 - c. Manufacturing industries of the following classifications: Primary Metals Industries; Petroleum Refining; Chemical industries; Mineral Processing Industries; Grain industry; Paper and Allied Products.
 - (1) Elimination of air pollutants from manufacturing operations by ceasing, curtailing, postponing or deferring production

and allied operations to the extent possible without causing injury or damage to equipment.

- (2) Elimination of air pollutants from trade waste disposal processes which emit solid particles, gases, vapors or malodorous substances.
- (3) Maximum reduction of heat load demands for processing.
- (4) Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing or soot blowing.

10.7 Preplanned Abatement Strategies

- A. Any person responsible for the operation of a source of air pollutants as set forth in §§ 10.6(B) through (D) of this Part shall prepare standby plans for reducing the emissions 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 emissions of air pollutants in accordance with the objectives set forth in §§ 10.6(B) through (D) of this Part.
- B. Any person responsible for the operation of a source of air pollutants not set forth under § 10.7(A) of this Part shall, when requested by the Director, 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 emissions of air pollutants in accordance with the objectives set forth in §§ 10.6(B) through (D) of this Part.
- C. Standby plans as required under §§ 10.7(A) and (B) of this Part shall be in writing and identify 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.
- D. During a condition of Air Pollution Alert, Air Pollution Warning and Air Pollution Emergency, standby plans as required by this section shall be made available on the premises to any person authorized to enforce the provisions of applicable rules and regulations.
- E. Standby plans as required by this section shall be submitted to the Director upon request within thirty (30) days of the receipt of such request; such standby plans shall be subject to review and approval by the Director.
- F. If, in the opinion of the Director, a standby plan does not effectively carry out the objectives as set forth in §§ 10.6(B) through (D) of this Part, the Director may

disapprove it, state his reason for disapproval and order the preparation of an amended standby plan within the time period specified in the order.